

Austrian Broadband Atlas

ITU-EC Regional Conference for Europe

Warsaw, Poland, 11-12 April 2016

Die ganze

Bandbreite

des **Lebens**



What we are about talking today

- Motivation to build up the Austrian Broadband Atlas
- Benefits of using raster data for preparing the Austrian Broadband Atlas
- The process for creating the Austrian Broadband Atlas
- More and future uses

Motivation and goals for the Broadband Atlas

- Tracking the progress of the Digital Agenda ...
- Austria: Broadband Strategy 2020, Digital Offensive, Masterplan



Medicine



Cloud



Entertainment



Economy



Education



Communication

What information can you get out of the BB-Atlas?

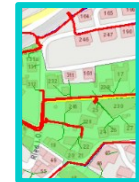
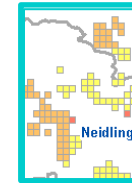
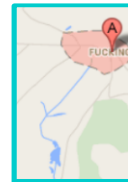
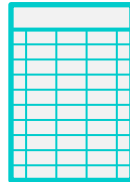
1. The expected maximum of bandwidth at your location
2. The active companies in the chosen region
3. Network operators with own infrastructure and residential products
4. Mobile net and fixed net with same bandwidth categories:
 ≤ 2 , ≤ 10 , ≤ 30 , ≤ 100 and >100 Mbps

Why do we use high resolution raster data?

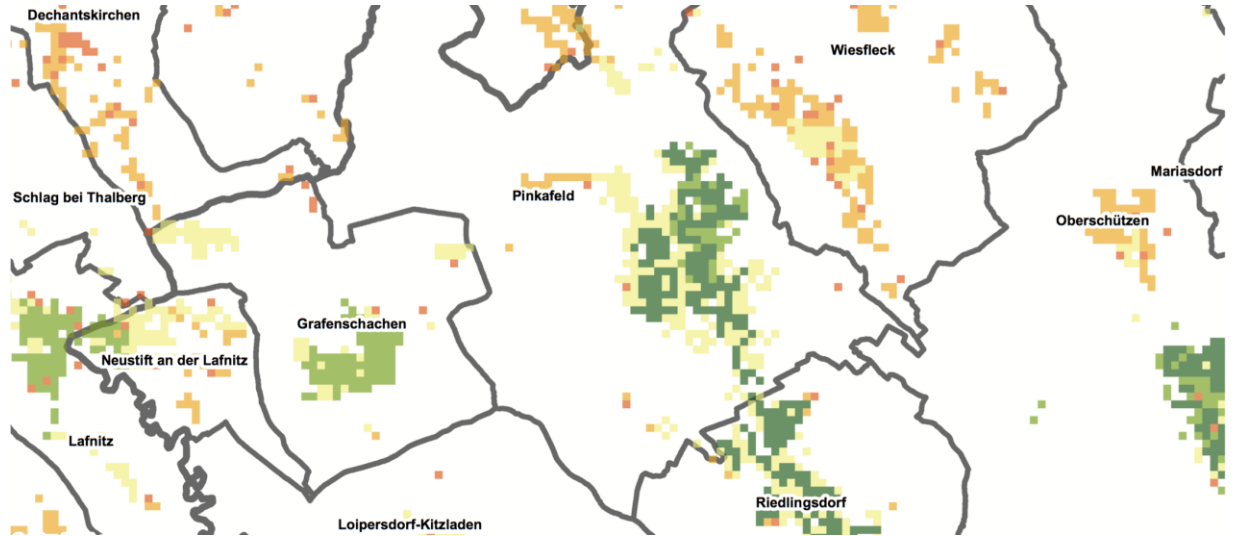
- to provide the best quality for planning and statistics
- to normalize data on the 100m grid for Fixed-Net data.
- it is the smallest possible grid with demographic data (Mobile-Net data is provided in polygons).
- for planning reasons to support broadband state aids.

Data collection - Step 1

1. Network operators send GIS-Shapes, KML-Files or something else ...

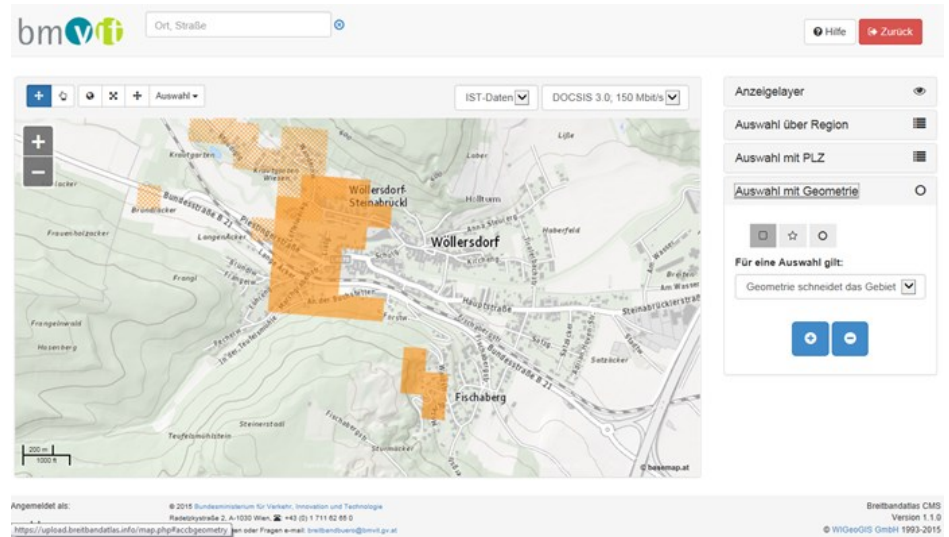


Pushing the resolution of data



Data collection - Step 2

Creating a web-gis-portal for the network operators to help them input broadband data on the 100m grid for actual and planning data.



The screenshot displays the bm vrt web-gis-portal interface. At the top, there is a search bar with the text "Ort, Straße" and a "Hilfe" button. Below the search bar, the main map area shows a topographic map of Wöllersdorf and Fischaberg. Several orange-shaded areas are overlaid on the map, representing broadband data. The map includes a scale bar (0 to 200 meters) and a "© hepi.at" watermark. On the right side, there is a control panel with the following elements:

- Anzeigelayer**: A toggle switch.
- Auswahl über Region**: A list icon.
- Auswahl mit PLZ**: A list icon.
- Auswahl mit Geometrie**: A circle icon.
- Für eine Auswahl gilt:** A dropdown menu with the selected option "Geometrie schneidet das Gebiet".
- Two blue navigation buttons (left and right arrows).

At the bottom of the interface, there is a footer with the following information:

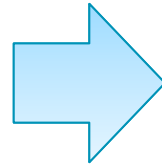
Angemeldet als: © 2015 Bundesministerium für Verkehr, Innovation und Technologie
Radebystraße 2, A-1030 Wien, ☎ +43 (0) 1 711 62 00
<https://upload.breitbandatlas.info/map.php?cc=geometry> oder Fragen e-mail: breitbandatlas@bmi.gv.at

Breitbandatlas CMS
Version 1.1.0
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Raster data & Broadband Atlas

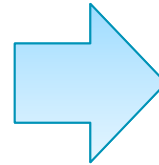
Additional data

Network operator
Bandwidth
Technology

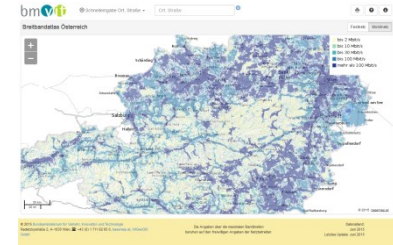


100m Raster

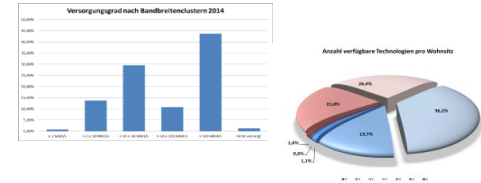
Domiciles,
Buildings,
Apartments,
etc.



Broadband Atlas



Statistics



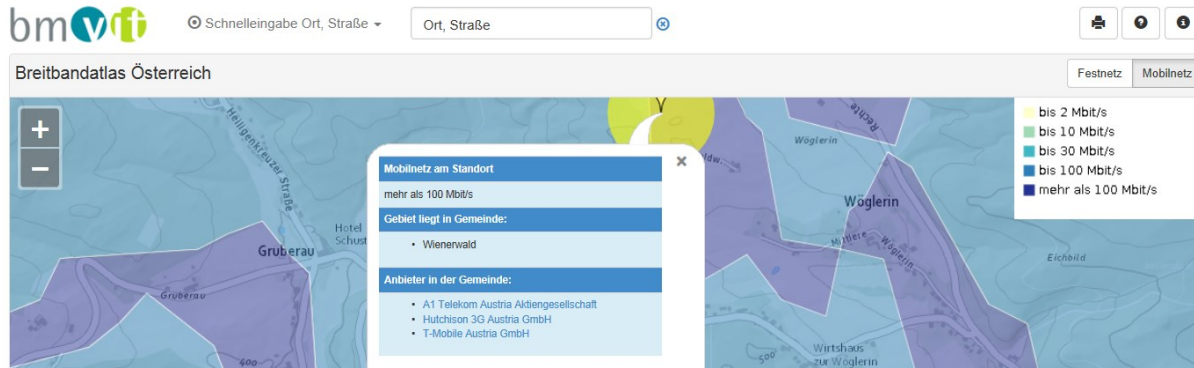
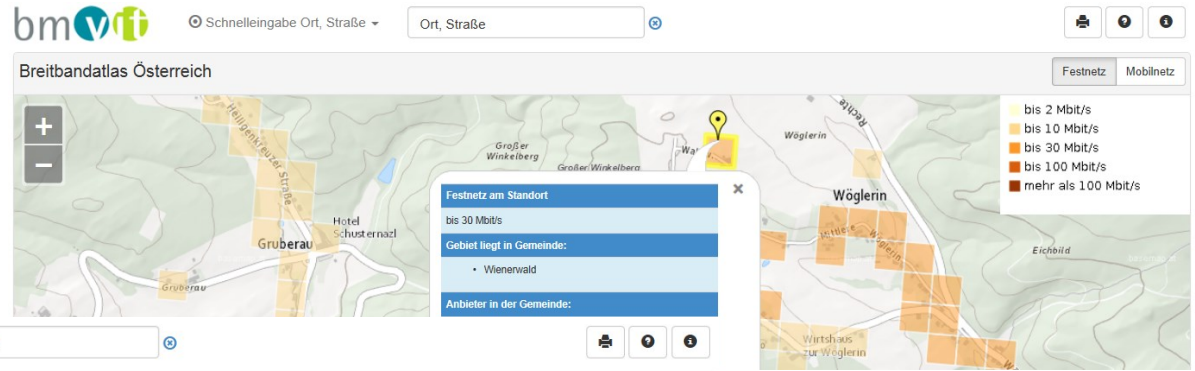
Why-Questions

raster_100m									
OBJECTID	Shape	L000100M3	POP_2015	MWS_2015	RW_SUM_2015	GER_2015	WOHNGER_2015	WHG_2015	GER_GES_2015
1	Polygon	100mN26935E43083	0	0	0	1	1	1	1
2	Polygon	100mN26956E43047	0	0	0	1	0	0	1
3	Polygon	100mN26675E43073	0	0	0	1	0	0	1
4	Polygon	100mN26843E43070	0	0	0	1	0	0	0
5	Polygon	100mN26641E43082	0	0	0	1	0	0	0
6	Polygon	100mN27083E42931	2	3	5	1	0	8	1
7	Polygon	100mN27075E42896	5	0	5	2	2	2	2

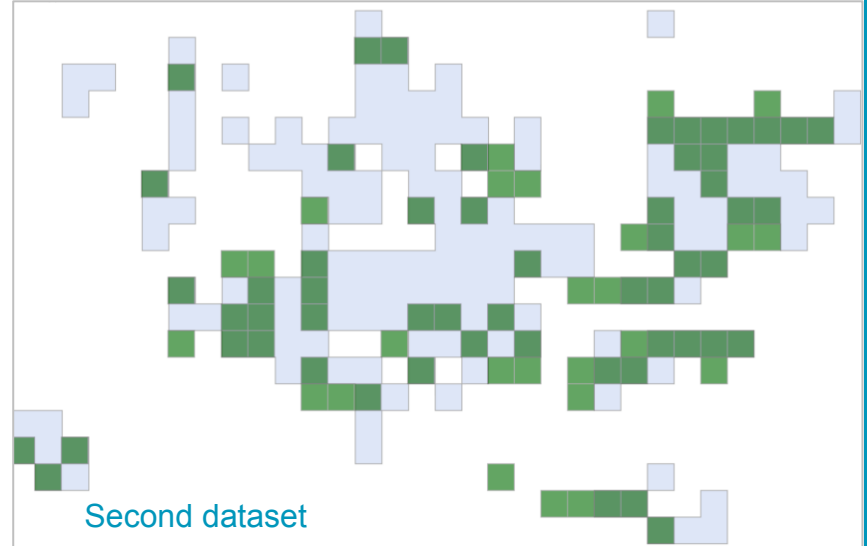
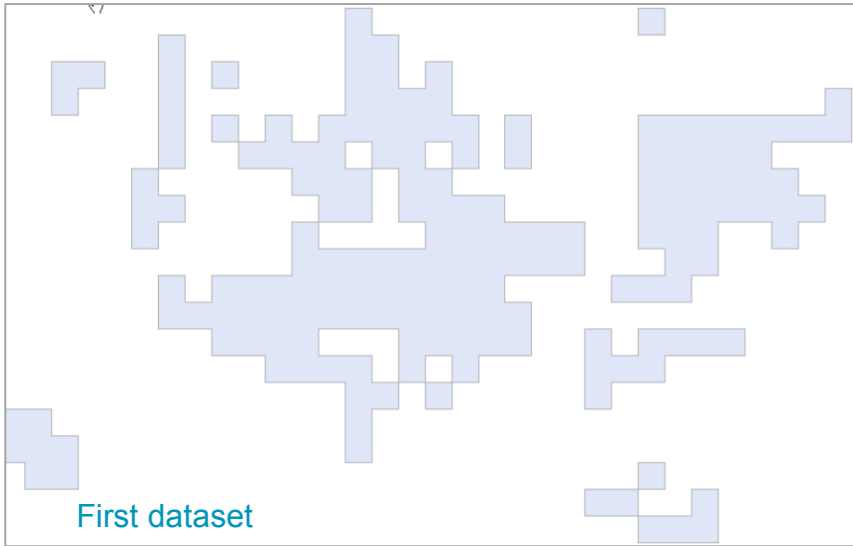
GIS-Shape or raster data



The results ...

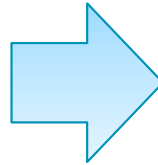
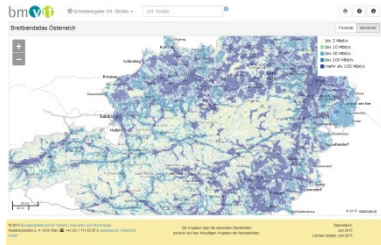


The benefit of publishing data



State aid map

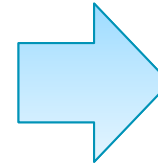
Broadband Atlas



Planned infrastructure
Network Operators

Forecast data

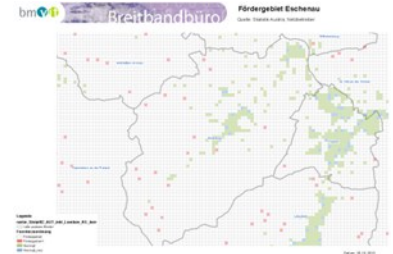
Actual state aid data



Feasibility Analysis

FTTH feasibility analysis
for the municipality

State Aid Map



Conclusion

- Efficiency improvements, the whole work flow is based on 100m grid cells
- 100m raster data as consistent data and unified data source for the objectification of analyses and evaluations
- Support the state aid program on the „hot spots“ of poor broadband supply
- Possibilities in answering „Why-questions“ and a better understanding of broadband development

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Broadband Office

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www.breitbandbuero.at
www.breitbandatlas.info
www.breitbandfoerderung.at
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