Reporting Manual for the delivery of Art. 12 data in Reportnet 3.0

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1. Introduction

This manual has been prepared to assist Member States in their submission of Article 12 national reports to the Central Data Repository (CDR) managed by the European Environment Agency (EEA). These guidelines aim to ensure that the procedure is comprehensible and clear to national reporters involved at any stage along the data preparation, import and delivery process.

The manual has been divided in different sections including i) a general description of the reporting procedure, ii) how to access the Repornet 3.0 reporting platform and the Art. 12 dataflow and iii) the preparation requirements for data delivery using the Reportnet 3.0 platform. This last section includes general information on Art. 12 data preparation and on the functions of Reportnet 3.0. Furthermore, specific instructions for the preparation and delivery of the specific Art. 12 schemas are included. Separate guidelines will be developed for additional reporting tools, e.g. Webforms, when these tools are available.

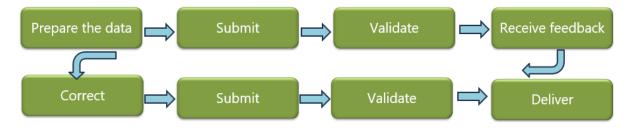
Additional technical guidelines for the use of the Reportnet 3.0 platform may be found in <u>https://reportnet.europa.eu/</u> in the section "Supporting documents".

For specific help and advice, questions regarding the data reports, data standards, QA/QC rules, and functioning of the specific features of the reporting folders may be addressed to <u>nature.helpdesk@eionet.europa.eu.</u>

2. General reporting procedure

For the upcoming 2019-2024 reporting period, the submission of national reports will be through Reportnet 3.0, accessible at <u>https://reportnet.europa.eu/</u>. Reporters responsible for data delivery for a Member State must first manage their access to Reportnet 3.0 and organize the different responsibilities among them (see section 3).

The following reporting process then takes place in several steps (Fig. 2.1), starting with the preparation of the data, submission and validation. Considering the feedback of the validation process, a correction and re-submission may be necessary. These steps should be repeated until the data has achieved the required quality and the delivery can be finalised (see section 4 of this manual).





The validation is an important function to generate acceptable reporting data. There are four types of error messages with different consequences and priorities for the following steps:

- Blockers: correction necessary, no release possible
- Errors: correction strongly recommended
- Warnings: possible error, data should be checked again
- Info: Information about potential anomalies in the data

Both Blockers and Errors should be addressed before releasing the delivery!

After these issues have been solved, the lead reporter can proceed to release the data collection. This will run a new validation process. If the delivery is successful (i.e. there are no blockers), a confirmation certificate can be downloaded (see section 5.1).

3. Access to Reportnet 3.0

3.1 Overview

Member State's national reports should be delivered via Reportnet 3.0 (<u>https://reportnet.europa.eu/</u>).

Each Member State should designate a lead reporter. Lead reporters can internally designate other national reporters on the platform. Lead reporters as well as reporters need to have access to Reportnet 3.0. For this, please follow the instructions to login to Reportnet 3.0 detailed in the following guidelines available in Reportnet 3.0: <u>https://www.eionet.europa.eu/reportnet/docs/prod/howto_login_reportnet3.</u> Importantly, all reporters should have an EU login. Once logged in the reporters will be able to see the dataflws assigned to them.

Lead reporters also act as the primary point of contact for the Commission, the EEA and the ETC BE regarding any question about national data deliveries via Reportnet 3.0.

Additional technical guidelines for the use of the Reportnet 3.0 platform may be found in <u>https://reportnet.europa.eu/</u> in the section "Supporting documents".

3.2 Manage reporters

The lead reporter can provide access to a dataflow to other reporters. For this, the lead reporter should access the corresponding dataflow (in this case, the Birds Directive Art. 12 – 2019-2024 dataflow) and click on the "Manage reporters" icon, located on the left vertical bar of the platform (see Fig. 3.2.1). A new window will open, where the blue '+Add' icon can be used to add a new national reporter. This will open a second window (Fig. 3.2.2), where the email address (i.e. the registered user email address) of the new reporter may be added. If the system cannot find the email as a registered user, then a red box will appear around the email address and an icon indicating the user is not valid. In this case, please verify if the email address is correctly registered in Reportnet 3.0. For each reporter to be added, the access level ('read' or 'write') should be given. 'Read' reporters may only see the dataflow schemas but have no editing rights, whereas 'write' reporters have editing rights. This setting may be edited anytime using the 'Edit' button. To save the entered data, click "Save". A lead reporter may add as many national reporters as needed. Once all reporters have been added, click 'Close' to finalize and close the main window with the listed reporters.

For further information on the management of reporters, please refer to the "**Reportnet 3 Requester HowTo**" Guidance available in <u>https://reportnet.europa.eu/</u>.

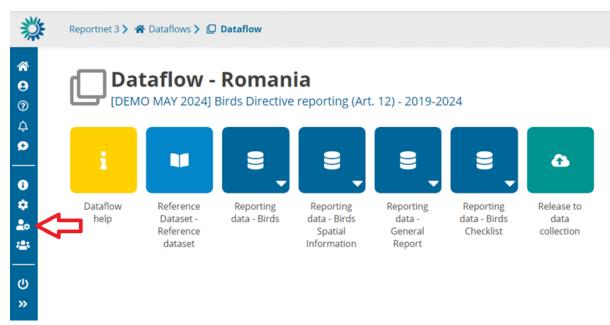


Figure 3.2.1. After accessing the country folder, the lead reporter may add one or more reporters by clicking on the indicated icon.

Manage reporters			0
	Add reporter	0	
	Reporter		
	Reporter email		
	Role		
	Select role	~	
	REPORTER WRITE		
	REPORTER READ		
	✓ Save	× Cancel	
Note: Management of secondary reporte	r access to this dataflow is the lead reporte	er responsibility	
+ Add C Update permissions		×c	ose

Figure 3.2.2. When selecting the icon indicated in Fig. 3.2.1, a new window will open where the registered email address and role of the new reporter may be added.

3.3 Access for countries reporting on outermost regions

Member States that submit reports for outermost regions have access to more than one dataflow, which will be visible to the lead reporter when accessing Reportnet 3.0. The "Birds Directive Art. 12 – 2019-2024 – Outermost regions" dataflow has been prepared for the Spanish region ESIC, and the Portuguese regions PTAC and PTMA. The lead reporter can assign additional reporters to each of these dataflows independently, by following the steps mentioned in section 3.2 for each dataflow. Portuguese lead reporters may also assign additional reporters individually for PTAC and PTMA, by managing reporters within each region's folder.

For Article 12, separate reports shall be filled in for each outermost region, except for the General Report schema, that only needs to be filled in for the main "country" dataflow (i.e. for the ES or PT dataflows). All other schemas (Birds Checklist, Birds Spatial Information, Birds) shall be filled in for all regions individually.

4. Data preparation and delivery in Reportnet 3.0

4.1 General data preparation

The Article 12 <u>Reference Portal</u> provides all the necessary information for preparing Art. 12 reports, including the reporting format, the explanatory notes, import tables, all schemas and data tables, reference tables and validation rules. Schemas, validation rules and import tables are also available directly in Reportnet 3.0 ('Dataflow help' button) in Reportnet 3.0 (Fig. 4.1.1). Additionally, import tables of any schema may be downloaded using the "Export dataset data" function found within the corresponding schema (Fig. 4.1.2). If no data has yet been entered, this



Dataflow help

function will provide an empty table that may be used by the reporters as template.

Reportnet 3 > 🖀 Dataflows 🗲 💭 Dataflow 🗦 🧯 Dataflow help

Dataflow help

Birds Directive reporting (Art. 12) - 2019-2024

Title 🗢	Description 🗢	Category 🜩	Language	Public 🔷	Upload date 🖨	Size	File 🔷
Reporting data - Birds.xlsx	Reporting Template Birds	xlsx	English	~	2024-05-31	9.49 KB	
Reporting data - Birds Checklist.xlsx	Reporting Template Birds Checklist	xlsx	English	~	2024-05-31	3.77 KB	x
Reporting data - Birds Spatial Information.xlsx	Reporting Template Birds Spatial Information	xlsx	English	~	2024-05-31	3.73 KB	x
Reporting data - General Report.xlsx	Reporting Template General Report	xlsx	English	~	2024-05-31	6.70 KB	x

Fig. 4.1.1. The Dataflow help section contains supporting information and documents relevant for the reports. In the "Supporting documents" section, import tables can be downloaded by clicking on the document icon on the right side of the table.

All these structures and validation rules must be fully taken into account when preparing data. Disregarding this can result in mistakes that must be rectified before the data is delivered. The same applies to the reference dataset, code lists and selection options: only the values defined there can be used for valid data entry in the respective fields. Using other values will lead to blockers and prevent data delivery. It is therefore particularly important to familiarize in advance with the technical requirements for compiling and editing the data.

As a basis for the Art. 12 data preparation process, it is necessary to first check, amend (if necessary) and confirm the national species checklist. All open questions to the relevant contents of the checklist, Member States are advised to solve them at this stage, as the content of the Checklist is an important reference for the validations of the next steps of the reporting process.

		- General Repo				
🏝 Import dataset d	ata 🔹 Export dataset	data 🕈 🛱 Delete dataset data		Valid	ate A Show validations	章 QC rules
Achievements	SuccessStories	GeneralInformationSources	1 NationalBirdAtlas	NationalBirdMonitoringOverview	NationalBirdRedList	() OtherPubl
1 Import table da	ata 🛓 Export table da	ta 🗂 Delete table data 🛛 🔗 Show/	/Hide columns 🛛 🗶 Validatio	n filter		
Actions	Validations	1_1_1_achievement 🕄 🖨	1_1_2_docur	nentation_file_provided 🟮 🖨	1_1_3_docum	entation_file 🕄
Rows per page	10 🗸		н			
+ Add record						

Figure 4.1.2. For any schema, the "Export dataset data" function initiates the download of an .xslx table that may be used as import template for the corresponding schema in Reportnet 3.0.

Once the checklist has been clarified, the actual reporting data should be prepared. Data can be compiled externally and be imported to Reportnet 3.0 using the corresponding import templates. Data can be further edited online in Reportnet 3.0. Alternatively, data can also be added manually in Reportnet 3.0. Particularly when importing data, the relevant technical requirements for the data must be fully observed by the reporters.

4.2 General functioning of Reportnet 3.0

Once a (lead) reporter has accessed the Reportnet 3.0 platform, if one or more dataflows have been assigned to them, these will appear in the initial view of the platform (Fig. 4.2.1). To access the dataflow corresponding to the delivery of Art. 12 reports, please click in the "Birds Directive Reporting (Art. 12) – 2019-2024" dataflow.

Within the dataflow, the reporter will have access to important information associated with the report, including a dataflow help section, the reference dataset (reference tables), the management of reporters (for lead reporters, see section 3.2 of this manual) and the report schemas for Art. 12 (Fig. 4.2.2).

The report schemas are based on the Art. 12 Reporting Format. Tabular information has been implemented in three reporting schemas (Birds Checklist, General Report and Birds) and in one spatial schema (Spatial Data Information) (Fig. 4.2.2), each of them composed of several tables. Each table represents a group of fields from the Art. 12 Reporting Format that are related to each other and follow similar validation rules. The necessary data must be prepared in these tables, considering basic requirements and quality rules.

1↓ Name 1↓ Description 1↓ Legal instrument 1↓ Obligation 1↓ Obligation id Role	Reporting dataflows (2				
	↓ Name	↑↓ Description	↓ Legal instrument	Obligation	1↓ Obligation id
Total: 2 dat	Role	✓ ↑↓ Status	Y Pinned	Delivery date range	T Filter D F
Role: LEAD REPORTER Delivery date: 2024-08-	Role: I FAD	REPORTER			Total: 2 dataflor Delivery date: 2024-08-14

Fig. 4.2.1. Initial view of available dataflows, in this case, the test dataflow for Art. 12.



Figure 4.2.2. View of a country's dataflow, including the Art. 12 schemas, as well as a help section.

In Reportnet 3.0, tables can be mandatory (implying that one or more of its fields are mandatory) or non-mandatory (in principle, optional). Mandatory tables/fields *must* be filled in, and specific quality control rules must always be observed. In contrast, non-mandatory tables/fields, in principle, *can* be filled in, but *if reported*, the full set of validation rules will be applied through the table and fields, and some fields may therefore no longer be optional. Furthermore, if reported, each non-mandatory table and field has specific formal requirements (e.g. text format, associated vocabularies) to be considered. These controls are set to ensure data quality and consistency also in these optional sections. To illustrate these conditions, consider the following examples:

Example 1: If the Member State decides to provide a success story (General Report, field 1.1 which is not mandatory in principle), but does not indicate a species code or season (fields 1.3 a or b), the validation process will produce a Blocker.

Example 2: The table "Pressures_GeneralInformation" is a non-mandatory table. However, if reported, information of, for example, field 7.2 "Methods used" ("7_2_Method" in Reportnet 3.0) must compile with the codes of the corresponding reference table (MethodUsed). Invalid codes will produce a Blocker.

Additionally, consider the case when a Member State decides to report on an optional species (e.g., ARR or OCC bird species, considered as optional to report according to the Explanatory Notes). In that case, once the species enters the reporting process, the data of that species must comply with the full validation rules of a mandatory species.

Finally, it is important to note that <u>all</u> species that must be reported according to the Explanatory notes and Guidelines require the respective reporting tables to be filled in, apart from those that are marked for deletion in the country checklist. Not reporting on one of the required species will block a delivery. However, fields can still be left empty if information is not available for a species, under specific conditions.

All validation rules are available in the Dataflow Help in Reportnet 3.0 and also described in the Reference Portal.

4.2.1 Data Submission

The first step to submit the reports is the confirmation of the national Checklist, which can be done by accessing the "Reporting data – Birds Checklist" schema (see the following section 4.3 Checklists). Once the national checklist is confirmed, the reporter may continue with the submission of the other schemas (section 4.4 including the General Report and Birds schemas, and section 4.5 including the Spatial Data Information schema).

In general, to import data for all tables of a schema together, the "**Import** *dataset* data" function should be used (Fig. 4.2.3). Tabular schemas (Birds Checklist, General Report and Birds) permit the import of a .zip file (containing the individual .csv tables) or a .xlsx file (may import one file with several sheets, i.e. several tables) (Fig. 4.2.4). For the Birds Checklist, the "Import dataset data" function may also be used to import a pre-filled file of the national Checklist. For spatial information, several formats are allowed, depending on whether the Member State reports grid cell codes or gridded polygons (see section 4.5 for more details).

To import tables individually, the "**Import** *table* data" function can be used (Fig. 4.2.3). This function only allows to import .csv files.

		a - Birds Chee			
ᆂ Import dataset da	ata 🔹 Export data	aset data 🛛 🛱 Delete dataset data		Validate	A Show validations 🚊 QC
ð BirdsChecklist A	() AlternativeCo	mmonSpeciesName			
🌲 Import table da	ata 🛓 Export tabl	e data 🛛 🛱 Delete table data 🛛 🧟	Show/Hide columns 🛛 🗶 Validation filter		
Actions	Validations	species_code 🛈 🖨	species_code_label 🛈 🖨	season_code 🛈 🖨	presence_code 🟮 🖨
Rows per page 1	0 🗸		K ∢ 1	▶ N Go to 1 of 1	
+ Add record					

Figure 4.2.3. Data can be imported to Reportnet 3.0 by using different functions: 'Import dataset data' will import data for all tables of a schema, 'Import table data' will import one file for a specific table.

			a - Birds Che 2019-2024 [TEST1] - Sv		
	▲ Import dataset data	port data	aset data 🛛 🛱 Delete dataset data	a	
7	ZIP (.csv for each table)	eCo	ommonSpeciesName		
/	Custom file imports				
(Import Excel File (.xlsx)	table	e data 🛛 🛱 Delete table data 🛛 🤋	Show/Hide columns 🛛 🗶 Validation fi	lter
\mathbf{X}	Other custom imports		species_code 🛈 🜩	species_code_label 🟮 🖨	season_code 🕄 🜲
	1 Prefill Checklist				

Figure 4.2.4. The function "Import dataset data" offers different import alternatives, mainly: import one .zip file containing several .csv tables, import one .xlsx file with different sheets, or import a pre-filled document (only available for the Birds Checklist schema).

Whenever one of these two functions is used, a new window will open where files may be selected from the local computer or dragged into the box (Fig. 4.2.5). Within this window, the function **"Replace data"** will erase <u>all</u> previous data that have been imported for the corresponding schema (i.e. for all tables of the schema if using the "Import dataset data" function) or for the corresponding table (if using the "Import table data" function). If the function <u>"Replace data" is not selected</u>, data will be added without erasing previous imported data, meaning that new entries will be added to the list together with previous entries. This also means that Member States may import information from several individual files, and data will be collected together in the country folder. These different files must, however, be imported one by one and not simultaneously, since the import functions only allow one (.zip or .xlsx) file at a time.

ZIP (.csv for each table)	۲
a Select or drag here a file	0
Replace data	
් Reset	▲ Upload X Close

Figure 4.2.5. When the "Import dataset data" and the "Import table data" are used, a new window will open where the files to be imported must be selected from the local computer or dragged into the box. Clicking "Replace data" will erase previous imported data (for a whole schema or for a table).

After importing datasets or tables with the mentioned functions, the "**Refresh**" button (top right) should be used to load the imported data (Fig. 4.2.6). With this, the new entries will be added on in the corresponding table(s) below the labels of the fields (Fig. 4.2.7). By default, the platform shows 10 entries per page, thus, when more than 10 records are entered, these will be displayed in several pages. This setting can be modified by changing the number of "Rows per page" at the bottom of the list of entries. Additionally, to move across pages, the reporter can use the arrows at the bottom of the list of entries (Fig. 4.2.7).

Data may also be entered manually, by using the "Add record" function (Fig. 4.2.6). When data has already been entered, the "Add record" icon will be placed at the bottom of the page below other entries (Fig. 4.2.7). By clicking this function, a new window will open, where data may be entered manually for each field of the corresponding table (Fig. 4.2.8). To add the record, click "Save" and the window will automatically close. The new record will be added at the end of all entered records. If the reporter wishes to continue adding records, the function "Add another record" may be clicked before clicking "**Save**". This will add the record but will keep the window open to continue adding entries.

🏝 Import dataset dat	a 🛓 Export dataset	t data 🛛 🛱 Delete dai	taset data			
		Valida	te 🔺 Show valida	tions 幸 QC rules ២ Dashbo	oards 🛛 🖻 Manage	copies 📿 Refresh
Seasons_Ge	neralInformation 🔺	PopulationSize	A O Population	nTrend 🔺 🚯 BreedingDistrib	utionSize_Map 🔺	BreedingDi ▶
▲ Import table dat	a 🛃 Export table da	ata 🗂 Delete table	data 🖉 Show/Hid	e columns 🛛 🗶 Validation filter	Filter by value	Q 8

Figure 4.2.6. After importing datasets or tables, always use the "Refresh" function on the top right. The function "Add record" allows to manually add an entry for a specific table. This action will open a new window, where data may be entered (Fig. 4.2.8).

ActionsValidationsspecies_code ♥ ←alternative_name ♥ ←common_name ♥ ←▲ A001Gavia stellataGavia stellataGavia stellata▲ 002Gavia arcticaGavia arcticaGavia arctica▲ 002A003Gavia arcticaGavia immer▲ 003Gavia immerGavia immerGavia immer▲ 004Tachybaptus ruficollisTachybaptus ruficollisTachybaptus ruficollis▲ 005A005Podiceps cristatusPodiceps cristatus▲ 005A006Podiceps grisegenaPodiceps grisegena▲ 007Podiceps auritusPodiceps auritusPodiceps nigricollis▲ 008Podiceps nigricollisPodiceps nigricollisPodiceps nigricollis▲ 008A001Podiceps nigricollisPodiceps nigricollisPodiceps nigricollis▲ 008A008Podiceps nigricollisPodiceps nigricollisPodiceps nigricollis▲ 008A021Botaurus stellarisBotaurus stellarisArdea cinerea▲ 009A028Ardea cinereaArdea cinereaArdea cinerea	Import table da	ata 🔹 Export table o	data 🛯 💼 Delete table data 🛛 🖋 Sh	ow/Hide columns 🛛 🗶 Validation filter	Filter by value
Image: Constraint of the second sec	Actions	Validations	species_code 🛈 🖨	alternative_name 🕄 🖨	common_name 🕄 🖨
Image: Constraint of the second sec			A001	Gavia stellata	Gavia stellata
Image: sector of the sector			A002	Gavia arctica	Gavia arctica
Image: Constraint of the second se			A003	Gavia immer	Gavia immer
Image: Constraint of the constraint			A004	Tachybaptus ruficollis	Tachybaptus ruficollis
Image: Constraint of the second se			A005	Podiceps cristatus	Podiceps cristatus
Image: Constraint of the state of the st			A006	Podiceps grisegena	Podiceps grisegena
Image: Constraint of the second se			A007	Podiceps auritus	Podiceps auritus
			A008	Podiceps nigricollis	Podiceps nigricollis
A028 Ardea cinerea Ardea cinerea			A021	Botaurus stellaris	Botaurus stellaris
	/		A028	Ardea cinerea	Ardea cinerea

Figure 4.2.7. List of records/entries after importing data in one table. To see all entries, the reporter may modify the number of entries shown in one page "Rows per page" or move across pages using the arrows at the end of the list of entries. To add one entry, use the "Add record" function. To edit or delete one entry, the action buttons "Edit" and "Delete" may be used. To delete all data of a table, the "Delete table data" function may be used.

Add record	8
1_1_2_success_story	
1_2_2_translation	
1_3_a_species_code 0	
None 🗸 🗸]
1_3_b_season_code 🟮	
None 🗸]
	Add another record Save Cancel

Figure 4.2.8. When manually entering a record, a new window will open, where data for each one of the fields for one entry (e.g. one species success story) should be entered. This example shows the fields to be completed for one entry of the Table "SuccessStories", within the General Report dataflow.

Each of the entries of a table may be edited using the Action button "**Edit**" (Fig. 4.2.7). When editing an entry, a new window will open, where data of one or more fields can be modified for that entry. To finish editing the entry, click "**Save**". However, data can also be edited[ET1][R(2] by simply clicking on the text (see Figs. 4.2.9 and 4.2.10). Entries can also be deleted using the "**Delete**" action button (red trash bin icon, see Fig. 4.2.7). To clear all data of a table, the "**Delete table data**" function may be used (Fig. 4.2.7).

1 Import datase	t data 🔹 Export data	aset data 🛛 着 Delete dataset data	1	Valid	date 🔺 Show val
BirdsChecklist	AlternativeComm	nonSpeciesName			
🏝 Import table	e data 🔹 Export tabl				
Import table Actions	e data 🔹 Export tabl	le data	Show/Hide columns X Validation filter species_code_label €	season_code 🕄 🗢	presence_0
					presence_o

Figure 4.2.9. Alternatively to the use of the "Edit" function, to edit any entry of a table, simply click on the field box. The box turns white, and the text can be edited directly.

BirdsCheckli	st () Alter	nativeCommonSpeciesName					
🏝 Import ta	able data 🛛 🛓 Ex	xport table data 🛛 🗂 Delete tab	le data	Show/Hide columns	🗶 Validation filter	Filter by value	Q 🕄
Actions	Validations	species_code 🕄 🖨	spe	cies_code_label 🕄 🖨	season_code 🕄 🖨	presence_code 🕄 🖨	spa_trigger
		A001	Gavia s	itellata	В	PRE - Present and occı 🗸	No
		A001	Gavia s	Search value		۹	No
		A001	Gavia s	None ARR - Newly arriving			No
		A002	Gavia a		from the check-list		No
		A002	Gavia a	EXBA - Extinct after 1980 OPT - Optional report			No
		A003	Gavia i	PRE - Present and occurs	regularly in the Member St	ate in the season in question	No

Figure 4.2.10. To edit fields with dropdown menus, clicking the field box will open the dropdown list of possible values to be entered. Please note that, by default, the search bar contains the current value, which should be erased to find other possible values of the reference table.

For any schema and table, whenever information on a particular field is required, the reporter can place the mouse over the corresponding **blue information icon** <u>and click on it.</u> This will display a small window with details and explanations of the field content (Fig. 4.2.11). To continue with the report, simply click "OK" or close the open window.

🏝 Import dataset	t data 🔹 Export d	ataset data	Table info	(
Achievements	A 1 SuccessStor	ion A		
Achievements	A U Successstor		Table name	Achievements
▲ Import table	e data 🕹 Export ta	ble data	Description	Achievements under the Directive 2009/147/EC during the reporting period, with a special emphasis on the SPA network.
		iore outd	Mandatory table	✓
Actions	Validations	1		
		Achieven		У ОК

Figure 4.2.11. Example of information window that opens after clicking on the blue info icon of a field.

Fields where attachments may or must be uploaded are indicated by a grey arrow towards up (Fig. 4.2.12) for every entry of the corresponding table. By clicking this icon, a new window opens where files can be selected or dragged. Once a file has been selected, click "Upload" to complete the action. Only one item per entry can be uploaded, thus, if the reporter wishes to upload more than one file, it is suggested to use compressed .zip files. To change an attachment, simply click on the arrow towards up once again and select the desired file. Attached files can also be downloaded (by using the arrow towards down icon) or deleted (trash bin icon). In the import template (.csv or .xlsx file), fields that require attachments must be left empty, i.e. no data should be written in the corresponding field. It is recommended to first import full datasets and tables and, afterwards, to import the corresponding attachments.

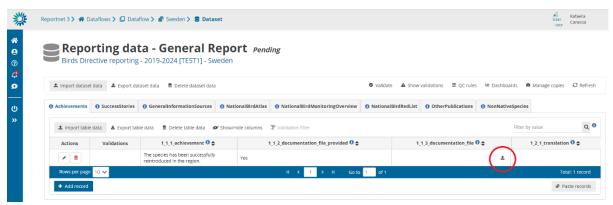


Figure 4.2.12. For any field where an attachment may be uploaded, the upload function is indicated by a grey arrow towards up (see red circle).

4.2.2 Data Validation

Within each schema, a list of the validation rules that apply to all the corresponding tables may be checked by using the "**QC rules**" function (Fig. 4.2.13). This will display a new window with a table listing general rules of a table, as well as field specific rules (Fig. 4.2.14). This table has a built-in search and filter function, to search for specific functions. For example, rules may be filtered by Table, Field or by Error class (Fig. 4.2.14). This table may be downloaded using the "**Download QCs**" function at the bottom-left corner of this window.

	Repor Birds Direc	ting data - tive reporting - 207	- Birds Pen 19-2024 [TEST1] -	<i>ding</i> Sweden					
1	Import dataset d	lata 🔹 Export dataset da	ata 🛛 🛱 Delete dataset o	lata				Validate A Show validations	⊉ QC rules
M	Seasons_C	GeneralInformation A	1 PopulationSize	Population	Trend 🔺	BreedingDistribution	nSize_Map 🔺	BreedingDistributionTrend A	• Pressures_GeneralInformation
	▲ Import table d	lata 🛓 Export table data	🗴 💼 Delete table data	🖉 Show/Hid	e columns	⊁ Validation filter			Filte
	Actions	Validations	species_code	0 🕈	se	ason_code 🕄 🗢		2_2_first_time_reporting 🛈 🖨	2_3_additiona
			A001		в		No		

Figure 4.2.13. For a certain schema, the function "QC rules" may be used to visualize the list of quality control rules that apply for the corresponding tables and fields. This list will open in a separate window (Fig. 4.2.14). To test these rules and validate the data, the "Validate" function should be used. Once the validation process has ended, the outcome may be seen by clicking "Show validations".

earch by (code, name, descrip	otion, message)	Table		Y Field	✓ Type of QC		~	
evel error	~	Creation mo	de	✓ Status	Validity		~	ර Reset
Table 🖨	Field 🗢	Code \$	Name 🖨	Description 🗢	Message 🖨	Expression	Type of QC	Level error
Achievements		TB1	Mandatory table records check	When a table is marked as mandatory, checks at least one record is added	Mandatory table has no records		TABLE	BLOCKER
SeneralInformationSource		твз	Mandatory table records check	When a table is marked as mandatory, checks at least one record is added	Mandatory table has no records		TABLE	BLOCKER
Achievements	1_1_2_documentation_file_pr ovided	FT10	Field type CODELIST	Checks if the field is a valid SINGLESELECT_CODELIST	The value is not a valid member of the codelist		FIELD	BLOCKER
NationalBirdAtlas	3_1_2_year	FT23	Field type NUMBER - INTEGER	Checks if the field is a valid NUMBER - INTEGER	The value is not a valid whole number		FIELD	ERROR
NationalBirdMonitoringOv erview	3_2_2_year	FT27	Field type NUMBER - INTEGER	Checks if the field is a valid NUMBER - INTEGER	The value is not a valid whole number		FIELD	ERROR
lationalBirdRedList	3_3_2_year	FT30	Field type NUMBER - INTEGER	Checks if the field is a valid NUMBER - INTEGER	The value is not a valid whole number		FIELD	ERROR
OtherPublications	3_4_2_year	FT34	Field type NUMBER - INTEGER	Checks if the field is a valid NUMBER - INTEGER	The value is not a valid whole number		FIELD	ERROR
vonNativeSpecies	4_4_consultation_date	FT39	Field type DATE	Checks if the field is a valid DATE	The value is not a valid date (YYYY- MM-DD)		FIELD	ERROR
Achievements	1_1_1_achievement	FC42	Field cardinality	Checks if the field is missing or empty	The value must not be missing or empty		FIELD	BLOCKER

Figure 4.2.14. Example list of validation rules for a schema. The table has a search and filter function (top search bar), where specific rules may be searched. The list of rules may be downloaded as a table using the "Download QCs" function at the bottom-left of the window.

Once data has been correctly imported or manually entered and edited for all tables of a schema, the reporter must validate the data using the "**Validate**" function (Fig. 4.2.13). A new window will open, indicating that the process may take a few minutes (Fig. 4.2.15). After accepting, the validation process will start. During this process, the "Validation" function will indicate in light grey "Validation in progress". It is suggested that the reporter stops working while validations are in progress.

Validate dataset		8
This action will take some minutes and it will run in background. Do you want to continue with the validation?		
	✓ Yes	× No

Figure 4.2.15. When the "Validate" function is used, a window will open requesting to confirm the action.

Once the validation process has finished, a small green notification window on the top right corner of the platform will confirm the completion of the process (Fig. 4.2.16). This small window vanishes relatively soon, however, the action is registered in the "**Notifications**" history, accessible on the left, vertical panel (see Fig. 4.2.16). By clicking on the bell icon, the reporter has access to the record of actions taken in Reportnet 3.0 (Fig. 4.2.17).

*	Reportnet 3 >	😭 Dataflows 🕽	🔲 Dataflow 🔪 💣 Sweden (> 🛢 Dataset		~	SUCCESS Validation finishe	
¥ 9 ฦ				Checklist Pend 2024 [TEST MAY 2024] - S			data - Birds Checl Click Refresh to v	
P	1 Import da	ataset data 🔹 E	export dataset data 🛛 🛱 Delete c	dataset data 🛛 🛛 Validate 🌔	▲ Show validations 章	QC rules 🐸 Dashboards	Manage copies	Refresh
	BirdsCheck	klist 🔺 🚯 Alte	rnativeCommonSpeciesName			genues — Dashbuarus	- Manage copies	Keiresii
 >					✔ Validation filter		r by value	Q 3
			rnativeCommonSpeciesName					
	▲ Import	table data 🔹 E	rnativeCommonSpeciesName	ile data 🖉 Show/Hide columns	✔ Validation filter	Filter	r by value	Q 🖲

Figure 4.2.16. After the validation process has finished, a notification appears on the top right corner of the monitor in the form of a small window, and is also tracked in the Notifications history, accessible on the left vertical panel (bell icon, see also Fig. 4.2.17). To see the list of validations, the "Show validations" function may be used.

Message	Level	Date	Action	
/alidation finished at Reporting data - Birds Checklist (Sweden). Click Refresh to view the data.	SUCCESS	2024-05-29 15:18:32	https://reportnet.europa.eu/dataflow/1240/dataset/70938? tab=6656d5c1814fd100016cc597	
/alidating Reporting data - Birds Checklist (Sweden)	INFO	2024-05-29 15:17:25	https://reportnet.europa.eu/dataflow/1240/dataset/70938? tab=6656d5c1814fd100016cc597	
oaded data completed at Sweden	SUCCESS	2024-05-29 15:15:29	https://reportnet.europa.eu/dataflow/1240/dataset/70938	
External processes ended at Sweden	SUCCESS	2024-05-29 15:15:19	https://reportnet.europa.eu/dataflow/1240/dataset/70938	
mporting data in Sweden	INFO	2024-05-29 15:15:14		
Rows per page 10 🗸	▲ 1	2) N	Go to 1 of 2 Tota	l: 14

Figure 4.2.17. Clicking on the bell icon (Fig. 4.2.16) opens a new window where a list of notifications is shown. Every task or action in Reportnet 3.0 is recorded in this list.

If issues arise during the validation process within the corresponding schema, these will be indicated with alert icons (Fig. 4.2.18). These icons will appear next to each table's name and, within a table, for every entry, in the summary column "Validations" and in the field column that presents issues (Fig. 4.2.19). Levels of issues (blockers, errors, warnings or information messages) are shown with different icons (Fig. 4.2.18). Placing the mouse over one of these icons will provide further information on the issues encountered (validation message).



Figure 4.2.18. Alert icons corresponding to the four error class codes.

		ta - Birds Che g - 2019-2024 [TEST1] - S					
▲ Import datase	et data 🔺 Export da	ataset data 🛛 着 Delete dataset da	ta	Validation	idate 🔺 Show validations 幸 (QC rules 🐸 Dashboards	Manage copies 2 Refre
 BirdsChecklist Import table 		CommonSpeciesName	🕫 Show/Hide columns 🛛 🏌 Validation filt	er		П	liter by value Q
Actions	Validations	species_code 0 🖨	species_code_label 🕄 🖨	season_code 🕄 🜲	presence_code 🕄 🗢	spa_trigger 🕄 🖨	comments 🖯 🗢
	• •	A006	Podiceps grisegena	w	PRE	No	A 0
 	• •	A007	Podiceps auritus	в	PRE	No	A 0
		A007	Podiceps auritus	w	PRE	No	

Figure 4.2.19. After running a validation, if issues have arisen, these will be indicated with different icons (Fig. 4.2.18) at the level of tables, row entries and fields.

To see the issues in detail, it is also possible to use the "Show validations" function (Fig. 4.2.16). This will open a new window with a summary of the issues (Fig. 4.2.20), including the level of error (info, warning, error or blocker), an explanation and the number of entries with such error. Clicking on any of the results in this summary will apply a filter based on the clicked error, displaying only the corresponding affected records. The table can be further explored using the "Filter" function, where errors can be filtered by type of QC rule, by table, field or error class/type (Fig. 4.2.18). It is important to note that, by default, only 10 errors/records are shown in one page, thus, if more than 10 errors/records are identified during the validation process, these will show in continuous pages. To move across pages, use the arrows in the blue bar below the list of entries of the table (similar to Fig. 4.2.7). This summary table can be downloaded with the function "Download validations" at the bottom left of this window (Fig. 4.2.20). Furthermore, by using the function "Export dataset data" >> "XLSX (.xlsx with validations)" (Fig. 4.2.21), the reporter may download the dataset with inserted validations, which allows to identify the issues per entry and per table. Some validations, however, may not be shown in the "exported dataset with validations" (e.g. table related rules not specific to an entry), thus the reporter should always pay attention to the indications shown in the validations' summary window.

× Close

alidatio	ons					
ype of QC		✓ Ta	ble	~	Field V Level error V	T Filter ව Rese
Entity	Table 🖨	Field 🗢	Code 🗢	Level error	Message 🗢	Number of records 🗢
FIELD	GeneralInformationSo urces	2_5_transposition_dir ective	FC52 0	BLOCKER	The value must not be missing or empty	1
RECORD	SuccessStories		01b_relation_species_season 0 _deleted	BLOCKER	The [species_code] and [season_code] combination is not present in the Birds Checklist dataset, or it is flagged for deletion (presence_code = 'DEL').	2
	er page 10 🗸			H 4 1	Find the second	ords (total errors: 3)

Download validations

Figure 4.2.20. Example of a list of validations shown when using the "Show validations" function. To filter validations, use the top filter tools, or simply click on any field within the table. This will display the records that have the selected issue. To download this table, click the function "Download validations".

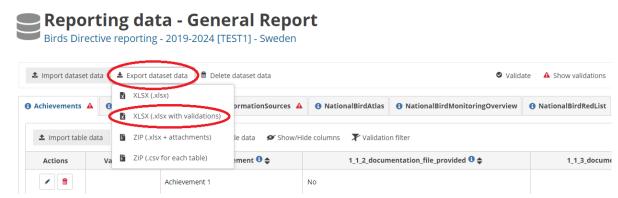


Figure 4.2.21. The "Export dataset data + XLSX (.xlsx with validations)" function may be used to download the dataset with validations inserted in the table, allowing the reporter to identify the issues per entry and per table.

Data may be validated at any stage of completion of a table or schema. Thus, for example, if the reporter has completed one of the tables of a schema, and wishes to check it for validations, this is possible by using the "Validate" function. However, since the validation process analyses the full schema (i.e. all tables of a schema together), the output of the validations will provide information for other mandatory tables of the schema as well.

4.2.3 Data Correction

Ideally, all Blockers, Errors and Warnings should be solved before delivering the data. Blockers will block the delivery of a report, whereas Errors and Warnings won't.

To correct the data, the reporter has two alternatives: 1) editing the original file offline, to later import it again in Reportnet 3.0, or 2) to manually edit the entries of a table in Reportnet 3.0. For the latter, the reporter can use the "**Add record**", "**Edit**" and "**Delete**" functions for every entry of a table, or simply click in any entry and edit (see Figs. 4.2.7, 4.2.9 and 4.2.10).

The "**Add record**" and "**Edit**" functions will open a new window where the individual fields of the corresponding entry may be added pr edited. Once the editions are complete, the "**Save**" function must be used to store the changes and go back to the general table.

4.2.4 Re-submission, Re-validation and Re-correction

The previous steps (Submission, Validation and Correction of data) may be performed as many times as needed for one or more tables of a schema. During this iterative process, all imported data will be stored on the platform, allowing the reporter to work on specific tables offline, if necessary, before going back to the online platform. If the reporter wishes to import new data and replace the data already stored in the platform, the "**Replace data**" function should be used when importing the new dataset or table (see section "II. Data submission" and Fig. 4.2.5). If not, the newly imported data will be added as additional entries next to already existing ones.

Similarly, data will not be lost when moving from one schema to another, allowing parallel work on different schemas. However, **imported data do not mean that the report of the Member State has been delivered and the platform does not automatically create stored versions of these imports**. To officially deliver a report, please refer to the following section "Report Delivery". As indicated before, all blockers and errors must be solved before ultimately delivering the report.

4.2.5 Report Delivery



Release to data collection

Once all blockers and errors have been solved and all schemas are complete, the lead reporter may deliver the national report by using the green icon "Release to data collection", located in the main menu of the country dataflow. A new window will open, requiring to confirm the delivery (Fig. 4.2.22). Additionally, the lead reporter may indicate whether the data to be submitted should be restricted from public view. By default, and independent of this indication, all spatial data will be restricted from public view. After the reports are delivered, the data are checked and the national summaries are approved, the EEA will

create maps releasing the spatial information of non-sensitive species. By clicking the option "**Restrict from public view**", **the complete national report** (including both tabular and spatial data) **will be restricted from public view**. Restricting the tabular information is strongly discouraged.

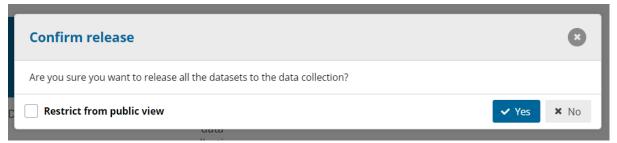


Figure 4.2.22. Last step of the general reporting process, to confirm the delivery of the national report. By default, maps are restricted from public view. Clicking on "Restrict from public view" will restrict the whole report from public view.

A quality control process on each schema will run when confirming the release by clicking 'Yes'. The list of validations will be refreshed in the background:

- If there are any blockers in any dataset, the release will stop and a message to the user will inform about that.
- If the quality control is fine, a notification will appear saying the data is being validated and sent to the data collection. An automatic copy will be created. In the main country folder, the reporter will also see a new icon from which a simple "Confirmation Receipt" can be downloaded (Fig. 4.2.23).

The reporter can modify the data and resubmit a new copy of the data as many times as needed. Whenever a new copy is released to the data collection, the previous delivery will be deleted, and a new confirmation receipt will be available for download.



Figure 4.2.23. After the correct delivery of a report, a new icon in the main country folder will show a confirmation receipt that may be downloaded.

For further information on the data submission, please consult the Reportnet 3.0 Reporter How To Guidance.

The following sections provide details of the data preparation and delivery of the specific schemas of the Art. 12 report. For each of these schemas, the general rules explained in section 4.2 apply.

4.3 Checklist

The first step to prepare the data submission is to confirm the national Art. 12 species Checklist. The Birds Checklist can be filled in based on the template "Import Template Birds Checklist", for which the technical details are described in "Art. 12 schema and validation rules_v.1" (all available in the Reference Portal). The template may also be downloaded from the Reportnet 3.0 Dataflow help button (see Fig. 4.1.1).

The schema for the Birds Checklist contains two tables, "BirdsChecklist" and "AlternativeCommonSpeciesName" (Fig. 4.3.1). The import template contains the same two tables too as separate datasheets. The first table should be used to confirm the national checklist to be used for reporting. The second one may be used to add an alternative scientific name used at the national level (if different to name from the reference list) and/or a common name in the national language. It is important to note that the second table may only be filled out for species (i.e. for species codes) that are present on the first table.

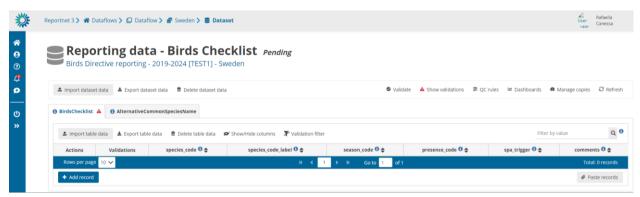


Figure 4.3.1. General view of the schema "Reporting data – Birds Checklist", including two tables, shown as two vignettes.

The "BirdsChecklist" table is a mandatory table and contains the following fields:

- species_code: individual species code
- species_code_label: species label, i.e. species scientific name, including subspecific population if appropriate. This field is filled automatically based on the species code, if the 'prefill checklist' option is used (see below). These values are editable by the reporters but are not validated.
- season_code: season (breeding, passage or wintering)
- presence_code: occurrence
- spa_trigger: information on whether the species belongs to a taxon not listed in Annex I of the Birds Directive but triggers SPA classifications nationally under Art. 4(2) of the

Directive. Therefore, Annex I species should be indicated as 'spa_trigger' = 'NO' as this filed corresponds to Non-Annex I spa trigger' species.

• comments: comments should be given in cases where any of the previous fields, with regard to the already published national checklist, are modified by the Member State.

The "AlternativeCommonSpeciesName" table is a non-mandatory table, contains the following fields:

- species_code: individual species code
- alternative_name: optional alternative species name (field 1.6 from Part B of the Art. 12 Reporting Format)
- common_name: optional common local or national species name (field 1.7 from Part B of the Art. 12 Reporting Format)

To work on the 'BirdsChecklist' and the 'AlternativeCommonSpeciesName' tables, the reporter may use the "**Import dataset data**" function (Fig. 4.3.2) to import an .xlsx (importing one file with two sheets, i.e. two tables) or a .zip file (importing two .csv tables simultaneously).

澿	Reportnet 3 > 🛠 Dataflows > 🔲 Dataflow > 💣 Sweden 🗲 🛢 Dataset
 ☆ ♀ ♀ ♀ ↓ 	Birds Directive reporting - 2019-2024 [TEST1] - Sweden
ø	🛓 Import dataset data 🛔 Export dataset data 着 Delete dataset data 🔍 Validate
	ZIP (.csv for each table)
с С	Custom file imports
"	🖪 Import Excel File (.xIsx) able data 💼 Delete table data 🖋 Show/Hide columns 🏋 Validation filter
	Other custom imports species_code 0 \$ species_code_label 0 \$ season_code 0 \$
	Prefill Checklist K K I F M Go to 1 of 1
	+ Add record

Figure 4.3.2. Alternatives to import dataset data for the Birds Checklist schema: an Excel file or a ZIP file may be imported from a local computer. Alternatively, a pre-filled checklist can be imported.

Reportnet 3.0 also offers a function to directly prefill the national Checklist for each Member State (Fig. 4.3.2). The fields of Table "BirdsChecklist" will then automatically be pre-filled (and not to the 'AlternativeCommonSpeciesName' table), based on the Art. 12 Checklist version published in the Reference dataset. If the Member State envisions to report under Art. 12 using this pre-filled checklist (i.e. without any changes), the Member State may proceed with the data preparations of other schemas and further delivery.

Alternatively, the reporter may import the 'BirdsChecklist' or the 'AlternativeCommonSpeciesName' table individually by using the "**Import table data**" function (see Fig. 4.2.3). This function only supports .csv files.

If the Member State requires to modify an entry in the Art. 12 national Checklist, including the table "AlternativeCommonSpeciesName", they may edit it directly in the Reportnet 3.0 platform (see Figs. 4.3.3, 4.3.4 and 4.3.5). The permitted modifications include:

- Addition/ modification of alternative and/or common species names for any bird species.
- Addition of species-season combinations, based on a species present in the codelist.
 In this case, information on the corresponding species_code, season_code, presence_code and spa_trigger must be provided, in addition to a <u>comment</u> explaining the addition of the entry to the national checklist (blocker).
- Modification of the occurrence of species-season combinations, or the information on spa_trigger
- Flagging of a bird species—season combination for deletion, by selecting the presence code 'DEL'. Please note that, in the case a species-season combination needs to be deleted, this should be only flagged and the record itself should not be deleted from the checklist, otherwise the delivery will be blocked.

If the season of a species needs to be modified, the existing species-season combination should first be flagged for deletion (i.e. use presence code 'DEL'), and a new species-season combination should be added.

Additions of new species-season combinations to the checklist may be done by using the "Add record" function (see Fig. 4.2.6). By clicking this function, a new window will open where for each entry (i.e. for each species-season combination) the individual fields 'species_code', 'species_code_label', 'season_code', 'presence_code' and 'spa_trigger' (information on whether the species belongs to a taxon not listed in Annex I of the Birds Directive but triggers SPA classifications nationally under Art. 4(2) of the Directive) must be provided, in addition to a <u>comment explaining the addition of the entry to the national checklist (blocker)</u>. Since the "Add record" function considers new added entries as changes to the Checklist, requiring a comment for every addition, the use of this function for importing a full national Checklist is discouraged. Instead, this alternative should be used only when a Member State needs to modify a particular species-season combination.

All modifications on species-season code combinations, occurrence or 'spa trigger' require a comment explaining the modification of the type of occurrence (otherwise the delivery is blocked).

1 Import dataset	t data 🔹 Export dat	aset data 🛛 🛱 Delete dataset data	3	🔮 Vali	date 🔺 Show v
BirdsChecklist	AlternativeComn	nonSpeciesName			
▲ Import table			Show/Hide columns 🛛 🔭 Validation filter		
Import table Actions	data & Export tabl	le data Delete table data species_code	Show/Hide columns	season_code 0	presence
\sim					presence PRE

Figure 4.3.3. To edit a species-season combination, use the 'Edit' function in the Actions column.

🏝 Import datase	t data 🔹 Export dat	aset data 🛛 🛱 Delete dataset data		Valid	late 🔺 Show val
BirdsChecklist	AlternativeComn	nonSpeciesName			
1 Import table	e data 🔹 Export tabl	e data 🛛 🗂 Delete table data 🖌	Show/Hide columns 🛛 🔭 Validation filter		
Actions	Validations	species_code 🕄 🖨	species_code_label 🟮 🖨	season_code 🕄 🖨	presence_
		A001	Gavia stellata	В	PRE

Figure 4.3.4. Alternatively to the step shown in Fig. 4.3.3, to edit any entry of a species-season combination, simply click on the text box. The box turns white, and the text can be edited directly.

🏝 Import datase	et data 🔹 Export dat	aset data 🛛 🛱 Delete dataset data	3	Search va	alue	۹
BirdsChecklist		nonSpeciesName 🛕 le data 🏾 🗂 Delete table data 🖌	🖉 Show/Hide columns 🛛 🏋 Val		ly arriving present - delete from the check-list inct after 1980	
Actions	Validations	species_code 🛈 🗢	species_code_label 🕄		onal report	
				PRE - Pres	ent and occurs regularly in the Men	nder State in the season in question
		A001	Gavia stellata	PRE - Pres	ent and occurs regularly in the Men B	PRE - Present and occurs regu

Figure 4.3.5. In the case of fields with dropdown menus, clicking the text box will open the dropdown list of possible values to be entered. Please note that, by default, the search bar contains the current value, which should be erased to find other possible values.

After checking and adapting the lists, a validation must be run to ensure the necessary data quality (see "Data validation" in section 4.2.2). Afterwards, the Member State may proceed with the data preparations and further delivery.

Once a dataset or a table has been correctly imported, all entries will appear in the table of the schema and may be visually checked. Once both tables of the "Birds Checklist" schema are completed, click "**Validate**" to run the validations (see Fig. 4.2.13).

4.4 Other tabular data

This section contains information on preparing and delivering tabular data related to two schemas, "Reporting data – General Report" and "Reporting data – Birds". Each of these schemas is subdivided into several tables. Similar to the Checklist schema, data may be imported using the "**Import dataset data**" or "**Import table data**" functions, or manually entered using the "**Add record**" function. Furthermore, within a table, entries may be edited online using the editing functions (see also "Data Submission" in section 4.2.1).

4.4.1 General Report

The schema "Reporting data – General Report" covers **Part A (General Report)** of the Art. 12 Reporting Format, and is divided into <u>eight tables</u>, listed below. The tables of the General Report should not be filled in for the territories of ESIC, PTAC and PTMA.

- Achievements: This table corresponds to fields within section 1 "Main achievements under Directive 2009/147/EC", point Main Achievements. Only one entry (i.e. one row) should be reported, thus, if the reporter envisions reporting multiple achievements, these must all be included in one single row. This is a mandatory table.
- SuccessStories: This table corresponds to fields within section 1 "Main achievements under Directive 1009/147/EC", point *Success stories*. This is a non-mandatory table, and multiple success stories (i.e. multiple entries or rows) may be submitted for one species, splitting a success story per season, or for several species.
- GeneralInformationSources: This table covers fields within section 2 "General information sources on the implementation of Directive 2009/147/EC". It's a mandatory table, and every sub-point (2.1 to 2.5) must be filled in. If more than one information source needs to be provided, these should be added within one single entry (i.e. within one row). The fields allow for multiline text.
- NationalBirdAtlas: This table covers fields within 3.1 "National bird atlas". It's a nonmandatory table, and multiple entries are allowed.
- NationalBirdMonitorinOverview: This table covers fields within 3.2 "National bird monitoring overview". It's a non-mandatory table, and several entries are allowed.
- NationalBirdRedList: This table covers fields within 3.3 "National bird red list". It's a non-mandatory table and several entries are allowed.
- OtherPublications: This table covers fields within 3.4 "Other publications of EU-wide interest (e.g. national overview of action for threatened species)". It's a non-mandatory table and several entries are allowed.
- NonNativeSpecies: This table covers fields within 4 "Non-native bird species (Art. 11 of Directive 2009/147/EC)". It's a non-mandatory table, and several entries are allowed.

In Reportnet 3.0, these tables are visible and accessible as different vignettes (Fig. 4.4.1). Depending on the monitor size, not all tables/vignettes may be visible when opening the

schema due to space limitations. To access the last tables situated towards the right, use the grey arrows or the moving bar underneath the tables' names (see Figure 4.4.1). In the import table "<u>General Report</u>", these tables are represented as different spread sheets.

		data - G		Report] - Sweden				
🏝 Import dat	aset data 🛛 🛓 Ex	xport dataset data	Delete data		s 幸 OC rules 岬 Da	shboards 🛛 🗖	Manage copies	C Refresh
Achi	evements 0 s	SuccessStories 🔺	1 Generalinf	ormationSources A	1 NationalBirdAtlas	1 National	BirdMonitoringOv	erview 🕨
🏝 Import t	able data 🔹 Ex	xport table data 🛛 🗂	Delete table da	ata 🛛 🖉 Show/Hide co	lumns 🗶 Validation filt	er Filter by	value	Q 🖲
Actions	Validations	1_1_1_achiever	ment 🔁 🜩	1_1_2_documen	tation_file_provided 🟮 🖨	;	1_1_3_documenta	ion_file 📵 🖨
		Achievement 1		No				

Figure 4.4.1. General view of the schema "Reporting data – General Report". The grey arrows and the white moving bar allow access to the tables/vignettes that are not visible due to space limitations.

<u>4.4.2 Birds</u>

The schema "Reporting data – Birds" covers **Part B (Bird species status and trends report format)** of the Art. 12 Reporting Format, and it's divided into <u>12 tables:</u>

- Seasons_GeneralInformation: This table corresponds to fields within section 2 "Season". This is a mandatory table.
- PopulationSize: This table corresponds to fields within section 3 "Population size". This is a mandatory table.
- PopulationTrend: This table corresponds to fields within section 4 "Population trend". This is a mandatory table.
- BreedingDistributionSize_Map: This table corresponds to fields within section 5 "Breeding distribution map and size". This is a mandatory table.
- BreedingDistributionTrend: This table corresponds to fields within section 6 "Breeding distribution trend". This is a mandatory table.
- Pressures_GeneralInformation: This table corresponds to fields within section 7 "Main pressures and threats", particularly, fields 7.2, 7.3 and 7.4. This is a non-mandatory table.
- Pressures_List: This table corresponds to fields within section 7 "Main pressures and threats", particularly, fields 7.1 a) to g). This is a mandatory table.
- Measures_GeneralInformation: This table corresponds to fields within section 8 "Conservation measures", particularly, fields 8.1, 8.2, 8.3, 8.4, 8.5 and 8.7. This is a mandatory table.

- Measures_List: This table corresponds to field 8.6 "List of main conservation measures". This is a mandatory table.
- Natura2000Coverage: This table corresponds to fields within section 9 "Natura 2000 (Special Protection Areas (SPAs)) coverage". This is a mandatory table.
- PlansProgress: This table corresponds to fields within section 10 "Progress in work related to International Species Action Plans (SAPs), Management Plans (MPs) and Brief Management Statements (BMMs)". This is a mandatory table.
- HuntingBags: This table corresponds to fields within section 11 "Information related to Annex II species of Directive 2009/147/EC". This is a mandatory table.

For most of these tables, each row/entry represents data of one species-season combination. For this reason, the first two fields of each table correspond to "species_code" and "season_code". The exceptions are tables "PlansProgress" (Progress in work related to International Species Action Plans (SAPS), Management Plans (MPS) and Brief Management Statements (BMSS)) and "HuntingBags" (Information related to Annex II species of Directive 2009/147/EC), for which each row/entry represents a species (no season information).

For table "BreedingDistributionSize_Map", only the *tabular data* associated to this table should be submitted here, whereas all associated *spatial data* (or maps) should be submitted via the schema "Spatial Data Information", available in the main menu of the Art. 12 dataflow (see also section 4.5). The reporter must ensure to mention in this table whether the Breeding distribution map (field 5.3) and Additional maps (field 5.6) are going to be submitted by indicating 'yes' or 'no' for each of these fields. The reporter must ensure to mention will not be provided again in the Spatial Information schema.

Similar to the General Report, in Reportnet 3.0, all tables are visible and accessible as different vignettes (Fig. 4.4.2). To access the last tables situated towards the right, use the grey arrows or the moving bar underneath the tables' names (similar as in Fig. 4.4.1).

These tables are found as different spread sheets in the "<u>Import template Birds</u>" .csv file. Since a large amount of information is requested in coded form in these tables, it is particularly important to consider the relevant reference datasets, which are available in the Reference Portal. Even typing errors, such as the inadvertent use of capital or small letters, would lead to errors/blockers.

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Figure 4.4.2. General view of the schema "Reporting data – Birds".

4.4 Spatial Data

The submission of distribution maps for breeding birds present in a Member State is a basic requirement of Article 12 reports. Maps should provide information about where breeding is recorded according to the categories defined in the new European Breeding Bird Atlas.

Distribution maps must be submitted using the "Reporting data – Birds Spatial Information" dataflow, found within the country folder. This dataflow contains two tables, "Birds_Distribution_GridCells" and "Birds_AdditionalMaps". The first table shall be used for the submission of distribution maps according to field 5.3 of Part B of the Art. 12 Reporting Format and is a mandatory table. The second table shall be used for field 5.6 'Additional maps' and is a non-mandatory table.

Similar as for other schemas, the function "Export dataset data" \rightarrow "XLSX" can be used to download the tables that should be used as import template (Fig. 4.4.1). This template is also available in the Reference Portal and in the Dataflow Help section (Fig. 4.1.1).

Member States can submit the birds' distribution data (for the table "Birds_Distribution_GridCells") in two ways, as tabular information or as gridded polygons:

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Figure 4.4.1. The function "Export dataset data" allows for the download of the schema tables. The downloaded table can be used as a template for reporting tabular information related to the two tables within the Birds Spatial Information schema.

Use of tabular information

This new method, implemented in the Reportnet 3.0 platform, facilitates the submission of essential geospatial information. Previously, Member States had to submit geometry information (e.g. shapefiles) consisting of multiple files, which increased the possibility of errors in the geometry of the files. With this new tabular approach, we limit these errors by simplifying the information to be submitted to a simple tabular file (.csv or .xlsx) that includes no more information than the species code and the occupied grid cell codes (EEA reference grids) by the species. Thus, Member States should prepare the information in the form of a .csv or .xlsx table, simply indicating the species code and the reference code to the EU standard grid (at 10x10 km or 1x1 km) where the species is recorded breeding, as described in the Explanatory Notes. This format, in contrast to maps or geometry files, contains the most basic information used for the creation of distribution maps and will be used for the recreation of the maps from EEA and ETC BE.

The table to be used for this is the "Birds_Distribution_GridCells" table, containing two fields/columns: "species_code" (bird species code) and "gridcell_code" (standard EU grid code, see the reference tables "GridCell10" and "GridCell50" for details). Member State can submit, in one single table, grid cell codes of different grid sizes (1x1 km, 10x10 km grids), i.e. some species may use one grid size and others a different grid size. However, each species should be reported using only one grid size.

Understanding that some Member States maintain their workflows and systems around the legacy geospatial format, the old format of submitting the spatial data is maintained. Member States may thus import a geometry file (shapefile, geodatabase) that conforms with the following requirements:

Use of gridded polygons

Alternatively to the submission of tabular spatial information, Member States may also submit gridded polygons, as long as they adhere to the following conditions:

- Single Shapefile: Zipped shapefiles may be submitted, containing all the necessary associated files (e.g., .shp, .shx, .dbf, .prj). Alternatively, unzipped .gpkg files may be imported.
- Grid Cell Polygons: The gridded polygons, or individual grid cell polygons must precisely match the specific EEA reference grid
- Spatial Reference: The SRID (Spatial Reference System Identifier) should be EPSG:3035
- Multiple layers: The shapefiles can include multiple layers, and it is acceptable for multiple layers to exist for the same species
- Files can contain dissolved or undissolved grid cell polygons at the proper European projection.

It is important to note that, if the Member State decides to import geometric files, these files will not be stored in Reportnet 3.0, and only the tabular information of these files will be extracted and stored. Thus, geometric files will be converted into a table containing the

species code and the grid cell codes. This table will be visible to the reporter after importing and using the "Refresh" function.

To submit, edit and validate data, the general functions and rules described in section 4.1 apply. However, the following particular aspects should be considered for the "Birds Spatial Information" schema:

The "**Import dataset data**" function can import ZIP files, Excel files (following the import template format) and geometry files (zipped shapefiles or one geopackage file) (Fig. 4.4.2).

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Figure 4.4.2. The function "Import dataset data" provides several alternatives for importing tabular and/or geometric files.

Similarly as for other schemas, only one file can be imported at a time:

- One ZIP file, containing one or two .csv tables, each one corresponding to the tables "Birds_Distribution_GridCells" and "Birds_AdditionalMaps". Table names and column names must follow the import template format.
- One .xlsx table that must compile with the format of the import table (i.e. contain two sheets, one for "Birds_Distribution_GridCells" and one for "Birds_AdditionalMaps")
- One zipped file containing the necessary shapefiles (e.g., .shp, .shx, .dbf, .prj). Geometry files need to have the following column names: 'CODE' for the species code and 'REFGRID' for the grid cell code.
- One geometry file in the form of geopackage (unzipped). Column names must be 'CODE' for the species code and 'REFGRID' for the grid cell code.

The "**Import table data**" function, on the other hand, can only import one .csv file, and the column names must follow the corresponding table of the import template.

Similarly as for other schemas, data can also be added manually using the "Add record" function.

Both the "Import dataset data" and "Import table data" functions will open a new window where files may be selected from the local computer or dragged into the box (Fig. 4.4.3). Within this window, the function **"Replace data"** will erase all previous data that have been

imported in the schema (i.e. for all tables of the schema if using the "Import dataset data" function) or for the corresponding table (if using the "Import table data" function). If the function <u>"Replace data" is not selected</u>, data will be added without erasing previous imported data, meaning that new entries will be added on to the list together with previous entries. This also means that Member States may import several individual files, and data will be collected in the country folder. These different files must, however, be imported one by one and not simultaneously.

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Figure 4.4.3. When using the "Import dataset data" or "Import table data" functions, a window will open where the file (ZIP, .xlsx, or .gpkg depending on the function) can be selected or dragged.

Once datafiles or tables have been imported, the "**Refresh**" button should be used (Fig. 4.4.4) to display the data for the corresponding table(s) (Fig. 4.4.5). Note that if geospatial files were imported, Reportnet 3.0 extracts selected information that takes the form of tabular data, containing only the species code and the grid cell code (Fig. 4.4.5).

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Figure 4.4.4. After importing files, the "Refresh" button should be used. This will display the imported data as in Fig. 4.4.5.

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		A021	1kmE430N260

Figure 4.4.5. After importing files (either tabular or geospatial) and refreshing the dataflow, the data (species code and grid cell code) will be displayed as a table.

The "Export dataset data" (and similarly, the "Export table data") function allows for the download of already imported (or manually added) tables (Fig. 4.4.6). Importantly, custom exports may be done, to download the (now tabular) data as either tabular (.xlsx) or geometry (shapefiles or geopackage files, zipped or unzipped) files. This allows the reporter to revise the submitted data. For example, if data were submitted as tabular data, they can be visualized as geometry files, and if data were submitted as geometry files, the table with gridded cell codes produced by Reportnet 3.0 can also be checked.

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Figure 4.4.6. The "Export dataset data" function allows the reporter to download the imported data in several formats, including both tabular and geometry files.

To submit additional maps, the table "**Birds_AdditionalMaps**" should be used. Data may be imported (via the "Import dataset data" or "Import table data" functions) from the import template, either as .xlsx (original format of the import template) or as a zipped .csv file. In both cases, the fields 'spatial_file_description' and 'species_code' should be filled in, whereas the field 'spatial_file' should not be filled in. After importing the table to Reportnet and refreshing, attachments corresponding to the field "spatial_file" should be uploaded by using the "Add attachment" function (grey arrow, see Fig. 4.4.7). Clicking the arrow will open a new window, where documents may be selected or dragged. Only one attachment per entry is possible. There are no format restrictions or quality control rules applied to an attachment.

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Figure 4.4.7. To upload an attachment, use the grey arrow in the corresponding entry.

If the Member State decides to submit "birds additional maps" (related to field 5.6) in addition to <u>gridded polygons</u> of "bird distribution maps" (related to field 5.3), the reporters must prepare 1) the tables designed for "Birds_AdditionalMaps" (a zipped .csv or an .xlsx file following the import template) and 2) a separated zipped shapefile (or unzipped geopackage file) corresponding to the "Birds_Distribution_GridCells" table. This means that two upload actions must be performed.