

EARTO Background Note: Openness of Government Data and Innovation Performance

26 January 2018

In the frame of the European Commission's review of the EU Directive on the re-use of public sector information (PSI Directive 2013/37) and the public consultation led by DG CONNECT to analyse the possibility of extending its scope to research data, EARTO would like to contribute to the debate with this background note. EARTO has already been actively involved in the discussions on Open Data with for instance the publications of the [EARTO paper on Open X](#), the [EARTO Background Note on the US Federal Agencies Data Sharing Policies](#) and the [EARTO Background Note on the US Open Science Data Cloud](#). As a follow-up, particularly in the frame of the discussions on governmental data, this short note aims at giving an overview of the Global Governmental Data Index ranking (OGD) and the Global Innovation Index ranking (GII) 2017, analysing the eventual links between the two. Indeed, this analysis brings an interesting perspective into the EU Open Data debate as it shows no correlation between the openness of governmental data and the innovation performance of a country.

1. The Global Open Governmental Data Index Ranking (OGD)

Run by the Open Knowledge Network, [the Global Open Data Index](#) ranks 94 countries according to the openness of governmental data, open meaning that "anyone can freely access, use, modify, and share those data for any purpose (subject, at most, to requirements that preserve provenance and openness)". This ranking looks at the openness of the following 15 governmental datasets:

- | | | |
|------------------------------|----------------------|-------------------------|
| 1. Government Budget | 6. Draft Legislation | 11. Election results |
| 2. National statistics | 7. Air quality | 12. Locations |
| 3. Procurement | 8. National Maps | 13. Water Quality |
| 4. National laws | 9. Weather forecast | 14. Government spending |
| 5. Administrative boundaries | 10. Company register | 15. Land ownership |

2. The Global Innovation Index Ranking (GII)

Co-published by Cornell University, INSEAD, and the World Intellectual Property Organisation (WIPO, an agency of the United Nations), [the Global Innovation Index](#) ranks the innovation performance of 127 countries. Its 81 indicators capture elements of the national economy that enable innovative activities with a broad vision of innovation, through five input pillars:

1. Institutions,
2. Human capital and research,
3. Infrastructure,
4. Market sophistication,
5. Business sophistication.

Two additional output pillars capture actual evidence of innovation outputs:

6. Knowledge and technology outputs,
7. Creative outputs.

The Global Innovation Index "aims to capture the multi-dimensional facets of innovation and provide the tools that can assist in tailoring policies to promote long-term output growth, improved productivity, and job growth. The GII helps to create an environment in which innovation factors are continually evaluated. It provides a key tool and a rich database of detailed metrics for economies, which in 2017 encompasses 127 economies, representing 92.5% of the world's population and 97.6% of global GDP".

3. No correlation between the Global Open Governmental Data Index Ranking (OGD) and Global Innovation Index Ranking (GII): no impact of the openness of government data on innovation performance

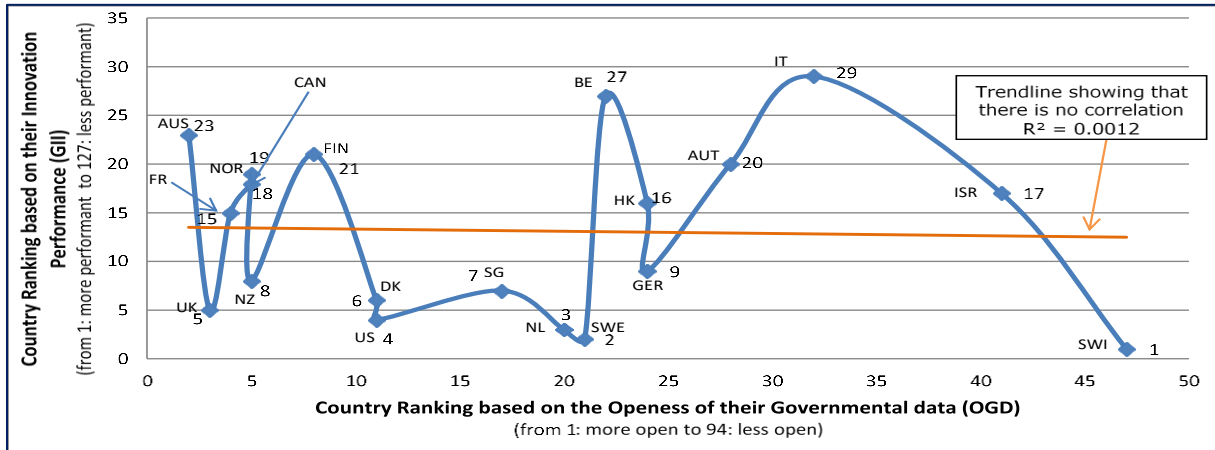
Open Governmental Data is sometimes claimed as having a positive impact on innovation and democratic control in a nation. For example, the [OECD report on "Making Open Science a Reality"](#) published in September 2015 lists the following potential benefits for OGD:

- "economic value (e.g. growth and competitiveness in the broad economy, fostering innovation, efficiency and effectiveness in government services)"
- "social value (e.g. promoting citizens' self-empowerment, social participation and public engagement in policy making and service delivery)"

- "public governance value (e.g. accountability, transparency, responsiveness and democratic control".

However, the figure 1 below, showing different countries with regards to both their OGD ranking, that is the openness of their governmental data, and their GII ranking, that is their innovation performance, simply does not bring these assumptions to light.

Figure 1 - Country ranking with regards to both the openness of governmental data (OGD) versus the country's innovation performance (GII) (data 2016)



The same can be seen when analysing the evolution of countries' OGD and GII rankings over a given period of time:

- Figures 2 and 3 show that between the publication in 2015 (2014 data) and the publication in 2017 (2016 data) of the OGD and GII rankings, the Netherlands, the USA and Switzerland show a rapid decline in OGD ranking (figure 2). However, these rapid changes in the openness of governmental data have very low or no impact on their innovation performance (figure 3).
- Switzerland (n°1 in GII-2017), the USA (n°4 in GII-2017) and the Netherlands (n°3 in GII-2017) are among the world's most democratic and innovative countries. The rapid decline in the OGD ranking for these countries has no impact, neither on their democratic functioning nor on their innovation capacity.

Figure 2: Global Open Governmental Data Ranking (OGD data 2014 to 2016)

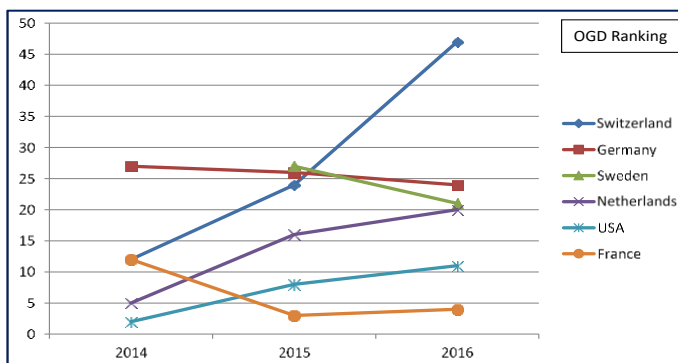
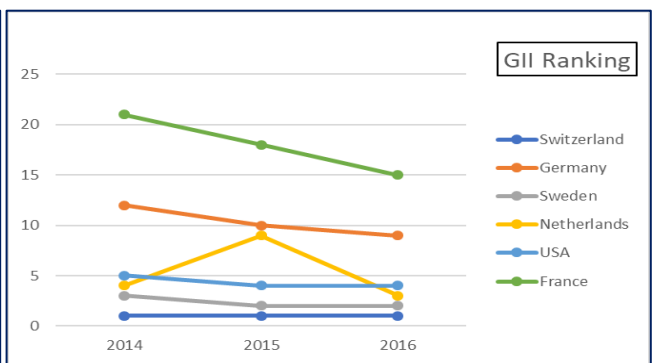


Figure 3: Global Innovation Index Ranking (data 2014 to 2016)



Based on these graphs, there seems to be no correlation whatsoever between the openness of governmental data and the innovation performance of a given country.

EARTO - European Association of Research and Technology Organisations

Founded in 1999, EARTO promotes Research and Technology Organisations and represents their interest in Europe. EARTO network counts over 350 RTOs in more than 20 countries. EARTO members represent 150.000 highly-skilled researchers and engineers managing a wide range of innovation infrastructures.

RTOs - Research and Technology Organisations

From the lab to your everyday life. RTOs innovate to improve your health and well-being, your safety and security, your mobility and connectivity. RTOs' technologies cover all scientific fields. Their work ranges from basic research to new products and services development. RTOs are non-profit organisations with public missions to support society. To do so, they closely cooperate with industries, large and small, as well as a wide array of public actors.

EARTO Working Group Legal Experts: is composed of 25 corporate legal advisers working within our membership. Established in autumn 2013, this Working Group has also worked on the revision of the state aid rules & the GBER. Our experts also contributed to the setting-up of the DESCA Consortium Agreement model for Horizon 2020. More recently they were at the origin of the EARTO Paper on Open X, the EARTO Background Note on the US Federal Agencies Data Sharing Policies, and the EARTO Position Paper on the European Licencing Framework for Standard Essential Patents.

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