



TRACK LOCATIONS

- Track 1: Scandic Havet Storhavet 1
- Track 2: Scandic Havet Storhavet 2
- Track 3: Radisson Blu Room 1 Track 4: Radisson Blu - Room 2
- Track 5: Stormen Concert Hall Sinus Track 6: Stormen Library - Litterature Hall
- Stormen Library ByLab Bodø

SUN | 30 September

Registratrion Desk

Hotel Scandic Havet

Monday - all day, starting at 8:00 from Tuesday - all day in Stormen Concert Hall

MON | 1 October

10:00 at Størmen Library

Technical Tours

New City – New Airport: The history of Bodø as an airport city

City walk: City of Bodø – past, present and future

Bodøsjøen: Culture heritage and recreation area. Guided walk and workshop

Keiservarden mountain: Hiking to the top of Keiservarden

Nord University: Role of the Nord University in Bodø, past, present and future

13:00 at Størmen Library

19:00

Additional City Walk

City of Bodø – past, present and future

Reception

Stormen Concert Hall

Ola Elvestuen

(Minister of Climate & Environment)

Planning for a Low Emission Society

TUE | 2 October

08:30

Welcome Introduction: Daniel Bjarmann-Simonsen, Deputy Minister, Ministry of Trade, Industry and Fisheries Introduction: Dushko Bogunovich, General Rapporteur

Jeremy Rifkin (live stream) ward a Smart Third Industrial Rev

10:30

-12:30

Coffee break & networking

11:00

Parallel Congress Tracks Track 1: The Global View Track 2: Making the Most of Un

Track 3: Climate-Proof Cities
Track 4: Technology & Infrastructure
Track 5: Social Networks Track 6: Contemporary Planning

tormen Library BvLab Bodø

Planners for limate Actio

- An initiative of UN-Habita

12:30 -13:30

13:30

-15:00

Lunch break

Parallel Congress Tracks Track 1: The Global View Track 2: Spotlight Cities Track 3: Climate-Proof Cities

Track 6: Contemporary Planning

- ByLab Bodø

15:00

Coffee break & mentoring

15:30 -17:00

Parallel Congress Tracks
Track 1: The Global View
Track 3: Climate-Proof Cities

Track 5: Social Networks

Track 2: Spotlight Cities
Track 4: Technology & Infrastructure
Track 5: Social Networks Track 6: Contemporary Planning

17:00 -19.00

ISOCARP Open Forum

(open to all) Radisson Blu

19:00

Dine Around

21:00

Get Together

WED | 3 October

08:30

-11:00

11:00

-12:30

13:30

15:00

17:00

19:00

-19:00

-15:30

ISOCARP Special General Meeting

(for ISOCARP members only) Stormen Concert Hall - Room Sinus

s the smart cit sustainable?
The case of Stormen Library Litterature Hall

ends at 10:00

10:30 Coffee break & networking

> Kevnote speaker **Peter Newman** Cool Planning: Cities and Climate Char

Awards for Excellence Session Chair: Sławomir Ledwon

Lunch break

12:30 -13:30

Parallel Congress Tracks
Track 1: The Global View
Track 2: Spotlight Cities **Track 3: Climate-Proof Cities** Track 4: Technology & Infrastructure
Track 5: Social Networks Track 6: Contemporary Planning

ormen Library ByLab Bodø

Planning for Diversity

(session proposa

ormen Library

ByLab Bodø

UPAT Seminar (Urban Plan-ning Advisory

Teams)

Coffee break & mentoring

15:30 Parallel Congress Tracks Track 1: The Global View Track 2: Spotlight Cities -17:00 Track 3: Climate-Proof Cities

Track 5: Social Networks Track 6: Contemporary Planning

ISOCARP Annual General Meeting

> (for ISOCARP members only) Radisson Blu

> > **Dine Around**

Possibility to visit Beer Brewery

THU | 4 October

08:30

10:30

-15:00

15:00

-15:30

Session Chair: Didier Vancutsem Aase Marthe J. Horrigmo, State Secretary, Ministry of Local Government & Modern Keynote speaker Herbert Girardet Regenerative Cities – Making Cities Work for People and Pl **Young Planning Professionals**

Coffee break & networking

-11:00 Parallel Congress Tracks & Side Events 11:00 -12:30

Track 1: The Global View Track 3: Climate-Proof Cities Track 4: Technology & Infrastructure Track 5: Social Networks

ormen Library ByLab Bodø

Lunch break

12:30 -13:30 13:30

Parallel Congress Tracks & Side Events

Track 3: Climate-Proof Cities

Track 3: Cool Planner: The Role Urban Planning and Design with

Meeting the Institutional Member ISOCARP (Stormen Library - Liter

tormen Library ByLab Bodø

Awards for Excellence

Constructed and Conteste

ance

Coffee break & mentoring

15:30 -17:30

Conclusions by the General Rapporteur & Congress Team Session Chair: Martin Dubbeling

Announcement of 2019 ISOCARP Congress Stormen Concert Hall - Theatre

19:00

Congress Dinner & Award Ceremony

Words of Welcome

Introduction by the General Rapporteur

Keynote Speakers

Congress Tracks

Congress Team

Presentation Schedule

Track 1: The Global View: Climate Change Impacts, **Sustainability and Resilience**

Track 2: Spotlight Cities: Planning for Coastal Cities, **Remote Towns, and High North Cities**

Track 3: Climate-Proof Cities: Planning for Weather, Water, Food and Energy

Track 4: Technology and Infrastructure: Clean, Green, **Smart**

Track 5: Social Networks: Citizen Participation, Urban **Governance and Cultural Transformation**

Track 6: Contemporary Planning Practice Projects and Paradigms

Open Sessions in Bodø ByLab

Special Sessions

Technical Tours

42

ISOCARP Programmes

ISOCARP Awards

List of Participants

Practical Information

Local Organizing Committee Bodø:

Rakel Hunstad, Chair of the Local Organising

Kristoffer Larsen Seivåg Urban Planner, Bodø Municipality

Marianne Bahr Simonsen Project manager Smart Bodø, Bodø Municipality

Stephan Skjelvan, Head of Unit for Development, Bodø Municipality

Carina Dreyer Salater, Event Coordinator, Visit

Anita Skog, Adviser, Industry, Bodø Municipality Eirik Eide Haugmo, Head of unit Finance, Bodø Municipality

Silje Munkvold, Hostess CityLab Bodø Municipality





ISOCARP:

Sławomir Ledwoń, ISOCARP Vice President Congresses & Events

Didier Vancutsem, ISOCARP Secretary General Dushko Bogunovich, General Rapporteur 54th ISOCARP Congress

Gaby Kurth, ISOCARP Programme Manager





#ISOCARP2018



ISOCARP - International Society of City and Regional Planners

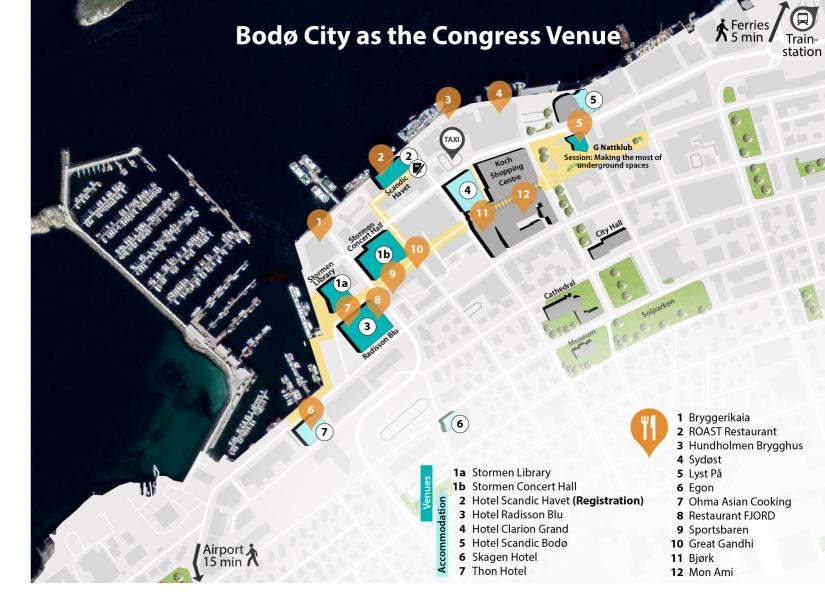
Download the Congress App, "ISOCARP Bodø 2018"

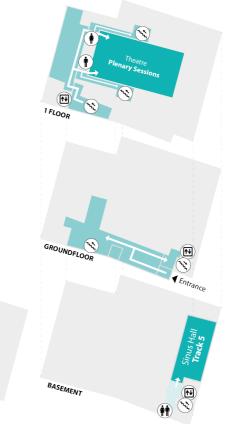


You get up to date with everything that is happening at the congress. You can design your own congress programme and get notifications when and where to go. Book your place in a restaurant for the dinearound on Tuesday and Wednesday.

In order to use the app you must have registered for the congress with a mobile number and an e-mail address.

Participants may ask questions about the app and the congress in general at: isocarp@bodo.kommune.no





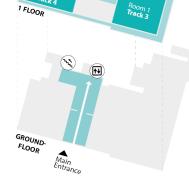


1a STORMEN LIBRARY

Open Sessions







2 SCANDIC HAVET HOTEL

Gala Dinnei

WORDS OF WELCOME



Bodø is proud to have been selected as the host city for ISOCARP's 54th Congress.

Today, 54% of the world's

population live in urban areas, a proportion which is expected to increase to 66% by 2050. The UN declares that managing urban areas has become one of the most important development challenges of the 21st century.

When we develop our comm unities for the future, we must do it in a smart way. How we live, move, and meet each other will prove even more important when facing big global challenges such as climate change. The key focus here in Bodø is to develop our community together with and for the people living

Bodø, a city located above the Arctic Circle, surrounded by magnificent nature and awe-inspiring mountains, offers unique opportunities for urban development. New solutions and approaches explored here in Bodø can be adopted and implemented by other Arctic cities facing similar challenges and opportunities.

We pride ourselves in being an attractive conference city. This repute is achieved by offering both high-class accommodation and facilities, but also by sharing with our visitors a unique combination of outstanding nature and genuine hospitality.

Welcome to Bodø!

Mayor of Bodø Ida Pinnerød



Climate change is the existential threat that will define this century. It will not only dominate the environmental sphere of

sustainability, but also the social and economic spheres. It will create the absolute necessity for urban resilience. And, it will create a wonderful opportunity for urban regeneration on a global scale. The positive effects of climate change adaptation and mitigation will not only ensure a more sustainable future, but a more safe, healthy, equitable, and vibrant present.

The 54th Annual International Planning Congress will examine these challenges and opportunities with the theme "Cool Planning: Changing Climate and Our Urban Future." The Congress tracks will provide insight on urban planning and design for climate change action from international and multi-disciplinary perspectives of benefit to practicing planners, local government officials, private sector experts, environmental managers, educators, students, and the public.

Bodø, Norway is an extraordinary setting for this international event. Located just north of the Arctic Circle, Bodø is positioned to be an Arctic Gateway with smart, sustainable city planning and design. The Nordland coast, nature reserves, and towns are all uniquely beautiful, and the area is famous for the world's strongest tidal current (Saltstraumen), the Northern Lights, and many other attractions.

I invite you to be part of this singular experience of a lifetime that is certain to be both meaningful and memorable Help implement the "Climate Action" Sustainable Development Goal: "Take urgent action to combat climate change and its impacts."

With much appreciation for your interest and commitment to "Knowledge for Better Cities."

ISOCARP President
Ric Stephens



The Local
Organising
Committee is
very happy to
welcome you
to the 54th
annual ISOCARP
Congress in
Bodø. We are

excited that you have decided to venture the trip to the exotic high north! We will do our utmost to give you a unique experience, both with respect to the congress programme and this year's congress location in the heart of our vibrant and urban, yet compact city, between steep mountain chains and the Norwegian Sea.

Bodø is currently undergoing large and exciting transitions. The Norwegian Armed forces will phase out their operations in Bodø by 2021/2022. It has been the largest employer in the post-war era. Furthermore, there is an urgent need for a new runway at the current airport. These two events have triggered one of the greatest projects of urban development in the history of Norway. It will liberate an area equivalent to 800 football fields of "blank space" for innovative and sustainable urban development. The developments will strengthen Bodø's position as an intermodal hub for transportation, and create and test solutions for environmental friendly and people friendly cities of the future. Zero emission neighbourhoods, innovative energy communities, new renewable energy technologies, mobility as a service and much more is at the core. The journey to "The World's Smartest City" has begun. We invite you to take part in this first-hand for example through a pair of Hololenses while visiting Bodø, in our Living Lab in Stormen Concert Hall.

Bodø's transition to a low carbon economy aligns perfectly with this year's congress theme "Cool Planning: Changing Climate and Our Urban Future". We look forward to discuss this theme – a theme of utmost relevance for all cities and communities at a global level – in the setting of our Arctic city in rapid development.

Further to a solid congress programme on a timely subject, we hope that you will be blinded by the nature and impressed by the urbanity, intrigued by local cuisine and amused by local brewery.

Welcome!

Chair of the Local Organising Committee

Rakel Hunstad



ISOCARP has travelled around the world – from Netherlands in 2015, through Durban, South Africa (2016) and Portland, Oregon, USA (2017) – to

finally come back to Europe again. This year we will have the pleasure to visit Bodø in Norway and discuss the issue of "Cool Planning: Changing Climate and Our Urban Future."

The theme and the location perfectly align. We will discuss climate change impacts, sustainability and resilience, not only on the global scale, but also in relation to specific cities, such as those that are located on coast, remote and high north – particularly relevant to the Arctic Circle. Speakers will address the issues related to technology, infrastructure and social networks. For a global perspective there will be a special track related to contemporary planning practice, where a more general approach will be presented.

The congress sessions will take place in different buildings – including the amazing Stormen Concert Hall and Stormen Library – all of which are conveniently located in the downtown of this compact city. So this year Bodø will be the congress venue! We expect an extraordinary line-up of speakers. Keynotes will be given by the top world class experts – Jeremy Rifkin, Peter Newman and Herbert Girardet. Many special sessions will be organised. Apart from research papers, we will have the opportunity to learn about case studies from practice. Everyone will be able to find sessions relevant to their interests and learn from a truly international set of experts. There will be an extensive social programme and opportunities to visit the region before and after the congress.

For the first time in ISOCARP history we will have live online interaction with ISOCARP members during the Special General Meeting, when the new constitution will be discussed and voted. Also we will be streaming the plenary sessions online!

I would like to invite you to Bodø – not only to take part in the congress and immerse yourself in the walkable city – but also to experience the city and interact with its residents with their most welcoming hospitality, nature and great food. Possibly the Northern Lights will make your stay memorable.

We all hope that the delegates will enjoy their time, will be satisfied with the contents and will remember this congress for long time.

Join us in Bodø! Beste hilsen!

ISOCARP Vice President Congresses and Events

Sławomir (Sławek) Ledwoń





INTRODUCTION

Dushko Bogunovich General Rapporteur

Dushko Bogunovich

is Professor of Urban Design and Planning, and Dean of the Faculty of the Built Environment, Arts and Science at BA ISAGO University in Botswana. He now lives in Gaborone. His permanent residence is in Auckland. There, **Dushko was Associate Professor** of Urban Design at Departments of Architecture, and Landscape Architecture, at New Zealand's largest polytechnic, Unitec Institute of Technology. He taught underand post-graduate courses, and conducted research and consulting in: urban planning, environmental policy and sustainable development. His research focus is on Auckland, **Christchurch and the NZ urban** system in the context of global urbanisation and the challenges posed by the acceleration of climate change. Dushko has been a member of ISOCARP since 1984.

Perhaps the year 2018 will go down in history as the year the global community finally realised that climate change is an existential and imminent threat to human presence on Earth. As the UN Secretary General, Antonio Guterres, put it at a meeting at the UN Headquarters in New York on September 10th: "The world risks crossing the point of no return on climate change, with disastrous consequences for people across the planet and the natural systems that sustain them."

Strong words for a professional diplomat. But how many of the 7.3 billion people on the planet will have heard them? And grasp the dire urgency? It is more likely that the extraordinary weather events of this year's Northern summer will produce the needed awakening impact on public opinion and government action, than yet another political speech.

In the same week that Mr Guterres was raising the alarm over the paralysis of world leaders and voicing his dismay at the slow implementation of the Paris Agreement, two colossal superstorms were spinning at either side of the globe – hurricane Florence in the Atlantic, and typhoon Mangkhut in the Pacific. Tens of millions of people in the cities, towns and villages in the eastern US, The Philippines and southern China stood in the way of these two monsterstorms

The Call for Papers for this congress was written in January 2018. It contained a few bold statements. The Call announced that the congress agenda would be 'one of the most ambitious

in ISOCARP's history' and declared that the aim of the congress was 'nothing less than to save civilisation'. It asserted urban planners' critical role in this undertaking, arguing that 'the future of civilisation now more than ever depended on the way we plan and manage our cities and towns'.

The Call also introduced the host city, Bodø, describing it as 'cool in both senses'. This was a dual reference to its attraction to visitors and investors as a 'cool place', and to the fact that it is a cold city, due to its location Europe's and Norway's far north, inside the Arctic circle.

However, in the meantime - as the weird Northern Hemisphere summer of 2018 would have it - Bodø became unusually warm. Along with its region, Nordland, and the rest of Arctic Norway and Sweden, Bodø experienced temperatures of around 30 degrees Celsius (the normal for July is about 15). What was even more anomalous for this region of the world, was that it had more than 50 forest wildfires, something normally associated with Mediterranean parts of Europe.

In fact, the entire Northern Hemisphere has been affected by unusually weather phenomena. Heat waves, forest fires, storms and floods were fierce and widespread all over North America. Europe, Asia and northern Africa. Heat waves in July and August affected Ireland, Wales, England, France, Spain, Portugal, Turkey, Pakistan, China, the Koreas, Canada and California. In early August, temperatures in western Spain and southern Portugal reached 47 degrees. Meanwhile, forest wildfires were raging in the United Kingdom, Sweden, Denmark, Estonia, Finland, Latvia, Malta, the Netherlands, Poland and Germany. In Greece 90 people died in one wildfire near Athens. This is almost as many as Portugal in 2017, when more than 100 people died in wildfires. In California, some 5,000 recorded wildfires killed 10 people, burned 3,000 sq km of land, destroyed over 1,000 homes and forced evacuation orders on 20,000 residents. In Asia, storms and floods battered regions of Japan, China and India.

But while the attention of the media and the public is understandably on the populated areas, the scariest harbingers of the new climate in 2018 are in the Arctic. In December and January this past winter, the area between the North Pole and the Svalbard Islands had weeks of above zero temperatures. It even rained. By the time we all gather in Bodø, we will know if the long predicted 'blue ocean event' happened, or didn't. At the time of writing this report, a completely ice-free Arctic Ocean seemed unlikely. But that is of

little consequence. The fact is that the Arctic sea ice is almost gone and the *albedo effect* – more solar heat gain from the darker surface of an ice-free ocean – is now accelerating. This means the permafrost areas of the coastal plains and shallow seas of Siberia, Canada and Alaska are irreversibly thawing. And that means the dreaded 'methane clathrate bomb' is ever more likely to go off and change our planet forever.

So, the situation with the global climate system is indeed alarming. No more are we facing the 'prospect' of climate change – the climate HAS changed. In this new reality, what concerns our profession is that cities and towns worldwide will face the consequences in a disproportionate way. Not only because urban areas now contain more than half the human population, but also because urban inhabitants are heavily dependent on that clever human invention called 'urban infrastructure'. The trouble with urban infrastructure is that when it works, life is good and easy; but when it gets destroyed or disabled, life quickly turns

So what can Planning do? What can town, city, regional and spatial planners do to mitigate climate change processes that can still be prevented or slowed down, and to prepare us for all those that are now inevitable?

This is what this 54th Congress of ISOCARP is about. 500 planners from all over the world will gather in Bodø for five days to try to answer the two big questions of 21st century urbanism:

- 1) how can we make cities more sustainable and thus prevent even more global warming given that 'cities are heat engines' (as succinctly and profoundly stated in the language of thermodynamics and its Second Law the Law of Entropy);
- 2) how can we make cities more **resilient**, so that they can withstand the shocks and crises that seem inevitable regardless of how soon we take drastic action to curb our carbon emissions.

However, there is an even harder question, implied in these two, which we intend to put in front of delegates towards the end of the congress. Which of these two agendas - sustainability or resilience - has (or should have) priority for your planning department or consultancy? Or for your mayor and your city council? Or in the opinion of your citizens?

We do not expect a clear cut and definitive answer. Nor are we asking because we think somebody knows the exact answer. We are asking because we think this is the most important question for governments – central and local - and the planning profession to consider at this moment in history.

The Congress delegates are coming from 53 nations and some 160 cities and towns. Contributions will come in the form of papers, case studies and special sessions.

The plenary sessions will be addressed by the Norwegian and ISOCARP dignitaries, as well as by three extraordinarily qualified, internationally renowned keynote speakers:

- Jeremy Rifkin, globally acknowledged economist, futurologist and expert on technology, cities and industrial revolutions, author of several seminal books;
- Peter Newman, professor and author from Australia, leading world expert on sustainable cities, and transport and technology policy;
- Herbert Girardet, author and educator, from the UK, and world's leading expert on urban ecology and the imperative of 'regenerative urbanism'.

But of course, the engine room of any conference are the presentation sessions. These will be delivered in six concurrent tracks, each one a sequence of between five and seven sessions. Each track will be monitored by a pair of rapporteurs chosen from different corners of the world.

• Track One is about the Global View – comprised of papers which are not rooted in a particular city or town or region, but are global in scale and consequence. They aim to interrogate the general question of impacts of climate change on urban areas and these areas' generic capacity for sustainability/mitigation and resilience/adaptation.

Tracks Two, Three, Four and Five are about climate and specific cities and towns - their issues and projects, and the main strands of their climate response:

- T2 Spotlight Cities as defined by their somewhat specific locations and geographies (coastal; mountainous, remote; Arctic; tropical...);
- T3 Climate-proof Cities defined as urban areas where the basics such as food, water, energy and shelter are deemed vital in readiness for future extreme weather events;
- T4 Technology and Infrastructure

 is focused on engineering and how
 the design concepts of 'clean', 'green'
 and 'smart' can support the objective of
 being a resilient and sustainable city;

• **75** - **Social Networks** – is about the human factor and politics; it interrogates models of citizen participation, urban governance and cultural transformation required for transition to sustainability and resilience.

Track Six is about examples of **Contemporary Planning Practice** worldwide which are not necessarily focused on the climate/global warming issue. It offers insights into the diversity of the planning profession's current issues, methods and solutions worldwide.

There will also be several special sessions, including on:

- UN's Sustainable Development Goals in Norwegian Planning;
- Strategic Research and Innovation Agenda;
- The Next City (an ISOCARP seminar); and
- Global Resilience Networks.

Finally, thanks to our hosts, the City of Bodø, there will be a stream of session open the public – at the *ByLab* venue. *ByLab* will cover topics like:

Planners for Climate Action (an UN initiative); New Generation of Planners (an ISOCARP initiative); Reframing Citizen Participation for Sustainability Transition; Planning for Diversity; and Legitimacy of Urban Governance.

Does this look promising? Will this congress 'save the world'?

As clearly stated in the Call for Papers, 'the root cause of, and the solution to the global climate crisis, are fundamentally urban'. In plain language: cities will determine the fate of the world. Their rampant metabolism is powerful enough to throw the entire biosphere into a death spiral - and this may happen well before 2100. But their extraordinary concentration of human intelligence (planners included!) offers the hope that we'll figure out how to save ourselves before breachingw of which the UN General Secretary warned us on 10th September.

We are coming to the realisation that Cool Cities are a historical imperative. Either our cities get Cooler, or our planet gets Warmer.

This imperative will not happen by itself. It is a task which must be planned. This makes urban planning the coolest profession on the planet.

KEYNOTE SPEAKERS

Jeremy Rifkin (live stream)



Jeremy Rifkin is an advisor to the European Union and the People's Republic of China. His recent books include, The Zero Marginal

Cost Society: The Internet of Things, the Collaborative Commons, and the Eclipse of Capitalism and The Third Industrial Revolution: How Lateral Power is Transforming Energy, the Economy, and the World. He is the Executive Producer and narrator of the new film, The Third Industrial Revolution: A Radical New Sharing Economy, produced by VICE Media and now available in nineteen languages on YouTube.

Toward a Smart Third Industrial Revolution

We are experiencing the beginning of an historic upheaval. The emerging Third Industrial Revolution is giving rise to a digitally-interconnected smart planetary infrastructure and a radical new sharing economy. This is the first new economic system to enter onto the world stage since capitalism and socialism in the 19th century. It is a remarkable historical event that will transform the very nature of commerce, trade, and the way we work and live. This great economic transformation is, in large part, a global response to the growing threat posed by climate change. The shift from the Holocene to the Anthropocene and from the Age of Progress to the Age of Resilience marks a turning point in the human sojourn and an extraordinary opportunity to rethink the way we manage our urban and rural environments in an increasingly unpredictable world.

Peter Newman



Peter Newman is the Professor of Sustainability at Curtin University in Perth, Australia. He has written 20 books and over 340 papers

on sustainable cities. Peter's book with Jeff Kenworthy 'Cities and Automobile Dependence (1989) has been described as one of the most influential planning books of all time' by Reid Ewing Professor of City and Metropolitan Planning at the University of Utah. In 2014 he was awarded an Order of Australia for his contributions to urban design and sustainable transport. Peter has worked in local government as an elected councilor, in state government as an advisor to three Premiers and in the Australian Government on the Board of Infrastructure Australia and the Prime Minister's Cities Reference Group. He is a Fellow of the Planning Institute of Australia, is a Lead Author for the IPCC on a new study for accelerating a zero carbon future and his latest book is Resilient Cities: Overcoming Fossil Fuel Dependence.

Cool Planning: Cities and Climate Change

Cities are going to need to adapt and to mitigate to climate change. This will mean preparing for slow, incremental change like Cape Town and Perth with their massively reduced rainfall that began and was predicted decades ago; such cities must make hard decisions before they collapse. Other cities are using the need to cool their atmospheres using biophilic urbanism, led by the remarkable Singapore. But disasters can also be dramatic and terrible from extreme and sudden changes in weather. Both slow and fast adaptation can be turned into a major opportunity if planners can grasp the chance to bounce forward' not just 'bounce back', to build mitigation into every building, precinct and infrastructure. It must be about grasping the need for disruptive innovations that can rapidly decouple fossil fuel use from GDP, a process that is now well underway. Cities are the focus of disruptive changes as they are where growth is happening. We now know how to build the Renewable City through radical reductions in the need for energy, switching to solar/wind/geothermal with batteries, and electrifying everything, especially transport. The Theory of Urban Fabrics will be used to show how different strategies are needed in different parts of the city: the high density walking city, the medium density transit city and the low density automobile city, which are found in every city. The dramatic changes that have begun in mitigation will be illustrated showing the necessary role for planners using some global innovations from my own city Perth.

Herbert Girardet



Prof. Herbert Girardet is an international consultant on sustainable urban development, having worked for major cities

such as London, Vienna and Bristol. In 2003 he developed sustainability strategies for South Australia that have been largely implemented. He also worked extensively across the Middle East, incl. the Saudi Sustainability Initiative, 2010-12. He has been a consultant to UNEP and UN Habitat, and is a recipient of a UN Global 500 Award 'for outstanding environmental achievements'. He is a member of the Club of Rome, co-founder of the World Future Council, an honorary fellow of the Royal Institute of British Architects, a member of the World Academy of Art and Science, and visiting professor at University of the West of England. He has also produced 50 environmental TV documentaries for major broadcasters. He is author and co-author of 13 books, including: THE GAIA ATLAS OF CITIES, 2002 and 2006; CITIES, PEOPLE, PLANET – Urban Development and Climate Change, 2004 and 2008; A RENEWABLE WORLD – Energy, Ecology, Equality, 2009; and CREATING REGENERATIVE **CITIES, 2015.**

Regenerative Cities – making cities work for people and planet

The environmental impacts of an urbanising world present an unprecedented challenge to urban planners and decisionmakers. With cities as centres of production and consumption, we need to realise the economic benefits of making them resource efficient and eco-friendly. I argue for creating 'regenerative cities' – thinking and acting beyond sustainable development, and finding new approaches for integrating town and country planning. In a world of climate change and resource depletion, cities need to find new ways of developing a 'give-and-take relationship' with their local region, including food and renewable energy supplies. I'll draw closely on the example of South Australia where such initiatives have created the basis for a new, green economy for Adelaide.

CONGRESS TRACKS

TRACK 1 THE GLOBAL VIEW



Track 1 takes a global look at climate change, exploring how urban and rural areas worldwide are tackling challenges regionally, and how solutions can be applied globally. Presentations from five continents will approach the conference theme of climate change holistically, acknowledging the scale of this phenomenon, and the global collaboration necessary to comprehensively and effectively respond.

TRACK 4 TECHNOLOGY AND INFRASTRUCTURE



After two decades of discussion about smart cities, a globally shared definition of smart urban development and the identification of the most effective approach to urban sustainability and climate resilience are still missing. Undoubtedly, the traditional smart city approach is strongly rooted in an ICT-driven approach, but urban sustainability requires many more components. Above all the human one, as latest interpretations show. The future, smartness and resilience of our cities and their infrastructures are calling for citizen-oriented adaptable and accessible solutions. Only by enabling new behavioural and business models will our cities finally shift focus from adaptation and mitigation costs to smart low carbon development opportunities.

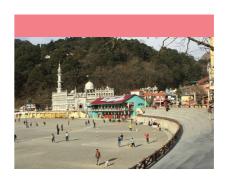
TRACK 2 SPOTLIGHT CITIES



The Spotlight Cities track takes a careful look at some of the most vulnerable cities in the world. The track examines the main risks and the associated adaptive strategies for coastal, remote, and Arctic cities.

The authors have collectively assembled insights, analysis, and techniques for responding to climatic events and mitigating against future risks.

TRACK 5 SOCIAL NETWORKS



With a spotlight on people, the main question is how communities and citizens can be engaged in the planning process while acting as part of a formal or non-governmental system? Sustainability and local stewardship forms the centre of the discussion on citizen participation while Planning places for people puts citizens in the heart of green initiatives. Furthermore, Inclusive cities addresses migration. changing population typologies and transforming communities that are beginning to dilute political borders. Lastly, *Planning policy, governance and* management discusses the role of nongovernmental actors in diverse scales of planning and development, followed by Heritage in context and Smart City, which round of the track by examing the role of participation and innovation.

TRACK 3 CLIMATE-PROOF CITIES



Cities are facing new challenges, related to social and demographic changes, innovations, the effect of finance on the economy and - climate changes. How can urban planning propose new management models for the cities facing these challenges? How should planners change their practice in order to reduce vulnerability of human settlements, better manage crisis periods and mitigate cities' natural resource over-consumption and GHS emissions?

TRACK 6 CONTEMPORARY PLANNING PRACTICE



This track reflects the diversity of 'less-climate-related' planning issues that drive contemporary planning researchers and practitioners. Weaving common threads is not easy, let alone a pattern or paradigm in contemporary planning. There are recurrent topics such as preserving cultural and natural heritage, the need for quality over quantity, (real) public space making, TOD-planning, etc. But there are also some newer fields such as 'UniverCity'/ School Planning, Sponge City-Planning, Urban Eco-Planning, Dual Planning System approach and ...the 'Periodic Table of Urbanism'.

CONGRESS TEAM

TRACK 1 THE GLOBAL VIEW

Kate Holmquist USA



Kate Holmquist, AICP, is an Urban Planner and licensed Landscape Architect specializing in sustainable development

and land use policy. Most recently she worked for the City of New York on initiatives to improve the sustainability and resilience of municipal infrastructure and increase equitable access to public open spaces and the city's waterfront. She led community based planning and stakeholder engagement for two diverse and high-need neighborhoods, and managed a portfolio of planning and redevelopment projects for NYC Parks.

Kate has over a decade of public and private sector experience working at the nexus of natural and urban systems – ranging from international large-scale planning to conservation and sustainable design and restoration projects.

Evren Ulker Kacar Turkey / USA



Evren Ulker Kacar is an urban planner with expertise in land use and environmental planning. She is experienced in leading complex

environmental analyses for public and private development projects, rezonings, and neighborhood plans throughout New York City. At the NYC Department of City Planning, Evren worked as a Senior Project Manager and oversaw the environmental review and analysis of major projects in accordance with city, state, and federal regulations.

Evren has many years of experience in land use planning and has guided comprehensive and strategic planning processes for several communities in the region. She is currently a Senior Environmental Planner at VHB, a leading private firm that specializes in planning and design, transportation, research, and was invited to speak at the UN-Habitat World Urban Forum in 2014. She currently resides in Portland, Oregon.

TRACK 2 SPOTLIGHT CITIES

Kevin King Canada



Kevin King is an experienced urban planner and recent founder of bokeh urban design in Vancouver, Canada.

His experience in both urban design and development planning strengthens his work, providing an awareness and understanding of core design issues and project complexities while not losing sight of the importance of stakeholder input.

Previous experience included more than a decade of work as part of DIALOG – a North American integrated design firm - where Kevin lead teams in the development of master plans, design guideline development, site planning, rezoning applications, downtown revitalization plans, and streetscape improvement projects in Canada and the United States.

Kevin is also an adjunct professor at UBC's School of Architecture and Landscape Architecture.

Sofia Morgado Portugal



Sofia Morgado is an Architect holding an MSc in Contemporary Architectonic Culture (FA-TU Lisbon), she is Doctor in Urbanism

(ETSAB/UPC, Barcelona) with postdoctoral studies and Agregação in Urbanism (Habilitation for Full Professorship; FA-ULisbon). Since 1997 she has been lecturing at the Faculty of Architecture, University of Lisbon; courses include urban design studios, contemporary urbanism and metropolitan studies. Based in Lisbon she is actively involved in international and national networks and research.

She has lectured and spoken in several countries, been invited speaker and conferences' and seminars' scientific committee member, referee, discussant and chair. She is used to networking and being involved in international assignments. Recent positions include being Expert at the Societal Challenges 6 Advisory Group and National Delegate at the Helsinki Group, at the European Commission, and at the ERAC/SWG/GR&I, EC.

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TRACK 3 CLIMATE-PROOF CITIES:

Eric Huybrechts France



Eric Huybrechts is a senior Architect and Regional/Urban Planner, member of SOCARP and Icomos, Officer in the Royal order of

Sahametrey (Kingdom of Cambodia). He is in charge of the International and European affairs for the Regional planning Agency of Paris region. He has developed a large experience in the field of Urban and Regional Planning as expert and team leader on Algiers, Beirut, Cairo, Ethiopia, Istanbul, Mongolia, Mumbai, Paris region, Phnom Penh, Rio de Janeiro, Saudi Arabia, Tripoli-Libya and others. He was resident in Cameroon, Egypt, Lebanon, Cambodia and Syria and then develop specific methodologies for planning in developing countries, taking into account the effects of climate change. He has prepared projects at local level, sub metropolitan, metropolitan, regional and national scales.

Lena Niel The Netherlands



Lena Niel is an urban researcher working both at research institute Deltares (NL) and the design office Posad (NL). She studied both urban

planning (Technical University of Delft, NL) and interior architecture (Royal Academy of Art, NL). Lena focuses on the integration of Dutch water management, land use planning and stakeholder participation in strategic (urban) projects on different scale levels. She is dedicated to designing a climate-proof future, both for human and nature. Thinking out of the box and crossing the borders of other disciplines is what she sees as one of the biggest challenges for the design of climate-proof cities.

She is actively seeking the combination of engineering, science and planning/design. She has gained international experiences in integrated regional planning in Mexico, Brazil, Canada and Kenya. Next to her work at Deltares, she holds a position in the Dutch delegation of the International Society of City and Regional Planners (ISOCARP).

TRACK 4 TECHNOLOGY AND INFRASTRUCTURE

Adriano Bisello Italy



Adriano Bisello is an Urban and Environmental Planner, with more than ten years of working experience and a strong interest in the field of

smart-city projects and low-carbon urban-regeneration strategies. He did his Ph.D. in Real Estate Economics, investigating the co-benefits of smart-energy projects at the urban level. He worked as a consultant and a freelancer planner for public administrations and engineering companies. Currently he is senior researcher in the Urban and Regional Energy Systems Research Team at EURAC in Bolzano (Italy). Adriano's activities range from local to European-funded projects in the field of smart cities, international energy planning, and sustainable energy policies and plans. He is a passionate public speaker and co-author of research works published in international books and journals.

Wanjiku Macharia Kenya (Prep)



Wanjiku
Macharia is
the Principal
Consultant
of Frontline
Planning &
Innovations, a
in institution

development. She has worked with a number of international professional services firms involved in capacity building to ensure that government departments plan adequately for programmes to secure budget allocations from the National Treasury and support to civil society organizations to develop programmes to enable them access international funds.

Ana María Fernández-Maldonado Netherlands/Peru



Ana María Fernández-Maldonado is a senior researcher working at the Chair Spatial Planning and Strategy of the Faculty of

Architecture and the Built Environment of Delft University of Technology, where she has been working since 1992. She is member of the editorial board of two academic journals, has presented her work in many international conferences and published her work in academic journals and books. She has experience working in several European-funded projects. She has been invited to present her work in Utrecht, Amsterdam, Barcelona, Venice, Mexico City, Melbourne and Lima. Her research interest is related to spatial planning, housing and urban transformations in European and Latin American cities.

TRACK 5 SOCIAL NETWORKS

Ali Alraouf Egypt/Qatar



Ali Alraouf is an architect and urban planner interested in research and practice related to holistic architectural and urbanism.

He has held permanent and visiting teaching and research positions at regional and international universities including University of California at Berkeley-USA. His research interests are: Knowledge-based Urban Development, Post-Carbon Contemporary Gulf Cities, Urban Vitalization of Historical Districts, Knowledge and Creative Cities. He published more than 95 journal refereed papers, critical reviews, essays, in addition to books and book chapters, including his latest book "Knowledgebased Urban Development in the Middle East". He is currently acts as Head of Capacity Building, Training, Research and Development unit at Ministry of Municipality and Environment (MME). He is also a visiting Professor at HBK University and the Chairman of Green Urbanism and Planning Group at Qatar Green Building Council.

Nupur Prothi India / Sweden



With two decades of experience as a landscape architect, Nupur's emphasis on collaborative engagements and synergies

across disciplines is rooted in her academic background. With graduate and post-graduate degrees in Physical Planning and Landscape Architecture from SPA Delhi and Heritage Conservation from University of York (UK), her work through Beyond Built Pvt Ltd, a research-based design practice in Delhi, seeks to bridge these diverse interests. The firm is currently involved in various water-front projects for the Government in India. She envisions a concentration over the next two decades towards community-driven projects in urban spaces in India, a culturally-diverse, democratic nation.

Currently based out of Stockholm she is an Advisory Circle Member of the International Federation of Landscape Architects (IFLA), Advisory Board Member of the Institute of the International Society of City and Regional Planners (ISOCARP).

TRACK 6 CONTEMPORARY PLANNING PRACTICE:

Frank D'hondt Belgium/Greece



Frank D'hondt has a master's degrees in urban geography and territorial planning, both obtained at Ghent University in Belgium. He

is founding director of the Territorial Capital Institute, a knowledge-based platform to exchange theory and praxis of integrated territorial development and placemaking, drawing upon his experiences on localising the New Urban Agenda and the International Guidelines on Urban and Territorial Planning. He was founding-director of o2 Consult, specialised in participatory planning processes. Since 2005, Frank has been working with UN-agencies in developing countries, including Kosovo, Palestine, Nepal, Afghanistan, Kenya and the Caribbean, specialisng on national urban policies, metropolitan planning, post-conflict/disaster planning and participatory visioning and placemaking. Frank is the Assessor of governmental agencies in the UAE, was vice-president of the European Council of Spatial Planners and founding-member of the Flemish Association of Planners and currently acts as the ambassador of ISOCARP.

Andreas Schneider Switzerland



Andreas
Schneider
is Professor
for Urban
and Regional
Planning at
the Technical
University of
Rapperswil,

Switzerland (teaching in BSc, MSc + CAS studies, applied research and consulting, management IRAP institute). He studied architecture at ETH Zurich, Switzerland and CEPT Ahmedabad, India.

Andreas is in the Board of Trustees (investment committee + real estate committee) of Metron Pension Fund, Brugg, and from 2002 to 2011 he was Project Manager (strategy and process consulting, regional and urban development, marketing and real estate development) at Metron, Brugg.

His specific interests are in planning methodology and implementation, as well as in an entrepreneurial approach on strategic planning and urban redevelopment.

European and Latin American Cities.

PRESENTATION SCHEDULE

		Track 2: Spotlight Cities: Planning for			Track 5: Social Networks: Citizen		
TK=Track Keynote	Track 1: The Global View: Climate Change	Coastal Cities, Remote Towns & High	Track 3: Climate-Proof Cities: Planning	Track 4: Technology and Infrastructure:	Participation, Urban Governance and	Track 6: Contemporary Planning Practice	Special Sessions, Side Events, Session
The Track Requises	Impacts, Sustainability and Resilience	North Cities	for Weather, Water, Food and Energy	Clean, Green, Smart and Resilient	Cultural Transformation	Projects and Paradigms	Proposals
Venue	Scandic Havet - Storhavet 1	Scandic Havet - Storhavet 2	Radission Blu - Room 1	Radission Blu - Room 2	Stormen Concert Hall - Sinus	Stormen Library - Litterature Hall	Stormen Library - Bodø ByLab
Session 1	Global goals & national planning policy Part I	Making the most of underground spaces - Venue: 'G Nattklubb', former underground shelter (address: Sjøgata 16B)	Green infrastructure and urban design	Planning next generation infrastructures for innovative solutions	Sustainability and local stewardship	Urban innovation part 1	Planners for Climate Action - an initiative of UN- Habitat
Tuesday 2. Oct 11.00-12.30	Gossop, UK - TK Al-kuwari, Qatar Alexander, USA Liang S, China Chepelianskaia, France	Session Proposal Moderators: Han Admiraal, Netherlands Antonia Cornaro, Switzerland Elizabeth Reynolds, UK	Escobosa-B/Dem-A, Mexico - TK Feng Xin, China Skeie, Norway Czyzewska, Poland	Kuzniecow Bacchin, Netherlands - TK Boyko, Russia Tan Li, China Agrawal/Ukonze, India/Nigeria Cao Zhejing, China	Susaki, Japan - TK Temesgen, Norway Lundberg, Norway Shen Ping, China Kuhk/Vloebergh, Belgium	Kumar S, India - TK Zhang Xiaoping, China Luo Wenjing, China Kizildere, Turkey	Moderator: Didier Vancutsem, ISOCARP Speakers: C. Auclair; J. Kehr Kaw; A. Wyckmans; E. Huybrechts; J. Aerts; G. Mutezo; T. Gall
Session 2	Cultural impact of climate change: Norway multi- dwelling life-style	Rising tides: resiliency and the waterfront in the face of extreme climatic conditions	Green infrastructure and habitats	Urban Mobility in Transition: Perspectives and Challenges on Urban Living and Public Spaces in China	Planning places for people	Urban innovation part 2	ISOCARP and the new Generation of Planners
Tuesday 2. Oct 13.30-15.00	Gossop, UK - TK Al-kuwari, Qatar Alexander, USA Liang S, China Chepelianskaia, France	Schreurs, Belgium - TK Olufemi, Canada Paragas, Philippines Wong, UK Priyomarsono, Indonesia Alraouf, Qatar	De Luca, Italy - TK Admiraal, Netherlands Huai Songyao/Song Liu, China Lian Xin, China Delibas, Netherlands Starzewska-Sikorska, Poland	Session Proposal Moderator: Sebastien Goethals, ISOCARP Speakers: Pan Haixiao, China Wang Hongyang, China	Guo Yuting, China - TK Gommers, Belgium A Longduoqi, China Li Lihua, China	Luo Wenjing, China - TK Roy, India Davidovici Marton, Israel Lorens, Poland Lu Yuan/Wang Xiangyi, China	Moderators: Zeynep Gunay & Slawomir Ledwon ISOCARP
Session 3	Global idea sharing - Case studies in sustainability and resilience	Cold cities: Challenges and strategies for cities of the North	Food and heat	Planning next generation infrastructures for adaptation, mitigation & disaster preparedness	Inclusive cities	Eco-planning system	Reframing citizen participation for a sustainable city transition – the case of Bodø ByLab
Tuesday 2. Oct 15.30-17.00	Heinen, Germany - TK Schuett, Poland Letebele, South Africa Manyike, South Africa Gall, Germany Alraouf, Qatar Young, USA	Li Han, China - TK Leng, China Nikolaev, Russia Granmo, Norway Lorens, Poland Khokhlova, Germany	Olufemi, Canada - TK Kapelos, Canada Marat-Mendes, Portugal Schackmar, Germany Renault, France Li Xin, Forestry Univ.,China	Mahlangu, South Africa - TK Zhang Menghan, China Hou X/Xue B, China Alade, Nigeria Zhong Yujia, China	Rizzi, Italy - TK de Sousa, Argentina Hirandas, India Moreira, Portugal	Xiji Jiang/Ye Dan, China - TK D'hondt, Greece Sliwa, Poland Wang Jinbai, China Zheng Yi, China	Session proposal as part of Track 6 Moderator: Daniela Baer, Norway Speaker: Marianne Bahr-Simonsen
Session 4	Planning methodologies for climate adaption and resilience	Form and technique: City and region shaping through analysis and technology	Energy	Shaping urban form and flows in the smart cities	Planning, policy, governance and management	Heritage planning	ISOCARP UPAT Seminar
Wednesday 3. Oct 13.30-15.00	Trundle, Australia - TK Ariyanti, Netherlands Venvik, Norway Van Niekerk, South Africa Ranjbar, Iran Iranmanesh, Iran	Garcia, Portugal -TK Li Xin, Tianjin, China Ye Chengkang, China Liu Chengcheng, China Chitapi, South Africa Domingues Caetano/Malta Purim, Brazil de Sousa, Argentina	Zhao Pengjun, China - TK Hernandez Moral, Spain Leng Hong, China Tzou M, China Bisello, Italy	Baer, Norway - TK Chepelianskaia, France Ren Xiyuan, China Kai Xin, China Xin Lian/Zhou Jun, China Denis/Russia	Lorens, Poland - TK Okisatari, Japan El Gritly, Qatar Maleeva, Russia	Qian Renzan, China - TK Teipelke, Germany Zhang Xinxin, China Maldina, Italy Maximova, Russia Morgado, Portugal	Moderators: Martin Dubbeling and Milena Ivkovic ISOCARP
Session 5	Global goals & national planning policy Part II	Urban works: Infrastructure, the built environment, and landscape in the face of climate change	Water	How to develop a new public service	Heritage in context	Landuse & planning systems	Planning for diversity
Wednesday 3. Oct 15.30-17.00	van Noordt, Belgium - TK Aydin, Turkey Tandoh, Ghana Apraku, Ghana Fernandez Maldonado, Netherlands	Shllaku, Australia - TK Ilieva, Bulgaria Agrawal, India Aladekoyi, Nigeria	Leclercq, UK - TK Baer, Norway Chen Lulu, China Van Niekerk, South Africa Li Yue/Geng Hong, China Peilun Li, China	Session Proposal Moderator: Larissa Guschl, Netherlands	Geambazu, Romania - TK Cai Zihan, China Yan Cunai, China Yang Jianqiang, China Xinyue Gan, US/China Xia Huiyi, China	Liu Wen, China - TK Masinga, South Africa - TK Yang Xiaoting / Huang Y, China Goldie, UAE Wirz/Schneider, Switzerland	Session proposal as part of Track 5 Moderator: Tone Magnussen Speakers: Torill Nyseth; Gregory Taff; Anniken Førde
Session 6	Assessment/understanding impacts of climate change	Sustainable development goals in Norwegian planning - possibilities and challenges	Data and modelling	Turning technological innovation in urban and community values	Smart city		ISOCARP Awards for Excellence Seminar
Thursday 4. Oct 11.00-12.30	Hasan/Shakil, Bangladesh - TK Paul, India Shmeleva/Shmelev, Russia/UK Batista, Portugal Hanzl, Poland	Session organised by the Norwegian Ministry of Local Government and Modernisation	Bonhomme, Belgium - TK Liu Xiang, China Sun Ge, China Xia Fujun, China Tillner, Austria Vettorato, Italy	Borsboom-van-Beurden, Norway-TK Ludlow, UK Celik, Turkey Marful, Ghana Moreira, Portugal Ledwon, Qatar Sergi, Italy	Fernandez-Maroto, Spain - TK Aleksandrov, Norway Forde, Norway Wang Guoqiang, China Santangelo, Italy		Moderators: Martin Dubbeling and Ana Peric ISOCARP
Session 7		Sustainable development goals in Norwegian planning - possibilities and challenges	Governance and economics	Cool Planner: The role of urban planning & design within global resilience frameworks	New strategic research and innovation agenda of JPI urban Europe	"Next City Seminar" Meet the Institutional Members of ISOCARP	Constructed and contested legitimacy in urban governance
Thursday 4. Oct 13.30-15.00		Session organised by the Norwegian Ministry of Local Government and Modernisation continued	Xu Ningjing, China-TK Pomazan, Ukraine Hiltgartner, Austria Ayeke, Ghana Hosseinifarhangi, Netherlands Kumar A, India	Session Proposal as part of Track 3 Moderators: Milena Ivkovic & Lena Niel, NL Speakers: C. Auclair; J. Kher Kaw; I. Shmeleva; B. Van Heerden	Moderators: J. Borsboom-van-Beurden & Mari Solerød	Moderator: Martin Dubbeling and Jeremy Dawkins ISOCARP	Session proposal as part of Track 5 Moderator: Mathias B. Reinar, Norway Speakers: A. Røiseland; M. Grønning; M. Nilssen; A.K. Lundberg; M.B. Reinar; T. Nyseth



Track 1 takes a global look at climate change, exploring how urban and rural areas worldwide are tackling challenges regionally, and how solutions can be applied globally. Presentations from five continents will approach the conference theme of climate change holistically, acknowledging the scale of this phenomenon, and the global collaboration necessary to comprehensively and effectively respond. Participants will be introduced to the impacts of climate change affecting communities, and challenged to think globally about strategies for sharing knowledge, scaling up solutions, and addressing issues of equity that disproportionately affect some populations over others. Sessions will explore planning approaches being employed to mitigate climate change and plan for more resilient cities and communities at different scales and levels of government, in parts of the world where planning for climate change is well underway to countries still striving to raise awareness on the impacts of climate change.

Congress Abstracts: Assessment/ Commentary

The Global View Track looks at the big picture. We expect lively discussions as diverse view points highlight important challenges, disparity, and fragmented approaches – and offer a global forum for understanding a global issue, and identifying opportunities to strategically reduce the effects of climate change through collaboration, idea sharing and coordination. Diverse case studies will offer valuable lessons in what has worked and what hasn't: and practitioners and academics across a range of organizations will evaluate and discuss the potential of spatial planning, land use management, and technologies for risk assessment to inform policy and practice from different perspectives.

What can we expect at the congress The Global View Track will feature over 30 speakers, organized into six sessions that explore the impacts and assessment of climate change, policy challenges at the national level in the context of global climate goals and agendas, and present planning methodologies for and case studies in sustainability and resilience.

Session 1: Global Goals & National Planning Policy - Part I

How are governments responding to global climate agendas and sustainability goals? Two sessions will explore challenges of national, state and local coordination on policy and planning to ensure action and progress. Part I will focus on intergovernmental coordination and the hurdles to implementation, and actionable policy to address energy efficiency and production, green-house gas emissions, sea level rise, and achieving Zero Carbon cities.

Session 2: Cultural Impact of Climate Change: Norway multi-dwelling lifestyle.

Researchers from the Norwegian University of Life Sciences will present on shifting cultural patterns in homeownership, and the link to climate change. More than one out of five households in Norway own a vacation home in addition to their primary homes. Case studies in this session will focus on mobility and housing consumption patterns including the effects of climate change on travel modes and future land use patters.

Session 3: Global Idea Sharing - Case

Studies in Sustainability & Resilience In the spirit of the 54th Congress we will create a global forum for idea sharing, presenting a variety of case studies that take a critical look at what works and what doesn't in planning for sustainability and resilience.

We will hear about successful spatial planning approaches for reducing greenhouse gas emissions in three developed nations, the role of spatial planning and land use management in Africa, and the effects of changing weather patterns and rapid glacier retreat on water

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availability in Andean Cities, and New York City, Doha, Qatar will discuss their strategies for a resilient future.

Session 4: Planning Methodologies for climate adaptation & resilience

Presenters and participants are invited to take a high-level look at the planning profession and rethink methodologies for climate adaptation and resilience. We will hear from topical experts about environmental planning, spatial planning, and land use management approaches, such as endogenous resilience, volcanic river basin management and the use of indigenous knowledge as a tool for water resource management. This session will look at methodologies ranging from placebased solutions to systems level planning strategies, illuminating a natural tension between contextual approach and the need for scalable solutions.

Session 5: Global Goals & National Planning Policy - Part II

How are strategies measuring up in meeting national and global climate targets? Part II will dive into coordination of climate action and planning policies across borders and political boundaries. Presentations will look at spatial planning and regulation at the local level in African and Asian cities, to understand their effectiveness in addressing national climate policies.

Session 6: Assessment & understanding the Impacts of Climate Change

World-wide, the impacts of climate change vary widely and are experienced differently. For planners to address climate change holistically and strategically, the assessment of regional effects of climate change and the data to project future impacts are critical. Session 6 explores efforts by government agencies, NGOs, and academic institutions to measure and understand the problem to make data-driven solutions possible.

(TK) track keynotes

Authors are responsible for the content of their work

Session 1: Global goals & national planning **policy** - Part I

2 October (Tuesday), 11:00 - 12:30

Chris Gossop, National Energy Foundation (NEF), Milton Keynes, United

London and climate change - a zero carbon city for 2050 achievable or just hot air?

The new London Plan sets the target of London becoming a zero carbon city by 2015. The paper explores the realism of this - will the prescriptions of the plan and the likely results on the ground suffice to meet that target?

Mooza Al-kuwari; Khonokze Rahaman, Doha, Qatar

Climate change strategy for the urban planning and development sector in Qatar

The Ministry of Municipality and Environment has developed a Climate Change Strategy for the Urban Planning Sector for the State of Qatar that will regulate developments in the country.

Serena E. Alexander, San Jose State University, San Jose, USA Harnessing the opportunities and understanding the limits of America's state-level climate action plans

This research is an evaluation of America's current state-level climate action plans focusing on their emissions reduction outcomes as well as their development procedure and foundations; goal setting, policy coverage and regional coordination; implementation provisions and conditions; and implementation mechanisms and monitoring results.

Sisi Liang, Tsinghua University, Beijing, China

From green to resiliency: A review of evolution, experiences and implementations of American Climate Change Action Plan Through a deep review of city-level climate action plans in the United States, this paper discusses the evolution, implementation, and performance of green efforts cities made during the

past decade. It calls for a transformation of policy from green development toward improvement on resiliency.

Olga Chepelianskaia, Uniciti, Toulouse, France

Climate resilience through land use regulations in Asian CIties Climate resilience is a critical imperative for Asian cities and it needs to be mainstreamed into land use regulations to achieve a durable and cost-effective result. The presentation outlines how to put this approach in place in a context of developing Asian cities' political, institutional, economic and societal challenges.

Session 2: Cultural impact of climate change: Norway multi-dwelling life-style

2 October (Tuesday), 13:00 - 15:00

Jin Xue; Petter Næss; Rasmus Steffansen; Harpa Stefansdottir; Tim Richardson, Norwegian University of Life Sciences, AS, Norway

Multi-dwelling home lifestyle and climate change Drawing on the concept of multi-dwelling home lifestyle, the paper aims to analyze the associated mobility pattern, housing

consumption pattern and the impacts on climate change. Rasmus Steffansen; Jing Xue; Harpa Stefansdottir; Petter Næss; Tim

Richardson, Ås, Norway Vacation home planning, perceptions of nature and climate change

This study focuses on perceptions of nature and climate change in relation to Norwegian vacation home planning, ownership and use. The data (qualitative/quantitative) largely reveals an anthropocentric outlook from both the planning side and the user side, resulting in a neglecting of nature and climate changes related impacts and effects.

Petter Næss; Jin Xue; Rasmus Steffansen; Harpa Stefansdfottir; Tim Richardson, Norwegian University of Life Sciences, Ås, Norway

Travel modes for visits to non-primary dwellings: considerations and justifications

Based on qualitative interviews of Norwegian users of nonprimary dwellings, supported by a questionnaire survey among a larger sample, this paper addresses travel modes when visiting non-primary dwellings and the reasons stated for choosing the relevant modes of transportation.

Harpa Stefansdottir; Jin Xue; Petter Næss; Rasmus Steffansen; Tim Richardson, Norwegian University of Life Sciences, Ås, Norway

The impact of climate change on potential use of vacation

The aim of the study is to lay out how changing climate may affect the future use pattern of three selected vacation home areas in Norway. This study is mainly based on eleven qualitative in depth interviews with vacation home owners in Trysil, Oppdal and

Session 3: Global idea sharing - Case studies in sustainability and resilence

2 October (Tuesday), 15:30 - 17:00

(TK) Deborah Heinen, Hafencity University, Hamburg, Germany

The role of regional planning in the US, Canada and Germany in spatial climate mitigation actions

Land use and transportation patterns are significant factors impacting greenhouse gas emissions. They are also factors that are governed differently in nations across the globe. Therefore this paper seeks to compare the regional capacities to govern land use and transportation in Hamburg (Germany), Seattle (USA) and Vancouver (Canada).

Rolf Schuett, Systemarchi, Nochowo, Poland

Climate change impact in Andean cities in Bolivia: the Tiquipaya case and a community led New Urban Agenda for resilient planning

This paper discusses how it may be possible to implement important impulses of the New Urban Agenda in communal collaboration strategies. It suggests as well how low tech landscape and urban design can improve resilience and community involvement.

K. Emmanuel Letebele, EThekwini Municipality, Durban, South Africa The impact of climate change on spatial planning, the case of Durban, eThekwini Municipality

The Municipality developed the Spatial Development Framework underpinned by New Urban Agenda, Sustainable Development Goals, and the Paris Agreement. It also has climate change responses such as the Durban Climate Change Strategy and Climate Resilience Implementation Plan. The paper will explore coordination, main streaming and implementation of climate

Sagwata Manyike, South African National Biodiversity Institute, Pretoria, South Africa

Incorporating climate change resilience into spatial development tools in South Africa

The Biodiversity and Land Use Project, which is funded by the Global Environmental Facility through the United Nations Development Programme is piloting various ways in which South African Cities can become more resilient towards climate change through interventions in their spatial planning and land use management systems.

Track 1

Tjark Gall, Urban Framework, Germany

A methodological approach to measure interrelations between urban form and flood-related risks in Kampala, Uganda

This paper aims to develop a method to examine the relationship of spatial characteristics to the often-unjust distribution of climate change risk exposure and test it in the case of Kampala, Uganda. The research intends to increase the understanding of spatial injustice to support better-informed policy and spatial intervention strategies.

Ali A. Alraouf; Jomaa A. Marzouq, Urban Planning Doha, Doha, Qatar Revisiting the concept of resilient cities: the case of Doha, Qatar

Using the case of Doha, the paper illustrates a new conceptual understanding of cities' resilience. The paper analyses the contemporary evolution in Doha and highlights the milestones in structuring the new vison for Doha's development as a resilient city holistically.

Ingrid Young, New York City Mayor's Office, New York, United States of America

New York City- environmental review and planning for a sustainable future

NYC Planning and Environmental Review- Creating a more Sustainable and Resilient City. How rethinking one major city's regulatory framework can better shape sustainable growth over the next century

Session 4: Planning methodologies for climate adaption and resilience

3 October (Wednesday), 13:30 - 15:00

Alexei Trundle, The University of Melbourne, Parkville, Australia

Endogenous resilience: integrating urban informality with climate change planning in Pacific Small Island Developing States

This paper demonstrates pathways for building on the resources, networks, and latent capacities of urban informality to enhance the climate resilience of urban systems. Post-disaster case study research from two Pacific Small Island Developing States is used to illustrate conceptual and practical opportunities for urban planning to complement endogenous resilience.

Vicky Ariyanti; Jurian Edelenbos; Peter Scholten, Erasmus University Rotterdam/ IHS, Rotterdam, Netherlands

Future direction for a volcanic basin planning

Governing water in an active volcanic basin requires inter-faceted views and integration of water, lahar (volcanic debris flow) and volcano management. This paper addresses these issues simultaneously using a case of Opak Sub-Basin in Mt. Merapi region, Indonesia.

Guri Venvik, Geological Survey of Norway, Trondheim, Norway The ground beneath our cities

The subsurface is important for cities. Cities not only expand outward and upward, but also downward. The more use we make of subsurface space, the more surface space we free for the one function that cannot do without daylight and fresh air: living

Willemien Van Niekerk; Amy Pieterse; CSIR, Pretoria, South Africa; Jacques Du Toit, University of Pretoria, Pretoria, South Africa

Place-based adaptation solutions for South African settlements

This paper explores how climate change adaptation was mainstreamed into South African local government planning instruments by comparing two case studies. One drove integration internally while the other received support from national government to enable and drive integration. The challenges and opportunities for mainstreaming are discussed.

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Ehsan Ranjbar, Tarbiat Modares University, Tehran, Iran; Najmeh Motalaei, Iran

Climate change and the effects on urban planning and design in Iranian cities

Iran is one of the countries that touch the effects of climate change. This article is trying to elaborate the challenges resulting from climate change in Iranian cities, assess the consequences and effects on everyday life of cities and introduce new policies in urban planning and design.

Nasim Iranmanesh, Islamic Azad University East Tehran branch; Kouros Etaati, Jarf Sanat, Tehran, Iran

Indigenous knowledge as solution against drought in cities of Iran (case study: Qazvin city)

This paper will review the indigenous knowledge in harvesting and supplement water in historical cities of Iran to get to know some sustainable solutions to challenge the drought which is the result of global warming of the earth.

Session 5: Global goals & national planning policy - Part ||

3 October (Wednesday), 15:30 - 17:00

Anneloes van Noordt, Environment Department Flanders, Brussels, Belgium

The role of spatial development in the energy and climate transition

This paper is centered on how spatial development can contribute to the energy and climate targets. Focus points will be defined to indicate the role spatial development can play and a research by design exercise will be discussed. To conclude, policy recommendations in general and specifically for Flanders are formulated.

Bilge Aydin; Azime Tezer, Istanbul Technical University, Istanbul, Turkey; J. Joerg Knieling, HafenCity University, Hamburg, Germany

How to combine resilience theory with regional policies? A network based methodology

The aim of this study is to develop a new, network-based methodology for regional resilience analysis in order to analyze interconnected risk factors in a complex world. There has been explained, how system approaches can be combined with network theory to evaluate regional resilience with a multidimensional, multi-scale and multi-temporal perspective.

Nada Tandoh, Land Use and Spatial Planning Authority, Accra, Ghana The effect of climate change in Ghana's cities

Ghana is not isolated from the changes in climate the world over. Impacts of climate changes include floods, drought, heat waves etc. Policies and strategies have been developed, and also mainstreamed into governance to ensure implementation. This paper reviews Ghana's perspective of climate change impacts, sustainability and resilience.

Patrick Apraku, Land Use and Spatial Planning Authority, Accra, Ghana Governance, management, administration and planning systems in Ghana

The Government of Ghana has demonstrated commitment to mainstreaming climate change into key planning processes at the national, regional and local level. Ghana's resolve to mainstream climate change into the development agenda is through the Ghana Shared Growth Development Agenda I&II (2010-2017) attest to this commitment.

Ana Maria Fernandez Maldonado, Delft University of Technology, Delft,

Addressing climate change in European spatial planning
The study investigates how climate change related issues have
modified European spatial planning in two ways: how spatial
planning systems have included climate change-related issues;
and which main planning instruments are being used to achieve
to tackle the risks associated with climate change. It uses data
from the ESPON-COMPASS project.

Session 6: Assessment & understanding the impacts of climate change

4 October (Thursday), 11:00 - 12:30

Shahadat Hossain Shakil, USAID, Dhaka, Bangladesh; Mohammed Hamidul Hasan, Bangladesh Institute of Planners, Dhaka, Bangladesh

An assessment of effective approaches for adapting to the impacts of climate change on urban poor communities to make the urban area more resilient. - Perspective from Bangladesh

Is a bottom-up or top-down approach more effective for adapting to the impacts of climate change on urban poor communities in the cities of global south?

Saikat Paul; Raj K., B. Bhaskar Rao; Ritu Roy, Indian Institute of Technology Kharagpur, Kharagpur, India

Application of low-rank sparse decomposition method to study urban heat island

This study establishes use of Low-Rank Sparse Decomposition Method to assess trends or patterns in Urban Heat Island (UHI) phenomenon in the metropolitan city of Kolkata. This would help in UHI mitigation and adaptation planning strategies in tropical regions.

Irina Shmeleva, Institute of Design and Urban Studies, Saint-Petersburg, Russian Federation; Stanislav Shmelev, Environment Europe, Oxford, United Kingdom

Global urban sustainability assessment: a multidimensional approach

Environment Europe database includes 90 global cities and allows to benchmark sustainability performance on 20+ social, economic, environmental and smart indicators.

Luisa Batista; Miguel Lopes; Paulo Pinho, University of Porto, Faculty of Engineering, Porto, Portugal

Metabolic Impact Assessment for strategic urban planning
This presentation intends to show the potentials of Metabolic
Impact Assessment (MIA) of urban development proposals to
strategic urban planning. The introduction of MIA into SEA fosters
the implementation of climate change mitigation strategies.

Robert Cichowicz; Malgorzata Hanzl, Technical University of Lodz, Lodz, Poland

Measuring CO2 emissions - implications for spatial development

Air pollution measurements and analyses indicate the relationship between built form and urban development and the presence of concentrations of CO2 and other pollutants. The current study examines these relationships in quest of the recommendations how to transform urban development and users behaviour to decrease CO2 emissions.



What is the track about?

The Spotlight Cities track takes a careful look at some of the most vulnerable cities in the world. The track examines the main risks and the associated adaptive strategies for coastal, remote, and Arctic cities.

The authors have collectively assembled insights, analysis, and techniques for responding to climatic events and mitigating against future risks.

What has been the response?

Adaptive strategies for vulnerable waterfronts are described through the lens of both policy and design. Spatial strategies that take into account the complexity of the city are evaluated with consideration for both urban and natural systems.

Papers and workshops in this track address a diversity of geographic locations and city scales. New York City, the Gold Coast of Australia, the severe cold regions of China, Buenos Aires, Delhi select European cities, Doha, Jakarta, Lagos, Sjøgata, and others all provide examples that will shape our understanding of resiliency.

Through the papers in this track, we consider strategies for urban infrastructure that will mitigate against risk associated with climate change. These strategies may address street design, drainage systems, regional greenway networks, or flood protection. Alternatively, these strategies may be driven more by land-use strategies or policy approaches and discuss the city from macro-level development patterns.

The track also presents an emerging palette of methodologies – sometimes driven by technological innovations – that better enable practitioners to understand current conditions and advocate for effective change. Papers include information on computer simulated models that aid in the site selection process. Other topics include a description of how public spaces or social solutions play a role in effective strategies for

How do you deem / assess the response?

A diversified set of perspectives, methodologies, geographical conditions, and case studies indicate a very positive reaction to the challenge casted by the Congress call. The breadth of the contributions resulted in a rich array of possible Session formats – a remarkable outcome indeed.

With the Sessions finally outlined, lively debates are expected to develop between presentations. Questions, related to either research or practice, may give rise to future collaborations and partnerships. Content drawn by presenters and contributions from the audience will be pivotal to creating a shared set of conclusions at the closing of the Congress.

What can we expect at the congress?

The congress will engage participants through workshops, presentations, debates, and discussion. In particular, the Spotlight Cities Track will contribute to the lively interaction between delegates with different backgrounds and cross-cutting topics within each of the 5 different Sessions.

Session 1 will provide an opportunity for up to 30 participants to meet 'underground' for an exploratory workshop for potential underground uses in Bodø. This workshop will be preceded by knowledge sharing on popular uses and possibilities to repurpose underground spaces.

Session 2 dives into matters related to resiliency along vulnerable waterfronts. Recent and significant weather events have highlighted the inherent challenges and risks associated with urban development along the waterfront. Residents' vulnerability and resilience to flooding in Lagos, Nigeria is examined through a lens of adaptive governance. A Recovery and Rehabilitation Plan for Tacloban City in the Philippines following the destruction of the world's strongest typhoon to make landfall

is evaluated. Storm impacts and flooding controls in Hong Kong and NYC are analysed.

Session 3 focuses on urban infrastructure, the built environment, and landscape in the face of climate change. Street design in the Gold Coast of Australia, drainage systems in Delhi, and the effectives of urban expansion on utility services in Akure, Nigeria are included papers. An evaluation of a demonstration city – Qi'an in China – that uses a 'sponge' greenway as an ecological buffer is provided. Lastly, climate readiness strategies from New York City and Boston are discussed.

Session 4 will discuss broad techniques and macro-scale analysis of the City. Urban form and development strategies – including ecological buffering - will shape the discussion. Emerging research, knowledge networks, and calls for citizen engagement are shaping our cities. This session will highlight potential solutions to working within the rapidly changing contexts of our urban environments.

Lastly, **Session 5** is directly related to cold cities and cities of the north. The series of papers in this session explore unique aspects associated with designing for climate change that these cities, towns, and villages face.

(TK) track keynotes

Authors are responsible for he content of their work

Session Proposal Making the most of underground spaces

2 October (Tuesday), 11:00 - 12:30

This event will take place at a short walking distance from the congress venues in a former underground shelter, last used as the 'G Nattklubb'. The address is 'Sjøgata 16B'. Please allow yourself some time to walk over to this location.

Moderators: Han Admiraal (ITACUS/Enprodes), Netherlands; Antonia Cornaro (ITACUS/ISOCARP Swiss ND/Amberg); Elizabeth Reynolds (URBEN/Think Deep UK)

Cities are more and more being challenged by lack of space whilst at the same time having to cope with the reality of climate change. In this session we will ask ourselves how to make the most of underground spaces through repurposing.

How can we repurpose existing underground spaces in such a way that they regain a new life and become beneficial again for a city? In this session, we will look for inspiration at the many bunkers that Bodø has and analyse and discuss what new uses they could serve.

After introductions/input statements by the moderators we will hold an interactive workshop with the audience as well as with local representatives. These will be from the local municipality, the real estate department of the Ministry of Defence, the local aviation museum; and the airport authority. Together, we will look at possibilities to repurpose these underground spaces. The outcome will be a report to be presented to the local representatives at a later date. Also, the event will be the kick-off of a new ISOCARP group on underground urbanism.

Session 2: Rising tides: resiliency and the waterfront in the face of extreme climatic conditions

2 October (Tuesday), 13:30 - 15:00

Gitte Schreurs; Kris Scheerlinck; Erik Van Daele; David Burney, KU Leuven, Ghent, Belgium

Countering the current paradoxical redevelopment of New York City's vulnerable waterfronts

The research aims to develop novel spatial strategies for the reconfiguration of vulnerable industrial waterfronts, defined by climate change and economic decline. The paper aims to counter the current 'tabula rasa' developments in New York City, by taking into account climate change and the waterfront's existing spatial qualities and fragilities.

Olusola Olufemi; Olufisayo Ogunmodede; Pinremola Olufemi; Oluwabukola Somoye, Independent, Oakville, Canada

A resilient coastal mega city, a resilient people: Flooding as a climate change threat in Lagos, Nigeria

From affluent neighbourhoods to impoverished communities, flooding resulting from climate change remains an existential threat in Lagos. Planners have a major role in facilitating resilience thinking and collaborating with various stakeholders to build resilience against flooding and other environmental disasters by developing capacity to learn, adapt, self-organize, and transform.

Gerald Paragas, Municipal Government of Sta. Barbara, Pangasinan, Philippines

Challenges and lessons learned after Supertyphoon Haiyan in Tacloban City, Philippines

The report follows the experiences, challenges, successes and lessons of Tacloban City in the Philippines as the coastal city moved from humanitarian response to the recovery and development phases after the Supertyphoon Haiyan.

Chui Ying Tracy Wong, University of Cambridge, Cmbridge, United Kinadom

Climate change adaptation in Hong Kong from urban planning perspective: flood zoning as control mechanism

Flood zoning is suggested to be a better solution than engineering-led measures to cope with risks of sea level rise and storm surge under climate change for the planning of coastal communities in Hong Kong.

Naniek Widayati Priyomarsono; Rudy Surya; Ninawati Ninawati; Theresia Budi Jayanti, Universitas Tarumanagara , Jakarta, Indonesia

The development of Juwana Settlement as a Northern Java coastal city in Indonesia has the potential to support global maritime axis

Juwana is strategic city in the northern Java coastal area. It has many resources, linier settlement alongside Gonggo river, and radial settlement in the outback. This city can be a prototype of a coastal city to create an economy networking. It has the potential to support Indonesia to be the global maritime axis.

Ali Alraouf; Mubarak AL Nuaimi, Urban Planning, Doha, Qatar Cool waterfronts and coastal cities: how Qatar's peninsula develops a resilient future?

This paper illustrates a shift in contemporary urban development in Qatar. The shift stems from a deeper understanding of the vulnerability of Qatar as a peninsula facing the consequences of climate change in an inevitable manner. It sheds light on planning approaches which characterize the new waterfronts development paradigm.

Session 3: Cold Cities: Challenges and strategies for cities of the North

2 October (Tuesday), 15:30 - 17:00

Han Li; Benchen Fu, Harbin Institute of Technology, Harbin, China
Study on renovation planning and residential design of the
resilient village in forest areas of severe cold region in China
Based on resilience concepts, this paper carries out an in-depth
study and demonstration on resilient renovation strategies of
village planning and residence design in forest areas of severe
cold regions of China, from theoretical and practical perspectives,
in order to deal with climate change and reduce regional energy
consumption.the future challenges.

Hong Leng; Cunyan Jiang, Harbin, China

Study on the relationship between urban climate change and urban development construction in severe cold areas
Based on the particularity of climate environment in severe cold areas, the paper discusses the relationship between urban climate change and urban development construction, advancing some urban planning strategies and suggestions.

Artem Nikolaev; Sergei Kudinov, ITMO, Saint-Petersburg, Russian Federation

Development of recommendations on the planning structure and street design in the cities with cold climate

This paper is aimed to make an analysis of Russian regulatory documents for city planning and to find ways how to improve them from the aspect of planning in a cold climate.

Ida Marie Granmo, Vefsn Municipality, Mosjøen, Norway

Between fjords and mountains: Climate changes vs. cultural heritage sites in northern Norway – an example from Mosjøen in Nordland county

The new weather conditions in northern Norway are threatening local cultural heritage sites. Urban planners in Mosjøen are now trying to develop a zoning plan for the cultural heritage site Sjøgata, that both functions as a protection plan and as an adaptive strategy to climate change.

Piotr Lorens, Gdansk University of Technology, Gdansk, Poland

Planning for the north-European waterfront cities - issues and strategies

Redeveloping urban waterfronts is subject of common practice globally. Although, as one of the major driving forces in this process is tourism development, climate issues play an important role in design and functioning of these structures. Therefore, waterfront cities located in less climate-privileged parts of the world, require alternative design strategies.

Viktoria Khokhlova

The case of Teriberka. Arctic present

Once experienced the thinning of the overbuilt physical structure, Teriberka shall turn back to the dynamic lifestyle. Unlike the settle towns with constantly increasing demands, Teriberka is in need of the principles and structures capable to vary in scale or to be moved whenever needed - intellectually and physically.

Session 4: Form and technique: City and region (TK) Mario Shllaku, Hassell, Brisbane, Australia shaping through analysis and technology

3 October (Wednesday), 13:30 - 15:00

TK) Pedro Ressano Garcia; Ana Claudia Oliveira, LEAU Lisbon, Portugal S.O.S. - sustainable open solutions to climate waterfront S.O.S. Sustainable Open Solutions to climate waterfront mission is to develop affordable research environment and efficient operational tools to schools of Architecture. Entities to interact directly with the market. The aim is to make use of the existing strategic network to face the future challenges.

Xin Li, Tianjin University, Beijing, China

Using Computer Simulation to Plan and Design Traditional Dong Towns & Villages in Mountainous Areas of Tongdao, Hunan, China

We will present an automated computer planning and design simulation of Dong nationality's towns & villages. Our bottom-up planning and design simulation program can characterize cultural customs, community structures, and spatial features of traditional Dong towns & villages. It is significant for protecting traditions and landscapes in rural-urbanization.

Chengcheng Liu, Tianjin Urban Planning & Design Institute, Tianjin,

Research on potential disaster risk & countermeasures in China's coastal rapid urbanization area

The urban planning strategy of China's action plan for urban adaptation to climate change has been actively practiced in the China's coastal rapid urbanization area. This paper analyzes the potential disaster risk in these areas and the specific measures in three aspects of urban planning.

Simbarashe Chitapi, Aurecon, Tshwane, South Africa

A comparison of the utility of urban strategies for small towns: The Cases of Lobatse and Arandis

This paper compares the regeneration strategies put forward by two small towns in decline. Each town, although somewhat remote is within 100km of a significantly larger town. The paper assesses and scores the plans' resilience and sustainability response, its utility and implementatibility and proposes improvements for future plans.

Mirela Thaise Malta Purim; Fernando Domingues Caetano; Jeronimo Paulo Cunha Pimentel de Meira, Paranacidade, Curitiba, Brazil

The annulment of urban perimeter as a technical tool for urban planning: the unsustainability of the cities in the

This paper analyses the urban perimeter legislation annulment as a planning instrument in the cities of the State of Parana – Brazil. This annulment results in urban perimeter oversizing, reinforcing widespread occupation and the conversion of rural land into urban land, leading to unsustainable settlements.

Jennifer Ailen Choi; Laura Corbalan Viero; Mitchell de Sousa; Rocio Di Corrado Analia Fernandez, University of Buenos Aires, Ciudad Autónoma de Buenos Aires, Argentina

Perception, territory and urban planning: perceptive studies over the south border of the city of Buenos Aires, Argentina The development of the city throughout Riachuelo left traces on the territory that cannot be read by traditional cartography, there is a halo in the collective memory reflected by different perceptions through time that cannot be mapped traditionally. New representation methods are required for these dynamic, complex and fragmented borders.

Session 5: Urban works: Infrastructure, the built environment, and landscape in the face of climate change

3 October (Wednesday), 15:30 - 17:00

Planning for cooler streets; functions and elements for cooler coastal cities, the case of gold coast, Australia

The paper presents the case of Nerang Street in Gold Coast, Australia, as an example where the application of urban canopy and urban biome concepts along with the adequate urban planning and design strategies aims at dropping the temperatures by 5 degree Celsius.

Lucia Ilieva, CSDCS, Sofia, Bulgaria

Adaptive strategies for mobility planning in remote and coastal cities and towns - "LAST MILE" project case

Mobility and Accessibility are vital elements for sustainable urbanisation with a direct impact on climate change. The INTERREG Europe Project "LAST MILE" is presented with its focus on developing adaptive strategies providing user oriented services for the travel chain's last segment in remote tourism destinations and coastal cities and towns

Mahak Agrawal, New Delhi, India

Climate risks and urban drainage: a case of National Capital Territory of Delhi

Urban Development blind to natural drainage for decades, aggravates natural climate variability of Delhi. Multiplier effect is profound on vulnerable population with least adaptive capacityvillages located within the flood plains. Need for adaptive strategies is realized to make the city and its population resilient to climate risks of floods.

Opeyemi Aladekoyi, University of Medical Sciences Ondo, Ondo, Nigeria; Micheal Oyinloye, Federal University of Technology, Akure, Nigeria

Effects of urban land use change on selected public utilities for sustainable development in Akure, Nigeria

One of main driving forces of global environmental change is urban expansion, which is central to the sustainable development debate. This research aims at examining the impact of urban expansion on utility services in Akure Nigeria, with a view to improve strategies to protect these utilities for sustainable development.



Location: Radisson Blu, Room 1

Cities are facing new challenges, related to social and demographic changes, innovations, the effect of finance on the economy and - climate changes. Seventy percent of the world population will live in cities by 2050, mostly in large metropolises. The urban population will double, of which 50% will be living in unplanned areas. Financialisation of the economy will produce more empty cities for speculation purpose and increase social and spatial exclusion. Smart cities and artificial intelligence will change the job distribution with the emergence of new skills and new ways to manage cities. But climate change - or climate 'shift', as some scientists now warn about due to acceleration of dangerous trends – appears to be the biggest threat. It will increase natural hazards, making large populated coastal areas and cities particularly vulnerable. The effects will be extreme in sensitive areas due to heavy rains, storms, water shortage, landslides, drought, heat waves, and sea level rise - as already observed in New York, Paris, Dacca, Cairo, Shanghai, Cape Town or Chennai.

How can urban planning propose new management models for the cities facing these challenges? How should planners change their practice in order to reduce vulnerability of human settlements, better manage crisis periods and mitigate cities' natural resource over-consumption and GHS emissions? What is a 'climate-proof' city and how do we plan for it?

We believe that we, as urban planners and designers of future cities, have to change our way of looking at the city. The city is not a collection of buildings, open spaces, technical networks and people anymore. We must adopt the perspective of a 'living urbanism': the city is an ecosystem. As derived from biological ideas, an ecosystem exists of many dynamic and static flows. All of them count. The city should be analysed from different perspectives, before one can make truly resilient cities. People, biota, water, food, energy, information - should all be understood before making an urban plan. But also transportation infrastructure, waste and material resources like sand, gravel and other building material – they are all part of our profession. By analysing the entire system, one can understand how flows run through a city or a territory and where, and in what way, they should be altered in order to achieve a resilient urban ecosystem. Only by following this approach we can create cities that will remain liveable when climate change becomes worse.

The idea of the city as an urban ecosystem and its urban metabolism is not new. It originated in the Chicago School of urban sociology (E.W. Burgess) in the early 20th century, was further developed in the 1960s

(A. Wolman), and then, in practice, got applied by Richard Forman, Ian Mc Harg and other practitioners and academics in landscape and urban planning. But the idea didn't survive the era of economic changes (liberalisation, financialisation) and comprehensive or strategic planning. Now is the time to shed a new light on this philosophy. Not only because we can give a new, deeper, layer to our profession as urban planners, but because we have to change our view on city and regional planning in the face of climate challenge, new economy and socio-demographic changes. We have to make our cities climate-proof. We should even strive to enable our cities to restore the

Overview of the abstracts

We have received a large amount of abstracts on climate-proofing cities. This demonstrates how many urban planners and designers realise that we have to change our current way of approaching the city. The main themes that have been addressed are the flows of energy and biota. Regarding energy, the main questions are: how are we going to provide sufficient sustainable energy to our growing cities? What will be the impact of this energy production and consumption on the carrying capacity of our planet? With regards to biota, the topic of Urban Nature-based solutions is the main theme. Since this topic is becoming very popular amongst landscape architects, urban planners and designers, but also policy makers and governments, most abstracts are giving a literature overview of the definitions that are being used. Also, questions regarding the application of Urban Nature-based solutions in cities seem relevant amongst our profession from a global perspective.

With regards to representation, it seems that the topic of climate-proofing cities is a relevant topic world-wide. We have received a lot of submissions from China. Europe, South America and North America, but also from India (where the bigger cities are very much involved in Urban Naturebased solutions and sustainable energy production). Only a few submissions came from the African continent and Australia.

Our view on the accepted abstracts and

This track is looking at how to make cities climate-proof. The abstracts that have been submitted are very good examples of cities that are busy implementing the themes of energy production/consumption and greening the cities. As stated as a problem in our introduction, we note that most abstracts are only stressing one specific flow of the urban ecosystem. To make a truly resilient city, it is important to link the

specific flow of energy and biota towards other flows and generally pursue a holistic view of the city. How are people going to live in the city? E.g. how will Urban Naturebased solutions make a better living space for people? How will it affect the urban heat island is a positive manner? It might be that we do not have enough qualitative information on the effects of the flows on our cities. It is necessary to develop these as soon as possible, to enable urban planners to make cities climate-proof in the future.

Few contributions are dealing with the management of crises: how to secure human settlements during natural events. There are questions to be discussed on the capacities of cities and region to implement institutional coordination, the efficiency of this coordination between administrations (civil security, telecommunication, health...), the effectiveness of the alert systems, the robustness of the strategic infrastructures are crucial to save life and reduce vulnerability of human settlements during natural events. The increase size of city-regions due to demographic changes (metropolization + population growth) makes the coordination more complex and less efficient, and increases the vulnerability.

Expectation for the Congress

With about 40 contributions and a large diversity of subjects and approaches, Track 3 will be very rich for debates, analysis and solutions for climate-proofing cities. More than just a platform for presenting case studies, Track 3 will enable important discussions. Delegates will be encouraged to go further, to stress common points on the diagnosis and solutions and to create a dynamic discourse between planners. However, while these debates will be interesting, they will have a limited positive impact if there is no follow up. The Congress is a key moment to mobilize collective intelligence to launch initiatives, to forge networks around a question and to empower urban professionals with key messages to deliver to UN-Habitat, UNEP, OECD, Habitat Professional Forum, ICLEI and other multilateral organizations. Many international initiatives and programmes already exist - such as Resilient Cities, Climate Action... - but this ISOCARP Congress should open the opportunity to give direct access to our planners to the entire international debate on proofing cities facing climate change.

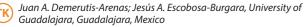
The cities that are expected to grow the most are located in Africa and South Asia. As International Planning Society, we must strive to collaborate with these continents and large regions as much as possible, to design climate-proof cities where the vulnerability is the highest.

Authors are responsible for the content of their work

(TK) track keynotes

Session 1: Green infrastructure and urban design

2 October (Tuesday), 11:00 - 12:30



Green infrastructure for metropolitan areas in MexicoThe paper defines main features of green infrastructure for metropolitan cities.

Xin Feng; Jin Yunfeng, Tongji University, Shanghai, China

Case Study: urban green belt planning in Foshan City, China How do Chinese planners plan green belt in order to make cities resilient to adapt to climate change? - especially in the Chinese context, where accelerated urbanization has generated continuous rapid growth creating a series of environmental problems.

Rune Skeie, Asplan Viak AS, Oslo, Norway

Urban Ecology – Achieving sustainable urban development through multifunctional blue and green infrastructure Through urban projects on different scales, from development of

districts (XXL) to blue and green roofs (S) Skeie shows that a key to achieve sustainable urban development may be to consider the city as an ecosystem.

Karolina Czyzewska, Zabrze, Poland

Green Warsaw - the future of green vegetation

Green balconies, green roofs and green walls as a solution for: reducing stress of habitants; reducing air pollution in the city; solving the problem of urban heat islands.

Abdelwehab Alwehab; Firas Alrawi; Falah Almosawi, University of Baahdad. Baahdad. Iraa

Localizing Imperatives of Sustainable Neighborhood Models: Iraqi Cities as a Case Study

Green buildings design models offered new opportunities to augment the paradigm of sustainable urbanism. The research incorporates local physical and environmental elements and attempts to extract significant indicators within models intended to improve urban environmental quality at the microscale and identify confluence areas to advance sustainable urbanism objectives.

Session 2: Green infrastructure and habitats

2 October (Tuesday), 13:30 - 15:00

Claudia De Luca; Elisa Conticelli; Simona Tondelli, University of Bologna, Bologna, Italy

Nature-based solution, green infrastructure and ecosystem services: a framework for understanding and creating resilient urban ecosystems

Climate-proof cities rely on nature-based solutions, green infrastructures, ecosystem-based adaptation and ecosystem services to create resilient urban ecosystems. Nevertheless, the relation among these concepts is still fuzzy. This paper provides a better understanding of these concepts and their integration into planning instruments to support cities embedding those within their plans

Han Admiraal; Antonia Cornaro, ITACUS & Enprodes Management Consultancy, Delft, Netherlands

The contribution of urban underground space to climateproof and resilient cities

Integrating underground space into the urban fabric is a necessity as part of climate proofing our cities. We need to develop an underground urbanism to ensure the peculiarities and advantages of underground space are appreciated. In that way, cities can become resilient and climate-proof within their area constraints.

Song Liu; Song Yao Huai; Hongting Pan, Tongji University, Landscape Architecture Department, Shanghai, China

Construction of Green Infrastructure Based on Water Ecological Security Pattern, A case study of Songtao River Catchment in Guizhou Province, China

Based on an evaluation of the regional water ecological security pattern, green infrastructure is constructed to achieve Songtao river catchment ecological security.

Xin Lian; Jun Zhou, Planning Institute of China Center for Urban Development, Beijing, China

Towards a sustainable and eco-civilized era: a national-wide project of pairing Ecological Restoration with Urban Repair (ERUR) in China

A Chinese national-wide project called "Ecological Restoration and Urban Repair (ERUR)" creatively pairs the traditional ecological restoration with efforts to tackle with urban habitats issues, which is a pilot step for Chinese cities to restore urban ecological system challenged by both the massive urbanization as well as global climate change.

Meltem Delibas, Delft University of Technology/ Istanbul Technical University, DELFT, Netherlands; Azime Tezer, Istanbul Technical University, Istanbul, Turkey; Taneha Kuzniecow Bacchin, Delft, Netherlands

Soil Ecosystem Services (SoES) in urban planningSoil as the foundation of all terrestrial ecosystems on Earth gives urban planners wise advises for a sustainable future.

Anna Starzewska-Sikorska, Institute for Ecology of Industrial Areas,

LUMAT project – integrated environmental management of land resources as contribution to enhancement of urban areas resilience to climate change

Project LUMAT is concerning integrated environmental management of land resources in functional urban areas. Cases of the LUMAT project functional urban areas in 7 countries present solutions of integrated environmental management which can be considered as activities contributing to the enhancement of urban resilience to climate change.

Session 3: Food & Heat

2 October (Tuesday), 15:30 - 17:00

(TK) Olusola Olufemi, Independent, Oakville, Canada

Cascading threats of climate change on the food system in Nigeria: an overview

Integration of the food system and food planning within the Green and Brown agenda through participatory governance, collaboration and authentic dialogue provides an eco-efficient approach to minimising the ecological footprint and foodprint. A secure ecological foundation guarantees food planning within a complex, cascading and interconnected threats of climate change.

George Thomas Kapelos, Ryerson University, Toronto, Canada

"Heat!" – testing design approaches to mitigate excessive heat exposure for vulnerable populations in Toronto apartment buildings

With climate change, excessive summer heat will impact Torontonians, especially residents in older, high-rise buildings, not designed to anticipate extreme heat. Researchers documented the issues on film. They presented data to students who designed prototypes for outdoor cooling centres. Community members provided feedback on proposed designs.

Teresa Marat-Mendes, Lisbon University Institute ISCTE-IUL, Lisboa, Portugal

Planning for Change: The Forms and Flows of Lisbon Metropolitan Area Food System

Integrating food within urban planning, from a metabolic perspective, is critical to catalyze an urban sustainability transition. This presentation discusses the theoretical and methodological framework of SPLACH Project to approach the food system, while

Track 3

dissecting the urban forms and social-economic flows that affect the metabolic function of the urban realm.

Jakob Schackmar, University of Kaiserslautern, Kaiserslautern, Germany Substitute industries and economic change as a chance for cities to become more sustainable

Urban farming, as bio-economy, can be a sustainable approach to revitalize cities effected by structural economic changes and transform them into future oriented and livable places.

Pierre Renault, Independant consultant, Paris, France

Past knowledge and new strategies: Are Iranian cities ready for climate change?

Iran cities used to adapt to arid climate with old technical knowledge as Qanats or Badgir. The river restoration program could be an opportunity to solve urban heat island issues in Tehran.

Xin Li, Beijing Forestry University, Beijing, China

Construction of resilience in urban fringe based on sponge city: an example of green space planning of Shahe in Beijing, China

Based on the rainfall characteristics of northern China, the elastic design of water is used to give space for the river within the embankment, to provide site for the storm-water outside the embankment, and to create an elastic landscape in the urban periphery.

Session 4: Energy

3 October (Wednesday), 13:30 - 15:00

Pengjun Zhao, Department of Urban and Regional Planning, Peking University, Beijing, China Reduce residents' transport energy use in China:

Comparing the impacts of land use planning, public transit improvements, and low-carbon-city initiatives

The paper is about how to reduce residents' transport energy use in China.

Gema Hernández Moral; Victor Serna González; Giulia Massa; César Valdemaseda Tranque, Fundación CARTIF, Valladolid, Spain

ENERGIS: tool for demand characterisation in urban settings to support energy planning at different scales.

Only with adequate knowledge on the energy status in the city (in particular of the residential sector, main contributor to CO2 emissions in cities) it is possible to plan for a low carbon environment. The ENERGIS tool will support planners by mapping energy demand information of cities at different scales.

Hong Leng; Xi Chen; Zhe Diao, Harbin Institute of Technology, School of Architecture, Harbin, China

Evaluation of the impact of the urban morphology on building energy consumption in cold region cities - take the office building in Harbin, China as an example

The aim of this work is to quantitatively analyze the impact of urban morphology on building energy consumption in cold region cities. The results can provide a theoretical reference for the energy-saving oriented urban planning strategies in cold region cities, and are of significace for the mitigation of climate change.

Martin Tzou; François Courtot; Jingbo Guo; Sijie Liu; Yili Xiong; Jiashuo Xiu, EDF China, China; Shu Du, China Center for Urban Development,

District cooling in Sanya Haitang Bay: energy integration in urban planning from theory to practice

Climate change initiatives undertaken in the city Sanya in China reveal the importance and the challenges of integrating energy issues at the urban planning stage, considering the significant contribution of district energy systems in reducing cooling demand and carbon emissions in hot and humid cities.

Adriano Bisello; Silvia Tomasi; Daniele Vettorato, EURAC research, Bolzano. Italy

Sustainable and smart energy transition in cross-border territories. Insights from the European Alpine macro-region
This paper discusses the results of an ongoing research on energy trategies in the European Alpine macro region (ELICALP). It

strategies in the European Alpine macro-region (EUSALP). It suggests the steps to set up an effective planning and monitoring system for the strategies implementation that is replicable in cross-border regions promoting a sustainable and smart energy transition

Session 5: Water

3 October (Wednesday), 15:30 - 17:00

TK) Yann Leclercq, MRTPI, London, United Kingdom

Mitigating the effects of climate change in strategic development: The Ibadan City Masterplan

Nigeria's third largest city, Ibadan, is anticipated to grow from 6 to over 13 million by 2036. One of the impacts of the city's sprawling growth is increasing flooding. Upon the initiative of the Oyo State Government, Dar was commissioned in 2016 to the city's first masterplan.

Daniela Baer; Edvard Sivertsen; Nathalie Labonnote, Rebecka Snefuglli Sondell, Sintef; Terje Skjeggedal, NTNU; Trondheim, Norway

Planners' information need in adaptation to climate-induced floods

This study investigates urban planners' need for information to adapt to climate change. Interviews with planners in Trondheim and Stavanger disclose gaps in the provision of data and needed tools. A newly developed GIS-based tool for estimating flood damage costs as part of city planning is presented.

Lulu Chen; Suʻning Xu; Xiaohe Hou; Binxia Xue, Harbin Institute of Technology University, Harbin, China

Study on the framework of environment layers in the urban layer system

This paper proposes the concept of 'urban layer', and studies urban environment layers in the urban layer system and builds the structure of it. It applies the study on environment layers to the project of Comprehensive Urban Design of Waterfront Areas of Beijing, especially the water layer and climate layer.

Willemien Van Niekerk; Amy Pieterse, L. Louiza Duncker; Kea Maditse; CSIR, Pretoria; Claire Davis, Natural Resources and Environment, Pretoria, South Africa

Water sensitive urban design as adaptation strategy

Cities in areas getting hotter and drier have to find alternative approaches to manage the increased demand for water versus the shrinking supply, while also climate proofing their cities. Water sensitive urban design as an adaptation strategy integrates the management of urban water resources with urban planning.

Hong Geng; Yue Li, Wuhan, China

A climate-adaptation based study on the comprehensive planning strategy of urban water systems

When it comes to improving urban climate adaptability, it is of vital importance to conduct researches on both how to adapt to and how to mitigate the impacts of climate change upon urban water systems.

Peilun Li; Zhiqing Zhao; Lu Zhang, School of Architecture, Harbin Institute of Technology, Harbin, China

Urban new districts' toughness development under the sponge infrastructure project: The case of Jinan, China

As a response to urban rainwater disasters, the paper summarizes the three themes; urban flood control, drainaige pollution control and rain resources utilization touching upon technical, organizational, economic and societal challenges of the themes. New district of Jinan city project is discussed as the case study together with the challenges of the sponge infrastructure.

Session 6: Data and modelling

4 October (Wednesday), 11:00 - 12:30

Geraud Bonhomme, Perspective.brussels - Brussels Planning Agency,

Usquare.brussels a resilient planning approach

Usquare.brussels is an innovative project to convert former urban barracks with a remarkable heritage into an international university resilient district. The site, property from the Brussels Region since 2018, will be a pilot operation linking a new spatial planning tool with the principles of the Regional Plan for Circular

Xiang Liu; Jian Zeng; Yanan Fang, Tianjin, China

Study on the microclimate of seaweed houses in Jiaodong the case of Dongchudao Village

Seaweed house is a very ecological dwelling in Shandong peninsula, China. This paper uses data measurement, numerical simulation and other means to study the microclimate environment of seaweed house.

Ge Sun, Shanghai Tongji Urban Planning& Design Institute, Shanghai,

A study of human ecology and resources network

The case will demonstrate a biological self-organize algorithm, which is based on the new human ecology, makes an effective contribution to help with the existing resource oriented network urban morphology. It gives design proposals of Liwa Oasis, UAE, which is a future optimized network plan of resource distribution.

Fujun Xia, Shanghai Tongji Urban Planning & Design Institute, Shanghai,

Study on the performance of sponge city construction based on land use planning - Cases of Canghai new area in Wuzhou In order to solve the problems of the deterioration of water environment in China and frequent waterlogging disaster, the methods of performance evaluation in the planning stage of land use planning is explored in this paper, and some strategies to improve the performance of sponge city construction are put forward.

Silja Tillner, Architects Tillner & Willinger, Vienna, Austria

Downtown Cairo urban regeneration - a model for future urban regeneration plans with energy efficiency interventions

The Implementation Plan is intended as a future prototype to explore new models for urban regeneration in historic zones that integrate energy-efficiency into the plans, thereby linking planning and urban design measures for the improvement of mobility and the public realm with public and private investments in energy-efficient buildings.

Croce Silvia; Daniele Vettorato, EURAC Research, Bolzano, Italy Urban surface use optimization for climate resilience improvement

The optimization of the urban surface use is very relevant for the maximization of urban resilience to climate change. The paper proposes a method to optimize the urban surface use in order to improve the climate resilience capacity of cities.

Session 7: Governance and economics

4 October (Thursday), 13:30 - 15:00

Ningjing Xu, School of Architecture, Tsinghua University, P.R.China, Beijing, China

Investigation of regional coordinated development based on watershed comprehensive management for Greater Beijing **Municipality Area**

This paper is to provide a feasible plan for the ecological and economic coordinated development of the Greater Beijing region in the predictable future by comprehensive management in ecological watershed units.

Roman Pomazan, Urban Sustain Architecture design group; Alexandr Khvan, Frame Art Ltd; Pavlo Ostapenko, Geography department of Kyiv State University, Kviv, Ukrain

Shymkent City

Shymkent City is a project of the new urban district of the third million city of Kazakhstan. Shymkent is the fastest growing city of Kazakhstan, that has large amount of urban issues to be solved. Shymkent City was envisioned as the key urban driver of the most young-populated megalopolis of Shymkent. This new neighborhood is going to represent new comfortable

urban environment that should became the specimen for urban transformations of Shymkent in the future.

Karin Hiltgartner, TU Wien, Vienna, Austria

Climate protection and environmental Impact assessment: could climate protection be seen as an 'overall public interest'? This contribution analyses how differently Austrian courts valued climate protection within the Environmental Impact Assessment on the enlargement of Vienna's Airport. While the court of second instance rejected the project due to international obligations on climate protection, the Constitutional Court found that these were not to be taken into consideration.

Alexander Marful; Elom Ayeke; Rexford Assasie Oppong, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Strategies for making peri-urban coastal communities resilient in sub-saharan Africa: the case of Ningo-Prampram This paper focuses on Prampram, a Peri Urban community found in the Ningo Prampram district. The research investigated necessary interventions required in developing a resilient coastal Peri-urban community in Ghana, amidst the vast infrastructural deficit usually found in Sub-Saharan African countries.

S. Mohsen Hosseinifarhangi; Margherita Turnavi; Gerrit J. Carsjens; Arnold van der Valk, Università iuav di Venezia, Hummelo, Netherlands

Actor-network analysis of transition towards urban hitech horticulture. A comparative study of development and adoption of urban high-tech horticultural practices in Shanghai and Amsterdam

This paper firstly studies the development trajectories of technological novelties and secondly, analyzes the process of adaptation and preparation of niches for adoption in urban practices. It tries to find the gaps between these development trajectories and their adoption in urban practices.

Amarjeet Kumar; Saikat Kumar Paul, Indian Institute of Technology, Kharagpur, India

A framework to identify risk level of areas for the formation of evacuation zones during cyclones

The paper proposes a framework for formation of evacuation zones during disasters.

Session Proposal Cool Planner: The role of urban planning and design within global resilience frameworks

4 October (Thursday), 13:30 - 15:00 Location: Radisson Blu, Room 2

Moderators: Milena Ivkovic, Vice President ISOCARP and Director Blok74 Rotterdam, Netherlands, and Lena Niel, urban and landscape designer, Deltares, Delft, Netherlands

Speakers: Christine Auclair, Climate Change Planning Officer, Urban Planning and Design Branch UN-HABITAT; Jon Kher Kaw, Senior Urban Development Specialist at The World Bank; Irina Shmeleva, Institute of Design and Urban Studies, ITMO University, Saint Petersburg & Director of Institute of Sustainable Development Strategies (NGO), Saint Petersburg, Russia; Bernardus Van Heerden, Strategic Development Manager at eThekwini Municipality, Durban, South Africa

Cities are facing new types of challenges, because of the effects of climate change and densification in cities. The Sendai Framework, Sustainable development goals and The New Urban Agenda are trying to address these challenges for cities. Cities have to become inclusive, climate-proof and economic hubs. Hence, the city is approached as an urban ecosystem instead of a blue print that exists of different layers and flows. Only a truly resilient and inclusive city could be achieved if one understands the functioning of this system. This shift of planning and design also asks for a new type of urban planner and designer. But what is exactly this new role of urban planning and design to achieve these climate-proof cities in line with these frameworks?

As a preparation of this session, the ISOCARP Dutch National Delegation, ISOCARP Europe and Deltares Nederland organized an expert workshop on the 3rd of July 2018, under the title: Cool Planners and the Global Climate Change Resilience Networks, At the end of this expert meeting, several statements about the role of urban planning in the climate change were formulated. These statements will be used as a kick-off for the session.









Location: Radisson Blu, Room 2 by Adriano Bisello, Wanjiku Macharia, and Ana María Fernández-Maldonado

After two decades of discussion about smart cities, a globally shared definition of smart urban development and the identification of the most effective approach to urban sustainability and climate resilience are still missing. Undoubtedly, the traditional smart city approach is strongly rooted in an ICTdriven approach, but urban sustainability requires many more components. Above all the human one, as latest interpretations show. The future, smartness and resilience of our cities and their infrastructures are calling for citizen-oriented adaptable and accessible solutions. Only by enabling new behavioural and business models will our cities finally shift focus from adaptation and mitigation costs to smart low carbon development opportunities

Discussing technologies and infrastructures may appear somewhat "out of topic" in an urban and regional planning congress, bearing in mind the complexity and specifics each system, solution or even single component deserves. However, it is not. Infrastructures are even more interconnected thanks to ICTs platforms and IoT: technologies turn-over is fast: disruptive solutions may lead to great leaps forward; private-public partnership are asking for bankable investments; communities are willing to be part of the decision-making process; the sharing economy is calling for new value models; energy utilities are suspicious of energy prosumers; infrastructure endowments are ageing quickly; green areas are now understood as ecosystem services providers. These and many other factors affect how urban planners should think innovatively about technologies and nextgeneration infrastructures, looking more at "soft", adaptable and citizen-centered solutions rather than "hard", monolithic and preconceived tools to solve standardized

Cities aspiring towards resilience must make an important cultural shift to a model of urban planning which empowers the citizens. This is also an opportunity for city managers to develop leadership by developing a deeper understanding of its citizenry. Through collaboration and sharing, cities can propagate clean, green and smart infrastructure and technologies right until the neighbourhood level, thus creating and supporting successful, climate-resilient communities.

Overview and Assessment of the abstracts

Research findings and innovative approaches contributing to Track 4 come from all over the world, offering a broad perspective on these topics and contributing to shedding light on cross-cutting issues.

The following topics and research questions were suggested by the call for contributions: · How does the 'urban technology nexus'

- affect urban metabolism?
- · Infrastructure systems: how do we reinvent the concept and the configurations?
- ICT and the 'smart city'; 'sentient city; 'wise city'; 'green intelligence'
- · Disaster preparedness and 'smart resilience' • The future of transport technology and infrastructure
- The future of energy technology and infrastructure
- The future of building and construction technology • Urban form, urban flows and the design for
- smart, adaptable spaces • What are the economic opportunities in technological innovation for sustainability and resilience?

As a reaction to that, Track 4 presents the use of smart technologies and how nextgeneration infrastructures will affect urban ecosystems - both their form and flows thus helping cities become cleaner, greener, smarter and more resilient to climate

The first session on planning nextgeneration infrastructures for innovative

solutions highlights some illustrative examples. There is a study that aims at linking infrastructure designs, ecology, water and soil cycles for the development of adaptive, transformative designs and strategies in public works. In addition, the session has a paper that illustrates the role of landscape planning in managing flood response. There is a proposal to validate regulations for wind energy generation in Russian Federation focusing on wind farm planning, design, construction, operation and remediation. Next, an evaluation of the built greenway network using big data analysis and strategies for improvement will be presented. Finally, we will hear a proposal that reviews and addresses the equity and fairness dimensions for policy makers to consider when integrating green infrastructure in spatial planning to maintain a balance between economic and environmental goals.

The session on planning next-generation infrastructures for adaptation, mitigation and disaster preparedness highlights

innovative solutions to adapt to and mitigate against climate change. There is a research that posits that Geographic Information Systems (GIS) and Remote Sensing Technology allow urban planners and policymakers model for flood risks to gain critical insights on the real impacts of climate change and adopt sustainable resilient and smart solutions, providing examples from South Africa. There are also two case studies from China. One demonstrates how the cooling effect of green space can be improved by controlling the green area perimeter, shape and community structure of the tree species. The other examines a city's symbiotic relationship with its rivers and the management of flood response through landscape planning including reclamation and restoration of an urban riverfront.



The session on shaping urban form and flows in smart cities design highlights some illustrative examples of different concepts to consider. There is a paper that builds the case for Transport Oriented Development (TOD) as a climate adaptation strategy, the challenges and proposed solutions to mainstream TOD at policy, fiscal and operational levels. Another research presents the main challenges when planning for Zero Emission Neighbourhoods. Looking at examples from Norwegian cities, it observes that to successfully plan, the project developers must consider not only energy and emissions, but incorporate the interests and ideas of a broad range of "new" stakeholders at the early planning stage, such as utility companies. There is a paper that explores what the urban structure looks like when individuals' mobility are aggregated into spatial analysis units using large-scale cell phone data to emphasise the dynamic relationship between human mobility and urban structure, which is key to planning housing, community development and transportation. Another research suggests to develop a Land Suitability Evaluation model focusing on the quality of infrastructure and ecosystems that protect, provide and connect people. The aim is for the model to support resilient urban planning providing decision makers with a comprehensive picture of the urban infrastructure and ecosystems in order to make better informed decisions to deliver cooler cities. To get further insight into

urban flows, a study evaluates a Shared Farm model looking at the operating mechanism, core features that facilitate urban-rural reciprocal flow that is circumvented by China's binary urban-rural structure, which hinders the free-flow by a separated property right systems.

The session on turning technological innovation in urban and community values highlights some illustrative examples of planning for and leveraging meaningful technological innovations in the city and the community. There is a proposal to develop a methodology which identifies local windows of opportunity from a spatial and economical perspective, to systematically identify where smart city solutions could be applied within the current urban fabric while planning its management and maintenance to ensure a transformation urban project rather than a transient novelty. There is a paper that Ilustrates how disruptive technology for urban governance and decision-making offers major opportunities for engaging multi-disciplinary partners and integrating evidence based decisionmaking into the governance process. There is also a proposal to explore the challenges and potential of new technologies and their application in an urban setting by surveying urban innovation units and living labs to determine the effect of new technologies on city planning and its users.

In addition, this paper analyses the set of key principles that define the concept of living labs. Then there is a presentation on how disruptive technology applications for urban governance and decision-making offer major opportunities for engaging multidisciplinary partners and stakeholders, and integrating evidence based decision-making in governance process addressing societal challenge. An exploratory research to investigate whether the transformation that comes with the IoT and smart cities could serve as a catalyst for promoting culture and reducing marginalization will be presented. A study also examines the development of technology application for tourism activities that disseminate information and facilitate the appropriation of the urban space, analysing some of the new challenges to urban planning and city management, created by tourist activity at the local level which is not ready for it.

Finally, a presentation on planning and designing outdoor spaces in Qatar to be running-friendly in response to weather conditions.

Track 4 will feature two supplemental Sessions:

1. How to develop a new public service based on the "Smarticipate Platform".

2. Urban mobility in transition: perspectives and challanges on urban living and public space in china

Session 1: Planning next generation infrastructures for innovative solutions

2 October (Tuesday), 11:00 - 12:30



Taneha Kuzniecow Bacchin; Filippo La Fleur, Delft University of Technology, Delft, Netherlands; Richard Ashley, University of Sheffield, Department of Civil and Structural Engineering, Sheffield, United Kingdom

Next generation infrastructure design under conditions of extremes

Design and programming of next generation hybrid green/blue/ grey infrastructures for the adaptation and/or transformation of urban areas and (metropolitan) regions to extreme climate change (e.g. sea level rise, river peak discharge and intensive rainfall patterns).

Dmitry Boyko; Valeriya Patueva, GeoClever, Volgograd, Russian

Planning issues of wind farm siting in the Russian FederationThe paper will show main planning regulations and approaches of wind farms in Russia.

Li Tan, Beijing Forestry University, Beijing, China

Evaluation of built greenway network in Beijing based on big data analysis

This paper evaluates the built greenway network in Beijing based on two types of big data: travel trace data from bike-sharing applications and the point of interest data from Micro-blog. Core problems and strategies are summarized for a better plan and design of greenway network responding to climate change.

Ifeoma Ukonze; Donald Okeke, Department of Urban and Regional Planning, University of Nigeria Nsukka, Enugu, Nigeria; Collins Nnamani, Department of Estate Management University of Nigeria Nsukka, Enugu, Nigeria / presented by Mahak Agrawal, New Delhi, India

Integration of green infrastructure into transportation planning in African cities

This study gives a review of the integration of the concept of green infrastructure into the transportation policy framework which could serve as a tool for achieving sustainable transport development. It will also help show an alignment between the socio-economic and environment gains of this concept in African cities.

Zhejing Cao, Tsinghua University, Beijing, China

Resilient slow traffic system planning based on traffic survey data and comparative study: evidence from Wenyu River area in Beijing

This paper aims at taking Wenyu River area in Beijing as an example, to analyze the slow traffic demand, trip pattern, land use mode of the periphery of urban center, for proposing resilient slow traffic system planning strategies through comparative case

Track 4

Session Proposal Urban Mobility in Transition: Perspectives and Challenges on Urban Living and Public Space in China

2 October (Tuesday), 13:30 - 15:00

Moderator: Sebastien Goethals, Vice President ISOCARP

Speakers: PAN Haixiao, Tongji University; WANG Hongyang, Nanjing University, China

The current transition of urban mobility is about to transform our daily commuting habits and energy consumption modes in both urban and rural environments.

Since digital connectivity has opened new windows of opportunities for communities and commuters through the sharing economy, the way we use together and individually our streets and public spaces might be less (or more?) segmented and informal, as a result of real-time and collective decision-making.

An optimized scenario of mobility transition, integrating automation, sharing and electrification by 2050, presents a reduction from 4,600 to 700 megatons of CO2 and from 2,1 to 0.5 billion vehicles worldwide.

But only few cities are now starting to test smart mobility systems, and most of them dramatically lack of urban planning strategies in terms of integration of public transport and new mobility services and public spaces.

Chinese cities are the places where the change happens at the fastest pace. Shared and free-floating bicycles have become a popular trend in China and worldwide, but the massive amount of bicycles that recently invade the streets of Chinese cities has shown the limits of such solution.

This session proposes to identify the major coming challenges of the urban mobility revolution in China and worldwide.

During the first part of the session, Sebastien Goethals will introduce the relation between smart mobility and urban metabolism, through integrated planning and design strategies, followed by a quick introduction of the scale and speed of China's urbanization and mobility transformation.

During the second part, two Chinese major experts in urban planning and mobility, PAN Haixiao (Tongji University) and WANG Hongyang (Nanjing University) will give a presentation about their approach of the mobility transformation and its potential to improve livability in Chinese cities.

The third and last part of the session will be dedicated to a rapid visioning exercise with the public, putting in perspective the role of city planners in the technological transition of cities.

Session 3: Planning next generation infrastructures for adaptation, mitigation & disaster preparedness

2 October (Tuesday), 15:30 - 17:00

Sabelo Mahlangu, University of Witwatersrand, Johannesburg, South Africa

Planning for a changing climate: A GIS and remote sensing approach to urban flood modelling in the Gauteng City Region A GIS and Remote Sensing approach to urban flood modelling will be presented.

Menghan Zhang; Beiijng, China

Symbiosis with rivers: the management of flood response to future climate change from the perspective of landscape planning

We should find solutions to disasters based on the idea of resilience by establishing a place that can adapt to the temporal dynamics. As means of flood management and symbiosis with rivers, in both low-urbanization areas and urban areas, two different detailed strategies of landscape planning are provided.

Binxia Xue; Xiaohe Hou; L. Lulu Chen; S. Su'ning Xu, Harbin Institute of Technology, Harbin, China

Study on the optimized strategy of resilient spatial pattern from the perspective of sponge city - Taking Garden Street Historic Block in Harbin City as example

In order to solve the most serious rainwater problem in old urban areas of China, this paper redesigns green infrastructures which are compatible with the architectural style of old city and then combined with gray infrastructures. The program optimizes space in a resilient way and builds a three-dimensional spatial pattern.

Wale Alade; Femi Adeniji, University of Lagos, Lagos, Nigeria; Mobolaji Olaseni, Yaba College of Technology, Yaba, Lagos; Olubukola Alade; Bukola Alade, Bells University of Technology; Olajuwon Olaseni, Vistaplan Consultina Niaeria

Making Lagos a cool city: a study of transport system and travel behaviour

Lagos transport system threatens peoples' survival and climate. Urgent and full implementation of the Lagos strategic transport masterplan which makes provision for multimodal transport system, transport and land use integration among others is recommended with urban planning strategies such as Transit Oriented Development for land use and travel demand management

Zhona Yuiia: Tan Li, Beiiina, China

Study on vegetation in Haidian District of Beijing based on heat island effect

By studying the data combined with the law of cooling effect of green space, we found that the cooling effect of green space can be improved by controlling the green area, perimeter, shape coefficient and community structure. Based on this, we will guide to improve the urban ecological green network.

Session 4: Shaping urban form and flows in the smart cities

3 October (Wednesday), 13:30 - 15:00

Daniela Baer, SINTEF, Trondheim, Norway; Brita Nielsen, Norwegian University of Science and Technology, Trondheim, Norway

Challenges and Best Practices for the planning of zero emission neighborhoods and smart energy communities – the case of seven Norwegian cities

We will present challenges which occurred when planning for Zero Emission Neighbourhoods in seven Norwegian cities as well as best practice examples how to cope with them.

Track 4

Olga Chepelianskaia, Uniciti, Toulouse, France

Climate adaptation: transit oriented development as a strategy in Asian cities

Increasing vulnerability to climate change in Asian cities has made adaptation a critical matter. While successful Transit Oriented Developments (TOD) in developed Asian cities have uncovered significant benefits, its adaptation potential is yet to be analysed. The presentation outlines the climate change adaptation role of TOD in Asian cities.

Xiyuan Ren, Tongji University, Shanghai, China

Research on urban spatial structure in Shanghai from a human mobility view based on cell phone data

Four characteristics of human mobility in spatial analysis units: flow strength, influential area, flow composition, and law of time. A dynamic urban form is then described to support the future design for smart spaces.

Xin Kai, Shanghai Tongji Urban Planning and Design Institute, Shanghai, China

Land suitability evaluation for resilient urban planning: a planning practice of Pingdingshan City, China

This paper proposes a land suitability evaluation model for resilient urban planning in the dimension of infrastructure and ecosystems. In the process of ecological strategy planning in Pingdingshan, the model used to identify the ecological valuable and sensitive areas, providing an ecological basic framework for land-use planning.

Jun Zhou; Xin Lian Beijing, China

Shared Farm: an approach to achieve urban-rural reciprocity based on sharing economy

The sharing economy, featuring the access-based consumption without the transfer of ownership, offers a perfect therapy for rural area in China to bypass the institutional obstacles of land transaction and participate in the game of market economies. Shared Farm was born based on such concept.

Session Proposal How to develop a new public service

3 October (Wednesday), 15:30 - 17:00

Moderator and Speaker: Larissa Guschl, urban planner based at participatory planning and design office WeLoveTheCity, Rotterdam, The Netherlands

Citizens have plenty of ideas for the neighbourhood in which they live, work and play. Unfortunately, they don't always have access to the right information to develop their ideas into a concrete proposal. That's why Freie und Hansestadt Hamburg, Roma Capitale and The Royal Borough of Kensington and Chelsea want to share a combination of open data and expert knowledge. The smarticipate platform allows citizens, entrepreneurs, NGOs and city officials to submit their proposal for a sustainable neighbourhood and to receive immediate feedback. This means everyone can get involved, even those who have never interacted with local government before. Some citizens and entrepreneurs even want to go further and demand access to the technological core of the digital platform to plug in their own topic.

During the hands-on session you can test the smarticipate prototypes (Plant a Tree App, Urban Transformation App, 3D Planning App). Besides that, we will challenge you to think about which kind of New Public Service you would like to introduce and how the smarticipate platform could help in achieving that goal.

Session 6: Turning technological innovation in urban and community values

4 October (Thursday), 11:00 - 12:30

Judith Borsboom-van Beurden, Norwegian University of Science and Technology, Trondheim, Norway

Windows of opportunity for smart city solutions

For a real urban transition, a systematic scan of the windows of opportunity for smart city solutions is needed, not only during urban (re)development, but also in asset management in the built environment.

David Ludlow, European Smart Cities, Bristol, United Kingdom

Smart city governance - co-creating urban planning and

Disruptive technology applications for urban governance offer major opportunities engaging multi-disciplinary partners and stakeholders, integrating evidence based decision-making addressing societal challenge. Research questions to be addressed include the specifications for a user-defined framework of interconnected strategic policy, and how best to ensure development of a common model of urban governance?

Ozge Celik, Özhan Ertekin, Istanbul Technical University, Istanbul, Turkey Re-thinking the city: Living Lab concepts in Turkey

The paper examines living labs in Turkey to find out cooperation between labs and local government and its influences and contributions on local planning.

Alexander Boakye Marful; Daniel Duah, Kwame Nkrumah University of Science and technology; Joseph Agyei Danquah, Building and Road Research Institute, Kumasi, Ghana

Smarting the cities: a catalyst for acculturation in Ghana? This paper seeks to investigate whether the transformation that comes with smarting cities could serve as a catalyst for acculturation or a strategy for resilience. As an exploratory research, a mix method approach was adopted in collecting data from persons within Kumasi and a microcosm of a city in Kumasi.

Maria da Graça Moreira, Universidade de Lisboa, Lisboa, Portugal

Tourism and ICT; a new urban challenge to planners Tourism is one of the economic activities that have developed most in urban space. The number of people who make tourism along with the changes in ICT is having a great impact on the appropriation of urban space. The APPs about climate are a value

Sławomir Ledwon, Vice President ISOCARP, Doha, Qatar; Mubarak Al-Naimi, Ministry of Municipality and Environment, Doha, Qatar

on the tourist activities.

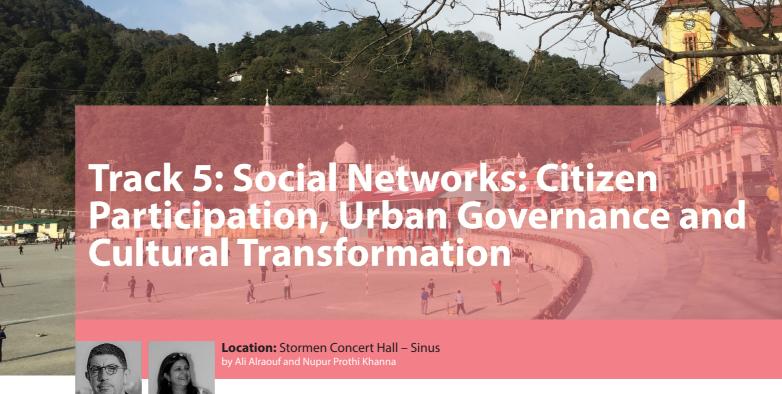
Hot climate and runnability: how climate affects outdoor running activities. A case study of Doha, Qatar

This article discusses runnability - the relation between built environment and outdoor activities of citizens, in particular running. Correlation to changing weather conditions throughout the year in hot climate is made by analysing the case study of Doha, Qatar. Examples of the latest infrastructure and its features are also presented.

Giovanni Sergi, Department Architecture and Design Genoa University, Senigallia, Italy; Paolo Rosasco, Department Architecture and Design Genoa University, Genoa, Italy

The use of Living Lab in some Italian urban settings to test the feasibility of the Smart City. Making the needs of communities compatible with applications of new technologies

Since 2007 several Italian Municipalities have tested the Smart City model. With reference to the EU Manifesto of Helsinki which outlined the Living Lab in 2006, some Municipalities have worked to check the consistency of the Smart City model with the primary role of inhabitants within such processes.





As is clearly manifested in the call for abstracts, this track focuses on people. The main question is: how can communities and citizens be engaged in the planning process, while acting as part of a formal or non-

This track is extremely valuable and we are anticipating that the selected papers and case studies would initiate a fresh, engaging and timely discussion underpinning the relevance of people, communities and citizens in the way cities are designed, planned and used today.

This track will also stage two session proposals.

The submitted abstracts were assessed for their relevance to the track and its subthemes, research merit, contribution to global discourse on the subject, sharing valuable local experience, comprehensively analyzed case studies and good practices. The selected papers showcase a wide spectrum of planning knowledge and experience.

Overview of abstracts

governmental system?

This track received the highest number of abstracts, a fitting indication that people form the core of equitable, smart and sustainable planning. The diversity of discussions ranging from theoretical analyses to good practices from across geographies, offer a well-rounded contribution to the climate change discourse. Based on particular emphasis, the sessions were organized around six themes: sustainability and local stewardship; planning places for people; inclusive cities; planning policy, governance and management; heritage in context; smart city.

Topics discussed in the different papers allowed the track team members to divide the sessions in a way which would holistically cover the interdisciplinary and interrelated nature of the contributions.

A discussion on themes and sessions

Sustainability and local stewardship forms the heart of the discussion on citizen participation in planning for 'cool cities'. The discussions centers on people engagement in diverse contexts, from mapping their natural landscape, to safeguarding their commons, to coming together in the face of natural disasters. Engagement, protection and preparedness are demonstrated in three different national contexts (Japan, China, Flanders) as part of this session.

Planning places for people puts citizens in the heart of the green initiatives in today's fast urbanising world. From designing participatory landscapes to measuring environmental benefits of open spaces, deliberations from Europe and China illustrate the relevance of people to the transformation of these spaces into places and their relevance to health and community well-being.

Inclusive cities addresses the reality of migration, changing population typologies and new and transforming communities that are beginning to dilute the political borders in our world today. Addressing concerns around segregation, this session brings forward views from the developing nations (Asia, South America, Europe, Sudan) related to the central role of women and children in sustainable practices as well as addressing the challenge of aging communities in

Planning policy, governance and management is an engaging session on the role of non-governmental actors in the diverse scales of planning and development. Ranging from master planning in West Asia, to housing concerns in Asia, to community based space management in Africa, this session focuses on public participation in policy and governance for safeguarding our urban future.

Heritage in context elicits interest amongst many papers in assessing the unfortunate loss of urban heritage in the absence of understanding its significance, imminent pressures of the fast paced development, and lack of engaging and incorporating our past in our present development. Cases from Asia (China and Istanbul) highlight the role that participatory processes are playing in re-appropriating heritage in planning and giving it a place of significance in the monochromatic urban form taking over our historic environment.

Smart City lays out possibilities around the potential of renewable energy. Innovative ways for urban planning to create cities that can prepare for a sustainable future form the core of discussions from Asia and Europe in this session.

Session proposals 01 Constructed and contested legitimacy in urban aovernance

Academics and practitioners from Norway will present the challenge for urban governance in facilitating sustainable cities. The negotiations around legitimacy claims from different stakeholders, planners and decision makers to enable this transformation will be the main subject of the discussions in this session.

02 Planning for Diversity

Comprising of short presentation from Norway, this session addresses the capacity of cities to live with differences, to ensure social, economic and environmental sustainability of cities. The deliberations will relate to new theories, methods and tools for planning for diversity, supported by good practices and case studies.

Way forward

Planning, like democracy is for the people, by the people and of the people. Also like democracy, the choices that we make impact us directly - as demonstrated by climate change in the recent past and in the present. Climate change is central to the future direction we need to take for planning our cities, spaces and places. The opportunities are diverse, considering indigenous knowledge systems on one end of this spectrum, down to using Al and digital media as enablers to visualize and actualize a better world. This track contributes a new perspective for the planning discipline as a facilitator to actualize this vision of a cooler, livable earth, safeguarding our future and that of the generations to follow

Authors are responsible for the content of their work

(TK) track keynotes

Session 1: Sustainability and local stewardship

2 October (Tuesday), 11:00 - 12:30

(TK) Kasumi Susaki, Ryukoku University, Kyoto City, Japan

A study of Japanese neighborhood communities expected to work during climate change-related natural disasters - from the religious diversity perspective

In Japan, neighborhood communities are expected to work during large-scale natural disasters, and municipalities have begun to encourage their activities. Some of their activities are related to shrines or temples. Therefore, neighborhood communities should examine diversity. This paper reports the result of the examination

Amsale Temesgen, Nord University, Bodø, Norway; Bjørn Vidar Vangelsten, Nordland Research Institute; Mònica Guillen Royo, University of Oslo, Oslo, Norway

Citizen participation for increased sustainability and quality of life in cities in Nordland County

Nordland county in Northern Norway aims to increase both attractivity and sustainability of its cities. This paper presents preliminary results from a workshop method based on Max Neef's Human Scale Development theory using citizen participation to propose policies for improved quality of life and sustainability in selected cities in Nordland.

Aase Kristine Lundberg; Mathias Reinar, Nordland Research Institute, Bodø, Norway

Urban living lab: towards more legitimate and inclusive participation in urban planning? experiences from Bodø living

Urban Living Labs have been promoted around the world as a desirable approach to public participation in urban planning. In this paper, Bodø Living Lab is used as a case to explore how such initiatives contribute to secure and improve the legitimacy of urban planning faced with climate change.

Ping Shen, Tongji University, Shanghai, China; Jingyu Liang, Guangzhou, China; Zhao Miaoxi, Guangzhou, China

Detecting attractive spots of hiking tourism based on geotagged photos: the case of northern outskirts of Guangzhou,

Based on geo-tagged photos shared online by hikers, we detected attractive spots and obtained tags reflecting landscape features of the spots in order to provide references for planning, governance and management of hiking tourism.

Annette Kuhk, Katholieke Universiteit Leuven, Leuven, Belgium; Guy Vloebergh, Omgeving cvba, Antwerp, Belgium

How local re-commoning initiatives set a spark for global challenges

Three landed commons initiatives in Flanders (Belgium) on organic farming, social housing and slow roads illustrate how (re-) commoning practices of active land use stewards lead to a more sustainable use of scarce land and of fertile soils, and as such also to a contribution in the mitigation of climate change.

Session 2: Planning places for people

2 October (Tuesday), 13:30 - 15:00

Yuting Guo, College of Architecture and Urban Planning, Tongji Yuting Guo, Conege Community University, Shanghai, China

Space production: the interaction between social network and community garden

This paper investigates urban community gardens as spaces of citizenship through a case study of the Paraquat garden in Anshan Four village to find out the interaction that urban agriculture brings to citizens' participation and the residents' lifestyle as public space.

Iris Gommers, City of Antwerp, Antwerp, Belgium

A green tool to measure the environmental and ecological benefits of green areas and to involve different stakeholders Antwerp's "Greentool" allows urban planners to explore the potential of green to improve the living environment (heat stress, water run-off, air quality, noise perception, biodiversity, carbon sequestration) in a specific area. The application shows which nature based solutions can be used where in the city and gives the potential impact.

Longduoqi A; Hang Ma, Harbin Institute of Technology, Shenzhen, China Evaluation of public space vitality of based-scenic villages in a subtropical climate region: Case study of Guanhu Village in

This study aims to establish a method to evaluate the public space vitality (PSV) of coastal villages in urban fringe through tourist preference. It has some theoretical significance to guide the selforganized development of coastal villages in urban fringe.

Lihua Li; Lingling Li, School of Architecture, Harbin Institute of Technology, Harbin, China

Adaptable planning strategies of urban sport spaces in cold regions for climate and citizens' needs: case study of Songyuan, China

Based on investigating and analyzing citizens' needs of recreation and physical activities under the influence of climate, planning strategies of urban sport spaces in China's cold regions are explored to improve the regional and climate adaptability.

Session 3: Inclusive Cities

2 October (Tuesday), 15:30 - 17:00

Paola Rizzi, University of L'Aquila, L'AQUILA, Italy, Pongpisit Huyakorn, UDDI, Thammasat University, Bangkok, Thailand

Gaming simulation as a policy planning tool in a racially diverse neighborhood: a case study of Lardproaw district,

The researcher implemented Gaming Simulation as a method to assess the awareness toward climate change and the perception regarding the collaboration for local policy development from different local racial groups which include Thais, South East Asians, Europeans, etc. Ultimately, we recommend the progressive approach for elevated local community-based planning.

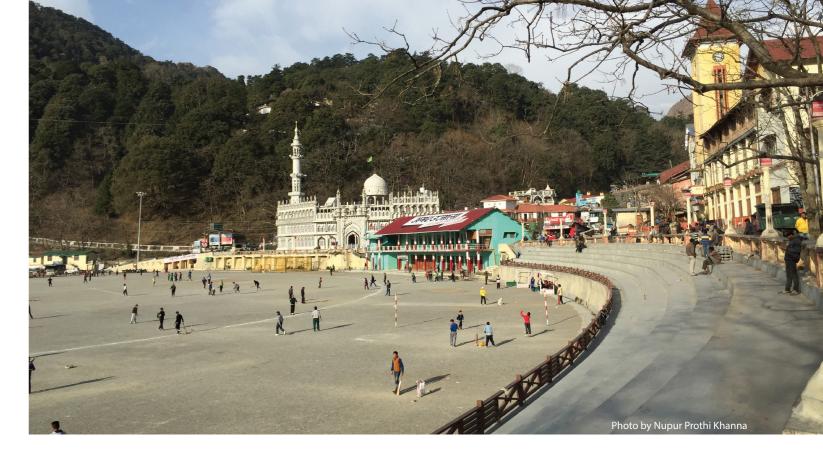
Mitchell de Sousa, University of Buenos Aires, Ciudad Autónoma De Buenos Aires, Argentina

Beyond urban seggregation: social reproductions and territorial frames of popular sectors in middle-sized towns of Latin America: the case of the neighborhood "Planta De Gas" in the Patagonian-Argentine city of Trelew

This work studies the characteristics and the specific themes that are located between the dynamics of the popular sector and the socio-spatial process. The main objective is to identify the transformations of the territorial organization on informal settlements in middle-sized towns on the Latin American context.

Lekshmy Hirandas, School of Planning and Architecture, New Delhi, New

Child in the City: Understanding the role of children in community engagement, Case of Chara Mandi, New Delhi The case study will introduce an understanding of the role of children in Participatory Planning. It is a well-established fact that children are much more perceptive to their environments than



Maria da Graça Moreira, Universidade de Lisboa, Lisboa, Portugal Associations of active aging; a potential tool for local

This paper presents a research on the role that 'senior universities' can play as tools for the preservation of tangible and intangible heritage in some urban or rural areas.

Session 4: Planning, policy, governance and management

3 October (Wednesday), 13:30 - 15:00

(TK) Piotr Lorens, Gdansk University of Technology, Gdansk, Poland Civilizing the public participation practice in post-transition

> Public participation is nowadays commonly understood as the key issue in contemporary planning theory and practice. It can be noted that in post-transition countries the local communities are much more demanding in this respect, and - in result - new tools and approaches to this are being developed.

Mahesti Okitasari, UN University Institute for the Advanced Study of Sustainability, Tokyo, Japan

Spaces of non-state actors in the urban development process: (TK) Serin Geambazu, Ion Mincu University, Bucharest, Romania Rethinking the community-based planning in the housing

This paper examines how community-based planning in Indonesia changes with the shifting roles of non-State actors in the development process, particularly in urban settlement, and the introduction of international urban development agenda and approaches in the last two decades (1999-2017).

Nagy El Gritly; Noora Al Suwaidy, Ministry of Municipality and Environment, Doha, Qatar

Towards setting up a contemporary planning system that adopts a participatory planning approach, enhances good governance, and delivers cool planning for Qatar urban future

The paper will show the importance of the role of Consultation and Community Engagement with all concerned stakeholders during the preparation of urban development projects. Such findings would represent a fundamental and decisive progress in the development and consolidation of Qatar's emerging Planning System.

Ekaterina Maleeva, Project Director at Strelka KB, Moscow, Russia

Standards for the integrated development of territories The Integral Guidelines for Urban Development is designed to make 1114 Russian cities modern, resilient, and responsive to the needs of residents. This is the first such document in Russian practice. The guidelines combine a flexible approach to regulation, while at the same time integrating existing norms and rules and set the bar for high quality development of the urban environment.

Session Proposal Planning for diversity

(Session Proposal as part of track 5) 3 October (Wednesday), 15:30 - 17:00 Location: Stormen Library – Bodø ByLab

Session 5: Heritage in context

3 October (Wednesday), 15:30 - 17:00

Local identities on change- urban waterfront regeneration within the global city Istanbul

The study reveals the dimensions of an urban waterfront regeneration project in which the rights of the future users of the space are lost behind a fight between the government and strong opposition parties gaining ground of governance landscape, motivated by their stake in the development.

Zihan Cai; Ming Lu, Harbin Institute of Technology, Harbin, China Research on sustainable design of historical blocks based on

inhabitant social integration measurement: a case study of Harbin in China

In order to solve the conflict between inhabitant life and commercial tourism in the renewal of Chinese historical blocks, this paper uses the confirmatory factor analysis to construct an evaluation model of inhabitant social integration measurement and proposes a sustainable design strategy for historical blocks from the perspective of inhabitant social integration.

Track 5

Cunai Yan; Chenchen Ren; Huiyi Xia, Shanghai Tongji Urban Planning & Desiqn Institute, Shanghai, China

Applied research on public participation in urban renewal planning based on the 'Fanchang Model'

This research tries to improve the original planning process of the urban renewal projects through enhancing public participation and public opinion survey process so as to form a framework of PIEA (Participation + Investigation + Evaluation + Action) for urban renewal projects.

Jianqiang Yang, Southeast University, Nanjing, China

Study on endogenous and inclusive development of old residential area

In the principles of resident participation, equal cooperation, progressive regeneration and inclusive development, the paper studies the substantial connotation, realistic meaning, fundamental principles, community organization, and regeneration measures. It proposes workable measures for endogenous urban regeneration, and establishes a holistic route in which collective intelligence should be brought into play.

Xinyue Gan, Tsinghua University, Beijing, China

Urban Beautification in Beijing's old city from the 1990s to the present: Taking housing regeneration in Beijing old city as the case

From 'housing demolition' in 1990s and early 2000s, to 'housing vacation' at present in Beijing old city, how does the mechanism of housing regeneration transform? At present, whether the living conditions of the local residents have been improved in the process of 'housing vacation'?

Huiyi Xia; Renzan Qian; Cunai Yan; Nankai Xia, Shanghai Tongji Urban Planning & Design Institute, Shanghai, China

Multi-dimension urban planning in renewal of the old city - a case study of an urban renewal project in QuYang, Shangahi, China

It is mainly based on community governance, adding data platform services and data analysis, using the Internet to provide residents or users with more effective and comprehensive public supporting services, and providing management with data control and big data analysis in the background.

Session 6: Smart City

4 October (Thursday), 11:00 - 12:30

Miguel Fernández-Maroto; Juan Luis De las Rivas Sanz; Sergio Cantero Celada; Ángel María Marinero Peral, University of Valladolid, Valladolid, Spain

INTENSSS-PA: a governance approach for integrating energy and spatial planning - its results in Castilla y León (Spain) The INTENSSS-PA project aims to develop and implement an institutional capacity building approach related to energy and spatial planning, addressed to public authorities and societal stakeholders in order to support them to enter in a new

spatial planning, addressed to public authorities and societal stakeholders in order to support them to enter in a new era of holistic planning through a participatory, multi-level, interdisciplinary decision-making process.

Evgenii Aleksandrov; Elena Dybtsyna; Anatoli Bourmistrov; Giuseppe Grossi, Nord University Business School, High North Center for Business and Governance, Bodø, Norway

Opening Smart City 'fairy tale' to Critical Scrutiny: insights from dialogic accounting literature

Smart City idea becomes a 'fairy tale' with smart IT-solutions, smart people and smart collaboration for sustainable future. However, it is still unclear how to develop Smart City management which somehow should balance between interests of financial sustainability, citizens, environment and business or/and political

Anniken Førde, Tromsø, Norway

Enhancing urban encounters - the transformative powers of creative integration initiatives

This paper explores innovative integration initiatives in cities in the north, emphasizing how new forms of engagement and responsibility might be engendered. The cities are seen as sites of experiments, where new relations across difference are developed.

Guoqiang Wang; Liu Songfu; Shen Yu, Faculty of Architecture, Harbin Institute of Technology, Harbin, Heilongjiang Province, China

The framework research on sustainable conservation of urban building heritage from the collaborative visioning for the future based on the complexity theory

This paper highlights how heritage sustainable conservation becomes important for dynamic innovation in the urban evolutionary process in the coming anthropogenic era, during which decision-making and human behaviour is becoming the dominant influence.

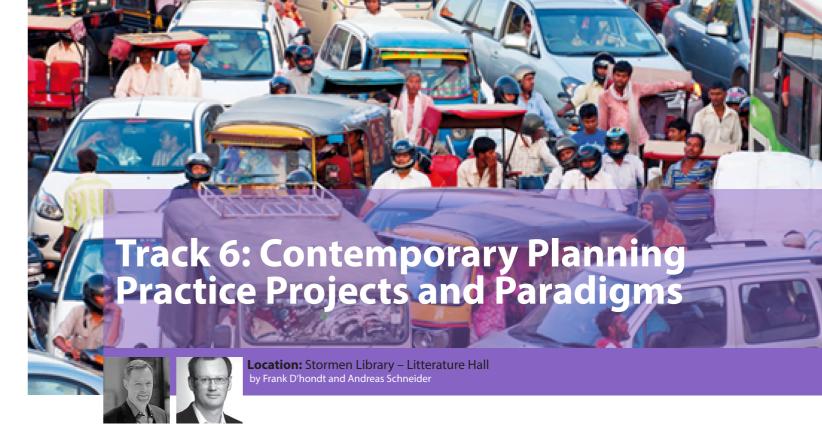
Angela Santangelo; Simona Tondelli, University of Bologna, Bologna, Italy

Embedding energy user's behaviour into multi-criteria analysis: Providing scenarios to policy-makers to design effective renovation strategies of the housing stock

The paper aims at contributing to the discussion about promoting urban regeneration through energy-related policies able to incorporate user behaviour. The outcomes shall support policy-makers to design and implement energy policy instruments to regenerate the existing built environment, to increase urban resilience, quality of urban spaces and quality of life.

Constructed and contested legitimacy in urban governance

(Session Proposal as part of track 5) 4 October (Thursday), 13:30 - 15:00 Location: Stormen Library – Bodø ByLab (see page 40)



This track reflects the diversity of 'lessclimate-related' planning issues that drive contemporary planning researchers and practitioners. Weaving common threads is not easy, let alone a pattern or paradigm in contemporary planning. There are recurrent topics such as preserving cultural and natural heritage, the need for quality over quantity, (real) public space making, TODplanning, etc. But there are also some newer fields such as 'UniverCity'/School Planning. Entrepreneurial Planning, Mobile-data-based Activity Planning, Community Life Cycle Planning, Sponge City-Planning, Urban Eco-Planning, Dual Planning System approach and ...the 'Periodic Table of Urbanism'. In other words, if eclectic 'diverCity' is your thing and climate change is not necessarily the primary focus of your work and research - this track is yours!

Session 1: Urban Innovation 1

The lead paper explores the transformation in the urban planning approach of Kolkata/ India based on a timeline of historical events since its inception as an Indian colonial port city, to today's IT-driven city. The paper confers that the prevailing hegemony of the dominant neoliberal urbanism is neglecting the place-making characteristics of the public realm of Kolkata, leading eventually to erosion of the cultural fabric of Kolkata neighbourhoods. The authors strongly opine the redevelopment of the public realm to reinvigorate the fading cultural patina of the neighbourhoods and enhance the neighbourhood cohesion. Other papers in this session struggle with the same consequences of urban transformation driven by neoliberalism and authoritarianism. Papers exploring econeighbourhoods and UniverCity complete this first session.

Discussion could be centred around following keywords: urban communities, urban transformation, neoliberalism, econeighbourhoods, UniverCities and public space.

Session 2: Urban Innovation 2

The lead paper analyses working, living and leisure activities in metropolitan Wuhan/China and identify their spatial relations

between the old city and the East Lake new town. It then proposes optimizing suggestions for the current spatial plan of the new town in view'of a more peoplecentred approach to planning and urban development. Other papers advocate the idea of neighbourhood schools in India; people-centred entrepreneurial planning is Israel; the impact of large-scale urban interventions on contemporary city centers, with the Polish harbour city Gdansk as the case; and the concept of 'community-life-cycle in urban planning, with Ningbo Eastern new town development as case-study.

Discussion could be centred around following keywords: mobile-data mining, activity-planning, new town development, people-oriented/entrepreneurial planning and urban redevelopment.

Session 3: Eco-Planning System

The lead paper, taking Shanghai as an example, introduces the theory and praxis of Water-based Planning within the context of the Chinese Sponge-City Programme. Other papers argue for a global dual planning system, addressing both urbanized and nonurbanized territories; for a paradigm shift towards Urban Ecological Planning as tested in Pune/India: for centralized leadership to implement major projects that can jumpstart local development, as demonstrated in the case of Dateng Valley Redevelopment in rural Wu-Xuan/China; and for an urban morphology optimization model to address the Urban Heat Island effects, with Hangzhou/China as the case.

Discussion could be centred around following keywords: water-based planning, planning system assessment and reform, urban ecological planning and urban island heat mitigation.

Session 4: Heritage Planning

The lead paper presents research on win-win strategies for ecological heritage protection and eco-tourism development along transregional mega linear projects of China, resulting in new guidelines for the planning, construction, ecological restoration, tourism development and management of them. Others papers are dealing with sustainability planning for small border mountain towns

entering the global tourism market, with case studies in Georgia and Vietnam; with Landscape as a cultural ecosystem service and guiding administrations and professionals in incorporating landscape management into the different stages of regional and local planning and design; with Landscape planning in Russia; and with the challenges of urban rehabilitation of heritage districts under heavy touristic pressure, such as the Bairro Alto and Bica neighbourhoods in Lisbon/Portugal.

Discussion could be centred around following keywords: urban and ecological heritage, eco-tourism, landscape planning and ecosystem services, urban rehabilitation and gentrification.

Session 5: Landuse & Planning Systems

The lead paper presents issues and challenges in delivering compact development and densification in Auckland/ New Zealand. It suggests that the land use planning should be accompanied by a more thorough discussion and review of planning tasks and goals, and a deeper understanding on the role of plan regulation and its actual implementation under a marketdriven planning system. Other papers are presenting land-use suitability assessment criteria for South Africa, carried out on land before any developments are implemented; the practical limitations of mixed land use as a sustainable development model which promotes the compact and efficient use of spatial resources, comparing Chinese and American practices; the 'periodic table of urbanism', providing a comprehensive framework for describing the "general reign of order" in our towns and cities, whereby planners and related professions are able to reach a fuller understanding of cities – and thereby plan them better, with Palermo/Italy as the case study; and the case of a Railway hub area development in Arth-Goldau/ Switzerland, with innovative participatory methods on Stakeholder Process and Urban

Discussion could be centred around following keywords: compact development, land-use suitability assessment, mixed land-use, planning system rethinking and smart/participatory TOD.

Authors are responsible for the content of their work

(TK) track keynotes

Session 1: Urban innovation part 1

2 October (Tuesday), 11:00 - 12:30



Sudeshna Kumar; Haimanti Banerji, Indian Institute of Technology Kharagpur, Kharagpur, India

Analysis of transformation of urban planning practice by mapping changes in economic, social, cultural and built environment of the Neighborhood Level Urban Communities (NLUC): Case study of Kolkata, India

The study analyses the transformation of urban planning practice through mapping changes in economic, social, cultural and built environment of the selected NLUCs. The study then explores how entrepreneurial urbanism and neoliberalism has dominated planning practice leading to erosion of the cultural patina of

Xiaoping Zhang; Fengying Yan; Haiyan Lei, Tianjin University, Tianjin,

The planning methods of Chenjia Town international ecological community in Shanghai based on ecological security

With the planning of ecological community from the theoretical discussion into practical exploration, the paper takes the Chenjia Town international ecological community in Shanghai as an example to explore the planning methods of residential areas based on the ecological security, so as to provide reference for the construction of an ecological community.

Wenjing Luo; Haijun Li, Wuhan Planning & Design Institute, Wuhan, China: Han Zou, Hubei University of Technology, China

How do universities react with cities: the case study of Wuhan, China

Cities and universities have been reacting with each other in a complex, conflicting way not only in urban morphology but also in economic, social and cultural networks. This paper takes Wuhan as an example to explore the spatial relationship between universities and cities.

Dicle Kizildere, Istanbul Technical University, Istanbul, Turkey

Emerging forms of neoliberal governance on public space: an informal business improvement district in Istanbul

This paper investigates the birth and evolution of a Business Improvement District (BID) in Talimhane, Istanbul, which is the first case of the use of this instrument of neoliberal governance in the

Session 2: Urban innovation part 2

2 October (Tuesday), 13:30 - 15:00

Wenjing Luo; Wei Xiong, Wuhan Planning & Design Institute, Wuhan, China; Han Zou, Southeast University, Wuhan, China

Analysis on the working-living-entertaining spatial relations of new towns based on mobile location data: the case of the national independent innovation zone of East Lake in China By using mobile location data, we proposed a people-centred planning model which does not only describe the current human activities and interpret the reasons underneath, but also analyzes whether the current model of space use is sustainable and the future model of space supply is necessary to be changed.

Swechcha Roy; Saikat Kumar Paul; Vivek Agnihotri, Indian Institute of Technology Kharagpur, Kharagpur, India

Developing a conceptual framework for geo-spatial planning of location-allocation of schools in Indian cities

The current trends of school siting, theories about school effectiveness and approaches for meeting the social infrastructure requirement of a community is reviewed and inferred that the neighborhood school is very effective but has own limitations. The study proposes to include consumer choice in the concept of neighborhood schools.

Ronit Davidovici Marton, D.M.R Planning & Development, Tel-Aviv, Israel The hybrid urban renewal model - Entrepreneurship, income, employment, innovation everywhere

Urbanism requires the development of economic infrastructure that places the person and a todays lifestyle as a leading asset for the city renewal. Therefore, the major goal of renewal planning is to encourage entrepreneurship, innovation, employment everyone and everywhere. Bat Yam renewal plan is a modelling

Piotr Lorens; Michal Habier, Gdansk University of Technology, Gdansk,

Impact of large-scale urban interventions on contemporary city centers

Large scale urban interventions have become a common development practice in contemporary cities, allowing achieving rapid changes in their urban structure. The main aim of this paper is to discuss this issue in the wider context, taking into account also social, legal, economic and infrastructural consequences of their development.

Yuan Lu; Xiangyi Wang, Urbanspace Planning And Architectural Design Co.Ltd(Shenzhen), Shanghai, China

Research on the planning of community life circle in new town based on an evaluation approach - A Case Study of Ningbo Eastern New Town in China

A research explores the evaluation and construction of community life circle, which reflects the interaction of people's daily life and

Reframing citizen participation for a sustainable city transition - the case of Bodø **ByLab**

(Session Proposal) 2 October (Tuesday), 15:30 - 17:00 Location: Stormen Library - Bodø ByLab (see page 38)

Session 3: Eco-planning

2 October (Tuesday), 15:30 - 17:00

Dan Ye, Blue Town Urban Planning Co. Ltd, Shanghai; Xiji Jiang; Yidong Yu, Shanghai Tongji planning and design institute, Shanghai

Planning and construction practice for Sponge City in Shanghai: experience and reference

Shanghai has carried out a series of "Sponge City" planning work, including the specific planning of overall urban level, compilation of technical guidelines, special planning of pilot areas, and the implementation of the concept and technology of sponge city. This paper systematically introduces its concrete practices and useful experiences.

Frank D'hondt, Territorial Capital Institute, Glyfada, Greece

Better planning systems for cooler countries and cities International research made clear that most if not all spatial planning systems are not (longer) fit for the purpose of a more sustainable urban and territorial development. Based on the UN Urban Agenda and UN-Habitat's Planning Guidelines, a new method will be presented to review and reform Spatial Planning Systems.

Marcin Sliwa; Aranya Rolee; Refstie Hlilde, Norwegian University of Science and Technology, Trondheim, Norway

Urban ecological planning: principles, value positions and application in practice

The paper presents the principles of Urban Ecological Planning an approach of urban practice that challenges and supplements outdated technocratic urban planning methodologies that are still dominant in many developing countries. The value positions of this paradigm are illustrated with examples from an extensive fieldwork in Pune, India.

Track 6

Jinbai Wang; Da Xiao; Shanghai Tongji Urban Planning and Design Institute, Shanghai, China; Chen Chen, Tongji University, Department of Urban and Rural Planning, Shanghai, China

Towards world-class lakeshore city from edge county seat: Wu xuan's over-taking development strategy accompanying the construction of Dateng Valley Reservoir

Promoting regional development by means of major projects is a developing path that China frequently adopts and should shed light on the over-taking development strategy in less developed regions or economies.

YI Zheng; Junyan Yang, Southeast University, Nanjing, China

How Urban Morphology Can Be Optimized? Research on Interactive Mechanism Between Urban Morphology and Urban

Micro Climate

This paper focusses on analysing the mechanism and effect relationship between urban micro climate and urban morphology under a global climate change background. Through an urban design project to explain the interaction between urban mirco climate and urban morphology, and how urban physical environment can be improved by optimizing urban morphology.

Session 4: Heritage planning

3 October (Wednesday), 13:30 - 15:00

Renzan Qian; Huiyi Xia; Cunai Yan; Nankai Xia, Shanghai Tongji Urban Planning & Design Institute, Shanghai, China

Research on the scopes of eco-tourism development of areas along transregional mega linear projects of China - a practice study of Yin Jiang Ji Huai Project

This paper attempts to explore an operational route and theoretical model for delimitating the scopes of the ecotourism development of the areas along trans-regional mega linear projects, for providing significant reference to planning, construction, ecological restoration, tourism development and management of such kind of projects in China.

Renard Teipelke, Independent Consultant, Gera, Germany

Sustainability planning for small border mountain towns entering the global tourism market

This case study of sustainability planning in Mestia (Georgia) and Ha Giang (Vietnam) will reflect on the opportunities and challenges of small border towns in remote mountainous areas that are trying to enter the global tourism market as a driver for their economic development.

Xinxin Zhang; Jingsheng Li, Shanghai, China

Chinese rural area natural resource oriented town and village cool planning practice

The research discusses the rural area's 'refrigerator' role to the urban area. Two real Chinese town and village planning practices are chosen which are both natural resource oriented, but have different methods and strategies.

Sara Maldina, University of Boloana, Boloana, Italy

Landscape as a service. The potentials of integrating different approaches

The categories of "Cultural Landscape" and "Cultural Ecosystem" Services" represent the leading edges of a reconceptualization process of landscape, tending to combine the environmental approach and the cultural one. Through bibliographic and comparative analyses, the contribution aims at demonstrating the potentials of an integrated approach in landscape assessment and management.

Olga Maximova, University of Rome La Sapienza, Roma, Italy/ Burundi Values for planning

The paper presents the results of the PhD research of the author supported by the Erasmus Mundus Action 2 Programme of the European Union. The PhD research is dedicated to: The Landscape: comparison between Italy and Russia - general values for legislative and planning instrumentation.

Sofia Morgado; Pedro George; Jorge Nunes; Cármen Coelho, CIAUD/ Murbs, Faculdade de Arquitetura, Universidade de Lisboa, Lisbon, Portugal

Urban rehabilitation: realities and paradoxes in Bairro alto and Bica, Lisbon

The paper discusses the current urban reality in Bairro Alto and Bic and under the scope of the of the next Urban Rehabilitation Plan for, as part of a contribute to the Urban Planning Department of Lisbon. Critical aspects, from the research part of the work are to be presented.

Session 5: Landuse & planning systems

3 October (Wednesday), 15:30 - 17:00

Wen Liu; Lee Beattie; Errol Haarhoff; Shaoyao Tang, Auckland, New Zealand

Plan making in delivering intensification in Auckland, New **Zealand: issues and challenges** Drawing on Auckland experience and practice, this article investigates on the efficacy of urban planning systems to deliver outcomes well aligned with the goals of urban growth management strategies, with particular attention to delivering residential intensification and higher density housing policy outcomes.

Mthobisi Masinaa: Peter Nienaa: Brian Mubiwa: Maartin Friedrich, KENA Consult (Pty) Ltd., Pretoria, South Africa

Development of land-use suitability assessment criteria for South Africa

Land as a resource is limited in nature and its use is not only determined by the user but also by the capability of that land to sustain productive activities. This has led to the development of a Land Use Suitability Criteria for more appropriate and sustainable

Yuwei Huang; Hualan Design & Consulting Group Nanning, China; Cheng Yu; Xiaoting Yan, Nanning, China

The practical limitations and the reference of key technology of mixed land use

By comparing with the practice in America and considering the practice in China, there are three keys to overcome the limitations of mixed use of land.

E. Stephen Goldie, Abu Dhabi Department of Urban Planning and Municipalities, Wembley Downs, Australia

The periodic table of urbanism

Just as the Periodic Table of Chemistry identifies the physical components of our universe and is able to predict the relationships between them, a Periodic Table of Urbanism is proposed to provide a comprehensive framework for describing the "general reign of order" in our towns and cities.

Nicole Wirz, Raumplan wirz gmbh, Basel, Switzerland; Andreas Schneider, HSR University of Applied Sciences Rapperswil, Rapperswil, Switzerland

Railway hub area development in Arth-Goldau (Switzerland) Arth-Goldau is a railway hub with a lot of development potential. To activate this a participatory approach was necessary. For the first time, a Stakeholder Process methodology was applied for the masterplanning. This double case study will report about the experiences from the project manager's and the urban planner's

Open Sessions in Bodø ByLab

Location: Stormen Library – Bodø ByLab

Planners for Climate Action – a new initiative of **UN-Habitat**

2 October (Tuesday), 11:00 - 2:30

Moderator: Didier Vancutsem, ISOCARP

The session is organised by ISOCARP in cooperation with UN-Habitat and will present the new initiative of UN-Habitat related to Climate Action. It will present the global climate challenges experienced on the planet, and current actions on advocacy, capacity-building and research. Also the session will include the voices of young professionals.

The world is going through unprecedented climate change that is placing considerable stress on our societies and the environment. From shifting weather patterns that threaten food production to rising sea levels that increase the risk of catastrophic flooding, the impacts of climate change are global in scope and unprecedented in scale. Human settlements emit a substantial portion of the world's greenhouse gases (GHGs) and are home to concentrated populations that are highly vulnerable to the impacts of climate change. Rapid urbanization is transforming places, populations, economies, and the built environment at an exceptional speed and scale. This transformation is occurring throughout the world, and it is accelerating in many places, generating increasingly large urban conurbations and agglomerations. In that context of urgency, the urban and territorial planners as well as the climate change communities acknowledge their critical role and responsibility in tackling the future of cities. They realize the urgent need to take sustainable pathways towards addressing climate change in their practice. Urban form—compactness, density, mixed-land use, and integration of infrastructure especially transportation—is a key strategy for reducing human generated climate change.

A Global Collaboration of Planners for Climate Action

Planners for climate action is a global collaboration to promote the value and contribution of better planning to sustainable cities facing the impacts of climate change. By working together across the globe we share leading practice and knowledge on:

- Mainstreaming climate change mitigation and adaptation into land-use
- Supporting integrated approaches to planning and multiple scales of intervention that incorporate climate change Compact urban form that integrates land use infrastructure
- Cultural heritage conservation including adaptive re-use and infill development using patterns established by historic cities and towns ICOMOS has a Climate Action Mobilization effort to align with P4CA
- Promoting a climate-friendly built urban environment, both new development as well as redevelopment, at different territorial scales
- Also promoting participatory, bottom-up approaches to planning • Embracing when possible nature-based approaches to building climate
- resilience, green infrastructure and planning Improving the profession of planning, as well as planning education and research, through collaborative approaches.
- Moderator (Didier Vancutsem), Secretary General ISOCARP 11:05 Setting the scene – the P4CA initiative of UN-Habitat Christine Auclair, Climate Change Planning Officer, Urban
- Planning and Design Branch, UN-Habitat 11:20 Global Climate Challenges – Jon Kehr Kaw, World Bank How the World Bank is taking action Director, Social, Rural, Urban & Resilience Global Practice
- 11:35 Concrete actions on research
- Annemie Wyckmans, project Manager, CxC Project, NTNU
- Concrete actions on capacity-building Eric Huybrechts, IAU Paris
- 11:55 Concrete actions on advocacy Jens Aerts, UNICEF, New York
- 12:05 The Climate Change challenge and the view from Young Gamuchirai Mutezo, and Tjark Gall, YPP ISOCARP
- 12:15 Podium Discussion
- 12:30 Conclusions (to be continued during lunch break)

ISOCARP & the New Generation of Planners

2 October (Tuesday) 13:30 - 15:00

Moderators: Zeynep Gunay and Sławomir Ledwon, ISOCARP

This special session is designed to explore the future of planning profession with the involvement of the youngest generation. Since 1991, ISOCARP offers various platforms to engage young planning professionals in activating knowledge for better cities. Among these platforms are Young Planning Professionals' Workshops, Intensive Training Programmes, Mentoring, Publications and Awards. After a brief introduction, the results and examples of those programmes will be shared with the audience including the results of the Young Planning Professionals National Workshop in Xi'An, China. **The** session also introduces 2018's two Congress Workshops in Bodo and Kristiansand, Norway. This year's winners of the Student **Awards** will present their awarded researches. The session will be concluded with a discussion with the audience and participants about how ISOCARP can serve better the new generation, and about the future of planning through the fresh eyes of the young. The session will be open to the public and we invite the citizens to take part as well.

Reframing citizen participation for a sustainable city transition - the case of Bodø ByLab

(Session Proposal as part of track 6) 2 October (Tuesday), 15:30 - 17:00

Moderator: Daniela Baer, SINTEF Trondheim, Norway

Speaker: Marianne Bahr-Simonsen, project manager Bodø ByLab

The Bodø ByLab is a city lab for citizen participation and stakeholder collaboration with a physical meeting place at the library in Bodø. The Bodø ByLab is also the venue for our session. We will take the Bodø ByLab as starting point and explore how citizen participation transition. After a presentation of Bodø ByLab given by the project manager Marianne Bahr-Simonsen, we would like to invite the session participants to groupwork where we share and develop ideas on participating citizens in smart, climate and environment focused urban planning. Challenges for citizen participation are observed in 8 Norwegian Neighbourhoods who are pilot projects in the Research Centre on Zero Emission Neighbourhoods in Smart Cities. We will use storytelling as a method for describing challenges of citizen participation and workins small groups to share and develop new ideas for re-framing citizen participation.

Urban Planning Advisory Teams (UPATs): practices from Ningbo, Durban and Guangzhou

3 October (Wednesday), 13:30 - 15:00

Moderators: Milena Ivkovic and Martin Dubbeling, ISOCARP

In 2018, ISOCARP organised three Urban Planning Advisory Team (UPAT) workshops in Ningbo (China), Durban South Africa and Guangzhou (China). ISOCARP has selected three teams of experts to travel to Ningbo, Durban and Guangzhou to stay and work for a week. In Wuhan the UPAT team assisted in the development and rethinking of Xinmalu Historic District in Ningbo, in the the Historic and Cultural Corridors in Guangzhou.

The UPAT Seminar will take 90 minutes, starting of with an introduction of 15 years of UPAT workshops and continues with the results of the three 2018 UPAT workshops. The three UPAT teams present and share the outcomes of the UPAT workshops in Ningbo, Durban and Guangzhou.

A discussion and the introductions of upcoming UPAT workshops that ISOCARP has in preparation will conclude the UPAT Seminar. Vice Presidents UPATs Milena lykovic and UPAT Programme Manager and President-Elect Martin Dubbeling will host and moderate the UPAT

13:30 - 13	3:40	Welcome and Introduction of 15 years and 30 UPAT Workshops Milena Ivkovic and Martin Dubbeling
13:40 - 14	1:05	Ningbo Xinmalu Historic District UPAT
		Detlef Kammeier, Nupur Prothi Khanna, Mindong Ni
14:05 - 14	1:30	Durban Inner City UPAT
		Guy Vloebergh, Žívilė Šimkutė, Themba Masimula, Bernardus van Heerden
14:30 - 14	1:55	Guangzhou Historic and Cultural Corridors UPAT
		Paul Lecroart, Silja Tillner, Jens Aerts, Xue Liying
14:55 - 15	5:00	Introduction upcoming UPAT workshops (2018-2019)
		Milena Ivkovic and Martin Dubbeling

Session Proposal Planning for diversity

(Session Proposal as part of track 5) 3 October (Wednesday), 15:30 - 17:00

Moderator: Tone Magnussen, Nordland Research Institute, Norway

Speakers: Anniken Førde (UiT The Arctic University of Norway), Tone Magnussen (Nordland Research Institute), Gregory Taff (NIBIO)

Cities in northern Europe are increasingly inhabited by people with diverse cultural backgrounds. The social, economic and environmental sustainability of cities requires capacity to live with differences. Recent increases in refugees and asylum seekers pose new challenges, which adds to challenges already faced by the cities affordable housing, transport, community meeting spaces and new economic opportunities.

to creating new meeting places, indoors and outdoors, but the increased diversity has led to a wide variety of new and innovativ integration activities, aiming at connecting newcomers and established residents in urban meeting places. This session will focus on exploring the function of and connections between meeting places, interaction and participation in the city. As a part of this broad theme, these questions will be relevant:

A round-table discussion aims at exploring innovative multicultural integration activities that help us to live with difference, enhance integrative interaction and develop cities' problem-solving capacities

10 Years ISOCARP Awards for Excellence: Presentation of award winning projects (2005-

4 October (Thursday), 11:00 - 12:30

Moderators: Ana Peric and Martin Dubbeling, ISOCARP

ISOCARP celebrates over 10 successful editions of the ISOCARP Awards for Excellence. The ISOCARP Awards for Excellence are conferred in recognition of exceptionally innovative urban and regional initiatives. These Awards were created in 2005 as the highest honour that the International Society of City and Regional Planners can award to a city, region or an institution. Until 2018 ISOCARP has acknowledged 48 cities, regions of institutions with the ISOCARP Awards for Excellence. Amongst the laureates are the cities of Nanjing, Durban, Wuhan, Amsterdam, Bilbao, Singapore, Antwerp, Abu Dhabi, Brussels and Ottawa.

ISOCARP has invited laureates of the past editions Awards for Excellence to present their award winning cities and projects. The ISOCARP Awards Seminar will take 90 minutes, starting of with an introduction and overview of the +10 past editions of the ISOCARP Awards of Excellence and continues with pitches of projects and cities that won the ISOCARP Awards for Excellence between 2005 and 2017. Ana Peric, Vice President Awards and Communication and ISOCARP President-Elect Martin Dubbeling will host and moderate the Awards Seminar.

11:00 - 11:10	Welcome and Introduction of the ISOCARP Awards for Excellence Ana Peric and Martin Dubbeling
11:10 - 11:25	Strategic Development Plan, Shantou (2012) Hongyang Wang, Nanjing University
11:25 - 11:40	Transforming the Segregated Apartheid City: Durban Inner City Spatial Vision and Regeneration Strategy (Merit Awards 2017) Themba Masimula, Bernardus Van Heerden, Durban Inner City Team
11:40 - 11:55	Guangzhou Village Planning, Rural Living Environment Improvement and Innovative Development Practice in Metropolitan Area (Grand Award 2017) Xue Liying, Guangzhou Urban Planning & Design Survey Research Institute (GZPI)
11:55 - 12:10	Caribbean and Santander's Diamond of Colombia (Grand Award 2017) Juan Luis de las Rivas Sanz, University of Vallodolid
12:10 - 12:25	Local Identity-Oriented Strategic Development Planning of Jiangsu Province (Merit Award 2017) Hongyang Wang, representing Jiangsu Institute of Urban Planning and Design (JUP)
12:25 - 12:30	Call for the 2019 Awards for Excellence

Constructed and contested legitimacy in urban governance

(Session Proposal as part of track 5) 4 October (Thursday), 13:30 - 15:00

Developing a sustainable city with reduced climate gas emissions, energy consumption and pollution and re-use of waste often requires measures reaching far into the way citizens live and organize their lives. This includes how and where the citizens live, how they move around in the city and what they do in their spare time. The transformations needed to enable more sustainable cities pose a key challenge for urban governance: How to take necessary measures toward the "green city" in a way that is legitimate in the view of the citizens affected by the policies? In this perspective, legitimacy might be defined as the extent to which urban policies and measures are acceptable to citizens.

(for instance through participation, transparency and accountability in decision-making) and outcomes (for instance through the effectiveness and sustainability of policies) of urban governance. As a greener city necessarily involves a greener lifestyle, the success of policies to a large extent depends on its citizens commitment and willingness to comply with policies. Another important question revolves around how the legitimacy of necessary environmental policies are constructed within the political and bureaucratic spheres, where multiple issues compete for attention and resources.

constructed and contested in planning and development processes. Understanding how different stakeholders, planners and decision makers make and assess different legitimacy claims in governance processes of the "green city," can contribute to understand transformation processes toward a more sustainable urban future.

This session invites academics and practitioners to contribute with insight on the concept of legitimacy and sustainable urban planning

- On the evolution of the planning system: Marius Grønning, Norwegian University of Life Sciences (tbc)
- Legitimizing urban planning projects the balance between input and output participation: Maja Nilssen, Nord University
- Constructing legitimacy through an urban living lab: experiences from Bodø Living Lab: Aase Kristine Lundberg/Mathias B. Reinar, Nordland Research Institute
- Innovative forms of citizen participation at the fringe of the formal planning system: Torill Nyseth, UiT The Arctic University of Norway

Special Sessions

Is the smart city sustainable? The case of Bodø

3 October (Wednesday), 8:30 - 10:00

Location: Stormen Library – Literature Hall

Moderator: Representative from the High North Center, Nord University Business School (tbc)

This session will examine the sustainability of smart city development. Questions to be addressed include the financial implications for building a smart city, big investors vs. the local population, and the role governance and business hold going forward.

- Herbert Girardet, Professor, Co-founder of the World Future Council
- Anatoli Bourmistrov, Professor, High North Center, Nord University **Business School**
- Stephan Skjelvan, Head of Unit for Development, Bodø municipality

Sustainable Development Goals in Norwegian Planning - Possibilities & Challenges

4 October (Thursday), 11:00 - 15:00 **Location:** Scandic Havet – Storhavet

Session organized by the Norwegian Ministry of Local **Government and Modernization**

How do we implement the UN sustainable goals (SDG) through urban and regional planning? All three legs of the term sustainability is equally important; climate, economics and social. The event presents different approaches addressing the various SDGs by the use of regional and local examples.

11:00 - 11:20 Horrigmo 11:20 - 11:50 UN Habitat/H. Girardet

11:50 - 12:10 Deloitte

12:10 - 12:30 Denmark (Erhvervstyrelsen) 13:30 - 13:50 Nordland FK

13:50 - 14:10 Brønnøy (Regina)

14:10 - 14:30 Narvik 14:30 - 14:50 New Asker

14:50 - 15:00 Horrigmo; summary

New Strategic Research and Innovation Agenda of JPI Urban Europe

4 October (Thursday), 13:30 - 15:00 **Location:** Stormen Concert Hall – Sinus

Moderator: J. Borsboom-van-Beurden, Norway / Netherlands The aim of the session is to collect input to JPI Urban Europe's new Strategic Research and Innovation Agenda.

- Welcome (Judith Borsboom, NTNU, and Mari Solerød, RCN, 5 min)
- Introduction to new Strategic Research and Innovation Agenda 2.0 (SRIA 2.0) of JPI Urban Europe (Judith Borsboom NTNU, 10 min)
- (Mari Solerød, RCN, 10 min)
- Group work 1: specific issues for the urban agenda of Norway missing so far (25 min, drawing mind maps on table cloths)
- Group work 2: role of research to help solving these issues (25 min, discussing and drawing top 5 on table cloths)
- Wrap-up, next steps and future engagement in the SRIA 2.0 process (10 min)

"Next City Seminar" Meet the Institutional **Members of ISOCARP**

4 October (Thursday), 13:30 - 15:00

Location: Stormen Library – Literature Hall

Moderators: Martin Dubbeling and Jeremy Dawkins, ISOCARP

ISOCARP has a growing number cities, universities, planning and research institutes, national associations as well as planning and design firms that are registered as Institutional Members. These 40+ Institutional Members support ISOCARP in pursuing "Knowledge for

The Institutional Members are important for ISOCARP as they initiate YPP and UPAT workshops or co-hosted one of our annual congresses. In this "Next City Seminar" Institutional Members present their organisations, most recent projects and publications, followed by a discussion about the future role and future activities of Institutional Members within and for ISOCARP.

Jeremy Dawkins, Vice President Members and ISOCARP President-Elect Martin Dubbeling will host and moderate this seminar.

13:30 - 13:50 Welcome and Introduction of Institutional Membership of ISOCARP

Jeremy Dawkins and Martin Dubbeling 13:50 - 14:30 Pitches and introductions of Institutional Members

present in Bodø

14:30 - 15:00 Open discussion about the opportunities of Institutional Membership

TECHNICAL TOURS

On Monday, 1 October 2018, the following technical tours will be organised:

New City – New Airport: The history of Bodø as an airport city and the life along a NATO air base, and Bodø's huge development project the coming years.

City walk: City of Bodø – past, present and future (additional walk

Bodøsjøen: Culture heritage and recreation area. Guided walk and workshop.

Keiservarden mountain: Hiking to the top of Keiservarden (366 mas). Facilitation of recreation areas. (Good shoes, clothes and basic fitness required).

Nord University: Role of the Nord University in Bodø, past, present and

There will be a third city walk tour scheduled on Wednesday 3 October 08:30 which is only bookable through the congress app.

Limit of participants: 45

Duration: 3-5 hours (city walk 2

Start of all tours: 10:00 with pick-up at the Størmen Library (additional city walk at 13.00).



It is decided to relocate most of the military activity from Bodø to Ørlandet, a municipality further south in Norway. This is, on one hand, a dramatic resolution; at the same time, it is an opportunity. Thus, the existing runway is soon to be outdated leaving a vast land in need of regeneration. Based on these premises, the Norwegian Parliament also decided to provide funding for the relocation of the airport taking into consideration the increasing population and the scarcity of land within Bodø municipality. This has turned the situation from something negative to something purely positive. The new location of the airport will be 900 metres south of the existing runway (see figure), instead of a new airport at the periphery of the city. This will help the city to expand and to build increment by increment from the city core.

This tour will focus on Bodøs aviation and military history, and the huge project of moving the airport and new land for urban development on former NATO-base.

2. City walk



Duration: Two hours per group/walk

The city walk takes place in the city centre. Two local planners from the Municipality; Jonas Bjørklund and Mats Marthinussen will conduct the walk. Jonas is an architect and Mats is an urban planner. The focus of the walk is getting to know the main development of Bodø both the past, present and future through its history, built environment and master planning. During the walk, we would like the participants to engage in discussions and give feedback.

The first walk starts at 10.00 and the second one starts at 13.00. They both start at Stormen Library. Make sure which time you have signed up for through your registration for the congress.

There is a third city walk tour schedule on Wednesday 3rd October 08:30, only bookable through the congress app.

3. Bodøsjøen



In the Bodøsjøen area we find several historical and archaeological sites, as well as cultural institutions. It is also among the city's more popular outdoor recreation areas. The tour will feature a guided walk, followed by a discussion and workshop on future possibilities for strengthening the area as a cultural hub and centre, and securing important green-space corridors and connections.



Half day hiking trip: Basic fitness, shoes for hiking and warm, wind- and waterproof clothes required. Lunch served outside.

This mobile workshop will focus on facilitation of recreation areas close to the city. It will also touch on how area and city planning has had the aim to give people access to various recreational opportunities close to residential areas. Hiking to the top of Keiservarden gives a spectacular view, within a short distance from the city center. The specific track we are going to follow were built in 2016, by experts from Nepal, and has made it appealing for more people to explore the mountain.

5. Nord University and Mørkved district centre



Located 10 km east from city centre (red dot) • Get a guided tour around the University area and Mørkved district centre

Learn about:

- The history of the University
- University's role in the local society in Mørkved district centre
- Future expansion for the University

ISOCARP PROGRAMMES



learning from senior practitioners, and

working on real-world problems. ISOCARP's

long-standing YPP program is recognised

as offering outstanding opportunities for

Over a short period of 3-6 days, the YPPs

work in closely-knit international teams,

exchanging ideas and learning from each

other. In this way, the workshops provide

a synergetic platform where new ideas

and creative solutions to complex and

multifaceted urban issues are produced.

It includes a number of activities such as

42

young planners.

ISOCARP brings together recognised and highly-qualified planners in an international network.

ISOCARP Institute

In 2016 ISOCARP officially established the Institute as a "Centre of Urban Excellence" and formal body for generating, documenting and disseminating knowledge for better cities.

The Institute's core function is to design and deliver capacity building and continuing education programmes; conduct research and promote knowledge transfer; as well as offer advice and short-term consultancy services to government, nongovernment and international bodies worldwide.

ISOCARP's Urban Advisory Teams

3 October (Wednesday), 13:30-15:00

ISOCARP organises two to four Urban Planning Advisory Teams (UPATs) each year. The objective of a UPAT is to offer the extensive planning experience and expertise of ISOCARP members for international planning projects, programmes and policies. ISOCARP selects an international expert team visiting a city or a region for a week.

Together with the participants in the city this team develops simple, practical and original solutions that can improve the quality of life of people and communities in cities. Do you want to know more? Visit our website at http://isocarp.org/upats/.

YPP – Young Planning Professionals

2 October (Tuesday), 13:30-15:00 and 4 October (Thursday), 9:30-10:30 Routledge Exhibition during whole Congress

Ask any young planner who has participated in a YPP project, and they will tell you about discovering an exciting new place, experiencing a different planning context, joining a team drawn from around the world,

the annual YPP workshop (associated with the congress), YPP national or regional workshops (co-organised by partner organisations, such as local or regional governments or national planning organisations) and YPP awards.

WANTED: Enthusiastic young planning professionals of =<35 years interested in contemporary planning issues and looking for hands-on experience on actual planning tasks, working with an international team of young and senior planners. Join ISOCARP, and watch out for the next call for expressions of interest.

WANTED: Partner organisations who wish to host a YPP workshop, and benefit from the contributions of a skilled, enthusiastic and creative team of young planning professionals, working on issues ranging from urban design of key urban spaces to strategic decisions regarding the future of cities and regions. Do you want to know more? Visit our website at: http://isocarp.org/young-planning-professionals-programme/





Mentoring Programme

Tuesday – Wednesday – Thursday 15.00-15.30 at Radisson Blu

The Mentoring Programme was introduced in 2014 by Vice President Slawek Ledwon in order to connect the younger and more experienced ISOCARP generation.

It comprises three initiatives: Mentor a Paper, Mentoring Sessions and Mentor & Student Research Lab.

Mentor a Paper

The "Mentor a Paper" Programme concept is to match authors (mentees) with experienced ISOCARP Members, who help them in developing their final paper for the congress. This year a record number of authors asked for the help of a mentor to assist with the elaboration of the paper.

Mentoring Sessions at the Congress

Mentoring Sessions at the congress are an opportunity for meetings between delegates – between an experienced ISOCARP member as Mentor, and a Mentee, who would like to learn more about the society, and receive guidance on their career and professional development. Mentors meet with Mentees for a short meeting during the congress, they can also communicate with each other prior to the meeting. The aim is to allow for professional development through networking, guidance and sharing ideas between experienced members and young planning professionals. Mentors and Mentees apply to take part

in the programme. They are matched before the congress. ISOCARP will schedule meetings during the coffee breaks. Mentors explain how their professional work looks like, how they see the profession, how they benefit from being part of ISOCARP, what are the society's activities, give hints on career development etc. Both parties get to know each other.

Mentor Student Research Lab 2.0

The Mentor & StudeOnt Research Lab is a workshop based platform for research promoting the collaboration of professionals, graduate and PhD students. It brings together local research teams with mentors to share experiences and proposes strategic recommendations to strengthen sustainable urban development. During the last three months of research work, the groups - supervised by ISOCARP mentors and led by early career researchers - established a common ground. Here young ambition met with experience, professionalism and methodology to discuss urban issues. The 2 editions of MSRL's innovative formula (2014. 2016) turned out to be a great success and gained many positive opinions from not only the participants but also from the audience following the project from all around the world.

ISOCARP would like to thank the following member mentors who guided their mentees to the final paper:

Ali Alraouf Yuting Guo Yigong Zhang

Adriano Bisello Meltem DELIBAS

Dushko Bogunovich

Amit Chatterjee Ningjing Xu

Helena Freino Yuwei Huang

Pedro Garcia Sun GE

Zeynep Gunay Olga Chepelianskaia

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Mubushar Hussain

Bk Jain Xinxin Zhang

Madina Junussova

Daniel Kinnoch

Flavio Malta Teresa Marat-Mendes

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Ana Peric Guri Venvik

Nupur Prothi Ifeoma Ukonze

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Judith Ryser Mahak Agrawal Tjark Gall

Benjamin Scheerbarth Ozge Celik

Tim Strikers Xiaojun Wand

Evren Ulker Kacar Lekshmy Hirandas Xin Kai

Eva Vanista Lazarevic

ISOCARP furthermore would like to thank the following mentors who offered to help the mentee and started the collaboration. Unfortunately the mentee could not attend the congress and therefore the programme stopped.

Luis Ainstein
Jacob Babarinde
Jim Colman
Mark Cummins
Rashi Gupta
Nasim Iranmanesh
Rajendra Kumar
Taibat Lawanson
Sławomir Ledwoń
Sofia Morgado
Mbutu Mwaura
Tim Strikers
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Jef Van den Broeck

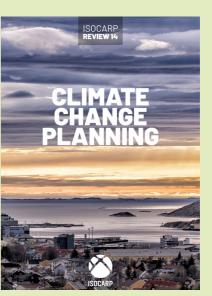
Ali Alshehhi

ISOCARP Publications

Publication: ISOCARP Review 14

The ISOCARP Review is the annual publication of the society. This year most of the articles focus on the topic of "Cool Planning: Changing Climate and Urban Future". Nine articles are about how planning can mitigate, and assist cities to adapt to, climate change, while three more articles report engineering and scientific efforts to develop new climate change planning tools. Three plans that are noteworthy and have elements related to climate issues and sustainability are presented.

Bodø tells us about themselves – their history, their demographic and employment make-up, their life style and their recent and on-going planning efforts - to inform our Congress attendees about their host town.



Awards for Excellence

3 October (Wednesday), 12:00 and 4 October (Thursday), 19:00

The ISOCARP Awards for Excellence are conferred in recognition of exceptionally innovative urban and regional planning initiatives in an increasingly urbanised world. Through the Awards for Excellence ISOCARP intends to encourage and promote innovative spatial projects at different scales that have resulted in improved natural or built environment, enhanced quality of life, sustainability and resilience.

Gerd Albers Award

4 October (Thursday) 19:00

The Gerd Albers Award is for best publication by ISOCARP members during the last year. The Award was established by the Society in 1999 in honour of Professor Gerd Albers, one of the Co-founders and past Presidents of ISOCARP, on the occasion of his 80th birthday.

Students Award

2 October (Tuesday), 13:30 - 15:00 and 4 October (Thursday) 19:00

The award is addressed to a student or student-group with outstanding results in urban and regional planning or a related field.

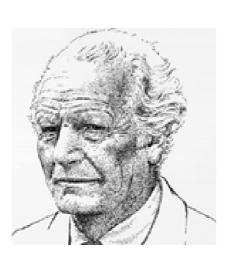
Routledge Prize

4 October (Thursday), 19:00

The Routledge Prize is made possible by Routledge Publishers that give an annual grant to ISOCARP. This grant is awarded to the best poster(s) in the Routledge Poster Exhibition during

For YPP posters see Exhibition Hall







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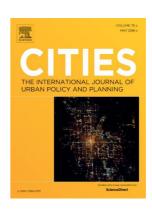






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VLOEBERGH, Guy, OMGEVING cvba, Antwerpen, Belgium

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WANG, Shu, College of Architecture and Urban Planning, Tongji University, Shanghai, China

WANG, Xiangyi, Urbanspace Planning and Architectural Design Co., LTD (Shenzhen), Shanghai, China

WANG, Xiaojun, Beijing, China

WANG, Xiaoyu, TYDG, Jinan, China

WELCH, Anne, Top of Alabama Regional Council of Governments, Huntsville, USA

WIE SANDBAKK, Merethe, Bodø Municipality, Bodø, Norway WIK, Ingrid, Norwegian Ministry of Local Government, Oslo, Norway WIK, Øystein, NOBL, Bodø, Norway

WIKTORCZYK-NADOLNA, Anna, Association of Polish Cities, Poznan, **Poland**

WIRZ, Nicole, Raumplan wirz gmbh, Basel, Switzerland

WONG, Chui Ying Tracy, ISOCARP MEMBER, Hong Kong

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XIA, Nankai, Shanghai, China

XIAO, Da, Shanghai Urban Planning and Design Institute, Shanghai,

XINYUE, Gan, Tsinghua University, Beijing, China

XU, Ningjing, Beijing, China

XU, Yuxiao, Ningbo, China

XUE, Jin, Norwegian University of Life Sciences, Ås, Norway

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YAN, Cunai, Shanghai Tongji Urban Planning & Design Institute Shanghai, China

YANG, Jiangiang, Southeast University, Nanjing, China

YANG, Xiaoting, Nanning, China

YE, Chengkang, Beijing, China

YE, Dan, Shanghai, China

YE, Jinghua, Nanjing Urban Planning and Research Center (NUPRC), Nanjing, China

YLINEN, Retu, City of Kuopio, Kuopio, Finland

YOUNG, Ingrid, Office of the Mayor, New york, USA

ZELAZNOWSKI, Piotr, MLA+, Rotterdam, Netherlands

ZHANG (Eco), Yigong, London, United Kingdom ZHANG, Menghan, Beijing, China

ZHANG, Xiaoping, Tianiin University, Tianiin, China

ZHANG, Xinxin, Shanghai, China

ZHAO, Pengjun, Peking University, Beijing, China ZHENG, Yi, Southeast University, Nanjing, China

ZHONG, Yujia, Beijing, China

ZHOU, Jun, Beijing, China

PRACTICAL INFORMATION

From the airport to the city:

You can walk from the airport to the city! It's only a 10 minute walk.

If you do not want to walk busses 1 and 4 go from the airport to and through the city centre.

Taxi: +47 (0) 7550

Public transport:

The bus is the main means of public transport. More information on the bus system, departures and tickets at https://177nordland.no/

Important: Buses does not take cash, only cards. You can buy bus tickets through the app "Billett Nordland".

Time in Norway:

CEST (UTC+2)

Mean temperature: 4,60 C

Average October temperature: 5,20 C

Longitude: 14°23 East Latitude: 67°17 North

Population: 50 090 (1 Jan. 2016)

Midnight sun: 2/6 – 10/7 **Polar night:** 29/12 – 15/2

Northern Lights: September – March

Country code: +47

Emergency Telephone Numbers:

Police: 112 Fire: 110

Medical Assistance: 113

Emergency room (ER): 116 117

Emergency number concerning congress matters:

+47 932 512 21 / +47 908 751 73

Currency: NOK (10 NOK approx. 1 EUR)

Name: Norwegian Krone (kr)

Coins: kr1, kr5, kr10, kr20 Banknotes: kr50, kr100, kr200, kr500, kr1000

Water:

Tap water is both safe and good to drink. We recommend using a bottle that you refill.

Biggest supermarkets:

Coop, Kiwi, Rema 1000

Opening hours: Mon – Fri 7-23, Sat 8-22,

Normal opening hours shopping: 10-18/20

WIFI and SIM Cards:

There is free Wi-Fi in all the venues.

SIM cards can be bought at Narvesen kiosk which you can find at the airport as well as at the Radisson Hotel and in the middle of Glasshuset in the public

You will have to fill in a form. The phone number will be registered within 24 hours Mon-Fri. The name of this is Mycall.

Electricity:

Norway uses the Europlug (Type C & F), which has two round prongs. If you are traveling from the U.S., you will likely need either an electricity transformer or adapter for your devices to use the 220 volts of electricity that come out of the wall outlets. Most of Scandinavia uses 220 volts.

Language:

Norwegian, however, most Norwegians understand and talk English very well.

Dress code:

ISOCARP does not have a dress code. You might want to dress up a little for the gala dinner on 4 October. However, there are no obligations.

For participants of the technical tour to Keiservarden it is important that you have proper clothes. The tour requires footwear suitable for hiking in unleveled wet terrain. The temperature will decline and the wind gets stronger on the way to the top, so make sure you have warm clothes and a wind-protected jacket. Please check weather forecast on beforehand: https://www.storm.no/





About ISOCARP

The International Society of City and Regional Planners (ISOCARP) is a global association of experienced professional planners. It was founded in 1965 in a bid to bring together recognised and highly-qualified planners in an international network. The ISOCARP network brings together individual and institutional members from more than 80 countries worldwide.

The wealth and diversity of professional expertise, knowledge, and experience in the ISOCARP membership is unmatched in the planning field. Although ISOCARP members work in many different fields they share a common interest in the spatial and environmental dimensions of urbanisation. They advise key decision-makers, proposing and supporting projects for intervention in a spatial context through general or specific actions.

ISOCARP encourages the exchange of professional knowledge between planners, promotes the planning profession in all its forms, stimulates and improves planning research, training and education and enhances public awareness and understanding of major planning issues at a global level. The association's main event is the annual ISOCARP Congress, which focuses on a globally-significant planning theme and which takes place in a different country each year.





About Bodø

Few other Norwegian cities and towns have been gifted with such magnificent and spectacular scenery as Bodø. The town provides a fascinating mixture of superb nature and a modern, urban and vibrant lifestyle. Right at the heart of all this you will sense the informal and friendly atmosphere amongst its population. It is a vibrant town, excellent for shopping, cultural and sports and leisure activities.

The regional capital of the County of Nordland has apparently been reaching for the stars in recent years, rapidly closing in on citizen number 52,000. This makes Bodø the second largest town in the North of Norway, beaten only by Tromsø. Bodø is currently one of the fastest growing towns in the whole of Norway.

Bodø's location has put the town right in pole position when it comes to communication, trade and services. Travellers by air, rail and sea all meet in the heart of this city. This is, however, just one of the things that has made our town one of Norway's most popular locations for events, meetings, conferences and get-togethers of all kinds.