



# THE URBANISATION PARTNERSHIP BETWEEN CHINA AND GERMANY

A Stimulus for Applying the New Urban Agenda in China

**Smart cities accelerate the implementation of the New Urban Agenda in China: The German-Chinese Urbanisation Partnership support the urbanisation to create a sustainable future for China.**



© chungking / Fotolia

---

**Huiwen Chen (M. Sc.)**

studied Urban Regeneration and Planning at University of Liverpool. Throughout her studies she maintained a focus on the urbanization of China and the influence of the urbanization in the society. For her dissertation at the Cardiff University she is using a case study about Dongguan to analyse the significance of scientific mode for Smart City development in China.  
chenhuiwen@scitylab.org

**Rong Ma (PhD)**

is working for China's smart city development. Her team of iSoftStone Group is working at smart city co-labs of MOHURD and is helping more than 30 cities in China in their urban planning, top-design and smart city projects. She is expert of ISO TC 268 and IEC SEG 1.  
marong@scitylab.org

**BiYu Wan (PhD)**

is former chief engineer and deputy director of Digital City Council of Chinese Society for Urban Studies (CSUS). Currently, he is the chief scientist of the Smart City Joint City Laboratory of Chinese Society for Urban Studies (CSUS, MOHURD), Deputy head of National Standardisation General Working Group on Smart City.  
wanbiyu@scitylab.org

**Dong Jiang (PhD)**

is member of the China National Smart City Standardisation Group, ISO/TC 268/SC 1, and IEC Syc WG 2 expert. Mainly engaged in space information technology, artificial intelligence, Internet of things, technology research.  
jiangdong@scitylab.org

On 21st October 2016, the United Nations Conference on Housing and Sustainable Urban Development (Habitat III) was concluded in Quito (Ecuador) with the adoption of the New Urban Agenda. In order to promote sustainable urbanisation, this new framework sets out how cities should be planned and managed. This new framework analyses the challenges that are facing the current cities and reaches global consensus for countries worldwide on a common road map for the next 20 years.

There is no doubt that the People's Republic of China plays a pivotal role in the global urbanisation process. The New Urban Agenda is a major political commitment by countries around the world to address the challenges of urbanisation. Moreover, the United Nations recommended a new model of urban governance for all member states and cities around the world. China has gathered successful experience and learned some lessons in the past few decades, especially since the reform and opening up more than 30 years ago. Experts, managers and colleagues around the world have reached consensus about the New Urban Agenda after repeated discussions.

### China's new urbanisation is the carrier and supporter of China's development

In the past 30 years, the pace of industrialisation and urbanisation has not matched the pace of urbanisation in Chi-

na, which is lagging behind the rate of industrialisation. As shown in figure 1, the output of more than 200 kinds of industrial products in China is ranking first in the world. The growth of industrialisation is extremely fast. It can be stated that urbanisation is an important engine driving the new type industrialisation, information and agricultural modernisation as well as providing a strong and lasting impetus for stimulating Chinese national consumption and private investment.

### The new road of China to urbanisation

A large population, resource shortages, and limited ecological capacity are the basic national conditions of China, and they are also the main constraints and challenges in China. Thus, it determines the development of China's urbanisation and must respect the national conditions. Premier Keqiang Li put forward the „people-oriented road with four simultaneous goals: optimising the layout, ecological civilisation, heritage culture and new urbanisation“ (Money 163 2017) in the government work report in 2014. It is undoubted that China's modernisation and well-off society will achieve an effective path. The guiding ideology of urbanisation includes not only the principles characterised by the adjectives intensive, intelligent, green and low carbon, but also embodies the essence of a new urbanisation with „people as the core“, which is more profound and comprehensive.

**1**  
Proportion of China's major industrial output in the world

Industrial product	Volume of production in 1978	Volume of production in 2012	Volume of production in 2012 of global GDP	2012 global ranking
Crude steel	31.78 million tons	717 million tons	46 %	First
Coal and mining industry	610 million tons	3,660 million tons	50 %	First
Cement	65.24 million tons	2,184 million tons	60 %	First
Electrolytic aluminum		19,883 million tons	65 %	First
Refined copper		5,823 million tons	24 %	First
Chemical fertilizer	8,693 million tons	68.40 million tons	35 %	First
Motor vehicles	0.149 million units	19.27 million units	25 %	First
Ship building		60.21 million tons	41 %	First

Source: Baoxing Qiu 2005

### New urbanisation is China's development strategy

The central meaning of the new urbanisation road taken by the Chinese Government is people-oriented. The four parts of modernisation are synchronised, the layout is optimised and the ecological civilisation and the heritage culture are promoted. It is an important way to promote the new urbanisation and adapt to the new trend of modern urban development, coordinate the materials, information and management resources of urban development, promote the application of a new generation of information technology innovation and realise the development of urban economic and social sciences (Baoxing Qiu 2009).

### New urbanisation in China – meaning and quality of the two aspects of upgrading

The national new urbanisation planning type clearly states the requirements to smart city development in China: "Smart city based on the city's material, information and intellectual resources to promote the Internet of Things, Cloud Computing, data and other new generation of information technology innovation to achieve urban planning and information and also the intelligent infrastructure, public service facilitation and the radiation into the surrounding areas" (Baoxing Qiu 2013). From the above-mentioned goals it can be seen that smart city planning and construction is based on high-quality and top-level design. It uses modern

and intelligent information and communication technologies for the entire city to link government, enterprises and the people in a smart ecological chain.

Compared to the traditional urbanisation development model, the new urbanisation puts more emphasis on the overall quality of the overall upgrade that is to promote urbanisation by emphasising the increased focus on upgrading the quality of the respective content. The 18th National Congress of the Communist Party (CPC) of China pointed out that to promote the new urbanisation it should focus on transforming the mode of economic growth to become intensive, intelligent, green and low-carbon.

Under the goal of the „smart promotion the development of new urbanisation“, China's Ministry of Housing and Urban Rural Development (MOHURD) launched the pilot project of creating two branches of national smart cities by the end of 2012. It selected two batches of 193 pilot cities in different regions and towns. The requirements for selecting the pilot cities are based on their economic development, social fairness, beautiful environment and also the innovative and pragmatic spirit. The main aim of the smart city pilot construction is promoting China's urbanisation by following several aspects, such as smart infrastructure, urban planning and research, equalisation of public services, social management of industrial development and modern development.

## 2

### Innovative urban development model to promote the development of new urbanization



Source: Liqiao Guo 2015



## Important progress of smart city development and urbanisation in China

The Chinese central government announced the promotion of smart city management and will develop a number of smart cities with distinctive characteristics until 2020.

On 6th February 2016, an official document called "Guidelines to Strengthen Urban Planning and Construction Management" (issued by the CPC Central Committee and State Council) announced the promotion of smart city management by:

- promoting city management and service systems in smart city construction, promoting Big Data, the Internet of Things, Cloud Computing and other IT technologies and upgrading urban management services and improving the intelligent level of a city/town;
- developing information infrastructure construction, improving network security and improving the quality of life of residents.

The "New Smart City" was included in the Thirteenth Five-Year National IT Development Plan, and several ministries started to evaluate the "New Smart City". On 15 December 2016, the State Council released the Plan listing new smart city construction actions. The goals are:

- to finish the construction of 100 "new smart city/town" as models by 2018;
- to achieve remarkable results in the new smart city construction by 2020; to develop ubiquitous IT service, transparent and efficient online governmental systems, innovative IT economy, fine management and urban operation system etc.

Improving policies for the smart cities pilots: In February 2016, the General Office of the Ministry of Finance and the General Office of MOHURD released the Guidance on Application for a pilot sponge city with underground comprehensive corridor.

Many local governments have issued the Thirteenth Five-Year Plan and top-level design of smart cities to guide the future development. At the beginning of 2016, the word "smart city" was a „high-frequency word". Different provinces have released smart city construction plans.

Pilot smart cities have achieved great success, and Yinchuan became the first city to promote smart city development by legislation. The first local regulations on the development of a smart city – Yinchuan City Smart City Promotion – were introduced and officially implemented on 1st October 2016. Yinchuan is the first city in China to promote the construction of a smart city following the given regulations.

Model innovation is still the key to smart city development, and local government actively explores the Public-Private Partnership (PPP) model. „Where does the money come from?" has always been a challenge when starting to develop a smart city. Nowadays, the PPP model seems to be one possible solution to get financial support for smart city development. The „PPP + capital market business model" is the biggest highlight of the Yinchuan model innovation.

More than 5,000 companies participate in smart city development. Many companies, organisations and enterprises participate in smart city development. More than 5000 companies are involved in the construction of government-led projects of smart cities based on our data and statistics.

More than 1,000 fora were conducted in 2016 under the smart city topic, and Big Data and Internet + become significant words. According to our data and statistics, more than 1000 fora were conducted in China in 2016. In addition, there are lots of symposia, academic meetings, lectures, etc. which have been conducted. These fora are of great concern: the 3rd Global Internet Summit (Wuzhen 2016), the World Smart Cities Summit (Shanghai 2016), the TMF Global Smart Cities Summit (Yinchuan 2016) and the 2nd Summit of China's Data Security (Guiyang 2016).

Characteristic town becomes a significant word in 2016. In July 2016, the Ministry of Housing Construction, Development and Reform Commission and the Ministry of Finance issued the Notice on the Development of Characteristic Towns. In October, the Ministry of Housing Construction declared 127 towns/villages as the first batch of pilot characteristic towns. „Characteristic town" became a significant word from October 2016 onwards.

China plays an important role in the international standardisation of smart cities. In 2016 July, the three major international standardisation organisations IEC (International

Electro-technical Commission), ISO (International Organisation for Standardisation), ITU-T (International Telecommunication Union – Telecommunication Standardisation Sector) co-sponsored the first World Smart City Forum in Singapore. These three international organisations and regional standardisation organisations have held a closed-door seminar on the standardisation of smart cities. China's experts participate in the forum.

Under the unified arrangement of the Standardisation Administration of China (SAC), our experts have been actively participating in these activities for three years. Considering the international standardisation of smart cities, there are experts with us on committees like ISO TC 268, IEC SEG 1, ISO/IEC JTC 1 and other international standardisation committees. Our experts contributed significantly to the work of these committees.

## China participates in the international standardisation of smart cities development

ISO is a worldwide consortium of national standardisation. International standard-setting is usually done by ISO's Technical Committees. ISO and IEC cooperate closely in the field of electrical and electronic standards.

Under the unified arrangement of the Standardisation Administration of China (SAC), our experts have been actively participating in these activities for three years. Considering the international standardisation of smart cities, there are experts with us on committees like ISO TC 268, IEC SEG 1, ISO/IEC JTC 1 and other international standardisation committees. Our experts contributed significantly to the work of these committees.

ISO/TC 268/SC 1 is the Technical Committee on Sustainable Cities and Communities and its Smart City Infrastructure

Methodology Subcommittee which was established in 2012. Its secretariat is located in Japan. Japan is chairing the committee and China is vice-chairing it. 19 Member States and 9 Observer States are taking part.

### 3

#### ISO/TC 268 Structure



Source: ISO/TC 268

Framework for Development and Operation, which is under the responsibility of ISO/TC 268/SC 1/WG 2, and has presented the ISO/PWI 37153 Smart Urban Infrastructure – Performance and Integration Maturity Model. ISO/TC 268/SC 1 also established links with ISO/TC 59/SC 17 on the Sustainability of Buildings and Civil Engineering, ISO/TC 207/SC 7 on Greenhouse Gas Management and Related Activities. The current subcommittee established two ad-hoc groups: AHG 2 on the Smart Urban Infrastructure – Best Practices for Transportation Facilities Guide and AHG 3 on the Urban Infrastructure Data Exchange and Sharing Guide. ISO will begin to develop a new Smart City Data Standard focusing on Smart City Infrastructure Data Exchange and Sharing. On 6 February 2017, after three months of voting, the international standard proposal ISO 37156 was formally approved. Finally, after two years of preparation, the first ISO smart city infrastructure data standard formal entered the standard development period.

## Introduction of IEC/SyC Smart Cities

The IEC Smart City System Committee (IEC/SyC Smart Cities) and its electro-technical aspects of smart cities were formally established in February 2016. Its predecessor is the IEC SEG1 Smart City System Assessment Group. IEC/SyC is responsible for conducting research on international standards related to smart cities in the field of electrical and electronic engineering to promote the integration, interoperability and effectiveness of urban systems. The Shandong Institute of Standardisation is the IEC/SyC domestic technology counterpart in China.

In July 2016, IEC/SyC held its first plenary session in Singapore. The first plenary meeting established the scope of the work of IEC/SyC, its organisational structure, the liaisons and liaison officers and future meeting arrangements. Three working groups and their research tasks (figure 4) were identified for IEC/SyC at this stage.

### 4

#### List of work group for IEC/SyC

WG No.	WG Name	Convener	Research Scope
WG 1	Terminology Works group	Michael John Mulquin (UK)	WG 1 is responsible for researching and maintaining the common terminology set of the IEC Intelligent Urban Systems Committee.
WG 2	Market Relationship Working group	Biyu Wand (China) Sicelo Xulu (South Africa)	WG 2 is responsible for identifying key aspects of the Smart City, collecting and analysing the use cases, the Smart City Simulator's electrical aspects, the criteria for testing in a real city.
WG 3	Reference Architecture Work group	Narang Nand Kishor (India) Heng Qian (China)	WG 3 responsible for the development and maintenance the Smart City Reference Framework model, and its cooperation with the IEC SRG System Resource Group to development and maintenance standard mapping tools.

Source: IEC

### 5

#### List of ISO/IEC projects

Project No.	Standard name	Editor/co-editor
30145-1	Smart City ICT Reference Framework-Part 1: Smart City Business Process Framework	Editor: Michael Mulquin (UK) Co-editor: François Coallier (CA), Dapeng Zhang (China), Nikita Utkin (RU), Danila Nikolaev (RU), Kishor Narang (IN), Jun Seob Lee (KR)
30145-2	Smart City ICT Reference Framework-Part 2: Smart City Knowledge Management Framework	Editor: Jacqui Taylor (UK) Co-editor: François Coallier (CA), Junfeng Zhao (China), Dapeng Zhang (China), Mark Fox (CA), Nanjagud Narendra (IN), Jun Seob Lee (KR)
30145-3	Smart City ICT Reference Framework-Part 3: Smart City Engineering Framework	Editor: Dapeng Zhang (China) Co-editor: François Coallier (CA), Prasant Misra (IN), Jun Seob Lee (KR), Nikita Utkin (RU)
30146	Smart City ICT Indicators	Editor: Tangli Liu (China) Co-editor: Chen Yi (China), Jacqui Taylor (UK), Nikita Utkin (RU), Danila Nikolaev (RU), Mark Fox (CA), Kishor Narang (IN), Michael Mulquin (UK), Jun Seob Lee (KR), Bruno von Niman (SE)

Source: IEC

## ISO/IEC JTC 1 Smart Cities Working Group (WG 11)

WG 11 is the predecessor of SG 1 (Smart City Research Group). The main work of WG 11 includes the analysis of smart city related technologies, markets and social ICT standardisation. WG 11 will submit research reports to the JTC1

Plenary Session and deal with the smart city ICT standardisation needs based on the existing key technologies taken from the perspective of the ICT smart city standardisation roadmap, potential standard requirements, smart city related terms and definitions, reference models, use cases etc.

## EU and Sino-German international cooperation

### Sino-German urbanisation partnership

China and the European Union attach great importance to cooperation in urbanisation. In 2012, the China National Development and Reform Commission and the European Commission co-founded the Forum on the China-EU Urbanisation Partnership.

The then Chinese Vice Premier Keqiang Li attended the opening ceremony and delivered a speech on Open the New Process of Strategic Cooperation in Urbanisation, and together with the then EU President Manuel Barroso signed the China-EU Joint Declaration on Urbanisation Partnership opening a new chapter in the EU-China Urbanisation Cooperation.

### The Sino-German urbanisation partnership and the NUA are mutually reinforcing

The Sino-German Urbanisation Partnership plays an important role in promoting the New Urban Agenda in China by considering the following aspects:

### Formulation of public policy

Close and good partnership can analyse the complicated and difficult challenges which the government is facing at present. Different institutions can carry out in-depth thinking and systematic analysis of long-term problems to provide useful policy suggestions, forward thinking, strategic thinking and solutions that can affect the formulation of public policies.

### Assess the efficiency of government operations

The urbanisation partnership also has the function of assessing the efficiency of the government's work in social and public affairs or testing whether the operation of the government meets its practical goals. It can promote the progress of relevant projects and make suggestions for improvement in China.

### Guide the public opinion

Many of the researchers in the urbanisation partnership have much working experience in local governments and international organisations, and they have a rich knowledge

## 6

### Important events of the Sino-German cooperation

Time	Related events of Sino-German international cooperation
26th May 2013	The People's Republic of China and the Federal Republic of Germany issued a joint notice after the visit of Premier Keqiang Li to Germany. The two side decided to implement urbanisation partnership to further strengthen bilateral cooperation in agriculture, forestry, food, consumer protection, food safety and environmental protection areas.
15th September 2014	Representatives and experts from several cities in China and Germany exchanged views on the Sino-German Smart Cities Forum in Rüsselsheim, Germany. They all depict the future blueprint for the development of a smart city.
10th October 2014	Keqiang Li, premier of the State Council of the People's Republic of China, co-chaired the third round of consultation between the Chinese and German governments in Berlin with Angela Merkel, Federal Chancellor. The two sides decided to publish the "Sino-German cooperation platform for action: Innovation together".
29th June 2016	Premier Keqiang Li attended and delivered the speech in the 2015 EU-China Urbanisation Partnership Forum, which was held in Brussels, capital of Belgium.
1-2nd November 2016	Sino-German standardisation cooperation working meeting held in Chengdu. The meeting strengthened the standardization exchange and cooperation between the Chinese and German.

Source: Baidu Wenku 2017



of international relations. When an international event takes place, persons from these institutions publish their own opinions on television, in news broadcasts or in newspapers – an approach that may guide the public opinion and help the partnership to profit from these advantages.

#### **Dissemination of social knowledge**

Researchers in well-functioning urbanisation partnerships can offer lectures, presentations and training courses on

sound platforms, such as schools or the community. Lectures can bring opportunities for cooperation and guidance for public understanding on real-time issues related to policy. The government and the community also build a communication platform regarding social policy concerns and strengthening the understanding of government policies, indirectly improving the management level of public administration.

## Sino-German urbanisation prospects

Establishing close contact and focus on cooperation and exchange is of utmost importance. Both parts can put effort to establish a corresponding think tank or platform, holding various fora and meetings regularly every year. Therefore, both research institutions can share research experiences and exchange research results, expand both the corresponding reputation and influence. At the same time, through establishing the platform to effectively organise various meetings or seminars, the expansion and improvement of the Sino-German research institutions may expand and improve their influence in national decision-making and public opinion building.

China and Germany should carry out cooperation projects between their cities



© viperagp / Fotolia

### **Proposal for a Sino-German cooperation on standards**

In recent years, the Sino-German cooperation in the field of standardisation, with deepening the development of bilateral economic and trade relations opened up to a multi-level, large-scale, three-dimensional development. Both institutions should focus on urban areas, carry out cooperation projects between cities of China and Germany on the topic of urbanisation, smart cities and international standards, share experiences and promote development. They should give full play to the research institutions in urban economic and trade development, cultural exchange and pass on to enhancing the process of the Sino-German cooperation, which will support the two countries in the effective implementation of the New Urban Agenda. It will also be necessary to promote the pragmatic cooperation between cities and the development and further enhancement of the human resources of the two research institutions:

First, we should improve the cooperation mechanisms in order to achieve long-term development and to make full use of a Sino-German Standardisation and Cooperation Committee Platform by organising and encouraging municipal departments, social organisations, enterprises and scientific research institutes of both sides to actively participate in the standardisation cooperation among cities.

Secondly, in order to promote a pragmatic development, we should understand the mutual concerns in order to enhance the exchange of experiences and practical exploration. Moreover – through the cooperation in research on standardisation – we should carry out vocational training and education to enhance the cooperation in international standardisation and smart city aspects.

Thirdly, we would like to encourage cities from both China and Germany that have the capacities and willingness to carry out city standardisation cooperation on the basis of international friendship cities to improve cooperation in the sector of urban consumption, equalisation of public services and construction of smart cities.

### **Strengthen the smart city pilot practice cooperation and exchange**

At present, the construction of smart cities is the important approach and supporter of the national new urbanisation in China. In the future, smart cities will be widely applied in various fields and on different levels in China to improve the living conditions of people, the production capacity of cities and towns to improve the level of public services.

At present – although smart city construction has started quite successfully – the approach still needs the active guidance and promotion of the government. MOHURD has carried out smart city pilots for some time and found that there are some common problems in various places, such as the lack of awareness of the concept and connotation of a smart city. It is very difficult to promote key project construction based on the institutional mechanisms which are not well developed; also because of the challenge of capital and talent shortages, etc. In the next phase, MOHURD will continue to steadily push forward the pace of constructing smart city pilots for the future of China.

#### **Focus on policy research**

In order to better guide the work of smart city construction, local governments should set up an expert team to carry out detailed studies on the related support of policies, standards and assessment systems. The team should use the theory and method of the urban “multi-regulation integration” and channel investment and financing plans with capital (market) as a means to promote the organic integration of a variety of planning activities, such as the city economic and social development planning, land use planning, urban and rural overall development planning, ecological environment planning, informatisation development planning and various sector planning activities.

Local governments should guide the pilot cities in their own development. This should provide a basis to carry out top-level and city-oriented design aiming at solving urban challenges facing the development of smart cities in China.

#### **Carry out pilot projects to promote project construction**

Through the statistical analysis of the pilot projects, local government and related institutions should examine smart cities in detail to create a common understanding and key areas in strengthening the city pilot.

At the same time, local governments should carry out key pilot projects for the construction of smart cities. Basic research should be carried out on behalf of the private sector as well as product-oriented research, the demonstration and application, the promotion and manufacturing as well as other aspects of in-depth research to promote the pilot city beyond the project.

#### **Strengthening exchange and cooperation**

In order to continually build up a series of joint labs with the leaders of related areas of smart cities and to carry out special research on the common support technologies related to smart cities, it is our responsibility to strengthen the cooperation between large enterprises, scientific research institutions, universities and other enterprises providing domestic and international technological advantages. Moreover, it is important to exchange and cooperate to promote internationally advanced concepts, key technologies and advantages of the successful introduction of products in order to improve the overall level of China’s smart city construction.

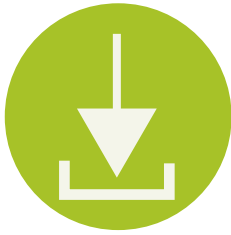
Some specific recommendations: establish a correct concept of smart city construction, top-level design of the smart city, build a smart city public information platform, strengthen the city’s typical smart application, optimise the operations of the smart city and establish an intelligent city security system.

Today, cities are confronted with a variety of challenges, such as population expansion, environmental pollution, traffic congestion, security risks and other issues. These increasingly prominent challenges are seriously hampering the sustainable development of cities. However, the city is also the convergence of human civilisation. Thousands of years of human wisdom will always shape the city. We believe that through the joint efforts of the whole society, through the Chinese Government actively responding to urbanisation by creating smart cities, and actively building a smart city pilot in line with China’s national conditions, the local conditions for creating a new urbanisation road leading to the future urbanisation of China are given.

## Literature

- Baidu Wenku**, 2017: Important events of the Sino-German cooperation. Accessed: <https://wenku.baidu.com/view/509f5d4008a1284ac85043ca.html> [retrieved on 13.07.2017].
- Baoxing Qiu**, 2005: Recognition of urbanization with Chinese characteristics, *City Development Research*, sixth period.
- Baoxing Qiu**, 2009: Coping Opportunities and Challenges – The Main Problems and Countermeasures of China’s Urbanization Strategy Research, China Architecture & Building Press, Beijing.
- Baoxing Qiu**, 2013: China’s Intelligent City Development Research Report (2012-2013), China Building Industry Press, Beijing.
- Liqiao Guo**, 2010: Study on how to speed up the development of urbanization informatization work, *City Development Research*, 1.
- Liqiao Guo**, 2013: Towards a Sustainable Future, China Architecture & Building Press, Beijing.
- Liqiao Guo**, 2015 (Smart City Guidance) China CITIC Publishing Group, Beijing
- Money 163**, 2017. Accessed: [http://money.163.com/13/1104/09/9CQVMF0J00253G87\\_all.html](http://money.163.com/13/1104/09/9CQVMF0J00253G87_all.html) [retrieved on 13.07.2017].
- People’s Publishing House** (ed.), 2014: National new urbanization planning (2014–2020), edition of April, Beijing.
- State Council of the People’s Republic of China** (ed.), 2010: The decision of accelerating the development and improve emerging strategic industries of the decision, the State council of China, No. 32.
- State Council of the People’s Republic of China** (ed.), 2013: The advice of strengthening urban infrastructure, edition of 26 September 6.
- Xirong Guo; Xianfeng Wu**, 2013: Study on the Construction Pattern of Smart City, *Journal of Surveying and Mapping Science and Technology*, No. 3.
- Zhu Junguo**, 2003: Informatization to promote urbanization. China’s rural economy, ninth period.

## Die New Urban Agenda – das Dokument als Download



Auf unserer Seite haben wir für Sie das englische Originaldokument zur New Urban Agenda abgelegt. Schauen Sie doch mal rein:

[www.bbsr.bund.de](http://www.bbsr.bund.de) > IzR

Die New Urban Agenda liegt auch in einer deutschsprachigen Fassung vor. Sie finden Sie als Download:

[www.habitat3.org](http://www.habitat3.org) > The New Urban Agenda

## Habitat III: Teile des Deutschen Pavillons leben weiter



Fotos: Carlos Cuenca Solana

Die auf der Habitat-III-Konferenz für den Deutschen Pavillon verwendeten Baumaterialien dienen inzwischen dem Wiederaufbau: Sie werden für Gebäude in dem Gebiet in Ecuador verwendet, in dem sich Anfang 2016 ein Erdbeben ereignet hatte.