

Country report for Ireland

CSO (Central Statistics Office)

Introduction

- Something about passed year:
The CSO has been through a deep technology renovation, joining the latest Web technologies in order to fill the gap with the end-users.

The new **PxStat** system that was proposed during the previous Px Reference Group in Bilbao (Spain) is now ready for the early *Alpha Release*.

The project is fully **Open Source** and released under the most open *MIT License* which allows anybody to use, change and even redistribute the product.

The project is available in **GitHub**:
<https://github.com/CSOIreland/PxStat>

The full documentation about the **Installation** (Architecture, Requirements, etc), **API** and **Developer** is available in the GitHub Wiki: <https://github.com/CSOIreland/PxStat/wiki>

The first *Alpha Release* of the code is planned to be published in GitHub in conjunction with this year Px Reference Group (early November 2019):

<https://github.com/CSOIreland/PxStat/releases> (stay tuned!)

Other 2 new products were also created, both available as Modules of the PxStat system:

- o **PxCompare**: compare and identify *changes, additions* and *deletions* of data and meta-data between different versions of the same statistical table by using a responsive Web interface.
- o **PxBuild**: create and update PX files by using a responsive Web interface

Finally, as part of the Open Source initiative, the CSO has also published the full **Client API Library** and **Server API Library** under the same *MIT License* in GitHub:

- <https://github.com/CSOIreland>

- Changes in content or usage:
 - o The number of Mobile users is still higher than the Desktop one
 - o The CSO joined the **ESSnet Linked Open Data** project, aiming to pilot the conversion from CSV & JSON-Stat to RDF of Statistical Data & Meta-Data.

PX International Reference Group meeting 2019

- Problems and/or good news:
 - o Ongoing collaboration with **NIRSA** (Northern Ireland Research and Statistical Agency) and **Statistics Estonia** on the **PxStat** project.
 - o During the development of the PxStat project, some issues with the PX format were identified. The parsing of a PX file can be sometime exposed to different interpretations. Also, the PX format currently introduces an overhead due to the mandatory presentational layer which conflicts with the concept of data & meta-data exchange format. The CSO is happy to share these findings in order to promote a better version (standard) of the PX format.

- Which version of PX-Web do you use?
 - o N/A

- Do you use the API?
 - o The CSO currently uses a proprietary API system. This will be replaced soon by the new PxStat API which is based on JSON-RPC 2.0 (<https://www.jsonrpc.org/specification>) with JSON-Stat 2.0 (<https://json-stat.org/format/>), CSV and PX outputs. The CSO intends also to build an API Adapter for cross-compatibility with the PxWeb API as well.

- Any reactions from users of interest?
 - o The demand to facilitate and improve the consumption of statistics from the general public and experts is increasing.
 - o High demand for Mobile/Responsive interfaces
 - o The first and most problematic issue reported by users is about “*finding*” Statistics and Data in the jungle of a statistical database. In response to the users, PxStat implements (as first entry point) a “*Google Like*” Search running a fully ranked search (similar technology used by Google) across all meta-data (including the support of synonyms and characteristics language-based) to facilitate the finding of Statistics and Data within the Statistical database.

- Other reflections?
 - o Moving toward the standardization of PX is important in order to formalize its existence and future. Otherwise, the transitioning to an existing data & meta-data exchange-standard (like JSON-stat, SDMX etc) is getting predominant in the statistical community.

What are your future plans (related to the programs)?

- Move the PxStat release from Alpha, through Beta and finally Production (RTM) by the end of 2019.
- Add the RDF/LOD module to PxStat during 2020
- Implement an Open Source adapter for cross-compatibility with PxWeb APIs during 2020
- Build Open-Source cross-adapters for PxStat to visualize statistical data via third-party software (i.e. Tableau, Power BI etc...) during 2020
- Take in and implement suggestions

Something you would like to show or discuss at the meeting?

Depending on availability in the Agenda:

- Run a live demo of **PxStat**, both for Data Dissemination (from the End-Users/Consumers prospective) and Data Management (from the Data Owners/Publishers prospective)
- Run a live demo of **PxCompare**
- Run a live demo of **PxBuild**

The yearly PX Reference Group Meeting is a great opportunity to showcase any progress but it's lacking practical sessions where the members can put their hands on the products and try to embed the solutions into their environments.

The CSO is also proposing a mid-year "PX Workshop" or better a "PX Hackathon" for those interested in more practical sessions: the aim is to facilitate a better understanding of the products in relation to each other environment, so that the PX products can be adapted, integrated and used also by other Statistical Organizations.

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