

GfK

GfK GeoMarketing

# Magazine

04 | 2011



## Digital maps

Ideal basis for geographic  
analyses and planning

# Welcome to GfK GeoMarketing Magazine!



Dear readers,

2011 is rapidly drawing to a close. This is typically not a calm period for companies, as they must struggle to meet their annual turnover goals and define budgets and realistic turnover goals for the coming year. We can help you complete these tasks by showing you how to locate potential with geomarketing.

We've been very busy in recent weeks and are proud to announce the completion of three important projects: GfK purchasing power data for all of Europe, maps that fit seamlessly with this data and the English-language version of RegioGraph. These tools provide everything you need to successfully position your company for 2012.

This edition of the magazine explores the applications and quality requirements of our digital maps and the benefits of using postcodes for geomarketing, business and GIS analyses.

I wish you a stimulating read, a successful close to 2011 and a good start to 2012!

Yours,

Dr. Eberhard Stegner  
Managing director, GfK GeoMarketing

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## Briefly noted: News & dates

### Updated: GfK Purchasing Power Europe 2011/2012

Our GfK purchasing power data for 42 European countries has been updated to reflect the **latest data and boundary status**. The study, which also includes data on inhabitants and households down to the most detailed available regional level, reveals consumer potential at inhabitants' places of residence. GfK Purchasing Power is an indispensable planning basis for all internationally active companies. More information at

> [gfk-geomarketing.com/purchasing\\_power](http://gfk-geomarketing.com/purchasing_power)

### Distinguished: GfK GeoMarketing named "professional service provider of the year" for the reinsurance branch

GfK GeoMarketing was selected from among a range of other leading companies as the "**professional service provider of the year**" in the reinsurance industry at the Worldwide Reinsurance Awards in London on September 7, 2011. The selection committee praised the superb quality of GfK GeoMarketing's maps and stressed the importance of a reliable cartographic basis for the reinsurance branch. More information at

> [gfk-geomarketing.com/award\\_en](http://gfk-geomarketing.com/award_en)



### New: GfK Product Catalog

Information on GfK GeoMarketing's entire range of products can now be accessed in our new product catalog, which includes product descriptions, information on availability and prices. Access the PDF at

> [gfk-geomarketing.com/catalog](http://gfk-geomarketing.com/catalog)



### Meet us in person!

Germany's Trade Convention  
(Deutscher Handelskongress)  
November 15-16, Berlin  
stand no. OG18

DOAG 2011  
November 15-17,  
Nuremberg, Germany  
stand no. 222

Dates of all events can be  
found at:

> [gfk-geomarketing.com/fairs](http://gfk-geomarketing.com/fairs)

# Geomarketing: Postcodes comprise indispensable basis of planning

Companies increasingly recognize the advantages of geographic analyses and their contributions to successful business planning. Postcode maps play a particularly important role in this regard. Good maps bring greater transparency and confidence to sales, marketing and controlling endeavors.



## Maps point the way to success

"Geomarketing" has many names and faces including "business mapping" and "geographic market analysis" to name but a couple. Using a software application to carry out regional analyses that evaluate and visualize the place-based component of data on digital maps is now a common business practice around the world.

Internationally active companies are particularly aware of the merits of a geographic analysis of their data and the resulting valuable insights. Applications of geomarketing range from the visualization of customer locations and definition of catchment areas to

the evaluation of regional turnover shares and identification and precise localization of unexploited market potential. Put simply, companies achieve greater efficiency and harness new turnover potential by carrying out regional evaluations of company activities in sales and marketing.

"Maps integrated into a geomarketing software comprise one of the most important tools for meeting the needs of today's sales, marketing and controlling divisions," explains Wolfram Scholz, managing director of GfK GeoMarketing. "This is especially true of internationally active companies."

Postcodes are the linchpins of most geomarketing analyses, because they link company data with maps. Addresses constitute the majority of company data, and almost every address contains a postcode.

This is the reason that detailed, precise and up-to-date postcode maps are so valuable to internationally active companies. Businesses are increasingly aware of the importance of working with high-quality maps, as these are the foundation of all spatial analyses.

## Postcode maps serve as common international currency

Postcode maps are especially important in an international business context. As almost all company data already contains postcode information, it makes sense to use postcode maps to visualize regional data trends and relationships. In contrast to place names, postcodes offer a straightforward, unambiguous means of associating data with maps. Moreover, almost all countries in the world have a postal system. Most postcodes are number-based, although some use a combination of letters and numbers. Postcodes thus offer an unambiguous means of coding place-based information and can be directly linked with high-quality, vector-based digital maps via the (alpha-)numeric code.

## What makes a good postcode map?

The production of precise, up-to-date and gapless postcode maps requires significant expertise and effort. To create accurate postcode maps of a given country, map producers must consult with official bureaus of statistics, post offices, government agencies, other map providers and NGOs\*. GfK GeoMarketing's in-house cartography division uses this information to create detailed postcode maps. These maps are then crosschecked against satellite/aerial images.

One of the greatest challenges faced by map suppliers is comprehensively digitizing all postal boundaries in a given country. Every single postcode must be precisely rendered and the boundaries of all postcodes must fit together without gaps or overlaps. Visualizing postal boundaries is particularly demanding, because only a few countries in the world have official postcode maps. As a result, cartographers must painstakingly research

\* non-governmental organizations

and then manually digitize these boundaries. Cartographers therefore often play the role of detectives as they piece together and compare various sources in order to accurately digitize the postal boundaries. It's also essential that these boundaries form an enclosed geography without gaps or overlaps. This applies both to boundaries within a given country as well as those in neighboring countries.

Only maps that meet these quality standards are suitable for geomarketing purposes such as sales territory planning and analyzing regional turnover.

## Maps quickly go out-of-date due to regional forms

Even maps that fulfill these standards must be regularly updated in order to ensure the accuracy of any analyses carried out with them: "An out-of-date cartographic basis leads to many problems and even outright errors," warns Klaus Dittmann, head

## New 2011 map updates

- Europe
- USA/Canada
- Africa
- Mexico
- Australia/New Zealand
- Russia
- World

Free samples available at

> [gfk-geomarketing.com/map\\_samples](http://gfk-geomarketing.com/map_samples)

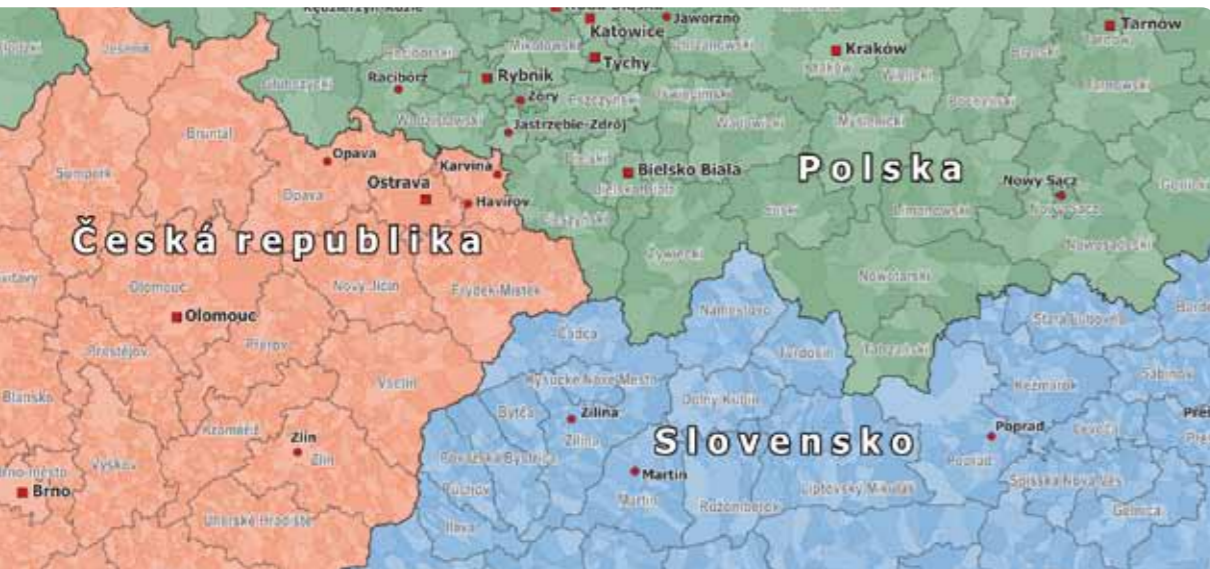
of cartography at GfK GeoMarketing. "For example, an accurate analysis or optimization of a transport network requires up-to-date maps. Outdated map sources – such as those that don't reflect the many thousands of boundary changes implemented every year in Europe by the respective national postal services – can mean that data is incorrectly associated with the maps. In some cases, data can even be lost if the regions in question no longer exist." Given these require-

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In addition to postcode and administrative maps, we also offer numerous **specialty maps**, including maps for the reinsurance (CRESTA) and pharmaceutical industries as well as topographic maps.

Our maps are available in all common data formats and meet the **highest quality standards**:

- gapless and overlap-free
- vector-based for infinite zoom
- based on geographic coordinates (WGS 84)
- fully attributed with international and local place names
- crosschecked against the latest satellite imagery
- seamless fit with GfK GeoMarketing's market and purchasing power data
- informed by many years of experience and expertise
- regularly updated and expanded

ments, GfK GeoMarketing regularly updates all postcode and administrative maps in order to ensure that they depict the latest boundaries.

Due to the expertise and effort required to carry out these regular updates, there is often a lack of good maps on the market for some countries, including – or especially – dynamic markets such as Asia. Companies active in these markets can benefit from GfK GeoMarketing's detailed postcode maps, which, in the case of Europe, are updated annually.

#### Maps are the backbone of spatial analyses

Although the production and updating of postcode maps is laborious for map suppliers, implementing these maps into company operations couldn't be easier. Using a good geomarketing software like RegioGraph, users can import and analyze their company data on the maps in just a few clicks.

GfK GeoMarketing has a very attractive range of offerings for companies interested in taking a geomarketing approach: We offer very competitive prices and licensing models for all needs, be it for a small or large number of users, an individual country, continent or the entire world and for all standard mapping and BI systems. Irrespective of the business division or area of the world concerned, our maps offer a reliable basis for planning and extracting more insights from your data.

#### We'd be happy to assist you!

Contact: Doris Steffen  
Tel. +49 (0)7251 9295180  
d.steffen@gfk-geomarketing.com

# We are experts in Sales territory planning



Book a coaching session and allow our consultants to help you define realistic goals for 2012!

#### Boost your sales success with GfK GeoMarketing!

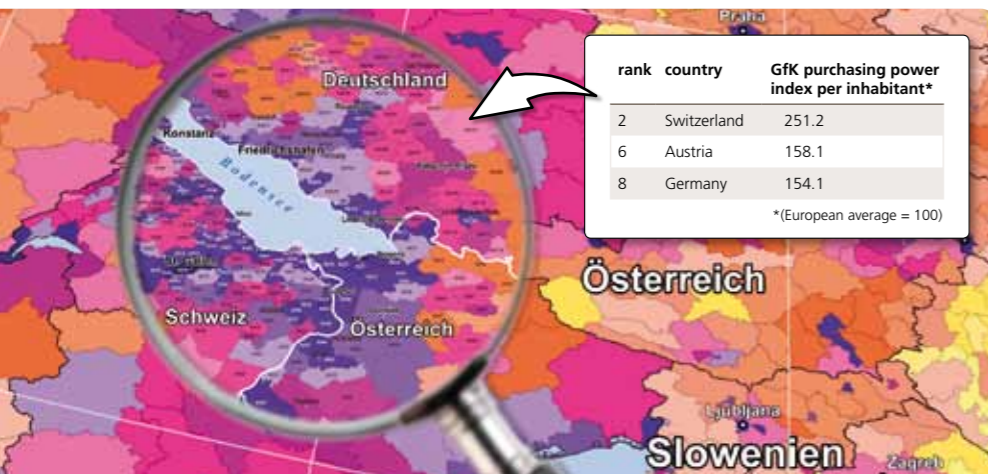
- Increase your sales force's efficiency by optimizing your territory structure
- We support you from the planning stage to implementation
- Almost 20 years of worldwide experience in sales optimization

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[www.gfk-regiograph.com/coaching\\_en](http://www.gfk-regiograph.com/coaching_en)

## Expansion planning: Data on potential provides orientation amidst unfamiliar territory

A reliable basis of planning is a prerequisite for successful expansion and the sustainable operation of branches both domestically and abroad. Regional market data comprises an indispensable basis of planning and analysis for sales and expansion endeavors. It's essential that this data be up-to-date and offer high-quality, gapless coverage.



Location planning is one of the most expensive and risky challenges faced by companies and directly impacts future competitiveness. These decisions often entail millions of dollars of investment and determine the prospects of a company for years to come. As such, the decisions must be based on reliable data and then communicated in an objective and transparent manner.

### Data in GfK quality

The quality of data directly influences the success of analyses and planning endeavors. All of GfK GeoMarketing's data has been intensively researched and validated. Thanks to the worldwide market research network of the GfK Group, we have access to an unprecedented range of international market and target group data. Our data experts use a diverse array of

techniques to model the regional distribution of this data and create an accurate portrait of the actual situation on site.

The results are then examined and validated by our location experts, who have first-hand experience of locations across Europe thanks to detailed on-site studies. This expertise is taken into account in GfK GeoMarketing's data modeling techniques, which are continually refined to ensure the highest possible accuracy. This is essential, because on-site conditions and available data sources change from year to year - hence the importance of always working with up-to-date data. An additional advantage of working with regularly updated studies is that ever more detailed data becomes available for many locations, which can then be taken into account.

### Europe-wide market data

GfK GeoMarketing's regional market data thus provides an objective decision-making basis that supports comparisons across multiple regional levels. The data offers the means of answering the following questions:

- How is the market potential distributed and where are the best turnover prospects for our products?
- Where are the intended target groups most concentrated and can they easily access the planned locations?
- How many locations can be successfully and sustainably operated within a given region?
- Which locations are most successful and offer the best future prospects?
- Which locations should be quickly acquired in order to ensure optimal market penetration?

### Detailed location comparisons

GfK data on potential makes it possible to precisely gauge the quality and future prospects of locations while also facilitating comparisons between the various locations under consideration. In addition to purchasing power data, GfK GeoMarketing also offers data on the retail sector, socio-demographic characteristics, as well as information on market players and industry and business potential.

The data is calculated at a detailed level (often the postcode level), which

supports comparisons of locations and catchment area analyses of specific city districts.

### Analyzing the drawing power of potential locations

The scope or drawing power of the product itself must be taken into account when evaluating prospective locations. This refers to the distance that a consumer is willing to travel to make a purchase - for example, only a few hundred meters in the case of toothbrushes. However, this could easily extend to several dozen kilometers in the case of luxury automobiles. Information from cash register surveys and customer loyalty card programs can also be useful for determining the maximum distance customers are willing to travel.

The drawing power of a location is also decisive with regard to how much of the existing potential in the catchment area it can exploit. Product- and branch-specific market data are indispensable when it comes to determining the extent of this drawing power. Such analyses involve incorporating data on target groups, including their socio-demographic profile and the degree of purchasing power available for the product line in question. Macro-economic place-based factors must also be taken into account, as the success of a branch site is often strongly determined by the quality of the surrounding retail environment. Particularly important in this regard are retail turnover and centrality figures: The former reveal the region-

GfK market data available for many European countries:

- GfK Purchasing Power
- GfK Retail Purchasing Power
- GfK Retail Centrality
- GfK Retail Turnover
- GfK Purchasing Power for Retail Product Lines

All data fits seamlessly with GfK GeoMarketing's digital maps. Find out more at [gfk-geomarketing.com/catalog](http://gfk-geomarketing.com/catalog)

All data is intensively researched and validated each year prior to the release of the new market studies.

## Plan more confidently with GfK market data



- End-customer, retail and industry data for Germany and all of Europe
- Microgeographic data for precise market management
- All data fits seamlessly with our digital maps at every regional level



How far does the potential for a given location extend? Are there enough customers with sufficient purchasing power in the target catchment area or is a competitor siphoning off too much potential? An analysis of GfK market data using the gravity model in RegioGraph Strategy reveals the potential turnover reach of a given location.

al turnover of the entire retail sector within a given region, while the latter measure the ability of a given retail location to draw on the purchasing power beyond its immediate borders. Agglomeration effects and competitors in the catchment area also impact the drawing power of a location. An analysis of a prospective site's drawing power also entails taking into account the performance data of already existing locations.

GfK GeoMarketing's retail experts can provide companies interested in expanding with precise information on the factors that will most affect the turnover of a given location and to what degree, including the available turnover potential for each postcode and municipality under consideration.

The drawing power and turnover potential of a prospective location can be modeled using detailed maps and a geomarketing solution such as RegioGraph Strategy that contains an integrated gravity model. This allows comparing the regional potential with

the competitive situation and distance to a prospective location, which reveals whether the potential available in a catchment area will lead to sustained success.

A detailed analysis of the prospective locations illuminates their strengths and weaknesses, making it possible to narrow down the options under review. However, the last step of an expansion planning endeavor should always be an on-site evaluation of the locations and real estate objects under review in order to assess the quality of the micro-location and immediate surroundings. Many location-specific criteria can only be evaluated on-site by experienced professionals, including the accessibility by public transport, parking provision, visitor frequency and quality of the real estate object in question.

#### Sales controlling: Gauging success and fine-tuning

Regional data on potential and cartographic analyses also comprise the basis of measuring success after an

expansion or the market launch of a product and reveal the regions and locations in need of optimization. One aspect of such analyses involves comparing the target turnover with the available market potential, which is revealed by regional market data. This makes it possible to evaluate a company's success and market exploitation and then make realistic plans for the subsequent phases of market development. GfK market data also helps companies answer question such as:

- What is the market penetration in the individual regions under review?
- Where are good areas for additional locations?
- What are realistic turnover and growth goals for the sales territories or branch sites?

#### Summary

Detailed, high-quality data on regional potential used in combination with maps and a geomarketing software such as RegioGraph allows companies to quickly and precisely determine the regions of a given country with the best turnover prospects. GfK regional market data offers a reliable, Europe-wide basis of planning – from the initial planning stage and preliminary selection of suitable new locations to the detailed evaluation of economic and socio-demographic factors in selected target regions and fine-tuning of branch, sales and supply networks.

*We have firsthand, on-site knowledge of all European markets and can support you throughout all phases of expansion planning.*

**We'd be happy to assist you!**

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o.giehse@gfk-geomarketing.com

## Automatically updating the cartographic basis in RegioGraph

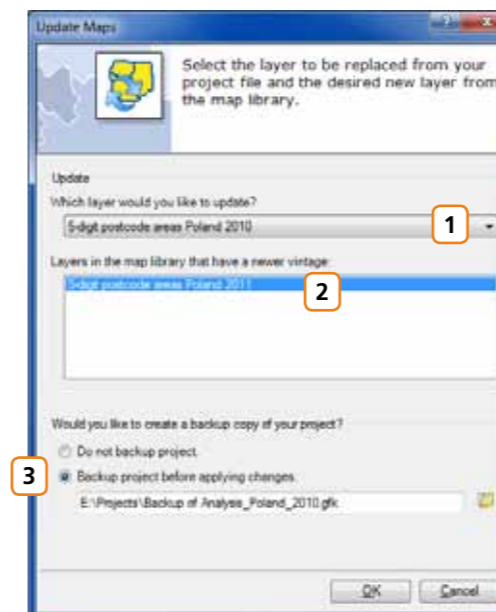
The previously time-consuming process of updating the cartographic basis can now be completed at the click of a button in RegioGraph 2011. It's therefore quick and easy to automatically update the boundary status of existing project files while preserving all settings and completed analyses. This new feature saves time and enhances productivity.

#### Preparation

After acquiring a new map update for RegioGraph, the associated layer should be imported into the map library. Next, open the project data whose maps you want to update.

#### Execution

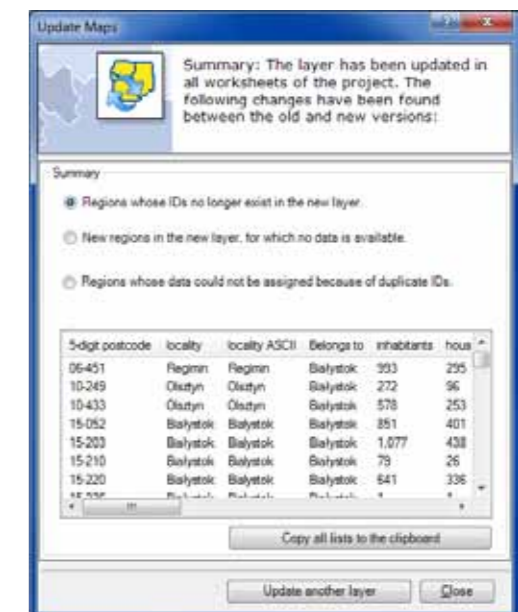
Click the **QuickStart** button in the bottom left-hand corner of the project sidebar to open the Quick Start Menu. Next, select **Tasks > Update Maps**.



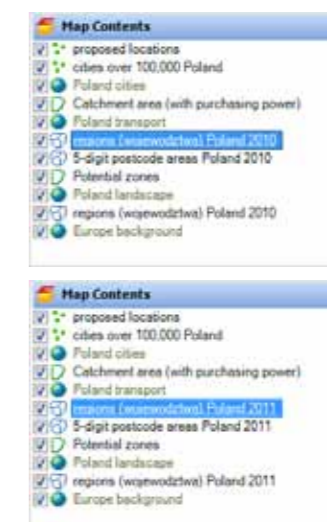
- 1 The subsequent dialog and pull-down menus allow you to specify the layers to be updated. Go ahead and select the first layer.
- 2 RegioGraph then checks whether there are maps in the map library with a more up-to-date status. Click the desired layer.
- 3 Prior to beginning the update, you can specify that a **backup copy** be made. Start the update by clicking OK.

#### Results

After a layer has been updated, you'll receive a summary that lists the changes made. Specify how you wish to proceed:



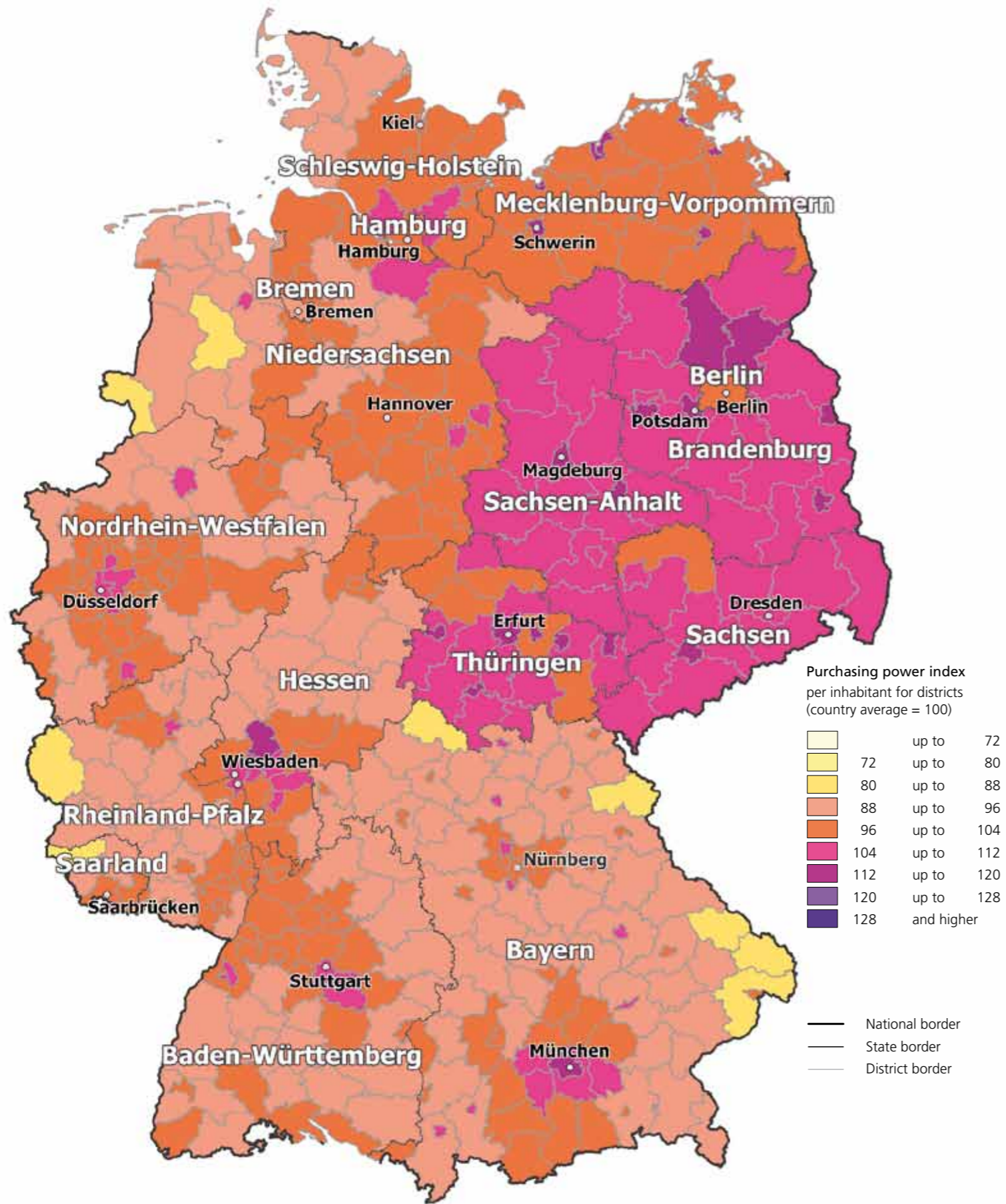
You can choose to update additional layers or end the update procedure. After ending the update process, all maps contained in the project file remain unchanged, but they now contain the new postcode or municipal boundaries.



**Map Contents (before/after):**  
Only the "regions" layer has been affected. All settings have been preserved.

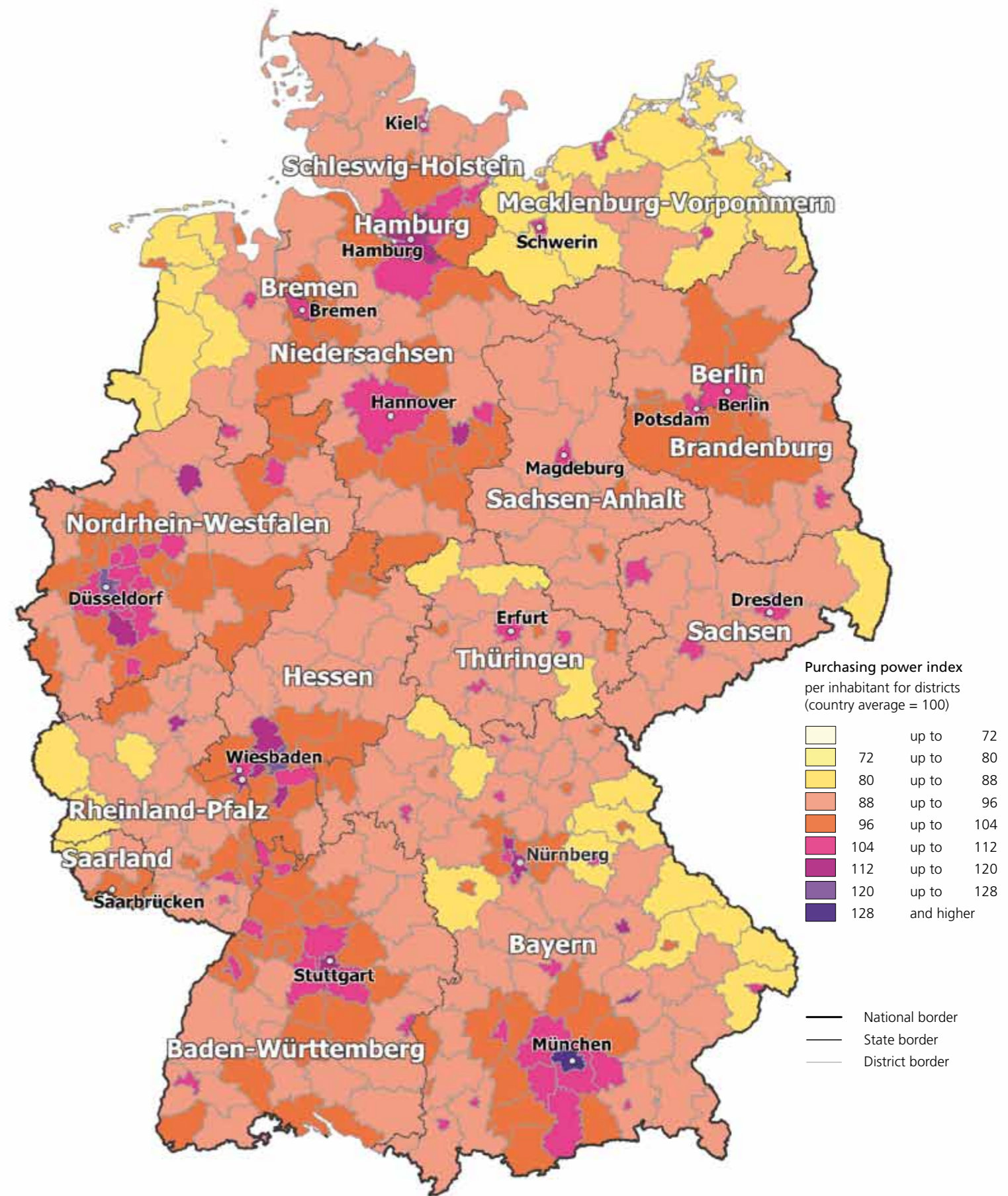


# GfK Purchasing Power 2011 for coffee in Germany



150 km

# GfK Purchasing Power 2011 for tea in Germany



## Mapping the place-based component of insurance risks

CRESTA is a non-profit organization founded in 1977 by representatives of the re-insurance branch in order to establish an industry standard for the exchange of place-based information. GfK GeoMarketing has been the official map supplier of the digital maps of the worldwide CRESTA zones since 2001. Interview with Christina Schlenther (Swiss Re).



CRESTA stands for „Catastrophe Risk Evaluating and Standardizing Target Accumulation“ and is the name of the organization as well as the geographic standard. The CRESTA zones provide a unified basis for the exchange of aggregated, insurance-relevant information among insurers and reinsurers.

More information at [www.cresta.org](http://www.cresta.org)

### What are CRESTA's main tasks?

CRESTA provides a universally recognized zoning standard for the insurance industry that serves as a unified geographic basis for exchanging aggregated insurance data. This promotes the accuracy and efficiency of the exchange of information among insurers and reinsurers.

There's a trend toward ever higher resolutions of spatial information. High-resolution postal boundaries are ideal for insurance companies, as these are typically well known in the market and accessible to all. Also, it's easy to aggregate postal zones if fewer zones per country are needed.

### Which cartographic characteristics are particularly important for these applications?

Data quality plays a tremendously important role for CRESTA. The geometric data must be available worldwide and not have any gaps or overlaps. GfK GeoMarketing's maps offer precisely these features!

### The CRESTA zones are to be adjusted in 2012 – what will this entail?

With this adjustment, CRESTA wants to move away from the now 30-year old or even older zones that often were manually created based on risks and now had to be painstakingly re-digitized for every update. The new CRESTA zones will be based on administrative and postal

boundaries, as these are generally well known and available. The future zones will be defined independently of risks. We will also offer two levels of resolution in order to best meet the needs of users: The high-resolution zones will be used as basis for the premium calculation models and the lower resolution zones will be for risk management and reporting tasks. A detailed overview of the planned changes can be accessed at

> [cresta.org/index.php/zone-changes](http://cresta.org/index.php/zone-changes)

**We're proud to have been the official supplier of CRESTA maps over the past 10 years and look forward to continuing to play this role. What are the most important developments in the near future for reinsurers?**

With regard to the required geographic base data, there's a clear trend toward high-resolution data, all the way down to coordinate-specific entries. The data quality of the underlying maps and geodata continues to play a paramount role.



**Christina Schlenther** has been head of the CRESTA secretariat at Swiss Re since 2006. During her time in this office, the decision to revise the CRESTA zones was made as well as the preparations for the 2012 implementation. Swiss Re alternates the running of the CRESTA secretariat with Munich Re.

## RegioGraph 2011

74 years of geomarketing expertise packed into one software



- 1937** release of first GfK Purchasing Power dataset
- 1957** advising of first customers in location selection
- 1991** release of first version of RegioGraph for sales territory planning
- 2007** complimentary data and maps added to RegioGraph

**RegioGraph 2011** is the crowning achievement of our expertise in sales territory planning, location selection and detailed analyses of potential.

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RegioGraph – preeminent geomarketing solution for businesses. More information at [www.gfk-regiograph.com](http://www.gfk-regiograph.com).

# CargoLine manages Europe-wide logistics network with RegioGraph

CargoLine is a successful company group that provides standardized, systematized cargo transport and logistics services in Germany and Europe, with around 70 partners throughout these regions. The company has been using RegioGraph and digital maps since 1993. Interview with Christoph Müller, head of the Europe co-ordination division.

## How does your business work?

In the pressured time constraints of today's markets, companies rely upon the punctual delivery of raw materials and goods. CargoLine consequently developed a range of products to meet these needs, including numerous time-sensitive delivery methods. In association with around 70 partners in Germany and abroad, we have a stable, comprehensive network that allows us to quickly and competently make deliveries to every corner of

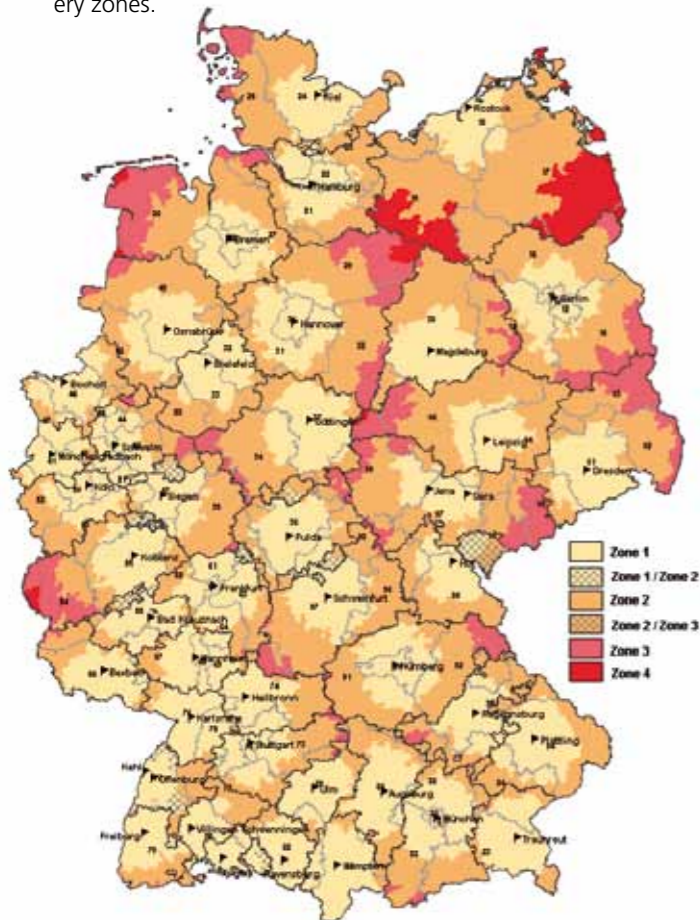
Europe. Our expertise is not limited to conventional street- and highway-based deliveries. Thanks to our partner network, we also offer sea and air freight services.

## Which challenges do our products allow you to accomplish?

The most important analysis that we perform is the visualization of which partners service which territories. This ensures a fair distribution of workload within our company group. Naturally, we also visualize transport volumes and flows on the maps. One of the things we really value about RegioGraph is its ability to visualize these delivery flows according to their various assignments. Visualizing this information is essential. The logistics branch has always had an affinity for maps – wall maps that provide an overview of all locations and warehouses remain an absolute must. But just as important today is the prompt visualization of all transports, which is something that is only possible with digital maps and a software application like RegioGraph, which offers a wide range of visualization and analysis options.

We also use RegioGraph for our partners' tariff analyses. After receiving a transport query, we use the software to perform a plausibility check with regard to the distance involved and the tariff suggested by the partner. Thanks

The overview map shows CargoLine's locations and delivery zones.



CargoLine stands for reliability and quality. The company group offers its customers a wide spectrum of services, with particular expertise in system-driven procurement and distribution logistics. A shipment tracking system that interfaces with the customer IT system and provides automatic notifications of the shipment status ensures timely service and streamlined operations. As a mid-sized company well attuned to the needs of its customers, CargoLine also develops customized logistics solutions. In 2011, 6,592 employees carried out 11.1 million shipments and achieved a turnover of €1.3 billion. In the last image rankings carried out by the magazine Logistik inside, CargoLine was the only cargo and transport logistics company group that managed to place among the top 10 in the category „transport & contract logistics“. More information at [www.cargoline.de](http://www.cargoline.de)

to GfK GeoMarketing's Europe-wide maps, we can quickly determine whether, for example, the delivery tariffs of a partner in France within a specific département are appropriate. Of course, our experience also plays a role in such evaluations, but the software and maps offer vital support and provide a reliable basis from which to make these decisions.

The data that we compile on our market, such as economic- and location-specific information, is also very important. This allows us to always keep an eye on the economic regions in which an additional business partner or location could be beneficial in the future. In other words, we also use RegioGraph as a strategic tool for guiding our partner development.

## Your final word on working with digital maps and RegioGraph?

To put it simply, your maps and software are essential to our daily operations. As a user of the software myself, I can tell you that I am able to work extremely well with RegioGraph. At first I had to get used to this geo-marketing approach, but now I can't imagine not using it. As longstanding users of RegioGraph, we've witnessed the evolution of this mapping software, which has been truly dynamic! Our partners also tremendously value the results generated by RegioGraph analyses and many of them have chosen to incorporate RegioGraph and digital maps into their own operations.

Christoph Müller

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[christoph.mueller@cargoline.de](mailto:christoph.mueller@cargoline.de)

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## Getting started with RegioGraph

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- Numerous practice-based examples, tips and tricks

Book a place on a course: [www.gfk-regiograph.com/training](http://www.gfk-regiograph.com/training)

# Creating a wind-storm model for Europe based on GfK maps and data

RMS is a globally leading provider of catastrophe risk management solutions. Based on GfK GeoMarketing's maps and market data for Europa, the specialists in risk modeling developed a wind storm model for Europe. Interview with RMS' senior risk modelers Tina Thomson and Barbara Page.

## You created a wind-storm model for many European countries – how does this model work?

The RMS® Europe Windstorm Model helps protect households and other insured policy-holders from the risk of their insurance companies becoming bankrupt if a major windstorm sweeps across Europe. While some severe windstorms have been experienced in recent times, such as windstorms Daria, Vivian and Wiebke in 1990, Kyrill in 2007, and Emma in 2008, science and history show that there is a chance of even more severe storms than this occurring in the future. The model is designed to extrapolate beyond history to the worst possible storm, and capture all possible events that can happen, and how frequently these might occur.

The model used scientific first principles, including meteorological forecasting models and global climate models, combined with a dense network of wind observation data, to estimate the probability of damage from a full range of possible windstorms at any location across 15 European countries. To achieve this, RMS has simulated four main model components: 1) a set of around 30,000 possible windstorm events that could strike Europe; 2) a realistic meteorological model that estimates the peak winds experienced at each location throughout the duration of each of these

events, which accounts for terrain and local environmental impacts; 3) functions that relate the severity of the wind to the damage that would be sustained by building types of all different ages, shapes and sizes; 4) the financial losses that would be sustained by policyholders and insurers.

### How is it set up?

#### What is the level of detail?

The key value of the model is that it provides a highly informed estimate of the damage potential across an individual insurer's entire portfolio of risks. For very big windstorms impacting a large swath of Europe, an insurer may not have sufficient funds to pay out all its policyholders unless it knows its full exposure. The model is flexible enough to work with the information available. Where the risk is highest, and changes

the most rapidly, for example around cities, or at coastlines where differences in topography and the environment can cause sudden changes in wind speeds, the model calculates each event's peak winds for every 1 km<sup>2</sup> grid cell. To optimize computing times, RMS uses larger cells of up to 10 km<sup>2</sup> in areas where the risk does not change much spatially. If users know the location and physical characteristics of the individual buildings in a particular grid cell, the model can calculate expected losses for individual buildings. Conversely, the model can also use aggregated data. For example, the insurer may only know the total number of properties it insures in a particular post code, or county, along with the type of usage, for example, residential or commercial, and the total value at risk.

### About RMS

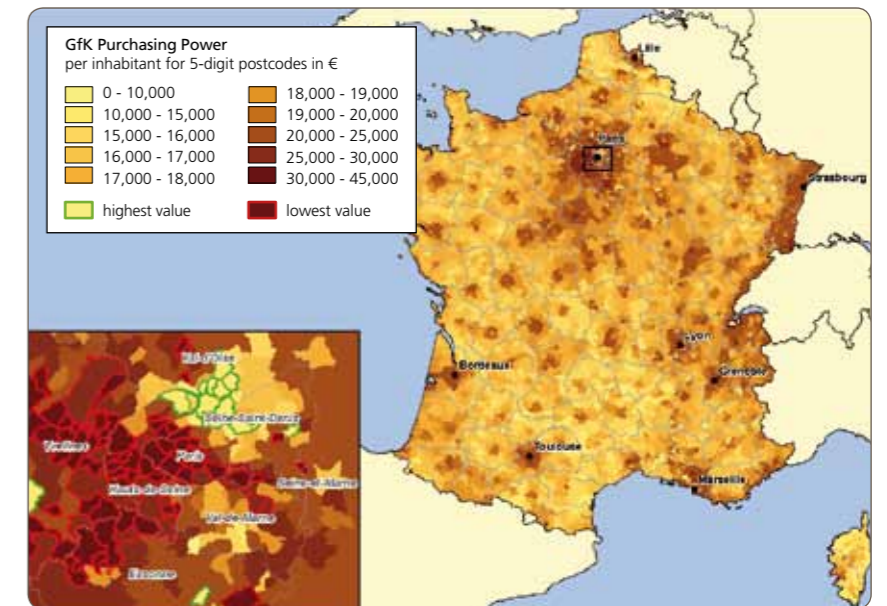
RMS is the world's leading provider of products, services, and expertise for catastrophe risk management. Founded in 1988, RMS offers technology and services for risks associated with natural perils such as earthquakes, hurricanes, and windstorms, as well as products for enterprise risk management and transferring insurance risk to the capital markets. RMS also leads the market in risk modeling for man-made disasters related to acts of terrorism, and infectious disease.

More than 900 RMS employees serve the global financial markets from offices in the U.S., Bermuda, the U.K., France, Switzerland, China, India and Japan. More than 400 leading insurers, reinsurers, trading companies, and other financial institutions rely on RMS models to quantify, manage, and transfer risk.

## Which data is fed into the model?

Model users – typically insurance companies (as well as reinsurers and brokers) – must input the location, value and characteristics of the buildings insured, along with the insurance policy terms, such as any excess the policyholder is liable for, before the insurance policy kicks in. To understand market-wide losses, users can input values from the RMS Industry Exposure Database.

GfK GeoMarketing data was a key resource RMS used to create its Industry Exposure Database. The Industry Exposure Database is a detailed snapshot of all the insured property in every postal code in Europe. RMS uses this snapshot during the development of the windstorm model – for example to validate the model, by comparing total market losses predicted using the RMS Industry Exposure Database with the losses reported at the time of the event. The GfK data, which covers all the European countries in the RMS model, combines several key metrics of interest with consistent vintage, resolution and format geospatial reference data. RMS used demographic data on population and households, combined with consistent postal code boundary maps, to understand the location of residential properties. This is particularly useful in countries where the statistical office does not provide data with accompanying geospatial information, or to break out coarser-resolution data (for example the number of single-family dwellings by region) to a higher resolution. RMS used purchasing power to refine its valuation models – for example, in Paris purchasing power was used to differentiate between wealthy districts with high rebuild costs per square meter and poorer districts with poorer-quality, cheaper housing. In addition, the German data on number



In some regions of Europe, such as Paris in France, the value of insured real estate objects was found to correlate with purchasing power. The wind storm risk model uses multiple other variables to assess insured risks for a large number of storm scenarios across all of Europe, e.g., the regionalized data sets "GfK Demographics" as well as "GfK Businesses" in Germany.

of businesses was helpful in understanding the geospatial distribution of insured non-residential property in Germany.

## How do RMS and its customers use the wind storm model?

Model users only need to know the location and characteristics of property at risk, as well as the sums insured. Once this information is entered, the model can conduct analyses. Users with additional information – for example about the type of construction, policy limits and deductibles – can also input this data to assess the impact of these characteristics. Users can choose from a range of analysis types, including scenario events, such

as "worst-case" analysis, or "what-if" analysis – e.g., "what if windstorm XX happened tomorrow"? The real value of the model, however, stems from probabilistic analyses. Though these take more time, they give a full distribution of potential losses and the probability across an insurance company's entire book of business. This allows an insurer to determine the probability of sustaining losses of particular amounts in any given year – for example, by calculating that while there is a 5% chance of losses totaling €300m, there is a 1% chance of a loss totaling €700m – which allows it to manage the amount of funds it keeps available for paying potential losses.



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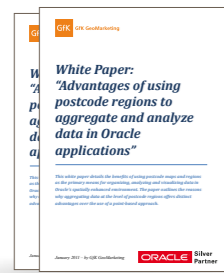


## Downloads & suggestions for further reading

### White paper: Postcode maps for Oracle

What's the value of using digital maps to visualize and analyze data in Oracle applications? Dr. Christopher Guider, international sales and marketing consultant at GfK GeoMarketing, discusses the advantages of carrying out these types of regional analyses in two white papers. Download

> [gfk-geomarketing.com/wp-oracle\\_en](http://gfk-geomarketing.com/wp-oracle_en)



### New English-language platform for RegioGraph

In concert with the release of the English-language version of the geo-marketing solution RegioGraph, a new online platform has been created where current and prospective customers can access details on applications, user reports and downloads for the English-language version of the software.

> [gfk-regiograph.com](http://gfk-regiograph.com)



### Knowledge by e-mail: GfK GeoMarketing e-News

GfK GeoMarketing's e-News keeps you in touch with the latest geomarketing developments. Subscribe online and receive monthly editions with up-to-date information on RegioGraph, digital maps, market data and location research. Mailing list subscribers also get a free download each month. Sign up today!

> [gfk-geomarketing.com/enews\\_en](http://gfk-geomarketing.com/enews_en)



### New free Europe map samples

Our free map samples of Europe have been updated to reflect the latest boundary changes. Our company website offers access to comprehensive digital map samples in all standard formats, including \*.shp (ESRI), \*.tab (MapInfo), Oracle Spatial and RegioGraph. Convince yourself of the high-quality and worldwide coverage offered by our maps. For Germany, we also offer branch-specific maps e.g., maps for the pharmaceutical and energy supply branches.

> [gfk-geomarketing.com/map\\_samples](http://gfk-geomarketing.com/map_samples)



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## Celebrating 20 years of RegioGraph: The most creative congratulatory card!

In the previous edition of the magazine, we asked our readers to come up a creative congratulatory card to mark the 20th anniversary of RegioGraph. We want to thank everyone for their submissions!

We were most impressed by the congratulatory card submitted by **Uwe Schenke**, head of information systems at **WEPA Apothekenbedarf GmbH & Co KG**.

Congratulations to Uwe Schenke and much success and fun working with the full version of RegioGraph Planning!



## Shared geomarketing knowledge is doubled geomarketing knowledge!

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