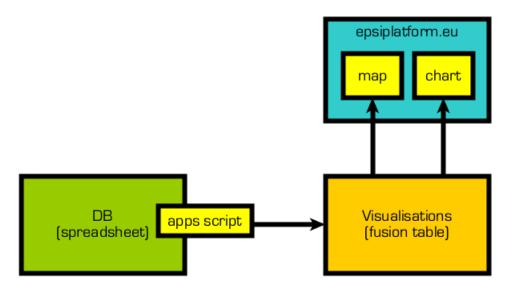
The ePSI Platform Scoreboard in Depth

In brief, the <u>ePSI Scoreboard</u> is a ranking of countries based on indicators that measures the healthy of PSI re-use in the EU28 Member States. This tool <u>was updated</u> in 2013 with the objective of making it fully crowd sourced and transparent.

The update of the system also enabled new appealing visualisations, enabling the possibility to reuse them into external websites. Also, following the open data paradigm the database is completely open to the public. This post exposes the ins and out of this popular tool.

The architecture

The ePSI Scoreboard has a simple architecture, composed of two main pieces: database, and visualisation module. The database is a Google Sheet that sends its information to the visualisation engine, a Fusion Table that allows us to include charts and maps in epsiplatform.eu.



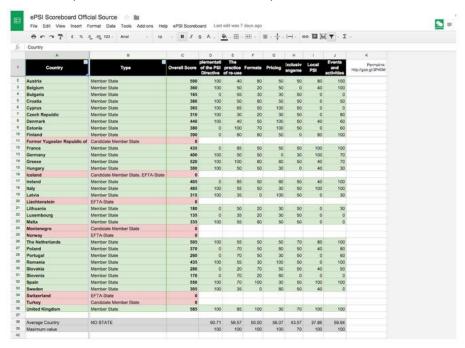
Both modules, the spreadsheet and visualisations are independent, and the information is synchronised eventually, using a script for that. Read more details about these pieces below.

The Database

The <u>database</u> is an open Google Spreadsheet that is visible to everyone. Anyone is able to comment on any cell, edition was restricted. Only the ePSI Platform team members had the permissions to change values in the different sheets of the document. The main reason for this was just to avoid spam.

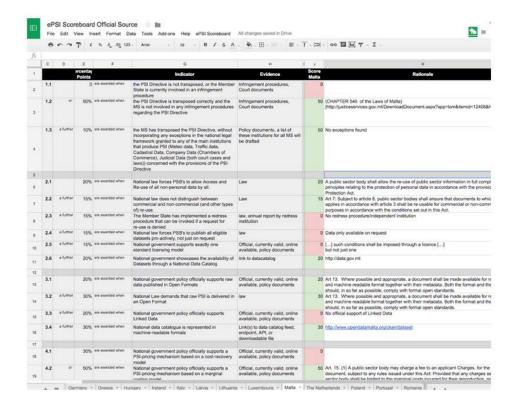
The database has different sheets:

The first one, <u>Nations</u>, contains an overview of the scoreboard, with all the Member States and their detailed scores. This sheet is protected and nobody can modify it. Values are automatically calculated through formulas that pick information from the country tabs.



The second, <u>Framework</u>, contains a template with all indicators and sub-indicators, with the specific rationale for each one. This tab acts as self-documentation of the PSI Scoreboard database.

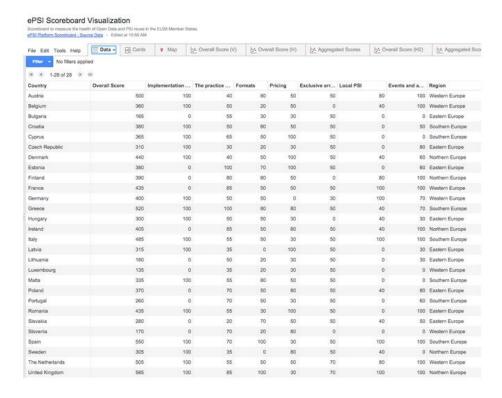
There are other 28 tabs —one per EU Member State— with the same indicators detailed in the Framework but with values relatives to each country. Scores referred to indicators must be justified with a proof (URL or reference).



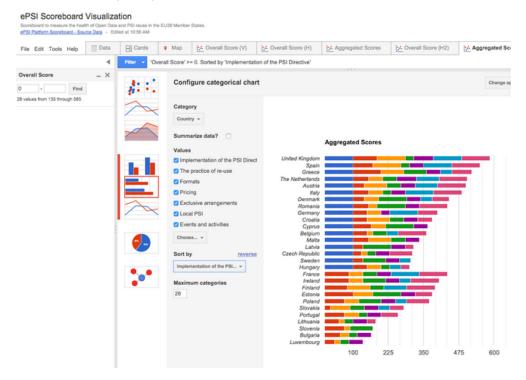
The Visualisations

The database is visualised on various intuitive maps and charts. Countries and their scores are represented through different visualizations mechanisms of Google Fusion Tables.

The scores shown in the *Nations* tab of the spreadsheet are copied into a fusion table that will serve the visualisations embedded within <u>epsiplatform.eu</u>.



This fusion table does not allow modifications and contains the same information present in the original database. The script executed after updating the database keeps the values updated in the fusion table, and subsequently, its visualisations.



Script to update the visualisations

As soon as the administrator modifies the country scores in the database, these new values are sent to the fusion table in order to update the visualisations. Both tables (spreadsheet nations overview and fusion table) are synchronised using an apps script on the original spreadsheet.

This script creates an additional button, named *ePSI Platform*, in the main menu of the spreadsheet. This button is only available for users with the administration role, and will trigger the update of the fusion table.

In case you want to learn more about this script, see the <u>full code</u> or ask me for more details.