

EU SEE Dashboard – User Manual

I. Purpose of the Dashboard

The **EU SEE Dashboard** is an interactive analytical tool designed to monitor, explore, and analyze alert-based events across countries and regions. It enables users to:

- Track **alerts and events** by geography, time, and thematic attributes
- Distinguish between **Negative** and **Positive** alerts
- Analyze **actors, subjects, mechanisms, and events of repression**
- Identify **top patterns and relationships** using bar charts, heatmaps, Sankey diagrams, and maps
- Apply consistent **Top-N logic** across all visualizations for focused analysis

The dashboard is filter-driven and dynamically updates all visuals based on user selections.

2. Dashboard Layout Overview

The dashboard consists of three main tabs:

1. **Overview** – High-level summary and distributions
2. **Negative Events** – Deep-dive analytical views for negative alerts
3. **Visualization Map** – Geographic distribution of alerts

A **global filter sidebar** applies to all tabs.

3. Global Filters (Sidebar)

The sidebar on the left controls all data displayed in the dashboard.

3.1 Region Filter

- Allows selection of one or more regions:
 - Africa
 - The Middle East
 - Asia and the Pacific
 - Americas and the Caribbean
- Selecting **Select All** includes all regions.

3.2 Country Filter

- Dynamically populated based on selected regions

- Supports multi-selection
- Selecting **Select All** includes all countries

3.3 Nature of Event / Alert (Alert Impact)

- Filters alerts by impact type:
 - Negative
 - Positive

3.4 Type of Alert

- Filters by alert classification (e.g., legal, physical, digital, etc., depending on dataset)

3.5 Enabling Principle

- Filters alerts by one or more enabling principles
- Works on comma-separated values (an alert may match multiple principles)

3.6 Year and Month

- Filters alerts by year and month of creation
- Month options update dynamically based on selected years

3.7 Reset Filters

- The **Reset Filters** button restores all filters to **Select All**
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4. Summary Cards (All Tabs)

At the top of each tab, summary cards display key metrics for the current filter state:

1. **Monitored Countries** – Number of unique countries in scope
2. **Total Alerts** – Total number of alerts
3. **Alerts Breakdown**
 - Count and percentage of Negative vs Positive alerts
 - Visual horizontal bar showing proportions

These cards always reflect the currently filtered data.

5. Tab I – Overview

The **Overview** tab provides a high-level analytical snapshot of alerts.

5.1 Alert Type x Alert Impact

- Horizontal stacked bar chart

- Shows how different alert types split between Negative and Positive alerts

5.2 Enabling Principle × Alert Impact

- Horizontal stacked bar chart
- Each enabling principle is broken down by alert impact
- Principles are automatically split and normalized

5.3 Region × Alert Impact

- Vertical stacked bar chart
- Compares Negative vs Positive alerts across regions

5.4 Country × Alert Impact

- Vertical stacked bar chart
- Highlights countries with the highest alert volumes

All charts update dynamically based on global filters.

6. Tab 2 – Negative Events (Advanced Analysis)

This tab is dedicated exclusively to **Negative alerts** and provides advanced analytical tools.

6.1 Inline Filters (Negative Events Only)

These filters appear at the top of the tab and apply **only within this tab**:

- **Actor Type** – Who is responsible for repression
- **Subject Type** – Who is targeted
- **Mechanism Type** – How repression occurs
- **Event Type** – Classification of the event

Each supports multi-selection and Select All behavior.

7. Top-N Configuration

A global **Top-N selector** controls the scope of analysis for charts, heatmaps, and Sankey diagrams.

Options:

- Top 2
- Top 5 (default)
- Top 10
- All

Behavior:

- Top-N is calculated **independently per dimension** based on frequency
 - Only records that match **all selected Top-N dimensions** are included
 - Ensures consistency across all downstream visualizations
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8. Bar Charts (Negative Events)

Six bar charts show the most frequent items under the current Top-N selection:

1. Actor of repression
2. Subject of repression
3. Mechanism of repression
4. Type of event
5. Alert type
6. Enabling principle

Key Characteristics:

- Counts are absolute frequencies
 - Labels are automatically wrapped for readability
 - Charts automatically resize based on number of items
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9. Heatmaps (Cross-Indicator Analysis)

Three heatmaps visualize relationships between key dimensions:

1. **Actor → Mechanism**
2. **Subject → Mechanism**
3. **Actor → Subject**

Key Features:

- Uses consistent **Top-N filtering**
- Shares a **common color scale** for direct comparison
- Hovering displays exact counts
- Dynamically adjusts height based on number of rows

These heatmaps are intended to reveal **patterns of repression** and recurring relationships.

10. Sankey Diagram (Flow of Negative Events)

The Sankey diagram illustrates flows between:

Actor → Mechanism → Subject

Behavior:

- Respects Top-N selection
- Link thickness represents number of alerts
- Nodes are color-coded by category

Legend:

- Red: Actor of repression
- Blue: Mechanism of repression
- Green: Subject of repression

This visualization is useful for understanding **end-to-end pathways of repression**.

11. Tab 3 – Visualization Map

The map provides a geographic view of alerts.

11.1 Choropleth Map

- Countries shaded by total alert count
- Darker color indicates higher volume

11.2 Interactive Hover Cards

Hovering over a country displays:

- Total alerts
- Negative alerts
- Positive alerts
- Percentage of negative alerts

11.3 Dynamic Zoom and Centering

- Automatically adjusts based on filtered countries
 - Ensures optimal geographic focus
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12. Data Handling Notes

- Alerts without valid country, impact, or date information are excluded

- Countries missing ISO codes trigger warnings
 - Enabling principles are split from comma-separated values
 - Date fields are parsed defensively to avoid errors
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13. Performance and Caching

- Data loading is cached using `st.cache_data`
 - Filters are session-aware to preserve selections
 - Charts are rendered only on filtered datasets
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14. Intended Use Cases

- Monitoring trends in negative events
 - Identifying dominant actors or mechanisms
 - Comparing regions and countries
 - Supporting policy analysis and reporting
 - Exploratory data analysis for research
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15. Interpretation Guidance

- High counts do not imply severity—only frequency
 - Top-N views emphasize dominant patterns, not edge cases
 - Heatmaps and Sankey diagrams should be interpreted together
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16. Footer and Attribution

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