



# DATA VISUALISATION ON EC.EUROPA.EU

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Converging from a cluttered  
landscape of data visualisation tools  
to  
a coherent web presence with  
standards that create synergies.



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## Maps



## MAPS : THE LANDSCAPE BEFORE 2015

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The EC web presence showed a scattered collection of different mapping applications.

- ✖ Different versions of OpenLayers, FusionMaps, Leaflet...
- ✖ Duplication of licences
- ✖ Duplication of development effort
- ✖ A weak corporate web mapping framework
- ✖ Background maps not in line with the EU
- ✖ Different data formats



## MAPS : A NEW CORPORATE STANDARD

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- Standard data formats
- Fully integrated authoritative GIS data supplied by ESTAT (country outlines, NUTS, background maps)
- Based on Leaflet
- Responsive design
- Flexible, able to cater for 99% of business cases
- 500.000 visits per month



## MAPS : REASONS FOR CORPORATE TOOL

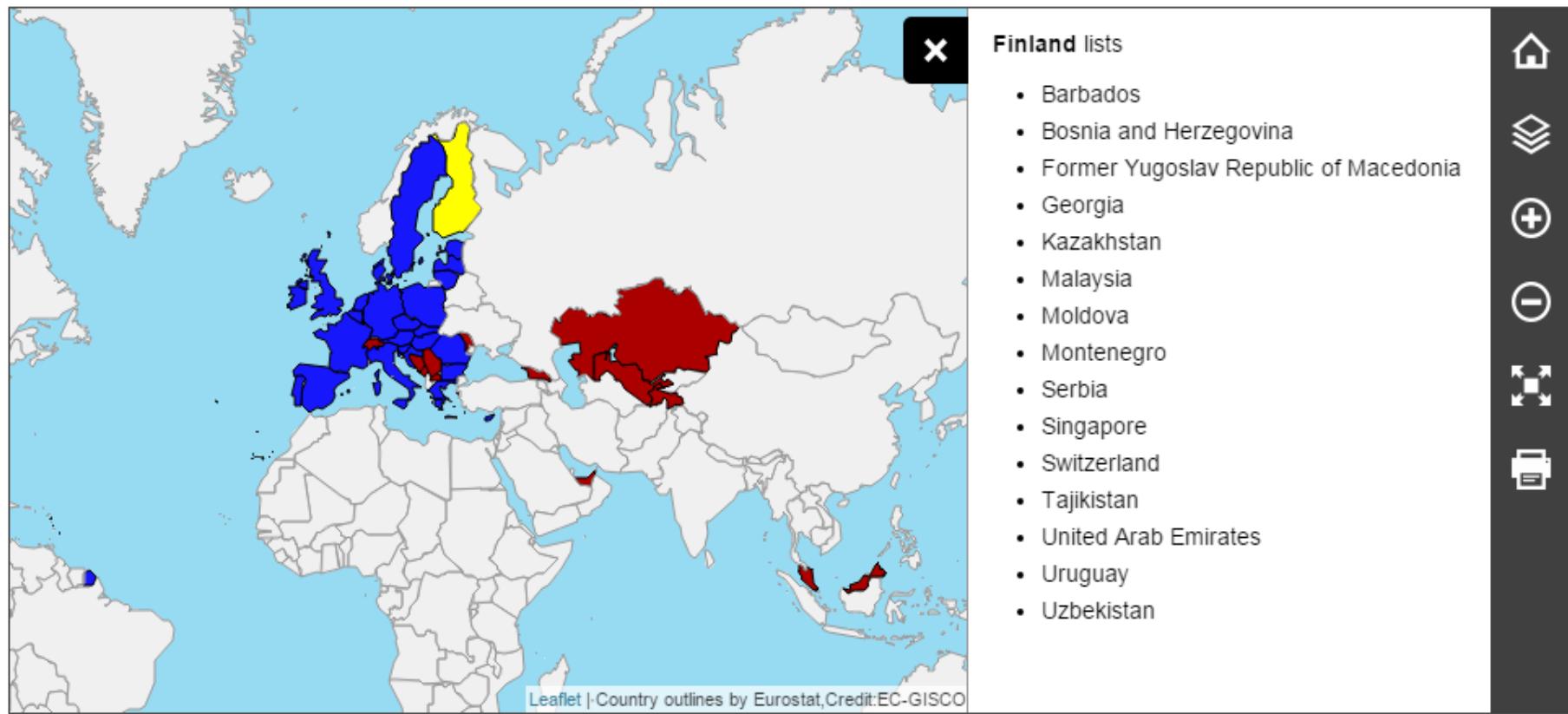
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Mid 2015, the EC web presence started implementing [corporate-standard web maps](#). Moving from OpenLayers to Leaflet.

- Driven by DG COMM in collaboration with DIGIT, ESTAT and CNECT.
- Centrally maintained by DG COMM and DIGIT, synergies ,costs reductions
- Central continuous improvement
- CMS-agnostic
- IPG compliant – supported by IE7+
- All resources internally available – no data protection issues
- Politically correct background maps
- Available to all institutions,

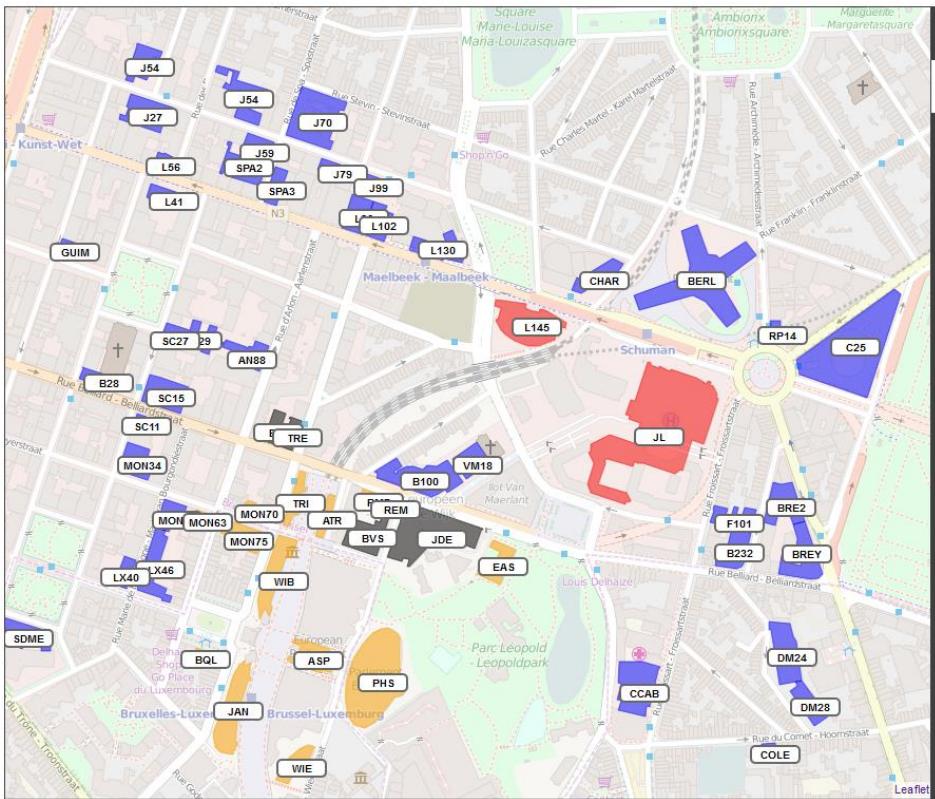
## MAPS : EXAMPLES

Tax good governance in the world as seen by EU countries



# MAPS : EXAMPLES

## POC EU buildings



A map showing the locations of various EU buildings in the Brussels-Luxembourg area. The buildings are color-coded by management body: blue for Commission buildings, red for Parliament buildings, black for Council buildings, orange for Curia buildings, and yellow for buildings managed by other EU bodies. Labels include: J54, J27, L56, L41, SPA2, SPA3, J59, J70, J79, J99, L102, L130, CHAR, BERL, RP14, C25, SC27, SC29, AN88, B28, SC15, SC11, MON34, MON63, MON70, MON75, TRI, ATR, REM, BVS, JDE, VM18, LX40, LX46, WIB, EAS, BRE2, F101, B232, BREY, JL, DM24, DM28, CCAB, COLE, JAN, Brussel-Luxembourg, PHS, ASP, BQL, JAN, Brussel-Luxembourg, WIE, and SDME.

**Select building management body**

- Commission buildings
- Parliament buildings
- Council buildings
- Curia buildings
- Buildings managed by other EU bodies

**Pan**

[Pan to Luxembourg](#)

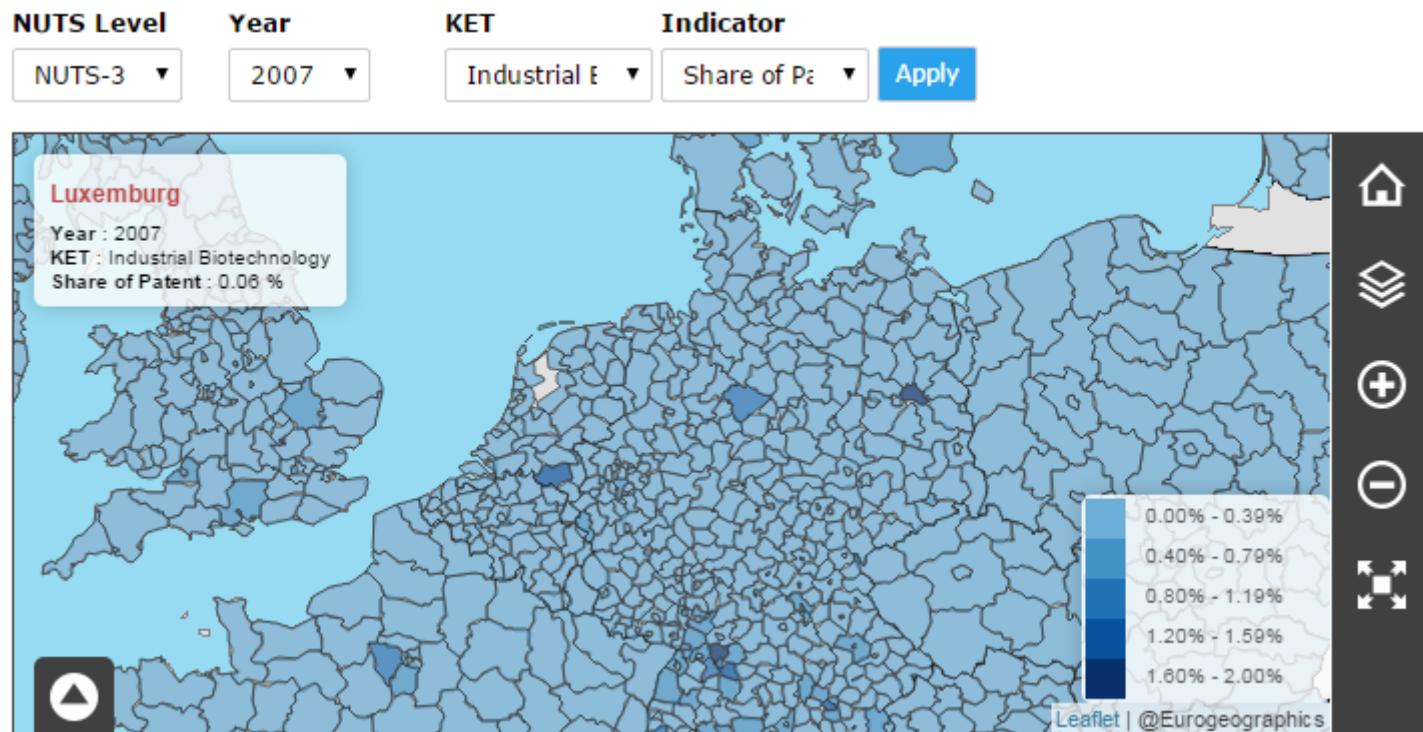
# MAPS : EXAMPLES

## About the EU - Countries



## MAPS : EXAMPLES

Regional distribution of KETs patents





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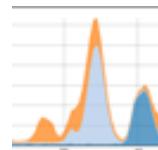
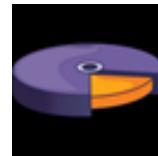
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## Charts

## CHARTS: THE LANDSCAPE TODAY

The EC web presence shows a scattered collection of different charting applications.

- HighCharts
- FusionCharts
- Canvas JS
- D3
- Raphaël
- ...

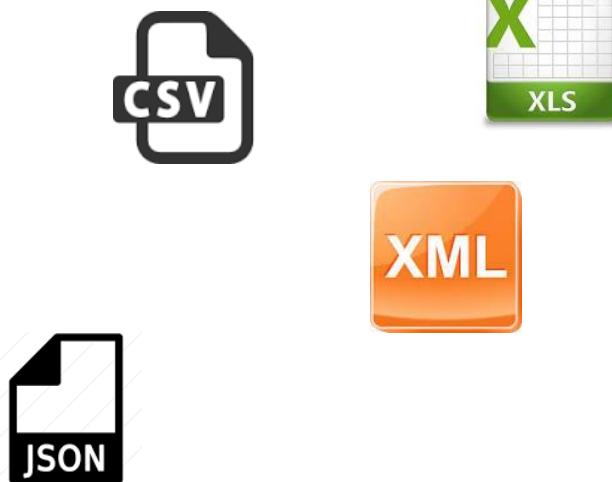


## CHARTS: THE LANDSCAPE TODAY

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Different charting applications = different input data formats

- CSV
- Custom XML
- Custom JSON
- XLS
- ...





## CHARTS: THE LANDSCAPE TODAY

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No standard chart tool

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No standard input format

No standards

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No synergies



## CHARTS: THE LANDSCAPE TOMORROW

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One corporate-standard charting tool

- Currently based on FusionCharts. See [documentation](#)
- DG COMM is open for new contenders (must meet IPG conditions)

One corporate data format for statistics for web visualisation

- JSON-STAT 2.1
- ESTAT data available at <http://ec.europa.eu/eurostat/web/json-and-unicode-web-services/getting-started/query-builder>
- Filter the dataset and generate the query
- Append the query  
to <http://ec.europa.eu/eurostat/wdds/rest/data/v2.1/json/en/>

Today, COMM and ESTAT are collaborating on developing corporate-standard visualisation of JSON-STAT 2.1



## Links:

1. [http://ec.europa.eu/ipg/services/interactive\\_services/index\\_en.htm](http://ec.europa.eu/ipg/services/interactive_services/index_en.htm)
2. <https://webgate.ec.europa.eu/fpfis/wikis/display/webtools/Webtools+documentation++Homepage>

## Contacts:

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# Thank you

José ARCOS, Head of EUROPA team technical sector