

30th Annual Meeting

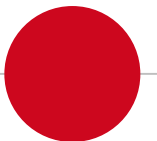
of the National Reference Laboratories for Avian Influenza
and Newcastle Disease of European Union Member States



Implementing the AIV H5 HPAI genotype dashboard in the EURL Avian Influenza Data Portal

Matteo Mazzucato

Istituto Zooprofilattico Sperimentale delle Venezie



● Overview

- EURL Avian Flu Data Portal current status
- Recap of data available
- New data for Genotypes

Portal current status

One year :

- 3600+ visits (unique sessions)
- 5700+ views
- Avg 13 users/day
- **No system *downtime***

The screenshot displays the EURL Avian Flu Data Portal interface. At the top, there is a navigation bar with 'EURL | Avian Flu Data Portal', 'General situation', 'Epidemiological details', 'Help', and 'FAQ'. Below this, the 'epidemic' tab is active, showing a date range of 'EPI-2022-2024'. The main content area is titled 'General situation' and includes a brief description: 'The total number of avian influenza cases notified by each Member States/Reporting Countries in different epidemiological units (commercial poultry farm, backyard farms, other captive birds and wild birds) is shown in the map below, complemented by a table that contains key information about each outbreak.'

Summary statistics are presented in four boxes:

- Total n. of Outbreaks: 1,064
- Wild birds cases: 711
- Farms, Captive, Backyard cases: 353
- Affected countries: 30

The 'Map of Outbreaks' section features a map of Europe with a legend for 'N. of Outbreaks' per country, ranging from 1-59 (lightest) to 174-231 (darkest). A table titled 'HPAI Outbreaks' provides detailed data for each outbreak, including ID, confirm date, subtype, country, and EPI unit.

ID	CONFIRM. DATE	SUBTYPE	COUNTRY	EPI UNIT
15923	2024-09-10	H5N1	Denmark	Farm
15928	2024-09-06	H5	France	Wild birds
15929	2024-09-02	H5N1	France	Farm
15924	2024-08-30	H5N1	Spain	Captive birds
15927	2024-08-30	H5N1	France	Wild birds
15926	2024-08-30	H5	France	Wild birds
15925	2024-08-28	H5N1	France	Wild birds
15922	2024-08-26	H5N1	Czech Republic	Captive birds
15913	2024-08-26	H5	France	Wild birds
15906	2024-08-23	H5N1	Denmark	Wild birds
15908	2024-08-22	H5N1	Spain	Wild birds
15909	2024-08-22	H5N1	Spain	Wild birds
15910	2024-08-22	H5N1	Spain	Wild birds
15916	2024-08-22	H5N1	Poland	Farm
15899	2024-08-22	H5N1	Belgium	Wild birds

At the bottom of the map section, there is a note: 'It is possible to visualise the dynamic map with a time slider displaying the temporal evolution of the HPAI cases according to the filter(s) applied.' Below this is a button labeled 'Open time-slider Map'.

The footer contains 'Contacts' information for the Istituto Zooprofilattico Sperimentale delle Venezie and 'Useful links' including Privacy, Cookies, EURL website, Mattermost, and Help Desk.

● Contacts, Questions & F.A.Q.

- Requests
 - Clarifications
 - Reporting incorrect data
 - Usage
- On May, two weeks with no updates
- **No** issues related to *system usage*

Interact with data

CONFIRM. DATE	SUBTYPE	COUNTRY	EPI UNIT
2022-02-24		Italy	Farm
2022-02-22		Italy	Wild birds
2022-02-22		Italy	Wild birds
2022-02-18	H5N1	Italy	Farm
2022-02-17	H5N1	Italy	Wild birds
2022-02-17	H5N1	Italy	Wild birds
2022-02-17	H5N1	Italy	Backyard
2022-02-17	H5N1	Italy	Farm
2022-02-17	H5N1	Italy	Backyard
2022-02-17	H5N1	Italy	Wild birds
2022-02-17	H5N1	Italy	Wild birds
2022-02-17	H5N1	Italy	Backyard
2022-02-17	H5N1	Italy	Farm
2022-02-17	H5N1	Italy	Backyard
2022-02-17	H5N1	Italy	Wild birds
2022-02-17	H5N1	Italy	Wild birds
2022-02-17	H5N1	Italy	Backyard
2022-02-17	H5N1	Italy	Farm
2022-02-17	H5N1	Italy	Backyard
2022-02-17	H5N1	Italy	Farm
2022-02-17	H5N1	Italy	Farm
2022-02-17	H5N1	Italy	Farm

The data are daily updated and displayed by the application through a dashboard consisting of graphs, tables and maps.

Each element is interactive and can be used to display information of interest in both tabular and spatial format. By applying sorting and selections, the displayed data are automatically updated in all other sections.

Previous Next

Issues?

- Open a ticket
- Track the status

Help Desk - GIS - IZSVe English ▾

IZSVe | GIS Laboratory > Help Desk - GIS - IZSVe > Submit a ticket > Problema software / Software Issue

Submit a Support Request

Required fields are marked with *

Name: *

Email: *

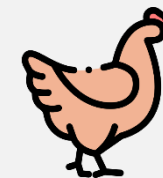
Organization:

Software / Application: *

Subject: *

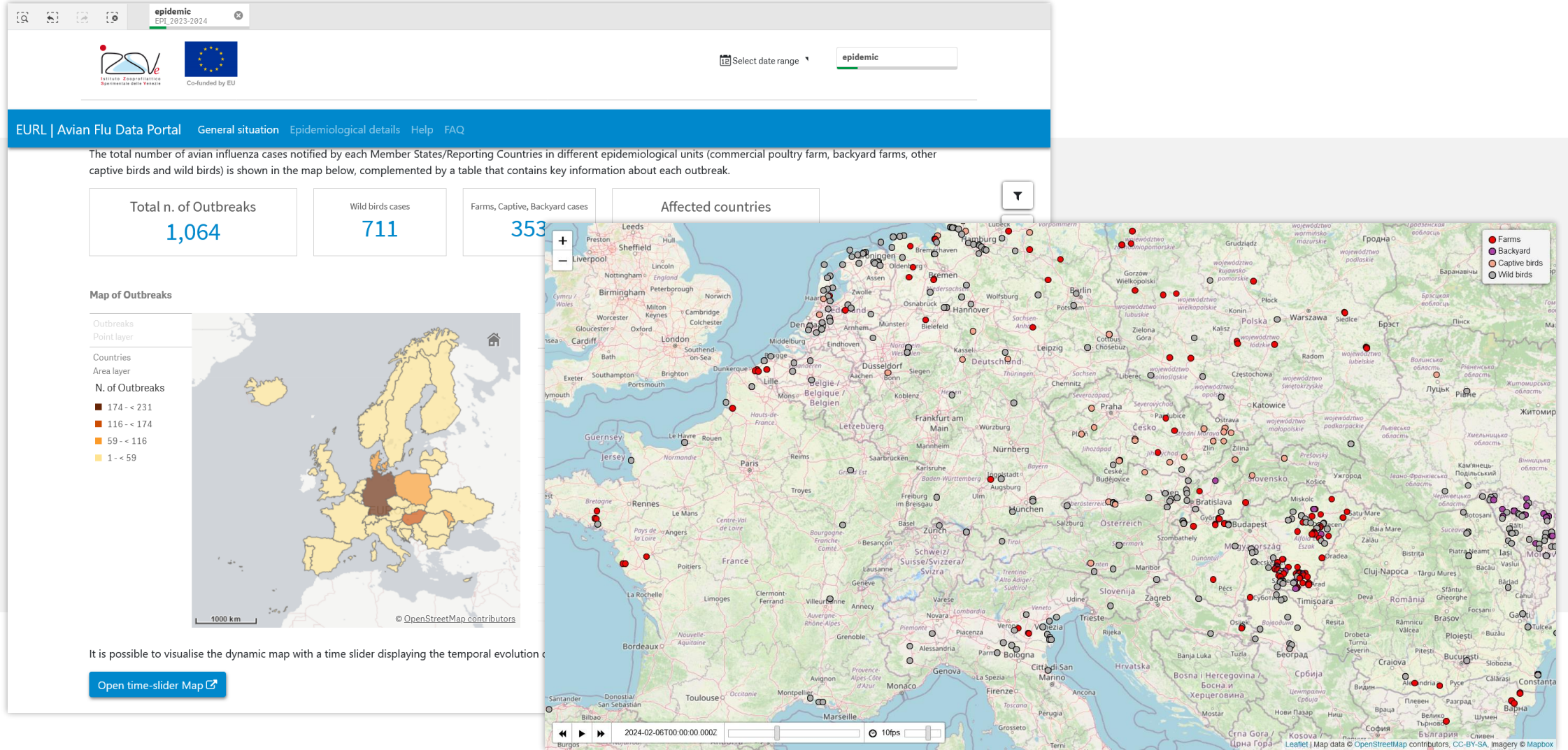
● Data available

- General situation
 - Outbreaks
 - Time-slider
- Epidemiological data
 - Epidemiological curves
 - Poultry, Captive, Wilds





General data





Epidemiological data

Poultry and Captive birds

N. of poultry and captive birds outbreaks, with detailed information on the species.

Poultry and Captive birds outbreaks with subtype

Species	H5	H5N1	H5N2	H5N3	H5N4	H5N5	H5N8	H7N7
Total	40	312	0	0	0	0	0	0

Poultry and Captive birds per species



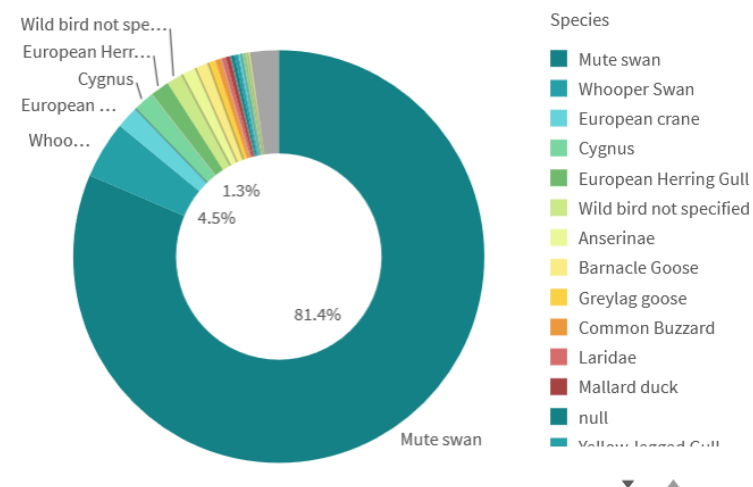
Wild birds

Detailed information on species and n. of animals, with specific reference to subtypes for wild birds cases.

Wild animals with subtype

Species	N. of anim...	H5	H5N1	H5N2	H5N3	H5N4	H5N5	H5N8
Total	6183	114	6058	0	0	0	10	0
Accipiter	8	0	8	0	0	0	0	0
Anatidae	10	0	10	0	0	0	0	0
Anserinae	71	0	71	0	0	0	0	0
Barn Owl	1	0	1	0	0	0	0	0
Barnacle Goose	65	0	65	0	0	0	0	0
Black-headed Gull	12	1	11	0	0	0	0	0
Black-legged Kittiwake	3	0	2	0	0	0	1	0
Canada goose	6	1	5	0	0	0	0	0
Carrion Crow	1	1	0	0	0	0	0	0
Caspian gull	5	0	5	0	0	0	0	0
Charadriidae	10	0	10	0	0	0	0	0

Wild animals

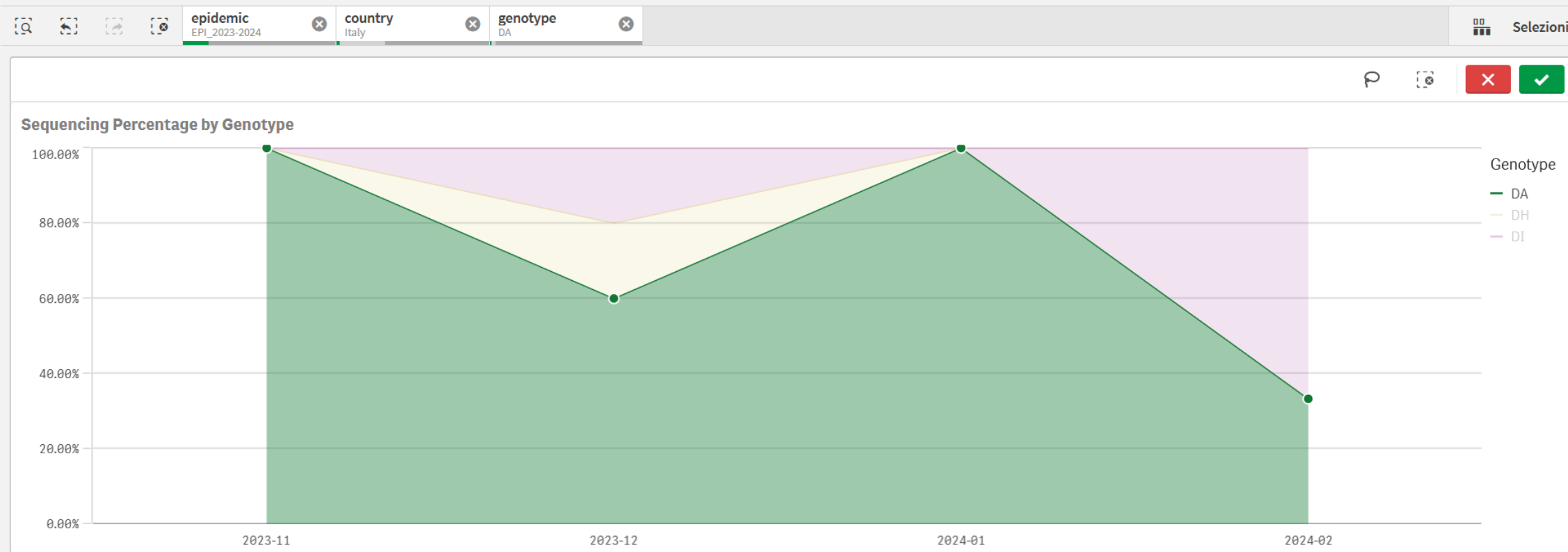


● New data of Genotypes

- Sequencing percentage chart of Genotypes
- Year/Month VS Genotype
- Map with Genotypes/country



Sequencing percentage chart of Genotypes



Year/Month VS Genotype

epidemic EPI_2023-2024 country Italy

Sequencing Matrix by Year-Month and Genotype

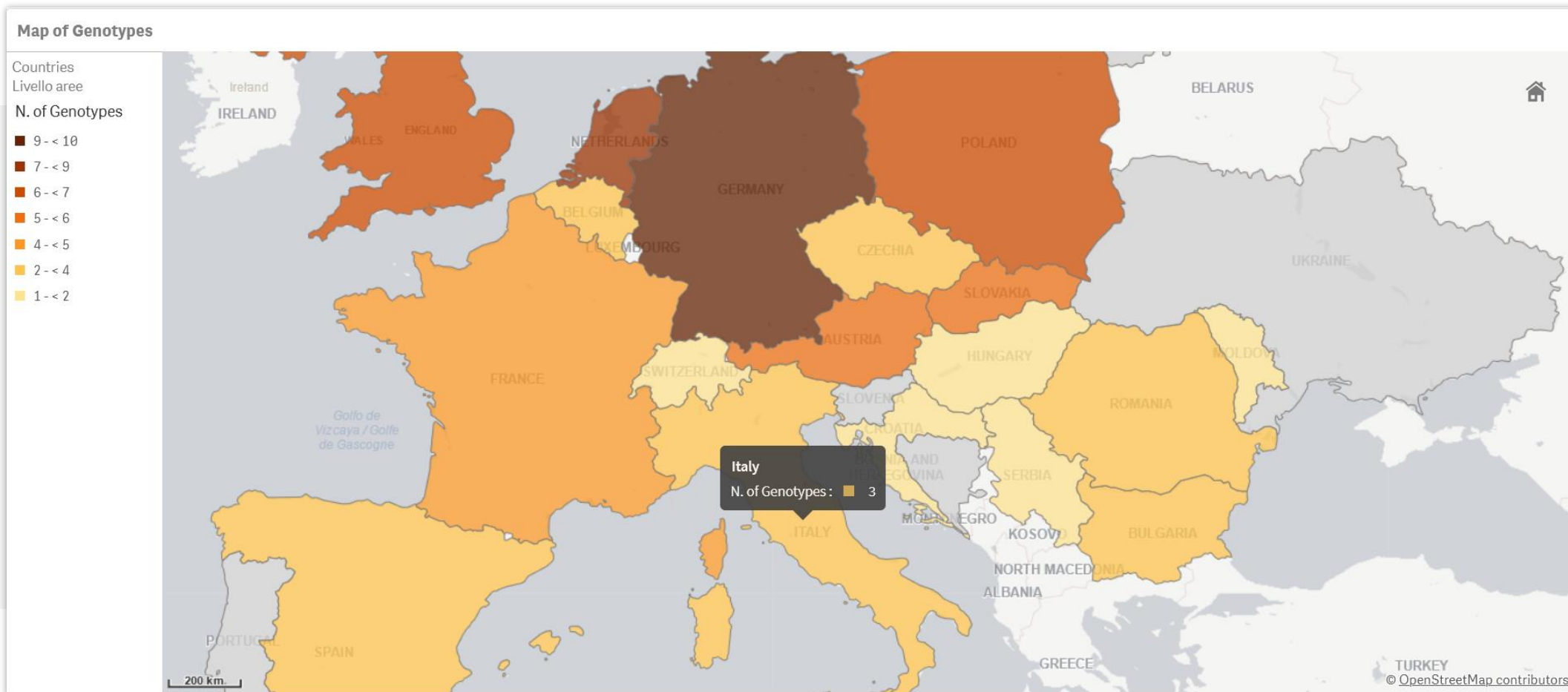
Genotype	2023-11	2023-12	2024-01	2024-02
DA	13	3	1	1
DH	-	1	-	-
DI	-	1	-	2

epidemic EPI_2023-2024 country Italy genotype DA

Sequencing Matrix by Year-Month and Genotype

Genotype	2023-11	2023-12	2024-01	2024-02
DA	13	3	1	1

Map with Genotypes/country



● Map with Genotypes/country



● Questions/Discussion

- The system is fed by **sequences shared with EURL**
(acquired from GISAID or by genotype-specific data provided by NRLs)
- System provides information on **circulating genotypes** in space and time
- **No sequences visible or downloadable** in the dashboard
- Proposed update schedule: **once per month**
(unless country-specific requests are made)

Do you have questions or comments?



Thanks for your attention!

Matteo Mazzucato, Alberto Tomasin

mmazzucato@izsvenezie.it | atomasin@izsvenezie.it



● Icons references

Flat icons:

- Gene icons created by Freepik
- Map icons created by Freepik
- Chicken icons created by Freepik
- Flask icon created by Freepik