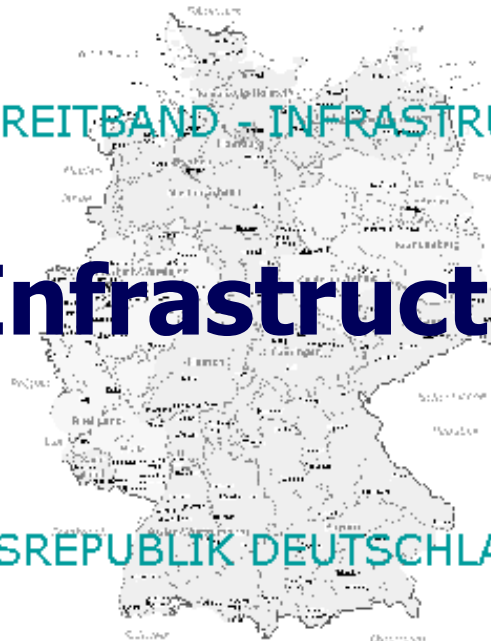




BREITBAND - INFRASTRUKTURATLAS

Nationwide Infrastructure Atlas

BUNDESREPUBLIK DEUTSCHLAND





Agenda

- The Federal Government's Broadband Strategy
 - Targets
 - Four pillar strategy
- Measure 2: The Infrastructure Atlas
- A fictional example



The Broadband Strategy I

- The Federal Government has defined the following targets:
 - Gaps in broadband penetration are to be eliminated and broadband access (min. 1 MBit/s.) made available nationwide by the end of 2010.
 - A total of 75 percent of households are to have Internet access with transmission rates of at least 50MBit/s. by the end of 2014.
- ➔ This can only be achieved by applying a combination of technologies within a competitive environment.



The Broadband Strategy II

- To achieve the ambitious short-term and long-term goals, the Federal Government is proposing an incentive-oriented approach that will:
 - capitalise on **synergies in the construction of infrastructure**
 - guarantee **supportive frequency policies**
 - commit to **growth and innovation-gearred regulation**
 - provide appropriate **financial support**
- ➔ The Federal Government therefore proposes in total 15 measures.



The Broadband Strategy III

- Measure 2 of the Broadband Strategy:

The German Federal Network Agency will establish an infrastructure atlas, in cooperation with the Federal Ministry of Economics and Technology.

Where possible, the agency will include the conceptual groundwork already completed by industry and broadband initiatives from the Federal States. A first edition shall be available by Autumn 2009.



The Broadband Strategy IV

- Goal:

Capitalising on synergies from infrastructure projects, because the more efficiently the existing infrastructure is pooled, the faster high-speed networks can be deployed and remote areas connected to broadband Internet.



The Broadband Strategy V

- Up to 70 percent of the costs of deploying broadband infrastructure in the fixed-line network are excavation costs. These costs may be reduced significantly if the various infrastructure providers become more open to collaboration and allowing third-party access to their own systems.
- ⇒ By reducing the costs, the probability for the rollout of broadband infrastructure in rural areas is increased.



The Infrastructure Atlas

- The infrastructure atlas is based on voluntarily provided information on existing infrastructures.
- At present the atlas comprises infrastructure data of more than 130 companies.



The Infrastructure Atlas

- Since 8th December 2009 the following applicants planning specified rollout projects can address to BNetzA for getting information:
 - Federal States, administrative Districts or urban municipalities (directly)
 - municipalities, planning agencies and telecommunication companies (indirectly)



A step by step approach

- Step 1: BNetzA provides project based information on the type of infrastructure (i. e. Fibre, ducts, antenna masts), the owner / the operator and their contact person
- Step 2: BNetzA provides additional information on the location of the infrastructure with pdf-maps.
- Start of step 2 expected for December 2010
- Step 3: WebGIS-based solution for closed user groups (end of 2011)



The new Telecommunications Law

- A special provision obliging owners/operators to provide the necessary data to BNetzA is foreseen in the Draft of the new Telecommunications Law.
(according to Art. 12 Paragraph 4 Framework Directive)



A (fictional) example – step 1



Welcome page

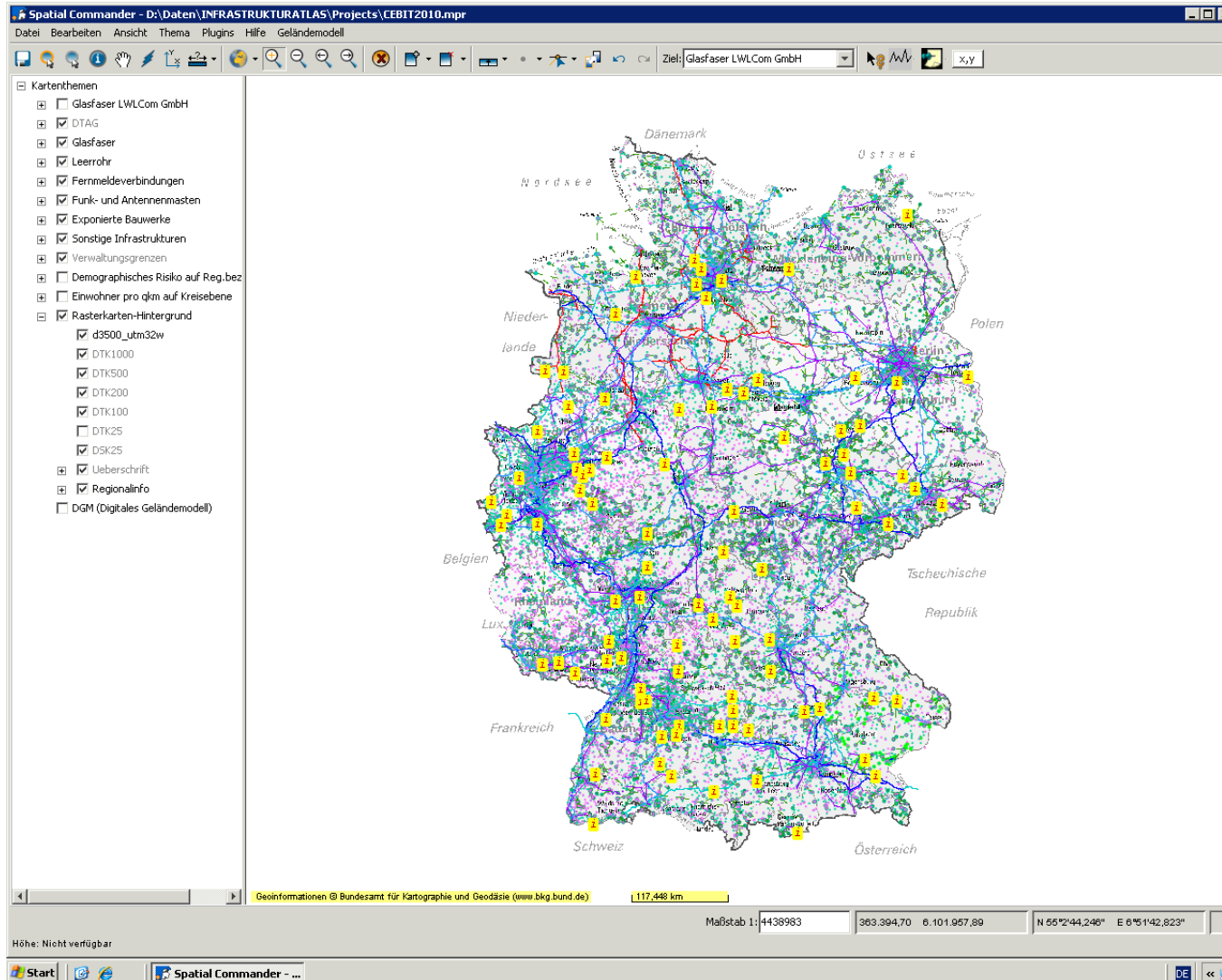
The screenshot shows the Spatial Commander software interface. The title bar reads "Spatial Commander - D:\Daten\INFRASTRUKTURATLAS\Projects\CEBIT2010.mpr". The menu bar includes "Datei", "Bearbeiten", "Ansicht", "Thema", "Plugins", "Hilfe", and "Geländemodell". The toolbar contains various navigation and editing tools. The main map area displays a map of Germany with the text "BREITBAND INFRASTRUKTURATLAS" and "BUNDESREPUBLIK DEUTSCHLAND" overlaid. The legend on the left lists the following layers:

- Glasfaser LWLCom GmbH
- DTAG
- Glasfaser
- Leerrohr
- Fernmeldeverbindungen
- Funk- und Antennenmasten
- Exponierte Bauwerke
- Sonstige Infrastrukturen
- Verwaltungsgrenzen
- Demographisches Risiko auf Reg.bez
- Einwohner pro qkm auf Kreisebene
- Rasterkarten-Hintergrund
 - d3500_utm32w
 - DTK1000
 - DTK500
 - DTK200
 - DTK100
 - DTK25
 - DSK25
- Ueberschrift
- Regionalinfo
- DGM (Digitales Geländemodell)

The status bar at the bottom shows "Geoinformationen © Bundesamt für Kartographie und Geodäsie (www.bkg.bund.de)", a scale of "188,762 km", and coordinates: "Maßstab 1: 7058720", "75.876,23 5.978.210,07", and "N 53°46'44,777'' E 2°33'34,708''".

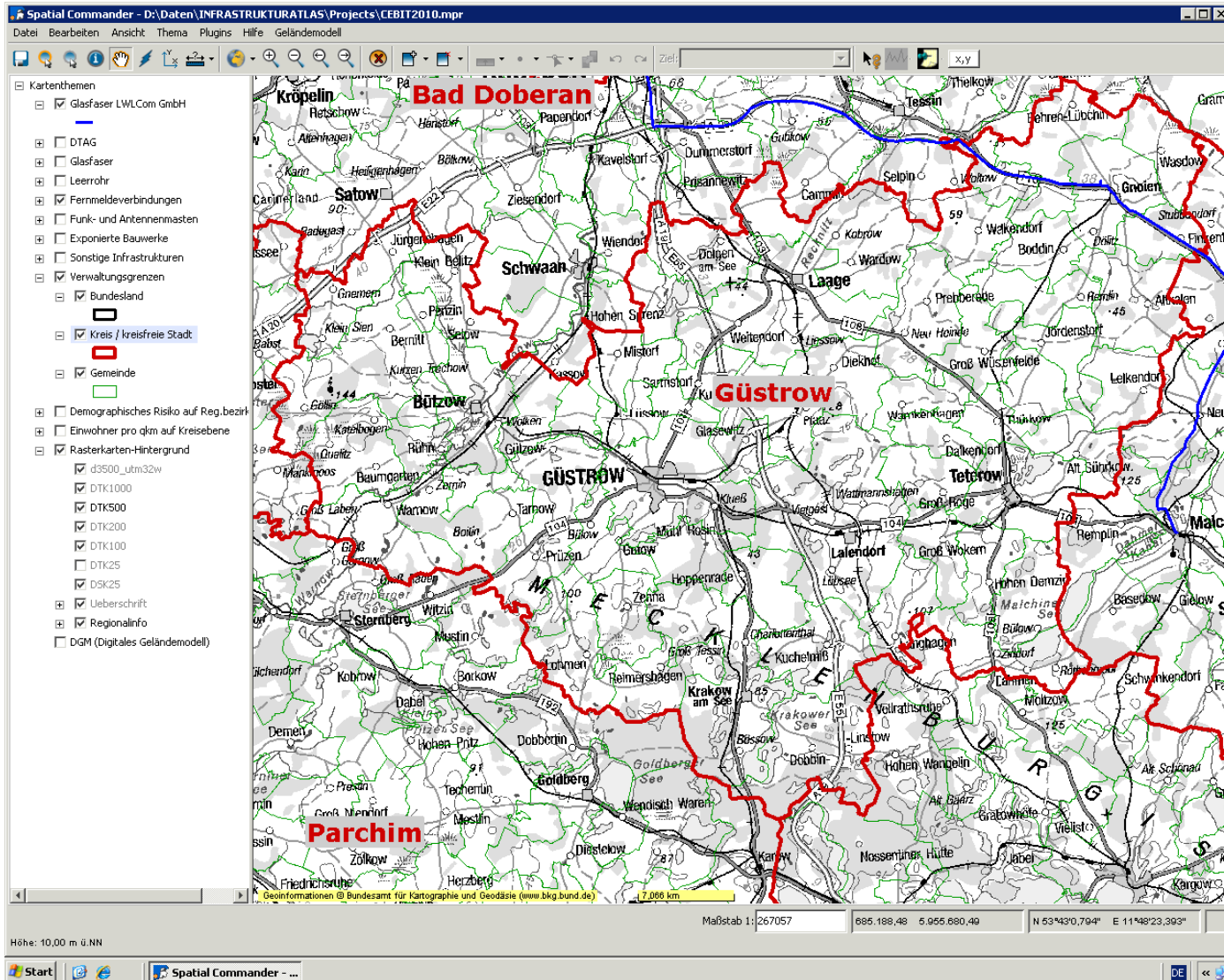


Infrastructures with regional and supraregional character



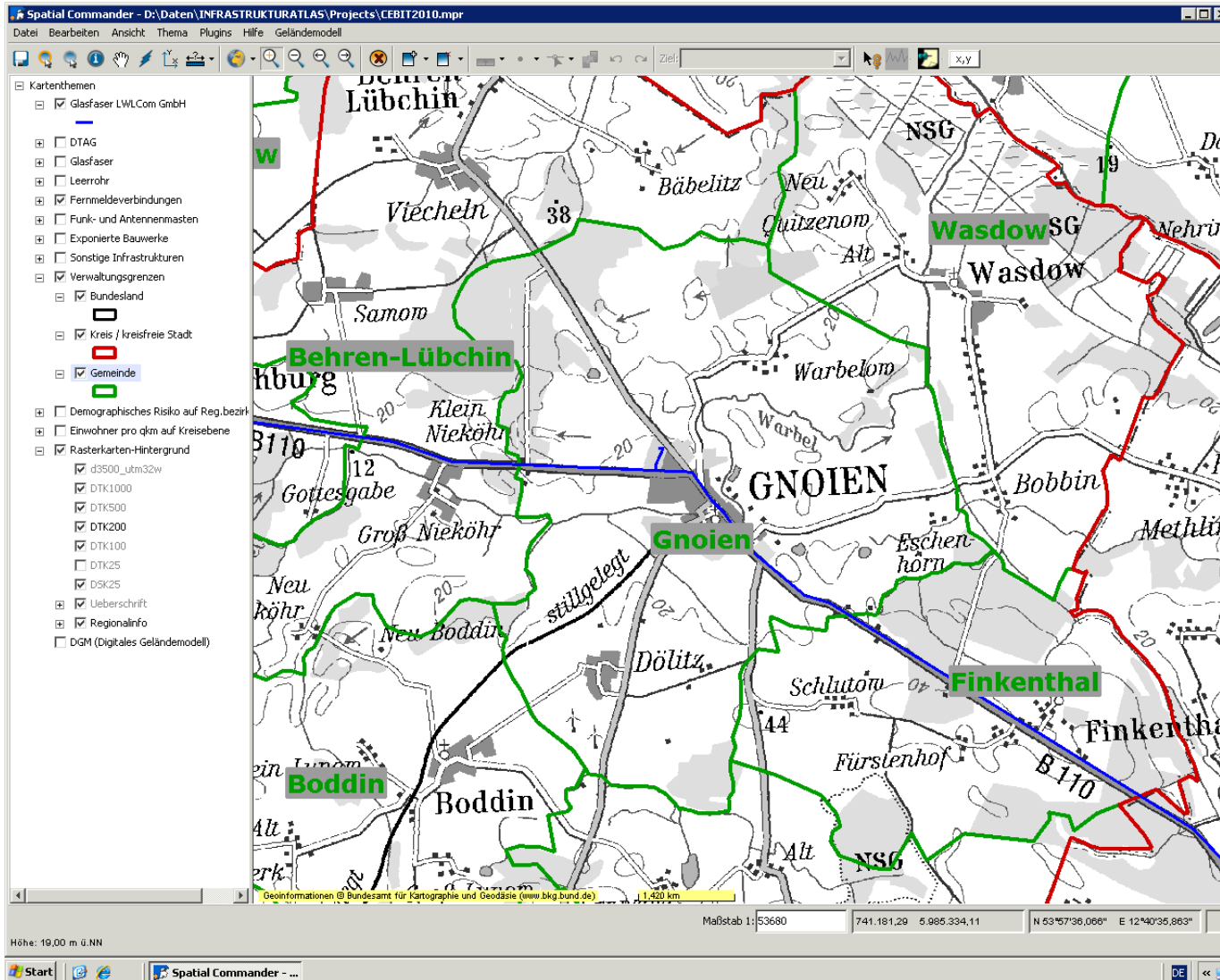


Information on the level of an administrative district



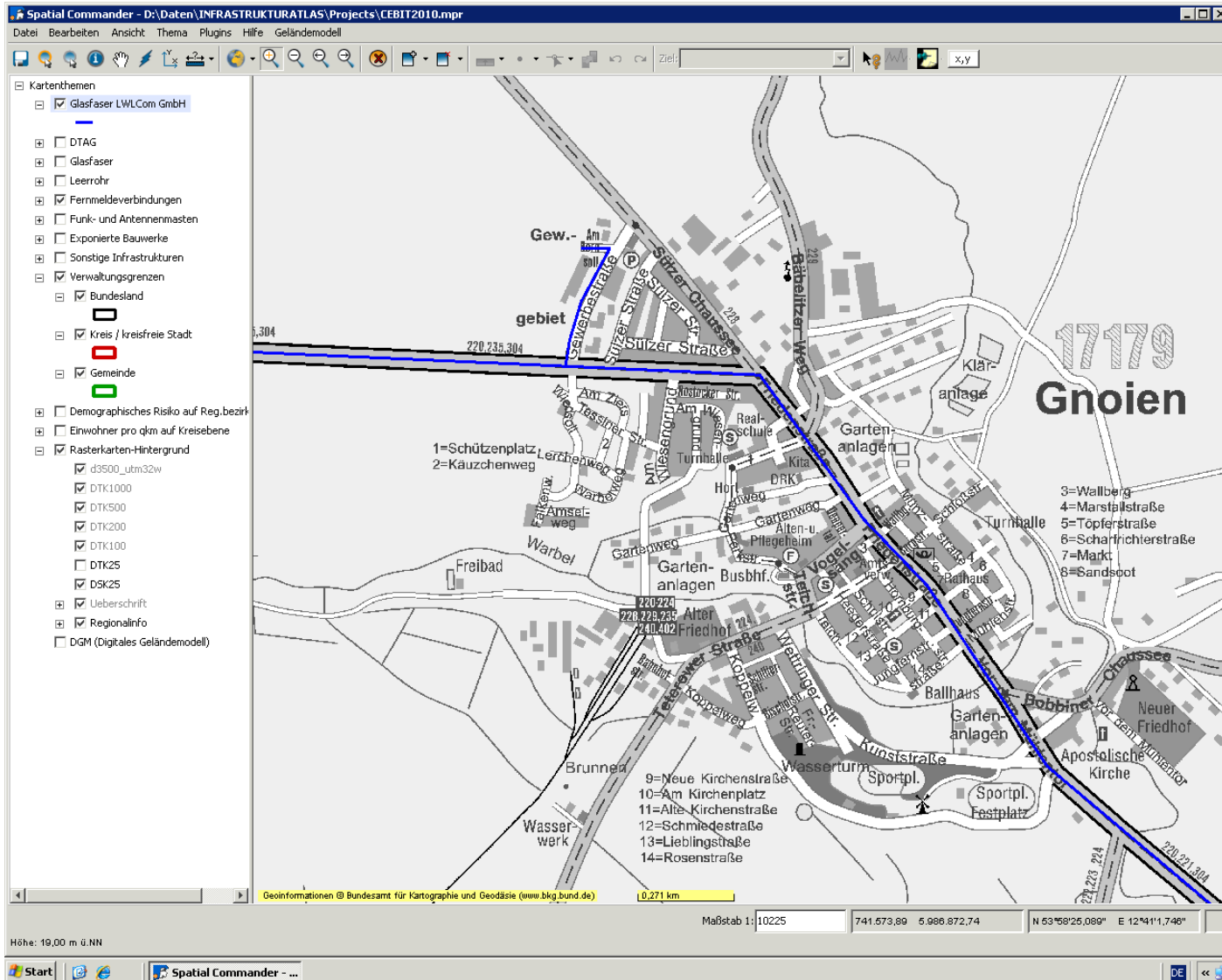


Information on the level of a municipality



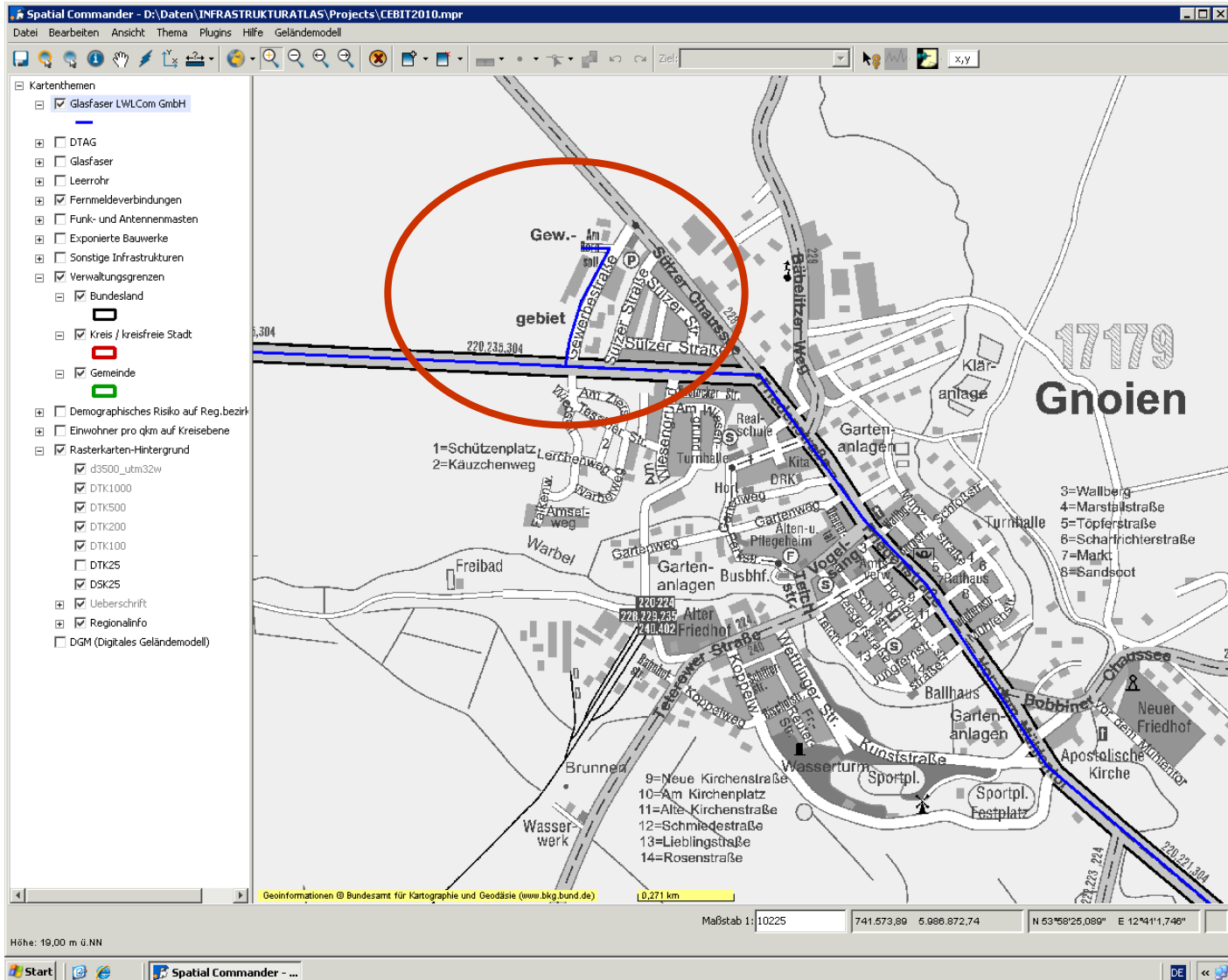


Information on the level of a town district





Information about the telecommunications infrastructure of an industrial zone





Information given to an applicant

Objekte identifizieren

| Feld | Wert |
|------------|------------------------|
| GEGENSTAND | Glasfaser-Kabel |
| EIGENTUM | LWLCom GmbH |
| BETREIBER | -- |
| SENSIBEL | nein |
| KONTAKT | Herr Lutz Mustermann |
| TELEFON | 050 / 13243546 |
| EMAIL | l.mustermann@lwlcom.de |
| HOTLINK | -- |

Geoinformationen © Bundesamt für Kartographie und Geodäsie (www.bkg.bund.de) | Maßstab 1:10225 | Höhe: 19,00 m ü. NN



Thank you for your attention

Klaus-Udo Marwinski

Federal Network Agency for Electricity, Gas,
Telecommunications, Posts and Railways
(Bundesnetzagentur)

Head of Section

Section 311 – International Policy Issues
and Regulatory Strategy

Postal address: PO Box 80 01, D-53105
Bonn, Germany

Phone: + 49 (0228) 14 – 31 10

Fax: + 49 (0228) 14 - 63 11

E-Mail: Klaus-Udo.Marwinski@BNetzA.de

