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

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Post Event Report

ASIEN-PAZIFIK-WOCHEN BERLIN

EMBASSY OF INDIA Berlin

Smart City

GROUP

National Institute of Urban Affairs

SIEMENS Ingenuity for life

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Overview

Cities play a driving role in global economic development. As economic centres as well as intersections of human coexistence, cities are more and more dependent on smart solutions for efficient interlinked structures in order to solve problems like congested infrastructures, lack of housing, insufficient water and electricity supply as well as inadequate water and waste removal services in a sustainable way.

"100 Smart Cities" programme in India

India, whose economy is likely to continue to grow strongly, is also facing this huge challenge. Currently about one third of the population in India, that is approx. 433 million people of India's 1.3 billion inhabitants, is living in cities. According to UN estimates, more than 400 million urban inhabitants will add to this figure in India by 2050.

In response to this challenge of a rapidly increasing urbanization, the Government of India launched their "100 Smart Cities" programme in April 2015. Initially it is planned that at about 100 locations in India either completely newly designed "smart" cities shall be constructed or existing cities shall be made more efficient and more worth living in. The first draft of the concept of the Indian Ministry for Urban Development has been published in September 2014. The official aim of the programme is an overall efficient infrastructure that makes cities more sustainable and liveable as well as their inhabitants wealthier, healthier and happier.

The financing approach of the Government of India focuses on public private partnerships. According to an Indian expert commission, water supply systems, drainage systems and transport infrastructure alone will need investments of 350 billion INR (approx. 4.6 billion EUR) per annum. The whole investment requirement will clearly exceed this figure. For a start, the Government of India will provide 6.5 billion EUR for the first five years of the programme. From June 2015 to December 2015, 97 cities in India put together their 'smart city proposals.' 20 winners were declared in January 2016, all in less than 200 days. The winners will start project implementation by June 2016, within one year.

German support for the Smart Cities programme

Germany has also taken part in the Indian Smart Cities programme. On the basis of a memorandum of understanding that has been signed in April 2015, an Indo-German working committee for sustainable city development was setup. The German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety shall be the main partner and together with GIZ support German companies that want to play a part in the Indian Smart Cities programme. For a start the Indo-German collaboration will be focused on three Indian cities: Bhubaneswar, Kochi and Coimbatore.

What the delegates had to say

> Die Konferenz "100 Smart Cities in India" hat eine nachhaltige Basis gelegt für eine aussichtsreiche Zusammenarbeit zwischen Deutschland und Indien.
>
> — Ref. II F: Außenwirtschaft und Europa-Politik, Senatsverwaltung für Wirtschaft, Technologie und Forschung Berlin

> The Indian 100 Smart Cities event was excellent and value addition
>
> — Head - City Account Management, Cluster South Asia, Siemens Ltd

> High professional speakers meet open minded people for collaboration - great opportunity to match stakeholders
>
> — Co-Founder Smart City Lab

> An excellent exchange of thoughts with relevant people
>
> — Dean of Studies, Faculty of Transport-Sports-Tourism-Media Ostfalia University of Applied Sciences

Indo - German Cooperation on Sustainable Urban Development

On 31 May 2016 at the conference "100 Smart Cities in India", the Indo-German collaboration in the field of city development as well as the status of the "100 Smart Cities" programme has been presented, and the participants discussed the impending challenges. Representatives of the three Indian cities that have been first to be chosen for the collaboration – Bhubaneswar, Kochi and Coimbatore – reported on the status of their projects.

✦ Minister Dr. Barbara Hendricks

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

The opening speech was delivered by the Hon'ble Minister Dr. Barbara Hendricks, German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety. She welcomed her Indian colleague, Hon'ble Minister M. Venkaiah Naidu, Minister for Urban Development, Housing & Urban Poverty Alleviation, to Berlin.

Minister Hendricks stated that Germany is witnessing the same phenomenon as India: that people are moving from the countryside to the cities and that the cities are growing constantly – a phenomenon that can be observed all over the world. The number of people living in cities worldwide is already greater than the number of people living in rural areas. This enormous growth of cities presents us with economical, ecological, social and societal challenges. With great respect, we are witnessing how India's economy is evolving and creating potential for continuing strong growth. In India, it is also the cities that are driving forces behind economic development. But they also cause problems because they are the major sources of pollution and consume a large amount of energy.

Minister Hendricks referred to the climate change agreement in Paris in December 2015 as well as to the 3rd UN conference on human settlements, Habitat III, that will take place in October 2016, that could implicate a change in international politics. The maintenance of the essentials of human life should be a top priority in settlement policy. Intelligent systems and technologies have the potential to improve the quality of life and social cohesion of urban societies to make mobility more efficient, to conserve natural resources and to reduce negative impacts on the environment.

Minister Hendricks declared that the Indian programme of 100 smart cities is a particularly ambitious and groundbreaking project, also beyond India's borders. Germany would like to support the Smart Cities programme in India. Especially the Ministry for the Environment, Nature Conservation, Building and Nuclear Safety wants to support German companies who would like to help the Indian cities to implement their ideas. It is worth learning from each other and developing common strategies and tools that can help building the future.

✦ Minister M. Venkaiah Naidu

Indian Ministry for Urban Development, Housing & Urban Poverty Alleviation

Hon'ble Minister M. Venkaiah Naidu referred to the conference as indeed very useful and also time-wise advantageous. In India people are moving to the cities at a faster pace now than before. This demographical transition brings along with it serious challenges and opportunities. For this reason the Hon'ble Prime Minister Narendra Modi has suggested to design a programme for 100 smart cities in India. There are also missions for 500 further cities that are considered for urban transformation. Furthermore, there are other programmes to improve environment and make places more livable in India; these programmes include heritage conservation or programmes like "Clean India", "Skill India", "Make in India", just to name a few. There is also a scheme called "Housing for All". In 2022, there should exist a place to live for every Indian citizen. Even foreign investment is allowed now in housing. Urban areas should be a better place for all, because cities are very important for India's economic growth. 60% of the

Indian GDP is coming from cities. If all continues to grow at this rate, it may raise to around 85% in India.

More than 20 million people will benefit from the 100 Smart Cities plans, said Minister Naidu.

In the meantime, further 13 cities, in addition to the first 20 cities identified to start the programme, are ready to start with feasibility studies. These cities have already identified the areas and the sectors they want to develop, and proved their preparedness, as a smart city development needs a lot of preparation. They have to qualify themselves, they have to prepare themselves, they have to be ready for reforms, and they must also be willing to become a creditworthy city.

Within this Smart Cities programme India has also gone for a major policy shift towards a PPP (Public Private Partnership) model. This is a true shift in the system that people were used to. Now there will be the necessity of transparency and accountability, and a confidence in the credibility of the cities is also needed. The investors will only invest if they make a profit, too.

Minister Naidu emphasized that he came to Germany to spread the news that there is a renaissance in India, there is a new awareness, a new mindset, a new determination in his country. India is willing to improve the living standards of its people and make its cities more livable, more healthy and more secure. His visit also aims for more support and investments from Germany for further cities in India – apart from the already chosen three cities, Bhubaneswar, Kochi and Coimbatore. In green and sustainable urban development India could learn a lot from Germany, and it is willing to learn. India is searching for support wherever it is available. So far, 30 foreign companies from 20 leading countries have been associated with the preparation of smart city proposals.

Minister Naidu also mentioned all sectors that have been identified for development and explained the financial plans for the 100 Smart Cities programme. Once the facilities will have been implemented, the cities will run, administer and maintain them (or commission other companies to do so). He confirmed, that there is tremendous enthusiasm about the Smart Cities programme now among the citizens in this cities. The status of the programme for each city will be published online for everyone to follow.

At the end of his keynote speech Minister Naidu reminded the audience that globally India is the place for all opportunities now and he invited German companies to come to India to take part in this process. This conference also provides a great forum to understand what are the opportunities India can offer, he said.

✦ Dr. Roland Busch

Member of the Managing Board of Siemens AG

Dr. Roland Busch provided a view from the industry perspective and how important it is to develop the 100 Smart Cities in India. Siemens has been in India since more than 150 years and is employing 16,000 people in India. Dr. Busch stated that there is a huge potential to drive productivity considering the massive amount of young people in India. The Chinese labour market already peaked in 2014 and is declining now, whereas India has a young population that is still continuously growing, and a growing population is one of the sustainable growth drivers of economies. Another growth driver is urbanisation. The most important factors you need for this growth is energy and infrastructure.

Another important growth driver is urbanisation, said Dr. Busch. But the speed of the increasing urbanisation is not only scary for a lot of people, if it is not well managed, you also end up in a mess, and the mess will start with transport problems. Reliable energy supply is also mandatory in order to address the next level of industrialisation. Another important issue is emission, not

only CO_2-emission that has a negative effect on our climate, but also the local emissions that make the air so bad, you do not want your family to live there. Further topics are water and waste, but also the quality of life, in particular security.

Security is a particularly important topic if you think of the "war for talents". Talents can choose where they want to live, and they do not want to live in areas where they fear for their life.

In order to support the 100 Smart Cities development, Siemens formed a consortium with the Indian industry. Their aim is to develop an individual programme for each participating city for a sustainable, livable, growing city, as there is no easy answer for all of them. Dr. Busch further explained that a city could save a lot of money if it would implement smart solutions for infrastructure. Running a metro line, e.g., is nowhere in world profitable; you always have to subsidize it. But still, London, New York, Delhi and Beijing run metro lines – and these cities belong to the metropolitan areas that are covering most of the GDP worldwide. Their metro lines are part of their success. Or vice versa, the longer your citizens are sitting in cars commuting to and from work and are not productive during that time, the more money you lose. A study confirmed this hypothesis; Dr. Busch named two examples (Paris and Beijing). Finally Dr. Busch stated that India is on the right track with this collaboration with Germany.

100 Smart Cities – Moving Ahead to Build India's Livable Cities

✦ Prof. Jagan Shah

Director of the National Institute of Urban Affairs, India

Professor Jagan Shah was talking about the leverages that India has created to bring about the urban transformation and creating a pathway towards livable cities in India. First of all, he referred to India's past when his country was still able to build good livable cities. The Harappan civilisation in the Indus valley, which had its mature phase between 2600–1900 BC, already knew a quite sophisticated planning for human settlements. The intelligence about living in a civilised manner had already been there, and this knowledge was even developed during the following centuries (e.g. Jaipur in the 18th century, Chandi Chowk in Delhi in the beginning of the 20th century, both were well ordered and well managed). But India kind of lost the plot somewhere. The 100 Smart Cities programme should bring India back on track.

The spatial expansion of Indian cities and urban centres has been 80% in the last ten years – uncontrolled and unregulated. Some cities like Delhi or Mumbai have been stretched to the limits of their resource basis and the limits of their management capacities. The reason is that India did not recognize urban areas as important over the last six decades. It celebrated the rural areas and villages. From the 18th century onwards industrial growth in Indian cities had even been declining. But the huge urban contribution to India's GDP needs to be leveraged with the Smart Cities programme now.

Professor Shah also adverted to almost undefinable kind of diversity of Indian cities. There are cities that are very sparsely developed and cities that are highly dense. That means that no

standard technique is going to help for developing a smart city, and therefore, smarter ways of planning are necessary now, they are not an option any longer.

Professor Shah presented a map of India which showed the larger strategy within which smart cities are located: the number of smart cities that have been allocated to different states of the country, the national highway network (called Golden Quadrilateral), the first freight corridors between Mumbai, Delhi and Kolkata, the sea-connection of ports through logistics networks, and international airports in India. Within this context India will develop a larger urban strategy with clear respect for the unique identity of each city. Professor Shah emphasized that unless India is providing good livelihood especially for the young population in India, the cities will not be able to create capacity to pay for the services that they need to provide in order to further develop. Cities therefore should be a pleasure to live in.

Professor Shah then explained the benefits of the mission “Transform India”, as it has been called by Prime Minister Narendra Modi. One of the key salient features of this mission is the introduction of a company (a special purpose vehicle) as an organ of service delivery and project implementation for the municipality.

He pointed out that citizen engagement has been one of the very quick win initiatives that came out of the Smart Cities programme as never before the citizens in India have been involved as intensely as it has been done in the Smart Cities mission.

As the mission has been designed, the cities will start with a concentrated area of their city, demonstrate the ability to deliver the outcomes, and then replicate that success in other parts of the city. Crosscutting themes are mobility, energy management, smarter governance, housing, or the use of ICT.

Professor Shah also explained the financial mobilisation for the Smart Cities programme in 20 lighthouse cities in India. 13% of the investment should come from Public Private Partnerships, including foreign investment.

One aspect of the programme is also to leverage the use of the tremendous potential that lies in the informal sector in Indian cities. About 50% of the inhabitants are self-employed.
So far, 50% of the Indian cities do not have development plans. Therefore, anything that can be done to help city managers to manage complexity will pay dividends. And Europe is a role model for India.

Indo-German Joint Working Group on Sustainable Urban Development

Within this part of the conference the joint working group and framework for the Smart Cities cooperation was presented.

✦ Dr. Susanne Lottermoser

Dy. Director General, Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, Germany

Dr. Susanne Lottermoser elaborated on the background and history of the Indo-German collaboration concerning sustainable urban development. It's basis is the joint declaration of intent of cooperation in the field of sustainable urban development that was signed by the Indian Ministry for Urban Development and the German Ministry for the Environment, Nature Conservation, Building and Nuclear Safety during the Hannover Trade Fair in April 2015.

Worldwide cities have to cope with the same challenges, and cities can be driving forces for innovation, welfare and sustainable development. The joint declaration aims at identifying common urban development challenges and intensifying exchanges on policies and research between Germany and India. Part of the declaration is the establishment of a joint working group on urban development, which met for the first time in autumn 2015. At this occasion India asked Germany for support in feasibility studies for two or three Indian cities.

A German delegation to India had the chance to look at the concepts of the first 20 cities chosen for the Smart Cities programme and decided to support three of them with feasibility studies: Coimbatore, Kochi and Bhubaneswar. An important partner on the German side is the GIZ. Dr. Lottermoser expressed her hope that this conference will offer many opportunities for further information and in depth discussions.

✦ Vineel Krishna

CEO, Bhubaneswar Smart City Limited

First of all, Vineel Krishna presented a short introduction about Bhubaneswar, the capital city of the Indian state Odisha. Odisha is a mainly rural state, rich in natural resources and with a huge number of tribal communities; only 16% of the population lives in cities.

Bhubaneswar has been planned as a modern city by the German architect Otto Königsberger in 1948. But it was planned only as small town for about 10,000 inhabitants. Today Bhubaneswar is a big city with more than a million people. It is an education hub with 50,000 students, it has a lot of steel and aluminium industry, and it is also an IT destination.

There is a strong citizen connect to the Smart City programme in Bhubaneswar. The inhabitants are very proud that they have been chosen as a number one city for the 100 Smart City programme. One third of the city participated in formulating the proposal for the competition. Now the population has also high expectations concerning the urban transformation.

The main aims of Bhubaneswar is to become a child-friendly city, an eco-friendly and sustainable city. For this, they want to develop an intelligent city operations and management centre which will serve as the "brain" of the city. Part of this system will be an intelligent traffic management system. The main centre of the city shall be redeveloped to a smart city. Furthermore, as Bhubaneswar was initially very widespread, it should be denser in the centre in future, with e.g. a central business district, but also affordable housing (at the moment, one third of citizens are living in slums) and green areas.

Finally, Mr. Krishna explained why German companies should invest in Bhubaneswar: Odisha has a stable, very popular government since 16 years now that will be still in power until 2019; a GDP-growth of 8,78%; and the city is working with the big global institutions like World Bank or the KfW. The investment opportunities in Bhubaneswar are urban mobility, housing, (renewable) energy, and infrastructure.

✦ Amit Meena

Corporation Secretary, Kochi Municipal Corporation

As Amit Meena outlined that Kochi divided their smart city proposal into three sectors: basic infrastructure and services; efficient infrastructure; and planned development. He presented the fast growing city of Kochi as the economic hub of Kerala and one of the main tourist hotspots in Kerala. Kerala is the most densely populated state in India. The citizen engagement is very high (Kerala shows more than 85% literacy), which also means that Kerala's citizens are very demanding.

Mr. Meena then presented the vision of Kochi's smart city proposal (the overall aim is a sustainable growth and ease of living) and all the sectors as well as the area in which Kochi would be developed into a smart city. About 100,000 people live in the area that has been chosen for redevelopment.. There will be actually two distinct areas, one is a heritage area that should be refurbished in a way that it still represents the heritage, the second is a commercial area, which shall be pedestrian-friendly in the end.

One of the main issues is sewerage, as only about 10% of the city got an underground sewerage network. Decentralized sewerage treatment plants should be installed in highly populated areas. Other main issues are seamless urban mobility (road, rail, metro, and water connectivity) or urban services (24x7 water supply to each household, 100% sewage management, one ticket for all transport platforms, etc.). Existing areas will be retrofitted and refurbished.

At the end of his speech, Mr. Meena presented the financial aspects of their programme. Expert advice from Germany, which provides good role models for the solutions Kochi is looking for, is very welcome.

✦ Parikipandla Narahari

District Collector, Indian Administrative Services (IAS), Indore Smart City Co.

Parikipandla Narahari, District Collector, Indian Administrative Services (IAS) and Indore Smart City Co. presented the smart city proposal of Indore.

Indore, the commercial capital of Madhya Pradesh, is also among the first 20 cities that have been selected for the Smart Cities programme. Mr. Narahari presented a short, but impressive film about how his town is actually trying to convert a part of Indore into a smart city.

✦ Dr. Sameer Sharma

Additional Secretary (Smart Cities), Ministry of Urban Development, India

"If you fail to plan, you are planning to fail." – this was the reminder that Dr. Sameer Sharma addressed to the audience in the beginning of his speech. The chosen future smart cities in India did their homework so far, and at least, they are aware now what they want to do. The next step in the process is to prepare the integrated projects for obtaining tenders. Within the next six month the bidding should start and probably take a couple of months.

With this Smart City programme, Mr. Sharma added, India is moving from traditional cities to post-modern cities. That means, that the phase of creating modern cities – like they were built in the USA after World War II – is leapfrogged in India. In order to be successful, India very strongly involved its citizens. There is a lot of collaboration and a lot of enthusiasm among the citizens now. It might look chaotic from outside that are so many people involved in the process, said Mr. Sharma, but in his opinion there was no other way than include this multiple rationalities in the process to make the Indian future smart cities go.

Financing Indian Smart Cities

✦ Hermann Mühleck

Executive Director, German Business Center India, EY Germany

In his introduction to the following panel discussion, Hermann Mühleck again named the highlights of the Smart Cities initiative: assured water and power supply, sanitation, solid waste management system, efficient urban mobility and public transportation systems, IT connectivity, e-governance, and citizen participation. For the 100 Smart Cities programme, as Minister Naidu had said, about 50 billion INR (about 7.5 billion EUR) have been proposed for the selected smart cities during a period of five years. But the conversion to smart cities will need much more investment. The questions remain: How can those smart cities attract investment and finance their projects? How are smart cities prepared to support robust business models? What do banks require in order to finance such investment?

Then Mr. Mühleck welcomed the specialists who were supposed to answer these questions during the panel discussion.

✦ Felix Klauda

Head of Division, Urban Development and Mobility,
South Asia, KfW Development Bank

Before the panel discussion started, Felix Klauda introduced the work of KfW and the "New Urban Agenda" on urban financing. He mentioned that KfW Development Bank is also investing in India. From the overall 8 billion EUR in 2015, 1 billion EUR has been committed to India.

Then Mr. Klauda outlined the principles of the New Urban Agenda: bridging the infrastructure as well as the financing gap. He said that a sound domestic policy framework, a strong and

transparent system of transfers, local government autonomy, capacities for planning, budgeting, accounting, procurement etc., capacities to implement and operate systems and services are also needed.

Mr. Klauda shortly introduced the projects in India in which KfW is already involved.

For the three chosen cities for the German collaboration, KfW can offer feasibility studies, close handholding during the investment and the commissioning phase, long-term loans, and a lasting partnership.

Panel Discussion

At the panel discussion the participants debated effective ways of financing smart city planning, investment and operation. Participants of the discussion were:

- Hermann Mühleck, Executive Director, German Business Center India, EY Germany (moderator)
- Felix Klauda, Head of Division, Urban Development and Mobility, South Asia, KfW Development Bank
- Vineel Krishna, CEO, Bhubaneswar Smart City Limited
- Amit Meena, Corporation Secretary, Kochi Municipal Corporation
- Parikipandla Narahari, District Collector, IAS, Indore Smart City Co

The discussed issues included:

- What can be offered to German investors?
- How could they make profit with their investment?
- Some business models are not viable for private investors (e.g. water supply systems).
- What are the ideas of Indian cities concerning good business models?
- Is India willing to pay for German technology which is often the most expensive but also the most sustainable or long lasting technology?
- Apart from working business models, will the local government provide the right framework for the projects?

Intelligent & Sustainable Urbanisation

This part of the conference dealt with urbanisation as a tool for the integration of economic, social and environmental dimensions of sustainable development.

Delivering India's Smart Cities

✦ Deepak Goray

Head of City Account Management, Cluster South Asia, Siemens AG

Deepak Goray talked about his experiences in transforming the concept into reality. At first, he gave a brief overview over the connection between India and Germany, especially the collaboration with Siemens, which started in 1879, as well as the "green" history of Siemens, which built the first electric taxi in 1890 in Berlin.

Then Mr. Goray explained by means of some examples which challenges have to be mastered if you want to create a smart city. You always have to adjust to the changing conditions. Cities require Metro systems, e.g., that need to be continually upgraded. You need to manage energy, and you need to go to the next level of smartness on a continual basis. Cities also need to become investor-friendly.

Mr. Goray mentioned an example of a city in the USA in which poor power networks sent the city on a decline and it lost its economic independence and identity and became a ghost town. 15 years ago the city council decided to redo the smart grid and energy system for the whole city in order to attract economic activity again, which will create jobs and improve the quality of life for the citizens. And it became a good success story.

Siemens has recently signed a Memorandum of Understanding with the Confederation of Indian Industry (CII); other industry partners are involved, but Siemens is the lead partner.
Based on examples Mr. Goray finally explained what is required to create and run a smart city.

Smart Cities India: German Technology – Local Strategy

✦ Damian Wagner

Project Manager, Morgenstadt Initiative,
Fraunhofer-Institute for Industrial Engineering IAO

The Fraunhofer Institute is very active in India, especially in the field of digitalization. Damian Wagner, who is also the coordinator of the smart cities initiative and the European smart city project Trianglium, stated that today cities have to cope with transformations at a very fast speed. Technology is not the only challenge for future smart cities; there is much more they have to cope with. This is a fact the European community tries to address with its smart cities and communities initiative with a funding of about 200 million EUR for smart city projects. The principle is to have lighthouse cities where you demonstrate projects and innovation, and then you try to replicate them to other cities, although there is no common solution for all cities.

Mr. Wagner also mentioned the city of Eindhoven (NL), which used to be the innovation headquarters of Philips, as an example for redefining the "business model" of a city when a huge company has left (in this case: Philips). In one district of Eindhoven the city created lots of space, including new technology, for start-ups. That also means, they addressed a lot of local capacity, which is also a focus of many other European smart city projects. Mr. Wagner said that this model could also work quite well for India.

Then Mr. Wagner explained the Fraunhofer concept of "City Labs", which actually includes a city analysis and the development of business fields or action fields and the development of projects and business cases. Fraunhofer did this for about 10 cities in Europe. After a large

comprehensive process, Fraunhofer provides a city profile which does not only state the main action fields, but also the strength and weaknesses. This provides a solid basis for the strategy and for development.

Finally, Mr. Wagner presented the Morgenstadt Initiative, a popular innovation network which puts together business, municipalities and any other stakeholder. Morgenstadt has been globally quite successful and is the basis of the Fraunhofer projects.

The analysis stakeholder process “City Lab”, with all the experience gained in Europe, could also be transferred to India. One of the main issues in India is to build capacity and to have training for the people involved in the process – a smart city academy –, something that Fraunhofer is currently establishing in Europe. Mr. Wagner also explained the framework that is needed to create smart cities from the Fraunhofer point of view. He said, that there is no other way to cope with the smart city projects but in a very strong partnership of all stakeholders.

Indo-German Smart Initiative

The private Indo-German Smart Initiative focuses on integrated urban development in Indian cities. It combines multidisciplinary knowledge in urban development, architecture and infrastructure supply and enhances its capabilities within a strong Indian and German knowledge alliance with public institutions and private research groups.

✦ Dipl.-Ing. Architect Eva Walter

International Project Management, DGI Bauwerk Gesellschaft von Architekten mbH

Eva Walter presented the collaborative approach of their initiative and talked about challenges and opportunities, process and impact. The partners in this initiative have already experiences in working in India. There is a partnership already with the National Institute of Urban Affairs and with other research institutes in India.

In India, the complexity is the challenge as nearly all parameters affect each other. Mrs. Walter named the different issues that cause this complexity. Germany has very smart technology to offer, but it has to be implemented regarding the conditions on site. Smart technology should not stand alone, but has to be part of the integrated planning process itself.

With an example in Berlin, she demonstrated how carefully the initiative with its cross-sectoral team examines the city structure and all conditions to identify the right measurements for integrating affordable housing in the city.

✦ Dipl.-Ing. Architect Margret Böthig,

Director India, gmp Architekten von Gerkan, Marg und Partner

gmp has been working in India since 2008. Margret Böthig named some of the projects gmp has already completed in India, like the Tamil Nadu legislative assembly or the new campus of the Indian Institute of Technology (IIT) in Hyderabad.

Then Mrs. Böthing presented an example of integrated urban planning – the Olympic City in Hamburg – that gmp worked out for the application of the city of Hamburg for the Olympic Games in 2024. This planning included the transformation of a part of the Olympic stadium into residencies with 500 apartments after the Olympic and Para-Olympic Games. It is a good example for an intelligent and sustainable investment for the future, she said.

Integrating Planning – Collaborative Approaches for Smart Cities

The final keynote speech was delivered by a German expert for urban planning, Prof. Elke Pahl-Weber

✦ Prof. Dipl.-Ing. Elke Pahl-Weber

Head of the Department of Urban Planning,
Berlin University of Technology (TU Berlin)

Professor Elke Pahl-Weber talked about how to make a city smart and how to get real flexibility as things are changing constantly and you cannot predict future. When the discussion of smart cities was started around the year 2000, all stakeholders were sure it all refers to integrating new communication technologies in the existing process of urban planning. But today we know that this is not sufficient any more. We must realize that at the moment a new technological revolution is taken place – and probably a social revolution as well. And urban planners are the right people to deal with this revolution.

Challenges we face are e.g. volatile power nets as the more regenerative energy we use, the more flexible our energy supply will get. The net will not be stable any more; India is well acquainted with this problem, but also Germany will have to face this fact. We will need net-reactive buildings, net-reactive ways of production, etc., and nobody knows what our future city will really look like. So we have to be flexible, said Professor Pahl-Weber. And without involving the people who live in the cities you will not be successful in creating a flexible and smart city. In theory this fact has already been elaborated on nearly 100 years ago, but in practice it has not been our main focus up to now.

The goals of developing cities are also conflicting with each other. Therefore it is necessary and most important to set priorities – individually for each city – and look at your needs and the needs of all stakeholders, before you are working out solutions. It's a complex challenge.

Concerning Professor Pahl-Weber the principal rule to follow if you want to develop a smart city is making it very clear what the consequences that are caused by your measurements are and to remember that transforming the urban context is a creative process.

The speech of Professor Pahl-Weber was followed by a question & answer session.

Networking & Cocktail Dinner

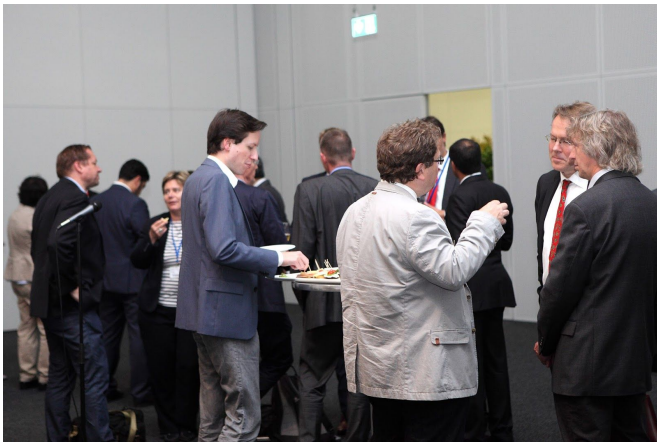
For another one to two hours the participants used the networking & cocktail dinner after the conference for further and deepening discussions.

Delegates asking their Questions

Delegates asking their Questions

Answers from Experts

Networking Session



Cocktail Dinner and Networking Session

Cocktail Dinner and Networking Session

The discussions between the stakeholders in Urban Development from Germany and Indian delegations from the Indian Urban Development ministry and city representatives promised scope for some serious exchange of technological expertise and long term solutions to the imminent issues that need to be addressed with regards to Smart Cities project implementations in India. Moreover, it set the stage for a more elaborate and focussed step forward for the Indo - German collaboration on Smart Cities in the future.

Stay tuned for more on that.

For more details email us at info@indus-media.com