Blog Open Knowledge Belgium

Title: Open Addresses, finally!

For a long time, one of the most requested datasets in Belgium was an authentic online source of all addresses in our country.

Then we waited … and waited … and waited some more. But not for too long, because, Open Data activists are **fast**!

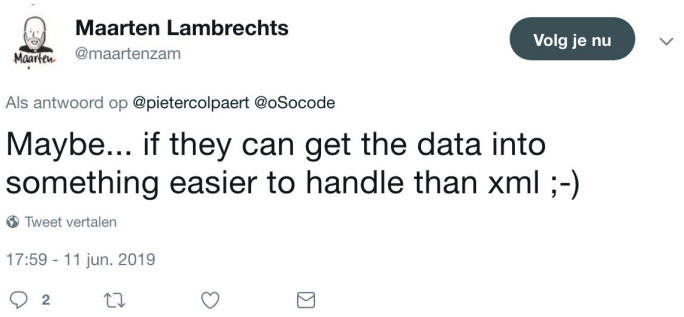
As a result, in June 2019, thanks to Bart Hanssens, the **Open Data hero** of the Belgian government, FOD BOSA DT and the **three regions** published the **BeST data set**!

This authentic dataset consists of a collection of XML files in which all addresses of Belgium are displayed with their respective geolocation. The fact that the data set became open source, provided us with numerous possible applications!

HOWEVER …

(Creating tension here)

XML can be a rather clumsy and inconvenient format, which causes the open dataset to be rather inaccessible for the general public.



But do not lose hope just yet…

(Creating tension again)

In order to make the XML data **accessible** for general users and applications, FOD BOSA DT collaborated with a team of three driven students at **Open Summer of Code 2019** (oSoc19).

Excited?
You should be!

The end result is absolutely, incredibly, utterly, FAN-TAS-TIC!

Well, FOD BOSA DT also had the “BeST” team.

Okay there little show-off, so what did they do then?

The team at oSoc19 created scripts that **filter** the data and **convert** it into other **useful formats**. This, in turn, enables smooth conversion of the data. Accordingly, they added the converted dataset to openaddresses.io, a global open address file that is already used by many applications. Using these new formats, the students ended up **creating a captivating visualization of all addresses in Belgium**.

The addresses of Belgium are plotted as a **heatmap**. This means that the denser the addresses are, the brighter a pixel will be. Dense cities such as Ghent or Brussels and the coastline which counts numerous apartments are therefore clearer on the visualisation.

"With the open source BeST dataset, it is much easier to check for existing addresses in the right format."

- Pieter Colpaert, OpenPlanner.team

Furthermore, the students were able to set up their own **Geocoder** in no time! This Geocoder is a service that, given an address query, attempts to return its exact geographical coordinates. Geocoding is an essential part of every route planning application, which is why other teams at oSoc19, such as **Hopper** and **Road Report**, are using this as part of their application.

The open source setup makes it possible for any organisation to host their own geocoding service, without any further costs or access limitations. Setting up a geocoder on your own is not an easy task, which is why BeST@ provided this **service for you**!

The Open Summer of Code undertaking was the true beginning of a movement in which an entire community can work with the dataset. Without existing **open source efforts**, and the open data that FOD BOSA DT and the Belgian regions provided, it would not have been possible for the **BeST@ team** to establish this project.

Want to find out more about the BeST dataset?
>> Go to **opendata.bosa.be** and download the entire dataset, easily and free of charge!