



RESEARCH NEWS

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Dear Readers,

The refugee topic is currently leading in the German and European media. It concerns many areas of life and impacts various sectoral policies. Scientists, administration experts and politicians are required to quickly find solutions for urgent problems but also to deal with medium- and long-term perspectives, impacts and requirements for action.

Even though the current issue of the Research News does not concentrate on the refugee topic but, as usual, covers the whole range of our research activities, various articles point out how hotly disputed the topic is.

Accommodating refugees and integrating them into society and creating affordable housing in large cities were topics being intensively discussed during the 9th Federal Congress on National Urban Development Policy. The question, how the current housing policy challenges can be better managed, is treated by the Alliance for Affordable Housing and Building. The aspect, which economic effects are related to migration, will also be analysed in this issue based on global remittance flows. Furthermore, the question is raised which consequences closed frontiers would have for transnational cooperation.

With our research activities and projects, we hope to make a little contribution towards solving the various challenges related to the crisis of refugees whether by providing information, developing concepts, communicating and transferring best practices or by promoting cooperation across borders.

We wish you happy reading!

The editors

- **Spatial Development**
 - Opening development perspectives to small towns – page 2
 - Vital regions – page 3
 - Neighbouring regions of Germany – page 4
- **Urban Development**
 - 9th Federal Congress on National Urban Development Policy – page 5
 - The co-creative city of the 21st century. X-Town 2025 – page 6
- **Housing**
 - Alliance for Affordable Housing and Building – page 8
 - New results from the BBSR Transaction Database – page 9
- **Building and Architecture**
 - European conference “Energy efficient building stock” – page 10
 - ÖKOBAUDAT promoting a Europe-wide life cycle assessment standard – page 12
 - First climate-neutral building of the Federal Government “Haus 2019” – page 13
- **Latest Map**
 - Remittances – page 14

Spatial Development

Opening development perspectives to small towns

The discussions on cities and urban development of the last years have been mainly characterised by global cities, megacities, agglomerations and large cities. Small towns have so far not received the attention by research and politics they deserve although they are important elements of the German polycentric urban system. With 2253 towns, their proportion in all types of towns, cities and municipalities in Germany is 55.8%. 33% of the population or 27 million people respectively live in small towns.

In spite of their high share, they mostly receive little attention in Germany as well and are often underestimated. However, the sustainable development of small cities is essential to stabilise them as places providing services of general interest and work or services for the whole society. The latter include production, natural and recreational areas, the production of renewable energies or measures to adapt to climate change e.g. creating retention areas.

But most small towns are fully occupied with fulfilling their duties, which limits their chances to push an active (urban) development. Especially for small towns it is important in the context of the competition of cities to take a stand with their own potentials

and to cooperate with other towns and cities successfully. But how can small towns succeed to develop and implement appropriate future perspectives on their own?

The research field “Potentials of peripheral small towns”, funded under the Experimental Housing and Urban Development (ExWoSt) research programme, highlights the particular situation of small towns in peripheral locations and the question concerning a sustainable development of these towns. Especially for this type of small towns, the BBSR statistics reveals a special need for action (Fig.).

During a four-year research process, the basic economic, social and demographic conditions of this type of town will be analysed, future potentials of a sustainable (urban) development be identified and their valorization be promoted. In June 2015, eight model projects were chosen, in the context of which approaches for action for the specific local situations, recommendations for action to politicians and experts and especially exemplary strategies for other small towns are to be formulated in their related towns by the beginning of 2018.

Working with scenarios is a central method. It goes far beyond the usual activities prior to the formulation processes of integrated urban development concepts and guiding principles. The aim is to find undiscovered potentials regarding towns, to use and to valorize them for their development. The strongly communication-oriented method is accompanied by local workshops, “BarCamps” for young people and a “step-by-step” learning exhibition. In order to identify and use the real potentials, it is necessary to think beyond traditional paths and business sectors (“relief town”, spa town, tourism...) with a lack of added value.

Even if the research field is going to run by 2018, it can be said that all parties involved have to break away from the (demographic) growth paradigm, especially regarding small peripheral towns. This change of perspective, away from stigmatization and a deficit view, includes the chance to change mentality combined with valorization and an open view towards the challenges and especially the performances and potentials of small towns.

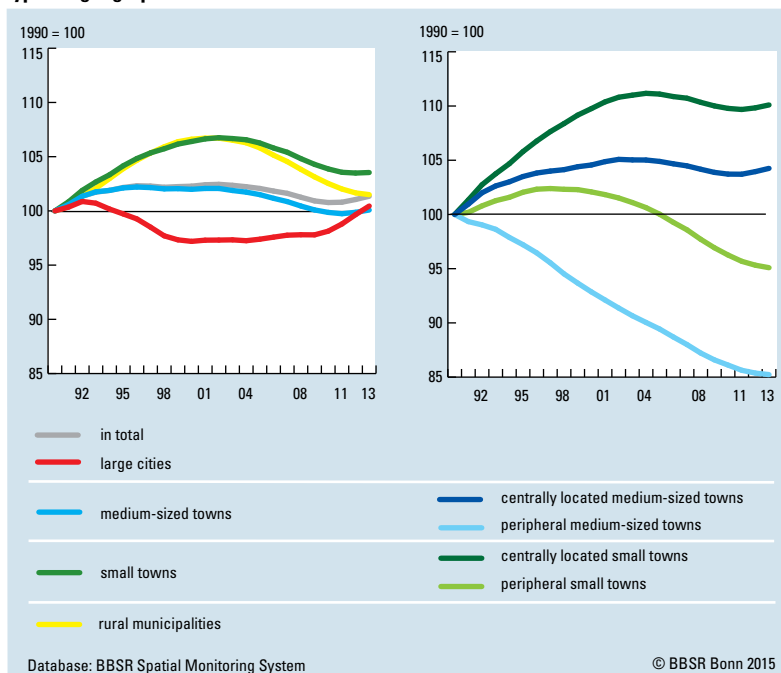
For more information

on the ExWoSt research field “Potentials of peripheral small towns”, please see project website (in German): www.exwost-kleinstaedte.de

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Demographic development according to forms of cities, towns and types of geographic location 1990 to 2013



Vital regions – active regional development as a future challenge

Regions have to face considerable challenges in order to remain attractive and active for the population and enterprises: Apart from ensuring services of general interest, other sectors of regional development such as economy and labour market or overall fiscal and ecological conditions play an important role. This is why the BBSR has started a new Demonstration Project of Spatial Planning aiming to support an integral, future-oriented regional development with spatial-functional alignment. The project started in November 2015 and is expected to be finished in June 2022.

The Demonstration Project of Spatial Planning “Vital regions – active regional development as a future challenge” is planned to promote integral development strategies in selected regions. These strategies

- aim at an integrated development perspective – while considering economic, climatic and social trends as well as current and possible overall financial conditions,
- are to be defined by involving relevant regional stakeholders and to be approved on all political levels,
- are to take already existing regional development perspectives or sectoral concepts into account and
- are to help prepare concrete measures ensuring the future regional development.

The new Demonstration Project mainly addresses institutions or organisations responsible for supralocal and interdisciplinary spatial development. Their spatial orientation should be strong enough to depict functional interdependencies in the fields of labour market and services of general interest.

Considering overall financial conditions

In view of the financial basic conditions to be changed from 2020 (e.g. balanced-budget amendment or reform of the federal financial ties) and the connection between the demographic development and municipal budgets, it seems necessary to link financial issues with regional development. This is especially required when it comes to financing and implementing concrete projects. The new Demonstration Project is to deal with this financial aspect explicitly, i.e. whether it is

possible to finance the strategy developed. In doing so, the main topic is how do regions handle low budgets and the increasing number of political challenges?

One essential goal is therefore to achieve that the model regions deal with the situation of their public budgets and the impacts of the demographic and economic change on them.

Call for project proposals

Against this background, regions of different sizes are searched for the Demonstration Project. The first four model regions will be presented during the kick-off conference in spring 2016. Three more rounds with four model regions each are going to start at planned intervals between 2016 and 2018. Coordinated by a consulting firm and concomitant research in the field of public finance, the altogether 16 Demonstration Projects are going to start an intensive exchange of experience by 2022.

More information

(in German):
http://www.bbsr.bund.de/BBSR/DE/FP/MORO/Studien/2014/LebendigeRegionen/01_Start.html

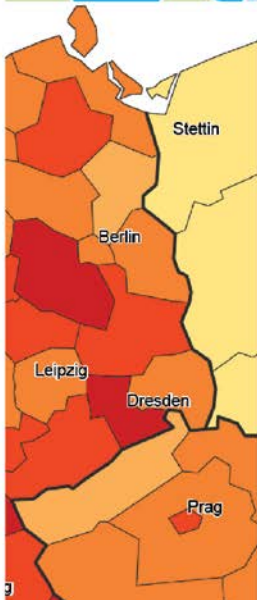
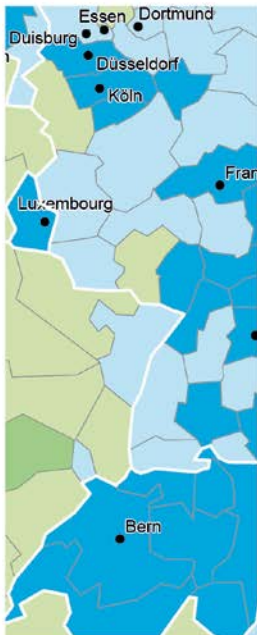
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Source: BBSR photo archives / W. Strubelt

Spatial Development



www.bbsr.bund.de > MORO > Programme

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Adding to spatial reporting by taking a look at the neighbouring regions of Germany

In autumn 2015, a new Demonstration Project of Spatial Planning started, which is going to deal with the contents and requirements of a spatial information system in Germany taking the border regions and their neighbouring regions into account.

With the project, the BBSR aims to pay more attention to these regions and also to formally underline the monitoring of the neighbouring areas of Germany and to give regions on both sides of the borders separate level of territorial observation.

With this topic, the BBSR seems to follow a Europe-wide trend. Other EU member states, such as France, have already similar spatial reporting activities. The EU Commission as well recently launched an initiative dedicated to the still existing obstacles in border regions.

In the last years, border regions increasingly turned into neighbouring regions. In many cases, they have developed an individual joint identity, cooperations by way of euregios and in the context of Interreg having played a not unimportant role. Although borders are hardly significant in terms of shopping and leisure activities anymore, they cannot be ignored as a barrier when using infrastructures and services and, despite related comprehensive regulations, with regard to the free movement of labour.

Many spatial phenomena in the border regions are not based on the state of being a border region but are due to national general conditions and macroregional functional interrelationships. A look towards the other side of the border and monitoring subregions on both sides of the borders as a whole with their functional interrelationships helps to identify regional disparities, joint structures and developments, functional differences but also mutual functional support and development chances.

Spatial information about border and neighbouring regions must fulfil two aspects. First of all, assessing spatial structures and processes requires to be put into a wider national and also european context. On the other hand, special spatial issues arise along borders and in the neighbouring regions.

This area of tension between a national perspective and a comparative and classifying regional view finally forms the basis for this MORO project.

Using available regional knowledge and involving regional partners and specialised local knowledge is crucial against this background.

Based on the model regions, the range of topics, related geographical definitions and the regional monitoring levels shall be fixed and translated into a data and indicator model. The possibilities of defining future cooperation and division of labour between regions, countries and the BBSR shall be in the same way discussed as the possibilities of implementing such nationwide monitoring activities after the end of the project phase.

At the beginning of the project in autumn 2015, 5 regions had expressed their interest in dealing with these issues. The regions are the following:

- Euroregion Neisse-Nisa-Nysa (Neisse-Nisa-Nysa euroregion)
- Internationale Bodenseeregion/Raumordnungskommission Bodensee in Zusammenarbeit mit der Geschäftsstelle der Internationalen Bodenseekonferenz für Alpenrhein-Bodensee-Hochrhein (International Lake Constance region/Lake Constance spatial planning committee in cooperation with Office of the international Lake Constance committee for the Alpine Rhine-Lake Constance-Upper Rhine region)
- Regional Planning Association Middle Upper Rhine
- Land Rheinland-Pfalz für die Großregion (Federal State of Rhineland-Palatinate for the Greater Region)
- StädteRegion Aachen für die Grenzregion Charlemagne (Aachen city region for the Charlemagne border region)

The project will be finished in winter 2017. Two events, planned for the beginning and the end of 2017, will provide a large interested public with the opportunity to inform about the project and to exchange with other experts. More details can be found soon on the BBSR website (in German).

Strategies for urban diversity

9th Federal Congress on National Urban Development Policy

In the context of the National Urban Development Policy programme, the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety and the Federal Institute for Research on Building, Urban Affairs and Spatial Development in Germany develop a position on urban development in Germany. On 16th to 18th September 2015, the 9th Federal Congress on National Urban Development Policy took place in the reopened KONGRESSHALLE am Zoo Leipzig (conference hall at Leipzig Zoo).

In our society, which becomes more and more diverse, individualization and pluralization, globalisation and migration are important drivers of development. Cities are the places where the variety of our society becomes the most apparent. In cities, various social situations and careers, biographies and life plans, feelings of belonging and origin overlap, they feature a simultaneity of crossing, meshing and newly arising milieus. The resulting diversity goes far beyond societal multiculturalism. From the view of the urban development policy, the question arises how city and society may continue to provide the binding forces needed and how people might live together mutually accepting and acknowledging each other.

This is why this year's Congress, which was attended by over 1,000 persons from administrations, enterprises and the civil society, had the topic "Urban Energies – Living Integration". "Integration" as a central element of sustainable urban development had been chosen as it implies both the inclusion of various interests, the bringing together of different procedures and the integration of new residents. Against the background of the current situation in Germany, discussions and lectures during the Congress focused on the accommodation of refugees, their integration into society and the creation of affordable housing in large cities.

During his Fact-Checking, Harald Herrmann, Director and Professor of the BBSR, made clear that, due to the enormous international migrations, cities, towns and municipalities face enormous challenges: "In the next few years, we will require a large number of new dwellings, in growing large cities, especially



Photo: Milena Schlösser

in the low-cost housing sector. Our Institute assumes that Germany will need at least 350,000 dwelling units additionally per year. Dwelling units means all kinds of housing, i.e. one-family houses, freehold and rented flats."

Thus, new avenues have to be followed apart from proven procedures in order to tackle these complex tasks. Such new approaches and innovative procedures are realized with so-called pilot projects funded under the National Urban Development Policy programme. So far, over 150 pilot projects have been launched under the programme. During the Congress the concrete impacts of the current developments and possible strategies and instruments of towns, federal states and the Federal Government could thus be discussed based on examples. Last year, for example, 15 pilot projects were selected in the context of the 5th call for project proposals. By 2017, they are going to put innovative approaches towards "Living together in the City" into practice and were able to present interim results at the Federal Congress.

Towards the end of the Federal Congress, the German Federal Government's position concerning Habitat III and the New Urban Agenda was handed over to a UN Habitat Secretariat representative. Habitat III will be the first world conference to take place following the adoption of the "2030 Agenda for Sustainable Development". The New Urban Agenda will thus be the first contribution towards implementing the global sustainability goal.

More information

www.nationale-stadtentwicklungspolitik.de
www.nationale-stadtentwicklungspolitik.de >
 English > Publications

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The co-creative city of the 21st century X-Town 2025 – a scenario

How will urban planning take place in the future? How will the relationship between citizens and local governments change? Are we on the right track with our urban planning instruments to develop sustainable and vital towns which provide a home to their citizens – and good arrival cities for newcomers as well? To answer these questions, a scenario for 2025 was drafted in the BBSR – based on societal trends and a number of research projects and stimulated by a variety of innovative projects and concepts in German cities. This scenario rather takes planning as non-planning and keeps up fuzziness and improvisation as important parameters.

X-Town is a town in the middle of Europe in which the attitude towards urban areas and their accessibility has fundamentally changed. In X-Town, old planning principles are revised and replaced by new instruments strengthening informal activities and their actors and turning them into basic elements of urban development processes. Civil society commitment and social creativity become a central resource in order to support the cohesion of the urban society, the integration of migrants and new forms of local economy.

Experimental use of space

In the scenario, the continuous shrinking of the city with many vacant buildings and a crumbling social infrastructure gives rise to declare a special zone for the “experimental use of space”. In order to promote a self-determined civil society commitment in X-Town, confining provisions in plans were moderated and the strict use typology of the Federal Land Utilisation Ordinance was abolished. The local government now only has to guarantee the central infrastructure supply while civil society players are able to take own decisions within their projects.

Reviving vacancies

Urban development in X-town benefits from the residents that in the last years set up increasing communities and developed a variety of alternatives to the former urban development. This is facilitated by new

regulation, the so-called “revive clause” (Section 176b of the Federal Building Code), which clearly defines the social responsibility of ownership. According to the clause, buildings or properties, which have been vacant for more than three months or have become dilapidated, can be occupied by “revivers” as legitimate temporary users. A particular form of revival are e.g. “cross-age” flat-shares or houseshares, in which senior citizens share their flats or houses with other persons interested.

The community in the centre

Many new creative citizens projects came into being when the town centre of X-Town was declared a “Community Improvement District (CID)”, in which large vacant properties are taken over by the local government. Planning regulations in force were abolished and a completely unbound urban development zone with only one rule was created: All conversion projects must include a collective approach, at least in the ground floor zone. The construction of collective kitchens, open workshops, playrooms, co-working spaces and other common rooms is supported from a community funds. The CID was the starting point for a new sharing culture in X-Town, which means that things and competences are exchanged – from irons to dancing lessons. Vacant storefronts and department stores in X-Town have started to develop into locational factors. Very quickly, the town centre has become again a popular and busy part of the town.

Optional spaces

A planning council out of neighbours and experts, which is filled every half year by lot, decides whether a new building is to be constructed in X-Town. Based on a newly introduced bonus system, clients are entitled to a reduced council tax if their buildings are likely to include optional spaces which can be informally occupied by the residents of X-Town. Such areas may include their own gardens being opened on certain days, to use small free areas for children to play, to use roof gardens for urban gardening, to provide



Source: Stephan Willinger, Stephany Haury

charging stations for e-cars and mobile phones or to provide a guest room for cost-free couchsurfing. A similar model is implemented in larger development areas. In these areas, optional spaces from the beginning provide the basis for planning, which is gradually extended by residential and working locations as well as common infrastructure. Informal uses are thus typical for new urban districts, which is why they are especially appropriate as arrival towns or cities for migrants.

Assessing the quality of life

A new instrument was developed to measure the quality of life in X-Town. The informally occupiable space per inhabitant, the so-called creativity ratio one (CRO), became the main unit of measurement. A high CRO signals that a variety of unoccupied free spaces is available for the urban society. Another criterion to measure the target achievement in X-Town is the informal urbanity index (IUX). It measures the vitality of an urban district based on the number of civil society projects. The local government of X-Town produces the IUX in cooperation with residents, project initiators and other creative actors. New and existing informal urbanity projects, their managers, users, spaces and offers are presented in the Internet.

Liquid democracy

The spatial development in X-Town is, on the one hand, based on the informal activities of civil society groups, which more or less spontaneously occupy and convert spaces. These activities are not steered anymore

by a higher authority in line with a statute or approval. Maximal transparency and continuous communication enable instead that concurrent uses can be discussed and negotiated and that solutions do not put certain groups at a disadvantage.

Apart from this spontaneous basis, lasting projects are developed and implemented on a cooperative basis as well. One important instrument in this respect is the collective project development platform "X-liquid". On this platform, civil society actors may submit proposals online and release for discussion. Ideas can be formulated and counter-initiatives be developed. Urban planners, so-called X-agents, support the initiatives in searching for locations and in the further project development.

Between vision and reality

What does this short report about a not fully realised town of the 21st century demonstrate? In X-Town, the roles of the state and of citizens have considerably changed. The societal development is based on the free development of each person, on the abolition of rules, on open possibilities for everyone but also on a grown responsibility of the individual for the community. Social relations, which have so far been vertically and centrally organised, turn into a horizontal and decentralised mode. This mode is characterised by an enormously growing importance of informal activities, that means of all societal activities arising beyond education, government and planning. In this regard, the informal town in Central Europe is able to learn a lot from the global south.

For the long version of this article (in German), please see "Innovations in spatial planning" (= Informationen aus der Raumentwicklung (IzR), Issue 3. 2015, ed.: BBSR, Bonn 2015).

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Housing

Alliance for Affordable Housing and Building

Since 2010, Germany has been recording a positive migration balance and growing population numbers especially in large and university cities. The reasons for this development are an increasing number of migrants, a good economic development and the high attractiveness of large and university cities particularly for young students and trainees. The existing housing supply and new housing construction cannot keep up with the demand in these cities.

The current housing market situation confronts the housing and construction policies with great challenges. In cities, where people have difficulties to find affordable housing, more residential construction, an intensive social housing assistance and a better support of low-income households regarding housing costs are required. Moreover, the gap of generation-oriented housing has to be filled and efforts to save energy in buildings have to be promoted.

This is why the Federal Government, the federal states, municipalities and associations joined together to form the Alliance for Affordable Housing and Building in summer 2014. The Alliance takes a central position in coping with the current housing problems.

In order to deal with all relevant fields of action, committees and working groups were established and additional experts involved. All proposed measures will be summarised in an action programme. The goal is to devise realistic solutions and good examples for the stakeholders involved.

Structure of the Alliance for Affordable Housing and Building

The Alliance considers itself to be a process and acts through four fields of action:

- strengthening investments into housing,
- reducing building costs,
- senior-friendly conversion in the neighbourhood
- social and climate-oriented housing and building.

Two times per year, representatives in leading positions of all Alliance partners discuss the Alliance's goals, progress and results during top-level meetings. These meetings are usually preceded by a meeting of the Housing and Property Council which involves representatives of housing and property associations, of the central German tenants' association and of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety.

The Alliance Forum is a series of events accompanying the Alliance.

The dialogue process to develop specific proposals for solutions and actions takes place in working groups or committees, under the overall control of the Federal Ministry. The groups include representatives of the thematically concerned Alliance partners, of other affected federal ministries as well as experts from the scientific and political sector and from associations.

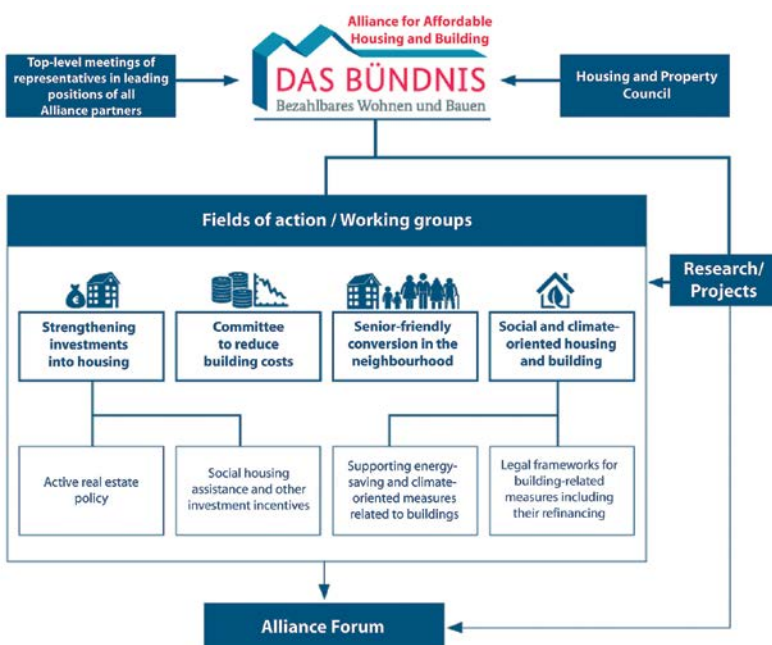
The results of the working groups will be summarised in a final report and provide the foundation for specific proposals for action. The final report is planned to be submitted at the end of 2015. On its basis, legal frameworks can be adapted in the future. On 3 and 4 March 2016, the results will be presented during a national congress in Berlin.

Further information

(in German): <http://www.bmub.bund.de/buendnis-wohnen/>

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Quelle: Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety

New results from the BBSR Transaction Database: lots of movement on the German residential portfolio market

Transactions with residential housing portfolios as well as sales of entire housing companies have gradually increased since the late 1990s. To observe the market activities and analyse changes in the ownership structure, the BBSR developed a transaction database for residential portfolios. The semi-annual analysis and interpretation allows to detect dynamics in the market on time and gives useful suggestions for housing policies. The database includes large-scale portfolio deals with more than 800 housing units since 1999 and – starting in the second half of 2006 – small transactions with 100 up to 800 units.

At this point, the database contains 502 portfolio transactions with 3.11 million dealt units for the period between 1999 and the first half of 2015. After the global financial crisis of 2008 and low market activities as a direct consequence, transaction dynamics have accelerated since 2011 due to improving market conditions. In 2013 and 2014, the pre-crisis level of around 300,000 sold housing units was reached again. Therefore, the current period of time can be considered the second boom phase of transaction activities after the first phase between 2004 and 2007.

The first half of 2015 supports the present development with 264,000 traded flats in 24 residential portfolios. Since 2013, between 19 and 28 transactions with more than 800 units were registered every six months, averaging 22 sales per half-year. In the first six months of 2015, almost half of the transactions had a volume of only 800 to 2,000 housing units. Compared with that, more than 10,000 units were traded in six transactions, having increased the share of large-scale deals in comparison with preceding half-years.

Besides, regarding transaction volumes, large-scale sales with more than 10,000 sold flats gained importance over the last years: in the first six months of 2015, 221,000 units (84% of all sold units) were traded in these transactions. Crucial for the high significance of large transactions is the acquisition of the market-listed GAGFAH Group by Deutsche Annington SE. This deal alone constituted 51% of all market activities in the past six months (135,500 housing units). The newly-formed

and renamed company Vonovia SE owns 370,000 flats throughout Germany and is by far the largest housing company in the country.

Similar to the last two years, listed housing companies are the key group for the German transaction market in the first half of 2015. Some of these companies went public in recent years, after their international investors had used the favourable market conditions to exit their investments by having them listed on the stock market. Currently, most of them pursue an active growth strategy by acquiring new portfolios or housing companies: Beside the purchase of GAGFAH Group, Deutsche Annington SE bought 18,700 units in Baden-Württemberg in June 2015. Additionally, Adler Real Estate AG – another listed housing company – took over 95 % of the shares of Westgrund AG, which represent 19,700 traded units. These three large-scale transactions in the first half of 2015 constitute almost two thirds of the market activities.

It can be expected that the high market activities will continue: Other major takeovers have already been announced and several capital increases to finance past and future transactions have been carried out.

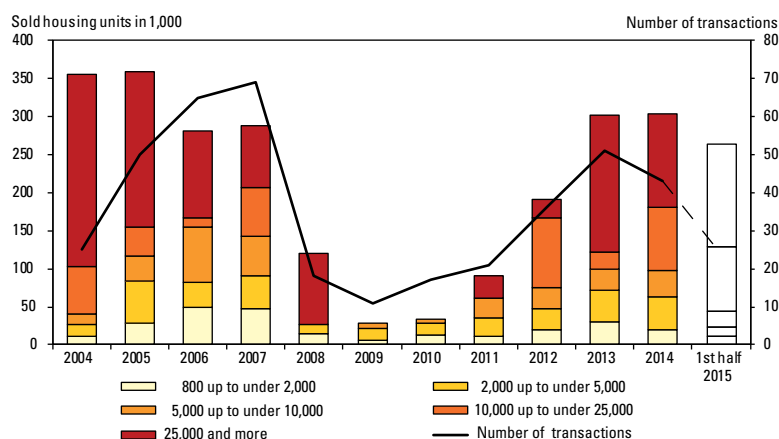
More information

Themen > Wohnen und Immobilien > Marktakteure > Projekte und Fachbeiträge > BBSR-Datenbank Wohnungstransaktionen

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Sold housing units and number of transactions on the German transaction market, 2004 – first half of 2015



Please note: only sales of residential portfolio with 800 housing units or more.
Data source: BBSR Transaction Database

Building and Architecture

Report: European conference “Energy efficient building stock – Present and future requirements of our European neighbours”

On 16th September 2015, the BBSR hosted the European conference on “Energy efficient building stock – Present and future requirements of our European neighbours” which took place in the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, Bonn.

The main aim of the conference was a European exchange of experiences concerning the energy regulations for existing buildings. This included the discussion on how Article 7 (Existing buildings) and Article 8 (Technical building systems) of the directive on the energy performance of buildings (2010/31/EU) should be implemented.

First of all, the German system of requirements from the enforcement point of view of the German federal states (“Bundesländer”) was critically presented by a representative of the Supreme Building Authority at the Bavarian Ministry of the Interior, for Building and Transport responsible for the enforcement in Bavaria. Thereafter, representatives of Norway, the United Kingdom, France, Flanders (Belgium), Luxembourg and the Netherlands presented their approaches and difficulties to fulfil the requested energy savings regarding existing buildings. During the final panel discussion, the mainly German audience was highly interested to know more about some of the presented aspects. One of the focuses of discussion was the current financial incentive system in Luxembourg. Furthermore, the “Green Deal” in the United Kingdom, issuing energy performance certificates to all buildings in the Netherlands and some more points were more deeply questioned and controversially discussed.

Participants of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, the Federal Ministry for Economic Affairs and Energy and experts in that field assessed the conference as a valuable source for new and deeper thoughts about certain aspects of the regulations for energy conservation and energy efficiency in the building sector.

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Source: both photos Hartmut Tröger

Environmental impacts of building products: ÖKOBAUDAT promoting a Europe-wide life cycle assessment standard

The Federal Institute for Research on Building, Urban Affairs and Spatial Development has expanded the ÖKOBAUDAT database by various new building product data sets and provided it with an online interface allowing to directly import life cycle assessment (LCA) data on the Internet. The new version is available at www.oekobaudat.de. Architects, engineers and planners are able to use ÖKOBAUDAT for assessing building materials and products in the context of the life cycle assessment of buildings. Based on indicators, the possible environmental and climatically relevant impacts of the various building materials and products are described in data sheets. Each sheet also contains information on the reference unit, validity and quality of the data.

In the new version, important quality-assured structural engineering data sets, including those concerning wood products, laminates, sealing materials, photovoltaics, triple glazing and post and rail constructions, were added to ÖKOBAUDAT. ÖKOBAUDAT contains both generic data sets and company- or association-related data sets from Environmental Product Declarations (EPD). Altogether there are more than 700 building products, most EPD data are delivered by Institut für Bauen und Umwelt e.V. Further BBSR's project partners are the Thünen Institute, ift Rosenheim and thinkstep AG.

The data can be filtered according to search functions and directly imported in all current building-related life cycle assessment tools. Based on open-source software, ÖKOBAUDAT is the first environmental database worldwide fully reflecting the criteria of the European Environmental Product Declarations standard (DIN EN 15804). The possibility of importing and exporting data via online interfaces as well as the compatibility with European standards enables to provide standard life cycle assessment data on a European level. Incorporating the life cycle assessment data of Austrian Bau-EPD GmbH established a cooperation with a European programme operator. The aim of this cooperation is to make the ecological parameters of buildings comparable across Europe and thus more

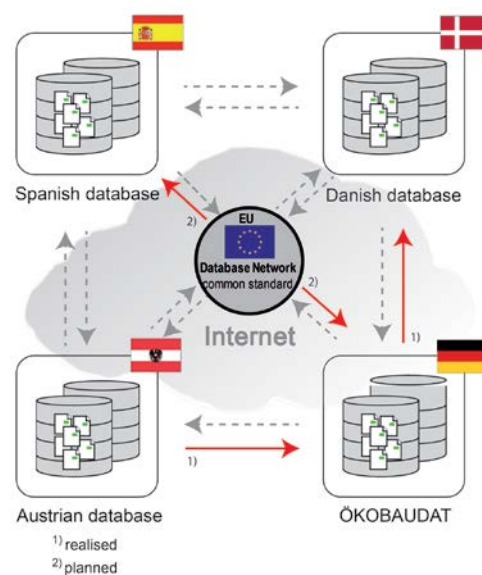
transparent. The BBSR also established a working group of experts to achieve this aim.

Measuring the environmental impacts of building materials and products is an important element of assessing the sustainability of buildings. This is why, via the "eLCA" life cycle assessment tool, the environmental indicators of the database are considered in the German Federal Government's Sustainable Construction Evaluation System for Federal Buildings (Bewertungssystem Nachhaltiges Bauen BNB). The tools have created a comprehensive life cycle assessment infrastructure. ÖKOBAUDAT is supported by the "Future Building" research initiative of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety.

www.oekobau.dat
www.bauteileditor.de
www.nachhaltigesbauen.de

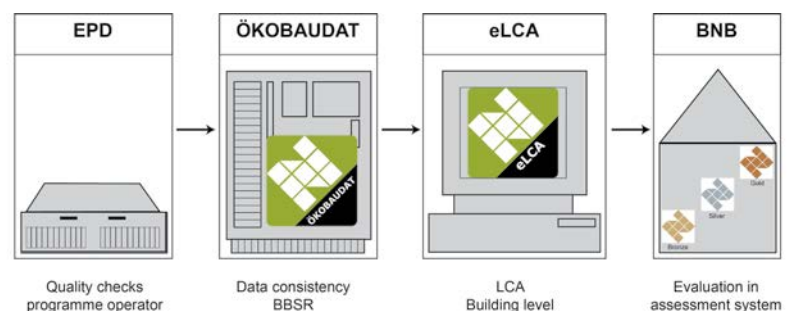
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Linking databases, importing and exporting ÖKOBAUDAT data in a European context

Life cycle assessment in the context of the BNB – from product and basic data to the overall assessment of buildings



First climate-neutral building of the Federal Government “Haus 2019” – results of the monitoring



Left: **South elevation of the building** Right: **View of the roof with photovoltaic modules and solar thermal collector**

Source: BBR, Photo Andreas Meichsner

On 8 July 2010, the recast of the Energy Performance of Buildings Directive (EPBD) (2010/31/EU) came into effect. One requirement of this Directive is that, from 31 December 2020, all new buildings in the European Community have to fulfil the nearly zero-energy standard. Due to the leading role of public buildings, the aforementioned requirement has to be fulfilled for these buildings already from 31 December 2018. As an expression of its serious efforts in the field of climate protection, the German Federal Government decided in June 2011 to adopt the requirement of the 2010/31/EU directive immediately. According to the decision the Federal Government had to construct new buildings in the nearly zero-energy standard already from 2012.

A pilot project which started in 2010 aimed to fulfil the future energetic requirements for buildings already earlier. The project name “Haus 2019” was derived from that aim and from the requirements of the EPBD (2010/31/EU). In detail, the aim of that project was to construct the first climate-neutral building for the purposes of the Federal Government. Furthermore, a very sustainable solution, that means a highly ecological, economic, socio-cultural and functional quality, had to be developed. The sustainability of the building should meet the highest level of the “Federal Assessment System for Sustainable Building” (BNB, 2009 version). The building had a net floor area of approximately 1,000 m² and was to be located in Berlin.

Following an intensive planning phase and a careful construction phase, the building was

put into operation in September 2013. From then on, the monitoring process of the building operation has been running. Preparing the monitoring activities (developing a monitoring concept, describing the required monitoring devices, controlling the implementation of the monitoring devices, checking the monitoring data) was an integral part of the building project. The monitoring is led by the BBSR. This article reports about the first two years of the building and compares the results with the benchmarks expected from the planning phase.

Renewable energies are neither permanently available nor unlimited. This is why the aim of a climate-neutral building is fulfilled if the annual energy demand and the annual energy generation are minimally balanced. Balancing means to cover the total amount of energy demand of the building by only using renewable energies. Based on a very energy-efficient building envelope (the individual parts meet the requirements of the passive house standard), the energy supply concept (see Figure 1) was developed.

Two main premises for developing the energy supply concept were that the renewable energies, which are available on the location, are optimally used and that the complexity of the concept is minimized. The heating demand of the building is covered by a heat pump which uses ground water as a renewable source. The ground water is also directly used to cover the cooling demand. The building has a permanent demand for domestic hot water. A part of that demand is covered by solar thermal collectors. Mechanical ventilation equipped with a highly

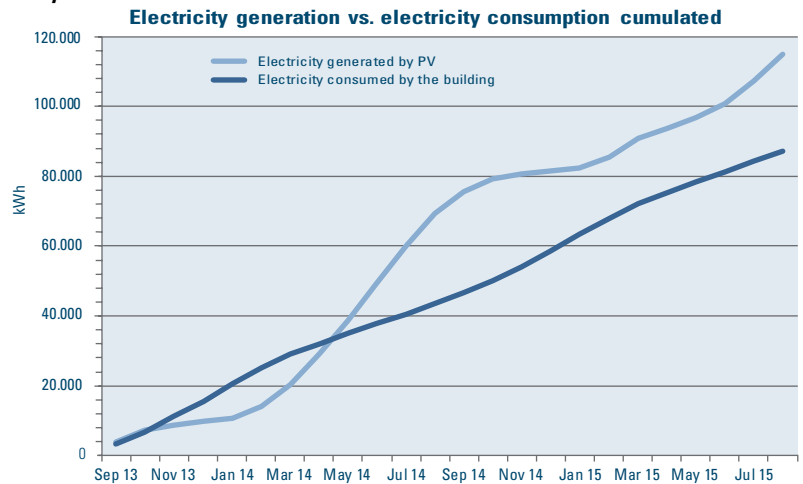
efficient heat recovery supplies the fresh air required and reduces heat losses at the same time. To cover the electrical demand, 280 photovoltaic modules with a power of 66 kWp in total were installed on the roof of the building. The annual generation of the photovoltaic (PV) system expected is approx. 53,000 kWh. Beside the PV system, the building is also connected to the electricity grid of the site. In the long term, a battery shall be used.

The operation of the building is monitored by the BBSR and its partners (TU Berlin, TU Braunschweig). The results show that the main objective, a climate-neutral building, was achieved in both years of operation. Nevertheless, different optimization potentials are detected from the detailed analyses of the data.

From the start of the building operation in September 2013, the electrical consumption for heating, cooling, lighting, domestic hot water and the operation of all other devices (elevator, computers, kitchen devices etc.) has been 87,097 kWh in total. However, the PV system generates 114,828 kWh in total, which is a plus of 27,731 kWh in our overall balance (Figure 2). It can be said that we have achieved our main objective in total but also in each year of operation.

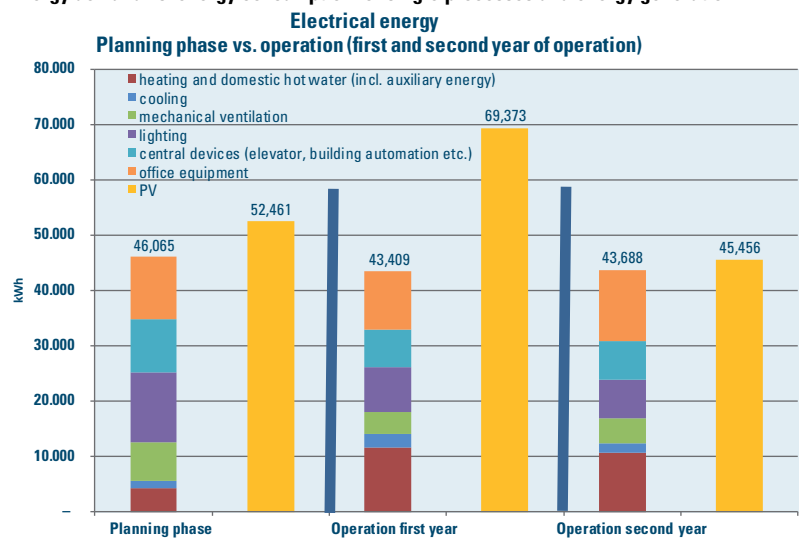
Having a look at the benchmarks of the planning phase shows that, during the first years of operation, the energy consumption for heating and domestic hot water was significantly higher than expected. This effect can be mainly explained by a reduced occupancy of the building. This is why the internal heat gains were missed and have to be compensated by the technical devices. At the same time, the electrical demand, for instance for the office equipment, was lower than expected. This effect was even more strengthened by the real occupancy times of the building. During the planning phase, an occupancy of the building from Monday to Friday between 06:00 a.m. and 10:00 p.m. was taken into account. But the building is mainly used from 08:00 a.m. to 06:00 p.m.. Due to the presence-dependent control of ventilation and lighting, the running times and the measured energy consumption of these systems are lower than expected (Figure 5). Figure 5 also shows, that there were some problems with the PV system in the second year of operation. Due to these problems, the generation of electricity decreased by around 35 % compared with the first year.

Figure 1
Comparing the energy demand for building operation and the energy generated by PV systems



Source: BBSR

Figure 2
Energy demand vs. energy consumption for single processes and energy generation



Source: BBSR

Even if the operation of the building has not been optimized by now, "Haus 2019" already generates more renewable energy than it consumes. Thus, the building fulfils the "climate-neutral" standard. The plus of electricity is used on the same site where the building is located. And also the second aim of sustainability was achieved. As a result of the assessment procedure in January 2015, the building received the Gold Standard sustainability certificate. The project thus was really successful – the building is an exemplary solution for the upcoming requirements to our new buildings.

For more information

on "Haus 2019", please see UBA website (in German): <http://www.umweltbundesamt.de/neubau-buerogebaende-haus-2019-in-berlin>

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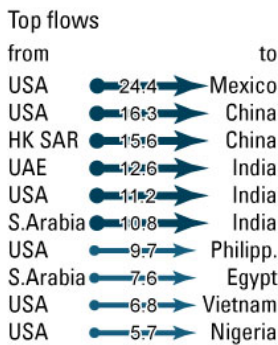
Latest Map

Remittances – Migration helps boosting economic development in cities

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Remittances [US\$ billion]



Top countries

| receiving | Value [US\$ billion] | sending | Value [US\$ billion] |
|-----------|----------------------|-----------|----------------------|
| India | 70.4 | USA | 130.9 |
| China | 64.1 | S. Arabia | 44.5 |
| Philipp. | 28.4 | UAE | 29.3 |
| Mexico | 24.9 | UK | 25.1 |
| France | 24.8 | Germany | 23.8 |

HK SAR - Hong Kong Special Administrative Region of the People's Republic of China
 Philipp. - Philippines; S. Arabia - Saudia Arabia

Doug Saunders (2010) put it right: "(...) the great migration of humans is manifesting itself in the creation of a special kind of urban place. These transitional spaces – arrival cities – are the places where the next great economic and cultural boom will be born (...)."

In the context of latest research studies and scientific papers on migration (cf. Research News 1/2015), the BBSR took a closer look at global remittance flows to provide the evidence that migrants in cities, where they arrive and settle down, contribute significantly to the economic development of these cities and urban places as well as their home nations.

Taking 2014 data as a basis, it becomes clear that the top five remitting countries and their cities are the USA, the MENA region (with the United Arab Emirates and Saudi Arabia as its activity centres), the United Kingdom and Germany. Profiting from these flows are the top five receiving countries and their cities in India, China, the Philippines, Mexico and France (cf. data box on the left).

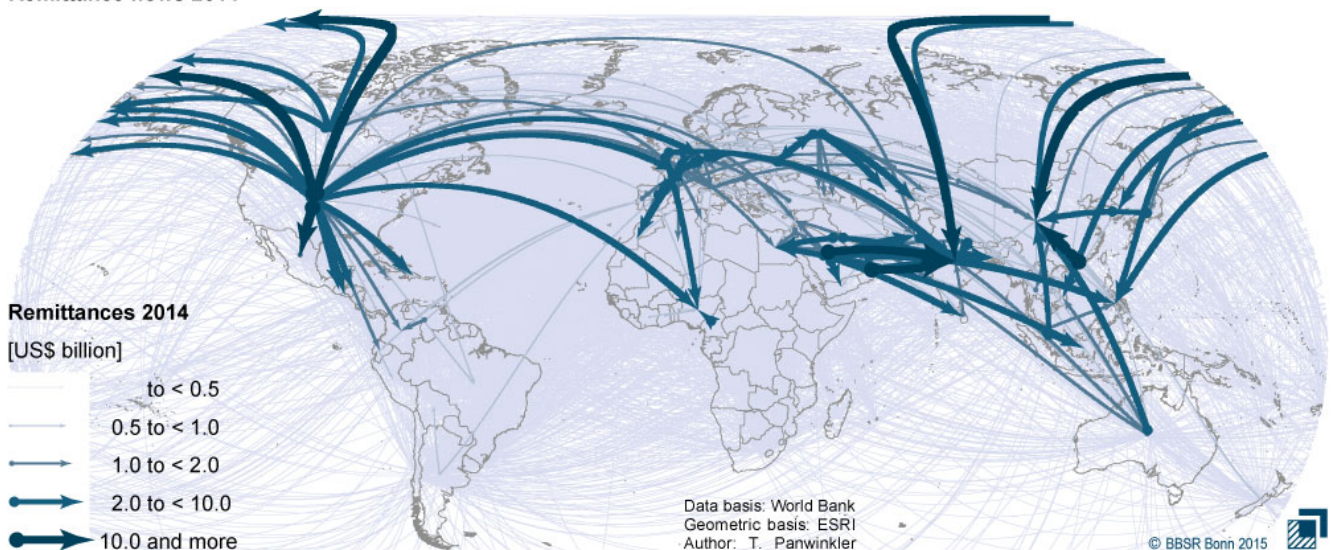
Overall, almost US\$ 583 billion were remitted to home countries being almost 1 % of the gross world product (global GDP). The global remittance flows thus exceed global aid spending, which amounts to US\$ 150 billion of the total official net development assistance

and official aid received in 2013, by almost four times (The World Bank Group 2013/2014).

Though the data gathered by the BBSR is primarily derived from data sources aggregated on a national level and the map subsequently reflects the remittance flows of entire countries, the correlation between these flows and cities can be clearly seen. In that respect, a recent study of ESPON shows that in one of the top sending countries, the United Kingdom, 35.5 % of the national GDP is generated in the metropolitan area of London (ESPON Atlas 2014). In return, a top receiving country like India is characterised by the fact that its top 10 cities host around 8 % of its population and produce 15 % of its total economic output (Census of India 2011, IIHS Geospatial Lab 2011).

One may thus generally state that cities in particular profit from the remittances sent by migrants. Migrants act as carriers of knowledge exchange, invest their earnings in primarily small and medium-sized businesses, create working places and thus contribute to national tax revenues and local neighbourhood development. Furthermore, they are the constructors of foreign trade relations in which they act as mediators between languages and (business) cultures.

Remittance flows 2014



Gleichwertigkeit auf dem Prüfstand (Equivalence under scrutiny)

Informationen zur Raumentwicklung (IzR), Issue 1.2015,
Ed.: BBSR, Bonn 2015

Achieving equivalent living conditions is a central spatial planning issue but the understanding of it so far should be adapted. For German citizens, many areas of life are characterised by disparities: The east-west convergence stagnates, the demographic change goes on and the discussion about the new solidarity pact demonstrates that the municipal problems in many towns, cities and municipalities of the old federal states as well become more and more urgent. Is the paradigm of equivalent living conditions therefore only an empty phrase or is it still a postulate which is up to date when it comes to improving life in the regions?

Not only the demographic change or the municipal budgetary situation require this, the work of the federalism commission and the objectives of the Territorial Agenda 2020 also have to be included in the debate. This leads to the following questions:

- How can the mission according to the Basic Law be understood?
- Is the postulate still up to date?
- Would territorial cohesion as a central idea not be more adequate?
- Is the central places system still able to ensure equivalent living conditions?
- How can equivalence finally be measured?

This issue shall help to find answers to these current questions. All articles in this issue point at problems, provide proposals for solutions and challenge readers to think or to change their way of thinking. Encouragement and contradiction are thus anticipated and shall provoke a lively discussion.

Was bewegt uns (morgen?) What moves us (tomorrow?)

Informationen zur Raumentwicklung (IzR), Issue 2.2015,
Ed.: BBSR, Bonn 2015

We live in a highly mobile society in which nearly everybody is on the way nearly every day. Mobility is oriented towards man, his or her needs and activities and should not be equated with transport, which only refers to movement. But how are we on the way nowadays and what exactly has changed and, first and foremost, how will we move in the future?

For young people, not the status or the latest Golf model etc. is important. Older persons, however, the generation who grew up with the car, remain ever longer mobile on four wheels. So the mobility pattern of the Germans has changed and will continue to change. But which direction does the trend take? Which concepts make sense and which ones rather not?

Urban mobility becomes more and more multi-faceted and simple but what happens with rural areas? Which concepts make sense, especially against the background of the demographic change? What happens on the European level in order to make mobility more ecological and efficient and what are the future priorities of mobility policy?

These and other questions will be discussed in this IzR issue. The purpose of this issue is to present current scientific and practical findings and their significance for future planning in order to adapt mobility to the needs of users.

Innovationen in der räumlichen Planung Innovations in spatial planning

Informationen zur Raumentwicklung (IzR), Issue 3.2015,
Ed.: BBSR, Bonn 2015

An innovation, a new product, a real invention does not simply happen. Hoping for a coincidence will not be enough if cherishing high expectations for something new, at least for fundamental changes. A reform cannot be achieved without saying goodbye to existing things. In this context, innovation always means two things: first of all to invent. Secondly to implement a new idea. Only an invention, which is accepted by the people, will be finally acknowledged as an innovation.

People have assumed for a long time that theory comes prior to practice. Researching, structuring, writing down – then putting into practice. Nowadays, it becomes increasingly clear that new knowledge and organisational structures often influence each other, that theory and practice operate in tandem. This is also the approach followed in this IzR issue.

It focuses on the successfully realised innovation. Creation, realisation and spread of innovations in the field of spatial planning can be traced based on the following four topics:

- regional development – reflexive regional policy
- urban development – planning new urban districts
- urban renewal – spatial pioneers and temporary uses
- neighbourhood development – neighbourhood management and integrated approaches.

If analyses, case studies and expert reports may help to state more precisely which social innovation factors have a positive or negative effect on spatial planning, social innovations can be better and more specifically promoted in the future through political and planning measures.

The journal IzR is available in German language with English abstracts. Some issues contain articles in English language. The abstracts are available as free downloads (www.bbsr.bund.de > English > publications > Informationen zur Raumentwicklung).

The IzR can be obtained from the Franz Steiner Verlag (service@steiner-verlag.de) and from bookshops as single issue or by yearly subscription. The price for a subscription is 72 euros, a single issue costs 19 euros. All prices plus postage and packing.

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News**25 years of Interreg**

Interreg, the European Union's instrument to promote cross-border, transnational and interregional cooperation in Europe, now celebrates its 25th anniversary. Originally started as a Community Initiative to promote cooperation in border regions, Interreg has established as a mainstream programme. Since 2007, "European Territorial Cooperation (ETC)", as Interreg is officially called, has become a European cohesion policy objective. Since 1997, not only cross-border cooperation (strand A) but also transnational cooperation (strand B) has been supported in the context of Interreg. Transnational cooperation includes the cooperation between national, regional and local partners in transnational cooperation areas with the aim to improve the territorial integration of these regions. A third strand, interregional cooperation (strand C), promotes cooperation networks and the exchange of experience in order to improve the efficiency of existing regional development and cohesion instruments.

Looking back to achievements and looking to the future: these are the two aspects on which the 25 years of Interreg conference on 15/16 September 2015 in Belval, Luxembourg, focused. The success and the value added of transnational cooperation are considerable. The fact that many problems cannot be solved by one country alone but by cooperating across borders becomes very clear against the background of the current crisis of refugees. How problems can be even better solved, was intensively discussed. Although it became clear that even more discussions about the programming period from 2020 are required: the discussion and the process of forming an opinion have already begun, which was proved by the many contributions and questions from the audience. They referred to a simplified administration of European Territorial Cooperation, reactivating the people-to-people strategy or focusing more intensively on our immediate neighbouring regions e.g. in the Mediterranean or in the context of the Eastern Partnership. In view of the current crisis of refugees, especially the last aspect was underlined.

Further Information

http://ec.europa.eu/regional_policy/en/conferences/interreg25/

<http://blog.interreg.de/blog-details/25-jahre-interreg-luxemburg-einschaetzung-impressionen.html> (in German)

<http://www.interreg.de>



Photo: Brigitte Ahlke

On behalf of the Federal Ministry of Transport and Digital Infrastructure, the Federal Institute for Research on Building, Urban Affairs and Spatial Development supports the transnational cooperation in Germany. In the current programming period 2014–2020, Germany is involved in altogether six transnational programmes.