

CeTLeR

Centre for Tourism and Leisure Research



#MARA_Mobility – Case of DuGIS engine VASAB - webinar 7 September 2020 Tobias Heldt, Associate professor

DuGIS- the basis for delivery to WP Goals and project implementation

Our Challenge in MARA project:

- Base-line map for each region to support mobility analysis
- Dynamic features require access to up-to date and on-line data

Our solution:

A new innovative GIS engine, with links to a Server developed by DU

- Base data is downloaded into our server
- Some open API are used
- Buffer technique enables quick processing of information for selected buffer (practically any radius can be used – the bigger the slower)



Enables production of base line maps for all case areas



Desk top application that allows for customized analysis by each Partner

This presentation will showcase

A) *Public transport analysis*

B) *Spatial analysis*

i. *GAP between Point-of Interest and mobility offer*

ii. *Time to Reach*

Note: presentation includes a number of static maps but the tool is dynamic, i.e. analysis can be performed for all MARA cases

Public transport analysis of MARA Case Ludwigslust

DuGIS (Powered by CeTLER labs) V1.0 Beta, Developed for Trafikverket - [GUI loaded.]

File Statistics GIS Setting Help

Book marks

Germany, ludwigslust

Base map

Basemap 1

Buffer setting

Buffer radius in Meter 2000

14 53.330412, 11.497235 53.330412, 11.497235

Data sources / Analysis

Data sources Analysis

Analysis

Reachable Range Route Grid Buffer Traffic flow

Public transportation

Public transport

Find Station Public Transit Route

Request a list of public transit stations within a given geo-location. Max 50 buss stops per request.

The results also shows a list of transit lines operating from those stations, as well as the direction (or head-signs) of these services.

To find the nearest stations, select buffer size, click on the required location on the map. Click search button.

Target Service Info. only

Red

Nearby Bus stations Public Transit Route

Stations (50)

Name	Number	Street	Postal
Krankenhaus, L...	4A	Neustädter Straße	19288
Ludwigslust Kra...	4A	Neustädter Straße	19288
Ludwigslust F.-...	9	Friedrich-Naum...	19288
F.-Naumann-Allee	9	Friedrich-Naum...	19288
J.-Brinkmann-Str.	13	John-Brinkman...	19288
Ludwigslust J.-B...	13	John-Brinkman...	19288
Kanalstraße	24	Kanalstraße	19288
Ludwigslust Ka...	24	Kanalstraße	19288
Am Bahnhof	1	Rudolf-Tarnow...	19288
Ludwigslust	1	Rudolf-Tarnow...	19288
Ludwigslust Ba...		Rudolf-Tarnow...	19288
Ludwigslust Th...	27	Friedrich-Naum...	19288
Th.-Körner-Str.	20A	Friedrich-Naum...	19288
Ludwigslust Ale...		Schweriner Straße	19288
Ludwigslust Eic...	4	Eichkoppelweg	19288
Eichkoppelweg	4	Eichkoppelweg	19288

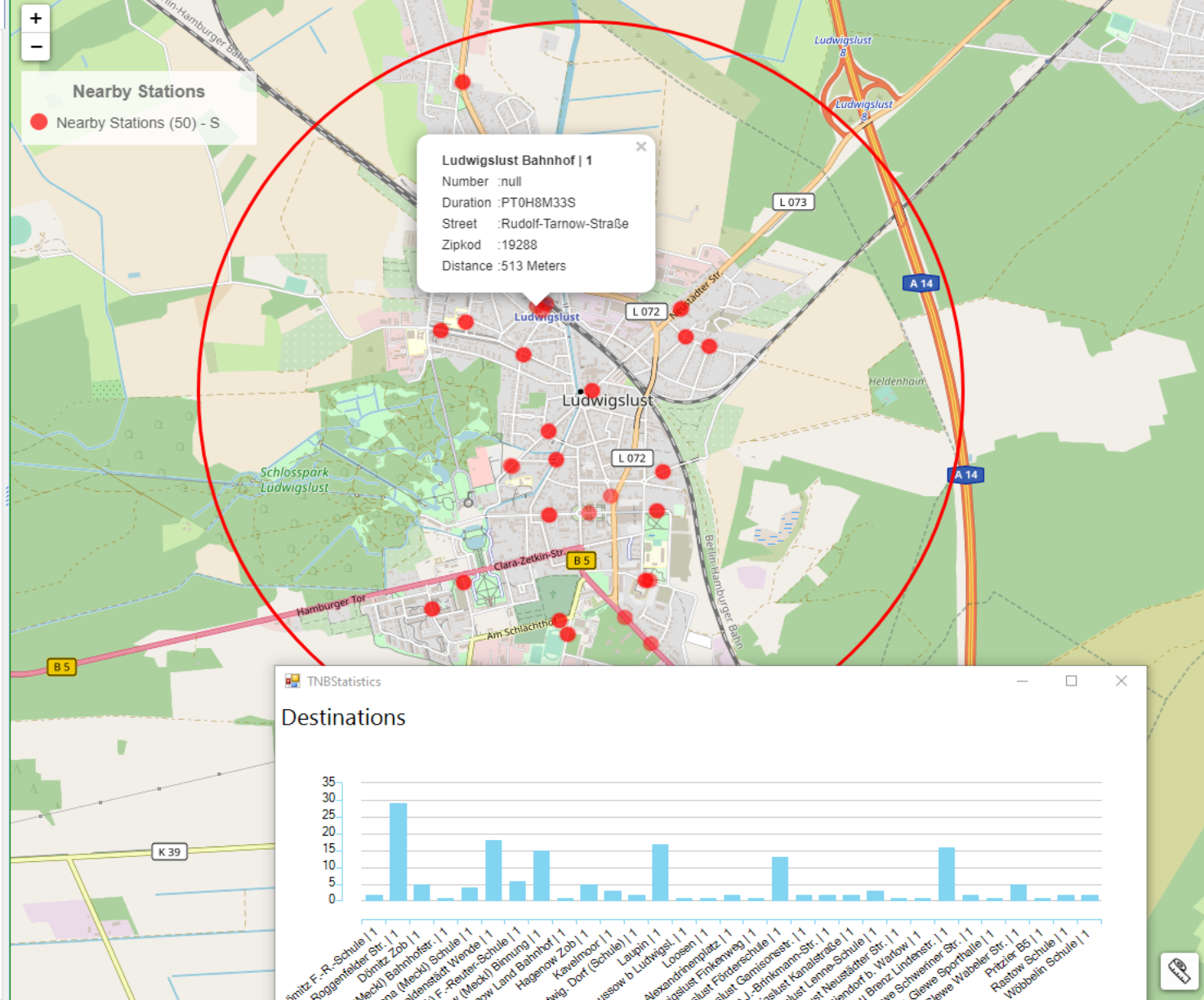
Transports (65)

Transports list Departures time

All next departure times and destinations for the selected station. Max returned results 500.

Start from: 2020-09-04 05:30

Time	Dir	Name
09/04/2020 06:05:00	Dömitz F.-R.-Schule 1	584
09/04/2020 06:10:00	Dömitz F.-R.-Schule 1	58
09/04/2020 05:39:00	Dömitz Roggenfelder Str. 1	812
09/04/2020 07:48:00	Dömitz Roggenfelder Str. 1	812
09/04/2020 08:00:00	Dömitz Roggenfelder Str. 1	58
09/04/2020 08:40:00	Dömitz Roggenfelder Str. 1	58
09/04/2020 08:41:00	Dömitz Roggenfelder Str. 1	812
09/04/2020 09:45:00	Dömitz Roggenfelder Str. 1	812



GAP analysis: Point of Interest and Public transport availability

DuGIS (Powered by CeTLLeR labs) V1.0 Beta, Developed for Trafikverket - [GUI loaded.]

File Statistics GIS Setting Help

Book marks

Germany, ludwiglust

Base map

Basemap 1

Buffer setting

Buffer radius in Meter 2000

15 53.330412, 11.497235 53.330412, 11.497235

Data sources / Analysis

Data sources Analysis Reset map

Analysis

Public transportation

Reachable Range Route Grid Buffer Traffic flow

Radius in meter: 250 Plot

Clear Start analysis

Nearby Bus stations Public Transit Route

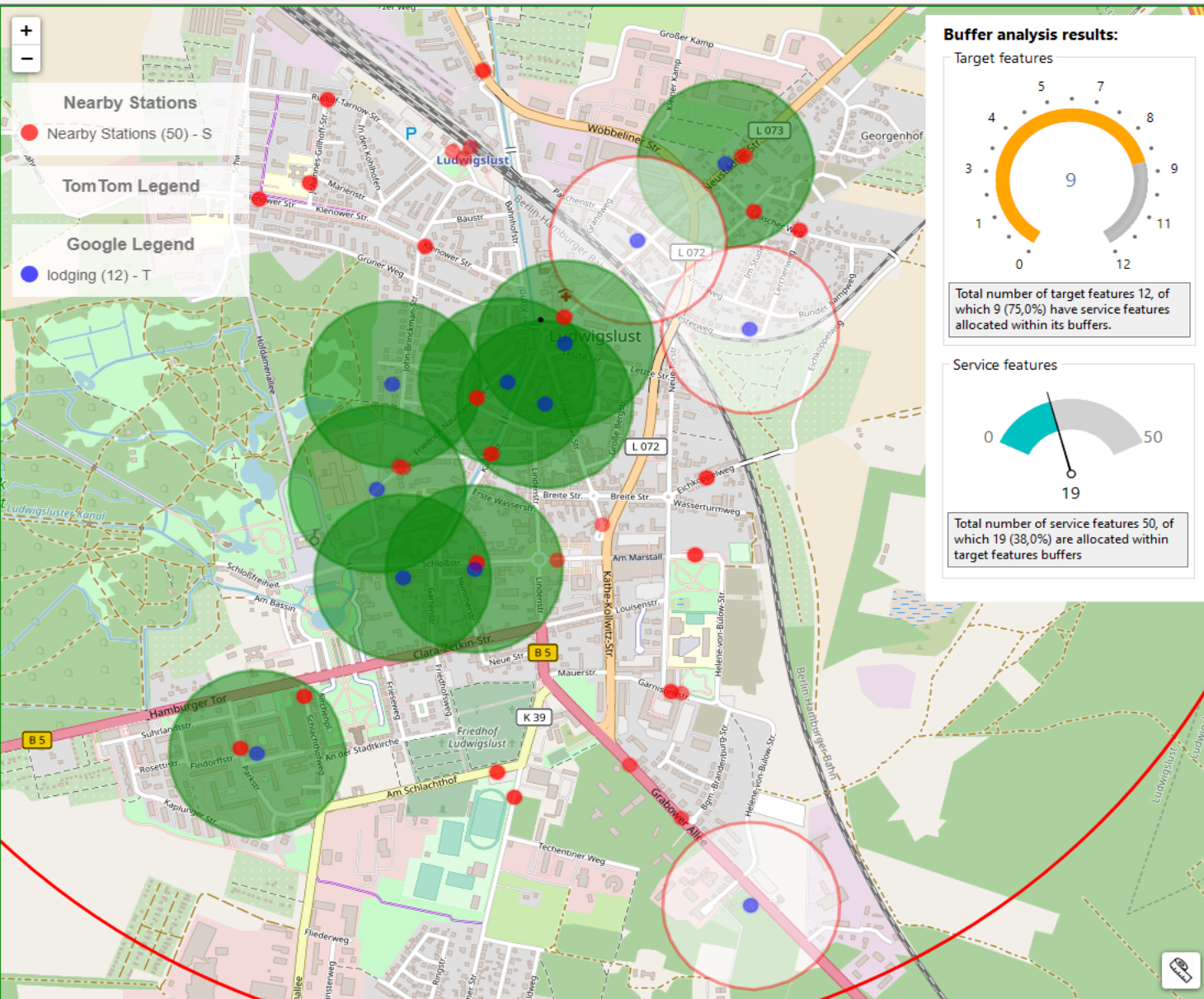
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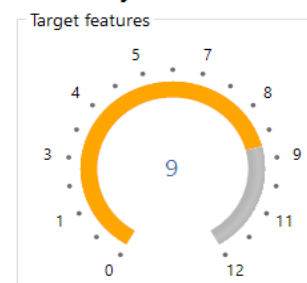
Transports (65)

Transports list Departures time

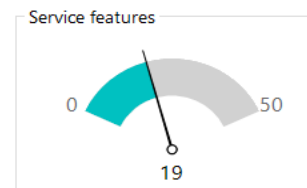
Name	Dir	Mode
560	Hagenow Land B...	Buses
560	Hagenow Zob 1	Buses
560	Ludwiglust Bahn...	Buses
560	Picher Schule 1	Buses
570	Ludwiglust Alex...	Buses
570	Ludwiglust Bahn...	Buses
570	Ludwiglust Fink...	Buses
570	Ludwiglust Förd...	Buses
570	Ludwiglust Gami...	Buses
570	Ludwiglust J.-Bri...	Buses
570	Ludwiglust Kana...	Buses
570	Ludwiglust Neus...	Buses
575	Ludwiglust Bahn...	Buses
575	Pritzler B5 1	Buses
58	Dömitz F.-R.-Sch...	Buses



Buffer analysis results:



Total number of target features 12, of which 9 (75,0%) have service features allocated within its buffers.



Total number of service features 50, of which 19 (38,0%) are allocated within target features buffers

Time to Reach analysis: Walking time from Schools to bus stops

DuGIS (Powered by CeTLer labs) V1.0 Beta, Developed for Trafikverket - [GUI loaded.]

File Statistics GIS Setting Help

Book marks

Germany, ludwigslust

Base map

Basemap 1

Buffer setting

Buffer radius in Meter 2000

16 53.341841, 11.488824 53.330412, 11.497235

Data sources / Analysis

Data sources Analysis

Analysis

Public transportation

Reachable Range Route Grid Buffer Traffic flow

Reachable Range

The Reachable Range analysis calculates a set of locations that can be reached from the origin point.

Within: 500 Second Minute: 8,3

Parameters

Route type: fastest

Trans. mode: pedestrian

Use traffic data: No

Depart at: 2020-09-04 10:30

Max speed: 1 km/hour

Color: BlueViolet

Nearby Bus stations Public Transit Route

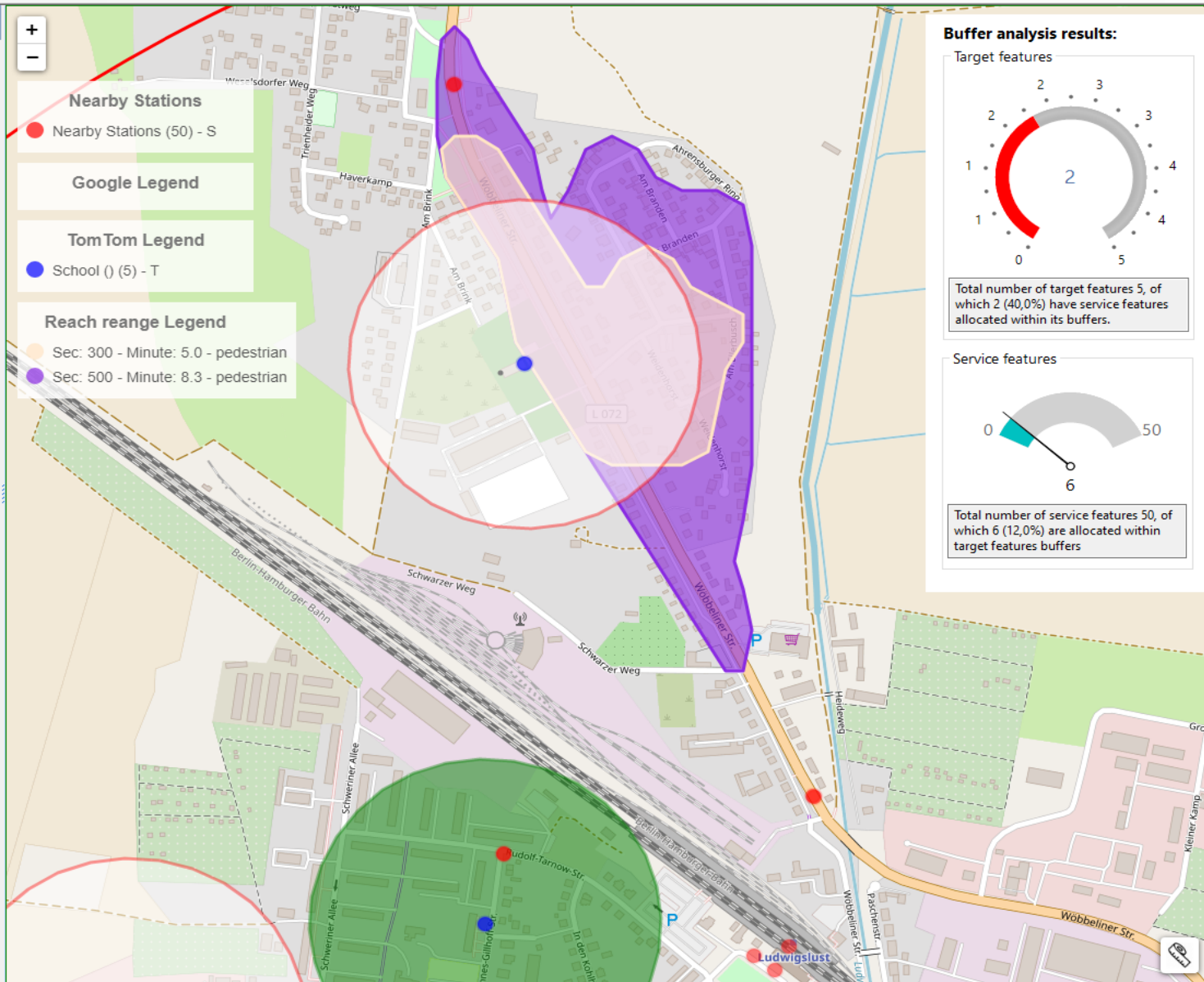
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Transports (65)

Transports list Departures time

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570	Ludwigslust Neus...	Buses
575	Ludwigslust Bahn...	Buses
575	Pritzler B5 1	Buses
58	Dömitz F.-R.-Sch...	Buses



Nearby Stations

- Nearby Stations (50) - S

Google Legend

TomTom Legend

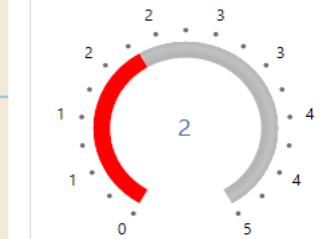
- School () (5) - T

Reach range Legend

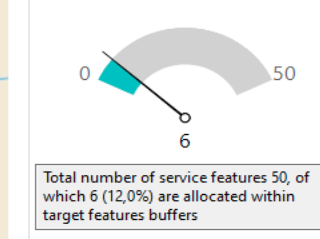
- Sec: 300 - Minute: 5.0 - pedestrian
- Sec: 500 - Minute: 8.3 - pedestrian

Buffer analysis results:

Target features



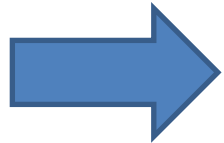
Service features



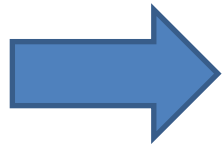
Conclusions

A new innovative GIS engine, DuGIS

Supports the MARA mobility project by:



Enabling the production of base line maps for all MARA cases



Allowing for customized analysis by each Partner thanks to the desktop application and link to DU Server

Thanks!

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Skriv upp dig till vårt [nyhetsbrev!](#)

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