

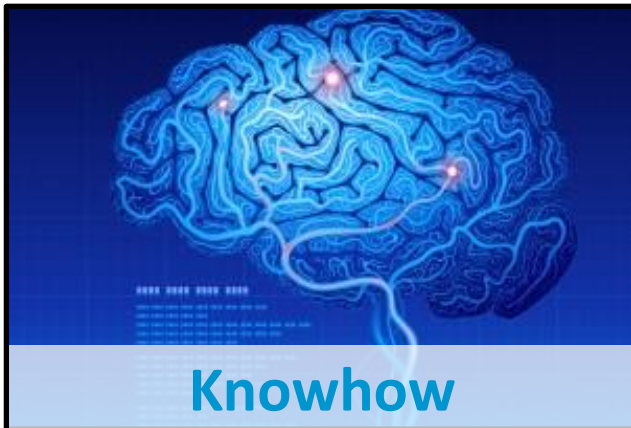
bePelias: un géocodeur local basé sur BeStAddress

Vandy Berten – Smals Research – 25-09-2025





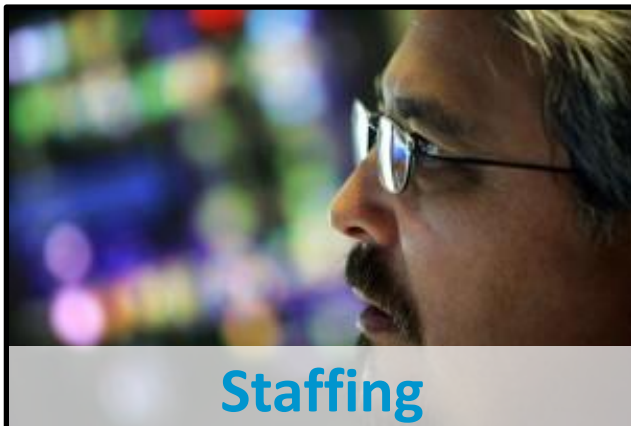
SUPPORT FOR E-GOVERNMENT



Knowhow



Development



Staffing

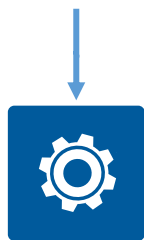


Infrastructure



Geocoding: concept

“Av. Fonsny 20, 1060 Bruxelles”



```
{“street” : “Avenue Fonsny”,  
“housesbr” : “20”,  
“zipcode” : “1060”,  
“city” : “Saint-Gilles”,  
“country” : “Belgique”,  
“location” : [50.8358,4.3361]}
```

(1) Address standardization:

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(2) Geolocation:

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Geocoding: concept


“Av. Fonsny 20, 1060 Bruxelles”

Street	Number	Zipcode	Locality	Location

```
{“street” : “Avenue Fonsny”,  
“housesbr” : “20”,  
“zipcode” : “1060”,  
“city” : “Saint-Gilles”,  
“country” : “Belgique”,  
“location” : [50.8358,4.3361]}
```

Tools

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Bing maps

here

TOMTOM

Google Maps

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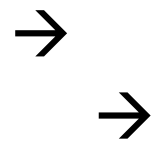
OpenStreetMap

BeSt Addresses

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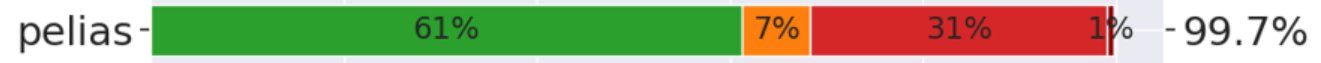
Our constraints

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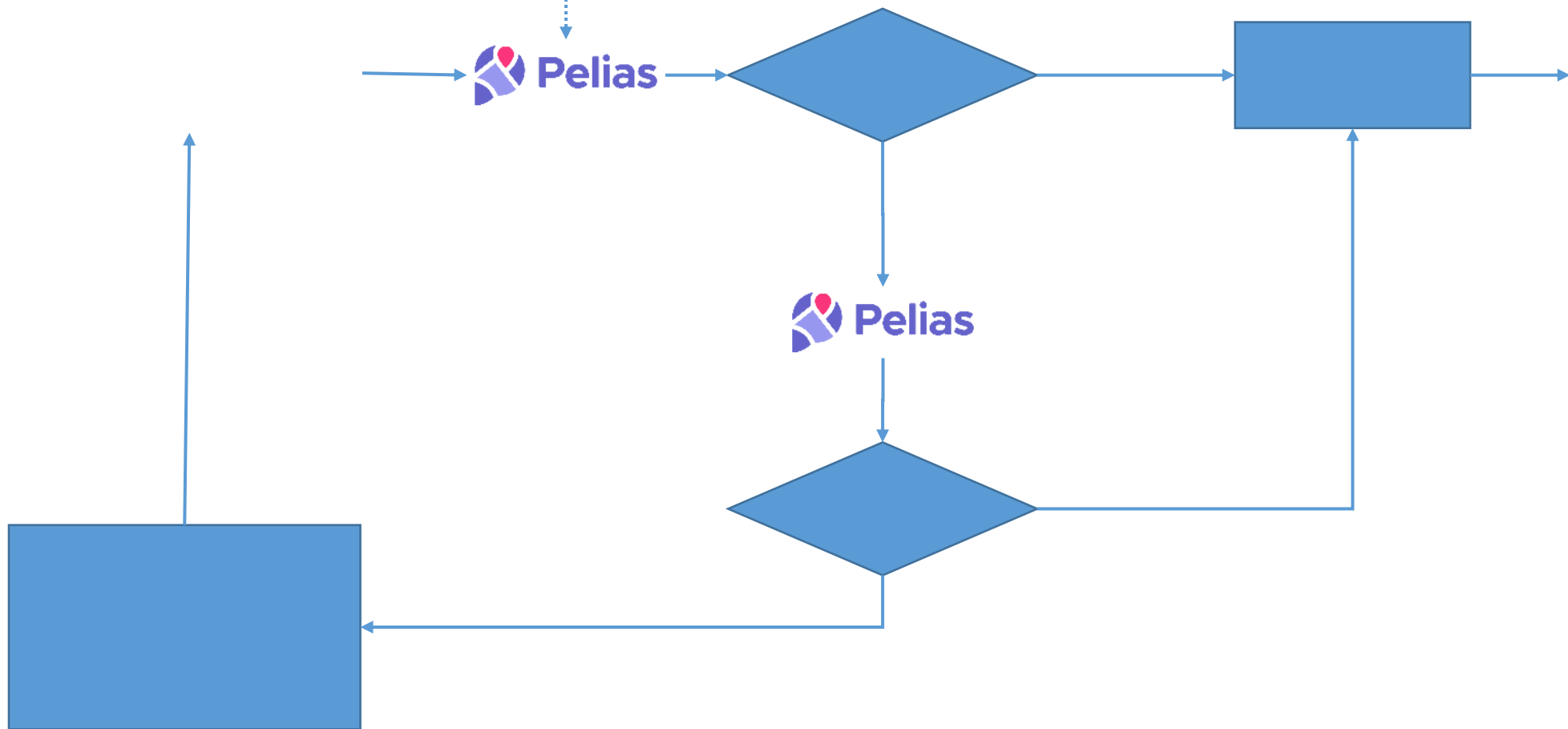
Pelias

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bePelias

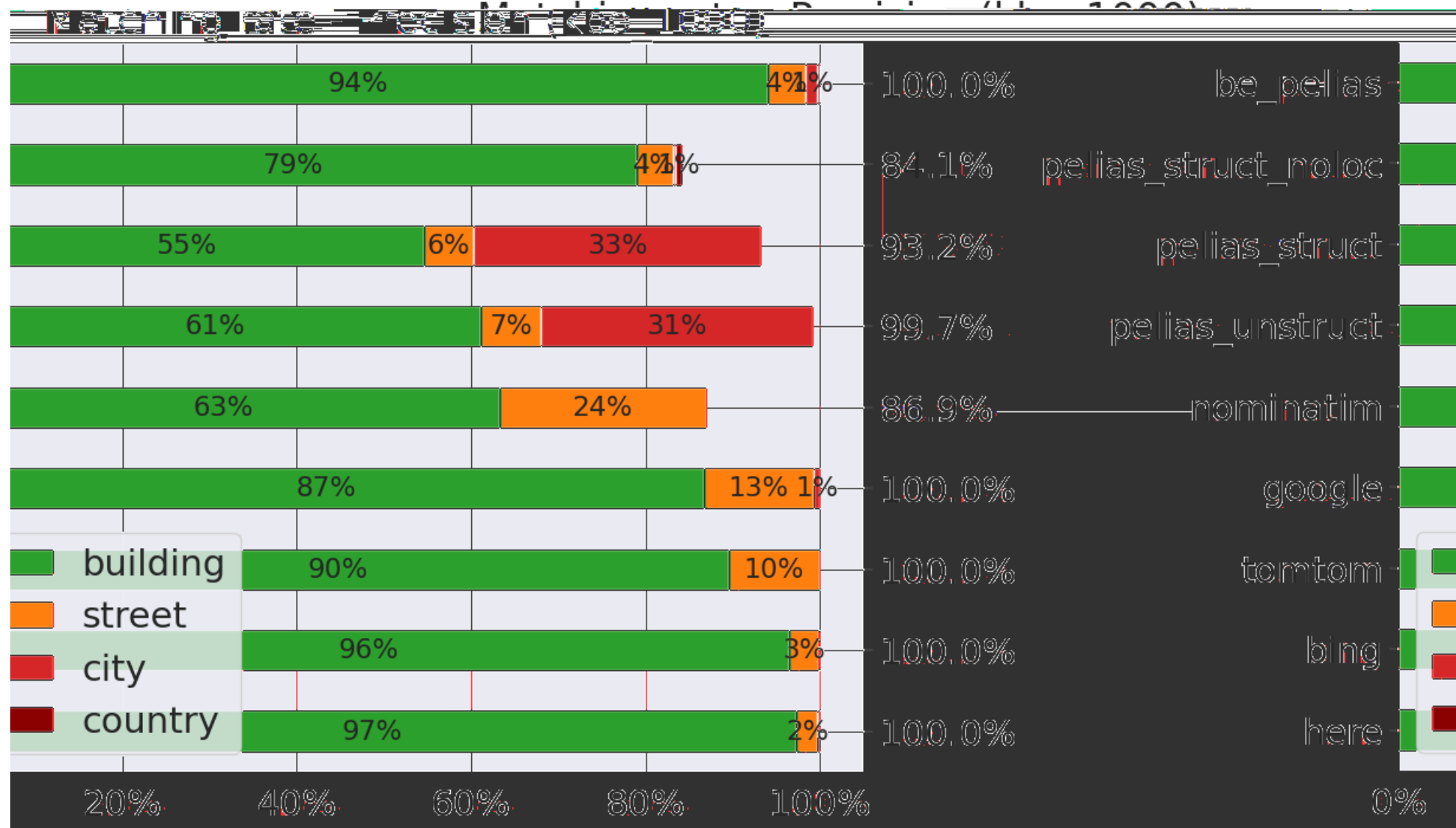
BestAddress csv files



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bePelias: Matching rate



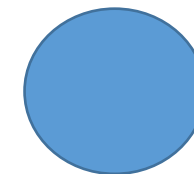
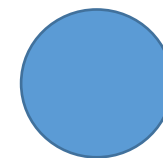
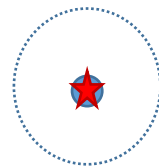
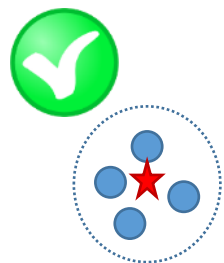
Performances

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- -
 -

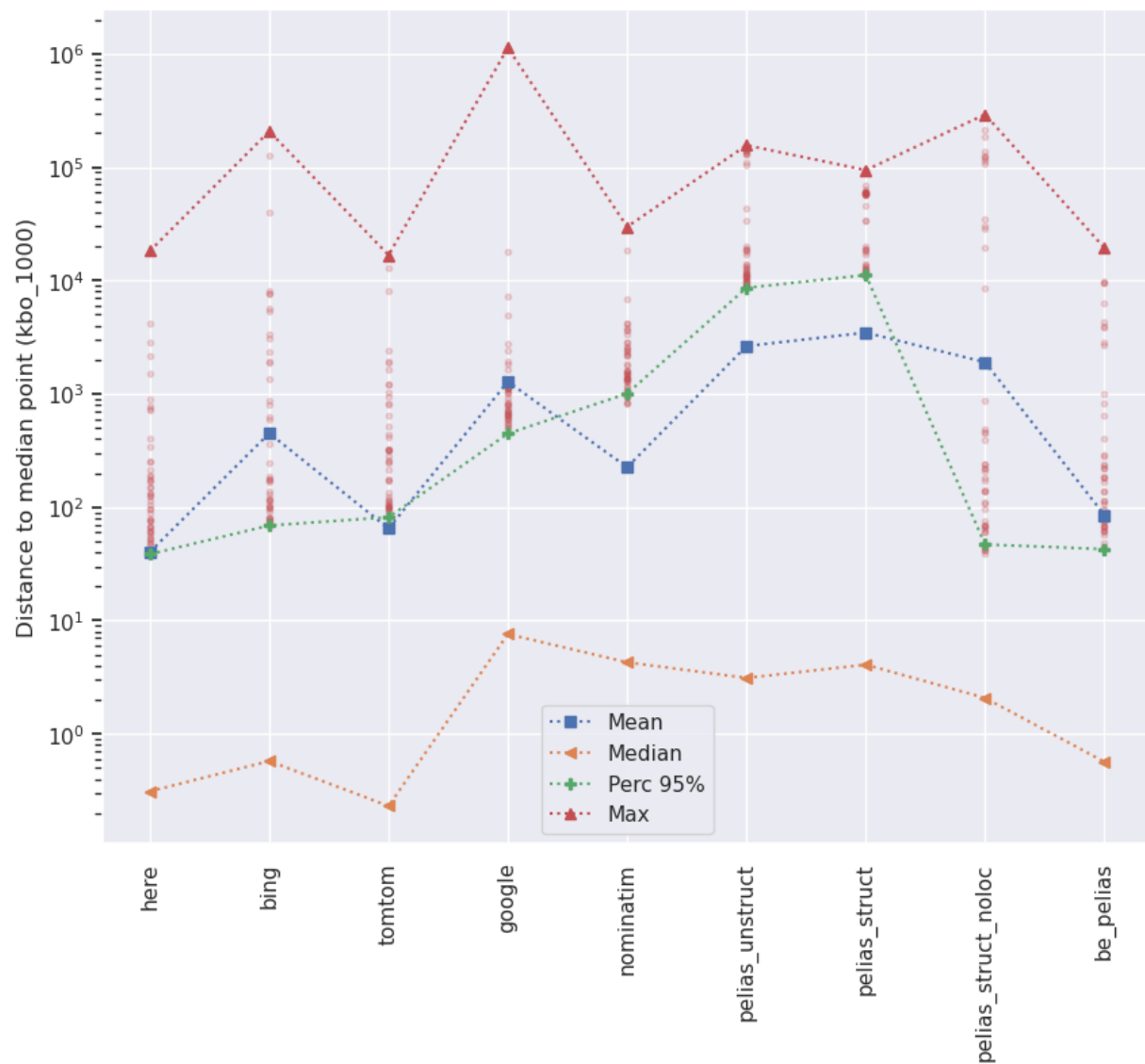


Methodology

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Distance to median point



Deployment

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- - `./scripts/build.sh` # Build pelias & bepelias docker images (~30 minutes)
 - `./scripts/feed.sh` # Prepare files from Bosa and load them (~1h30)
 - `./scripts/run.sh` # Run Pelias and bePelias API (with default parameters)
-
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-

Call

[https://\[host:IP\]/REST/bepelias/v1/geocode?](https://[host:IP]/REST/bepelias/v1/geocode?)

[streetName=](#) [&houseNumber=](#) [&postCode=](#) [&postName=](#)

```
{
  : [{
    : {
      : "https://databrussels.be/id/address/219307/7",
      : {
        : { : "Avenue Fonsny", : "Fonsnylaan" },
        : "https://databrussels.be/id/streetname/4921/2" },
      : {
        : { : "Saint-Gilles", : "Sint-Gillis" },
        : "21013",
        : "https://databrussels.be/id/municipality/21013/14" },
      : {
        : { : "Saint-Gilles", : "Sint-Gillis" },
        : "1060" },
      : "20",
      : "current",
      : { : 50.83583, : 4.33845 },
      : "address" } ],
    : 1,
    : "struct",
    : {
      : "Avenue Fonsny, 20",
      : "",
      : "1060" },
      : 3,
      : "clean;no_city",
    : "..."} ] }
```

OpenAPI

bePelias API 1.0.0 OAS 3.1

[/REST/bepelias/v1/openapi.json](#)

A service that allows geocoding (postal address cleansing and conversion into geographical coordinates), based on Pelias and BestAddresses.

Code available on <https://github.com/SmalsResearch/bePelias/>

Vandy BERTEN - Website

Send email to Vandy BERTEN

Servers

default

GET	/geocode	Geocode	^
GET	/geocode/unstructured	Geocode Unstructured	^
GET	/reverse	Geocode Reverse	^
GET	/searchCity	Search City	^
GET	/id/{bestid}	Get By Id	^
GET	/health	Health	^

OpenAPI

Schemas		^
BePeliasError	> Expand all	object
BoxInfo	> Expand all	object
Coordinates	> Expand all	object
GeocodeOutput	> Expand all	object
GetByldOutput	> Expand all	object
Health	> Expand all	object
HealthDetails	> Expand all	object
Item	> Expand all	object
Municipality	> Expand all	object
Name	> Expand all	object
PartOfMunicipality	> Expand all	object
PostallInfo	> Expand all	object
ReverseGeocodeOutput	> Expand all	object
SearchCityOutput	> Expand all	object
Street	> Expand all	object
ValidationError	> Expand all	object
HttpValidationError	> Expand all	object

Conclusions

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Vandy BERTEN

vandy.berten@smals.be

<https://www.smalsresearch.be/author/berten/>

Smals, ICT for society

02 787 57 11

Fonsnylaan 20 / Avenue Fonsny 20

1060 Brussel / 1060 Bruxelles