

Advertising mapping : using OpenStreetMap for the protection of landscape

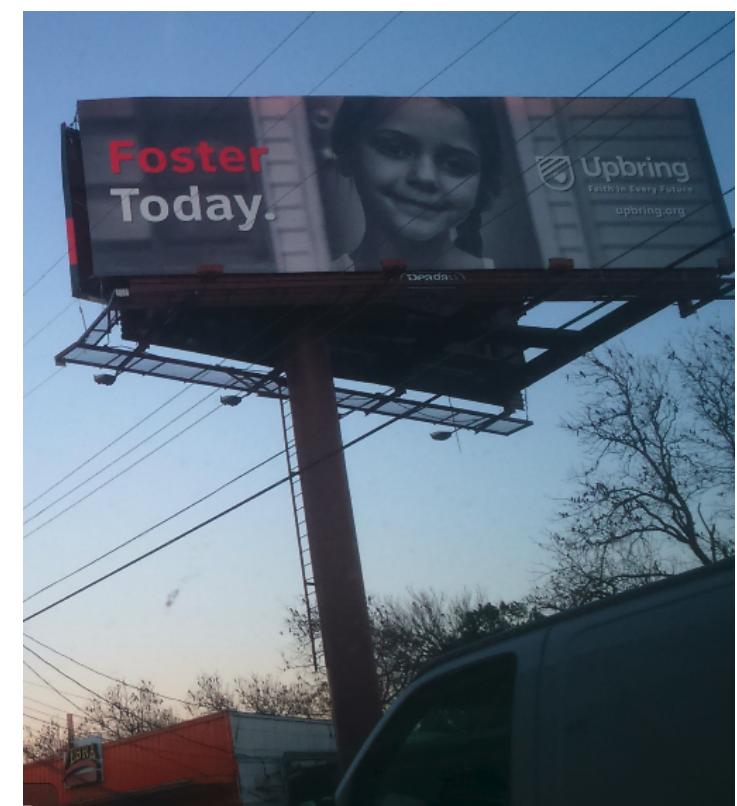


Paul Desgranges
at SOTM Milano 2018



26/07/18

Advertising mapping into OSM



2

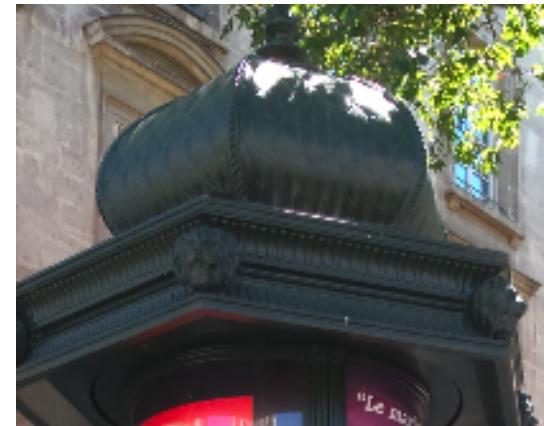




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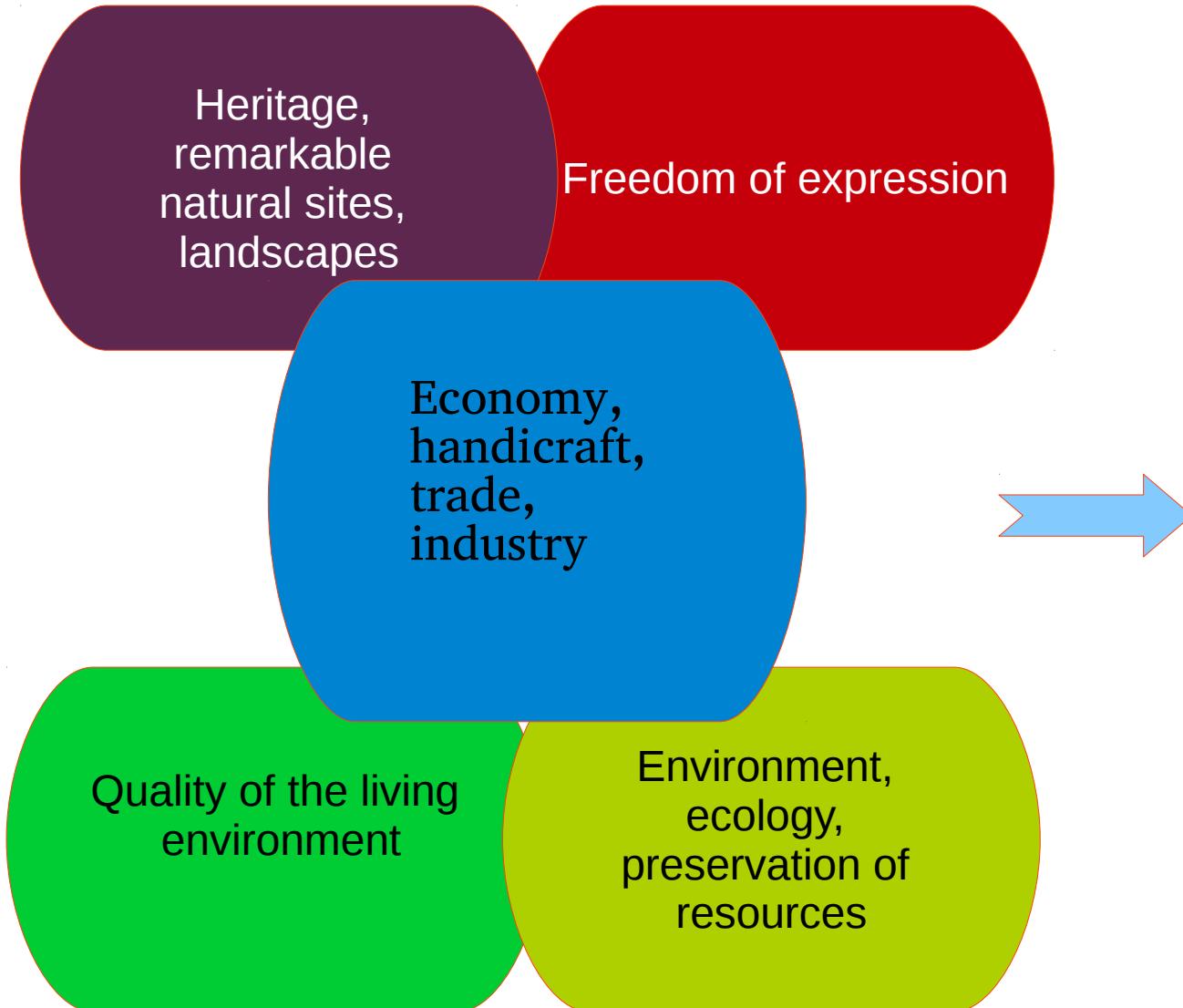
Advertising mapping into OSM

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Outline

- What are the devices which can be mapped ?
- Why bother to do this ? What would be the use of that ?
- How to map and tag into OSM ?
- Tools : preset JOSM, OSM Contributor, MapContrib.
- Rendering : icons, openadvertisemap, umap
- Stats per type and per country

Legislation on advertising in public space in France is the result of 100 years of discussion on :



12/07/2010 : law
ENE (Engagement
National pour
l'Environnement)

30/01/2012 : decree
RNP (Réglement
National de
Publicité)

Complexity !



« No ad !
Trees instead !! »



Grenoble to replace street advertising with trees and 'community spaces'

A plan to curtail outdoor advertising was a campaign promise by Green mayor Eric Piolle in recent municipal elections, as he claims it is "a European first for a large city"



French city Grenoble bans advertising on trees

NOVEMBER 25, 2014

#advertising #cycle paths #france #green city #grenoble #sustainability

Grenoble is the first European city to renounce the revenue from billboards in public spaces – Grenoble earned some 645,000 euros in 2014 – in favour of making the city a greener space for residents.

"It's time to move forward in making Grenoble a more gentle and creative city," said the city's Green Party Mayor Eric Piolle, who campaigned for office in early 2014 with a promise to remove advertising from Grenoble. "We want a city which is less aggressive and less stressful to live in, that can carve out its own identity. Freeing Grenoble of advertising billboards is a step in this direction."

Mayor Piolle aims for a green and sustainable city without advertising billboards. At the same time, the city will promote public transportation and will build new cycle paths.

Between January and April 2015, some 326 advertising panels will be taken down as JCDecaux's contract comes to an end. The removed billboards will be replaced by young trees and by free community notice boards.



ma

French city Grenoble bans advertising in favour of trees

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advertising panel in Grenoble will be replaced by a tree
Text by Tony TODD [Follow](#)

Grenoble has decided to pull its advertising
on with trees.

or, announced on Monday it would not renew its contract with

Wednesday, Jul 25



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French city becomes the first in Europe to ban street advertising... and replaces all posters with trees and signs for community groups

- Grenoble will plant 50 young trees by spring under the green plan
- 326 advertising signs will be taken down and contracts will be cancelled
- Cultural and social groups will be offered free advertising on noticeboards

Advertising devices into OSM : what for ?

Aims 1

- Store into OSM DB what can be seen on landscape
- Perform inventory (how many, density)
- Compare towns with same characteristics
- Follow changes in time

Aims 2

- Be able to verify legality of installation, automatic detection of infractions ?

Aims 3

- Be able to measure advertising pressure
 - On a city, along an itinerary, ...

How to tag into OSM ?

- **man_made=advertising** (first level tag, not mandatory)
- Tag **advertising** : external aspect (form factor)
- Then support, overall size, height, number of sides, lit, luminous, animated.
- Then legal aspect : operator, private/public property, type of message, display size, legal type according to local legislation
- Visibility (nuisance or impact)

External aspect of device

- **advertising=<value>** is first level tag (if **man_made=advertising** is not). To give the external aspect of the device
 - **advertising=billboard**
 - **advertising=poster_box**
 - **advertising=totem**
 - **advertising=column**
 - **advertising=board**
 - **advertising=tarp**
 - **advertising=sign**
 - **advertising=flag**
 - **advertising=sculpture**

Support

support to qualify what supports the device

- **support=wall**
- **support=poles/pole/ground** devices grounded (either poles, or a large unique pole 'trunk' ["advertising tree"]) or directly put on the ground, in France poles for telecom/electricity/light/traffic sign are not allowed to support advertising
- **support=mast** device supported by a mast
- **support=fence** In France blind fence only can support advertising
- **support=post** In France many advertising boards are supported by a post
- **support=easel** not mandatory if advertising=easel
- **support=scaffold** mostly for advertising=tarp
- **support=ceiling ou roof** supported on roof
- **support=street_furniture; street_furniture:transit_shelter ; street_furniture:newspaper_kiosk ;street_furniture:flower_kiosk ; street_furniture:information ; street_furniture:map ; street_furniture:bench ; street_furniture:trash ; street_furniture:recycling ; street_furniture:clock ; street_furniture:toilets** all kinds of urban furnitures being able to support advertising. In France only 5 of them are allowed : transit_shelter, newspaper_kiosk, information, ...

Overall size

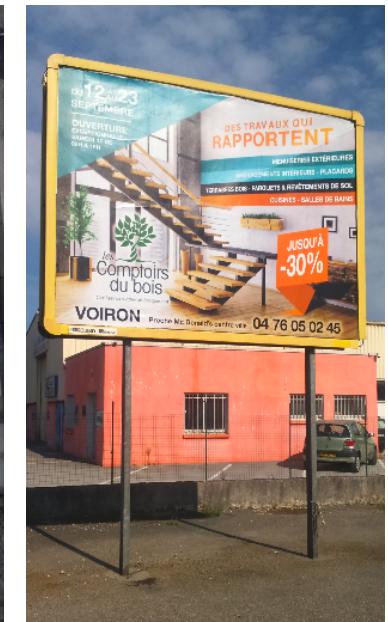
size : external size of the device
(without the support), it is not the display size, but the size of display size AND the frame

Difficult to measure precisely, but they are standard formats

width*height in meter

- size=1.5x1
- size=1.3x2 ($1.2 \times 1.7 \Rightarrow 2 \text{m}^2$)
- size=3.5x2.7 ($3.2 \times 2.5 \Rightarrow 8 \text{m}^2$)
- size=4.4x3.4 ($4 \times 3 \Rightarrow 12 \text{ m}^2$)

size better than **width + height**, because there is as well **display_surface**, and **height** for the overall height of device

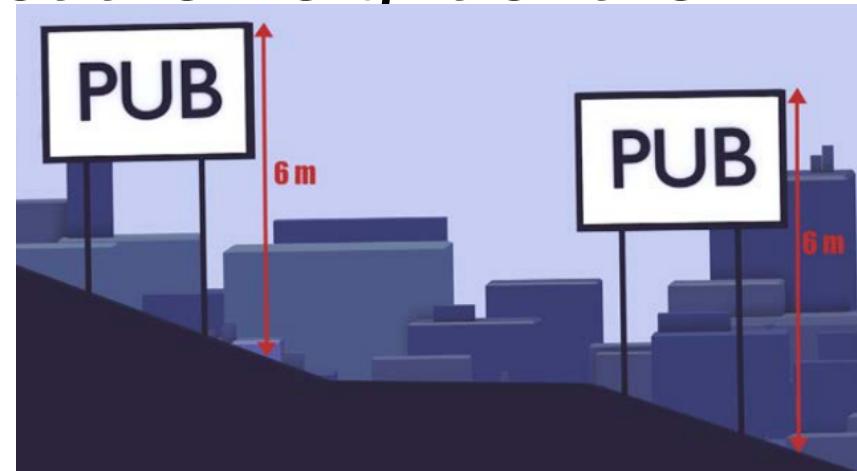


Height

height : the height of the highest point of device from the lowest point, average height has no meaning here, this is not the height of the display surface

In meter :

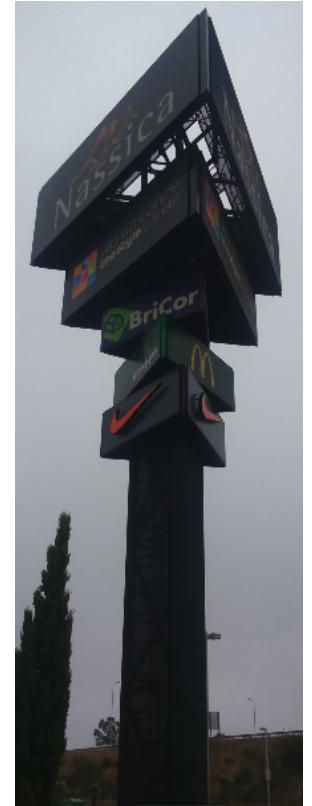
- **height=2.2** often for poster_box
- **height=6** often for grounded billboard (max height in France)
- **height=7.5** often for wall billboard (max height in France)



Number of sides

sides : the number of sides of the devices

- **sides=1** wall devices, tarps, most of the boards in town, default value
- **sides=2** totems, most of grounded devices
- **sides=3** sometimes
- **sides=4** sometimes



lighting

lit : yes/no



Proposal

- **lit=projection** spots or neon ramps
- **lit=transmission** poster_box lit from inside
- **lit=neon**
- **lit=numeric** all types of digital display
- **lit=screen** all types of screen



Animation type

animated :

- **animated=yes/no**
- **animated=trivision_blades** : small triangles rotating
- **animated=winding_posters** : several posters, often 3, winding one after the other
- **animated=rotating** : advertising columns rotating on itself
- **animated=screen** : a screen is an animation type
- **animated=digital_prices** : for petrol stations for example
- **animated=digital_messages** : for electronic display
- **animated=wind** : some easels on ground are rotating with wind

Operator

operator to qualify the one performing display,
advertising company, or town, or shop, of brand

, ...

- operator=JCDecaux
- operator=Ville de Grenoble
- operator=SMT^C (Syndicat Mixte des Transports en Commun)

Reference

reference identifier of advertising device,
supposed to be unique by an advertising
company, supposed to be visible in France on
all devices (“buteau”)

- ref=

Visibility : device visibility

- **visibility**
 - **visibility=house** : device for pedestrians, visible up to 10 m
 - **visibility=street** : device for vehicles driving slowly, visible between 10 and 50 m
 - **visibility=area** : device visible from far, or for vehicles driving fast, visible from more than 50 m

Land

- **land_property** to tell if the advertising device is on private land or public land
 - `land_property=public`
 - `land_property=private`

Type of message

message : type of advertising message. Only if permanent characteristics.

- **message=commercial** vast majority, default value
- **message=opinions/non_profit** In France we have mandatory boards for free speech and non profit organization in all towns in France, reserved space for freedom of expression.
- **message=information** municipalities
- **message=showbiz** In France adv columns in town can only display advertising for showbiz (theater, music, movie, concerts, ...)
- **message=map** for geographic information
- **message=political** for electoral boards, with “permanent=no” as only during election campaigns in France
- **message=safety** for safety warnings, flood,
- **message=legal** for legal information
- **Etc. Other values are possible**
- When there are two sides it is possible to have **message:front=commercial** and **message:reverse=information** for example for urban furniture ad hoc

Legal device type in France

- **legal_type:FR** to qualify the legal type of device in France
 - `legal_type:FR=publicité`
 - `legal_type:FR=publicité:mobilier urbain:panneau`
 - `legal_type:FR=publicité:mobilier urbain:colonne`
 - `legal_type:FR=publicité:mobilier urbain:mât porte-affiches`
 - `legal_type:FR=publicité:mobilier urbain:abri transport`
 - `legal_type:FR=publicité:mobilier urbain:kiosque`
 - `legal_type:FR=enseigne`
 - `legal_type:FR=enseigne:temporaire`
 - `legal_type:FR=préenseigne`
 - `legal_type:FR=opinions/associations`
 - `legal_type:FR=JEI`

Supposed status of device against law in France

- **legal_status:FR** to qualify legal status of device, as far as french legislation is concerned.
 - **legal_status:FR=ok** : device seems to respect french legislations.
 - **legal_status:FR=to verify:comments** : supposition is made that device does not respect legislation, to be verify by an expert, comments.
 - **legal_status:FR=ko:comments** : device does not respect legislation, add comments to explain.

To know if this device is usable by anybody or it is private and reserved

- **access** to tell if it is possible to stick one's own posters, enable to differentiate commercial boards from boards offered to free opinions and non profit organisations
 - access=open or yes
 - access=private or no

Size of display

display_surface This is not the overall size of the device, but the size offered to the display.

Difficult to measure precisely

surface in meter²

- **display_surface=1.5** : for 1,5 m² => “préenseignes” in France
- **display_surface=2** : for 2 m² => poster_box
- **display_surface=8** : for 8 m² => a lot of grounded billboards in France
- **display_surface=12** : for 12 m² => a lot of grounded billboards in France

Visibility

: two other attributes to measure impact of device
of advertising pressure of the device

- **flow** tells how the device is set as compared with the flow of people or vehicles
 - flow=front
 - flow=medium
 - flow=parallel
 - flow=reverse
 - flow=multi

Visibility

: two other attributes to measure impact of device of advertising pressure of the device

- **side** to tell on which side of the road is located the device as compared of the side when the people or vehicles pass
 - side=same
 - side=opposite
 - side=middle

Orientation:

- **orientation**

Scope “advertising:”

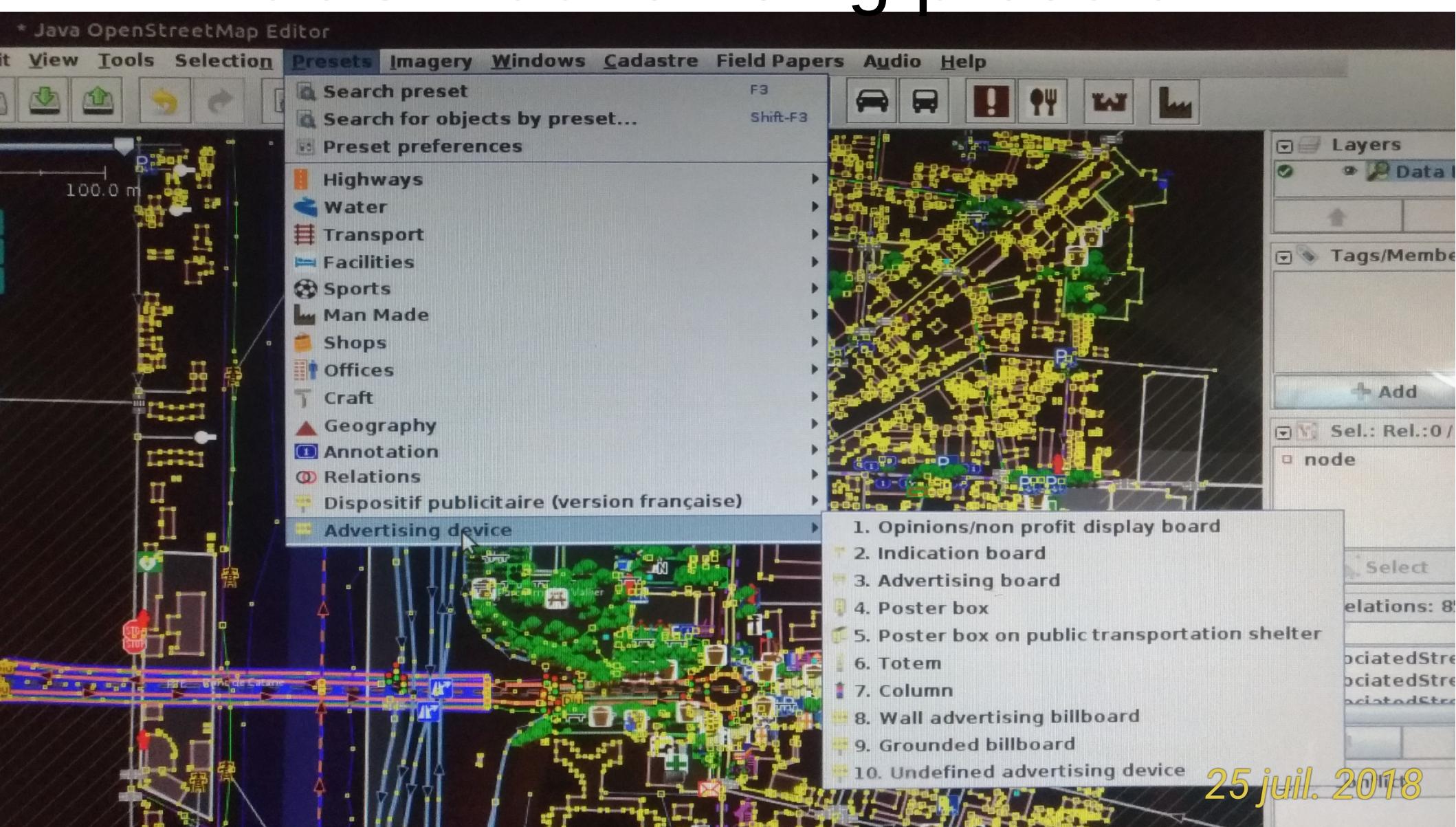
Advertising device can be installed on an existing object and to not mix advertising attributes and object attributes, “advertising:” scope can be added.



Tools

- **JOSM advertising presets** : for main cases, to facilitate collection of information into JOSM
- **JOSM advertising style** : to have a rendering into JOSM while we are editing advertising devices
- **OSM contributor** : Android application with 3 profiles dedicated to 3 types of devices (being built)
- **Map Contrib** : one theme to help advertising mapping contribution (being built)

JOSM advertising presets



JOSM advertising preset 1 out of 10

Change 1 object

Editing a 'grounded billboard' advertising device

Support of advertising billboard: pole

Size of billboard (width * height): 4*3

Height of highest part of billboard: 6

Number of sides: 2

Lit ?

Luminous ?

If animated device, type of animation: winding_posters

Advertising message type: commercial

Display surface (in m²): 12

Operator: operator

Unique identifier: ref

Installed on public property

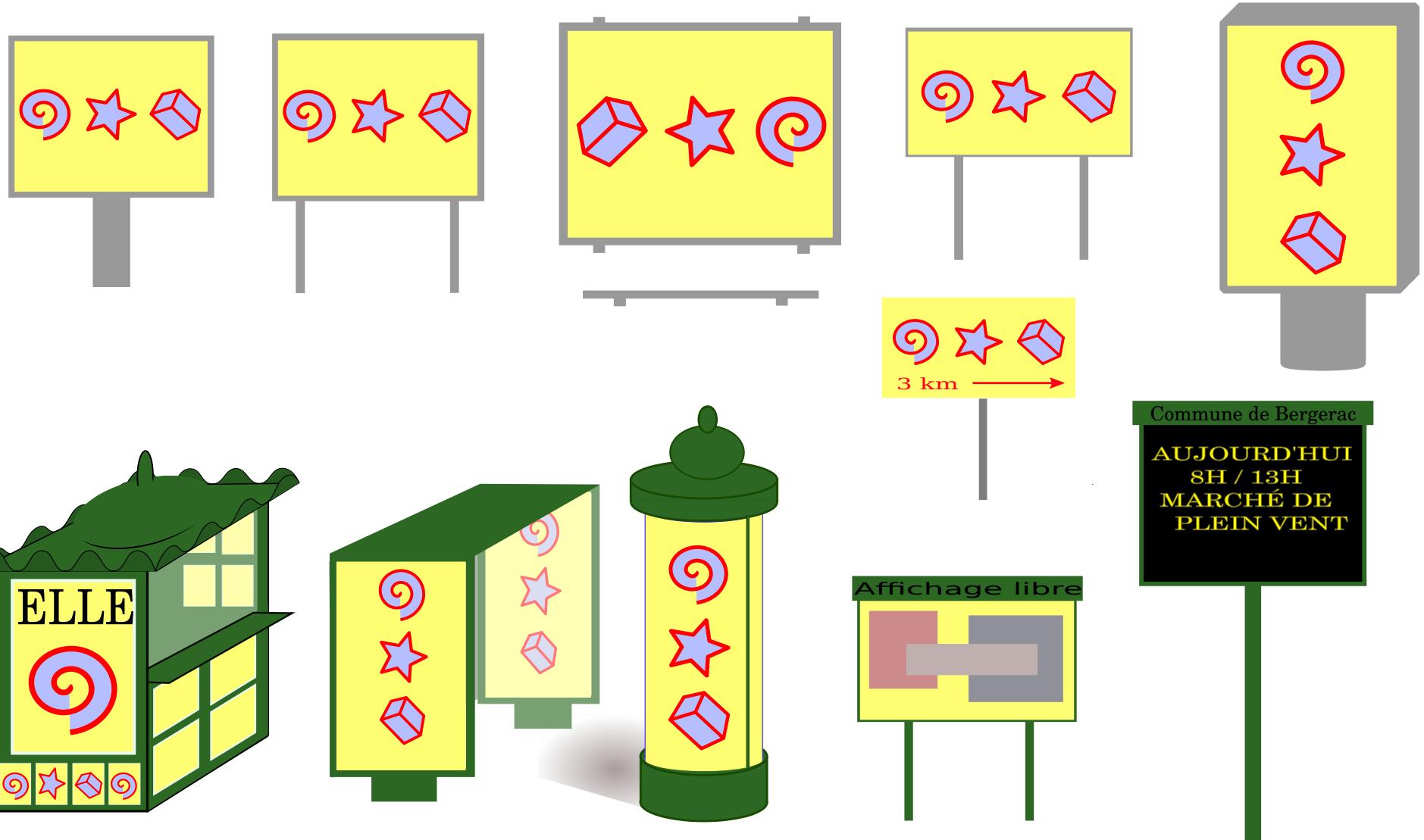
Display usable by all ?

Orientation of advertising device with respect to the flow of people: front

Visibility: area

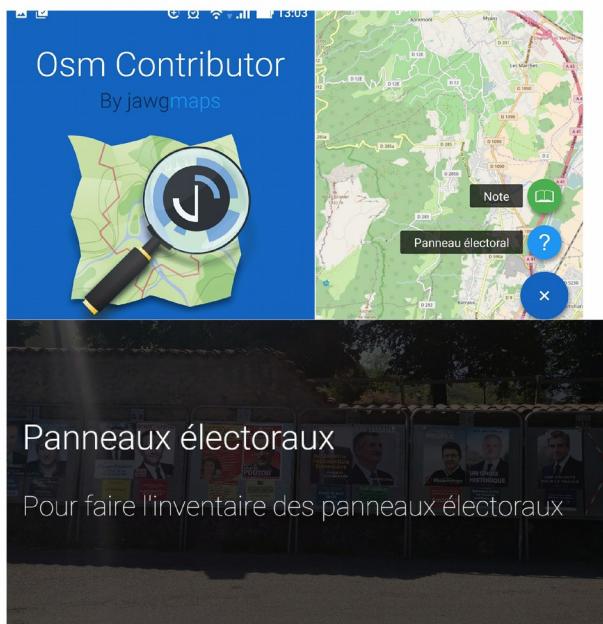
[More information about this feature](#)

JOSM style

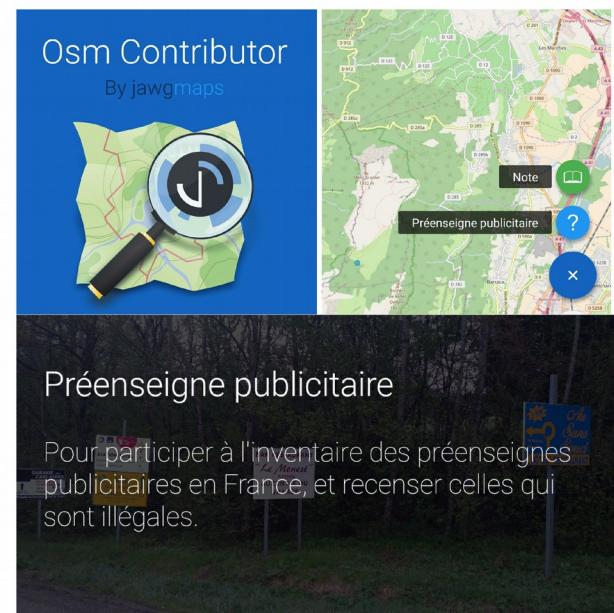


Androïd App : OSM contributor profiles (being built)

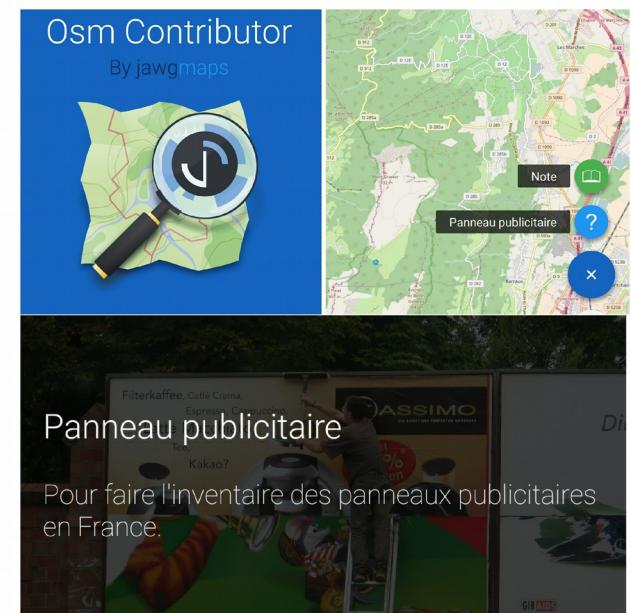
Political boards



Indication boards

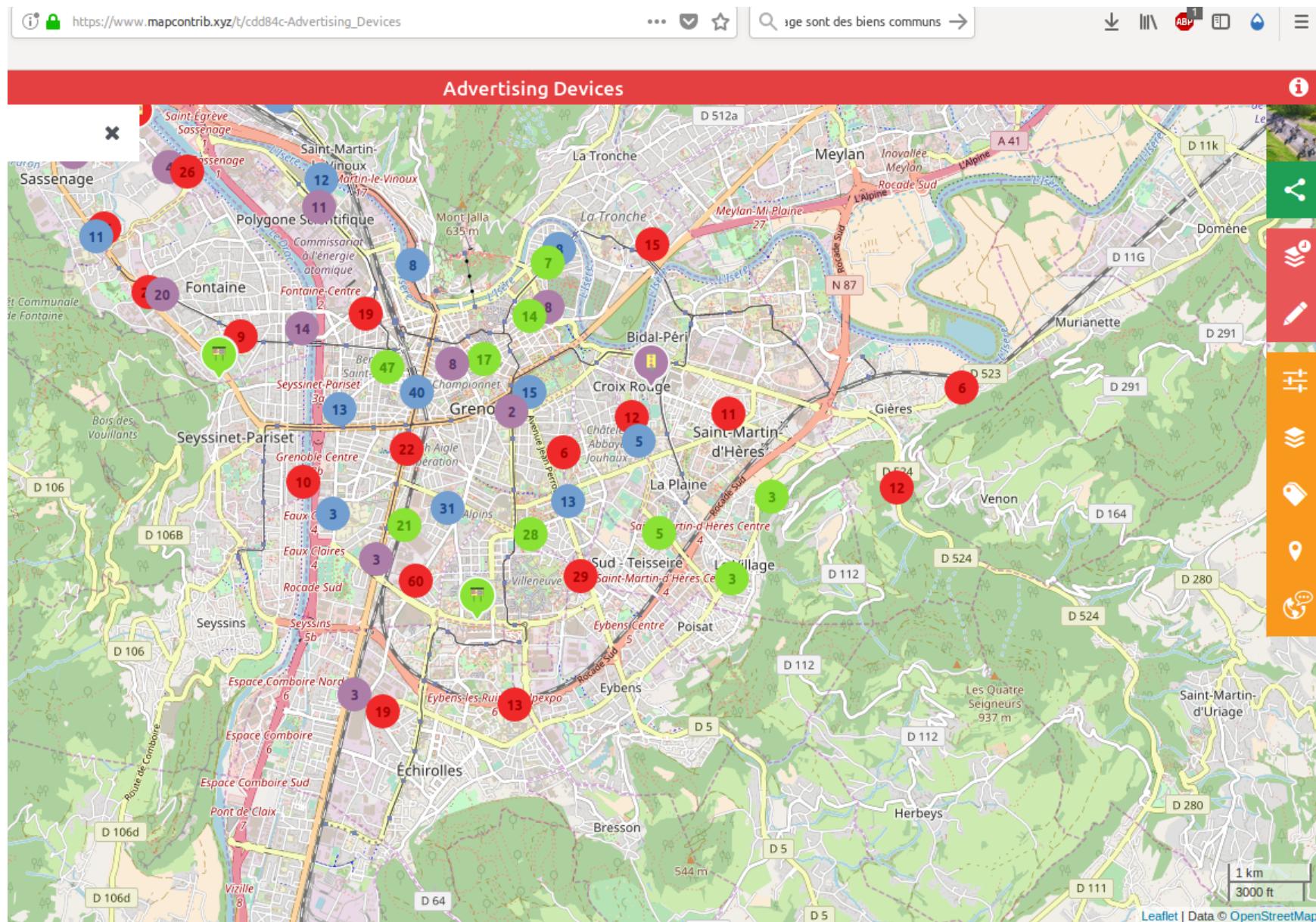


Billboards

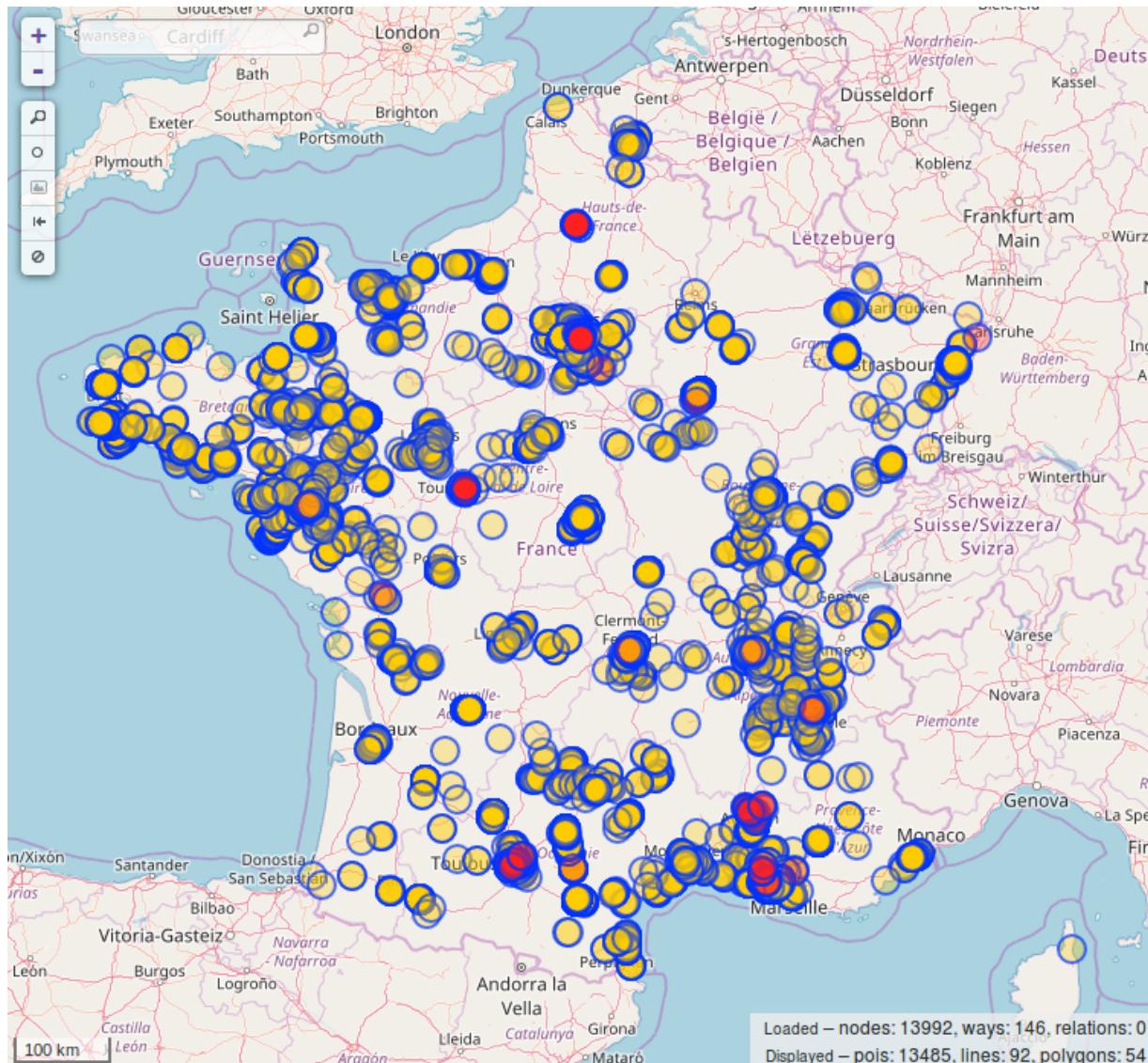


Map Contrib (being built)

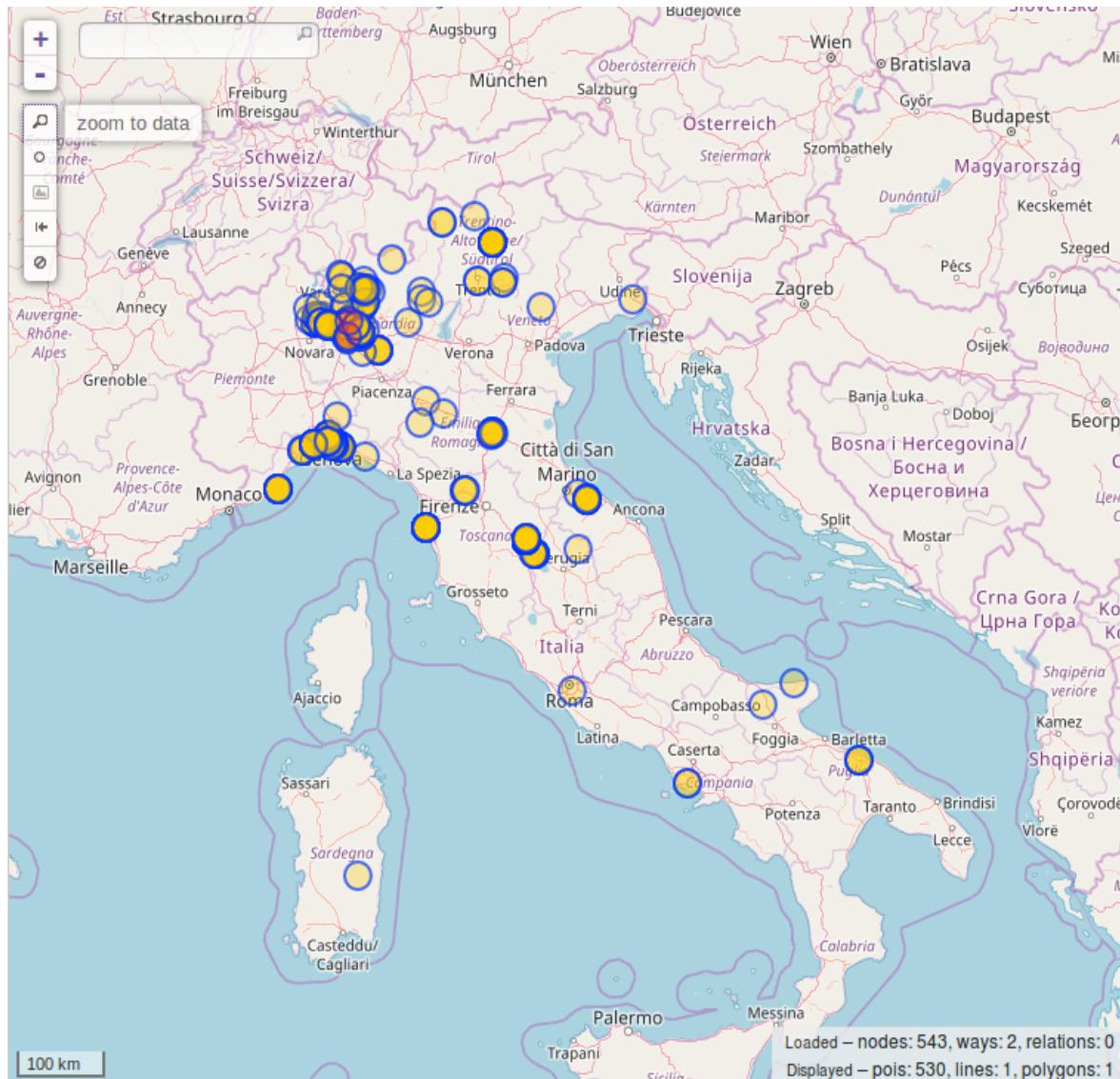
https://www.mapcontrib.xyz/t/cdd84c-Advertising_Devices



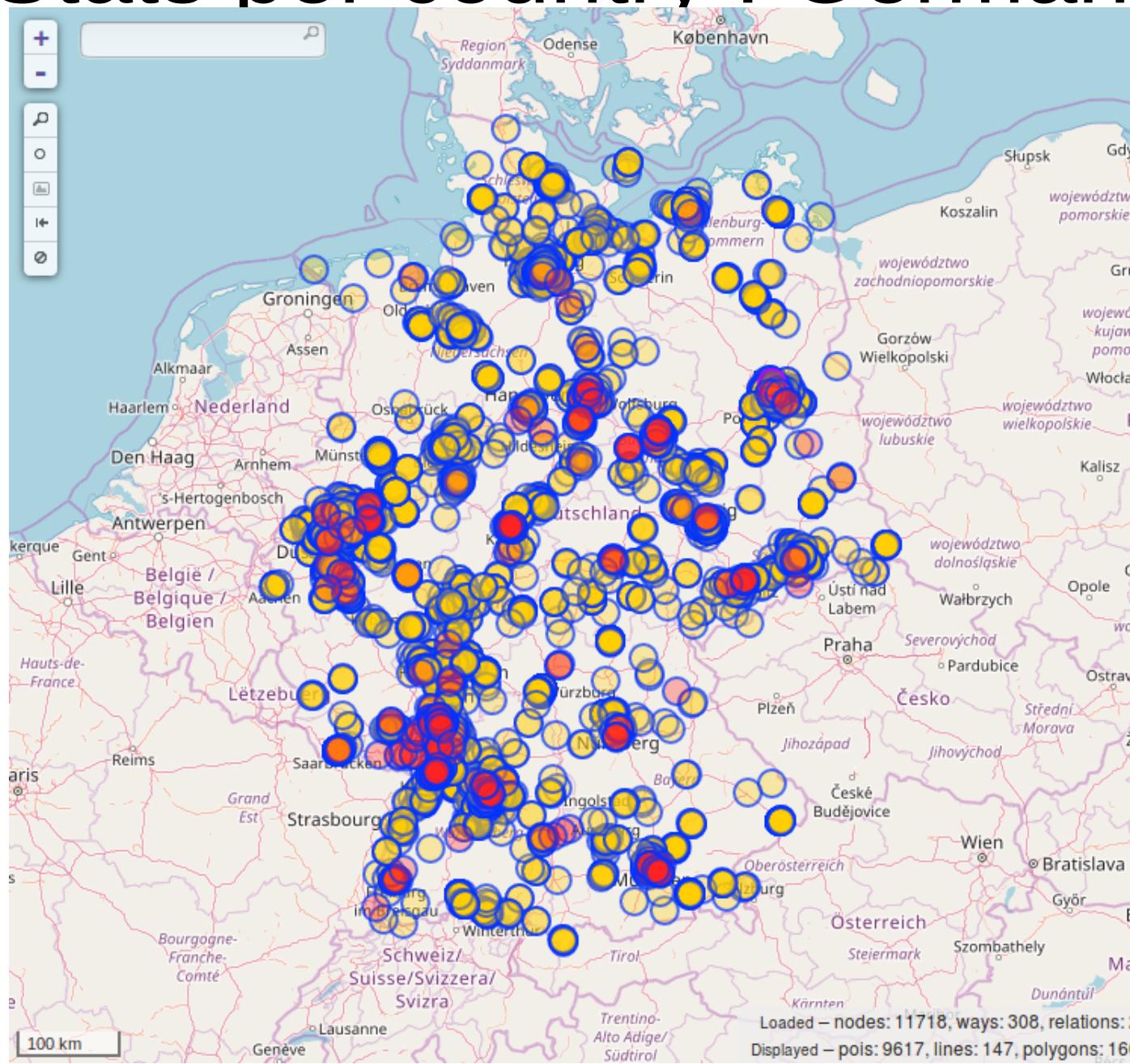
Stats per country : France



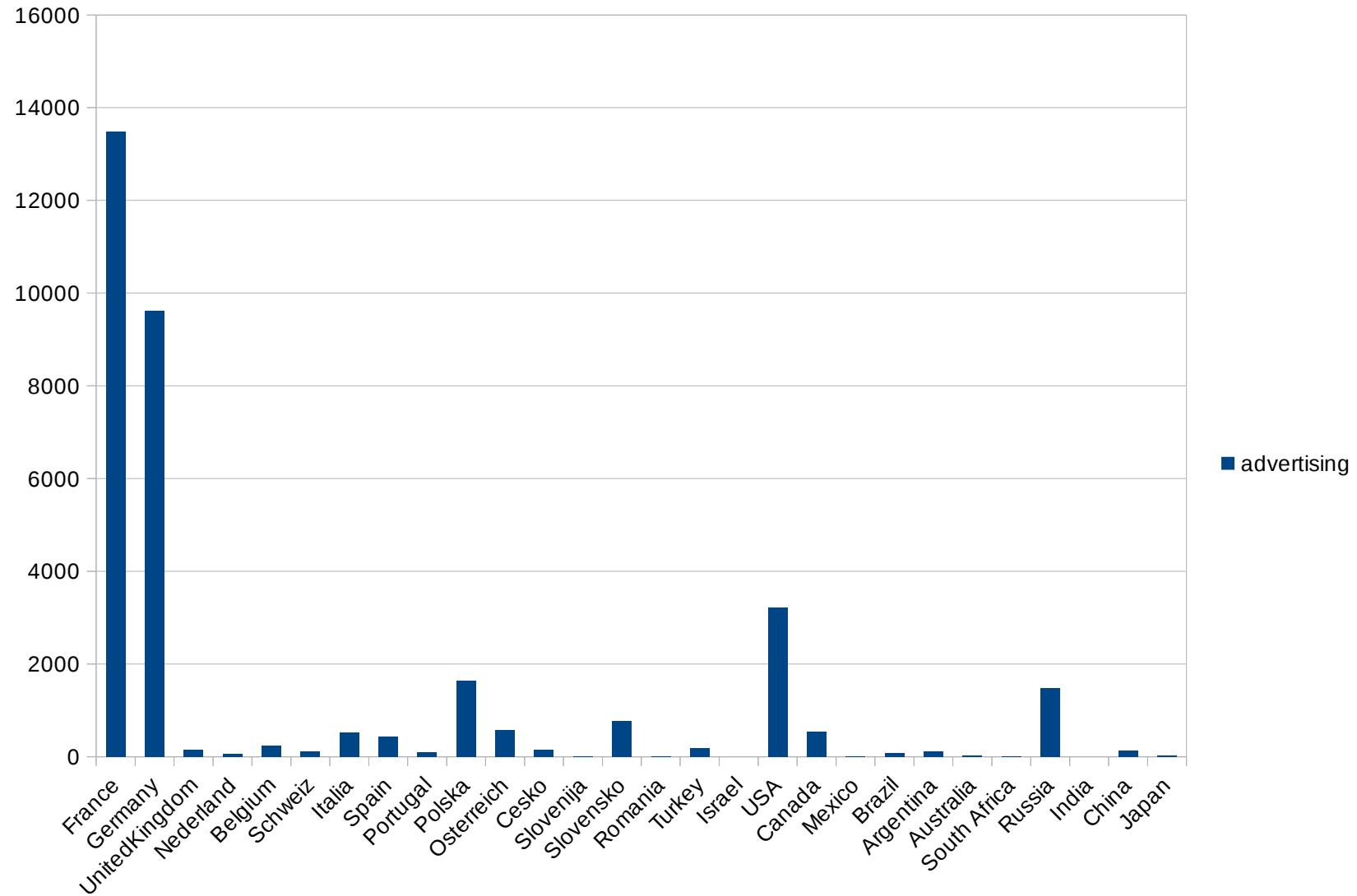
Stats per country : Italia



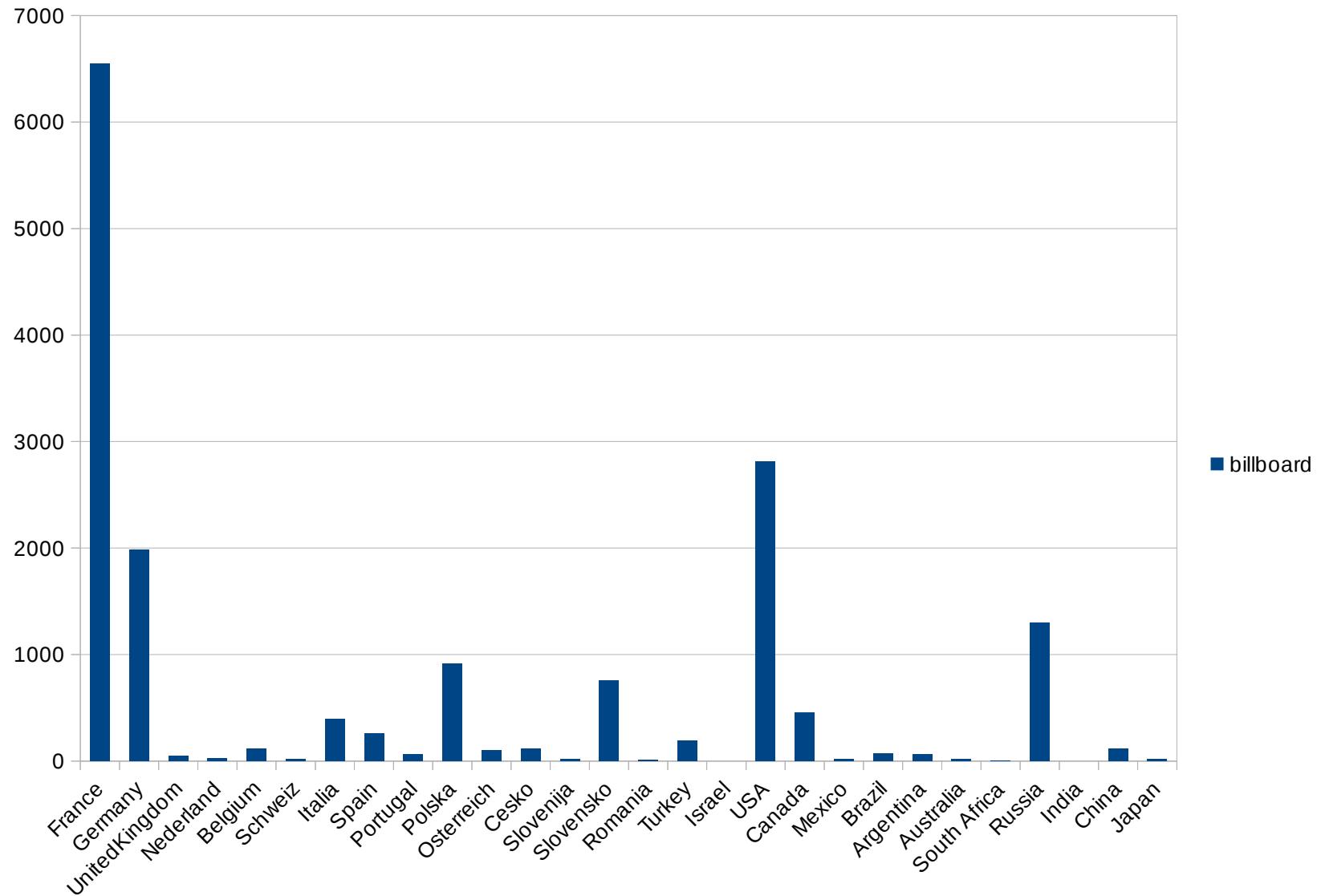
Stats per country : Germany



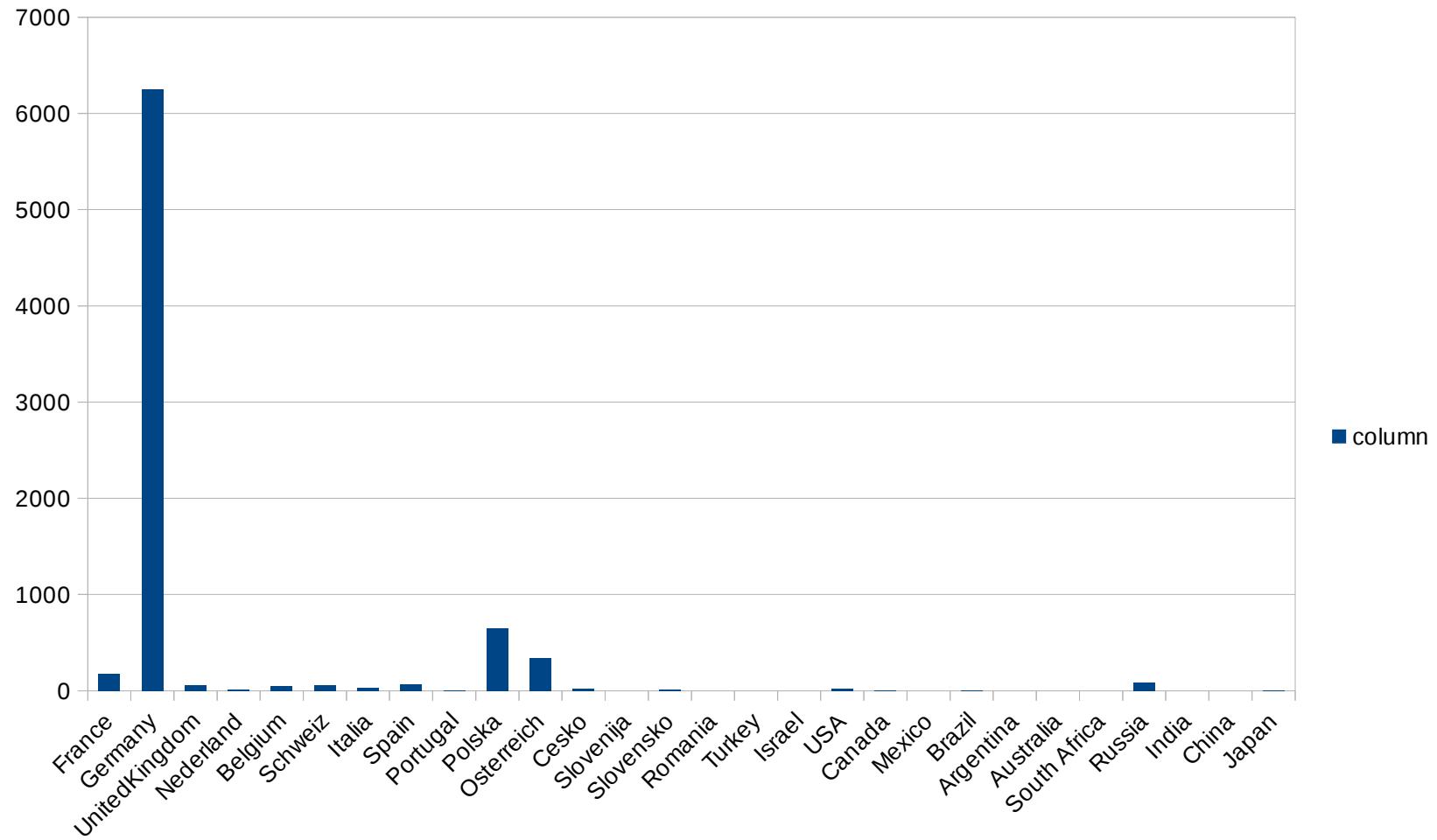
Stats on 'advertising=' July 24th 2018



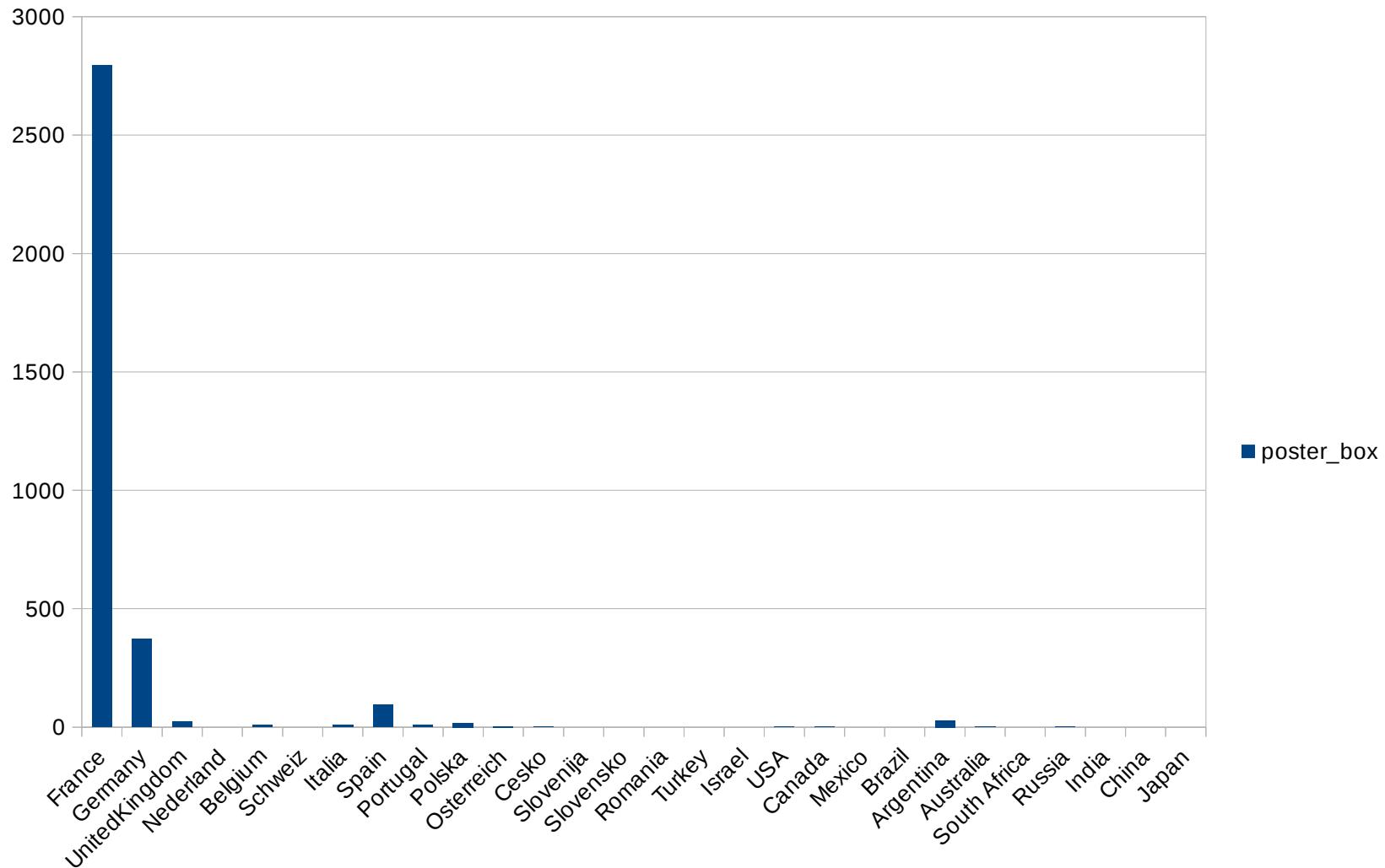
Stats on ‘advertising=billboard’ July 24th 2018



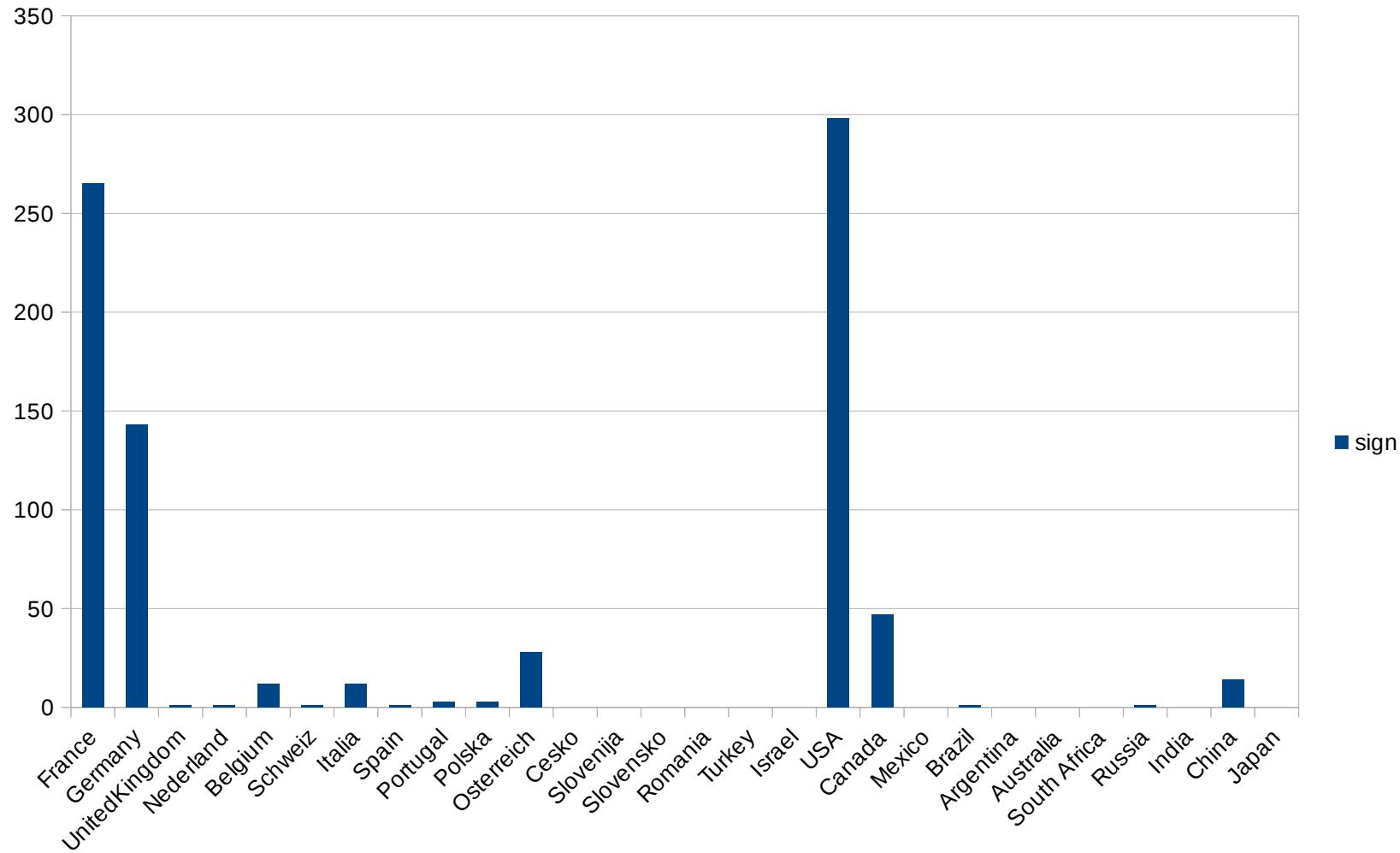
Stats on 'advertising=column' July 24th 2018



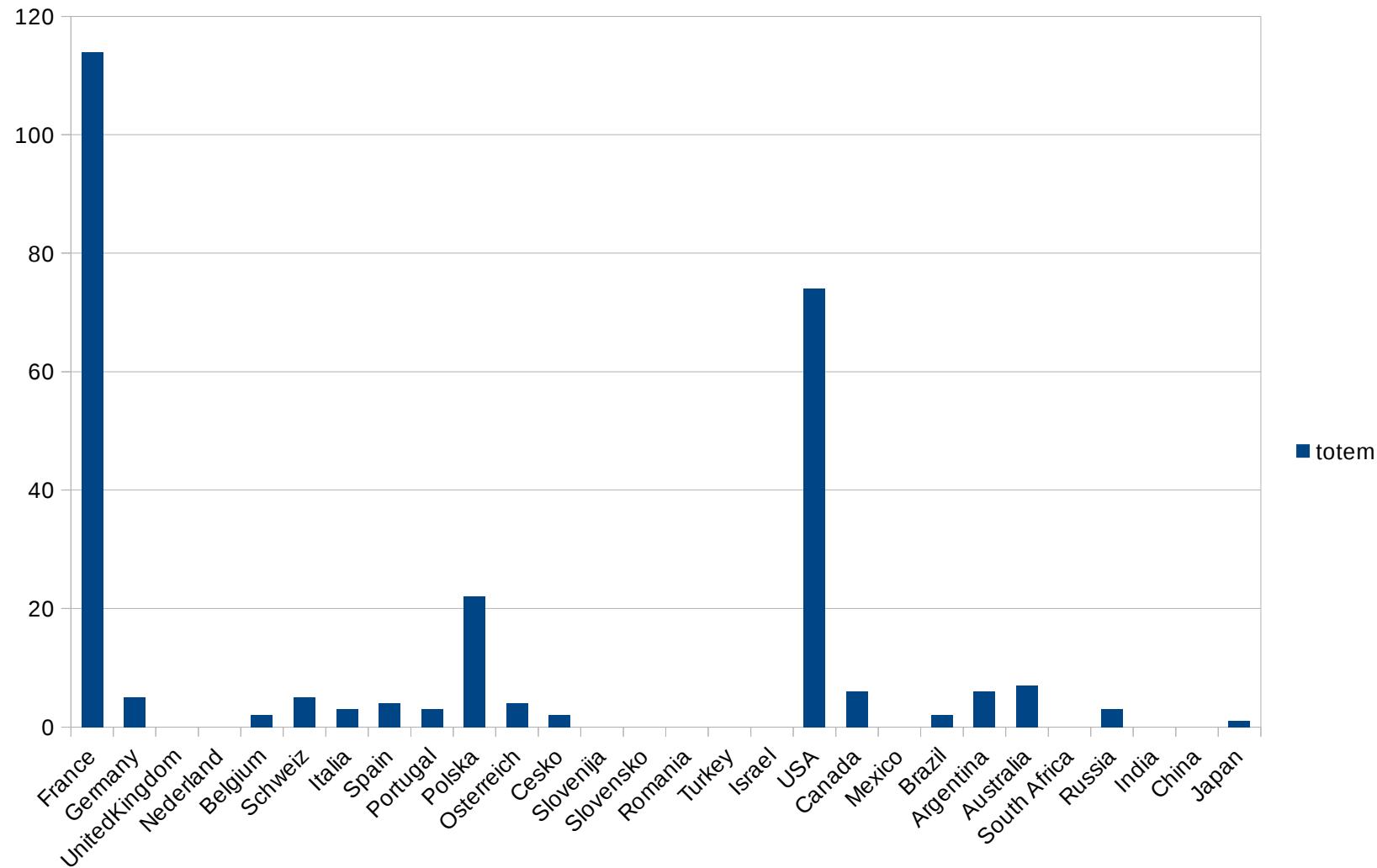
Stats on 'advertising=poster_box' July 24th 2018



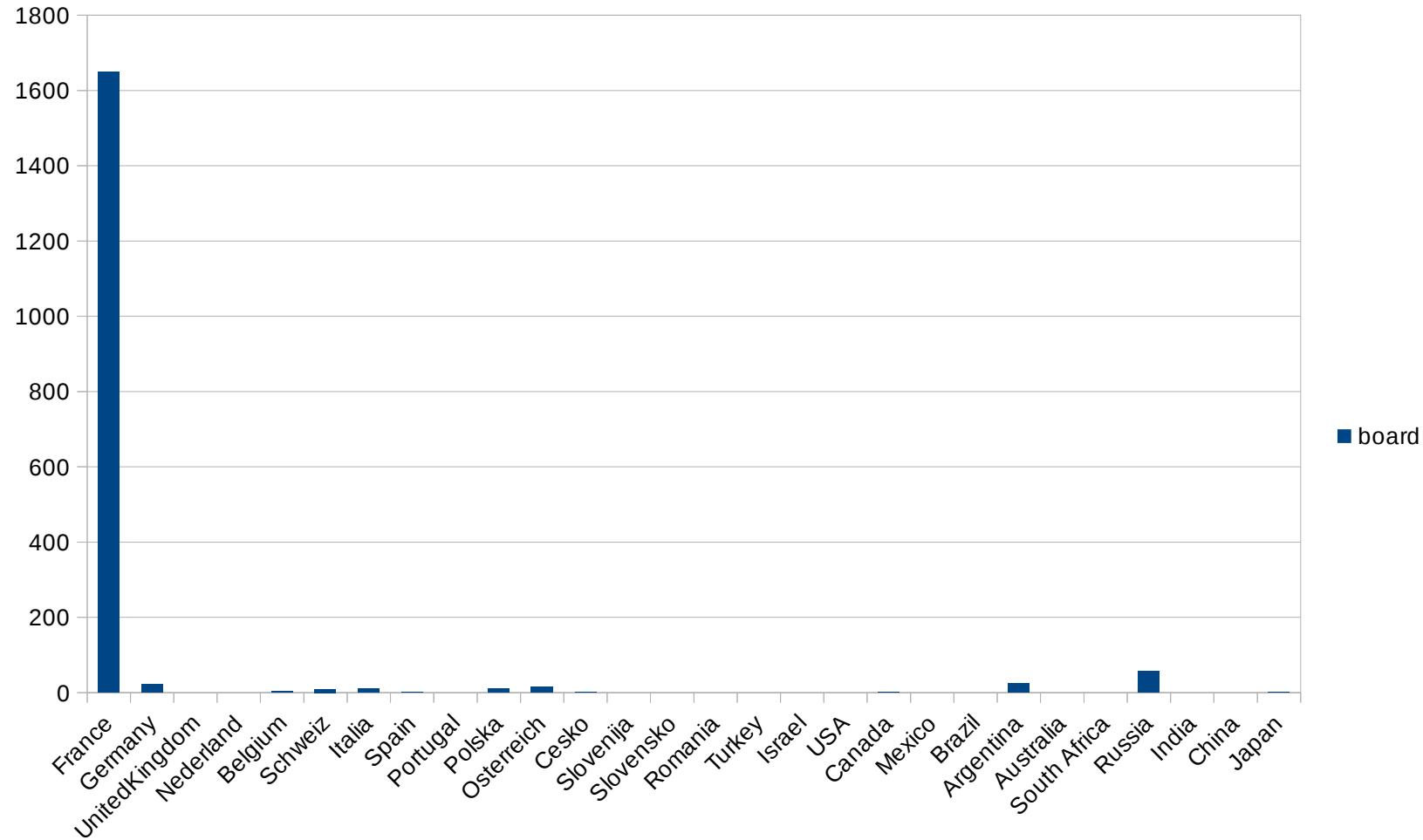
Stats on 'advertising=sign' July 24th 2018



Stats on 'advertising=totem' July 24th 2018



Stats on 'advertising=board' July 24th 2018



OpenAdvertMap

- <http://projets.pavie.info/openadvertisermap/#15/45.1803/5.7326>

Some umap

- Inventory of advertising devices in Boulazac
http://umap.openstreetmap.fr/en/map/panneaux-scelles-au-sol-boulazac_147909#15/45.1819/0.7760
- Inventory of advertising devices in Grenoble
http://umap.openstreetmap.fr/fr/map/dispositifs-publicitaires-grenoble_110558#14/45.1778/5.7200
- Inventory of grounded signs of JDLD in France
https://umap.openstreetmap.fr/fr/map/inventaire-des-j_194621#6/46.619/6.218

Merci ! Thanks ! Grazie !

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