AGENDA ITEM 2

Lessons learned and main changes from 2021 data call

AGENDA ITEM 2 - Lessons learned and main changes from 2021 data call

Table “Emissions”

Overall statistics for reference year 2020

7102 records

195 substances

166 Countries/Districts/Sub-units

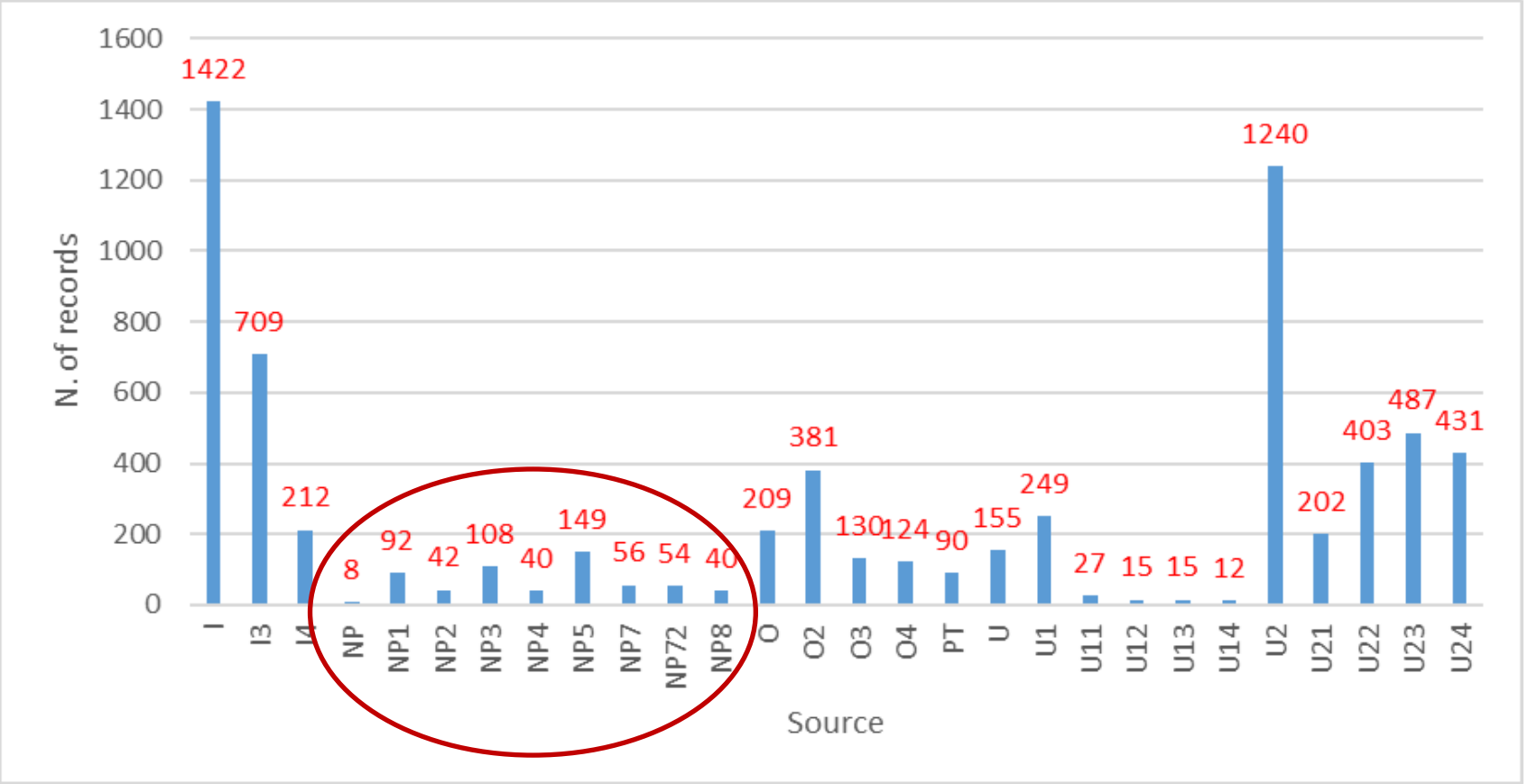
29 Countries

Source: Waterbase - Emissions https://www.eea.europa.eu/data-and-maps/data/waterbase-emissions-10
Data reported by EEA member countries and cooperating countries

AGENDA ITEM 2 - Lessons learned and main changes from 2021 data call

Table “Emissions”

Number of records per Source category



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AGENDA ITEM 2 - Lessons learned and main changes from 2021 data call

Table “Emissions”

Main issues detected:

- The hierarchical structure of the sources is not respected

i.e. in a certain spatial unit, for a certain Source category/Sub-category SC_i

$$\sum_{j=1}^{n} SC_{ij} \neq SC_i$$

- reported values under E-PRTR higher than the WISE-1 emission value and “parameterEPRTRfacilities” is reported as "both”

- Reported substances beyond those requested

AGENDA ITEM 2 - Lessons learned and main changes from 2021 data call

Table “Emissions”

The hierarchical structure of the sources is not respected
i.e. for a certain Source category/Sub-category SC_i

$$\sum_{j=1}^{n} SC_{ij} \neq SC_i$$

U2=U21+U22+U23+U24

Point sources are categorised as follows:

PT – Point sources (PT = U + I +O)
U – Point - Urban waste water treated and untreated (U = U1 + U2)
U1 – Point - Urban waste water - untreated (U1 = U11 + U12 + U13 + U14)
U11 – Point - Urban waste water - untreated - less than 2 000 p.e.
U12 – Point - Urban waste water - untreated - in agglomerations between 2 000 and 10 000 p.e.
U13 – Point - Urban waste water - untreated - between 10 000 and 100 000 p.e.
U14 – Point - Urban waste water - untreated - more than 100 000 p.e.
U2 – Point - Urban waste water treated (U2 = U21 + U22 + U23 + U24)
U21 – Point - Urban waste water - treated - less than 2 000 p.e.
U22 – Point - Urban waste water - treated - between 2 000 and 10 000 p.e.
U23 – Point - Urban waste water - treated - between 10 000 and 100 000 p.e.
U24 – Point - Urban waste water - treated - more than 100 000 p.e.
I – Point sources - Industrial waste water (I = I3 + I4)
I3 – Point - Industrial waste water - treated
I4 – Point - Industrial waste water - untreated
O – Point - Other point emissions (O = O1 + O2 + O3 + O4 + O5)
O1 – Point - Contaminated sites or abandoned industrial sites
O2 – Point - Waste disposal sites
O3 – Point - Mine waters
O4 – Point - Aquaculture
O5 – Point - Other

Diffuse sources are categorised as follows:

NP – Diffuse sources (NP = NP1 + NP2 + …+ NP8)
NP1 – Diffuse - Agricultural emissions
NP2 – Diffuse - Atmospheric deposition
NP3 – Diffuse - Unconnected dwellings emissions
NP4 – Diffuse - Urban run-off
NP5 – Diffuse - Storm overflow emissions
NP7 – Diffuse - Other diffuse emissions (NP7 = NP71 + NP72 + … + NP75)
NP71 – Diffuse - Forestry emissions
NP72 – Diffuse - Transport emissions
NP73 – Diffuse - Mining emissions
NP74 – Diffuse - Aquaculture emissions
NP75 – Diffuse - Other
NP8 – Diffuse - Background emissions

AGENDA ITEM 2 - Lessons learned and main changes from 2021 data call

Table “Emissions”

Action taken:

Data dictionary updated to clarify that **when, within the same spatial unit for a source category, data is reported at a lower level, then do NOT report data at an upper level and vice versa**

For example:

I3 and/or I4 reported → **Do not report I**

I reported → **Do not report I3 and/or I4**

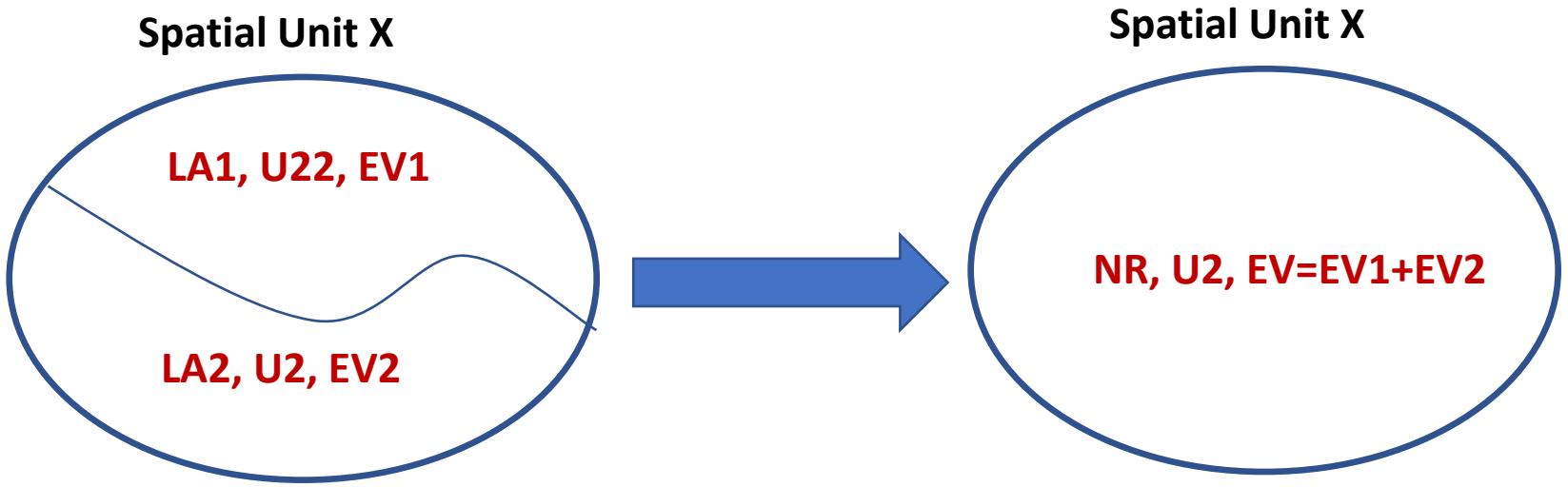
Always report at the lowest possible level (more details), provided that the data is available throughout the spatial unit

AGENDA ITEM 2 - Lessons learned and main changes from 2021 data call

Table “Emissions”

When the information is available at different levels (due to e.g. different local reporting authorities for the same spatial unit) **values must be reported at the same (highest) hierarchical level**

For example:



LA1: Local reporting authority 1
LA2: Local reporting authority 2
U2: Category Urban waste water treated (sum of all sizes)
U22: Category Urban waste water treated (plants 2000-10000 p.e.)

EV1: value reported from authority 1
EV2: value reported from authority 2
NR: National reporter
EV: value reported from national reporter

AGENDA ITEM 2 - Lessons learned and main changes from 2021 data call

Table “Emissions”

reported values under E-PRTR higher than the WISE-1 emission value although “parameterEPRTRfacilities” is reported as "both”

Name	EPRTR Facilities
Definition	Information if the Emission value is aggregated from all Facilities (E-PRTR and non-EPRTR) or from non-E-PRTR Facilities only.
Methodology for obtaining data	This value is required for emissions from point sources, which are relevant for E-PRTR reporting, i.e. from following source categories: PT (total point sources) U (total urban waste water discharges) U2 (urban waste water treated) and its sub-category greater than 100 000 p.e. (U24) I (industrial waste water) and all its sub-categories (I3, I4) O (other point sources) and all its sub-categories (O1, O2, O3, O4, O5) To avoid double reporting, the emissions from the E-PRTR facilities only should not be reported here, but through the respective E-PRTR dataflow. The EEA will extract the relevant data from the E-PRTR dataset directly, after the deliveries are processed.

Please pay attention and cross-check with national PRTR data and/or PRTR reporters

AGENDA ITEM 2 - Lessons learned and main changes from 2021 data call

Table “Emissions”

Reported substances beyond those requested

Action taken

The list of substances has been harmonized with WISE-6 parameters, where relevant, in order to include as many substances as possible (https://cdr.eionet.europa.eu/help/WISE_SoE/wise1/WISE1_ObservedProperty_QC_reference.xlsx)

New unit of measure introduced (**kg{TEQ}/a) for two furans (1,2,3,4,7,9-hexachlorodibenzofuran and 1,2,3,4,8-pentachlorodibenzofuran)**

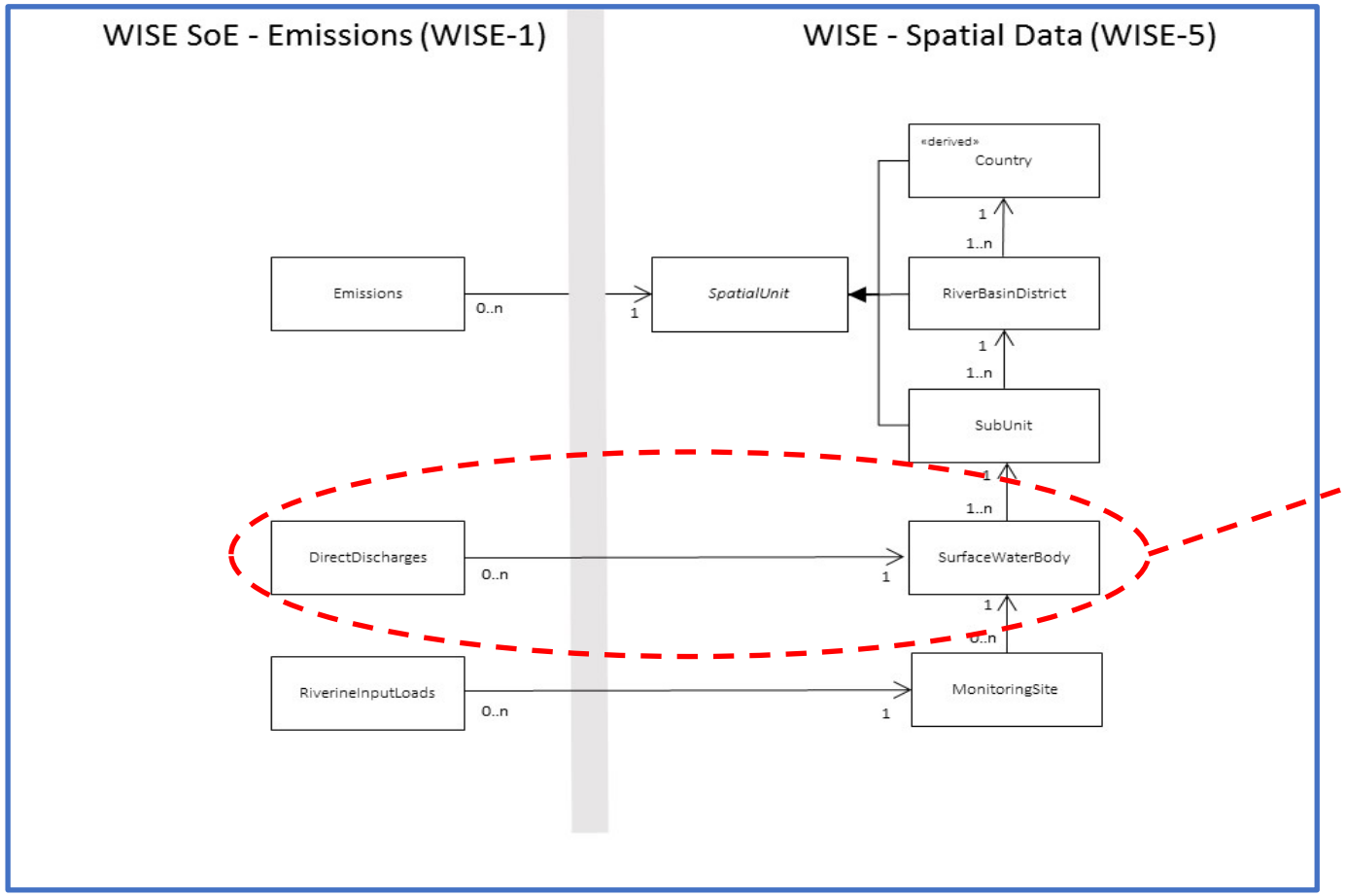
Sample records

observedPropertyDeterminandCode	observedPropertyLabel	tableName	resultUom
CAS_630-20-6	1,1,1,2-tetrachloroethane	Emissions	kg/a
CAS_1070-78-6	1,1,1,3-tetrachloropropane	Emissions	kg/a
CAS_71-55-6	1,1,1-trichloroethane	Emissions	kg/a
CAS_79-34-5	1,1,2,2-tetrachloroethane	Emissions	kg/a
CAS_79-00-5	1,1,2-trichloroethane	Emissions	kg/a
CAS_76-13-1	1,1,2-trichlorotrifluoroethane	Emissions	kg/a
CAS_75-34-3	1,1-dichloroethane	Emissions	kg/a

AGENDA ITEM 2 - Lessons learned and main changes from 2021 data call

Main changes from 2021 data call

- Only adjustments in the data dictionary and related documents
- Same structure and templates as previous exercise (e.g. no fields added)
- Same data model



"DirectDischarges" sheet not requested

AGENDA ITEM 2 - Lessons learned and main changes from 2021 data call

Main changes from 2021 data call

1. A list of substances, based on WISE-6 quality, has been established and for each substance the requested unit of measure has been identified and indicated (t/a, kg/a, **kg{TEQ}/a**). This correspondence may differ in some cases compared to previous exercises.
   https://cdr.eionet.europa.eu/help/WISE_SoE/wise1/WISE1_ObservedProperty_QC_reference.xlsx
   This change also applies to "RiverineInputLoads" sheet

2. Concerning U2 sub-sources (urban wastewater treated), throughout the DD and vocabulary it has been clarified and confirmed that the reported sizes refer to treatment plants and not to agglomerations.

AGENDA ITEM 2 - Lessons learned and main changes from 2021 data call

Table “Emissions”

Main changes from 2021 data call

3. **2 new sub-sources** have been introduced in order to account for specific cases not listed

O (Point - Other point emissions)

O5 (Point – Other)

- O1 (Contaminated or abandoned industrial sites)
- O2 (Waste disposal sites)
- O3 (Mine waters)
- O4 (Aquaculture)

N (Diffuse - Other)

NP75 (Diffuse – Other)

- NP71 (Forestry emissions)
- NP72 (Transport emissions)
- NP73 (Mining emissions)
- NP74 (Aquaculture emissions)

AGENDA ITEM 2 - Lessons learned and main changes from 2021 data call

Table “Emissions”

Main changes from 2021 data call

4. A change has been made in the section “Methodology for obtaining data” concerning the field parameterEPRTRfacilities, where the reference to UWWTPs with sizes ≤100,000 p.e. has been deleted in line with the size considered under the E-PRTR regulation.

Concerning UWWT
“parameterEPRTRfacilities” only mandatory for **U, U2 and U24**

AGENDA ITEM 2 - Lessons learned and main changes from 2021 data call

Table “RiverineInputLoads” open since 2021 data call

Overall statistics for reference year 2020

2254 records

108 substances

172 monitoring sites

5 Countries (EE, ES, IT, LT, SE)

SE also reported for years from 2014 to 2019

Source: Waterbase - Emissions *https://www.eea.europa.eu/data-and-maps/data/waterbase-emissions-10*
Data reported by EEA member countries and cooperating countries

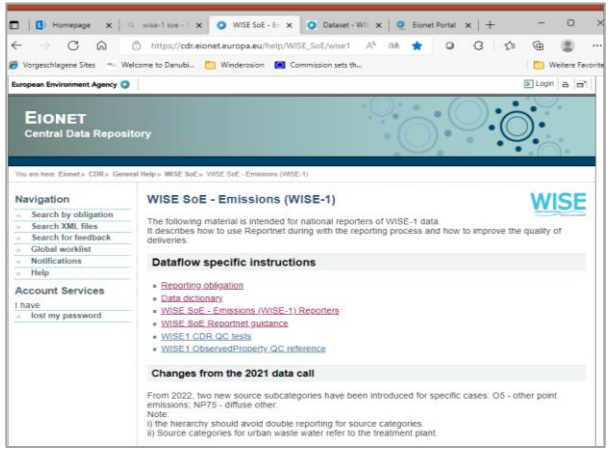
AGENDA ITEM 3

Demo on WISE-1 data reporting through Reportnet 3

AGENDA ITEM 3 - Demo on WISE-1 data reporting through Reportnet 3

- Help pages - overview

CDR help page for WISE-1:
https://cdr.eionet.europa.eu/help/WISE_SoE/wise1



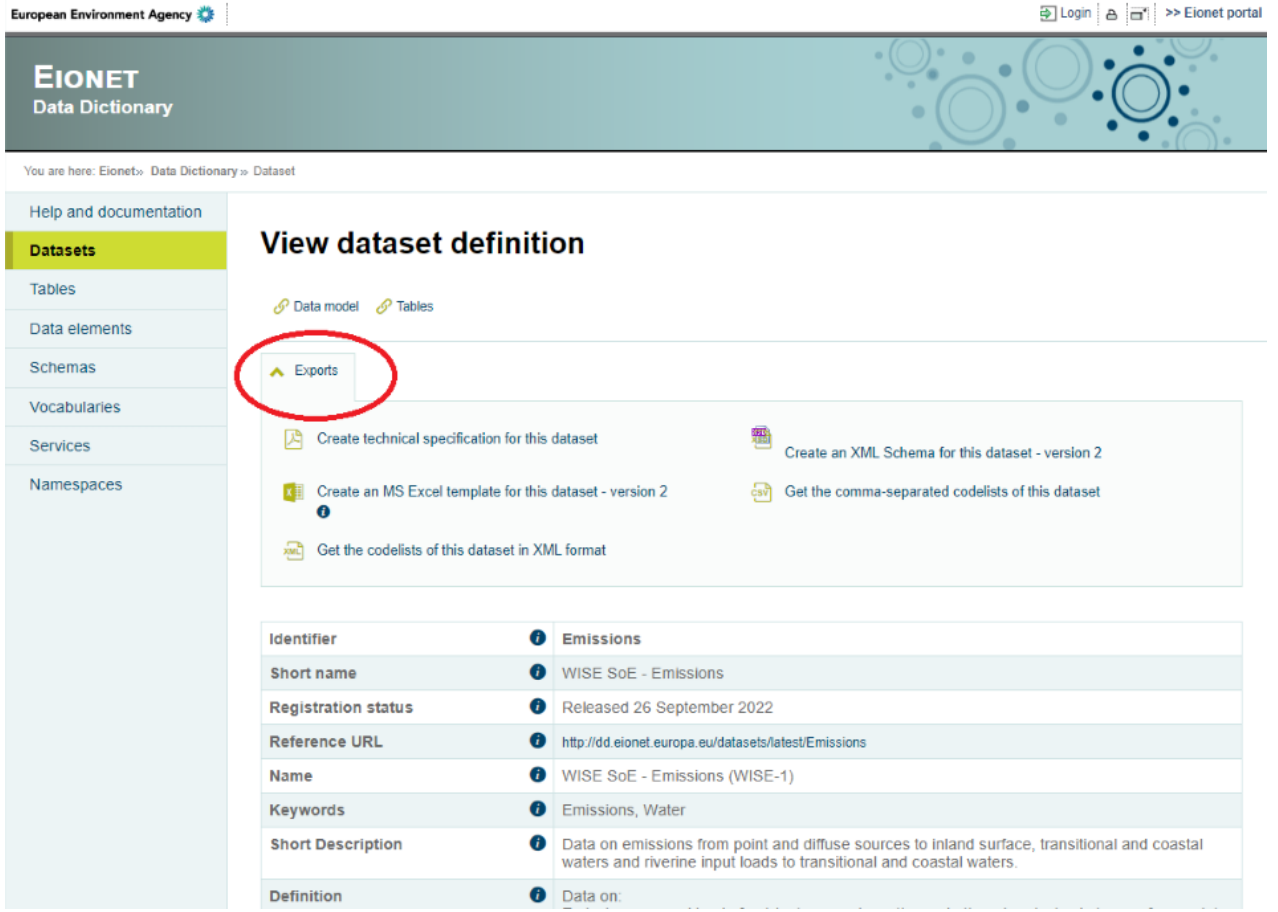
- Data Dictionary
- **NEW**: How to use Reportnet 3 for WISE-1
- QC test description
- Reference list of WISE-1 observed properties (updated)

AGENDA ITEM 3 - Demo on WISE-1 data reporting through Reportnet 3

- Data Dictionary

https://dd.eionet.europa.eu/datasets/latest/Emissions

- Descriptions and code lists
- Data model
- Tables
- Template (**did not change!**)



AGENDA ITEM 3 - Demo on WISE-1 data reporting through Reportnet 3

- Reportnet 3 - overview

- Login
- Data flow overview
- Data upload
- Data validation
- Data release

AGENDA ITEM 3 - Demo on WISE-1 data reporting through Reportnet 3

- Reportnet 3 - Login

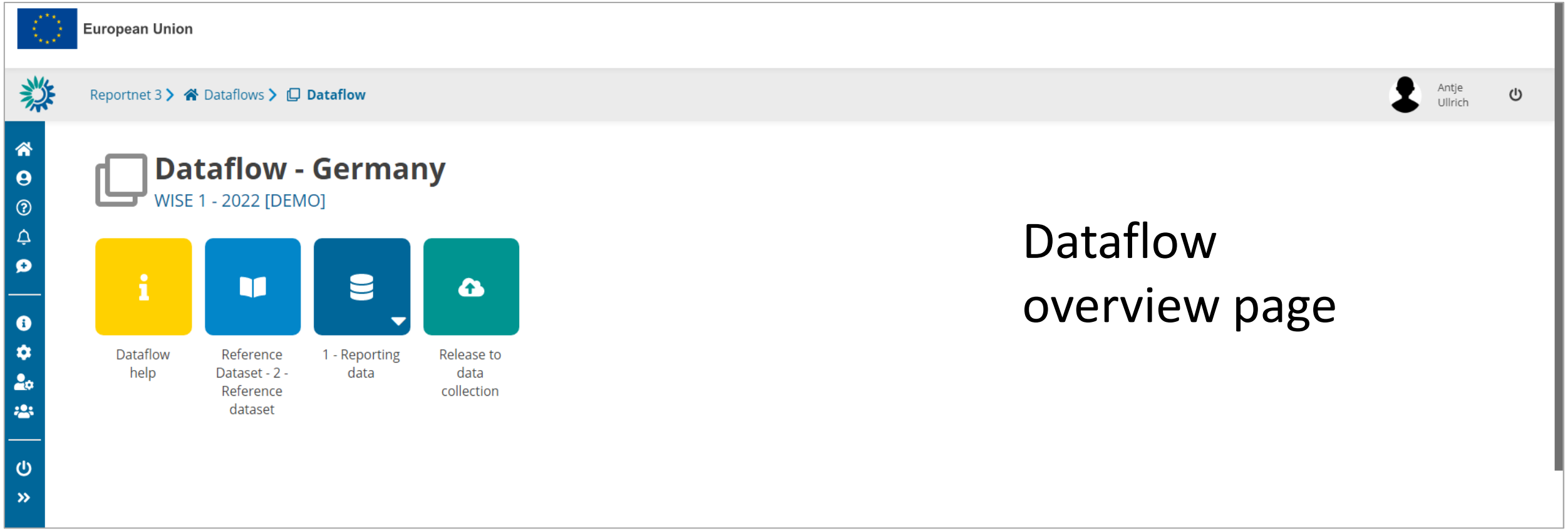
Go to Reportnet 3, login and open the recent WISE-1 data flow:

https://reportnet.europa.eu/

EU-Login is needed

AGENDA ITEM 3 - Demo on WISE-1 data reporting through Reportnet 3

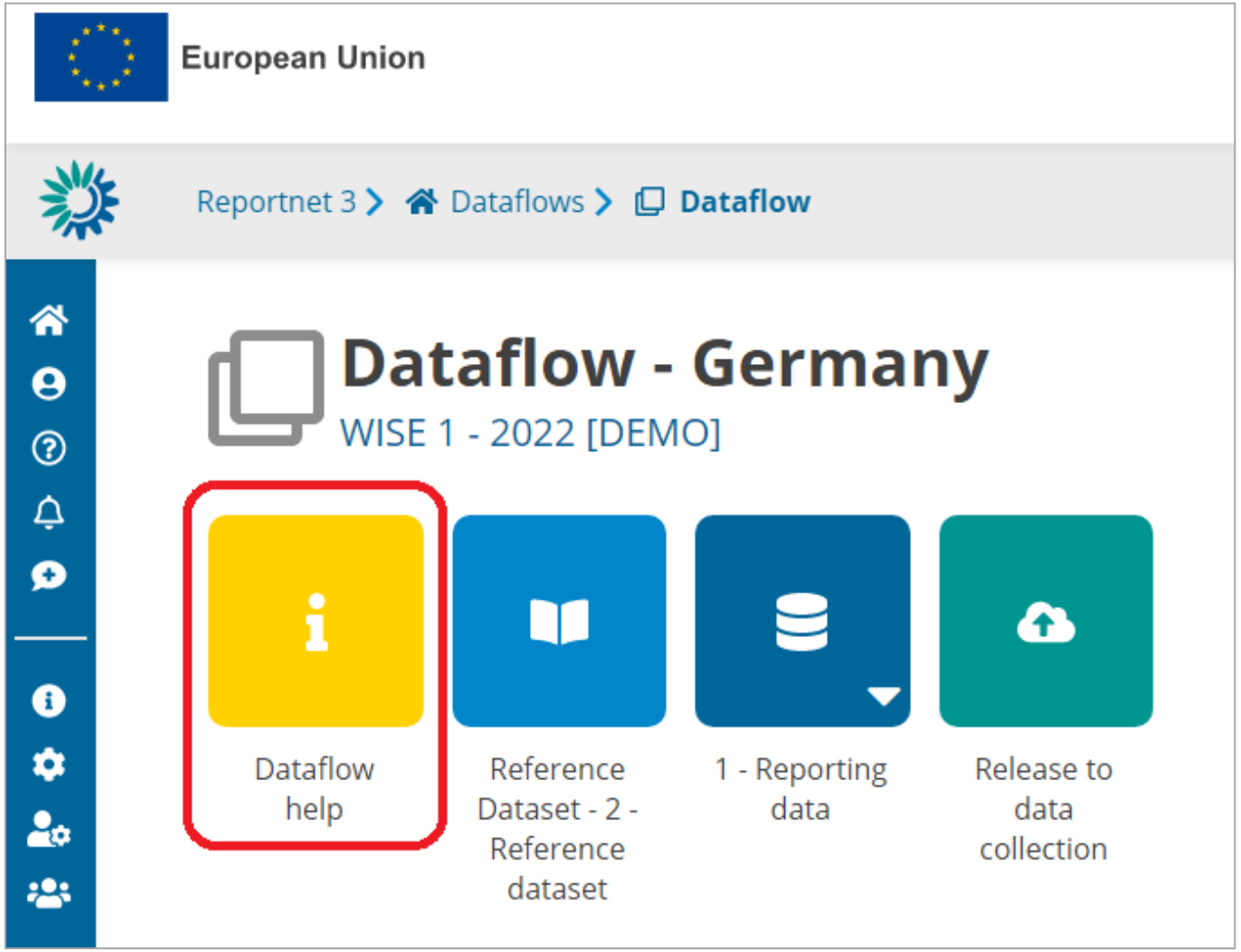
- Reportnet 3 – Dataflow overview



Dataflow overview page

AGENDA ITEM 3 - Demo on WISE-1 data reporting through Reportnet 3

- Reportnet 3 – Dataflow overview

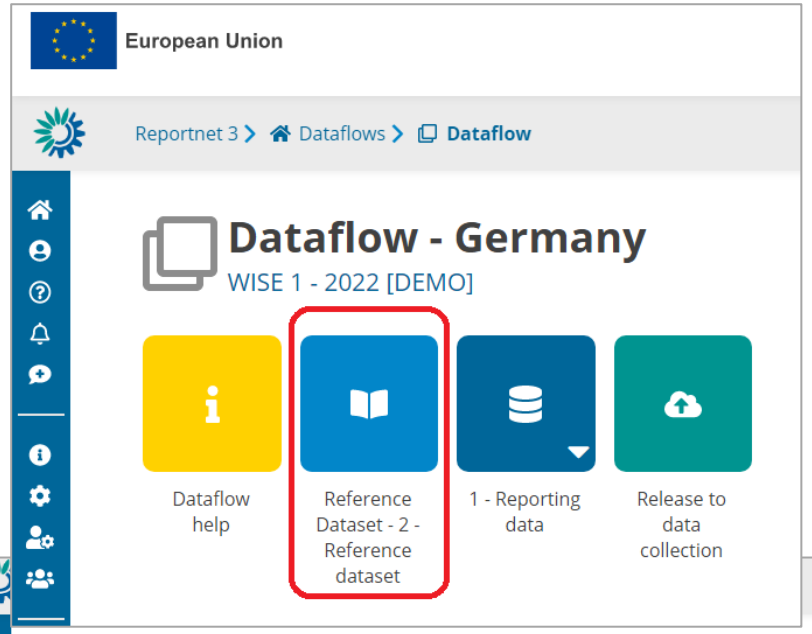


WISE-1 specific

- supporting documents
- links
- data schema

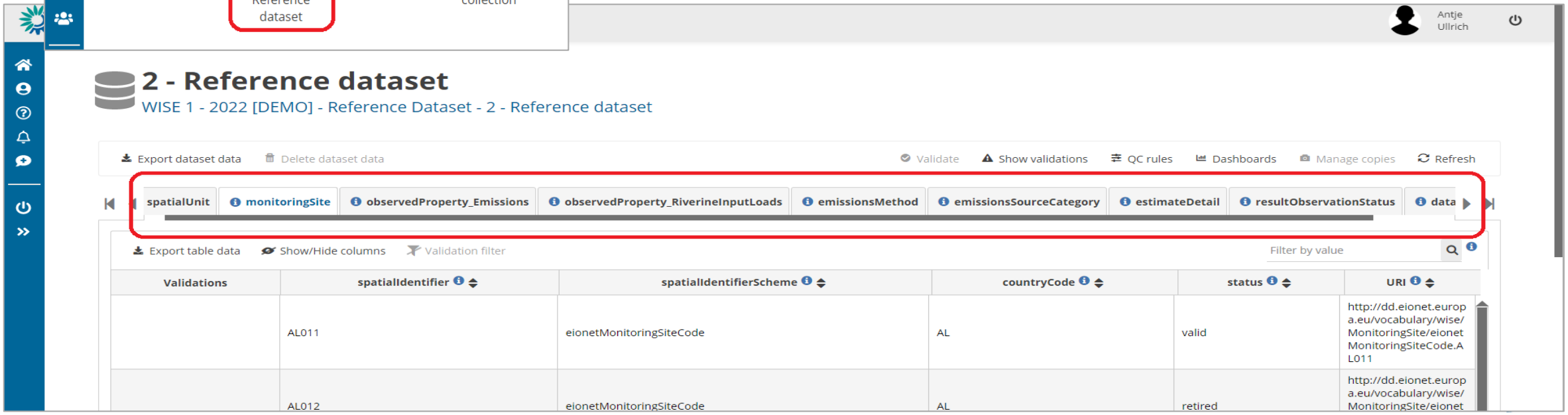
AGENDA ITEM 3 - Demo on WISE-1 data reporting through Reportnet 3

- Reportnet 3 – Dataflow overview



Reference Dataset

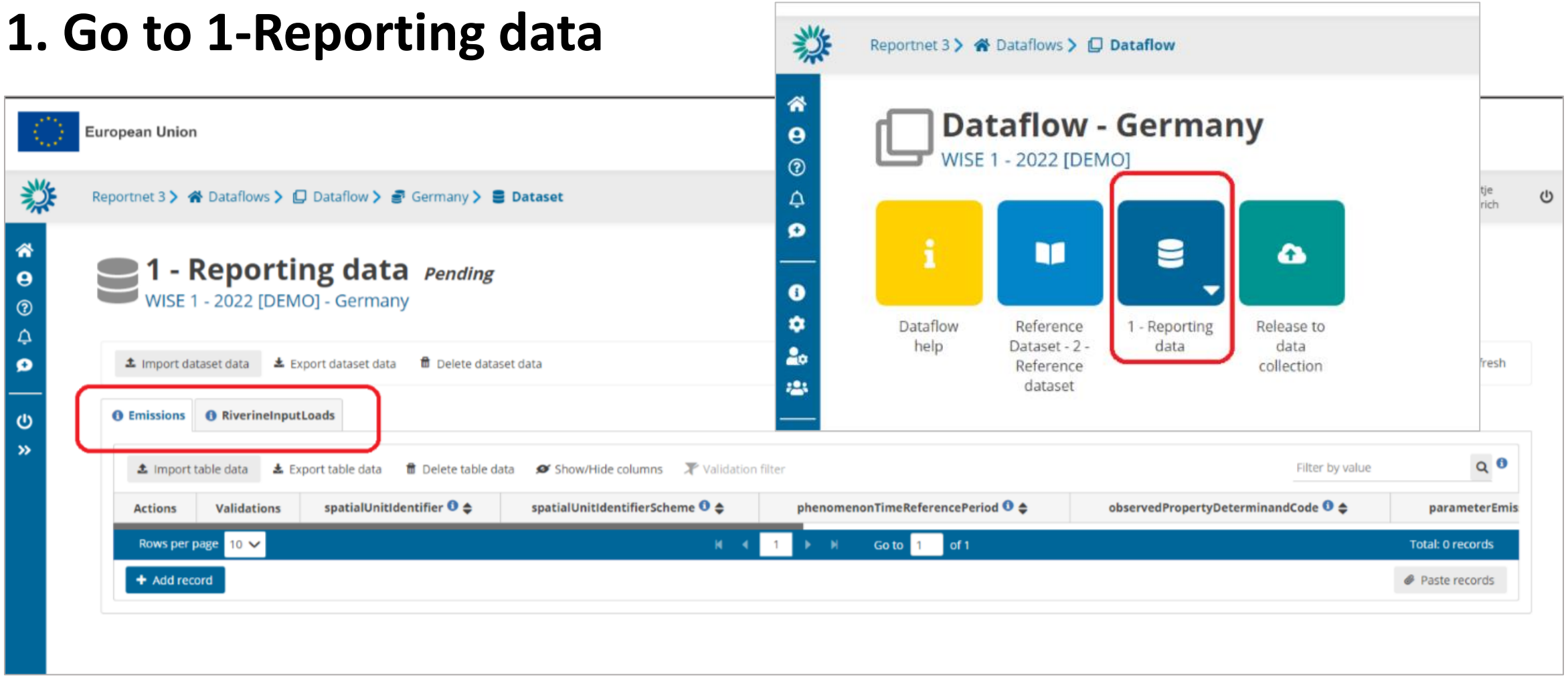
– all relevant WISE-1 information: spatial units, all monitoring sites, list of substances (emissions and riverine input loads) and code lists (e.g. emission source categories)



AGENDA ITEM 3 - Demo on WISE-1 data reporting through Reportnet 3

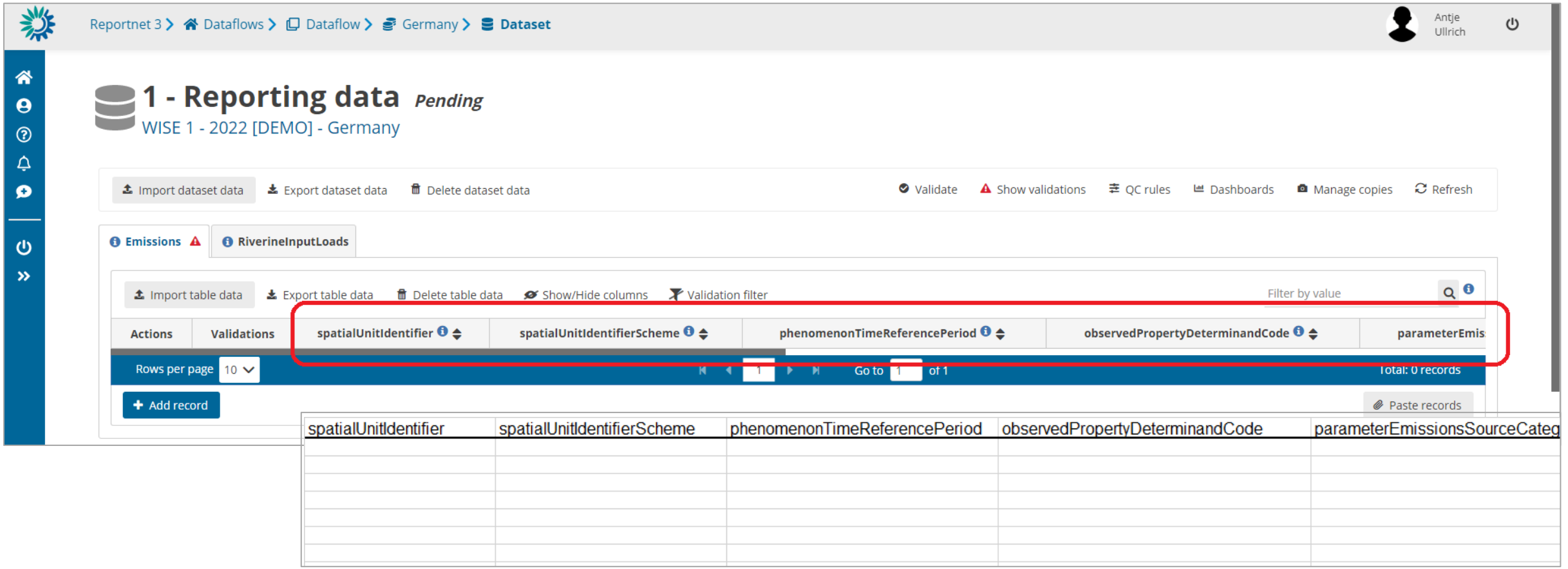
- Reportnet 3 – Data upload

1. Go to 1-Reporting data



AGENDA ITEM 3 - Demo on WISE-1 data reporting through Reportnet 3

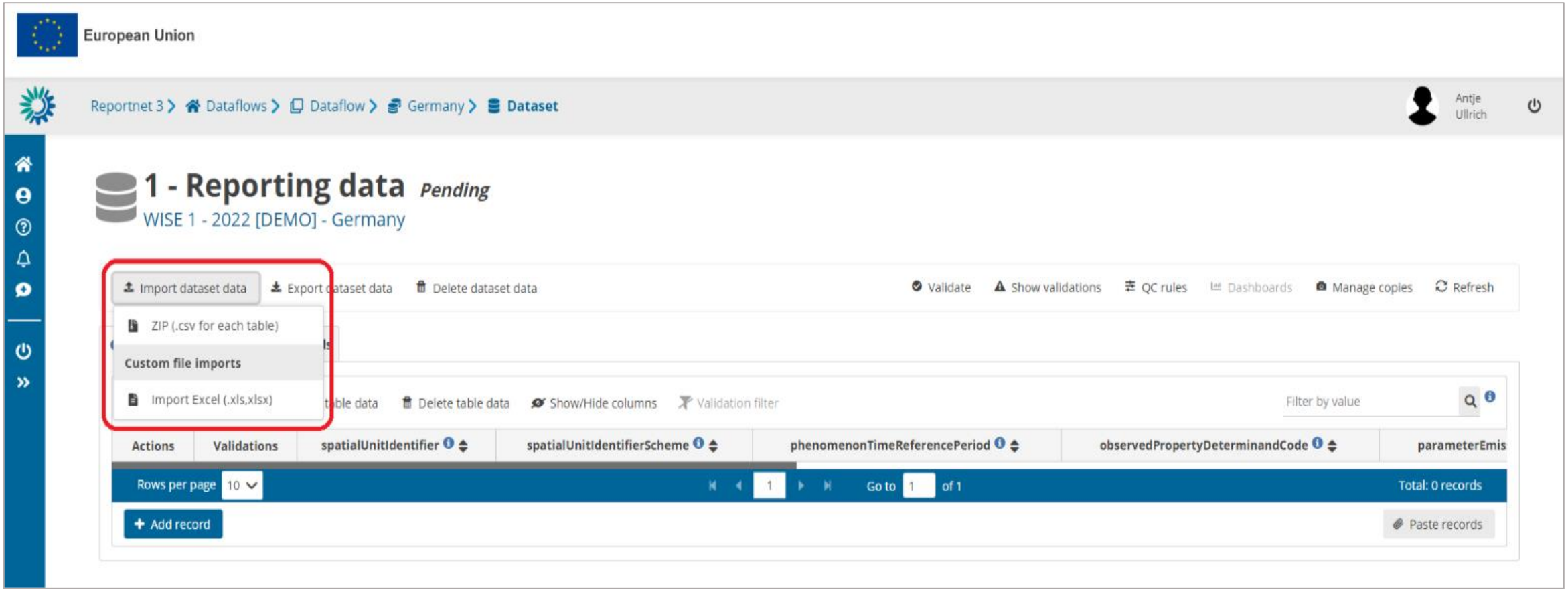
- Reportnet 3 – Data upload



AGENDA ITEM 3 - Demo on WISE-1 data reporting through Reportnet 3

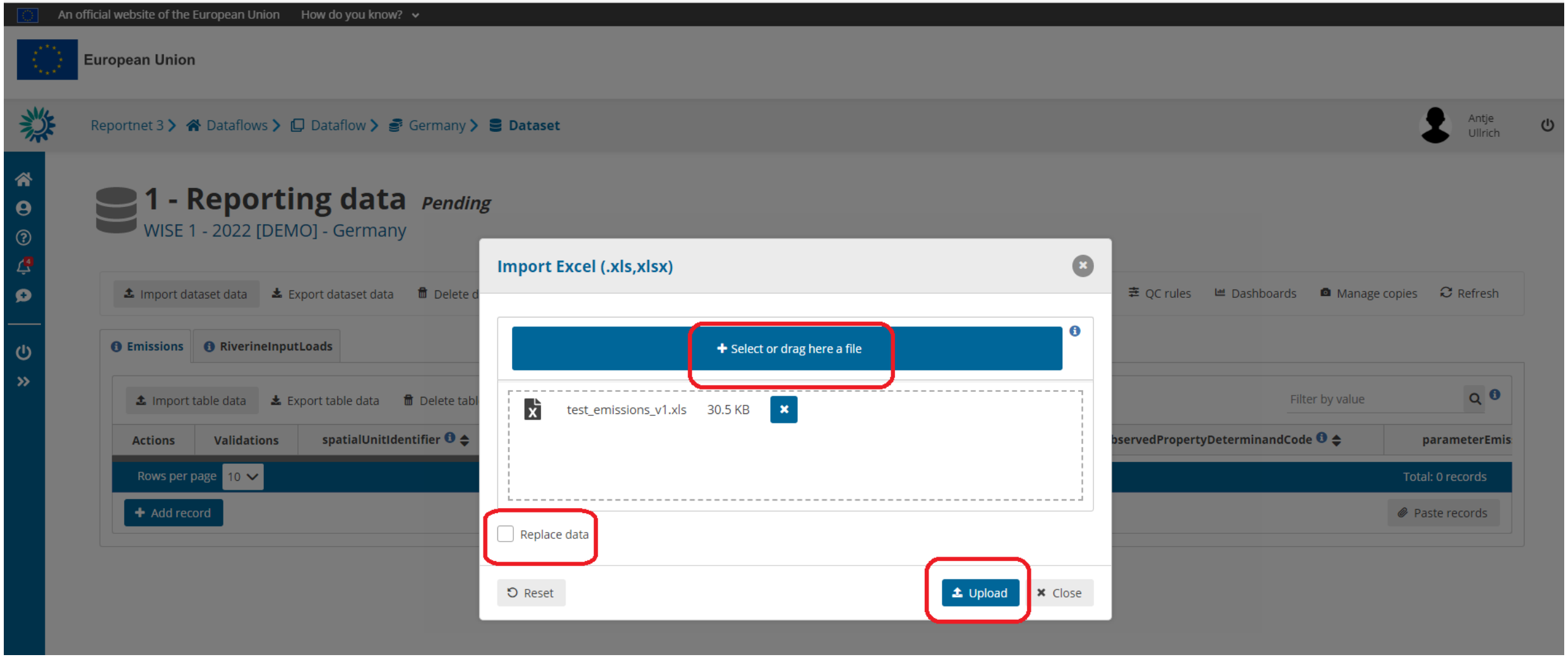
- Reportnet 3 – Data upload

2. Import filled data templates – tabular data (.xls, .xlsx, .csv)



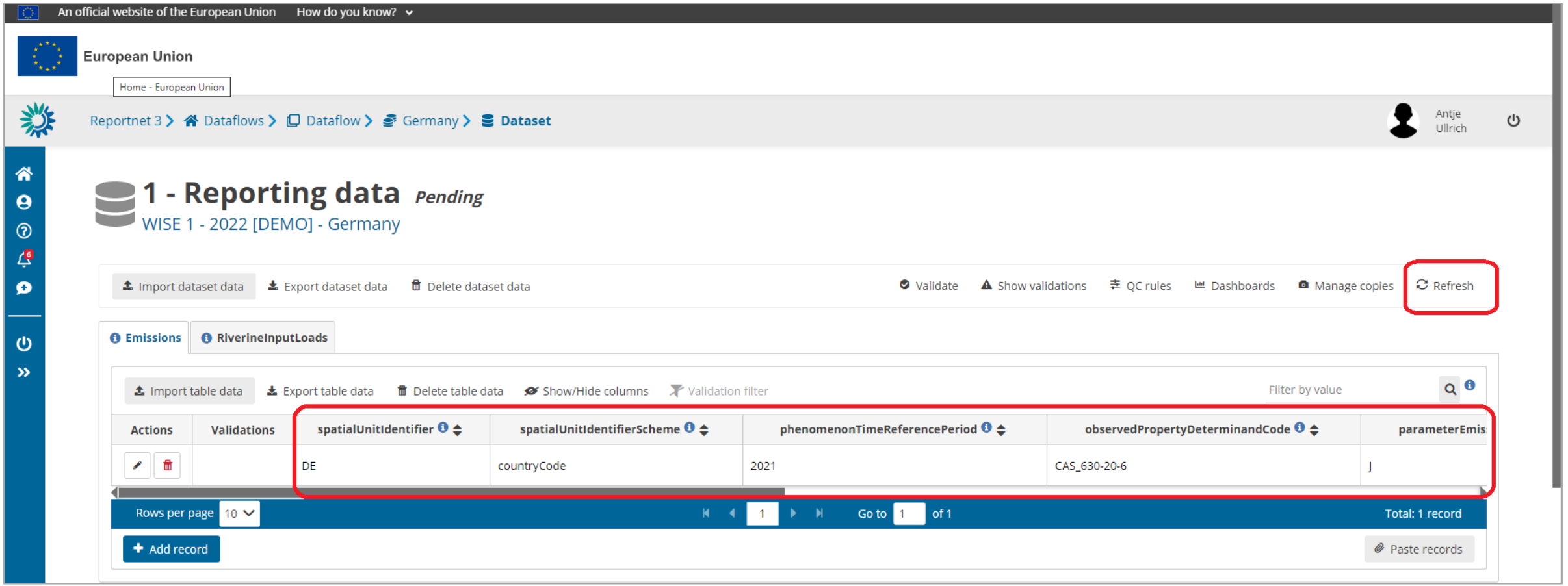
AGENDA ITEM 3 - Demo on WISE-1 data reporting through Reportnet 3

- Reportnet 3 – Data upload



AGENDA ITEM 3 - Demo on WISE-1 data reporting through Reportnet 3

- Reportnet 3 – Data upload



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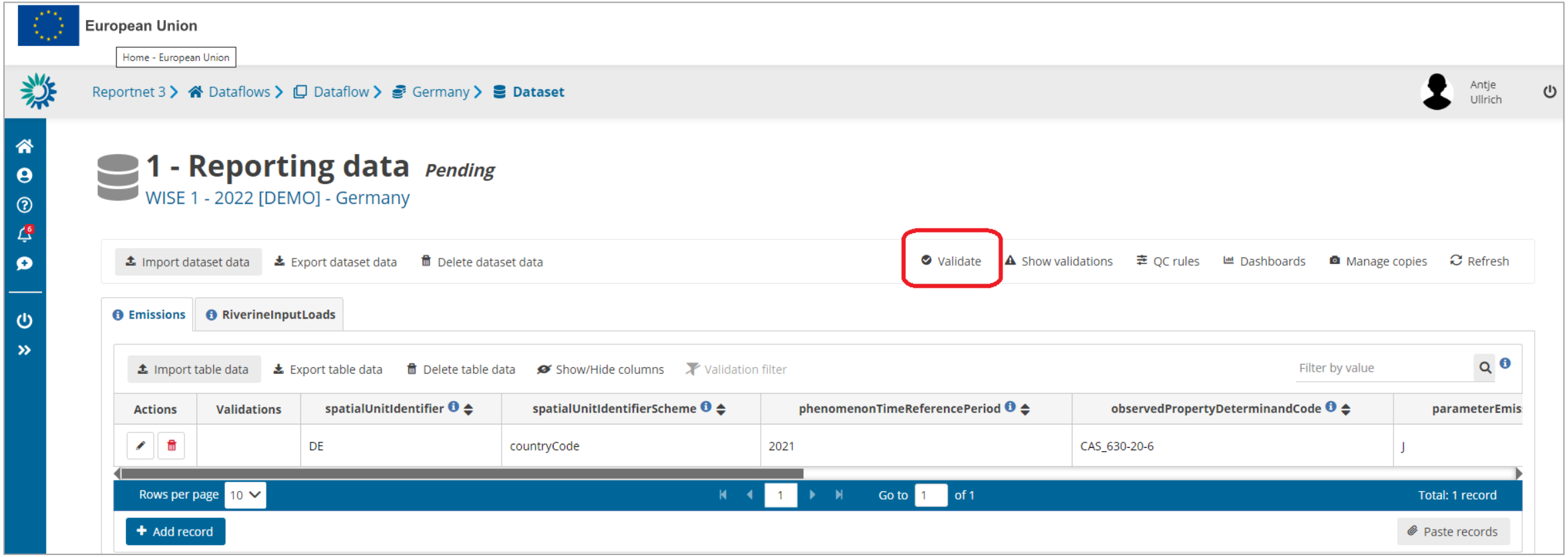
AGENDA ITEM 3 - Demo on WISE-1 data reporting through Reportnet 3

- Reportnet 3 – Data validation

Once the data are successfully imported

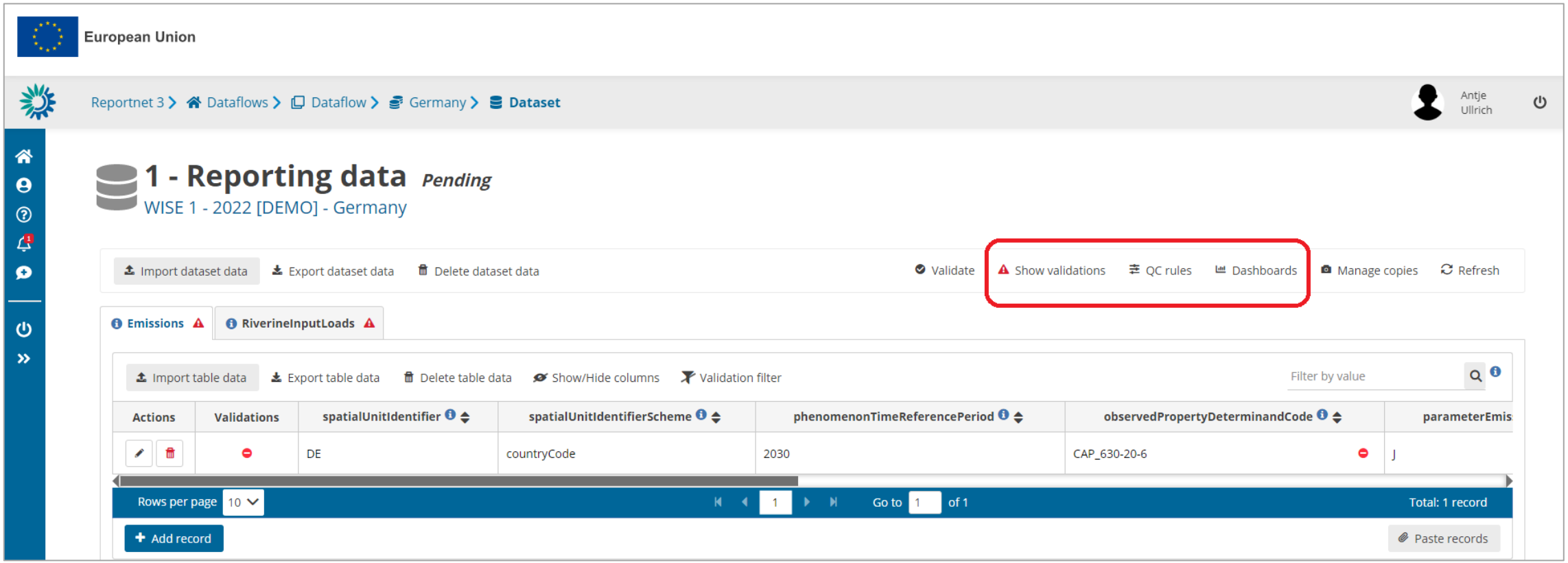
3. Validate the data



AGENDA ITEM 3 - Demo on WISE-1 data reporting through Reportnet 3

- Reportnet 3 – Data validation

4. Check validation result



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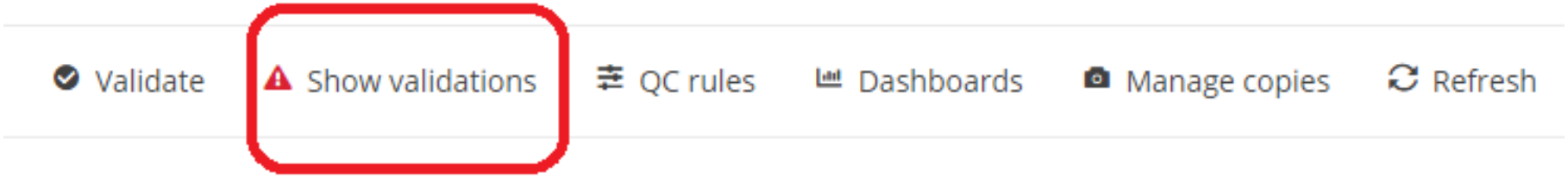
AGENDA ITEM 3 - Demo on WISE-1 data reporting through Reportnet 3

- Reportnet 3 – Data validation



Entity	Table	Field	Code	Level error	Message	Number of records
FIELD	Emissions	parameterEmissionsSourceCategory	TC32	BLOCKER	The value is not a valid member of the referenced list.	1
FIELD	Emissions	observedPropertyDeterminandCode	TC37	BLOCKER	The value is not a valid member of the referenced list.	1
FIELD	RiverineInputLoads	monitoringSiteIdentifier	04a_spatialId_country	BLOCKER	The monitoringSiteIdentifier doesn't match the reporting country. It should start with '<cc>'.	2

Rows per page 10 | 1 | Go to 1 of 1 | Total: 2 records (total errors: 4)

AGENDA ITEM 3 - Demo on WISE-1 data reporting through Reportnet 3

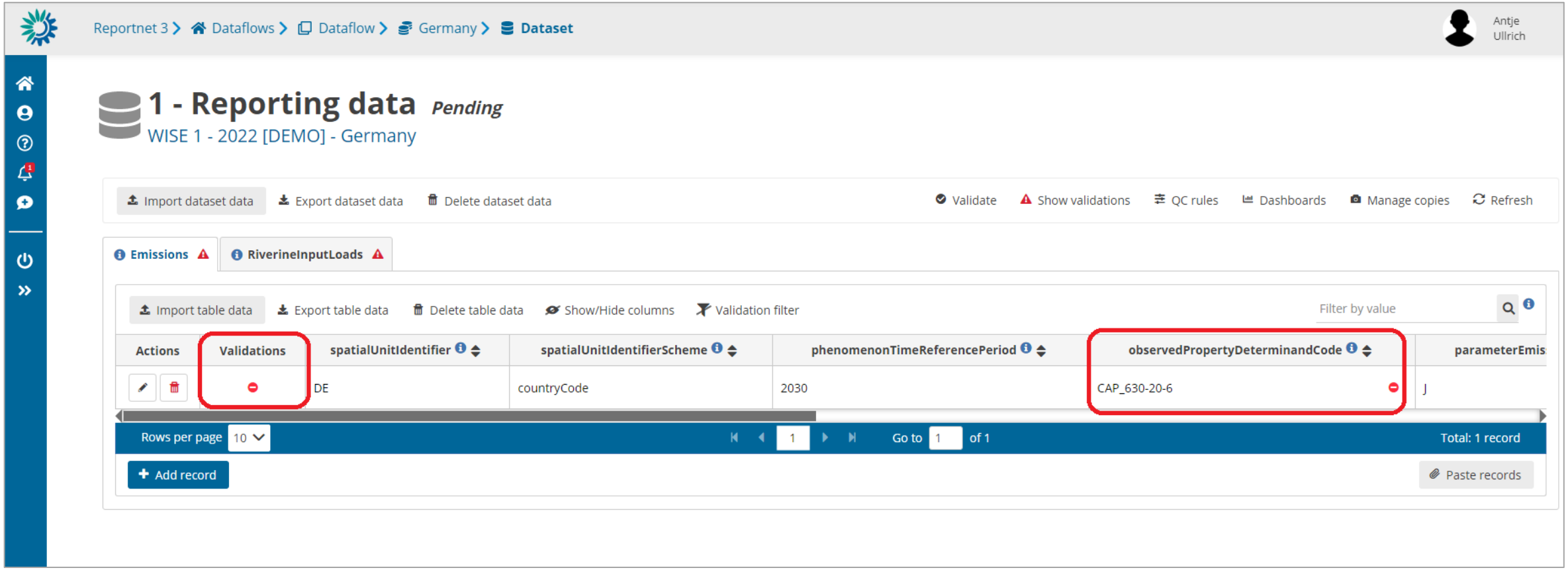
- Reportnet 3 – Data validation

Validate | Show validations | QC rules | Dashboards | Manage copies | Refresh

Table	Field	Code	Name	Description	Message	Expression	Type of QC	Level error
Emissions	spatialUnitIdentifier	FC2	Field cardinality	Checks if the field is missing or empty	The value must not be missing or empty		FIELD	BLOCKER
Emissions	spatialUnitIdentifierScheme	FC4	Field cardinality	Checks if the field is missing or empty	The value must not be missing or empty		FIELD	BLOCKER
Emissions	spatialUnitIdentifierScheme	FT5	Field type CODELIST	Checks if the field is a valid SINGLESELECT_CODELIST	The value is not a valid member of the codelist		FIELD	BLOCKER
Emissions	phenomenonTimeReferencePeriod	FC6	Field cardinality	Checks if the field is missing or empty	The value must not be missing or empty		FIELD	BLOCKER
Emissions	observedPropertyDeterminandCode	FC8	Field cardinality	Checks if the field is missing or empty	The value must not be missing or empty		FIELD	BLOCKER
Emissions	parameterEmissionsSourceCategory	FC10	Field cardinality	Checks if the field is missing or empty	The value must not be missing or empty		FIELD	BLOCKER
Emissions	parameterEPRTRfacilities	FT12	Field type CODELIST	Checks if the field is a valid SINGLESELECT_CODELIST	The value is not a valid member of the codelist		FIELD	BLOCKER
Emissions	resultEmissionsValue	FT13	Field type NUMBER - DECIMAL	Checks if the field is a valid NUMBER - DECIMAL	The value is not a valid integer or decimal number.		FIELD	BLOCKER

AGENDA ITEM 3 - Demo on WISE-1 data reporting through Reportnet 3

- Reportnet 3 – Data validation



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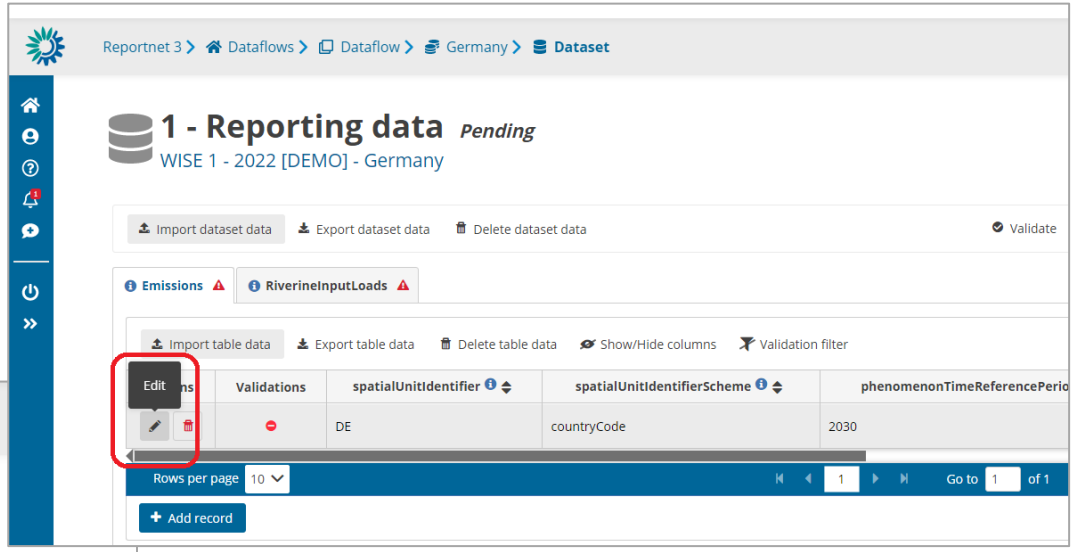
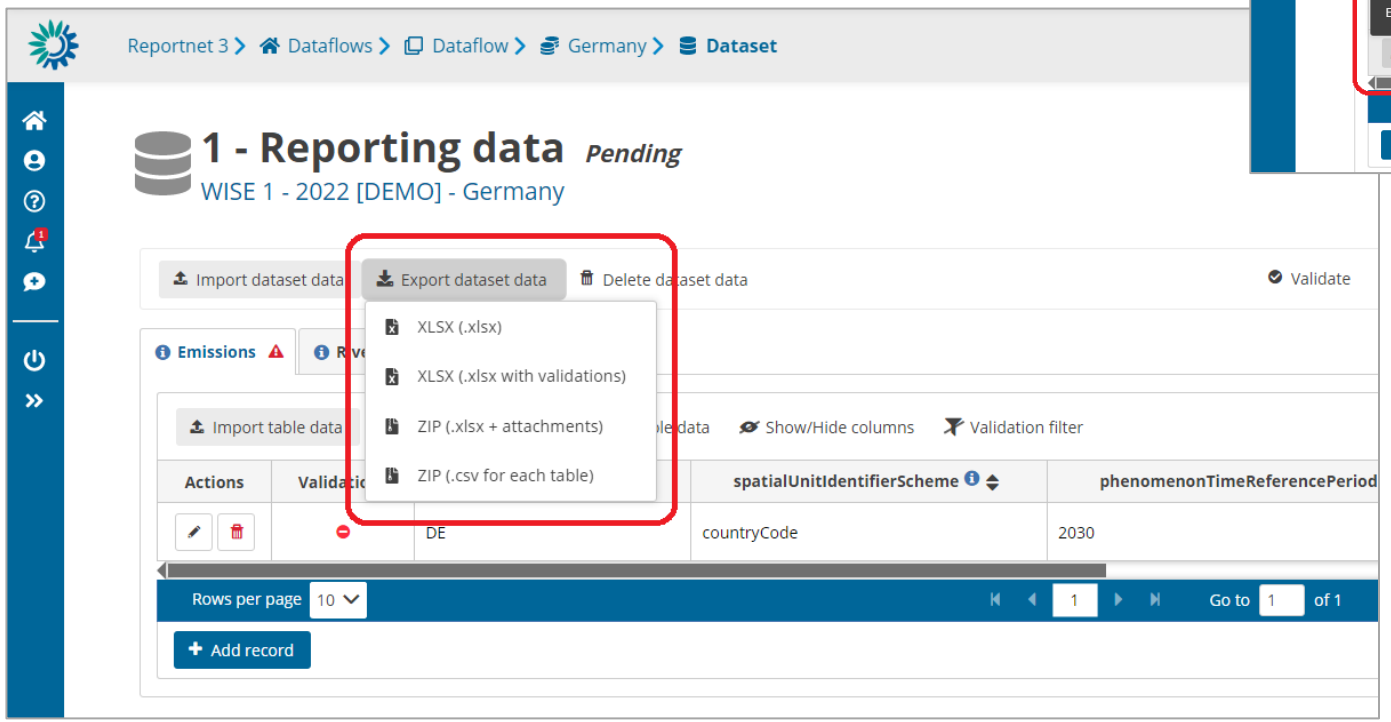
AGENDA ITEM 3 - Demo on WISE-1 data reporting through Reportnet 3

- Reportnet 3 – Data validation

5. Correct data (if needed)

- **Correct in Reportnet (export is recommended)**
- **Correct in original data file and reimport**

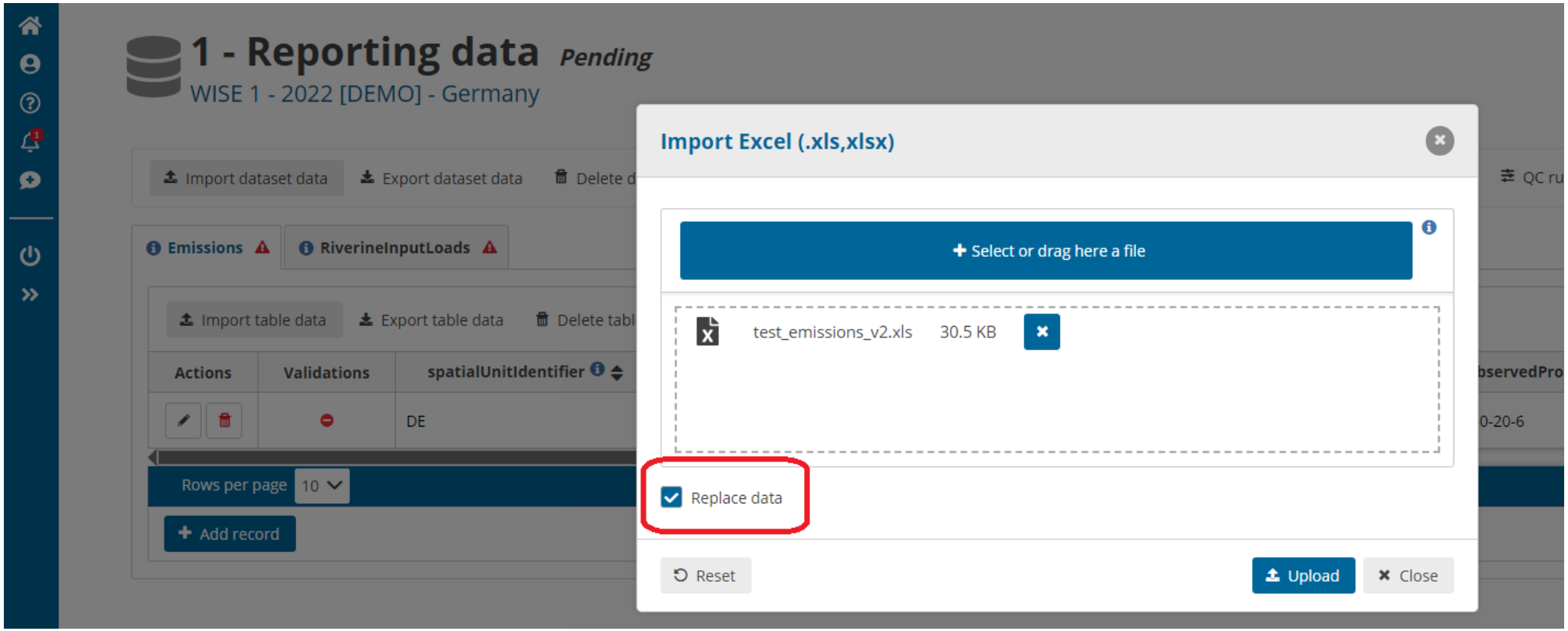




European Environment Agency

- Reportnet 3 – Data validation

6. Reimport corrected data (if needed)

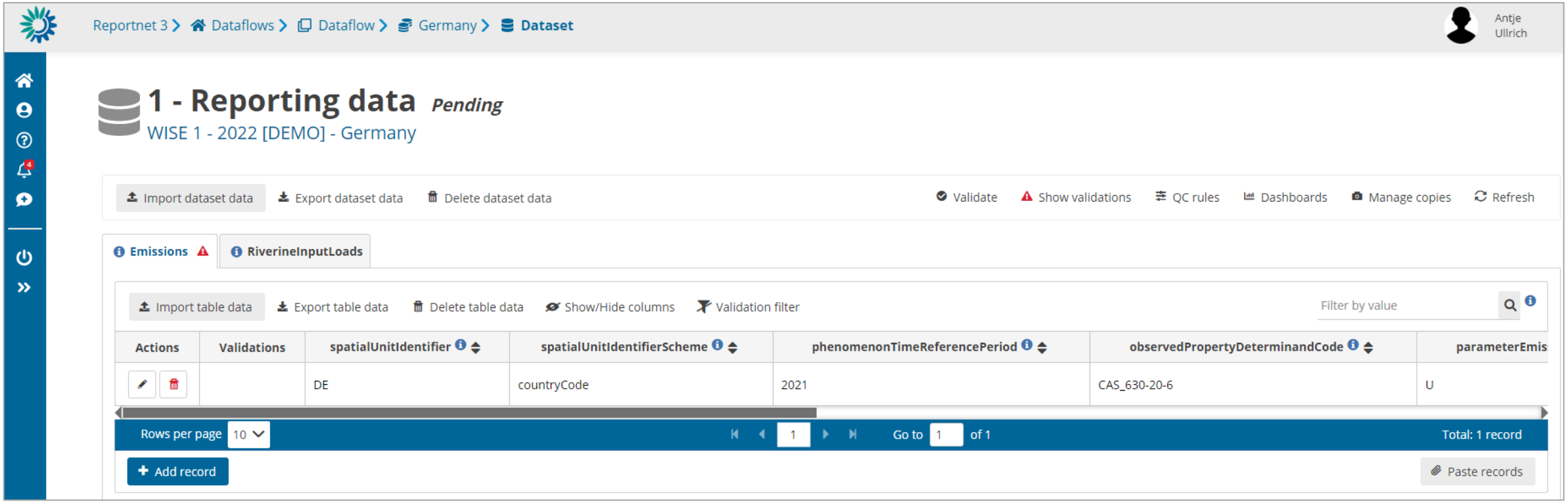


AGENDA ITEM 3 - Demo on WISE-1 data reporting through Reportnet 3

- Reportnet 3 – Data validation

7. Validate and check reimported data

Target: No BLOCKERs, No ERRORs



Reportnet 3 – Data release

7. Release data – when validation process is finished

Thank you!

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