



Leibniz Institute of  
Ecological Urban and  
Regional Development



## Research and Advice for the Environmentally Sustainable Development of Cities and Regions

The Leibniz Institute of Ecological  
Urban and Regional Development **2016 +**

# Contents

<b>Mission for Research and Advice</b>	<b>1</b>
Our guiding concept	2
Starting points of our research	4
Our understanding of ecological urban and regional development	5
Our research priorities	6
Our goals of research and knowledge transfer	9
Characteristics of our research	13
<b>Guiding Principles of Our Work</b>	<b>15</b>
General principles	16
Organisational structure and research process	23

## Preliminary Remarks

With this Development Concept, the Leibniz Institute of Ecological Urban and Regional Development states its medium- to long-term goals and indicates how these goals are to be attained. The concept is the basis for the institute's work.

Based on the mandate in the statutes and on what has been achieved so far, the concept deals with the IOER's strategic development as a research facility of the spatial sciences within the Leibniz Association striving for scientific excellence and societal relevance as well as for national and international impact.

The Development Concept is composed of a Mission for Research and Advice, and the Guiding Principles for the institute's work. It was formulated in a participatory way, states shared values and serves as a point of reference for the IOER's staff.

The present Development Concept 2016+ provides an update of the Development Concept 2010+ from 2010.

### Excerpt from statute mission

“The institute’s purpose is to conduct research of significance beyond the region. The institute is tasked with addressing core questions of ecologically orientated spatial research in the national, European and international context, working in an interdisciplinary manner. It comprehensively investigates the demands of a regional, urban, landscape, construction and housing development guided by the principle of sustainability. It focuses on the initial conditions and prospects for development, as well as on strategies, methods and instruments of ecological urban and regional development. This includes the development of foundations for planning and political decision-making. [...] The institute works in a multidisciplinary way, together with other research facilities such as universities and universities of applied sciences. It plays an active role in promoting and training young researchers.” (§1 Art. 2 and 3 of the IOER’s statutes)

# Mission for Research and Advice

## Our guiding concept

The Leibniz Institute of Ecological Urban and Regional Development is a research facility of the spatial sciences within the Leibniz Association, focusing on ecological issues of sustainable development. We develop scientific foundations for an environmentally sustainable urban and regional development in the national, European and international context.

We investigate causal relationships between the natural environment and society as well as related societal management options. The global and regional challenges to urban and regional development, e.g. challenges posed by climate change and demographic change, are given particular attention.

Against the background of the United Nations' Sustainable Development Goals, especially goal 11 of making cities and settlements inclusive, safe, resilient and sustainable, and following the New Urban Agenda, Urban Europe and the National Research and Innovation Agenda City of the Future in Germany, we deal with issues of ecological sustainability and resilience in national, European and global contexts. Our work focuses on the ecological or – in the broadest sense – the “green” city in its respective region.

We are interested in how cities and regions can be developed or transformed with reasonable effort so that in future the environmental and living quality they provide for humans is as high as possible while nature has diverse opportunities for development, resources are used efficiently and an adequate prevention of environmental risks is guaranteed. For this purpose, we conduct spatial surveys and analyses.

On the basis of our research, we advise political actors and society. By way of knowledge transfer in close connection to our research we provide knowledge regarding the changes of spatial structures, their impacts and society's options for influencing them from a perspective of ecologically orientated spatial research.

We are motivated by our wish to contribute to the compatibility of human action and the development of the natural environment through innovative research and advice so as to secure foundations of life in a sustainable way and enable an environmentally sustainable urban and regional development.

Our work pursues an interdisciplinary approach. We deal with research questions across planning levels and scales. Our work strives

for scientific excellence, societal relevance and national and international impact.

We aim at raising young researchers' interest in topics of societal relevance within spatial and environmental development and teaching them the required theoretical, methodological and practical research skills and an understanding of practical requirements. We integrate them into interdisciplinary research teams and offer them structured support.

## Starting points of our research

The global and regional challenges of urban and regional development and their implications for spatial and environmental development are the starting points of our research. This includes

- impacts of climate change, problems of the decline of biodiversity, the increasing scarcity of natural resources as well as natural hazards and environmental risks,
- the spatial implications of socio-demographic change, the disparate developments and perspectives of urban and rural areas under the impression of an increasing pressure towards urbanisation as well as the impacts of growth and contraction in cities and regions due to economic changes and technological change, natural demographic development and migration, including international migration,
- the increasing use of resources for the built-up environment, the high demand on land for settlement development and the progressing change in cultural landscapes,
- challenges and opportunities of rehabilitating and developing areas with environmental damage and of ecological transformation as well as the revitalisation of cities and regions,
- the change in societal management systems, changes in government action, the increasing relevance of cooperation between public and private actors, of participatory mechanisms, of governance issues and of information and communication technologies.

## Our understanding of ecological urban and regional development

We conceive of ecological urban and regional development as the development of spaces wherein the causal relationships between humans and their natural environment are given particular attention.

Our work is based on the following assumptions:

We generally conceive of space as an expression of societal interactions, drawing on concepts of space developed in the social sciences. For our research, space is also relevant as a concrete section of the earth's surface in terms of physical space with its material characteristics. Concretely, we deal with cities and regions.

Our understanding of ecology is informed by approaches from urban, landscape as well as human ecology. In our work, the relevance of ecology in the context of the spatial sciences extends from emission-orientated considerations of efficiency through immission-orientated analyses of ecosystem services and quality targets up to impact analyses in risk research.

On the one hand, we understand development as change, i.e. as a continuous process "taking place", during which new things emerge, existing things change and pass away. On the other hand, we understand development as a directed and consciously managed process influenced by actors and their respective interests.

## Our research priorities

The IOER conducts both basic and applied research. As we are a research facility of the spatial sciences, societal relevance is important to us. On the one hand we pursue methodological approaches which promise a greater understanding of environmentally sustainable urban and regional development, and on the other hand we deal with institutional and instrumental research questions through which we can derive practice-orientated advice for planning and managing urban and regional development.

Based on its research and its expertise in Germany and Europe, the institute is increasingly also committed to internationally orientated and sometimes comparative research on issues of environmentally sustainable urban and regional development. Taking the disparities of the "Geography of Urbanisation and Regional Development" and the respective natural, socio-cultural, demographic and economic conditions into account, we work on the imperatives and possibilities of an ecological transformation in connection with three thematic areas:

- Cities and regions with currently high urbanisation dynamics are faced with the task of shaping their growth processes so as to comply with the demands of en-

vironmentally sustainable development; this is both a challenge and an opportunity; it is particularly difficult in places where the rapid, mostly unplanned urban growth of the past decades has already resulted in dramatic problems. Spatial priorities of research and advice and of cooperation include China, India and Vietnam, for example.

- By contrast, cities and regions which already had their strongest phase of growth before or in the 19th century and in the first half of the 20th century face significant pressure to adapt to the demands of sustainable development; in light of ageing and population decline they often face new challenges which make today's transformation in terms of an ecologically sustainable development even more difficult. In this context, we conduct studies in Europe, East Asia as well as South and North America, for example.
- Finally, cities and regions in the post-socialist states face particular transformation challenges including both the management of growth dynamics and the tasks of urban transformation in a changed societal context. Some of the institute's research focuses on the countries in Central, East-

ern and South-Eastern Europe and on Russia, for example.

We substantiate our guiding concept with the following priorities of our research:

In the research area "Monitoring of Settlement and Open Space Development" (FB M) we develop methods for acquisition, monitoring, analysis and visualisation in order to better describe, understand and project the state and changes of land use and the building stock.

In the research area "Resource Efficiency of Settlement Structures" (FB E) we investigate to what extent and with which approaches cities, buildings and infrastructure can be shaped and developed so as to use land and natural resources in the most sparing and environmentally friendly way.

In the research area "Environmental Risks in Urban and Regional Development" (FB R) we deal with the analysis, assessment and instruments for considering environmental risks caused by natural hazards and climate change. Our research focuses on thermal and hygric environmental impacts and on typical receptors in particular of urban space.

In the research area "Landscape Change and Management" (FB L) we deal with analyses of changes

in cities and regions with particular consideration of open spaces and their ecosystem services, as well as with strategies, instruments and forms of governance for influencing them.

In the research area "Economic Aspects of Ecological Urban and Regional Development" (FB W), we investigate the complex relationships between economic conditions and the actors' behaviour in the context of ecological urban and regional development. Issues of European urban and regional development also play a role here.

Issues of ecological and revitalising urban transformation in the contexts of demographic and societal development, changed economic conditions, technological innovation, conservation of urban design and challenges of a transition towards sustainability, energy efficiency and resilience are also relevant. The related questions are mainly connected to the Interdisciplinary Centre for Ecological and Revitalizing Urban Transformation (*Interdisziplinäres Zentrum für ökologischen und revitalisierenden Stadtumbau*, IZS), a joint research facility of the IOER with the Technische Universität Dresden located in Görlitz.

In our research and knowledge transfer, we attach great importance

to cooperation across different research areas within the institute and promote collaboration among the research areas. The work on our various research priorities is linked, primarily through close coordination between the different research areas and through overarching research projects. Theoretical and methodological basics of ecological urban and regional development are discussed in a working group across disciplines and prepared for the work of the institute and its research areas.

Our well-structured graduate and post-graduate programmes are connected to the research priorities. Within the international Dresden Leibniz Graduate School (DLGS) established in cooperation with the TU Dresden, we promote research on sustainable and resilient urban development following the Sustainable Development Goals by the United Nations.

## Our goals of research and knowledge transfer

In our work, we pursue the following medium- to long-term goals:

We contribute to an enhanced understanding of global and regional challenges, opportunities and risks for environmentally sustainable urban and regional development, the concomitant interactions between humans and their natural environment as well as the impacts on urban and regional development in the national and international context.

We contribute to an enhanced understanding of possible courses of action and strategies as well as of societal and planning management mechanisms and instruments in the national, European and international context which are relevant for an environmentally sustainable urban and regional development. We investigate these under the conditions of different management and planning systems.

We develop methods for the purpose of better recognising, understanding and assessing processes of urban and regional development and their impacts.

We evaluate perspectives of an environmentally sustainable urban and regional development, especially from an ecological, demographic and economic viewpoint, and we formulate recommendations for developing and reshaping cities and regions.

Through knowledge transfer, we help to establish core questions of ecological urban and regional development in scientific and societal discourse.

With respect to our research priorities, we set ourselves the following medium-term goals:

In the research area “Monitoring of Settlement and Open Space Development” (FB M) we will

- deal with issues of land use and its changes as well as demands on a land management orientated towards sustainability goals,
- in particular, develop methods for the automated collection of information from analogue maps, digital geodata and high-resolution image data and enhance the building-based analysis of settlement structures via SEMENTA, while also using the latest generation of digital spatial base data,
- with the help of the user-friendly and internet-based IOER Monitor orientated towards issues of ecological urban and regional development, provide relevant indicators of settlement and open space development across Germany at a small scale as a scientific service and constantly update the indicator system,
- and identify the potentials of Urban Data Mining for the spatial sciences by using the monitor data to derive patterns, rules and trends of settlement development relevant for planning.

In the research area “Resource Efficiency of Settlement Structures” (FB E) we will

- create scenario-based models of the impacts of demographic change on construction activity, building stock and infrastructure for longer periods of time (until 2060) and analyse them with respect to their resource relevance,
- analyse settlement structures and their changes on different spatial levels (neighbourhood, city, region, country) with respect to their demand on land and material as well as to potentials for saving resources,
- develop context-dependent efficiency indicators and identify options to influence efficiency,
- contribute to a scenario-based strategy development, to policy consulting for regional and urban development and the construction and housing industry.

In the research area “Environmental Risks in Urban and Regional Development” (FB R) we will

- analyse the vulnerability of buildings, cities and regions in the face of various environmental impacts as well as the resulting risks by investigations with respect to engineering and environmental science,
- develop spatial models and visual representations of related risks, including the impacts of measures for risk reduction, for different actors,
- investigate and develop strategies of risk management and risk governance as well as regulatory proposals for legal instruments of risk prevention.

In the research area “Landscape Change and Management” (FB L) we will

- identify how landscape development is managed through procedural (actor- and governance-related) influence factors of landscape planning in interaction with other instruments,
- analyse the state of instruments of landscape management and of biodiversity offsets in the European and international context and investigate possibilities of expanding offset approaches to other fields,
- critically reflect upon existing guiding concepts of open space, develop approaches for expanding instruments of landscape management and contribute to integrating new concepts, models and guiding concepts into landscape management.

In the research area “Economic Aspects of Ecological Urban and Regional Development” (FB W) we will

- provide economic input to research about the core issues of IOER research,
- develop relevant economic methods, models and data bases, and link them with the work of the other research areas,
- analyse economic core aspects of ecological urban and regional development on different scales (households, municipalities, regions, national and European levels).

Issues of ecological and revitalising urban transformation are linked to our Interdisciplinary Centre for Ecological and Revitalising Urban Transformation (*Interdisziplinäres Zentrum für ökologischen und revitalisierenden Stadtumbau*, IZS), which conducts interdisciplinary research and knowledge transfer in cooperation with the research areas of IOER. The IZS:

- deals with challenges of revitalising cities undergoing demographic change, especially population decline and ageing, and aims to develop new solution approaches together with practitioners,
- addresses issues of reshaping historically grown cities in their urban and regional context so that they meet the future demands on ecologically sustainable urban development,
- deals with issues of revitalisation in the contexts of ecological development, demographic change, energy and resource efficiency, and risk management, on the one hand, and the demands of cultural building heritage and preservation, on the other.

Potentials for establishing a research area in this thematic field in the medium term are being investigated.

## Characteristics of our research

Our research is of national scientific relevance and interest. In our research and advice, we are committed to scientific excellence and societal relevance. Our transfer activities and advice are based on scientific expertise and evidence from our own research.

Our research is theory based and characterised by empirical work. We gain insight and experience through systematic surveys, analyses and case studies and contribute to the development of methods and theory formation in the spatial sciences.

Our research is orientated towards thematic fields. We focus on issues of ecological urban and regional development. Our research projects range between basic research, knowledge transfer and application.

Our research is interdisciplinary. It brings together researchers from the natural sciences, from engineering and from the social sciences. We address our research topics from different specialised perspectives. Practice is included in the research process in various ways.

Our research strives towards integration. We deal with the causal relationships between humans and their environment as well as with strategies, forms and instruments of management aimed at an environmentally sustainable urban and regional development.

Our research deals with research questions across planning levels and scales, from the individual plot and building, the neighbourhood, the community, the city and the region to the national and international context.



# Guiding Principles of Our Work

## General principles

In our work at the Leibniz Institute of Ecological Urban and Regional Development, we pursue the following general principles:

### *Independence, good scientific practice, quality assurance*

As a research facility of the Leibniz Association, we are independent in our research and advising activity.

Our research adopts a strategic approach, i.e. it follows lines of research with a long-term reach and takes up current developments.

We are committed to the rules and principles of good scientific practice. Ombudspersons monitor their implementation and serve as contact persons in cases of conflict.

The processes of setting up the research programme and obtaining the research results and the ways in which knowledge is transferred are transparent and open to scrutiny.

We conduct comprehensive external and internal quality assurance, e.g. through the evaluation procedure of the Leibniz Association, through audits, an annual goal assessment and continuous advice from our Scientific Advisory Board as well as in the context of the institute's research forums and with the help of internal reporting.

### *Scientific competition, strategies for third-party funding*

We engage in scientific competition for topics and research resources. This applies both within the institute and externally.

We take it that third-party grants from competitive research funding are to be understood as proof of scientific quality and of societal demand for our performance. They are an important component in our budget.

Projects funded by third parties contribute to answering the research questions of our research programme.

The topics and the initiative for acquiring third-party funding for research projects usually stem from the institute itself. In the context of knowledge transfer and advising activity, we additionally work on third-party funding projects whose topics are chosen externally, e.g. by government departments, if they fit the priorities of our research.

### *Equal opportunities, compatibility of career and family, non-discrimination*

We promote the equality of women and men and support the compatibility of career and family. We

have repeatedly been awarded the "Total E-Quality" certificate for our achievements.

As a research facility of the Leibniz Association we are committed to a rigorous implementation of the gender equality measures recommended in the Alliance of Science Organisations in Germany. Taking our organisational structure into consideration, we have determined flexible target quotas for women's participation in science following the cascade model of the "Research-Orientated Standards on Gender Equality" of the DFG (German Research Foundation).

We disapprove of any form of discrimination, sexual harassment and bullying at work. We do not allow any discrimination, e.g. based on race, ethnicity, gender, religion or belief, disability, age or sexual identity.

An equal opportunities officer gives advice to the institute's management, oversees the implementation of measures of the equal opportunity plan and develops her own initiatives.

We integrate gender-related aspects into research questions of our spatial research.

We welcome the ideas of the Leibniz Association with respect to a strong-

er support of diversity policies in its research facilities.

### *Staff, promotion of young researchers, visiting researchers*

We want to attract excellent researchers from home and abroad.

We are firmly committed to our task of promoting young researchers. Its core elements are:

- the institute's structured graduate programme with a broad range of funding and supervising arrangements for doctoral students,
- the internationally orientated Dresden Leibniz Graduate School (DLGS), which is co-managed by the IOER and the TU Dresden,
- the promotion of post-doctoral researchers who, within the guidelines of our research programme, are in charge of their own research,
- the support of researchers acquiring a postgraduate qualification as a professor (habilitation), and
- contributions to teaching at universities at home and abroad, especially at the Technische Universität Dresden.

Qualifying research is supported in such a way that it can be concluded as quickly as possible.

We offer researchers of other facilities the opportunity of conducting research at the institute as a visiting researcher. For this purpose, we have established a visiting researcher programme.

We offer our researchers the opportunity to work at other facilities as visiting researchers for a limited amount of time.

### *Cooperation, networks, strategic partnerships*

We maintain cooperation and networks with numerous partners in the field of spatial sciences and related disciplines in Germany and abroad. Our aims are the joint generation of knowledge, facilitation of comparative research, scientific exchange, exploiting synergies and a joint transfer of research results.

In strategic partnerships, we closely cooperate with leading universities, independent research facilities as well as individual and institutional practitioners. Strategic partnerships are developed continuously.

There is a special relationship with the Technische Universität Dresden. The close cooperation with the TU Dresden is, amongst other things, expressed by:

- the membership of the TU Dresden in the Board of Trustees of the IOER,
- the participation of a scientific representative of the TU Dresden in the Scientific Advisory Board of the IOER,
- five joint professorships in the fields of spatial development, settlement development, environmental development and risk management, environmental, urban and regional economy as well as ecological and revitalising urban transformation with the Faculties of Environmental Sciences, Architecture, Business and Economics and with the International Institute Zittau (*Internationales Hochschulinstitut Zittau, IHI*) as a Central Academic Unit of the TU Dresden,
- the participation of the IOER in core research facilities of the TU Dresden and in the framework of the German Excellence Initiative,
- the research cooperation in joint in-house and third-party funded projects with chairs and institutes of different faculties,
- the cooperation in promoting young researchers, especially in the framework of the Dresden Leibniz Graduate School and with the Graduate Academy of the

TU Dresden as well as for graduate and post-graduate research projects,

- the cooperation in teaching in several master programmes, especially in the framework of several joint professorships and honorary professorships,
- the cooperation in the field of information and communication technologies.

We are part of the DRESDEN-concept and the Future Concept of the TU Dresden in the framework of the German Excellence Initiative. We expect the cooperation with the TU Dresden to strengthen in the years to come.

Other important partners in Dresden are the Institute for Integrated Management of Material Fluxes and Resources (UNU-FLORES) of the United Nations University and the Dresden University of Applied Sciences (*Hochschule für Technik und Wirtschaft*, HTW).

The spatial research facilities of the Leibniz Association (5R-Network) form a network and are strategic partners of outstanding importance. Our successful cooperation has been long-lasting. In the future, we plan to further expand it in the framework of the profile formation of sections of the Leibniz Association

and the development of the 5R-Network, e.g. through

- joint research projects, publications and conferences,
- different forms of knowledge transfer, consulting for societal actors and public relations activities and
- the joint promotion of young researchers.

In addition to partners in the spatial sciences, we work closely with other Leibniz facilities, especially those from Section B (Economics, Social Sciences, Spatial Research) of the Leibniz Association, of which the IOER is a member, as well as those from Section E (Environmental Sciences), of which it is an associate member. The cooperation occurs in research projects, amongst others, which are funded by the *Leibniz-Wettbewerb* (Competition Procedure of the Leibniz Association), in the Leibniz Research Alliances "Biodiversity", "Energy Transition", "Healthy Ageing" and "Crises in a Globalized World" as well as in other networks, e.g. "Mathematical Modelling and Simulation". We wish to strengthen these cooperations in the areas of special interest to us.

### *Internationalisation and international cooperation*

Our work makes an important contribution to the study of international issues of ecological urban and regional development and to sustainable urban and regional development in the international context. We publish essential research results in international journals.

We are a partner and hub in European and international projects, networks and bodies, together with selected universities, research facilities and think tanks operating at an international level.

Our staff development and the promotion of young researchers are linked to the goals of internationalisation.

Together with other research facilities in Europe, we help to shape the European research arena. Since the IOER's founding, we have closely worked with spatial research facilities in Central, Eastern and South-Eastern Europe. This cooperation is organised in a network (spa-ce.net), whose visibility is to be increased in future.

The existing and developing cooperations with research facilities in East, South-East and South Asia and in South and North America will be expanded through joint research

projects, publications, conferences and cooperation in promoting young researchers.

### *Scientific dialogue, publication strategy*

We promote the dialogue with scientific actors through publications, expert meetings, talks and through roles on and membership in scientific boards and committees.

Our publication strategy is an important guideline for the dissemination of research.

Results from our work that primarily address the scientific community are published in high-quality journals.

We are committed to "open access" approaches.

Our library is a specialised library which holds the relevant scientific literature for the research fields of ecological urban and regional development and makes it available for research and borrowing.

### *Knowledge transfer, consulting for societal actors and policy-makers, dialogue with society*

We are convinced that knowledge transfer for a sustainable development of cities and regions is an important way to increase society's

attention to challenges, topics and solution approaches in ecological urban and regional development and for preparing and initiating the application of new insights by society. The institute has a transfer strategy, which we adapt continuously.

Knowledge transfer, which permeates all of the IOER's areas and is closely connected with the respective research, is pooled in a programme area in the context of the programme budget.

We promote dialogue with society. Based on our research and scientific evidence, we advise societal actors, and in doing so we provide the foundations for decision-making in sustainable planning and policy-making. Societal actors are directly involved in IOER projects.

Our research results are tailored to target groups and spread via appropriate media. In addition to the direct sharing of our research, our public relations work also plays an important role.

Cooperation with government departments, with their relevant research facilities in the areas of urban and regional as well as environmental development, with local authorities and with practitioners at home and abroad is an important element of our work. The spatial de-

velopments of the urban regions of Dresden and Görlitz are particularly relevant for our work as "reference cases" and "research labs".

The IOER annual meetings, the Dresden Land Use Symposium, the "Denksalon" symposium on Ecological and Revitalising Urban Transformation and the Dresden Planners' Forums are important platforms for communication between science, practice and society.

Our Monitor of Settlement and Open Space Development (IOER Monitor) is a permanent, internet-based scientific service. It provides indicator-based, small-scale results from spatial analysis for research and practice across Germany.

### *Responsible research and conduct*

With our research on ecological urban and regional development, we contribute to the environmentally sustainable development of cities and regions. We are aware of our responsibility towards the environment and society with regard to our research process and organizational structure and we implement appropriate measures.

We use the IOER's financial resources in a responsible and efficient way.

Programme budgets as well as cost and performance accounting contribute to the transparency of our planning and financial management.

In the context of our research management, the research performance is regularly recorded and analysed for meetings and decision-making as well as for reporting.

We aim to minimise the environmental impacts associated with our activities as much as possible. For this purpose, the institute continuously improves its internal measures for environmental and resource protection. We have been awarded the Ökoprofit® seal and participate in the “Ökoprofit Klub”.

## Organisational structure and research process

The organisational structure and the research process help to implement the institute's mission and substantiate the general principles of our institute's work as follows:

### *Creative and motivating work environment*

The IOER attaches great importance to offering its staff a creative and motivating work environment.

Within the context of the guidelines of the research programme, and taking necessary managerial authority into account, we support independent and innovative scientific research.

We promote the continuous acquisition of knowledge by our scientific and non-scientific staff, for example in the context of professional development and training and as visiting researchers, as well as by participating in thematic and working groups and by attending conferences.

The institute promotes a good and healthy working environment.

Through different offers such as flexible working hours, the institute supports the needs of its staff according to their stage in life.

### *Setting up and implementing the research programme*

Our research programme is formulated for the medium term and is connected to the programme budget drawn up in the context of the biennial budget of the Free State of Saxony. The research programme is updated continuously.

The research programme is set up in the context of a structured and participatory procedure in consultation with the heads of the research areas and with the participation of the staff; it is reviewed by the Scientific Advisory Board and adopted by the institute's Board of Trustees.

Every couple of years, the institute organises a "*Zukunftswerkstatt*" (innovation workshop) for discussing its medium-term research goals and new research topics. The members of the Scientific Advisory Board take part in the discussions. We also invite other experts from science and practice.

The implementation of the research programme is continuously assessed and evaluated internally and through the advice of the Scientific Advisory Board.

There are regular reports within the institute concerning the progress made in research projects.

The biannual research forums are an important platform within the institute for discussing our strategic goals and research results.

### *Organisational structure with flat hierarchies and interdisciplinary teams for topic-related research*

The IOER's organisational structure is characterised by flat hierarchies. At its core are the research areas with interdisciplinary teams composed of natural scientists, engineers and social scientists. The heads of the research areas are responsible for the research within their areas.

The institute's researchers are active beyond the boundaries of their research areas in manifold ways. This promotes exchange and cooperation across the confines of the research areas.

Our structure is capable of adapting to changing conditions. The focus of the research areas is assessed each time when setting up the research programmes. In the medium term, research areas can be rebuilt or dissolved in order to react to new research questions. A change of staff at the head of the research areas is possible.

### *Management of research, organisational management and infrastructure*

The Institute's Internal Coordination Group is a body for the purpose of advising the director with regards to research content and organisational issues of universal importance. Apart from the director and the deputy director, it includes the heads of the structural units and other selected senior researchers. The chair of the works council and the equal opportunities officer take part in the consultations as permanent guests.

The meeting of the heads of research areas is a body for preliminary discussions about strategic questions of the IOER and issues of cooperation between the research areas. It includes the director, the deputy director, and the heads of the research areas.

The Administration and the areas for Research Infrastructure and Research Management deliver important services for our research and consulting activities. On behalf of the institute's management, they ensure an adequate and highly efficient framework infrastructure which lives up to the demands of an excellent research facility. This includes a highly efficient geodata infrastructure and the IOER's library specialised in the spatial sciences.





Published by:

Leibniz Institute of Ecological Urban and  
Regional Development

Director: Prof. Dr. Dr. h.c. Bernhard Müller  
September 2016 | updated October 2017

Weberplatz 1  
01217 Dresden  
Germany

Phone: +49 351 4679-0  
Fax: +49 351 4679-212  
info@ioer.de  
<https://www.ioer.de/1/home/>

Cover photo: © R. Vigh, IÖR-Media 2015

Print on FSC certified paper



Leibniz Institute of  
Ecological Urban and  
Regional Development

