

# METROPOLIS 2008 COMMISSION REPORTS CONNECTING CITIES SYDNEY

- C1. Eco-Regions
- C2. Financing of Urban Services and Infrastructure
- C3. Comprehensive Neighborhood Regeneration
- C4. Urban Mobility Management
- C5. Metropolitan Performance Management



# MESSAGE FROM THE PRESIDENT



Jean-Paul HUCHON Metropolis President

I applaud the choice of Sydney for the celebration of the Metropolis 9th World Congress. Our host city is modern, generous and open, in the image of our Association and the values it has personified for more than 20 years.

I would like to thank the State of New South Wales for its hospitality. I would also like to acknowledge and thank all the people who have been organizing the event for months.

We are about to enjoy a unique moment, rich in exchanges and meetings; a bearer of hopes and the foundation of new joint understandings.

We are beginning, and hope to live, this moment with an awareness of the scale of the problems but also confident in the capacity of cities and the agents of the international community to take charge of their destinies and to tackle the challenges of unbridled urbanization and globalization on the march.

"Cities in Connection" is the slogan and goal of this Congress. Is there any better way to illustrate the mission that Metropolis has taken on? Beyond the borders and distances that separate us, beyond our differences, Metropolis brings together more than 100 cities from across the world, united around a common object: to get to know each other better, to interweave with other members steadfast bonds of cooperation and friendship, to be able to together create the conditions for a sustainable future and to write the finest pages of a shared history.

From this agreement and these high spirits shall emerge a worldwide metropolitan dynamic that Metropolis will take up within the United Cities Local Governments (UCLG) association, of which it is the metropolitan section, and before the highest governmental and international authorities.

The present report is an illustration of our members' commitment and unswerving determination to bring to their cities the innovations and adaptations that the evolution of the world has made necessary, in daily benefit of their fellow citizens.

Since the last World Congress, in Berlin in May 2005, the Standing Commissions have worked tirelessly, motivated by exchange and a constant desire to come up with solid solutions. The sum of their labor, presented below, underscores how productive this dialogue has been and incites us to carry on and further develop the comparison of our experiences and our analyses.

**Commission 1 on Eco-Regions** has worked on defining a common approach to the concept and focused especially on the identification of new models and tools of governance, the preservation of biodiversity, the promotion of semi-urban agriculture which respects the environment and the development of sustainable tourism.

**Commission 2 on the Financing of Urban Services and Infrastructures** has looked into the ability of cities to mobilize and allocate the financial resources essential to the development of infrastructures and services. It has also studied the conditions cities need to achieve true financial and fiscal autonomy, as well as possible improvements in management policies and tools, and the steps to follow to enhance internal results.

**Commission 3 on Comprehensive Neighborhood Regeneration** promoted a comparative presentation and evaluation of different urban-renewal strategies. Its work focused on the goals, execution conditions and impact of these steps in their diversity and brought together actions and experiences of particular interest.

**Commission 4 on Urban Mobility Management** concentrated on analyzing major transport, logistics and flow-management infrastructures in large urban centers, particularly regarding innovations and non-motorized means of transport.

**Commission 5 on Metropolitan Performance Indicators** worked with the UN-Habitat to identify evaluation tools and criteria for urban-development strategies in order to obtain increased efficacy that could enable the design and execution of programs tailor-made to local realities and people's current and future needs.

I would like to thank all the people who took part in the Commissions and contributed to these quality exchanges. The resulting works, analyses and propositions are the strength of Metropolis; they forge its unity and contribute to its international recognition.

Other taskforces, like the one established around the Bank of Cities project, have also carried out active reflections and their conclusions will be presented at the World Congress in Sydney.

I trust the debates that have begun in the different discussion spaces will carry on here, both for our greater interest and that of our fellow citizens.

I wish you all a good World Congress.

Jean-Paul HUCHON Metropolis President

# THE STANDING COMMISSIONS

# **C1: Eco-Regions**

Presidency – Paris, Ile-de-France Vice-Presidency – Toronto Chair - Michel Vampouille, Vice-Chairman with responsibility for the Environment, Sustainable Development and the Eco-Region, Paris, Ile-de-France Coordinator - Iuli Nascimento, IAU-IDF, Paris, Ile-de-France

# **C2: Financing of Urban Services and Infrastructure**

Presidency - Montreal Vice-Presidency - São Paulo Chair - Gérald Tremblay, Mayor of Montreal Coordinator - Amara Ouerghi, City of Montreal

# **C3: Comprehensive Neighborhood Regeneration**

Presidency - Barcelona Vice-Presidency - São Paulo Chair - Jordi Hereu, Mayor of Barcelona Coordinator - Christine Piquemal, Metropolis SG

# C4: Urban Mobility Management

Presidency – Berlin Vice-Presidency – Seoul Chair - Ingeborg Junge-Reyer, Senator for Urban Development of Berlin Coordinator – Barbara Berninger, City of Berlin

# **C5: Metropolitan Performance Management**

Presidency – Melbourne Vice-Presidency – State of Mexico Chair – Justin Madden, State Minister for Planning, State of Victoria, Australia Coordinator – Mary Lewin, Department of Planning and Community Development, State of Victoria, Australia

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Since the 1992 Earth Summit, local authorities have progressively assumed their responsibilities in the challenge of sustainable development by implementing Local Agendas 21. However, Local Agendas 21 have still to take fully into account the complexity of territories, in particular in metropolitan areas that often run into conflict with the administrative limits of the cities.

The Eco-Region concept can be defined as all policies which a metropolitan area implements in order to promote sustainable development polices within the limits of its own economic basin, and beyond its territory, interregional or decentralized cooperation to tackle existing imbalance and identify ways of re-establishing a new equilibrium.





The expansion of urban development interferes with the natural ecosystem.

# **C1: Eco-Regions**

Presidency – Paris, Ile-de-France

Vice-Presidency - Toronto

**Chair** - Michel Vampouille, Vice-Chairman with responsibility for the environment, sustainable development and the Eco-Region, Paris, Ile-de-France

Vice-chair - David Miller, Mayor of Toronto

Coordinator - Iuli Nascimento, IAU-IDF, Paris, Ile-de-France

# Participating cities, regions and international organizations:

Abidjan, Abomey, Abuja, Alexandria, Amman, Antananarivo, Bamako, Barcelona, Belo Horizonte, Brazzaville, Brussels, Cairo, Colombo, Cotonou, Dakar, Gwangju, Gyeonggi, Ile-de-France region, Kathmandu, Kinshasa, Makati, Mashhad, Melbourne, State of Mexico, Montreal, Moscow, Ouagadougou, Paris, Porto Alegre, Puebla de Zaragoza, Seoul, Teheran, Thies, Toronto, Turin, ICLEI, UNESCO.

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Report's Author: Iuli Nascimento, IAU-IDF, Paris, Ile-de-France





Toronto hosted the first Commission 1 meeting in conjunction with the Metropolis Board of Directors' Meeting.

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The first Commission 1 meeting held in Toronto in June 2006.

# 1. INTRODUCTION. SUSTAINABLE DEVELOPMENT, ECO-REGION AND TOOLS TO MEASURE A POPULATION'S QUALITY OF LIFE

In the common ground between the distinct intellectual traditions that include ecology, economy and the socio-cultural environment, sustainable development is a notion still perceived as relatively vague and difficult to carry out. However, in the wake of the 1996 UN conference in Istanbul, it became official in more than 100 nations and numerous applications were initiated, some in Ile-de-France.

From the early 1970s, scientists, NGOs, economists and political representatives were looking into the limits of natural resources in the face of post-World War II growth that focused on 'producing increasingly more' and in the face of a demographic explosion among countries in the south. The industrial age seemed to be particularly punishing to natural environments and resources, and environmental accidents were on the rise (desertification, deforestation, technology accidents, black tides, etc.).

In 1970, a group of economists (the Club of Rome) met to publish a report entitled "Limits to Growth", which became famous for recommending 'zero growth' among the human population in order to save non-renewable raw materials.

### Think Globally, Act Locally

In 1972, a number of representatives from various countries around the world, "concerned about tomorrow", took part in the UN Conference on the Environment held in Stockholm. They proposed creating a World Commission on Environment and Development, led by the Norwegian Prime Minister, Harlem Brundtland, to reflect on trends in economic development and the dangers that were threatening the planet and the species that lived on it. The Commission met for the first time in 1984 and made a commitment to publish a report (at the behest of UNESCO director-general Javier Pérez de Cuellar), which was released in 1987 under the title "Our Common Future". The main message of the report was the need to "think globally and act locally".

The Brundtland Report, as it was known, was principally concerned with the protection of the Earth's ecosystem. The idea was not to consecrate virgin areas and preserve them from human activity, but rather to establish a number of frontiers beyond which the pollution involved with industrial civilization should be banned. The Report urged the need for development that would meet "the needs of the present without compromising the ability of future generations to meet their own needs". It identified two risks susceptible of affecting the entire planet: climate change due to the accumulation of greenhouse gases, and serious attacks on the stratosphere's ozone layer by chlorofluorocarbon (CFC) products. For the first time, people were saying that poorly managed and environmentally irresponsible development could drive humankind to ruin. Henceforth, development would have to be done respecting the planet's natural ecological balances. The term coined was 'sustainable development'.



# **First Warnings**

The chasm between industry and the defenders of nature was, at the time, unbridgeable. The environment was not a priority concern for Western societies. On the other hand, intellectuals, scientists (whether environmentalists or not) and ecologists were becoming alarmed by the increasingly deplorable state of the air, water and land. The Brundtland Report confirmed that Stockholm was a historical turning point signaling the end of the years of strong economic expansion known as the 'Les Trente Glorieuses' (Thirty Glorious Years).

A certain number of particular warnings and signals appeared to side with the forces that society at the time considered 'alarmist': the 1973 oil crisis marked the start of awareness about the vulnerability of non-renewable natural resources. Later, a string of industrial accidents and catastrophes, including Seveso (1976), Amoco Cadiz (1982), Bhopal (1984), Mexico and Chernobyl (1986), testified to a series of hazards that could affect people. Other events, this time natural disasters, confirmed dangers at the world scale: a drought in Africa, catastrophic rains in Asia, and earthquakes in Latin America...France suffered repeated flooding.

#### **The Environment Enters Public Policies**

If the 1972 Stockholm Conference did not manage to catch the world's attention, it was at least the starting point for the development of a suitable framework for putting responsibility for the environment on the public agenda. The first Ministry for the Environment was created in France in 1974 and the first Environment Department began at the IAURP (Institute for Urban Planning and Development of the Paris Region, the forerunner to the IAURIF, i.e., Institute for Urban Planning and Development of the Ile-de-France Region). From then on, a series of legal provisions and a regulatory framework were also developed in France: The 1976 Law on the Protection of Nature, arising from the 1967 natural parks regional policy, the 1976 Law on the Classification of Industrial Facilities and various legal texts on water and waste, etc.

### Sustainable Development Becomes Official

The UN Conference on Environment and Development (the Earth Summit) was held in Rio de Janeiro in 1992. It was a qualitative step that introduced new relationships between environment and development and made it possible to address the problem of worldwide development at the big-picture level: demography, poverty, urbanization, environmental degradation, etc.

More than 100 heads of state and government signed various documents:

- The Rio Declaration
- Agenda 21
- A text creating the World Commission on Sustainable Development
- Two conventions; one on the climate and the other on biodiversity
- Two texts on forest and desertification.

The Earth Summit was validated by the international community at the following UN conference in Istanbul (June 1996) where the concept of sustainable development was made official. The European Commission defined sustainable development as a policy and strategy aimed at ensuring the long-term continuity of economic and social development, respecting the environment and without compromising the natural resources indispensable for human activity.

The Istanbul Conference established the following principles:

- principles of precaution and prevention (acting before irreparable damage is done, i.e., anticipation)
- principles of saving and good management (cutting waste)
- principle of responsibility (the person who spoils the environment has to pay in order to take part in the reparation)

 principle of participation (participation of all the actors involved, managers, industrial companies, farmers, NGOs, etc.)

- principle of solidarity (with other countries and future generations).

# From Idea to Start-Up

There are various economic theories about environment and natural resources, all more complementary than opposing. The idea is to try to harmonize the environmental, economic and social approaches with the fight against inequality in a coherent argument. That is the only way to find a definition and concrete application of the concept of sustainable development that respects its fundamental principles of democracy, solidarity and ecology, and social and economic fairness.

Even today, sustainable development is perceived as a relatively vague idea. In the common ground between various intellectual traditions, in the articulation between ecology, economy and the sociocultural environment, the integrationist concept of sustainable development calls for improvement and liberalization, things that do not facilitate its perception or immediate understanding. Establishing a sustainable-development strategy runs up against numerous difficulties, including:

- incompatibility between economic development (profits) and environmental protection (especially for developing countries)

- replacement of economic resources for countries that produce non-renewable energy

- inequalities of financial resources when it comes to carrying out an environmentally friendly economic-development policy

- lack of reliable data and comparisons between countries.

#### **New Needs**

As well as specific aspects of the environment, sustainable development should not lose sight of questions related with the planning of the urban space through the use of transportation and the creation of new habitats conceived to prevent crime and enable the enhanced social integration of the population. It is also necessary to shore up the role of SMEs; organize and rebuild the industrial fabric; manage waste and sewerage; protect historical centers and increase public participation in debates regarding sustainable development, a matter which is indispensable for putting it into practice. The pace of growth and size of urban agglomerations create new concerns in terms of the economic and social viability of cities:

- growing demand for urban services
- imbalance between the daily needs of the people and the ways of meeting these needs
- gross investment in infrastructure networks and public authorities' lack of wherewithal to invest in the upkeep of these networks and urban services.

# **Indicators: A Leading Role**

None of this can be carried out without establishing tools to observe and manage the space and aid in decision-making, such as remote sensing technologies and geographic information systems.

Among the ideas raised in Istanbul was that of a program for preparing sustainable-development indicators, something which had already been listed in the Agenda 21 recommendations (chapter 40). The aim was to have, for a determined period, a set of economic, social and environmental indicators that would be standardized internally and be susceptible to reflecting national efforts with regards sustainability. The indicators would quantify and enrich information, analyzing it via the combination of different data from various sources. Often complex phenomena would thus become 'visible', making it possible to monitor them over time and act in accordance. The indicators would serve as communication and information tools that could characterize static or dynamic situations. They would contribute to decision-making in the field of sustainable development.

We still do not have a standardized set of indicators that permits assessment and international comparison in the environmental area, as occurs in the economic and social sectors. Faced with growing demand for a description and rigorous assessment of environmental actions, proposals are multiplying internationally and at the domestic level, and numerous experts are interested in carrying the reflection forward. Since 1989, the OECD has been preparing and calculating a set of environmental indicators based on the 'Pressure-State-Response' methodological framework which permits the monitoring of environmental conditions in Member States. This method is used by the IFEN (French Institute for Environment) to prepare a string of indicators for environmental results in France.

At the same time, numerous sectorial and localized initiatives illustrate various interpretations of sustainable development on the ground. However, these experiences are either relatively removed from the concerns of the people or are overly sectorial.





Serge Kempeneers (Brussels) and Michel Vampouille, Vice-President of the Regional Council of Ile-de-France, at the Commission 1 meeting held in Paris in January 2008.

The study carried out by the Institute for Urban Planning and Development of the Ile-de-France Region at the request of the Regional Committee for the Environment and with the support of the Water Agency and the ARENE (Regional Agency for the Environment and New Energies) defined sustainabledevelopment indicators within the framework of the Plan for the Organization and Management of Marne Aval Waters and proposed a global analysis method that would permit sustainable localized action.

# Interactive Concepts for a Better Understanding of Sustainable Development

In 1969, the American astronaut Neil Armstrong made us aware of the fragility of Planet Earth. He said the Earth was small, blue and lost in the immensity of the cosmos. Because of its fragility, it had to be preserved. The global and local balance of the Earth's ecosystems depends on the frequency of the amount and quality of exchanges between the components of its environment: lithosphere, biosphere, atmosphere, etc. - and to which we now have to add 'anthroposphere'. This is the challenge that sustainable development proposes emphasizing by harmonizing environmental, economic and social approaches in a coherent argument.

People say that asking the right questions will provide many answers - in other words, it is important to know what we are talking about. There is a great deal of confusion, even within authorized media, between ecology, the environment and sustainable development. In short, these three areas are working on the issue themselves, as they are weaker so long as each has its own motivation and justification. To properly understand the meaning of 'sustainable development' it is necessary to distinguish between these notions.

The concentration of people in cities and the expansion of urban development are generating a new ecosystem that imposes itself on, or interferes with, the natural ecosystem. This is the urban ecosystem. An ecosystem is exposed to constant changes that may compromise its coherence and resistance. It is therefore part of an unstable balance, i.e., a situation of dynamic crisis. This is the case of an urban ecosystem that has ever-growing air requirements to satisfy its needs and make up for its impact and which is characterized by a growing ecological footprint. One of the goals of sustainable development is to delimit, i.e., monitor, this ecological footprint with responsibility for the outlying regions affected.

An ecosystem is not an isolated thing: it includes spatial systems that function at different scales. The scale of an ecosystem is determined by the size of their living beings and their population and by the spatial scope of the relations they have with other beings on which they depend. The metropolitan ecosystem can resemble a living organism, both in terms of its constitution (organs = spaces) and workings (metabolism = relations). Of course, it is important to consider these relations with the ecosystems of neighboring regions. An ecosystem is not designed at a single scale. It comprises different spatial systems that function at different scales. This play of scale between global and local is one of the keys to urban planning, along with sustainable development.



Environmentalists were quick to draw an analogy between urban spatial systems and natural ecosystems, from where we get the notion of the urban ecosystem. But urban spatial systems are unbalanced, as to date they have barely included the environment. The impact of ancient human establishments, practically right up to halfway through the 19th century, remained moderated (apart from the clearing of scrub to grow crops and the consumption of natural resources) as they did not expand very much and human beings still did not have the means to subdue nature. Today, environmental concerns have progressed but urban systems have expanded so much that the imbalances are maintained: it is a race, a permanent challenge between problem and solution, aggravated by the scale of the systems.

In the common ground between various intellectual traditions, in the articulation between ecology, economy and the socio-cultural environment, the integrationist concept of sustainable development calls for improvement and liberalization, things that do not facilitate its perception or understanding. Putting a sustainable-development strategy into practice runs up against numerous difficulties, including:

– The difficulty of making economic development (tendency toward short-term profit) compatible with social progress and the protection of the environment, particularly in developing countries.

- The development of renewable energies and replacement of fossil fuels, as well as the diversification of the economy for countries that produce non-renewable energy (and raw material in general).

 Inequalities of financial resources to carry out environmentally friendly economic-development policies that assume the cost of conservation and the distribution of the environment, and to take charge of the public's needs in their totality.

- A lack of reliable data and comparisons between countries and regions.

- A lack of political will and conviction to change the bad development trends of today.

An approach to sustainable development with its three inseparable pillars (social, economic and environmental) contributes a new dimension so that putting it into practice can involve interaction between physical, chemical and biological aspects, and social, cultural and economic factors that can have a direct or indirect, short- or long-term effect on human beings and human activities. It therefore includes ecology and the environment, but also the economic and social context that acts on the individual and his or her daily life, in all the dimensions of humankind: social, intellectual, cultural, affective and also spiritual.

#### From the Idea of Sustainable Development to Putting it into Practice

The concept of sustainable development is based on three inseparable areas: economic results, social progress and environmental conservation, with a commitment regarding its duration and within a democratic framework (governance).

The start-up of this concept is a chance to think about and introduce new priorities into political actions at the local, regional and national scales. This new way of considering space can change what a territory looks like, permitting an improvement in the population's quality of life. Coherent governance should enable articulations and agreements between the different actors responsible for putting this new way of considering development into practice. We can see how a new desire to harmonize local approaches with the worldwide approach can be developed to respond to immediate needs, while at the same time respecting long-term potentials with respect to future generations. Sustainable development proposes a new way of looking at things and a new way of addressing, in their totality, the problems that human beings face, which have until now been dealt with one a one-by-one basis: in short, a change in human relations with time and space. The reflection of 'here and now' should be allied with that of 'there and tomorrow' to justify our political and technical options.





Natural resources are not inexhaustible.

# 2. THE ECO-REGION: A POLITICAL PROJECT AND CROSS-SECTIONAL APPROACH

Jean-Paul Huchon announced a project to make the lle-de-France region into an 'eco-region' during his most recent electoral campaign. This political project represents an excellent opportunity and favorable framework for really putting 'sustainable development' on a regional scale into place. Although the sustainable-development concept may seem imprecise at first glance, it has the merit of proposing a cross-sectional approach toward regional development that includes the economy, sociology and the environment and makes it rich and complex at the same time. It also includes a time scale (long-term) with the notion of responsibility with respect to future generations. The 2050 horizon can be taken as a suitable development to the territorial scale is not always easy and its application demands a supplementary effort from the specialists in the different disciplines. Human sciences, earth sciences and sustainable development sometimes come into conflict with sectorial goals. However, sustainable development offers the possibility of opening reflections up to the understanding of the way that urban systems work overall, a step in the right direction for urban ecology and a way to help reduce these conflicts.

In the 1969-1970 period, Nicolas Georgescu-Roegen demonstrated, in his theory of 'deceleration' based on thermodynamics<sup>1</sup> and system entropy<sup>2</sup>, that economic growth was the result of a society's productivity and that this productivity depended on the availability of natural resources and the workforce used to make them into consumer goods. The result of his work was the idea that natural resources were not inexhaustible and were not being used in a way that respected the environment's resistance capacity<sup>3</sup>. The economic-development model after World War II had had serious consequences for modern societies: climate change, a rise in natural risks, loss of biodiversity, exclusion of one part of the world's population from elemental goods for survival, etc.

In reality, the production of wealth, the use of natural resources and the commercialization of manufactured products, goods and services account for the most important impact on a population's wellbeing and the quality of its environment. An economic model based on industrial growth has wreaked undeniable damage on the rural economy and natural resources. Globalization has further sped up the process of the exclusion of small urban centers and rural zones from the globalized economic network. Environmental problems affect every country.

It is important for the lle-de-France region to ensure rural areas are not isolated from the globalized economic network. In order to redirect the development model of human activity to a regional scale, it is a good idea to propose a new form of territorial planning that involves the wellbeing of the population. The eco-region seems to be a suitable spatial framework for achieving this goal.



2 In thermodynamics, entropy is the state of disorder of a system. It increases when this happens. 3 Here resistance means the environment's capacity for regeneration.



To address the major global changes that have been taking place since the end of the 20th century, environmental activists have been concerned about the future of societies and have proposed broader analysis methods to tackle environmental problems. The protection of natural environments and species at the local scale is not enough to handle the challenges of the new century. The problems of global warming, loss of biodiversity, major natural disasters etc., can only be addressed if there is a very wide framework of socio-ecological projects included in a vast territory, i.e., an eco-region. The importance of these goals requires the establishment of an ambitious regional strategy on sustainable development, articulated at the national and European scales.

The definition of clear goals and precise aims for the conservation of biodiversity and socio-spatial development is needed to guide public policies. From an operational viewpoint, the application of a conservation program with regards biodiversity has to be done at different scales from both inside and outside the eco-region perimeter. Education and the political scope of an eco-region project, as well as partnerships between different actors in society (NGOs, public and private organizations, local groups, etc.) are essential to the operation's success. A suitable institutional organization is needed to shore up decisions at different scales. Creating an eco-region requires real political will.

A review of the Master Plan of Urban Planning and Development, the preparation of the Regional Economic Development Plan, the realization of regional Agenda 21, the evolution of the Common Agricultural Policy and the application of European directives on biodiversity protection are a good opportunity in the Ile-de-France region for the effective preparation of a political project by the current regional executive. Via the eco-region concept, it should be possible to propose new bases for a regional policy and create a dynamic of human development in harmony with nature. For that, we have to define a number of ambitious goals. A series of guidelines that can be used as a model for the conservation of biodiversity, articulated with the goals and strategies of the Master Plan of Urban Planning and Development and the Regional Economic Development Plan, could awaken the interest of the different segments of society with regards spatial and socio-economic challenges and bring new partners on board.

## The Eco-Region Concept and the Territory: the Ile-de-France Example

An 'eco-region', or ecological region, could be defined as a fairly large geographical zone distinguished by a set of similar characteristics (physical environment, resources, population and way of life). Defining an eco-region consists of relating these characteristics with ecological aspects and socioeconomic development factors. The application of the concept could be a previous condition in any planning project of the IIe-de-France region and Paris Basin. To that end, the 'eco-region' has to articulate the conservation goals of biodiversity and define how to assume natural and technological risks with the sectorial policies of environment, agriculture, transport, tourism, culture, education, research, etc.

An eco-region is composed of geographical subsectors (life zones). Life zones are vectors of a population's wellbeing and altogether comprise the regional ecosystem. They form the basis of social, economic and cultural life within a territory, i.e., the lle-de-France region. Their balance also depends on their aptitude in responding to the legitimate needs of the population and their ability to react to the demands and harmful practices of the people.

Partnership relations that enable exchanges with other zones should be established at the lifezone level, with no immediate compromises to the principles of self-sufficiency and the food and energy autonomy of each. A set of employment zones, service zones, leisure zones, etc. forms a life zone. Changes in ways of life and means of transport have recently led to a boom in these different zones; they all have to cover the same concerns with respect to the different generations and must be guided by the same environmental demands. In fact, life zones do not necessarily coincide with the environmental zones that each requires a suitable management scale (aspect zones, underground water level, forestry massifs, agricultural land, landscape units, relaxation areas, etc.) This coherence ensures an "immune defense capacity" greater or smaller than the eco-region.

The eco-region concept considers the territory as an ecosystem in its entirety and that it should contribute to the balance of the world ecosystem. In other words, any action within its perimeter must be capable of assessing its impact with respect to the environment, the population of Ile-de-France and the inhabitants of the planet, and must also calculate environmental, social and cultural costs. The long-term dimension should be taken into account with respect to chemical pollution, the natural environment's resistance capacity and, above all, the wellbeing of the population of Ile-de-France.



The eco-region has a duty to value its ecological heritage. It makes it possible to address development from an angle other than just simple economic growth. It is an ecosystem that manages and controls the secondary energy flows that enter and leave its territory. An eco-region has to shelter people and guarantee them an acceptable level of wellbeing, all the while respecting the environment and maintaining the principle of solidarity with present and future generations. This involves a search for balance and autonomy that gives legitimacy to the principles of prevention and precaution.

# **Responding to an Eco-Region's Demands**

To respond to an eco-region's demands it is necessary to develop a life-cycle approach to water, energy, matter, etc. in order to know their economic, human and energy potential and to guide their development, starting from a series of strategic choices. Such a snapshot would make it possible to highlight the strong and weak points of energy management, among other problems. It would involve localizing all the energy impacts of a regional ecosystem in the short, medium and long terms.

Creating conditions favorable to the establishment of an eco-region's principles requires making an energy balance at the regional scale (material balance). To that end, it is necessary to establish a series of indicators to:

quantify energy consumption by activity sector (industry, tourism and agriculture, domestic...)
 properly mark out energy supply and demand, in order to better understand the strengths and weaknesses of the available regional resources

regulate the input and output of the energy flows of raw materials, agricultural products, petrol...)
 limit waste-management costs, and value as highly as possible the recycling of material and energy recovery, while also reducing production as much as possible

- developing the use of biomass and other renewable energies.

In order to understand the functioning of the regional energy system, it is necessary to make an eco-balance (analysis of material and energy flows) to know the inputs and outputs of agricultural, industrial and craft production, as well as the use and future of these products (recycling, incineration and concealment).

Generally speaking, an eco-region should respond to various goals. It should:

– Deliver on the population's needs regarding jobs, goods and services, journeys, food, housing, culture, health services, etc.

- Recreate and boost a local agricultural economy to ensure a stable economic market.

- Create a social and cultural fabric that takes into account the current evolutionary trends of the population (ageing, division of families into small units, integration of population due to immigration, etc.).

- Preserve the environment and biodiversity.

– Enable the region to address economic crises, technological accidents and natural disasters (food autonomy).

– Bear current trends in mind with regards economic evolution (goods becoming more expensive, shortage of fossil fuels) and limit the use of non-renewable resources, thus avoiding greenhouse gas emissions to fight climate change.

- Develop renewable energies at the local scale.
- Control energy supply and demand while also making savings.
- Favor changes to ways of life and consumption (journeys and habitats).

– Make a hierarchy of the different urban zones susceptible to densification and protect those where it would make no sense in relation to their social and cultural functions.

- Develop social solidarity and public awareness of wealth distribution (taxation).
- Reduce the ecological footprint<sup>5</sup> to bring it into line with worldwide challenges (preservation of biodiversity and ecological balances).

The environment has a cost, and each element has to have a price set out in heritage accounting. This price should be determined in relation to scarcity, resistance capacity, impact on individuals and impact on the natural environment. This would encourage people to look after the rivers, forests and jungles, meadows and rural roads and generate considerable income. Each activity's negative and positive effects on the environment should be subject to accounting.

5 A region's ecological footprint represents an estimate of the global needs required to ensure a population's quality of life. The notion used most frequently in relation with the ecological footprint is 'biocapacity per person'. The ecological footprint accounts for what we take from nature and the biocapacity this provides us with.



In conclusion, it is expected that the eco-region will maintain the coherence between life zones, environmental zones and the balance of the regional ecosystem. The concept opens up a course of reflection with regards a new way of considering the regional space, with solid and universal bases.

# Articulation of the Regional Economic Development Plan and the Master Plan of Urban Planning and Development. Tools to put the concept into action.

Solidarity with future generations is equivalent to protecting territories through healthy management that respects the regional space. The protection and appreciation of the environment for future generations and the guarantee to not compromise their needs imposes the establishment of local responsibilities, and this is a task for all the actors present in a territory.

The principles of an eco-region are in line with a true systemic approach. For that reason, the llede-France region must use a reliable evaluation tool of public actions and policies. Such a tool will contribute to reflection and an understanding of the way the regional ecosystem works in general and of its interactions with France, Europe and the world.

In this context, new analysis methods should emerge to pursue the search for wellbeing and balance for the IIe-de France society. The example of heterogeneous indicators of the 'human wellbeing/ environmental quality/ecological footprint and carbon balance' type is a step in this direction. These methods are still experimental, but preliminary results allow us to draw conclusions with regards their applications and the possibility of steering regional action toward the construction of an eco-region.

The economic guidelines and strategies were determined in the Regional Economic Development Plan and should have the spatial support of the Master Plan of Urban Planning and Development. Articulating these two documents is no easy task, particularly because the time scales are not the same. It would therefore be a good idea to carry out a regional Agenda 21 process specific to this problem and in close collaboration with the Regional Agency for the Environment and New Energies. A regional Agenda 21 would make it possible to harmonize time scales and cover other concerns, such as agreements between actors and citizens.

It would be necessary therefore to find, within this framework of the review of the Master Plan of Urban Planning and Development, the economic strategies that would need a spatial basis, the regional territory and the Paris Basin. For example, the guidelines and strategies proposed in the Regional Economic Development Plan should be developed with the aim of better controlling energy and air pollution (acting on global warming and public health) and also developing the new technology market, eco-industries and all environmentally responsible activities (responding to market logistics, creating jobs, etc.).

Furthermore, the Master Plan of Urban Planning and Development could consider sectors allocated for urban reconversion (recycling, energy flow economy), the creation of technological research departments and the creation of sectors for the development of green industries. These sectors would demand new logistics in terms of regional planning and would have a lower environmental impact. Another idea would be to advocate new habitat and leisure zones subject to green-building regulations (green departments, eco-parks, etc.).

This would make it possible to re-launch the green-industries market that is emerging within the framework of sustainable development in the lle-de-France region. Agenda 21 could present a balance of the different economic challenges and then find the lines of action to take at the regional scale, in accordance with the different actors involved in the economy and the regional territory, and the Paris Basin. For spatial challenges, it would be important to indicate the places that have already taken environmentally responsible actions in order to consolidate them. This would further allow the time scales of the two planning documents to be coherent.

This action plan would include a series of indicators to monitor the evolution of the set goals. The diagram below illustrates the articulation between the different levels of action considered at an ecoregion scale. The example in the following plan is that of the Ile-de-France region.

The principles of an eco-region are in line with a true systemic approach. In this context, new analysis methods should emerge to pursue the search for wellbeing and balance for the IIe-de France society.



The economic guidelines and strategies were determined in the REGIONAL ECONOMIC DEVELOPMENT PLAN and should have the spatial support of the Master Plan of Urban Planning and Development. Agenda 21 could present a balance of the distinct economic challenges and then specify the lines of action to be taken at the regional scale and that of the Paris Basin. For spatial challenges, it would be important to indicate the places that have already taken environmentally responsible actions in order to consolidate them (see diagram 1).

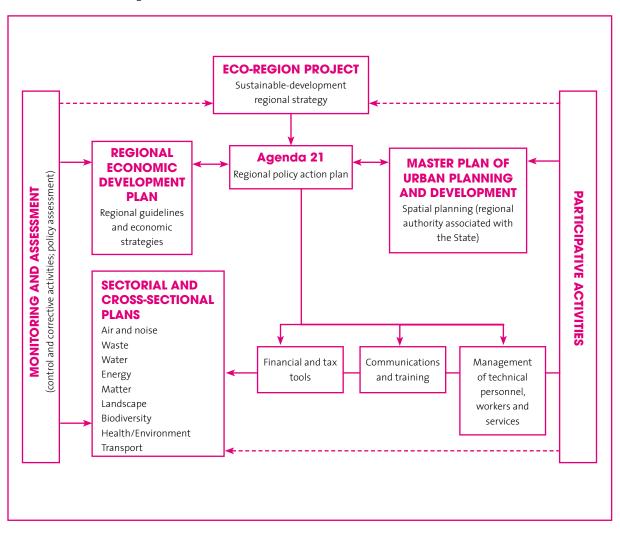


Diagram 1:

A number of matters could be raised within the framework of the review of the Master Plan of Urban Planning and Development:

– How to guide the development of the Ile-de-France region in order to articulate it with a pan-European ecosystem

– How to organize the urban development of the periphery and prevent the obstruction of communication networks (mobility)

– How to provide a hierarchical structure and/or define the notion of urban density in the regional space

- How to prevent the housing/job spatial divorce

- How to fight the consequences of urban sprawl: journeys, pollution, socio-spatial segregations

– How to include the fight against urban sprawl in the Master Plan of Urban Planning and Development and ensure coherence with other planning documents

- The types of fragmentation and socio-spatial specialization that should be favored or eliminated in the Ile-de-France territory

- How to prevent waste production

- How to respond to EU directives with regards environmental assessments of its plans and programs



# 3. COMMISSION 1 ACTIVITY REPORT

The Ile-de-France region is responsible for Commission 1: Eco-Regions, under the presidency of Michel Vampouille, vice-president of the Ile-de-France region with responsibility for the environment, sustainable development and the eco-region. Commission 1 vice-president is David Miller, mayor of Toronto. The Commission 1 technical secretariat is in hands of the Regional Agency for the Environment and New Energies, represented by its president Marie Pierre Digard until September 2007.

#### Goals

The Commission's goals firstly involve presenting case studies on governance, open spaces management (semi-urban agriculture and biodiversity) and sustainable tourism. They also involve the exchange of experiences with the cities that take part in the meetings and taking note of the suggestions and expectations of Commission 1 members.

# 3.1 Commission 1 First Meeting, Toronto

#### Workshop 1: Governance and the Urban Environment

The exhibition included a general presentation on the governance of the City of Toronto as an ecoregion.

To create the globalization process, governance requires two types of integration: internal and external. The restructuring of governance in a neoliberal context has to be done in line with market principles rather than public ones. We have to move beyond 'the administrative state' to bring civil society into the decision-making process without in any way undermining the state.

To resolve these problems, market principles have to predominate, supported by private initiative and public participation: the city is a business enterprise.

The idea is to find a realistic frontier for governmental action at different administrative scales. It involves creating the conditions so that an urban region may play a collective role.

## Ecobudget for the better governance of natural resources and environmental quality The ICLEI Example

Ecobudget is a system aimed at the economic management of natural resources and environmental quality, modeled according to financial resources.

An annual or biannual ecobudget is established in the form of public expenditure frameworks for natural resources. This system of environmental management must enable enhanced administrative management by the political sphere: via the cycle of the annual budget, taking account of the rarity of natural resources and environmental quality in an ongoing manner.

The participation of high-level authorities and businesspeople enables management at municipal and community level as a whole. An ecobudget allows local government to keep the general public informed of the viability of political strategies.

#### An example of public participation in the planning of a public space The Brussels Experience (Belgium)

At the outset, the square in the Ursulines neighborhood was a non-descript area above a tunnel in the city centre but it was subsequently restored, included and linked up with the city centre. Responsibility for managing this area was taken over by the IBGE (Brussels Institute for the Management of the Environment) in 1995.

Today, the public space has become an area of relaxation, a versatile central zone built with highly resistant materials since the space is heavily used and one which enjoys a platform with a screen intended to reduce noise pollution from the site around the clock.



#### The participative budget

#### The Porto Alegre Experience, Rio Grande do Sul (Brazil)

Federal legislation does not allow the felling of trees without financial compensation. Decisions on budget items are taken in consultation with the local population.

For the creation of the German Park, a dialogue was established between the municipality and the local population and over 3,000 trees were planted at the request of the local population as part of the 'Adopt a Tree' Program.

The Program to Restore the City's Historic Heritage involved restoration of monuments which were in a bad state of repair due to the ravages of time or vandalism. To implement this project, a research and conservation laboratory was set up, manned by a multidisciplinary team working 24/7 in partnership with the municipality, the private sector and civil society.

#### Workshop 2: Open Spaces Management: Semi-Urban Agriculture and Biodiversity.

#### The Ile-de-France Experience (Paris)

In the framework of Commission 1 on Eco-Regions, the Ile-de-France region proposed four work themes, one on the management of open spaces in cities.

The sustainable planning of cities should include the protection of biodiversity in the framework of the maintenance of a network of open natural spaces, forests, agricultural land and recreational land. In view of this, the Commission proposed the following issues of exchange:

- biodiversity in an open and urban environment

- the role of agriculture in cities.

#### Workshop 3: Sustainable Tourism

#### The Toronto Experience (Canada)

The city's planning policy was 'the living city and the natural city'. This was reflected in the creation of numerous green spaces in the city and by the restoration of extensive wetlands on the city's outskirts.

Context of the development of the Park Rouge project:

- •The loss of farming zones in urban and semi-urban areas
- Modification of land occupation
- •The urban zone which is slowly eating into natural areas and farming land

•Unorganized natural spaces with excessive visitor numbers which leads to erosion phenomena.

To this general context can be added the loss of biodiversity, in view of which Toronto decided to work on a new development system which comprised:

- •A percentage of natural zones to be preserved
- •Taking account of different forms of environmental pollution
- •A ratio of penetration of natural spaces in urban areas
- •Revision of land use
- Preservation of habitats in agricultural and urban areas
- •Interpretation of the three forms of land use: agriculture, urban and natural

Park Rouge is Toronto's principal nature zone and is the object of various scientific research works.



#### The Melbourne Experience (Australia)

The city of Melbourne comprises 3.7 million inhabitants and is governed by 31 distinct municipalities whose planning policies fall under the authority of the central government. Two key objectives have been adopted for a long term period of 30 years: protecting the environment in a highly urbanized context and one with a very large population.

A land-acquisition policy has been established by the city to protect natural spaces within its boundaries.

To protect the green belt from intensive urbanization, Melbourne has established strict limitations to improve farming practices and financial incentives.

Depending on the economic loss in yields, farmers are awarded compensation payments. A land-acquisition policy has been set up by the city to protect farming areas in outlying districts.

#### The Metropolitan Region of Barcelona Experience (Spain)

The Metropolitan Region of Barcelona has 4.6 million inhabitants which accounts for 65% of the population of Catalonia. The level of urbanization is both high and rising, putting considerable pressure on natural spaces.

In the midst of this mosaic, the city has built infrastructures and activity hubs, largely in the flood plains of rivers. Large natural spaces need continuity to function, which is why it is important to create a network of ecological continuity.

Planning proposals in the Metropolitan Region of Barcelona:

Territorial planning of free spaces is indispensable to establish the rules of the game. It involves setting up compensation, management and monitoring mechanisms for these spaces. A new development model is possible with the structured and sustainable growth of the Metropolitan Region of Barcelona.

#### The CUBES Project

The results of the CUBES Project are available to Metropolis for discussion. The project proposes a perspective of 'the Metropolis as a catalyst for global change'. More specifically, it involves working on health, education, goods and services with different countries from north and south.

## List of cities and international organizations present:

Antananarivo, State of Mexico, Brazzaville, Ile-de-France region, Dakar, Porto Alegre, Gwangju, Puebla de Zaragoza, Gyeonggi, Teheran, Kinshasa, Toronto, Melbourne, Barcelona, Colombo, Moscow, Brussels, ICLEI, UNESCO.

#### List of cities that responded to the eco-region questionnaire:

Kinshasa, Ile-de-France region, State of Mexico, Turin, Alexandria, Melbourne, Amman, Brussels, Mashhad, Puebla de Zaragoza, Barcelona, Antananarivo, Belo Horizonte.

#### List of people involved:

Michel VAMPOUILLE, Marie-Pierre DIGARD, Iuli NASCIMENTO, Roger KEIL, Otto ZIMMERMAN, Tom ROPER, Caroline MANCEL, Alberto MOECH, Deborah MARTIN DOWNS, Julian Christopher HILL, Antoni ALARCÓN i PUERTO, Christine ALFSEN-NORODOM, Sylvie DUFFRENE, Christine OUDINOT, Thierry COT, Catherine RIBES, Réka CSEPELI, Kevin CURRIE.



#### **Questionnaire on the Eco-Region Concept**

#### There were three questions for cities:

What does the 'eco-region' concept include in your opinion?
 The aim of this question was to open up the field of possibilities about what an eco-region could be.

- What are the challenges in terms of sustainable development on this matter?

This question should make it possible to check the understanding the heads of the cities' technical services have of the relationship between the concepts of 'sustainable development' and 'eco-region'.

- What are your concerns regarding this issue?

The aim of the third question was to see the expectations the participants had with regards this matter.

#### **Goals and Perspectives**

The questionnaire was designed to provide more data for the reflection groups and to see the viewpoint of the cities' managers with regards the eco-region concept.

#### **Results Presentation**

Seven cities have responded to date: Mashhad and Teheran (Iran), State of Mexico and Puebla de Zaragoza (Mexico), London (UK), Melbourne (Australia) and Porto Alegre (Brazil).

# **3.2 Eco-Region Training Session at the Metropolis International Training Institute. Montreal**

#### **Metropolitan Governance**

#### **General Framework**

The eco-region concept considers the territory as an ecosystem in its entirety and that it should contribute to the balance of the world ecosystem. It should take into account the size of a period in the long term compared with chemical pollution, the resistance capacity<sup>6</sup> of natural environments and, above all, the wellbeing of the population.

An eco-region has to shelter people and guarantee them an acceptable level of wellbeing, all the while respecting the environment and in line with the principle of solidarity with present and future generations.

#### **Main Goals**

To help guarantee human rights and the promotion of economic development toward greater social cohesion. Good governance has to be able to participate in the eradication or reduction of poverty, uphold environmental protection and the rational use of natural resources and shore up people's trust in the institutions of the public Administration.

#### Challenges

Highlighting the institutional framework of the authorities of the cities and regional areas present (common features and differentiation criteria of municipal and regional areas of authority).

# Ile-de-France and the Eco-Region: A Political Ecology Project -A Cross-Sectional Approach

Jean-Paul Huchon announced a project to make the lle-de-France region into an 'eco-region' during his most recent electoral campaign. This political project represents an excellent opportunity and favorable framework for really putting 'sustainable development' into place on a regional scale.

The production of wealth, the use of natural resources and the commercialization of manufactured products, goods and services have the biggest impact on a population's wellbeing and the quality of its environment.

6 Here resistance means an environment's capacity for regeneration.





Participants of the Eco-Region Training Session at the International Institute of Metropolis in Montreal.

To address the major global changes that have been taking place since the end of the 20th century, environmentalists have been concerned with the future of societies and have proposed broader analysis methods to tackle environmental problems. The protection of natural environments and species at the local scale is not enough to indicate the challenges of the new century.

Generally speaking, an eco-region should respond to numerous goals in a society.

The environment has a cost, and each element has to have a price set out in heritage accounting. This price should be determined in relation to scarcity, resistance capacity, impact on individuals and impact on the natural environment.

#### The Eco-Region Concept and the Ile-de-France Territory

An 'eco-region', or ecological region, could be defined as a fairly large geographical zone, distinguished by a set of similar characteristics (physical environment, resources, population and way of life). An eco-region is composed of geographical subsectors or life zones, vectors of the population's wellbeing and altogether they comprise a regional ecosystem and should contribute to the balance of the world ecosystem.

Partnership relations that enable exchanges with other basins should be established at the life-zone level, with no immediate compromises to the principles of self-sufficiency and the food and energy autonomy of each.

#### **Responding to an Eco-Region's Demands**

To respond to an eco-region's demands it would be necessary to develop a life-cycle approach to water, energy and matter<sup>7</sup> in order to know their economic, human and energy potential and to guide their development, starting from a series of strategic choices.

Generally speaking, an eco-region should respond to numerous goals in society.

The environment has a cost, and each element has to have a price marked in heritage accounting. This price should be fixed in relation to scarcity, resistance capacity, impact on individuals and impact on the natural environment.

7 Life Cycle Assessment (LCA) is a tool used to evaluate the environmental burdens associated with a product, process or activity. LCA starts with the definition of goal, scope and functional unit. Identification and quantification of energy and material inputs and outputs follows. The data obtained are then used to assess the impact of those energy and material uses and releases to the environment, and to systematically evaluate and implement opportunities to achieve environmental improvements". WBCSD, Environmental Assessment, a Business Perspective.



# Articulation of the Regional Economic Development Plan and the Master Plan of Urban Planning and Development. Tools to Put the Concept Into Action

The principles of the eco-region are in line with a true systemic approach. In this context, new analysis methods should emerge to pursue the search for wellbeing and balance for the IIe-de France society.

The economic guidelines and strategies were determined in the Regional Economic Development Plan and should have the spatial support of the Master Plan of Urban Planning and Development. Agenda 21 could present a balance of the different economic challenges and then specify the lines of action to take at the regional scale and at that of the Paris Basin. For spatial challenges, it would be important to indicate the places that have already taken environmentally responsible actions in order to consolidate them.

#### Sustainable Tourism: From Idea to Practice

Set the goals: register tourism in a sustainable logic, combining the social approach with economic profitability and environmental concern.

Establish global conduct that makes it possible to reduce the pillage of resources, ensure a more balanced distribution of income and position the valuation of territories and their inhabitants in the center of the process.

Bear in mind three aspects of sustainable development applied to the tourism sector:

Social aspect and society: mutually binding tourism; participative tourism, inhabitants as a center of the action.

Economic aspect: sustainability and economic profitability are not necessarily contradictory, i.e., they can help each other. The goal is to find economic arguments in favor of sustainable tourism.

Environment aspect: via the study of the relationships between tourism and transport, the problem of accommodation (green tourism in private homes), environmental protection, etc.

Make tourism actors and 'consumers' aware (turn them into 'consumers'); establishment of labels, subsidies with suitable goals, institutional communication. Essential condition: consult with the actors on the ground.

# Montreal and Sustainable Development: First Sustainable Development Strategic Plan, 2007-2009

In April 2005, the City of Montreal adopted the first Sustainable Development Strategic Plan for the city. As well as being a master document, the strategic plan contained a series of activities the city aimed to carry out in order to ensure its sustainable development. These activities were grouped into four priority areas. The establishment of the plan was staggered over a five-year period (2005-2009). The start-up phase has been completed and the establishment of the 2007-2009 action plan has begun.

#### **Eco-Region Training Course Report**

Sustainable development proposes a cross-sectional approach to regional development that integrates economic, social, town-planning, environmental and institutional aspects. It also includes the time scale (long term) and the notion of responsibility with respect to future generations.

Within this framework, eco-regions emerge as integrated wholes that simultaneously unite socioeconomic development, efficacy and the conservation of the environment. Public authorities should also channel their guidelines, policies and resources into building viable cities and regions.

A training session on eco-regions was organized in this context and to continue with Metropolis Commission 1's works. The international seminar was held at the Metropolis Training Institute in Montreal from 5 to 7 July 2007.



#### Organization

Around thirty people from 12 cities took part in the session. The first day addressed major concepts such as sustainable development and eco-region. After the session, the Metropolis member delegates attended the presentation of tools that could be used in the eco-region based on experiences in Porto Alegre, Montreal and Ile-de-France. An on-the-ground technical visit occupied the third day and took visitors to the following reference sites in Montreal: Mount Royal Park, the Biosphère, Lachine Canal and the Lachine Museum.

#### **Evaluation and recommendations**

Participants felt very involved with the issues presented. Both for people from the north and south, sustainable climatic, environmental and economic concerns are current issues.

The quality of the exhibitions and competency of the people who took part were also greatly appreciated by the public. However, many people felt the content of the exhibitions was too specific and overly technical and even though it was valuable it made it hard to understand certain themes.

Most of the participants would have liked to see more information on the situations of countries in the south, via differentiated north-south case studies, for example. The exchange of experiences is one of the priorities of Metropolis actions, so it is important to grant space to discussions and the collective search for solutions.

#### List of participants

Abidjan, Cotonou, Bamako, F.C.T. Abuja, Paris, Abomey, Thies, Cairo, Montreal, Kathmandu, Dakar, Seoul, Kati, Porto Alegre, Kinshasa, Toronto, Ouagadougou, Makati.

#### List of people involved

Michel VAMPOUILLE, Stéphane Gozlan, Iuli NASCIMENTO, Amara OUERGHI, Danielle LUSSIER, Reka SCEPELI, Danielle SAUTEREL, Catherine RIBES.

# 3.3 Second Meeting of Commission 1, Paris Ile-de-France

#### Semi-Urban Agriculture and Biodiversity

21 and 22 January 2008

#### Context

The Grenelle de l'environnement (Grennel Environment Round Table) recently reminded us that many of our activities involve greenhouse gas emissions which in turn contribute to global warming. French newspaper Les Echos, on 21 November 2007, published an article entitled "La désertification s'empare des sols fértiles" ('Desertification Mocks Fertile Land') which illustrated the responsibility of human activity in the degradation of the world's agricultural land. The figures are disturbing: desert areas and soil erosion are set to increase considerably. The International Soil Reference and Information Center (ISRIC) says that 200,000 km2 of soil is being eroded each year, a size equivalent to the United Kingdom. Ecological balances are crumbling and leading to increasingly fast and important changes:

- Desertification
- Climate change (global warming)
- Strong and rapid urban expansion (opposition between urban and rural zones)
- Rise in social exclusion (access to drinking water, health services, housing, education, etc.)
- Important demographic changes (ageing population, immigration and rise in pressure on the world's population)
- Rise in poverty across the world
- Repeated natural and technological disasters.

To establish the reflection framework of the 21 and 22 January 2008 Commission 1 meeting, priority was given to the issues of semi-urban agriculture and biodiversity.





Technical visit to the Vexin Region, Ile-de-France.

The 'eco-region' concept was established in the context of sustainable development. Two definitions are important: sustainable agriculture and biodiversity. Here we use the definitions of the environmental activist Vandana Shiva:

- Sustainable development should be based on the recycling of the nutrients in the soil.
- Biodiversity depends completely on local communities' rights to enjoy the fruits of their labor.

The session aimed to answer the following:

- What are the responsibilities of cities?
- What place should be reserved for agriculture in the regional space and what should be its role in conserving biodiversity?
- What type of regional governance should be established to respond to the requirements of sustainable development in agriculture and the conservation of biodiversity?
- How and with what tools should we assess semi-urban agricultural policies and the conservation of biodiversity?
- What are the new reflection issues for Commission 1 for the 2009-2011 period?

#### **Presentation of Experiences**

#### **Ile-de-France Regional Policies**

The first day of the Commission 1 meeting was reserved for presentations and the second was devoted to visits.

Challenges with regards transport issues, planning goals and environmental protection can be hard to bring into line. To help, indicators can highlight the strong and weak points of actions taken.

Ile-de-France's heavy density not only demonstrates its richness but is favorable to the environment in the economic spheres concerned (transport, waste, energy flows). It also maintains semi-urban agricultural areas. The Regional Council acts in sectorial aspects such as transportation, renewable energy etc. and in large-scale changes of behavior, thanks to professional training. The establishment of environment observatories and the dissemination of transparent and simple information have also helped meet this goal.



#### Presentation of the UNESCO Man and Biosphere (MAB) Program

Regions use natural resources and their ecological footprint contributes to measuring this consumption. UNESCO considers cities and regions as important partners. It works with the UN Habitat program to study diverse cities and regions.

The MAB Program aims to develop a better understanding of biodiversity and create conditions for its optimal use. It also completes the major conventions on the protection of biodiversity. Its operation is ensured by regional programs and a general secretariat.

In turn, biosphere reserves conserve ecosystems and their sustainable use. The MAB Program proposes support for research work, education and training. It has so far been designated 529 sites.

In terms of agriculture, UNESCO has carried out an evaluation comparable to the Millennium one. In short, it says a significant part of income could come from environment-related activities.

## Countdown to 2010: IUCN (International Union for Conservation of Nature)

Humans use natural resources so intensively that the list of species under threat of extinction is growing every day. Of the 24 ecosystems on the planet, 15 are threatened. Biodiversity is the key to maintaining these ecosystems. More than half the world's population lives in a city. The distance between the urban world and nature is growing and this is a real challenge.

The goal of the countdown is to stop the loss of biodiversity. The IUCN has contacts with 70 governments and 120 governmental agencies around the world. However, it does not have enough local authorities. Currently in the countdown there are 500 members who have signed a certificate and made a commitment in writing to biodiversity.

#### **Brussels' Biodiversity Strategy**

Brussels is a small, highly urbanized region with significant biodiversity potential. It has been making inventories and atlases of its fauna and flora since 1989, when it established a number of partnerships still in place today. Half the city is permeable to biodiversity and water, and 30% of the city is allocated to private spaces. Communication with the private sector is an essential challenge in terms of biodiversity. To that end, cities can get help from a rich historical focus.

There is a proposal to relate a green network (biodiversity) and a blue network (water) with central zones and relations between the two. The fragmentation of spaces is an important challenge. The plan to develop nature in the city includes a network of calming routes whose health is currently delicate. It is expected to be carried out in around 20 years' time.

Communication is done on the ground, but also over the internet and in the form of pamphlets. Emblematic species such as bats can express a particular potential. Each operation is a chance to shore up and give shape to the partnerships.



#### Baix Llobregat Aquarium Park (Barcelona)

The semi-urban space is first and foremost a buffer zone between the rural world and the city, but one which conserves fundamental features of the former while at the same time supporting the attraction of the latter (UN Economic and Social Council, 2004). Agricultural land does not have a legal definition in Catalonia, but natural spaces, landscapes and urban spaces do.

The agricultural park was formed in 1998 by the Barcelona Provincial Council, the Baix Llobregat Provincial Council and the Unió de Pagesos (Farmers' Union); 14 municipalities affected by the territorial expansion of the park later joined. The Catalan government, the Generalitat, also joined in 2006.

The plan specifies the five strategic guidelines to manage the zone described in the environmental plan. It tries to find a solution in view of the challenges of consolidation of agricultural societies via the efficacy of infrastructures and general services, the promotion of environmentally friendly systems of production, the search for marketing routes that meet market needs and, in short, the modernization of farms so they can carry out improvements and become more commercially viable. We should not forget environmental aspects as well as the organized social use of a zone surrounded by more than 700,000 inhabitants.

As well as being a way to conserve, develop and manage semi-urban agricultural spaces subject to strong pressure, the Baix Llobregat Agricultural Park is the result of a long process of discussions and reflections on the phenomenon of semi-urban lands in Europe and the search for models for the conservation and management of agricultural spaces.

#### **Fedenatur France**

Fedenatur is a meeting place for the managers of natural spaces and in particular semi-urban natural spaces. Natura 2000 enjoys numerous zones. These spaces are aimed at providing a 'green lung' for the public. The keyword in terms of management is the cohabitation of all the users and the non-destruction of the environments. Sports and leisure activities that have to respect the silence, the air quality and the ecosystem are a good way to discover nature and preserve it. Limited by the city and threatened by division into plots, the rupture of connectivity constitutes one of the main problems of semi-urban natural spaces. Their over-occupation can also be counterproductive.

The management institutions of these spaces have common problems: the reintroduction of species, educational activities, restoration of sites – these places need specific approaches, different to those of landscaped squares or regional nature reserves, which are much bigger. However, semi-urban natural spaces do not enjoy full recognition and lack a well-defined identity. Fedenatur fights to alleviate this state of affairs.



#### Semi-Urban Agriculture and Biodiversity in Ouagadougou

This is a specific case of an African country in the Sahel Belt. In Burkina Faso there are two groups: the region and the municipalities. The central region contains the main city of Ouagadougou. Semi-urban agriculture is one of the bases of the region's intermediate investment plan against poverty. 11% of the country's population lives in 1% of the territory. The region represents 30.8% of the national GDP, while agriculture makes up only around 1%.

The type of agriculture is extended families who work mainly with cereal crops and semiintensive in terms of depression, with activities involving horticulture, stockbreeding and the cultivation of associated cereals. To create conditions favorable to semi-urban agriculture, the organization of the low rice fields is continuing thanks to an action plan for rice and a second plan for the rainwater-irrigated plains.

Spaces are worked in two seasons, instead of being left fallow. Water management is essential, particularly ensuring water supplies throughout the year.

The territory, under pressure from urbanization, is subject to speculation. This involves intergenerational conflicts, as young people reproach their parents for having sold the land and compromising their future.

The mobilization of producers is difficult, particularly when it comes to marketing produce. Then there are agronomic difficulties such as weak inputs, not enough water and so on.

Despite all this, fewer cereal crops are being grown while horticultural production is on the rise. When producers get organized, it is very productive, as various examples from the central region have shown.

In terms of biodiversity, overgrazing and deforestation, for example, are the main problems. The collection of wood for heating and coal, the burning of undergrowth and anarchical clearing of scrubs, as well as urbanization, are among the main factors reducing the biodiversity.

The generalization of horticulture, as practiced in Ouagadougou, is a step toward food selfsufficiency.

#### The Agricultural Area of Porto Alegre

This is a strongly agricultural state in the south of Brazil. The city itself has more than 1.6 million inhabitants. The confluence of five rivers forms Guaiba Lake. The rural zone, i.e., 30% of the territory's land area, is in the south of the State. Land is distributed into production zones and biodiversity-conservation zones. The numerous farms are small in size and agricultural production is varied.

As well as three major conservation units, the city wants to establish a fourth which would mix agriculture with tourism. The 1999 master plan on urban and environmental development protects sensitive areas and allocates them for primary production. Landowners are not interested in property speculation, which is a major advantage. They want their land to be zoned as reserve land and the maintenance of sustainable agriculture in order to fight the occupation of their land. The preserved parts are where most conflict arises.

In terms of biodiversity in the city, planting trees is an important activity: more than 40,000 trees. Indeed, right across the State it is compulsory to plant a new tree as soon as another is felled. Replanting has to be done with a good-quality tree. Also, landowners who replant have to take care of the new tree for two years and recruit experts to this end. This system boosts horticulture and nurseries and so contributes to maintaining agricultural activity.

Most of the inhabitants of Porto Alegre have no knowledge of the agricultural area in the south, or of its fauna or flora. The highly urbanized northern zone is communicated with the southern agricultural zone via a coach, which enables the people to learn more about it. Media coverage has helped achieve this goal of the Secretariat of Tourism.



#### Southern Moscow

Moscow Valley has a low level of pollution from Moscow, which is in turn industrial and green (more than 30% of its area).

Laws and numerous texts help manage specifically protected spaces. Moscow enjoys a protected national park on an island right in the middle of the city. The framework plan, the leading document on town planning, details the development of the city through to 2025. Some natural territories will obtain the status of specifically protected territories.

40% of the land area of Moscow is forest. This means more than 5 million people can gather there at the same time, to determine the importance of its size. The protection of the spaces is the best way to maintain green spaces through to 2025. All the spaces have one or various functions (water purification, air, leisure) and the preservation of the territorial integrity is a basic rule. It is forbidden to build roads or divide the space.

The city and region manage problems together, particularly those related with the environment. A green belt, formed basically of forests, has been developed around the city. The city and region have formed separate entities since 1989. Each takes its own decisions separately.

Around the city, urban development is increasing basically in detriment of agricultural areas. Despite all this, southern Moscow is still highly rural. The prospects for 2020 mention a protection zone for the land around Moscow which would include parks, agricultural land and historical zones.

#### Ile-de-France

The regional master plan covers the whole of the region and specifies which items have been done in the planning of each territory. The Regional Council approved the plan in 2007 and it is currently subject to a public poll. The aim is to have a compact and dense city in order to particularly reduce greenhouse gas emissions (energy, transport). Open and urban spaces are at the head of coherent development logic.

The former are non-built up areas that cannot be touched. They are characterized by a great potential for adaptation. The structuring of the territory is carried out both for the city and open spaces. The latter cover different functions: resource management, agricultural production, risk management, biodiversity, quality of life framework, urban edges, social relations, economic attraction. These functions are distributed in line with proximity to the heart of the city. The green zone is situated in the shape of dense urbanization; then comes the green belt and finally the semi-urban spaces are located on the periphery.

The master plan envisages increasing the green area available to each inhabitant within the heart of the city, while the population also grows. Continuities are restored whenever necessary.

A green and blue network will be developed in line with a national network in order to ensure biological and territorial continuity.



#### Indicators for the Effective Establishment of an Eco-Region

An eco-region is a project of political ecology based on life zones considered vectors of wellbeing. Overall it forms a regional ecosystem. Various plans help put this project into action, such as the master plan of urban planning and development and the regional economic development plan.

The program of sustainable-development indicators has been organized around three elements of sustainable development (environmental, economic and social) and is based on synthetic indicators such as the UNDP's Human Development Index (HDI). These involve calculating a region's ecological footprint and carbon balance. The HDI is not very suitable for differentiating between infra-regional organizations and so it has been adapted to the context of the Ile-de-France region to meet its function. The set of these elements is analyzed on a performance table. Thanks to the regional geographic-information system, maps can be used as a visual support for results. Each indicator has a characteristics file that makes it possible to identify the sources and data that have been taken into account.

The wellbeing indicator is designed to spark debate rather than support a definitive response to an issue. It was inspired by works from the University of Vancouver. A human dimension and an ecological dimension constitute the structure of the territory.

A software package manages this system of notation and makes the calculations needed. When the criteria are weighted, we see that the IIe-de-France region is above the French average. Applying the same method to the European sustainable-development strategy reveals that France is one of the leading EU countries. The way the indicators evolve over time provides valuable information on the impact of activities carried out and makes it possible to take corrective measures where required.

Voluntary cities can try out the software in line with their available data. This could lead to comparisons between cities.

#### Agrotourism Presentation: Paris Ile-de-France Regional Committee

Agriculture takes up more than half the land area of Ile-de-France and employs just 0.5% of the region's active population. Semi-urban production mainly covers horticulture, tree growing and nurseries, while large farms are dedicated to the production of cereals and oilseeds. Agriculture therefore represents a counterweight to the urbanization in the region.

Agrotourism offers a chance to conserve and appreciate Ile-de-France's agricultural heritage. Activity has not been very well developed in France, while the possibilities for agricultural farms are multiple and there is already a string of incentives. In other European countries and other French regions, efficient mechanisms show their importance, such as in Tuscany.



#### Presentation of the Regional Biodiversity Strategy: Ile-de-France Regional Council

Concerns are focused today on establishing a regional biodiversity strategy that can: 1. Halt biodiversity erosion by 2010.

- 2. Regain natural spaces in favor of biodiversity.
- 3. Create return conditions for some emblematic species.
- 4. Value the natural heritage of the Ile-de-France region.

5. Permit the good working of the ecosystems, in particular for the reestablishment of biological continuity.

Ten action plans will put these goals into place. They cover everything from the urban environment to the rural one. As well as the creation of a regional biodiversity agency, the strategy envisages: developing ecological continuity; promoting awareness of species and improving their management; reducing pressure on ecosystems; improving the management of forests, wetlands and other areas; using agricultural spaces in biological continuities; better integrating biodiversity in infrastructure projects; putting principles about regional properties into action and supporting the establishment through public awareness and informational campaigns.

With regards agriculture, an economic-development policy contributes to the diversification of agricultural farms, getting young people back onto farms and favorable market access. An environmental policy enables agricultural farms to do more than just respect legal minimums and commit to respect for the environment in all production stages (before procedures, during farming and later work). Finally, a specific semi-urban policy contributes to developing the suitable tools and actions for particular problems such as access to the land, the search for alternative economic models for farming and relations between the urban, rural and agricultural environments.

#### **Presentation of Lafarge**

World leader in the production of building materials, Lafarge has a significant presence in each of the following activities: cement, granules and concretes, plaster. With 71,000 collaborators, the group is present in more than 70 countries.

With over 800 quarries around the world, Lafarge limits its activities to a sustainabledevelopment strategy and, together with the World Wide Fund for Nature (WWF), develops a biodiversity indicator on its sites.

In France, Lafarge Granulats runs 130 quarries and contributes 52 million tons per year to the granules market.



#### Site Visit: Vexin Français Nature Reserve

Lying to the northwest of Ile-de-France, Vexin Français is an extensive lime plateau surrounded by rivers: the Seine to the south, the Oise to the east and the Epte to the west. Far from being monotonous, this tableland contains numerous undulations and is crowned by the double alignment of the wooded hills of Rosne and Arthies.

Created in 1995, the park is organized around a development project based on the protection and appreciation of its heritage. It is committed, along with its partners, to preserving natural environments, restoring the existing heritage and contributing to environmentally friendly local economic development.

The Vexin Français thus ensures actions that develop short routes, i.e., which prioritize the consumption of products from the land near where they are grown. To that end, it favors producers unions and establishes close relationships, such as for Vexin bread.

#### Presentation of the Green Spaces Agency (AEV)

Its goals consist of:

•Protecting and acquiring, with the help of the SAFER (Land Use and Rural Settlement Corporation) and the AFTRP (Paris Regional Land Management Authority) large natural spaces the region wishes to preserve from urban development. The Green Spaces Agency acts as a conserver of natural spaces of regional interest (acquisition of large forest masses and sites of principal ecological interest, territorial monitoring of semi-urban agricultural areas, acquisition of fallow land and rundown areas in order to restore them).

•Organizing and managing forests to open them up to the public, in line with the regional charter of biodiversity of natural areas.

•Contributing to the restoration of parks and historical sites open to the public.

• Preserving and appreciating natural areas.

•Doing up green belts and paths for pedestrians, horse riding and cycling, uniting the big natural spaces with each other and with developed areas.

•Promoting organization and evaluation studies of natural resources: studies to take snapshots of the landscape, ecology, tracking of flora and fauna, geological and archeological inventories, etc.

•Participating in environmental and eco-citizen education, e.g., the "Forestiers juniors" program aimed at primary-school children; events for the public at large.

•Helping, via subsidies, territorial groups to carry out a local purchasing policy and planning of open areas: semi-urban parks, forests, agricultural land, nearby green areas, etc.



# 4. CONCLUSION

# **Diversity of Approaches**

Commission 1's work has allowed us to appreciate the diversity of approaches each city has of this idea. Furthermore, we can see that each city that participates in the project has established, in line with its own capacity, activities concerning biodiversity, semi-urban agriculture, sustainable tourism and the structures of governance that go along with them.

Starting from this strong point, we have still not been able to jointly prepare a common approach about what an eco-region can be for Metropolis partner cities. Indeed, relations with the other standing commissions and other actors are necessary to establish a vision that is at once global, applied and shared of this idea. This could be done during future Commission work between 2009 and 2011.

With regards IIe-de-France, to make an eco-region project effective, five main inputs would allow us to propose an evaluation method that could help specify this project of political ecology. All the inputs would be described in a fairly small number of indicators, but would be well illustrated with maps, graphs, etc.

The inputs could be as follows:

1- A region structured by a section of multifunctional open spaces (a "regional system of open spaces").

2- A region that economizes natural resources and energy, particularly space and fossil fuels, and which ensures their rational management (water, air, soil, subsoil, matter).

3- A region that prevents, minimizes or compensates losses which the inhabitants subject it to; which reduces territorial environmental inequalities and which values the environment as a factor of territorial attraction.

4- A region with strong development (reduction of the agglomeration's vulnerability, risk prevention, change anticipation, sustainable employment, ecotourism, territorial equality, etc.).

5- An environmentally responsible region that controls its ecological footprint<sup>8</sup> (development of environmental procedures related with the land: agriculture, forestry concerns, renewable energies, vegetable matter, water supply, waste recycling and treatment, soil decontamination, green tourism and waste control as close to the source as possible) and which is exemplary in terms of environmental integration (ecocriteria, green building, green markets, fair trade, international cooperation).

Furthermore, within the general framework of an eco-region the idea is to localize technological risks. These risks are present wherever human activity can significantly damage natural and anthropized environments. Risks are even greater where fragile environments such as the Marne Valley are concerned. They are the contradiction of functions exercised in a place, such as leisure and petrochemical activities, which define the rules of land management in a context of sustainable development. By crossing locations of potentially hazardous activities with the anthropized environment's ability to handle this risk, you can highlight the features of human occupation where precautionary measures should be taken as a priority action.

Analysis indicators and general indicators permit the effective establishment of an eco-region project, as they make it possible to show the relationship between urbanization, water-cycle management, waste management, quality of life and material and energy flows in a global action of sustainable development in the eco-region.

8 An ecological footprint is an analysis indicator that can describe and estimate the pressure human activity exercises on the natural environment and an ecosystem's capacity for regeneration.



# **Toward a Pan-European Environmental Network**

The biophysical inventory of land occupation at the Paris Basin scale, known as CORINE, could be a good cartographic reference point for framing the reflection and establishment of the concept of the 'lle-de-France eco-region', and the activity could later be expanded to other French regions and metropolitan regions in European countries. The CORINE Land Cover database was developed on the basis of satellite imagery. It is coordinated by the European Environment Agency. The figures were updated in the year 2000 and are easily available. The 'green corridors' principle could also be expanded to the whole of the Paris Basin in collaboration with neighboring regions and European countries, within the framework of a pan-European environmental network.

Now it seems necessary to have an integrated reflection on eco-regions, the preservation of biodiversity and the sustainable development of EU member states. Using the CORINE Land Cover cartographic database, other geographical information about geology, pedology and socioeconomic data could be subject to a European study program to bring the different cartographic methods into line in order to establish pertinent comparisons between the different European metropolitan regions.

Metropolis, the World Association of the Major Metropolises, in association with the METREX network, can create suitable institutional frameworks for the establishment of a study program of these characteristics. METREX is a European network of metropolitan regions which includes experts and political representatives who work in the fields of planning and regional development. In this context, we could develop a reflection on the eco-region at various levels:

– How can we develop a responsible economy that respects global balances and takes into account a long-term period?

– How can we establish a mechanism to change the lifestyles of the people, who destroy natural resources and generate waste?

– How can we develop information, awareness and education about sustainable development in metropolitan regions?

– How can we address the cross-sectional nature of the problems of regional planning in urbandevelopment documents?

– What type of evaluation system would it be best to adopt in the sphere of metropolitan regions to monitor public policies?

– What mechanism should we use to stimulate the participation of inhabitants and partners among the actors involved in a regional territory?

- How can we start up an eco-regions network among European cities?



# FINANCING OF URBAN SERVICES AND INFRASTRUCTURES

METROPOLIS 2008 • COMMISSION REPORTS• CONNECTING CITIES • SYDNEY

The main mission of local and regional authorities is to provide services of quality to the citizens at reasonable cost and equip their city with adequate infrastructures. Consequently, the local and regional authorities need adequate financial resources of a true financial and taxation autonomy.

The commission aims to analyze ways in which cities plan their investments and finance their infrastructure, not only by acquiring approaches and modern management tools and increasing their internal performance but also by establishing a true partnership with the different models of government and the private sector.





Commission 2 addresses the issue of financing urban infrastructure and services.

## **C2: Financing of Urban Services and Infrastructure**

Presidency – Montreal

Vice-Presidency – São Paulo

Chair – Gérald Tremblay, Mayor of Montreal

Vice-chair – José Serra, Governor of the State of São Paulo

**Coordinator** - Amara Ouerghi, International Training Institute of Metropolis, Montreal

#### Participating cities, regions and international organizations:

Alexandria, Abidjan, Bamako, Barcelona, Belo Horizonte, Berlin, Brasilia, Brazzaville, Brussels, Bucharest, El Cairo, Esfahan, Frankfurt, Guangzhou, Mashhad, State of Mexico, Montreal, Moscow, Paris – Ile-de-France, Porto Alegre, Puebla de Zaragoza, Teheran, Toronto, São Paulo, Seoul, Sydney, World Bank, Inter-American Development Bank.

#### Acknowledgements:

Seydou Sow, Luc Bossé, Charles Élie Barrette and Max-Auguste Maurice Jr.

Report's Author: Amara Ouerghi, International Training Institute of Metropolis, Montreal





The development of quality infrastructure is a major challenge for all local and metropolitan leaders.

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The modernization of energy infrastructure is a priority for the leaders of the world's metropolises.

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The financial autonomy of local and regional governments is essential to improve public services.

## **COMMISSION FUNCTIONS AND PRINCIPAL STAGES**

## **Functions**

Commission 2 on Financing of Urban Services and Infrastructures has the following functions:

- Verify well the problems of city financing
- Identify the different sources of income
- Analyze types of financing for infrastructure projects
- Define local tax trends
- Promote technical know-how and good practices
- Support the Cities Bank project

## Principal Stages 2005-2007

- Approval of the budget by the Metropolis BoD
- Preparation of the terms of reference
- Getting the collaboration of cities and international organizations
- Preparation of a draft questionnaire
- Validation of the questionnaire
- Request for case studies
- Mailout of the questionnaire and gathering of data
- Analysis and summary
- Preparation of the provisional report
- First Commission meeting in Toronto (15-16 June 2006)
- Report presented to the BoD in Toronto (16 June 2006)
- Second Commission meeting (joint C2 C4 meeting in Seoul, 14-15 June 2007)
- Third Commission meeting in Antananarivo (17-19 September 2007)
- First training seminar in Montreal (3-4 July 2007)
- Report presented to BoD in Antananarivo (19 September 2007)

## 2007-2008

- Preparation of analysis files
- Preparation of preliminary version of the final report
- Distribution among members for comments
- Second training seminar in Tunis (13-14 March 2008)
- Preparation of the final version of the report
- Dispatch of report to Metropolis Secretariat General
  - Presentation of Commission conclusions and recommendations at the Metropolis Congress in Sydney, Australia (25 October 2008)



## **1. INTRODUCTION**

The principal mission of local and regional authorities is to provide quality services to citizens and companies. According to each authority's jurisdiction and spheres of activity, these services can cover culture, sport, recreation, waste, transportation, water, public safety, the environment and green areas, to mention just a few.

Also, to fully assume their responsibilities and guarantee a role of promoting their cities in the domestic and international economy, local and city authorities should be equipped with suitable infrastructures, essential to development. These infrastructures and the dynamism of the different economic agents, combined with a number of favorable conditions, will guarantee a city's competitiveness.

That is why local and regional authorities must have the right financial resources and even real financial and tax autonomy. They need to be equipped with the financial tools available to major cities and to reduce the tax burden on individual and corporate taxpayers to make their cities more attractive to the public and investors.

To help member cities equip themselves with the right financing tools, Metropolis, following the 2005 Berlin Congress, established a specific standing commission in this regard, of concern to all public authorities. This report presents the results of the research work done in different case studies, as well as the Commission's reflections on this matter, in the hope it may be of great use to political leaders.

## 2. CITIES' PRINCIPAL SPHERES OF POWER

Local and metropolitan authorities' financing requirements are directly linked with their spheres of power. A good understanding of this will make it easier to appreciate the problems facing the financing of urban services and infrastructures.

Some cities assume more responsibilities and provide more services than others. Some powers are assumed at the local (municipal) level or that of a higher authority (conurbation, metropolitan region). In cities, a number of political organizations with decision-making powers (city government, district government, metropolitan government, etc.) exercise authority. The laws and regulations specify the nature of this authority.

## 2.1 Basic Powers

Spheres of basic powers vary from one city to the next, particularly with regards what they are called. However, they generally cover all of the following: territorial organization, the environment, transportation, culture, sport and recreation and economic and social development. The transfer of these spheres of power is captured in the idea of grassroots management: management is entrusted to local organizations to respond to the basic needs of a community (principle of subsidiarity).

## 2.2 Specific Powers

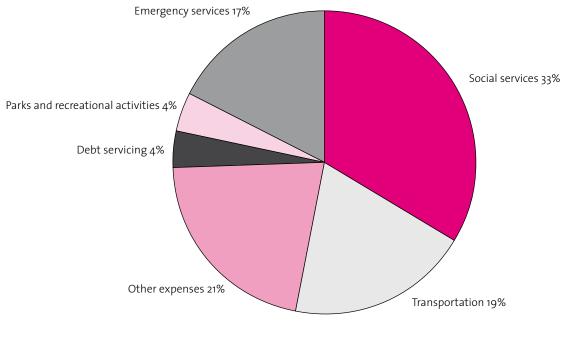
In cities in developed countries, local authorities assume many more responsibilities and take responsibility for other spheres as well, including transport infrastructure, public health, education (Tokyo, Stockholm, Ile-de-France), public safety (Montreal: police, fire brigade, emergency calls), social services (Toronto, Tokyo, Stockholm), technical development and housing (Berlin).

Some of these specific powers (i.e., the ones that refer to urban agglomerations) are managed at the metropolitan level. However, the metropolitan administration, which in most large cities has authority over the local administration, is charged with planning, agreement and distribution of expenses

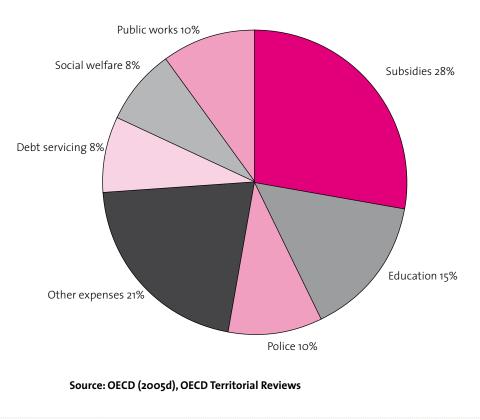


regarding urban infrastructures (Montreal Metropolitan Community). Provincial administrations can also participate in infrastructure management, adopting initiatives in the financing area.

**GRAPH 1: POWERS AND EXPENSES OF THE CITY OF TORONTO** 



Source: Toronto budget (2004)

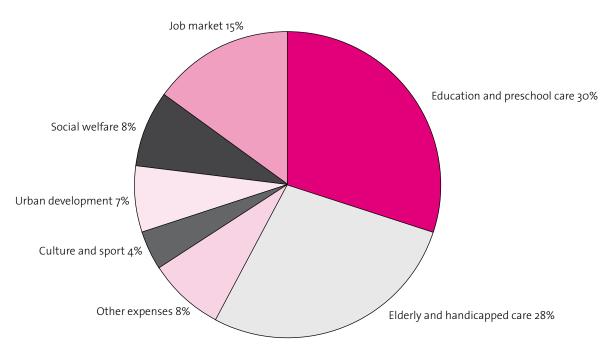


## **GRAPH 2: POWERS AND EXPENSES OF THE CITY OF TOKYO**

C2. FINANCEMENT



The first Commission 2 meeting was held in Toronto in June 2006.

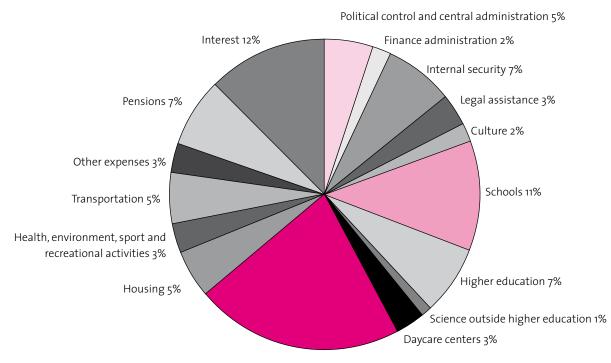


## **GRAPH 3: POWERS AND EXPENSES OF THE CITY OF STOCKHOLM**

Source: Stockholm City Council financial statement (2005)



## **GRAPH 4: POWERS AND EXPENSES OF THE CITY OF BERLIN**



Social affairs 21%

Source: Supplementary version of the 2007 budget

## **3. LOCAL ORGANIZATIONS' FINANCING METHODS**

## 3.1 Financing Operating Expenses

Financial resources for local authorities come from various sources, including:

**Property Tax** Of common use in Canadian cities and metropolitan regions in the OECD area. Tax on properties that cannot be easily moved. This tax-base stability involves a minimum risk of tax evasion or other maneuvers aimed at tax dodging. It is also very specific and therefore favors transparence. However, a strong dependency on property tax appears to limit income flexibility.

**Income Tax** Collected at the local level. In some cases, e.g., Sweden, it is an important tax which functions in the local sphere. Income tax is particularly sensitive to economic evolution and therefore guarantees good profitability during periods of growth. One of the drawbacks of a local income tax is its sensitivity to economic fluctuations, which could translate into irregular income of a pro-cyclical nature.

**Local Sales Tax** Collected in numerous cities, particularly in the US. However, this tax base is usually used to fund national and provincial administrations. Local retail sales taxes generally involve insignificant sources of income. They face an uncertain future in the US, particularly due to the success of e-commerce, as online shopping makes it hard to impose a tax at the time of purchase.



**Local Professional Taxes** These can take different shapes. In one same State, like California, some professional taxes are gathered in line with the number of wage earners and others depend on gross income. From the economic viewpoint, they are generally considered a fairly unsatisfactory option. A local professional tax is hard to manage, stimulates tax exportation and is normally an option only possible in large urban centers.

#### **Government Transfers**

Cities also depend on transfers from the State. The restricted degree of freedom – from the localautonomy viewpoint – linked to transfers means security for national administrations, which are generally keen on budgetary discipline among local authorities. Central administrations also resort to transfers to apply urban policies aimed specifically at promoting, for example, horizontal cooperation among regional authorities within a metropolitan region.

In some cases, city councils can negotiate the amount of the subsidy (e.g., in Italy), but when the amount has been set, they cannot intervene in the volume of income made this way.

#### **Rates and Sanctions**

City councils can also get income from rates applied to their services, such as sporting and cultural activities, garbage collection, the awarding of licenses, the hiring of spaces and parking lots. They also receive income from fines paid for breaking traffic, public-safety and environmental regulations. Despite reticence from the public and the business community, city councils are turning increasingly to rates, partly in order to raise income, but also to avoid waste and reflect the cost of services.

## TABLE 1

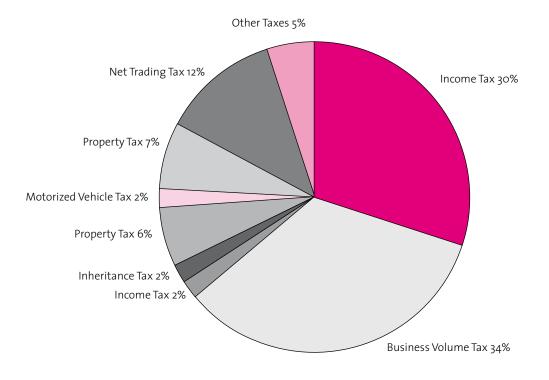
## Percentage of Local Income by Tax Type OECD Federal States, 2002

Country	Income Tax	Property Tax	Rates	Others
Australia	0.0	100.0	0.0	0.0
Austria	56.0	10.0	29.1	4.9
Belgium	86.4	0.0	13.3	0.3
Canada	0.0	91.5	2.0	6.5
Germany	75.8	17.7	6.4	0.3
Mexico	0.1	89.5	2.4	7.9
Switzerland	3.2	16.6	0.3	0.0
USA	5.2	72.6	22.2	0.0





#### Public-private partnership provides the impetus for many urban projects.



## **GRAPH 5: BERLIN - TAXES COLLECTED 2007**

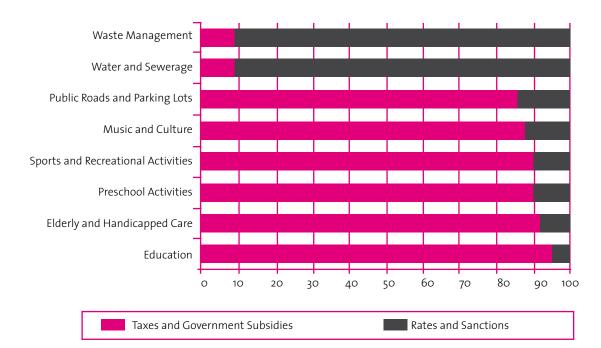
Source: Supplementary version of the 2007 budget

## **TABLE 2: STOCKHOLM CITY COUNCIL INCOME STRUCTURE**

Taxes:	67%
Government Subsidies:	14%
Rates and Sanctions:	8%
Others:	11%

## Source: Stockholm Budget 2007





## **GRAPH 6: STOCKHOLM - INCOME STRUCTURE BY ACTIVITY**

Source: Stockholm Budget 2007



Government Subsidies: 6.0%

## **TABLE 4: SOURCES OF INCOME - SYDNEY**

Rates (on land value) and Annual Charges	50%
Use Rates (including development expenses)	16%
Income from Investments	6%
Subsidies and Contributions	6%
Others (mainly rentals and parking fines)	22%



## **TABLE 5: SOURCES OF INCOME - PORTO ALEGRE**

INCOME (2002)	
IPTU (taxes on urban territorial ownership)	8.6%
ISSQN (taxes on other services)	13.9%
Others	0.1%
Endowment (municipal participation in taxes collected by the	
state and federal governments)	61.3%
Other municipal taxes, asset income and credit operations	16.1%

## TABLE 6: SOURCES OF INCOME - BRUSSELS

•Tax Income: 40% of city financing	
•75%: from three additional taxes	
•25%: from local taxes	
•Endowments: 50% of city financing	
•44.63%: general endowments (regional and federal)	
•55.37%: endowments for specific purposes (education, libraries)	
•Own Income (service provision, debts): 10%	
•6.92%: casino license	
•6.52%: use rights (energy)	
•43.49%: energy dividends + Dexia	
•43.07%: other own income	

## **TABLE 7: SOURCES OF INCOME - LONDON**

(Greater London)		
Rates, Fines and Other Income	35%	
Specific Government Subsidies	33%	
Redistributed Government Subsidies and Trade Taxes	20%	
Reserves (TfL: Transport for London)	4%	
GLA (Greater London Authority) Council Tax	8%	

## **3.2. Financing Infrastructures**

In a context of globalization and international competition, particularly among urban centers, infrastructures are fundamental factors of development. Cities use them to provide quality services to the public and the business community, but they also make it possible to guarantee a competitive edge, attract investments and consequently generate development.

Different financing sources enable the construction, care and maintenance of infrastructures:

#### **Cash Payment**

Can be done with funds available in the kitty, whether thanks to a surplus from the previous financial year or the use of reserves created from surpluses accumulated over earlier years.

#### **Bank Loans**

This mode of financing is used transitorily and for very short periods (i.e., bridge financing) due to its high cost because of the interest rates applied by financial institutions.



#### **Bond Issues**

Bonds are used to finance assets with a long useful life. This financing can be for the:

•medium term (5 to 7 years), e.g., for computer equipment or vehicles

long term (10 years and more) for property, roads or underground infrastructures

They involve loans from investors to the issuers (cities, governments, etc.) via guarantees. The issuer undertakes to make periodic interest payments and to return the capital within a particular time.

Cities are increasingly issuing bonds and seeking loans from specialized financial institutions to finance their infrastructures.

General obligation bonds are guaranteed by the tax authority of states and local organizations. They are linked to income, property and sales taxes.

Increasingly we are seeing another type of general obligation bond aimed at developing zones with a particular economic mission (special purpose districts), created to provide services that cover a territory larger than a particular municipality (water supply, sewerage, hospitals, fire protection, roads, etc.).

Project revenue bonds are based on the product of the operations they finance: levies, rates or specific taxes. They are mainly used to finance sectoral projects (hydraulic works, electricity, health, transportation, etc.).

The guarantee for these bonds varies considerably but is generally linked to a source of income that comes directly from the services provided. In the case of local service projects where the income does not cover the debt (public parking lots or street lighting) the guarantee can be shored up with a specific sales tax.

Financing using bonds has the advantage of being an instant source of funds, preventing delays in the implementation of infrastructures. This type of financing makes it possible to distribute costs over the life of the equipment or project. Finally, it introduces equity between beneficiary generations. However, it constitutes a medium- and long-term debt for the issuers, which have to face fluctuating interest rates.

**Tax Incremental Financing (TIF)** is a program that uses the rise in the mortgage value of buildings on land designated to finance infrastructure investments in a particular area. It is often used to finance infrastructures and economic development projects. Taxes collected from the rise in value are not assigned to the city council's general fund but are used to pay for investments.

**Improvement Tax** is a type of tax aimed at specific purposes in a city or neighborhood to finance improvements that go beyond the services usually provided by public authorities. The financed improvements aim to raise the residential or commercial value of the area. They can involve improvements in terms of city planning, safety or signaling.

An improvement tax is a very limited and specific source of financing. It stimulates innovation and elevates the quality of the territory concerned.



## TABLE 8

SOURCES OF INCOME FOR INVESTMENTS - LONDON	
Total financing for the 2007-08 year: 1,988,900,000	
Subsidies	11.4%
Investment Income:	13.7%
Loans and Credit Agreements:	51.6%
Tax Income:	22.9%
Contribution from Third Parties:	2%

#### Fuel Tax – Canadian Cities

Canadian cities have for a long time been claiming a stable source of income, and one that can be predicted, which permits the reparation of infrastructures in a poor state.

In March 2007, the Canadian Finance Minister responded positively to a petition to permanently transfer part of the fuel tax to cities.

A preliminary agreement signed in 2005 envisaged the transfer of part of the tax through to 2010. The 2007 federal budget extended the measure to the year 2014.

As of 2009-2010, the fund will collect two billion dollars a year. The money will be used to repair road and underground infrastructures. Part will be earmarked to funding the Montreal shuttle project to unite the airport with the downtown area.





A joint Commission 2 - Commission 4 meeting was held in Seoul in June 2007.

## 3.3 Public-Private Partnerships

Collaboration between the public and private sectors to guarantee the provision of public services is nothing new (in the US, the private sector was involved in telecommunications projects in the 19th century). Some European countries, such as France, the UK and Spain, also have a long tradition in this area.

Public-private partnerships (PPPs) can be considered "a contractual agreement between public and private partners that stipulates the results to be achieved in order to improve the delivery of public services. This agreement establishes a real allocation of responsibilities, investments, risks and benefits so as to provide mutual benefits that promote the achievement of results".<sup>1</sup>

According to the OECD, <sup>2</sup> the decision to opt for a public or private service provision should be taken after objectively evaluating what would best serve the public interest. Factors to take into account include the current service supply level and the state of facilities. It is also important to consider financial accessibility for families and business, network coverage, operational efficacy and long-term facility maintenance, as well as social and environmental viability.

In this way, the respect for a series of principles in relation with other factors will make it possible to extract advantages from PPP projects.

The following benefits can be obtained from projects funded by a public-private partnership:

- Land valuation
- Neighborhood revitalization
- Attraction of commerce
- Income
- Economic and social development

1 Bureau des partenariats d'affaires of the Secrétariat du Conseil du Trésor, see: http://www.tresor.gouv.qc.ca/marche/partenariats/index.htm

2 OECD: "Principes de l'OECD pour la participation du secteur privé aux infrastructures", 34 pages, OECD 2007



#### FINANCING BANGALORE INTERNATIONAL AIRPORT

Location	Devanahalli, 30 km north of Bangalore
Description	Two BOT (Build, Operate and Transfer) airport terminals to connect Bangalore, in Karnataka, southern India
Partners	Siemens, Larsen & Toubro, Zurich Airport, the airport authorities of the Karnataka Government, India
Operator	Zurich Airport
Contractors	Siemens, Larsen & Toubro
Total Project Value	10.2 billion rupee (234 million USD)
Total Equity	3 billion rupee (69 million USD)
Equity Distribution (in USD)	Siemens: 27.4 million; Larsen & Toubro: 11.8 million; Zurich Airport: 11.8 million; Karnataka Government: 9 million; Indian Airport Authority: 9 million.
Total Debt	7.2 billion rupee (165 million USD)
Debt Distribution	ICICI: 5.2 billion rupee (119 million USD); loan from the Karnataka Government (endorsed by SBI): 2 billion rupee (46 million USD).
Debt	71:29
Agents	ICICI
Partners' Legal Advisor	Linklaters, Crawford Bayley (Indian consultants)
Banks' Legal Advisor	AZB & Partners
Legal Advisors to the Karnataka Government	Jyoti Sagar & Associates
Legal Advisors to the Indian Government	Amarchand Mangaldas
Financial Settlement Date	June 2005

#### **Transportation**

#### 407 Highway, Ontario (Canada)

A partnership between the Government of Ontario and a private consortium formed by the Macquarie Infrastructure Group (Australia), Cintra Concesiones de Infraestructuras de Transporte (Spain) and SNC – Lavalin (Canada). The PPP is concerned with the overall management of a 108 km highway. "The purchase price determined in the bid was 3.1 billion dollars, to which we have to add around 900 million dollars for building costs, debt servicing and the rotation fund, to give a total transaction figure of 4 billion dollars."

#### Nottingham Express Transit (United Kingdom)

A PPP between Nottingham City Council and Nottinghamshire County Council, on the one hand, and Arrow Light Rail Ltd, on the other for a new light-rail tramway system over 14 km (Line 1). Project valued at 490 million dollars. The private company designed and built the system and will operate, maintain and finance it. Use and maintenance were given to a consortium. The private partner receives income in the form of regular payments linked to output and income from fares.

## Health

## St. Göran Hospital, Stockholm (Sweden)

A public-private partnership between Stockholm City Council and Capio AB, a private corporation that operates in the hospital sector in Scandinavia and the UK.



In 1999, Stockholm City Council rented the Saint-Göran Hospital, a facility with 240 beds and 1,400 staff members, to a private company. Council transferred to the company the risks related particularly with rising costs via financing contracts that specified the prices and volume of the service. The project has led to a 30% reduction in unit costs and improved services, with 100,000 more patients treated per year with the same resources.

#### Waste

#### Municipal Waste Management, Manchester (UK)

The Greater Manchester Waste Disposal Authority (GMWDA) is responsible for waste management and provides services to 958,000 families, or around 2.3 million people. The goal of the GMWDA with this project was to progressively achieve, through to the year 2020, the recycling or composting of 50% of waste and to prevent the dumping of 65% of waste. Activities consist of the design, construction, operation and maintenance of a comprehensive municipal waste-management system for the urban agglomeration of Manchester. The European Investment Bank (EIB) will contribute a maximum of 50% of the amount of preferential loans. The project began in August 2006.

#### 4. MODE OF FINANCING METROPOLITAN REGIONS

The metropolitan context is characterized everywhere by urban expansion (development of the suburbs), which involves an unequal supply of services and a lack of tax equity, requiring intrametropolitan solutions to distribute charges and resources.

The elevated financial requirements of the metropolitan regions generate very important tax challenges. A lack of financing undermines a region's future possibilities and the situation worsens if the region does not have the power to collect its own income. At the same time, national goals, such as the aspiration to equity at the regional scale, can force metropolitan regions to contribute financially to the development of the rest of the country.

The fiscal autonomy of a metropolitan region is an important element in making it more attractive to citizens and business. The region that enjoys more tax autonomy may more easily obtain the supplementary income it needs to acquire the goods and services essential to boosting its attractiveness among corporations and residents.

Tax mechanisms aimed at evening out inequalities in the metropolitan region include redistributive transfers and devices for the distribution of tax income. Preference is often given to equalization mechanisms because they guarantee the distribution of the costs of the public service that benefits the whole of the metropolitan zone, building a retaining wall against inefficient localization options motivated by differences in tax bases and putting identical means at the disposal of city councils to finance basic public services.

The tax-base equalization mechanism has the following advantages:

- The cost of public services consumed by the residents of a metropolitan region is also shared.
- Companies and individuals are less susceptible to moving from one place to another within the metropolitan region for strictly fiscal reasons.
- All city councils are equal when it comes to paying for public services.

The drawback is that aid derived from tax-base equalization mechanisms, like all aid, runs the risk of being awarded on political rather than economic grounds, and may reduce a city's incentive for development, as the richer it is, the less aid it will receive. Such mechanisms also make it possible to disassociate the costs and advantages of local public services, which could make it hard for the public to make informed decisions.

#### ΤΟΚΥΟ

Tokyo is made up of 23 special districts, or tokubetsuku, which have administrative and fiscal powers similar to city councils. They are financed by the property tax collected at the sub-national level, some of the residency tax paid by companies and the property tax collected within the Tokyo metropolitan region. 48% of funds are assigned to the Prefecture of Tokyo for the service provision at the regional level, such as water and sewerage, fire services and other similar provisions. The remaining 52% is divided between the 23 districts in line with their requirements.



## **SEOUL**

Seoul makes significant aid payments to its autonomous districts, the gu. The total amount of aid the city awards comes to 2 billion KRW (around 1.7 billion euro), i.e., 14% of the expenses of the city administration. Aid is distributed in line with a formula designed to cover the vertical budgetary deficit (which is fairly high) that exists among the gu, due to the great diversity of their budgetary capacities. The gu decide their budgets with regards costs related to social development, including health and environmental improvement and social security. The gu assign only a small fraction of their budgets to economic development.

In the US, **tax-base sharing** is an attempt to distribute the tax base.

Tax-base sharing can be defined as "a regional equalization tool that permits the creation of a distribution system of wealth among various local authorities on a voluntary basis. The technique consists, more particularly, of distributing part of the surplus to create a more balanced distribution of local income. The measure is normally combined with the creation of a regional development fund with capital established from part of the income obtained from the tax-base sharing and/or an endowment from the central State".4

The City of Minneapolis (US) has played a pioneering role in the application of an equalization tax system between the districts of its metropolitan region.

Partners in tax-base sharing systems say there are numerous advantages.

They say the system promotes equality in terms of tax types and the local governments' capacity to finance public services. They say it reduces competition for intra-metropolitan property tax and permits better land-use planning in the political arena (M. Orfield, 1999).

However, some observers who have studied the practice of tax-base sharing in America (Summers, 1998) and Canada (Collin, 2001) have concluded that the distribution of regional tax income with a view to regional solidarity or equalization is an unusual strategy at best.

Of the 35 US cities studied, only two (Minneapolis-Saint Paul and Pittsburgh) apply the tax-base sharing concept. The conclusion that can be drawn in almost all cases, according to these observers, is that measures are aimed at financing one or various regional services or facilities and that it is cost, not income, which determines distribution.

In conclusion, they say that, as practiced in large cities (US and Canada), the urban-agglomeration tax system is a matter of intra-municipal cooperation and not metropolitan solidarity (Collin, 2001).

#### Tax-base Sharing in Pittsburgh and Minneapolis-Saint-Paul (USA)<sup>5</sup>

Pittsburgh is one of the most fragmented metropolitan agglomerations in the USA, with 418 local governments, of which 412 are municipal.

The alternative to starting up an organization of a metropolitan nature arose in 1994 in the shape of a special local structure that included the whole region, with support and financing functions for regional activities.

The goal behind this mechanism was to provide local councils with additional financing so they could cut property-tax rates and reduce their dependence on property tax.

Of income from purchase tax (sales tax), 25% goes to the county and a further 25% is shared among the municipalities, which during the first year should reduce their other taxes, principally property tax.

The remaining 50% of tax income goes to the metropolitan district and is divided between civic, cultural and recreational organizations.

4 Jacques Gagnon, *"Les montages financiers internationaux en gestion du développement local"*, Sherbrooke University 2003, 50 pages. Also see:

- Myron Orfield, "Grand Rapids Area Metropolitics: Tax-Base Sharing in West Michigan", Metropolitan Area Research Corporation, A Report to the Grand Valley Metropolitan Council, May 1999, http://www.gvmc.org/ landuse/documents/tax\_base\_sharing.pdf

- Jean-Pierre Collin, *"La fiscalité d'agglomération dans le Québec d'après la réorganisation municipale"*, 5 OECD Territorial Reviews, *"Competitive Cities in the Global Economy"*, OECD 2006.

Also see: http://www.oecd.org/dataoecd/50/17/5037721.htm



The third Commission 2 meeting, held in Antananarivo in September 2007, featured the participation of Metropolis President, Jean-Paul Huchon. Panoramic view of Antananarivo, Madagascar.

Since 1975, a Minnesota law has stipulated that part of the trade/industrial tax base should be shared by all the communities in the Minneapolis-Saint Paul metropolitan sector.

Taking 1971 as a reference date, each community was asked to contribute 40% of the rise in their tax base (trade and industrial) per year to the metropolitan organization, thus covering all businesses, offices, commercial premises, warehouses, factories, gas stations and parking lots, as well as public utilities owners and unoccupied land which had been zones as commercial or industrial land. The Minneapolis-Saint Paul international airport and properties where taxes were raised for financing the district were not included in the measure.

The regulation had two objectives:

- to promote equity in the distribution of tax resources
- to promote regional planning

## **5. CITIES AND INTERNATIONAL FINANCING**

Cities are also financed by international fund providers and private-sector financial institutions. It is also important to point out that, in the private sector, some banks specialize particularly in city financing.

Each of these institutions chooses to support or not support projects/programs based on a number of conditions, selection criteria and clearly defined financing methods.

In terms of Official Development Aid (ODA), we can distinguish between multilateral development banks (MDBs) and bilateral development agencies.<sup>6</sup>

## 5.1 Multilateral Development Banks (MDBs)

MDBs offer subsidies and loans to support various development projects. Borrower countries use these funds to build infrastructures and provide urban services, among other purposes.

#### The World Bank

The World Bank offers a whole range of instruments, such as loans and donations, for activities designed to alleviate poverty and promote economic development in the world.

The IBRD (International Bank for Reconstruction and Development) and the IDA (International Development Association) award interest-free or low-interest loans and make donations to countries without access to international credit markets or which can only access them under unfavorable conditions.

The loans the IBRD awards to developing countries are mainly financed through the sale of its bonds on international capital markets.

6 http://www.infoexport.gc.ca/ifinet/menu-f.htm



The Bank offers two types of financing instruments:

The first loans refer to investment and are awarded for a long period (5 to 10 years). They are awarded to countries to finance supplies, works and services aimed at promoting economic- and social-development projects in diverse sectors.

The second (previously called adjustment loans/credit) provide external financing to be repaid quickly to help countries redirect public action and carry through on institutional reforms. They are short-term loans.

#### The International Finance Corporation's Municipal Fund

In 2003, the World Bank promoted the creation, via the International Finance Corporation (IFC) of a municipal fund aimed at making it easier for local organizations to obtain financing without a state guarantee. "Investments cover a wide range of sectors (drinking water, sewerage, transportation, electricity, solid waste, urban heating, education and health and other essential public services) and can benefit numerous organizations in the municipal or regional public sector (local or provincial administrations, public-service provision companies, partially government-owned companies, public-private partnerships and financial intermediaries)".

In reality, the International Finance Corporation intervenes in emerging countries (Brazil, China, Mexico, Colombia, South Africa) by awarding loans under market conditions and/or providing guarantees for bond issues on the part of large cities.

Its loans potentially cover all urban infrastructure sectors (transportation, online services, public facilities) and housing, but its real achievements in this area are hard to identify. However, the Municipal Fund has participated in bond issue operations by the Johannesburg and Mexico City city councils, providing them with partial guarantees.

#### The Inter-American Development Bank

The Inter-American Development Bank was founded in 1959 as an institution for multilateral financing with a view to regional development (North America). Its loans and investments finance projects aimed at sustainable development in economic and social areas.

They are used to support poverty-reduction strategies, accelerated growth, trade development and increased investment and regional integration and also to promote private-sector development and State modernization.

#### The Asian Development Bank

The Asian Development Bank is a multilateral institution for financing development in the region (Asia). Its vision consists of releasing this part of the world from poverty. Its mission is to help member states reduce poverty and improve citizens' quality of life.

#### The African Development Bank

The African Development Bank (ADB) is a regional-development and multilateral bank whose shareholders are the 53 African nations and 24 non-African nations in the Americas, Asia and Europe (non-regional member states). The Bank's goal is to promote economic development and social progress in all its regional member states (RMSs).



#### **5.2 Other Banks and Development Funds**

#### The European Investment Bank (EIB)<sup>7</sup>

The EIB finances multisectoral investment programs that cover: water supply and electricity, road networks, the environment, urban renewal, health and education. Financing contracts with South Africa, with two cities enjoying full rights to benefit from them, were closed on 16 September 2005 with the Infrastructures Finances Corporation (INCA), a South African organization that finances local organizations, acting as the financial intermediary. For the EIB, these two operations are the first to focus on two large cities and the first two framework loans awarded outside the EU.

The EIB, a long-term financing institution in the EU, participates in various financing projects, such as:

- The co-financing of investment projects in the South African cities of Pretoria (Tshwane) and Durban (eThekwini) with two loans worth 30 million euro each, aimed at financing urban infrastructures.
- Financing the modernization of the municipal infrastructures of Warsaw (Poland) with a loan of 125 million euro (contract signed by the bank and the city on 9 September 2005).

 $\cdot$  A 20-million-euro loan to Kozani City Council (Greece) to promote economic and urban development .

• Financing of various Italian cities (Florence, Bologna, Venice, Naples, Rome and Palermo) for a total of some 500 million euro. In the year 2000, the EIB signed a collaboration deal with Federtrasporti and the National Association of Italian Cities to carry out investments in the transportation sector.

#### **African Infrastructure Financing Initiatives**

Despite widespread poverty, a fragile political and institutional environment and major crises, the African content today looks hopeful, given the numerous state and sub-regional initiatives aimed at carrying out structural infrastructures.

These initiatives include:

• The New Partnership for Africa's Development (NEPAD)<sup>8</sup>, an African Union program adopted in 2001. It prioritizes large cross-border infrastructure projects (electricity interconnection, gas and oil pipelines, highways, railways, etc.). To carry out this work it was necessary to launch a coordination unit: the Infrastructure Consortium for Africa (ICA)<sup>9</sup>.

• The ICA was founded in 2005 and groups together the G8 countries, the African Development Bank and the European Union.

• The Pan African Infrastructure Development Fund (PAIFD)<sup>10</sup> officially began in 2007 and was endowed with \$ 625 million. Its aim is to invest in building infrastructures in Africa.

• The Emerging Africa Infrastructure Fund (EAIF)", founded in January 2002, currently has a fund of \$ 365 million. It aims to solve the lack of long-term financial loans for infrastructure projects in sub-Saharan Africa.

#### Johannesburg, South Africa \*

Among other financial institutions that participate in the financing of municipal infrastructure it is important to mention:

- The Development Bank of South Africa (DBSA). This bank is responsible for funding infrastructures and city development. It was established by the central government to promote the financing of infrastructure and the development of the cities.
- Commercial banks and financial institutions.
- The South African capital markets: the INCA (Infrastructure Finance Corporation Limited) must be the only private company that specializes in municipal and public financing.
- Insurance companies are important sources of long-term financing.

7 European Development Fund, http://europa.eu, and European Investment Bank, http://www.eif.org
8 http://www.icafrica.org
9 http://paidf.com
10 http://www.emergingafricafund.com

\* Jason NGOBENI, "Financement durable des infrastructures sud-africaines pour le marché des capitaux", in Villes en développement, September 2005, no. 69.



In 1982, Johannesburg City Council issued its first international loan in the form of a bond denominated in German marks for a total amount of 50 million deutschmark. With a four-year maturity period, it was fully guaranteed by the Republic of South Africa. The practice of sovereign guarantees was later abandoned for local governments. In the latter case, the DBSA and the IGC (International Finance Corporation from the World Bank group) have guaranteed interest payments.

The investment budget for Johannesburg City Council more than doubled from 125 million euro to 350 million euro between 1995 and 2005.

In 2004, the first municipal loan in the shape of a bond was issued for 125 million euro for a six-year period at an interest rate of 2.3%; a second was later issued in the form of a 125-million-euro bond, partially guaranteed (40%) for a 12-year period at an interest rate of 1.64%.

TABLE 9         SELECTION OF FINANCING SOURCES FOR INFRASTRUCTURES IN ASIA (2006)			
Fund Name	Management Company	Fund Amount (USD)	
Macquarie Korea Fund	Macquarie Shinhan Infrastructure Management Co. limited	2.3 billion	
Macquarie Korea Opportunities Fund	Macquarie Korea Opportunities Management Inc.	1 billion	
South East Asian Strategic Assets Fund	General Partner	250 million	
Infrastructure Fund of India	AMP Capital Investors	102 million	
Vietnam Growth Investment Fund	VietFund Management	25 million	





The elevated financial requirements of the metropolitan regions generate very important challenges.

#### **5.3 Private Banks**

#### DEXIA

The Dexia Group was founded in 1996 following a merger between Crédit Local de France and Crédit Communal de Belgique. Listed among the top 20 financial institutions in the euro zone, Dexia is one of the world's leaders in financial services offered to the local public sector for the financing of projects. The Dexia Group operates in the areas of asset management, insurance, investment services and capital markets. It is considered the world's leading bank on the local public-sector financing market (Dexia Crédit Local).

**Public financing** Consists of making loans, liquidity agreements and guarantees at the disposal of local authorities and other public-service organizations and of taking part in bond issues for customers. Dexia offers its customers a wide range of products, such as structured loans and services aimed at optimizing debt management.

**Financing projects** Developed worldwide. The priority is one essential infrastructure (transportation, environment) and the renewable energies sector.

**Credit rating improvements** Via its American affiliate, Financial Security Assurance (FSA), which enjoys a triple A rating. Dexia shores up the loan quality of municipal bonds and infrastructure operations, as well as **asset-backed securities** <sup>12</sup>.

The main places where it operates are France, Belgium, Italy, North America and Mexico, Germany, Spain, the United Kingdom, Scandinavia, Switzerland, Austria, Slovakia, Poland, Romania, the Czech Republic, Australia, Israel, Bulgaria, Hungary and Japan.

Dexia contributed to structuring the financing to modernize the Madrid suburban rail network in 2005, bringing 2.5 billion euro to the table. In 2006 it co-financed 142 trains designed to cover the Madrid city and regional network.

Dexia and the European Investment Bank (EIB) sponsor the South Europe Infrastructure Equity Finance (SEIEF) fund, which invests in non-listed securities aimed at medium-sized investments, mainly in France, Italy, Spain and Portugal.

12 See Dexia statement from 2/01/2007 in reference to the asset-backed securities operation for improved credit ratings in the infrastructure sector in Dublin, to the tune of 2.19 billion euro.



#### **INCA - Infrastructure Finance Corporation Limited**

INCA was founded in 1996 in response to growing demand for financing manifested by local authorities in South Africa and in the wake of a call from the federal government for greater commitment from the private sector to infrastructure development at the local level.

It is a 100% private company whose main activity consists of providing funds to public and private organizations committed to infrastructure development. This may involve local organizations, public-service management companies or any other South African structure active in the field of economic, social or transportation infrastructures.

INCA is composed mainly of South African capital. Close to 90% of the capital is in the hands of three corporations: Kagiso Financial Services Limited (an affiliate of the Kagiso Group) <sup>13</sup>, FirstRand Bank Limited (a large South African finance group active in all sectors of asset management, trading banks, insurance and financial services provision) and Momentum Group Limited, the powerful 'insurance' division of the FirstRand Bank (of whose creation it was the financial vehicle in 1996).

With regards the remaining 10%, the local branch of Dexia Crédit and Proparco (an AFD financing affiliate from the private sector) have, respectively, 4.5% and 0.01% of the capital <sup>14</sup>.

INCA has three main sources of financing:

- -Shareholder capital
- -Bond issues

-Long-term loans contracted with international fund providers (AFD, USAID and EIB) and national fund providers (the South African branch of Investec Bank Limited, Mettle Limited and the Standard Bank of South Africa).

INCA loans are from five to 13 years, with interest rates of between 7% and 8%, depending on the contract conditions.

Large South African cities are INCA's main clients: the ten biggest loans INCA has committed to were for the cities of Tshwane, Johannesburg, Ekurhuleni, EThekwini, Cape Town, Buffalo City, Msunduzi and Mogale, as well as South African Airways, Sedibeng Water Board (the water management and distribution company in the Sedibeng district) and Transnet Limited (a transport and logistics company of mainly public capital).

INCA has two affiliates: the INCA Bond Rehabilitation Company (IBRC), which facilitates 'low-intensity' investments in cities or public organizations in difficulties, and the INCA Capacity Building Fund (INCAP), which proposes training programs and study scholarships in the field of city management and promotes general-interest 'community' products (particularly regarding community waste management).

13 The Kagiso Group is a South African finance group present in a large number of activity sectors in the country, from product management through to financial services, insurance and risk management and the media. The Kagiso Group has a 'charitable' background: the Kagiso Trust was established in 1985 with funds from the European Economic Community dedicated to helping the victims of apartheid. The Trust funded the activities of businesses, NGOs and private individuals (e.g., through study scholarships) which had an impact on economic and social development. Following the return to democracy in South Africa, the Kagiso Trust promoted the creation of Kagiso Trust Investment (KTI), funded by JP Morgan. KTI carries out the Group's main financial activities today. KTI's investments in companies involved with economic and social development, in the municipal infrastructures sector, is part of a strategy to support the government's drive for black economic empowerment.

14 In 1998, Proparco granted most of its shares (4.41%) to Kagiso Financial Services Limited.



### **DEPFA BANK**

DEPFA BANK must be the only international bank fully devoted to financing the public sector and its infrastructures.

Its headquarters are located in Dublin (Ireland) and it is present in numerous countries. It intervenes in the following fields:

• Budget-finance: Provides loans to numerous public-sector organizations and different local authorities, depending on the administrative organization of each country, including city councils, particularly metropolitan ones. An example in France is Grenoble City Council, which received an 18-million-euro loan.

• Infrastructure-finance: Finances the development of large public infrastructures via publicprivate partnerships, particularly in the transport sector (highways, public transport, airports, etc.), the environment (water, waste and renewable energies) and public buildings (hospitals, jails, schools, etc.).

• Client product services: Active in investments in whose context the bank offers products derived from risk coverage, securitization, pension-plan management advice and infrastructure areas, etc.

DEPFA rarely gets involved in projects of less than 10 million euro.

#### The Macquarie Group Australia and the Macquarie Infrastructure Group

The strategy of the Macquarie Infrastructure Group consists of investing, developing and managing long-term profitable activities. The Group identifies new opportunities for creating operations that consist of the acquisition of new portfolio shares (a toll-paying motorway, for example) which meet the company's investment criteria.

The Macquarie Infrastructure Group Australia forms part of a private consortium that manages the 407 toll highway (an example of a public-private partnership for a 108 km highway in Toronto, Canada), along with Cintra Concesiones de Infraestructuras de Transporte (Spain) and SNC - Lavalin (Canada). This company carries out activities that cover various examples of public-private partnerships around the world.

### **6. CONCLUSION**

The Commission's work, channeled via case studies and the exchange of experiences, has made it possible to draw a number of conclusions worth analyzing in this report. These conclusions can be used as recommendations or sources of inspiration for leaders seeking financing tools and perspectives.

#### **Income Diversification**

Given that the addition of taxes involves a risk of aggravating the tax burden of contributors, we recommend a diversification of tax income. A strong dependency on one type of local tax income could hinder service-provision efficacy in the local sphere.

#### **Property Assets Control**

The control of property assets by city councils is considered essential to project realization as private land requires long negotiation and expropriation processes.

#### **Public-Private Partnerships**

PPPs make it possible to broaden the public financial capacity to carry out more infrastructure projects in a shorter time, to share risks with the private sector to different degrees, to alleviate the public sector load and to achieve margins for public financial maneuvers for services that only the public sector can offer.

Public-private partnerships are not a panacea for the problem of financing. There is no one model. They should be adapted to each project and context. The fundamental element in a public-private partnership is to properly assess the part of the risk the private sector will assume. The greater the risk transferred, the higher the public cost.



The public-private partnership is another tool cities have to speed up the realization of infrastructure projects, equipment and municipal or regional services.

A PPP gives results if there is true agreement between a common vision and the distribution of responsibilities with regards development, management, maintenance and financing.

Governance: need to unify government agencies under a single authority.

• Process: carry out all inter-governmental discussions before start-up.

• Establish a single interface to manage financing with the private sector.

• Structure: a public-private inter-ministerial mechanism to guarantee coordination of the whole.

• Respect for a timetable of fixed and short-term maturity dates (four years) to attract the private sector.

• Respecting budgets provides security to all the partners.

• The importance of associating the private sector with certain public spheres, e.g., arts and culture, produces a multiplier effect.

• Acceptability of the work by the partners; 1,200 business windows.

• It is important to cover a territory that is large enough but not too big, which offers the critical mass needed to produce a multiplier effect on private investment.

• Entrust planning to the planners.

• Ensure that the project is beneficial to all partners.

## **Conditions for a Successful Public-Private Partnership**

Because each project is unique and there is a big range of financial tools, it is necessary to take certain precautions to achieve a successful public-private partnership.<sup>15</sup>

We should bear in mind that, among other conditions, a PPP requires:

- True political leadership
- Assurance that the project is beneficial to all partners
- It is important to cover a territory
- Carry out all inter-governmental discussions beforehand
- A good sharing of risks and advantages, based on an appropriate risk assessment
- Consideration of maintenance costs when assessing project costs
- A very detailed definition of plans and costs
- Budgetary respect for all partners
- Compliance with maturity dates
- Surround yourself with top-rank specialists
- A good definition of functions and responsibilities (clear contract)
- Constant project monitoring
- A prevision of legal regulations referring to the financing and distribution of income
- A prevision of mechanisms for conflict resolution
- A prevision of mechanisms for communication between parties
- An accountability and transparency device
- An information system for the public.

#### **Support of Metropolis**

Financial operations can apply both to cities in developed countries and those in emerging or developing ones. It is important that Metropolis support the financing requests that city councils make to the different banks and international organizations.

The Cities Bank project has raised a great deal of interest, even expectation. We recommend speeding up its start-up, especially with regards boosting training, technical assistance and the search for funds to carry out infrastructure projects.

15 Claude Martinand, "Économie et gouvernance des services essentiels", in Revue d'économie financière, "Le financement de la ville", March 2006, Paris, 11 pages. Also see: "Villes en mouvement: rapport sur la stratégie de transport urbain", from the World Bank. Also see: http://ppiaf.org (consultancy agency for public/private/World Bank infrastructure); www.wdm.org.uk (British anti-privatization pressure group which advocates public-private partnerships).



# COMPREHENSIVE NEIGHBORHOOD REGENERATION

## METROPOLIS 2008 • COMMISSION REPORTS

## **CONNECTING CITIES • SYDNEY**

The city transformation process often has diverging consequences. While some areas experience the positive side of urban development, other neighborhoods and districts, and even entire cities, can fall into a cycle of depression and abandonment. Today, we often turn to policies based on a concept of comprehensive regeneration applied to a neighborhood or urban area.

The commission aims to evaluate the physical, urban planning, economic, social and environmental impacts of comprehensive neighborhood regeneration projects by gathering the experience of cities and assessing the impact these projects may have on the city as a whole and the factors that may favor or threaten the impact.





A comprehensive approach to regeneration includes physical, social and economic factors.

## **C3: Comprehensive Neighbourhood Regeneration**

Presidency – Barcelona

Vice-Presidency – São Paulo

Chair – Jordi Hereu, Mayor of Barcelona

Vice-chair – José Serra, Governor of the State of São Paulo

Coordinator - Christine Piquemal, Metropolis SG

#### With the support from:

The Department of Territorial Policy and Public Works Foment Ciutat Vella, S.A.

#### Participating cities, regions and international organizations:

Abidjan, Antananarivo, Barcelona, Belo Horizonte, Berlin, Brasilia, Brazzaville, Bucharest, Dakar, Frankfurt, Lisbon, Manchester, Mashhad, State of Mexico, Moscow, Puebla de Zaragoza, Rio de Janeiro, São Paulo, Seoul, Teheran and Turin.

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Report's Author: Montserrat Pareja Eastaway, Doctor in Economy





The first Commission 3 meeting was held in Sao Paulo in March 2006.

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Public space in the Orcasita neighborhood of Madrid.

Tram in the neighborhood of San Siro, Milan.

## **1. INTRODUCTION**

Urban areas are characterized by being complex and dynamic systems where different physical, social, environmental and economic processes meet. Every day the local sphere confronts head-on the problems associated with the living conditions of local residents, and is unable to ignore the increasing pressure of competition in a globalized world. On the one hand it is necessary to join international city networks, and on the other to solve the internal problems that this search for competitiveness, which impacts people directly, can generate. It is essential to design a city strategy in line with global standards but without forgetting the peculiarities of the historical, socioeconomic and political context of each. As Borja and Castells say, "positive urban policies consequently move between the theoretical demands of competitiveness and the practical dynamics generated by competition between groups and territories in the age of globalization" (Borja and Castells, 1997, p. 185).

City regeneration is set in a context of concern for the quality of life of urban dwellers and is not indifferent to the premises that a global and sustainable world demands. Urban renewal processes are a priority on most local and regional political agendas and yet there is no single definition of what is understood by the 'renewal', 'regeneration' or 'rehabilitation' of neighborhoods. This is because of the multiplicity of related aspects. Building a school, improving the sewerage system, designing a new route for a public square, providing jobs for the local unemployed and rehabilitating building façades are all examples of what urban renewal can entail.

Every intervention has the goal of solving problems by responding to people's needs. The search for reasons for the degree of degradation of certain neighborhoods suggests there is no single cause in the origin of the problems (Van Kempen, 1994). Often, neighborhoods with identical characteristics in terms of design or tenancy can face completely opposite situations: while some are very attractive places in which to live, others are focal points of social marginalization. The interaction between different factors can lead to different results in terms of reputation, economic development and social conflict.

Broadly speaking, these problems can be classified according to whether they are eminently physical or social, although the obvious interrelation between the two blurs the border of such a classification. The conditions of the home and environment certainly determine possibilities for personal and social realization on the part of individuals; however, they do not guarantee the elimination of a surge in conflict between groups with different cultural or religious backgrounds in a neighborhood. At the local level, the undeniable interrelation between physical and social is what determines the most suitable form of intervention. The variability of the problems to solve in turn determines the way to approach them. To that end, each neighborhood uses the available means and resources that the historical and socioeconomic context puts within its reach. Renewal processes are composed of a wide range of mechanisms used differently and involving distinct agents and institutions, including, for example, banks, local governments, private associations and the people themselves, with the only goal of improving the residents' quality of life as far as circumstances allow. These agents interact differently depending on the context they work in and the resources they have at their disposal.

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Throughout the 20th century, and particularly in the second half, an in-depth debate about the optimal and suitable mechanisms that could make it possible to improve society's living conditions began to emerge in academic and institutional circles. After decades of intervention in cities and



The second Commission 3 meeting was held in Barcelona in May 2007.

neighborhoods, more or less regular trends, typical of particular contexts, have been identified. For example, while the demolition of neighborhoods has been a regular instrument for fighting social exclusion in a number of Dutch and French neighborhoods, it is not very viable in a context such as Spain's<sup>1</sup>. Similarly, while the regularization of property rights to homes in informal settlements has been seen as a sine qua non condition of the attempt to rehabilitate informal settlements in Africa<sup>2</sup>, it is precisely the privatization of public social housing in countries that underwent an economic transition toward capitalism, such as in central and eastern Europe, that has been the most important cause of the deterioration and lack of maintenance of homes there. Partnerships between public and private agents, with the goal of joining economic forces for regeneration, have a longstanding tradition in Anglo-Saxon countries, while there are few such practices in Latin America.

Despite the different traditions, governments today support a 'comprehensive' approach toward regeneration. The standard definition of urban regeneration processes makes reference to a "comprehensive and integrated vision and action that leads to the resolution of urban problems and which seeks to bring about a lasting improvement in the economic, physical, social and environmental condition of an area that has been subject to change" (Roberts, 2000). The European Union, for example, recommends the principle of comprehensive policies as one which "achieves integration at both the horizontal scale - to realize the synergies of further integration of social, environmental, health and economic dimensions of sustainability - and vertically, across all levels of the European Union, Member States and regional and local governments, with the goal of achieving greater coherency between the different levels" (European Sustainable Cities report for Local Authorities, online document).

The dynamics and variety of interventions and the contexts in which they act make each case a particular example with its own implications in terms of problems and solutions. However, a comparison of elements that have facilitated or impeded the good development of policies makes it possible to identify, independently of such peculiarities, the key points in the success or failure of an intervention. Such a comparison also throws light on opportunities for knowledge-transfer between cities and possibilities of policy transfers as well. According to Szemzo et al, (2005), 'transferability' in the context of urban regeneration is the possibility of communicating data, information, policies and experiences and it depends, among other factors, on political will and an open debate among the key actors responsible for putting projects into practice.

With this intention and bearing in mind the difficulties of generalization, Metropolis Commission 3 on Comprehensive Neighborhood Regeneration (C3) has structured its work around the following activities:

1. The conclusions and recommendations from the first C3 meeting in Sao Paulo, 27 March 2006.

1 In Spain, demolition has only been used on a widespread basis in buildings affected by aluminosis (the degeneration of cement used in construction) and not as a regeneration policy per se.

2 In informal settlements in Abidjan, Antananarivo and Brazzaville, for example. However, this does not happen in Brazil, which prioritizes the construction of infrastructure and equipment.





Informal settlements in Belo Horizonte.

2. The preparation and use of the results of a questionnaire sent to the Commission participating cities (see Appendix).

3. The conclusions and recommendations from the second C3 meeting in Barcelona, 7-8 May 2007.

4. The conclusions and recommendations from the third C3 meeting in Antananarivo, 17-19 September 2007.

An additional product in the preparation of this report was the construction of a website<sup>3</sup> with a good part of the materials used.

The analysis of comprehensive neighborhood regeneration was done on the basis of three major types of neighborhoods, according to the features that were the object of study in each city: historical centers<sup>4</sup>, informal settlements<sup>5</sup> and new urban centers<sup>6</sup>.

#### 2. CHARACTERIZATION OF PROBLEMS IN THE AREAS TO REGENERATE

As mentioned previously, the dimension of the problems that appear in neighborhoods differs in accordance with their type, context and historical trajectory. A general overview enables us to distinguish between shortfalls that are fundamentally physical or planning-related (lack of infrastructures, shortage of basic sanitary systems, deteriorated façades, etc.) and those that have an eminently social origin (concentration of marginal groups, poor economic development, minimum level of education). The debate regarding the interrelation between the two has filled a large part of the specialist literature on urban regeneration issues, particularly in reference to the establishment of priorities with regards intervention (Franck, 1984).

Neighborhoods are constantly undergoing processes of change. This dynamic contributes to outlining their present situation and also to the creation of expectations about them. Gentrification, degradation and modernization are just some of the elements that determine the current state of the problems in intervention areas. It is true that some neighborhoods have been problematic since they were built, showing signs of degradation, irregularity and problems associated with social issues since their origin. For example, informal urban settlements created by people without resources and which lack any type of public control (the downtown area in the region of Sé in Sao Paulo, Complexo do Caju in Rio de Janeiro and Aglomerado da Serra in Belo Horizonte) have been precarious from the start, determining their subsequent evolution to a large extent.



3 http://www.metropolis.org/index.php?action=mostrarComision&modul=comisiones&id\_comision=95
4 Neighborhoods in Barcelona, Sao Paulo, Rio de Janeiro, Puebla, Brasilia, Lisbon, State of Mexico and Mashhad
5 Neighborhoods in Sao Paulo, Rio de Janeiro, Abidjan, Brazzaville, Belo Horizonte and State of Mexico
6 Neighborhoods in Barcelona, Berlin, Frankfurt, Bucharest, Dakar, Manchester, Estado de Mexico, Moscow, Seoul, Teheran and Turin



Graffiti in an outlying neighborhood of Berlin.

Recovery Works at the Santa Caterina market, Ciutat Vella, Barcelona.

Similarly, some outlying neighborhoods that expanded rapidly to house waves of immigrants (Serra d'en Mena in Barcelona and Badalona) feature building deficiencies and a lack of space. Other areas have suffered over the years from a process of deterioration which has contributed to the creation of stigma and a negative perception on the part of citizens, which in many cases leads to abandonment and marginalization for a considerable period of time. This is the case of a number of historical centers before they were revitalized, such as those of Barcelona, Lisbon and Sao Paulo, as well as the Sector Comercial Sur in Brasilia.

Generally speaking, the physical or planning-related problems that affect urban areas include:

- Problems of location
- Problems related to the period of configuration or construction
- Problems related to the low or inexistent level of upkeep in the neighborhood
- Problems associated with housing (humidity, building defects, use of defective materials, etc.)
- Problems related with lack of/low-quality infrastructures and public spaces in the neighborhood.

In general, the physical obsolescence of a neighborhood requires a specific intervention as its effects on the people's living conditions are undeniable.

Perhaps the most visible form of dissipation in particular urban areas is physical obsolescence. There are many reasons for this, from lack of upkeep to buildings that were faulty from the start, unsuitable designs and shortage of infrastructures. Often, the abandonment of economic activity and population from some areas for others with more dynamism, better connections and residential opportunities make some areas unattractive to residents and potential entrepreneurs alike.

On the other hand, the general trend of the different socioeconomic components can be seen much more sharply in neighborhoods in need of an overhaul. A neighborhood's social structure changes over time and is affected by different phenomena that lead to or have been determining factors in mobility. The movement of people to places beyond the urban border is proof of the search for affordable housing or a better quality of life, etc. This can involve abandonment and the risk of degradation of particular areas, particularly downtown city zones (e.g., in the case of Puebla, or the Castelo de Sao Jorge neighborhood in Lisbon), but it can also affect outlying neighborhoods which have lost their attraction because they have been sidelined from city evolution (e.g., the Moscow neighborhood of Preobrazhenskoe or Frankfurt's Gallusviertel).





Construction work on the UB Faculty of Geography and History; Raval neighborhood, Barcelona.

Public housing in San Siro, Milan.

The most common features that characterize the composition and evolution of the people in these neighborhoods can be summarized as:

- Progressive ageing
- Conflicts related with multiculturalism and varied ethnic composition
- Concentration of groups with problems related to social integration, at risk of exclusion.
- High unemployment figures and low levels of education
- High rates of residential turnover together with local groups with little tendency to mobility
- Anti-social behavior and safety issues

In general, social problems in cities are worse in the neighborhoods included in the study, i.e., informal settlements, new urban centers and historical centers. Often these problems do not emerge in isolation and in fact the complicated tangle of social conflicts in neighborhoods makes it hard to identify which problem is a consequence of which, and what is the source.

A good many of the problems in a neighborhood are based on changes in sociodemographic composition. A lack of possibilities (and even sometimes will) on the part of families to move to other neighborhoods determines a life cycle for the neighborhood itself. While in the early days neighborhoods are populated by young people, they age as time goes by (some neighborhoods in Turin and Frankfurt are examples). This situation is a regular feature of many outlying neighborhoods that began life with direct public aid, offering properties to people who had recently arrived in the city in search of work. While these neighborhoods were initially occupied by young people with small children, over time they became associated with an ageing population, although the arrival of new immigrants is changing the demographic balance. Frequently tensions emerge from the coexistence in a neighborhood of young people (often recently arrived from other countries and cultures) and older residents (Hall et al, 2005).

Political ideas that seek a cohesive society free of mechanisms of exclusion try to include these neighborhoods in the formal city via a wide range of mechanisms that meet in the majority of urban renewal processes. Certainly the hope for a bright future involves, among other factors, creating more decent living conditions.

The case of historical centers reflects a paradoxical situation, as by definition these areas tend to be in central and well-connected parts of town but at the same time have become very run down because of aspects related to sociodemographic features and a concentration of people in small spaces without enough channels of communication, a lack of infrastructures and sanitary deficiencies. The physical features of these neighborhoods often fail to adapt to the needs of older people (e.g., the case of the neighborhoods of Castelo de Sao Jorge and Alfama in Lisbon) and physical barriers can be a determining factor in the poor habitability conditions of the buildings (lack of elevators, cramped apartments, doorways not wide enough for wheelchairs to get in and out, etc.).





Lack of infrastructures in the informal settlements of Tirana, Albania.

Aerial view of the Serra d'en Mena neighborhood, Badalona, Santa Coloma and Barcelona.

Also, depending on the system of public-housing provision in each country, these areas may have been used as a public-housing cushion. From the start, the construction of such neighborhoods is part of a social desire to provide public housing. Homes are given to those in need of a roof over their heads that lack the resources to achieve it by themselves.

In many cases, the neighborhoods have been occupied by families with few resources and a high level of social conflict. However, a common feature of many systems of public-housing provision is a move toward more market-oriented supplies and therefore a process of privatization. This change in system has a direct impact on the functioning of the neighborhood and consequently the process of renewal carried out in it (this is the situation in many neighborhoods in European cities).

Certainly the outlying location of these neighborhoods leads in some cases to serious problems of connection determined by a lack of infrastructure and public transport. Such shortfalls involve an urgent need for intervention to prevent the areas from being destined to disappear.

The majority of informal settlements began in the 1960s. The informal city is characterized by a type of city production on the part of widespread sectors of the popular classes, whose low incomes do not allow them to access formal neighborhoods and properties (Andreatta, 2007). Informal neighborhoods are a response to the lack of housing provision for the poorest without at the same time solving the main problems of urban development (sewerage, water and lighting infrastructure, etc.).

In this sense, the main problem of these neighborhoods is their location in the non-city. The lack of basic infrastructure endowments conditions the future possibilities of these zones. Parallel to this, a failure to define property rights to the buildings hinders the distribution of residents' rights and duties and makes the possibilities for social integration more problematic.

# 3. ANALYSIS OF INTERVENTIONS AND ACTORS INVOLVED IN INTERVENTION PROCESSES

Historically, theoretical approaches underlining intervention processes in the urban network have emphasized distinct aspects related to the intervention: broadly speaking, they distinguish between two types of approaches. The first is physical determinism. As Broady observed, the architect who builds a house or designs a plan is also largely determining the model of social life of the people who will live in that house (Broady 1968, 13-14). Urban renewal founded on this principle considers that by adding light (e.g., by demolishing nearby buildings), or by making physical improvements to houses or improving sewerage systems, the people who live in the neighborhoods will behave better and the social problems will disappear. In this sense, another type of intervention in the neighborhood, of a social or economic nature, would not need to be linked to purely physical interventions.

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The second approach to regeneration is the comprehensive approach. This is a reaction to urban policies based solely on physical determinism or a particular isolated social or economic aspect. Many authors have defined what is understood by a comprehensive approach to neighborhood regeneration<sup>7</sup>.

7 See, for example, Hastings (1996), Healey (1997) Mugnano et al, (2005)

C3. REGENERACIÓN

By and large, comprehensive regeneration simultaneously combines the three most important planks of urban renewal, i.e., physical, social and economic renewal, and includes as far as possible all the actors directly or indirectly linked with the neighborhood.

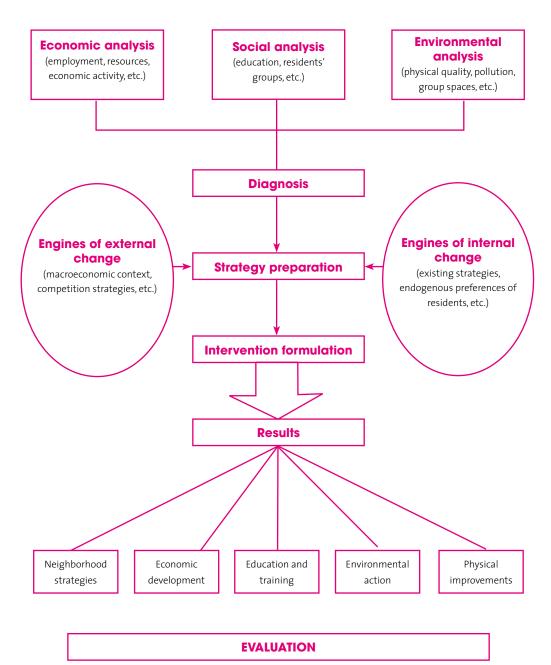
In order to take a more in-depth look at the characterization of comprehensive policies, two aspects are going to be analyzed closely: on the one hand, the design of mechanisms that make it possible to integrate all the policies that affect a neighborhood and, on the other hand, the factors that can determine the inclusion of the different actors involved.

# Policy integration in comprehensive neighborhood regeneration

In principle, comprehensive processes stimulate the territorial unity of the neighborhood from every perspective: they improve its physical quality (connections, infrastructure, etc.), boost local economic activities and pursue social cohesion and the involvement of residents in the territory.

As Diagram 1 shows, comprehensive processes of urban regeneration link both aspects at the global and local scales throughout the different intervention stages.

#### Diagram 1: The urban regeneration process





Source: Author's own work, based on Roberts, 2000, p. 20.

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Antananarivo, Madagascar.

Members of Metropolis Commission 3 in the training workshop in Antananarivo, Madagascar, September 2007.

Diagram 1 shows a type of urban regeneration based on an exhaustive knowledge of the intervention area in order to make an optimal use of the resources and endogenous potential available in the neighborhood.

Knowledge of the context structures and conditions both the intervention priorities and the design of the strategy. Identifying problems is not the only essential task: there are other aspects less closely linked to the intervention, such as socio-cultural and demographic developments, the features of the housing market, the economic attractiveness of the neighborhood and the political context in which the intervention is defined.

One of the key aspects in the design of intervention policies is in fact the institutional composition and inter-departmental relations in each organization. The context at the national scale affects the neighborhood as well as the competition strategies implemented at the city scale: they both delimit the possibilities of the regeneration processes. At the same time, identifying and promoting the neighborhood's endogenous potential can be one of the strong points in regeneration strategies (this has been a key issue in historical centers such as Ciutat Vella in Barcelona).

In this regard, once the available natural, economic and human resources, among others, have been defined, the question is how to make the most of them via the design of comprehensive policies that get the neighborhood involved. One way of linking renewal processes with the local people is through the participation and cooperation of all the agents with an interest in the neighborhood. One way that can guarantee a comprehensive approach to regeneration is getting the participation of the people who spend their daily lives in the neighborhood and making the most of the endogenous culture of the area. This contributes to a result in line with the priorities and requirements of the people who live there and ensures acceptance of the process. This aspect shall be developed in more detail in the following section.

Parallel to this, the 'time' variable appears to be a determining factor in every regeneration process, both in the design of the different intervention statuses and the achievement of sustainable long-term results. Although regeneration processes usually have long-term goals, it is important to recognize the value of measuring the progress of the strategies implemented, creating sub-goals in time that enable the identification of whether the progress is suitable or not.

One aspect that should be included in any comprehensive neighborhood regeneration from the start is the need for an intermediate and global evaluation of the results obtained during the intervention.

Comprehensive processes have many advantages but also a number of drawbacks. As Van Kempen and Van Beckhoven (2005) observed, while synergies between the different organizations that can be involved are not a feature of unidirectional policies (or ones aimed at solving a single problem), in comprehensive policies the need for coordination between courses of action aimed at different segments of life in the neighborhood (job creation, improved social inclusion, etc.) can mean better results. In area-based policies, comprehensive approaches enable the search for multiple solutions to the different problems that emerge in a neighborhood. This means that both large-scale interventions and small strategies require a certain connection that favors the external effects between them and, above all, that makes everyone involved in the renewal aware of their existence.



On the other hand, the need to coordinate the action of all the people involved in the regeneration requires an additional effort that is not a factor in non-comprehensive policies. Each actor can have different goals he or she does not share with the others in relation to the intervention. Agreement on strategy and the timeline of the results to obtain could be additional motives of conflict. Also, some processes involve solutions with different timelines, e.g., very often physical changes are visible in the short or medium term while a social-oriented intervention may need longer for the results to show.

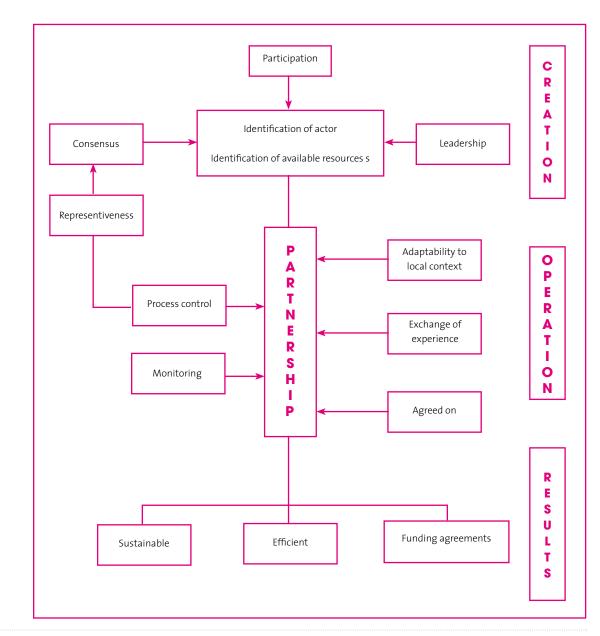
Similarly, comprehensive intervention policies should have the strategic link of the private sector, which can be the key element in the recovery of the economic fabric and therefore commercial activity and employment.

#### The importance of partnerships

Comprehensive policies not only correct different types of problems but involve a great many participants. In this sense, the articulation of actors via mechanisms such as partnerships is another example of governance applied to urban rehabilitation. As Le Galès puts it: "Governance relates to all the institutions, networks, directives, regulations, norms, political and social usages, public and private actors that contribute to the stability of a society and of a political regime, to its orientation, to its capacity to direct, and to its capacity to provide services and guarantee its own legitimacy" (Le Galès, 2002).

Diagram 2 shows the key elements to consider throughout the creation and operation of partnerships in urban rehabilitation processes, as well as the characterization of the expected results.

# Diagram 2. Partnerships in urban rehabilitation





In this way, comprehensive projects are more complex in their implementation because they should, supposedly, be undertaken via the coordination of the different agents involved, both public (local, regional or national governments, local public agents) and private (non-profit organizations, networks of associations and residents, etc.) as well as the participation of the different departments (education, health, territory) that configure the different institutions involved. Certainly, difficulties in implementation sometimes force the adoption of 'less' comprehensive policies, as Priemus and Metselaar have noted: "links (in urban rehabilitation policies) with economic questions, public health, culture, social aspects, etc. are often recognized but in general are hard to apply in the articulation of national urban rehabilitation policies" (Priemus and Metselaar, 1993, p.468).

# 4. INTERVENTION EVALUATION: FACTORS OF SUCCESS AND FAILURE IN REGENERATION PROCESSES

The goal of this section is to identify the aspects that have made a decisive contribution to the success or failure of a particular intervention. In reality, this involves a form of evaluation of any program, action or policy carried out in a particular neighborhood. However, it is essential to delimit the possibilities of this evaluation: firstly, what is understood by success or failure depends to a large extent on which actor or agent is asked. When has a policy failed? Probably not all the agents involved in the process would give the same answer. So a certain amount of controversy can arise when discussing what some people consider a favorable result of the intervention, as it is simultaneously a source of discontent to others. Secondly, there is no single definition of 'success' or 'failure'. Very often partial or temporary successes and failures in interventions are observed. Finally, the most appropriate acceptance of 'success' and 'failure' is that which makes it possible to assess both the intervention process and its results, thus linking success or failure to the achievement of results similar to the proposed goals.

# A) Evaluation linked to the process

#### Participation, leadership and trust

In the majority of the cases analyzed, the concept of 'participation' understood in its broadest definition was considered one of the key factors that contributed to the success or failure of an intervention. A high level of participation is a desired result and one that is also necessary during the process. Participation should be understood broadly and involves not just the local residents but also private investors who can help multiply the effects of private investment in the regeneration process or those with cultural or religious interests in the neighborhood.

#### Soziale Stadt Gallusviertel

#### An example of participation in Gallusviertel, Frankfurt am Main

The neighborhood of Gallusviertel in Frankfurt has the typical features of a new urban center suffering from loss of population, the emergence of groups with difficulties (low income, low level of education and high unemployment rates). It also requires improvements to the homes and environment.

Soziale Stadt Gallusviertel is a long-term project (2001-2011) with the fundamental aim of regenerating the neighborhood, developing a new business district and a new zone. A further goal is the participation of local residents in decisions that concern the project. The project is being carried out in five spheres of intervention:

- 1. Promoting the endogenous potential of the neighborhood.
- 2. Improving the local economy.
- 3. Improving the cultural and social life.
- 4. Adapting the physical elements of the neighborhood's environment and
- 5. Improving housing conditions.

The project involved the establishment of a neighborhood office in 2003 aimed not just at offering information to residents but also receiving their complaints, together with the establishment of a Citizen Participation Advisory Council consisting of 39 local agents and inhabitants who discuss and propose regeneration alternatives.

http://www.sozialestadt.de/en/programm/

Participation involves consensus, agreements and trust between agents. It requires cooperation, a will to negotiate and acceptance of the negotiation conditions. In this sense, the political and social context of the neighborhood is favorable to a greater or lesser degree to the participation and inclusion of everyone with an interest in the area. Reaching agreement is not always easy.



# Restructuring of the KOUMASSI Grand Campement en Abidjan, Côte d'Ivoire Provision of equipment with the participation of the affected population

This project, like all the projects that try to improve housing conditions in the informal settlements of Abidjan, includes the affected population in the regeneration process. In 2005 it was estimated there were some 80,000 inhabitan ts of the neighborhood, and that it was growing. The average size of the homes was around 30 square meters.

The creation of Restructuring Aid Committees (RACs) in the neighborhood is aimed principally at representing the interests of the population throughout the project. Actions to publicize and promote the renewal procedures use local TV and radio as well as the press and word-of-mouth.

The project evaluation suggests the people are happy with the results, in particular with regards the assignation of property rights to their homes.

One of the crucial stages in neighborhood rehabilitation is the initial moment when all the people who could participate throughout the process are identified and acknowledged. This is when dialogue and the learning process in search of agreement begin. This is where you detect the people who can exercise as leaders and driving forces of the process. In a good many regeneration processes, local governments become the leaders throughout the process; however in some particular contexts, the role of neighborhood associations as the promoters of processes is far from negligible.

Transparent regeneration processes open to dialogue and the exchange of experience and information, with representation of all the local agents in the different associated decision-making stages, is essential to a successful result, accepted as such by all the parties concerned.

Education plays a fundamental role in changing the mentality of the people. Beyond the private terrain there is the public space which should be considered an integral part of the daily lives of local residents. Involvement in its maintenance and the design of improvement proposals is a guaranteed way to ensure increased citizen satisfaction.

# The PORTO DO RIO Plan for Recovery and Revitalization of the Port Region Revitalization of a historical center in Rio de Janeiro, Brazil

A new phase in the municipal town-planning policy of Rio de Janeiro began in 2000. The Prefeitura took over leadership of the discussion about improving and recovering the use of property assets. Three neighborhoods, Saúde, Gamboa and Santo Cristo (317 Ha), which combined zones dedicated to residential use and areas linked to port activity, were the subject of the intervention. They had a number of the problems typical of rundown historical centers: loss of population (in around 20 years they had lost 11,000 inhabitants), difficulties with regards connections with other neighborhoods, poor conservation of some buildings and abandonment, together with economic decline.

The greatest potential of the port zone was its proximity to the downtown area. The regeneration process was aimed at providing an economic boost to the neighborhood, raising the value of the cultural heritage and improving connections, all the while maintaining the residential nature of the area and creating a model of sustainable development.

The urban renewal initiatives went hand-in-hand with the monitoring and participation of the different actors involved in the process, both in terms of the administration (i.e. the Prefeitura do Rio de Janeiro and the port authority) and social groups (Grupo dos Interlocutores). The creation of a work consortium as a management office for the plan was considered of vital importance to its viability. The introduction of partnerships between public and private organizations was also a determining factor in the plan's management.

http://www.rio.rj.gov.br/obras





Sign announcing works at Serra d'en Mena. Barcelona.

Demolition and reconstruction of the Sant Roc neighborhood, Barcelona.

#### Political will and the definition and promotion of strategies

Independently of the type of neighborhood, one key factor in the success of renewal policies is the existence of a clear political will to carry the process forward. The initial stages prior to the intervention are essential for getting the acceptance and agreement of all the parties involved.

It is also crucial to design a clear strategy that is not too generalized and which links the different process phases to medium-term goals. This requires exhaustive knowledge of the context where the intervention will be done. Knowing both the endogenous potential of the neighborhood and identifying possible actors involved in the day-to-day work can guarantee success in so far as the renewal process will be sustainable. Also, identifying all the problems the rehabilitation work faces makes it possible to prioritize them in a fashion agreed on by all the parties.

# Urban Regeneration Project in Turin (Via Artom, Parco Colonnetti) Consensus as a mechanism to prevent conflict

The urban regeneration project aimed at improving the Via Artom area and Parco Colonnetti got under way in Turin in 1999. The project was to be carried out over the course of more than a decade and has been subject to systematic evaluations since it began.

The intervention involved the demolition of a number of buildings and the resettlement of the inhabitants in other buildings in the district or in other parts of the city. The most significant elements of success have been:

- The regeneration of public housing in a non-conflictive fashion
- The resettlement of 150 families without any social tension and within the scheduled time

The process has successfully created a social and demographic 'residential mix': a combination of property types (public and private) enabled the mix of different levels of income in the territory, and young people have been given more access to public housing.

The improvement in the neighborhood's image began when, as well as the residential mix, a good part of the initiatives and events that attracted citizens to the area were carried out. This was done without eliminating the neighborhood's identity in the city.

http://www.comune.torino.it/periferie

The role of governments in intervention processes certainly differs in accordance with context. The solutions that rehabilitation programs afford should be adapted to the possibilities each country and/or society can offer. While in typical situations in developed countries, partnership formulae are the most common way to make the most of the synergies between the different public and private agents, in situations in countries with fewer resources, public intervention should guarantee at least



the basics. Intervention in informal settlements requires either a public sector or an international organization dedicated to cooperation to fund a basic sewerage system as a sine qua non condition and simultaneously to carry out a process of education and environmental awareness for all citizens. On the other hand, government support for local agents with the capability to assume certain functions is also extremely important. In particular, the role NGOs play as responsible officers on the ground is essential.

Our Challenge: The Social and Urban Revitalization of the Neighborhood of San Antonio, Puebla de Zaragoza, Estado de Mexico

Diagnosis as a mechanism of participation in the intervention project

This project shores up and complements the intervention begun in a preliminary stage (2004-2005), expanding it to the whole area and implementing a dignification program of the urban image.

The neighborhood was diagnosed before the intervention began. To that end, as well as the use of statistical sources, interviews were taken and a preliminary poll carried out with the inhabitants (June 2005).

The concerns of the population as evaluated in this preliminary poll were taken into account and the following actions of social inclusion considered essential:

• Offer programs and courses to improve the level of education

- o Workplace training and refreshment workshops/courses
- o Courses for the culmination of secondary school and preparatory qualifications to raise the level of education in the neighborhood
- o Training courses and workshops for women and the elderly

• Adapt facilities to run a childcare center or crèche at prices affordable to single mothers and low-income families in the San Antonio neighborhood

Adaptation of spaces for recreational and artistic activities

Responsibility for the program lay with two key agents: Puebla City Council (through the Secretariat for Urban Administration, Public Works and Ecology and the Municipal System for Comprehensive Family Development) and the Participation Committee of local residents (including representatives of the different social groups, young people, women and the elderly).

www.puebladezaragoza.gob.mx/dif/index.htm

Finally, it is essential to use promotional instruments prior to the start of the intervention process to eliminate unwillingness and to ensure future support. This is relatively easy from the time when the action strategy has been agreed on and a pact drawn up with regards action priorities.

#### The coordination needed between agents and management mechanisms

In both partnership processes and those clearly led by the public sector, it is necessary to have better vertical and cross-sectional coordination between actors and projects. One way to do this is to clearly define the tasks to carry out and the competencies and responsibilities throughout the length of the intervention process.

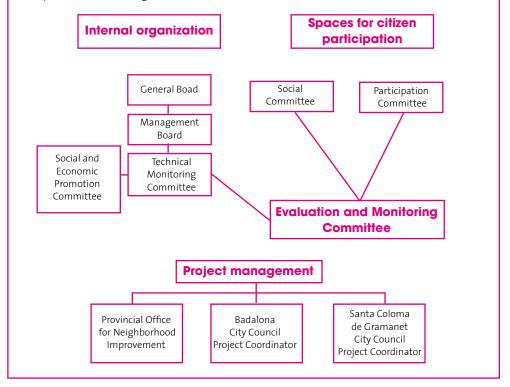
In many of the case studies, one element that augured a favorable result of the intervention was the execution of the rehabilitation of the neighborhood via a comprehensive management model, i.e., the creation of an organization that centralized competencies and facilitated the process. However, it is important to bear in mind that a lack of execution operability and poor management of intervention plans on the part of this central office could equally be a weak point associated with its operation.



# Comprehensive intervention project in the seven neighborhoods of Serra d'en Mena The revitalization of seven outlying neighborhoods of two cities, Santa Coloma de Gramanet and Badalona, Spain

The initiative adopted jointly by the local governments of two municipalities, Santa Coloma de Gramanet and Badalona, and the Barcelona Provincial Council, has been included in the rehabilitation programs of neighborhoods established by the government of the Autonomous Community of Catalonia. It affects seven neighborhoods which form part of the northern periphery of Barcelona. To that end, the following system of participation, management and evaluation was implemented:

http://www.ccbcnes.org/serramena/index.htm



The generation of ad hoc consortiums to channel resources and ideas with their own programs and a binding strategy in the regeneration process are among the mechanisms frequently used to facilitate continuity and the economic monitoring of interventions.

From among the key elements that seem to contribute to long-term project sustainability, it is important to mention that policy implementation should reflect local priorities and at the same time ensure a strategic approach that guarantees coordination among all the actors involved in the process. The definition of intermediate goals that permit evaluation before the end of the action as a whole ensures monitoring and enables the possibility of modifying the strategy in the medium term, in line with the efficacy of the results obtained.

#### Funding

One risk inherent to any regeneration process is the local government's ability to meet the cost of the needs associated with the improvement project. In many programs, a key element in determining the viability of a regeneration process is the availability of funding resources not only at the start of the program but on a continual basis through to the final stages. Depending to a large extent on the context, getting this funding is either the exclusive responsibility of the local government in charge of the regeneration process, or the search for money to get the intervention up and running is shared with other agents willing to co-fund the interventions.



#### Urban development plan of the neighborhood of Preobrazhenskoe Multiple public and private agents involved in the renewal of a Moscow neighborhood

Improved quality of life for neighbors via the provision of more services, better infrastructures and equipment are the main thrusts of the renewal work that began recently in this neighborhood and which is expected to run until 2020.

As well as containing significant historical and cultural legacies, the neighborhood has a relatively high percentage of the precarious housing stock. People living in deficient situations account for around 8% of the neighborhood's residents (around 66,000 people). The program anticipates specific interventions to relocate people in a precarious condition within the neighborhood and in turn new buildings to attract more people.

The scale and ambition of the project requires a high level of participation of funding sources. In particular, the attraction of domestic and foreign private capital and negotiation with potential backers is necessary to undertake a rehabilitation project of this size.

http://www.sozialestadt.de/en/programm/

Certainly, the observed trend is to share funding processes, i.e., responsibilities are divided among the people interested in carrying the neighborhood regeneration-process forward. Private agents are becoming increasingly involved from the start in the contribution of funds in exchange for 'rewards' once the renewal work has ended.

One way of formalizing this type of agreement is via a 'neighborhood contract' which stipulates the origin and amount that each party contributes. A determining factor in the success of this process is transparency and the systematic and periodic review of the agreements.

In most rehabilitation programs, funding is defined for a particular period. The presumption that the public money used in the programs has a catalyst effect on the private sector, creating further long-term results is part of the philosophy of most programs. However, one potential problem that can arise when the funding guaranteed for the process ends is that there is a lack of definition of strategies and goals to take it further.

# **B) Evaluation linked to the result**

#### Public and private ownership in informal settlements

Informal settlements should belong to the city and it is necessary to identify them via official addresses. One of the primordial tasks in regeneration consists of awarding formal ownership rights to the people who occupy the homes following the period when they built them themselves. Town-planning legislation is a fundamental part of organizing the informal city and guaranteeing security for land occupation by regularizing ownership.

The comprehensive regeneration of informal settlements should also prioritize public space and infrastructures over private units. Improved public space generates positive external effects more than the private rehabilitation of a home.

#### Inclusion of sustainability goals in regeneration

Comprehensive neighborhood regeneration should promote processes that can be sustained over time. Partial or temporary solutions are a waste of resources in the long term and an important loss of economic efficiency. A comprehensive approach to regeneration is inherently more sustainable because it goes beyond solutions that only affect buildings to include aspects that consider the community, employment and other types of socioeconomic objectives.

Certainly many of the factors that promote the sustainability of a neighborhood and the regeneration process fall outside the realm of local governments, such as the local economy, property market or the political context of the country or region in which the neighborhood is located. However, there is no doubt that sustainable regeneration is one of the factors that promotes the success of an intervention. Some aspects should therefore be included so that regeneration improves the neighborhood's sustainability. One is mobility and connections with the rest of the city. Integrating this aspect will guarantee the inclusion of the neighborhood in the formal city.



Vila Viva Program, Belo Horizonte, Brazil

#### A comprehensive approach to the regularization of the informal city: a multi-sectorial partnership

The purpose of the Vila Viva Program is to include the Aglomerado da Serra neighborhood in the formal city. To that end, the approach is both physical (recovery of environmental resources and provision of equipment and services) as well as social, and involves community development (social inclusion programs and use of cultural potential, among others).

The intervention proposal is based on three major areas:

- Urban restructuring
- Environmental reclassification
- Related social work

Under the leadership of Belo Horizonte City Council, the Vila Viva Program incorporates a multiplicity of agents of a public as well as private nature which are fruit of social initiatives in the intervention partnership. They include the Aglomerado da Serra community, consultancy companies, construction companies, the Minas Gerais sewerage company, the Minas Gerais electricity company, NGOs that work in the Aglomerado, the National Bank for Economic and Social Development and the Federal Government.

A key element in the program's success is the promotion of the process among citizens via the creation of a Social Communication Plan. The preparation of this idea began with the certainty that the right to information was an indispensable part of improving public participation and consequently building a sense of citizenry.

www.pbh.gov.br

The recovery of the environment is a key factor in the long-term success of a regeneration process. Including the environment in the long-term goals even though it is hard because you cannot see the results immediately is extremely important for the future sustainability of the neighborhood.

#### Shoring up the neighborhood's socioeconomic fabric

The construction of certain neighborhoods, particularly ones located on the urban fringes, was in the past often linked to the industrial development of the city. The possibilities afforded by the local economy, or even a single employer, facilitated the rapid construction of blocks of houses for workers. Over time, economic changes have impacted the neighborhoods, which have either become commuter suburbs with no type of activity or were abandoned by the residents in search of other, more attractive areas. Preventing a loss of neighborhood identity following an intervention guarantees that the people will identify with the result.

# Tourism and local people: two focal points of intervention Comprehensive project in Castelo de Sao Jorge, Lisbon

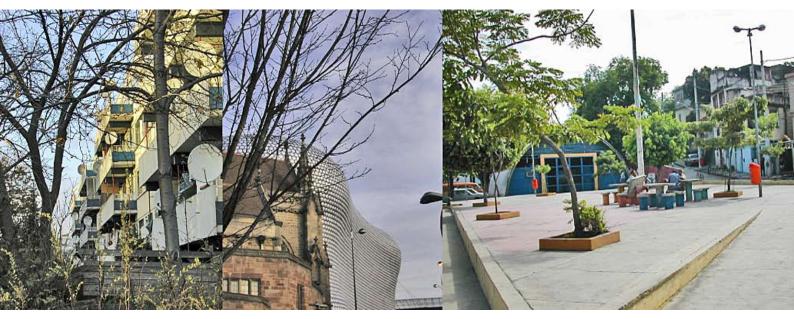
The neighborhood was declared a 'critical zone for recovery and urban reconversion' in 1985. The comprehensive project was established to improve the area from a socio-cultural and tourist viewpoint, while also combining the improvement of the living conditions of the locals, the promotion of their participation in the social life of the neighborhood and the revitalization of traditional commerce, creating new cultural and recreational facilities to benefit locals and tourists alike.

Under the leadership of the City Council, the multidisciplinary Castelo Work Team was created and given the job of managing the neighborhood, including the planning, start-up and supervision of all the interventions that were necessary. Public companies were also created to manage the provision of infrastructures.

The improvement of the neighborhood has been possible thanks to a combination of public and private funding. One key factor in the long-term strategy adopted for the intervention was to link the protection of the historical heritage and tourism with local economic development, preserving the residential occupation of the locals.

http://www.cm-Lisbon.pt





Regeneration policies improve a neighborhood's living conditions.

Regeneration policies improve a neighborhood's living conditions. Some elements that make a decisive contribution to making a neighborhood more attractive are the existence of job opportunities, a commercial life and the promotion of the existing economic life. Comprehensive projects that include measures aimed at stimulating business dynamism in the neighborhood, using the existing resources and generating jobs for residents guarantee a lasting solution. In particular, the development of retail trade not only brings life to the city but also means that family spending on consumer goods stays in the community.

In this aspect, coordination with employment policies designed at other levels of government (regional or central) is essential in order to not duplicate resources and to make the most of the synergies of the 'top-down' opportunities afforded.

It is also important to mention the role the social economy or tertiary sector can play, offering job alternatives that seek the integration of certain groups in the functioning of the neighborhood. For example, care for the elderly and handicapped, or part-time job offers.

# Integration of the neighborhood in the city and mix of uses

Comprehensive urban rehabilitation should link the neighborhood with the city and in turn provide a mix of uses in the community itself. Processes that improve the built environment should integrate it in the urban landscape via convincing town-planning designs that make it possible to assimilate the rehabilitated zones into the city.

One strategy that appears to guarantee an improvement in the reputation and the idea people have of the neighborhood is to achieve a considerable variety of uses in the area. The neighborhood should accommodate a broad segment of demand, different types of buildings, a variety of equipment and infrastructures and a range of economic initiatives. Boosting the socioeconomic fabric of the neighborhood is the way to prevent commuter suburbs, overly gentrified neighborhoods or areas without any commercial activity.

The neighborhood should meet a function in the city defined by its mechanisms of adaptation to the environment, by its residents and by the potential and resources it offers the rest. Forming part of the city also means that the neighborhood should meet the demands of being a part of it. The challenge in regeneration basically consists of offering the mechanisms to achieve this.



Favela-Bairro program: taking the city to the citizens, maintaining the local spirit Urban development of informal settlements, Rio de Janeiro, Brazil

The Favela Bairro program was a municipal initiative that began in the 1990s with the goal of building up all of the infrastructure needed to turn the favelas into city neighborhoods without demolishing the existing structures. The extensive duration of the favelas had eliminated their classification as 'provisional' and turned them into stable urban developments lacking in basic services.

The first project in the Favela Bairro program involved 15 medium-sized favelas containing between 500 and 2500 homes. The speed of the process favored the immediate visibility of the project and therefore the support of the public. The program involved the collaboration of the different municipal departments concerned and at the same time the implementation of other non-urban related programs (educational and health) that were the responsibility of other levels of government, i.e., state or federal, already present in the new spaces built. One key factor in the program's success was the respect for local culture, getting the inhabitants involved via a neighbors' association.

http://www.rio.rj.gov.br/habitat/favela\_bairro.htm



# 5. CONCLUSIONS AND RECOMMENDATIONS

Throughout this report, we have collected the different experiences of urban rehabilitation of new urban areas, historical centers and informal settlements. Across the board, one relevant conclusion is the acceptance of the superiority of **comprehensive approaches** to regeneration over the implementation of unconnected policies that deal with isolated aspects of the neighborhood, whether they are physical, social or economic. This does not conceal the increased difficulty in the implementation, control and evaluation of projects that incorporate a multiplicity of agents and which pursue the integration of diverse policies.

When facing the question of how to improve in order to achieve policies and programs that definitely benefit neighborhoods and their actors, particularly the local residents, learning and **knowledge transfer** among the people who carry out the rehabilitation policies in different contexts, types of neighborhoods and countries are key factors in the design of comprehensive regeneration programs with a high chance of success.

On the other hand, there is the possibility, without underestimating the peculiarities of each type, of extracting **common factors of success and failure** from all the experiences. Independently of the particular features of each case, cities should not be only productive and competitive in the international environment but should also be inclusive of the whole of society.

The regeneration of a neighborhood includes improving the built environment (i.e., the buildings and homes, group spaces, connections) but it should also incorporate stimuli for the development of community life on the part of the residents. A mix of uses in the space is a good rehabilitation criterion. Also, making the most of the endogenous potential of the neighborhood and considering the peculiarities of the context make it easier to design sustainable regeneration policies. So, before designing an intervention strategy, it is necessary to diagnose the situation of the neighborhood.

In all the cases studies, there was no doubt about the synergy effect between public and private actors. Many times the start-up of public works boosted private initiatives and local activities. Creating a suitable context for the synergies between the two, i.e., **public and private actors**, is an inexorable condition for a successful regeneration process; defining a clear strategy, exercising leadership and political will are undoubtedly determining factors. In this sense, the search for stable funding sources facilitates the continuity of processes and eliminates the uncertainty and risk associated with any possible budgetary stagnation. There is no doubt that as soon as the money needed for the intervention has been found or guaranteed, other factors emerge as fundamental to achieving the regeneration goals.

Identifying good practices and, in particular, the factors of success that have contributed to them, are interesting actions to carry out in order to boost the transfer of policies between one city and another.

Finally, the need to **evaluate** the results of policies and the functioning of the different mechanisms throughout the process is fundamental to guaranteeing the success of future programs and policies. The availability of objective parameters that support evaluation and congregate all the wills of the actors involved in the regeneration process makes it possible to ensure and reinforce the need to implement regeneration policies with and for the people.



# 6. APPENDIX

# Informal settlements

Restructuring of the KOUMASSI Grand Campement	Abidjan
Vila Viva Program	Belo Horizonte
Draft project of the State Program on Comprehensive Neighborhood Rehabilitation	Estado de Mexico
Porto do Rio: Plan for the Recovery and Revitalization of the Port Region	Rio de Janeiro
POUSO: Urban and Social Orientation of Informal Settlements Program	Rio de Janeiro

# **Historical Centers**

Comprehensive Intervention in the Neighborhoods of	
Santa Caterina and Sant Pere	Barcelona
Revitalization of the Sector Comercial Sur	Brasilia
Comprehensive Project for Castelo de Sao Jorge	Lisbon
Regeneration of downtown Mashhad,	Mashhad
Regeneration of Grand Shohada Square	Mashhad
Our Challenge: The Social and Urban Revitalization of the Neighborhood of San Antonio	Puebla de Zaragoza
Action Center	Sao Paulo
Gran Visión Projects (*)	Historical Center of Toluca
Rescue and Rehabilitation Project (*)	Historical Center of Tlalmanalco

# New urban centers

Soziale Stadt Gallusviertel	Frankfurt
Urban development of the neighborhood of Preobrazhenskoe	Moscow
Recovery project of Cheong Gye Cheon	Seoul
Urban regeneration project Via Artom	Turin

(\*) Questionnaire unavailable.



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# URBAN MOBILITY MANAGEMENT

METROPOLIS 2008 • COMMISSION REPORTS CONNECTING CITIES • SYDNEY

Sustainable development and the quality of life in the metropolises will depend increasingly on the comprehensive management of urban mobility. Traffic and transport have to be compatible with urban planning, economic development and the protection of the environment.

The Commission aims to examine urban mobility services and structures. To this end, it will prioritize the mobility and social cohesion, the financing of urban mobility and the urban commercial and freight transport.





Commission 4 is a platform for the collection, distribution and exchange of information on relevant issues of urban transport conditions.

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Vice-chair – Jung Woo Chang, Director General of Transportation, Seoul

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#### Participating cities, regions and international organizations:

Abidjan, Antananarivo, Barcelona, Belo Horizonte, Berlin, Brussels, Bucharest, Casablanca, Esfahan, Gwuangju, Hangzhou, Istanbul, Kinshasa, Kolkata, La Habana, Mashhad, State of Mexico, Montreal, Moscow, Puebla de Zaragoza, Seoul, Sofia, Stockholm, Tehran, Toronto

**Report's Authors:** Diana Runge & Hans-Joachim Becker, Technical University Berlin, Department for Integrated Transport Planning, **with the support of:** Urte Schwedler & Michael Abraham, Technical University Berlin, Department for Integrated Transport Planning





Mobility and transportation are key components of urban life in cities all over the world.

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The social dimension of transportation influences the evolution of social structures and practices.

# **1. INTRODUCTION**

# **Urban Mobility Trends**

Mobility and transportation are key components of urban life in cities all over the world. People desire mobility both for its own sake and because it enables them to overcome distances between different places to satisfy different needs. Businesses desire mobility because it is vital for their operation and functioning. However, the need and want to 'be on the move' also cause a number of negative impacts, such as air pollution, congestion, noise, greenhouse gas emissions, disruption of neighbourhoods, accidents, etc. These problems are most pronounced in urban areas, which in today's globalised world are focal points of economic and social development. Transportation in cities is often dominated by the use of the car, which despite measures aimed at restricting its use turns out to be in higher demand than ever. The tension between the human desire for mobility and the concern about the negative impacts of the physical realisation of this desire in form of transportation raises the question on how to shape transportation systems that supply a maximum level of mobility while generating only a minimum of negative impacts. Hitherto most cities have acknowledged the fact that they need to rethink mobility and implement measures for achieving urban transport systems that satisfy the claim for sustainability. However, the problems that arise and the challenges they are faced with are as numerous as the attempts made to tackle them.

Generally, the following trends in urban mobility can be noted in cities all around the globe:

- Car ownership and use have grown almost universally, thereby influencing settlement patterns and urban structures in such a way that a 'vicious circle' is being generated, leading to yet again a growth in car dependency.

- Car use tends to be lowest in city centres where public transport is available and parking is restricted and highest in suburban areas that are poorly served by public transport.

- Public transport ridership has decreased in a great number of cities; however, there are also some examples for a stabilised use of public transport, and sometimes even for a growth in passenger numbers.

- The use of non-motorised means of transport, namely walking and cycling, varies greatly across the world. It is highest in developing countries where often no alternatives exist, and lowest in cities of the developed world where virtually everyone owns a car.

- The social dimension of transportation, i.e. the degree, to which transportation influences the evolvement of social structures and practices and is in turn influenced by the way people live and travel, is often neglected, which – among others – causes social exclusion and the deterioration of living conditions for a large number of urban inhabitants.



- Similar to the developments in passenger transport, the share of environmentally friendly modes for freight transport is in decline, which in conjunction with increasingly globalised flows of goods leads to a deterioration of the traffic situation also in urban areas.

- Transportation, and particularly fuel-based road traffic, is a major and growing source of air pollution, noise and CO<sub>2</sub> emissions.

- The developments in the transport sector are influenced by a number of factors ranging from economic conditions over urban development to social practices, so that no universal solution exists.

The importance of mobility increases in any given period of time. However, the negative impacts of evergrowing transportation supply become more and more apparent even for the most positively thinking advocates of the "age of mobility". In order to ensure that the benefits of mobility are not outbalanced by its drawbacks, transport system development needs to be matched with other requirements regarding, for example, spatial development, the environment, legal and administrational conditions as well as the quality of life and expectation of citizens.

At present, the outlined – and other – transport related developments can be detected in all countries, however, they are not only starting from different existing conditions, but moreover the accelerated dynamics of change are somewhat unique. It is within this context that Commission 4 had established its agenda for the period 2005-2008, which is subject to review in the paper at hand.

# 2. COMMISSION'S AIMS AND ACTIONS

Commission 4"Urban Mobility Management" is a platform for the collection, distribution, and exchange of information on relevant issues of urban transport conditions. Likewise, the Commission provides a forum for its members to enter into discussions on specific circumstances, solution approaches and the possibility of joint actions. The issues that have been dealt with throughout the period lasting from 2005 to 2008 were identified and agreed on during the 8th World Congress of Metropolis in Berlin in May 2005. Three main topics, thereby, emerged as being of foremost interest to the cities:

1. Mobility and Social Cohesion, i.e. the importance of mobility for guaranteeing all citizens equal access to and participation in social life; establishing transport systems adapted to the people with the most needs, such as children, the elderly and the handicapped; paying particular attention to gender issues; developing and implementing measures that guarantee equal access to public transport and that increase traffic safety through the use of technology and organisation.

2. Financing of Urban Mobility: mechanisms to fund infrastructures and public transport systems; to promote the exploration and use of innovating funding systems for all types of transport; to follow the principles of efficiency, transparency and modal integration, to prioritise the interest of transport users, and analyse the economic and social impact of public transport and its specific value for the functioning of cities.

3. Urban Commercial and Freight Transport, i.e. the need to organise inner-city distribution of goods and services in such a way that it benefits the economy, local businesses and citizens without impeding on the urban environment, air quality or the conditions and quality of urban public space. Also, a number of cities are hubs for global freight streams, which are of importance for the city, yet they may also to a large degree negatively affect local conditions and the urban environment.

The rationale and starting points to deal with these and further issues of importance were also debated and agreed on in Berlin in 2005, resulting in the Berlin Declaration on Sustainable Urban Mobility. The Declaration, which can be found at the end of this report, briefly outlined the thematic areas of interest to cities and emphasised the dedication of the member cities to enhance mobility while limiting the negative impacts of transportation. Furthermore, the signatories of the declaration pledged for the continuation and strengthening of the knowledge transfer hitherto carried out, recognising it as a starting point for a new era of co-operation between metropolises around the world.

Thus, the course of action of the Commission in the period 2005-2008 differed from previous activities in that it applied a much more strategic perspective. The Commission did not, however, launch concrete actions, but instead it embarked on the demanding, yet often underestimated task of obtaining reliable information on the scope and extend of the chosen issues, and to identify similarities as well as differences between cities. Consequently, a comprehensive process of stock taking and analysis has been initiated and carried out in a systematic way every year for every thematic area. For every topic,



surveys among the member cities were conducted, which resulted in the preparation of comprehensive background papers as input for the discussions during the conferences. Likewise, every conference was thoughtfully documented in order to make the results accessible for other network members and cities interested in the respective subjects.

As result, Commission 4 now holds one of the most comprehensive data and information bases on aspects and developments of urban transport world wide. What is more, the scope of the information available goes well beyond that of ordinary information and data bases in that it is not restricted to numerical values derived for example from traffic counts. Instead, the information is contextual and reflects the actual conditions on the ground as well as its perception by city officials and local actors. Such a well catalogued inventory on urban transport issues may be of great interest and support to all actors - local, regional and global – that strive to become more actively involved in the shaping and improvement of urban transport systems.

The following chapters will now briefly summarise the work of each year of the past working period, emphasising results and most relevant outcomes.

# **3. MEETINGS**

# 3.1 Berlin, May 2005: 8th World Congress of Metropolis

Under the overall headline of the World Congress "Tradition and Transformation – the Future of the City" the Commission 4 Meeting in Berlin facilitated exchange on three topics of prime relevance for metropolises world wide.

First, the intertwined relationship between transport and spatial development was focussed on. Suburbanisation of housing, trade and production were thereby highlighted as one of the major challenges to cities and their transport systems. Case studies from Berlin and Melbourne referred to the somewhat paradox situation of urban spatial growth that takes place without matching population growth; a phenomenon that is known as urban shrinking. Fragmentation of landscapes and the urban fabric as well as increasing travel times and car use are some of the consequences that question the viability and functionality of urban transport services. In contrast, a case study from fast-growing Beijing, highlighted the need for fast and efficient mass transit system to match transport development with the accelerated growth of booming Asian centres and their population.

Proposed solutions to shape the transport-space relationship in a positive manner include the better coupling of transport and spatial planning, re-development of inner city areas to better meet residents' needs, adequate road space management, prioritisation of public transport, and the implementation of up-to-date technologies, such as remote controlled ticketing systems, driverless train systems, etc. The efforts needed to achieve the proposed matching of land use and transportation, the political will required as well as the achievements and rewards that can be obtained within only a 10 year period of stringent and successful, dialogue-orientated planning were impressively illustrated by a presentation on developments in Bogotá.

The presentation, furthermore, led over to the second topic of debate, namely dialogue-oriented transport policy and planning. Case studies were provided from Barcelona, Berlin and Seoul. While these cities all differ profoundly in their transport and spatial conditions, their political and administrative structure as well as legal requirements and financial options, the lessons learnt in the course of recent planning experiences showed striking similarities. Most noteworthy, it was highlighted that mobility is a highly emotional subject among many groups of society, which is why a minimum consensus on basic issues need to be achieved before any steps to change existing systems may be undertaken. Also, planning needs to involve technical and administrational experts as well as representatives of transport operators and the general public. The consideration of their interests, thereby, is not only a prerequisite for the acceptance of measures, but it also supports the drawing up of better, more realistic and relevant strategies and plans. In order to do so, formal structures of participation that are not tied merely to individual projects but rather represent a constitutional element of the planning process as such are needed. Lastly, long-term continuity and reliability of plans proved to be crucial for planners and politicians in order to ensure adoption and implementation of forward-looking plans.





The presidency of C4 joining the Commission 2 meeting held in Toronto in June 2006.

From Theory to Practice: Site Visit to Toronto Union Station.

The third and last subject dealt with related to political actions and strategies to combat transport generated emissions. Here, two different ways of reducing energy consumption and air pollution from the transport sector were outlined. First, some cities, such as (the federal state of) Mexico and Istanbul, decided to engage in the creation of new infrastructure in order to promote environmentally friendly means of transportation for goods and people. Second, cities with already highly developed transport systems, such as London and Toronto, focussed on the better management of services, the introduction of congestion charging as well as measures to change people's attitudes and behaviour.

The meeting of Commission 4 in Berlin concluded in the adoption of the Declaration on Sustainable Urban Mobility Management, which also highlights the dedication of the Commission members to intensify the exchange of information, knowledge and opinions within the upcoming working period. In order to do so, it was consequently decided that from then on every Commissions meeting would deal with one topic exclusively in order to allow for more in-depth and detailed considerations.

# 3.2 Toronto, June 2006: Social Cohesion

The meeting in Toronto in June 2006 dealt with the topic of mobility and social cohesion with special focus on gender issues in transportation. During the preparation of the conference it had turned out that the use of the term social cohesion as well as the concepts associated with it differ from city to city and country to country. Thus, programme preparation and organisation were challenging endeavours, since in some cases the cities themselves were not even aware of the fact that their transport strategies already held a social component, which should be brought further into the open and be debated about. As a consequence, the background paper prepared for the meeting brought together a variety of viewpoints related to social cohesion. Thereby, the discussions that had taken place during the 2004 meeting in Paris, which had already attempted to clarify the relevance of social aspects in transportation, were taken as a starting point for providing input. Likewise, a survey was carried out, asking Commission members to make a connection between mobility and social cohesion in their cities. The background paper structured the complex topic somewhat by breaking down the rather abstract term of social cohesion along the lines of more tangible issues, such as inclusion, accessibility, equality of chances, safety, poverty, disadvantages, abilities, and differences of need and demand.

Special attention was paid to gender issues, for which some basic data and information was brought together and best- vs. worst-case-examples were stated.

The background paper succeeded in creating a great interest in the meeting, and in acquiring distinguished speakers as well as participants for the round-table discussions.

The session showed that in the majority of cases, the measures and strategies presented by the city representatives initially had not been targeted at fostering social cohesion. Instead, they had been developed with the intention to solve other transport-related problems ranging from environmental, management and service aspects to more general aspects of urban development.

Case studies included the development and application of the so-called Concept of the Weak for the bus policy reform in Seoul, thus, ensuring the integration of the demands of the less-well-off groups





Presidency and Vice-Presidency of Commission 4 at the Toronto Meeting.

Panel discussion on Gender Sensitive Transport Planning in Toronto.

of the population. Furthermore, the Kolkata presentation showed that poor people are well aware of the important role that transport plays in the fulfilment of their daily tasks. What is more, the presented case study also proved that successfully addressing people's needs enables them to make use of existing potentials and to develop new ones, which might in the long-term improve their living conditions and those of the entire area. Thus, addressing social issues in transport must not merely be seen as a good deed, but instead, it may also create benefits for the local communities as a whole.

A similar position was taken up in the Toronto presentation, where it was shown that by approaching transport related social developments not from a negative, problem-centred angle, but by instead adopting a positive perspective and considering the manifold assets of urban environments, solutions can be found that might eventually be more successful than the traditional approaches. It had therefore been suggested that the promotion of mixed uses in walkable communities and the improvement of mobility options that allow people to move around freely in healthy urban environments will contribute greatly to more socially balanced neighbourhoods.

The second major topic of the meeting, i.e. gender issues in transportation, was dealt with based on some expert input together with a statement from the Metropolis International Network Women and Local Government. What is more, a prominently featured round table engaged in a very open and frank discussion on women's issue in transportation. Thereby, the need to respect social and cultural norms was highlighted, while at the same time it must be striven to provide equality of access and, therefore, equality of chances for all members of society. The discussion round was joint be members from the audience, who contributed with knowledge and viewpoints from their cities. One of the more controversially discussed topics, thereby, related to the question whether gender issues should be equated with the concept of universal design. While no consensus could be achieved, the debate appeared to be valuable in that it showed the diversity of notions related to the concept of gender. At the same time, the entire session gave prove to the initial perception that even though there is extensive knowledge on and awareness of gender based differences and inequalities in transportation, moving from theory to action is a difficult undertaking, since there still is a lack of proficiency and positive experiences on how to incorporated gender issues on a strategic level into transport planning.

The participants of the meeting all agreed on it having been an enriching experience, even the more so as it had not been pretended to come up with a handful of one-fits-for-all-solutions. Instead, the discussions invited and challenged participants to pay more attention to social issues, keeping in mind that mobility also and foremost is a social activity. Thus, at the heart of any successful transport system should be the user, not the vehicle.

Following the Commission 4 meeting, participants had the opportunity of joining the meeting of Commission 2 that took place the next day. Thus, Commission members were given a chance to engage in a dialogue, create synergies and find out more about the work of other Metropolis Commission. This second day proved to be of great interest and importance to the members of both Commissions. Consequently, the idea arose to further intensify joint activities, especially in cases were the topic was of mutual interest.





Mayors and city representatives at the C4-C2 joint meeting on "Financing Urban Mobility" held in Seoul in June 2007.

Ms. Junge-Reyer, President of Commission 4, welcomes the participants of the meeting in Seoul.

# 3.3 Seoul, June 2007: Financing Urban Mobility

The overall topic of the meeting in Seoul was "Financing Urban Mobility". Considering the crosscutting nature of the subject, it appeared that it should not be dealt with by Commission 4 alone. Thus, it was decided to initiate a collaboration with Commission 2 "Financing Infrastructure and Services" in order to create synergies, both as regards contents and organisation. What is more, the meeting was part of a larger event called the **Metropolis Mobility Week** that included the following elements:

- Training on Mass Transit Planning (Monday, 11 and Tuesday, 12 June),
- Seminar on Transportation and Air Quality (Tuesday, 12 June)

- Study Tour and Technical Visits to transport related spots and institutions around the City of Seoul (Wednesday, 13 June)

- Joint meeting of Commissions 4 and 2 (Thursday, 14 and Friday, 15 June)

The meeting had been organised as a combination of keynote speeches, case studies and discussion rounds. Four thematic blocks structured the inputs according to initially identified main prime issues of concern with regard to transport financing.

Such a four pillar conference structure was recommended by the results of the survey, which had been carried out in preparation of the conference. In the survey, Metropolis member cities outlined their approaches on financing urban transport, yet they also freely stated their problems and issues of concern. The meeting had been organised based on the stated demand for inputs and discussions in order to allow for practical and relevant debates

The main results of the four thematic blocks were as follows:

# 1. Decision Makers Point of View

Two keynote speeches (World Bank and the city of Curitiba) as well as the presentation by the vicepresidency of the Commission 4 (city of Seoul) highlighted the need to calculate costs and benefits of transport investments not merely along the lines of economic efficiency. Instead, cost-benefitassessment should also include the role of transport investments for the reduction of emissions, the contribution to the preservation of biodiversity and the development of urban economies, especially with regard to the alleviation of poverty. A second major issue that was addressed in the speeches as well as in the following round table discussion was a more political one, relating to the need to better balance medium and long term actions with short-term solutions to a city's momentary most pressing problems. Thereby, the relevance of a transport project, and thus the political, planning and financing priority assigned to it, should not be assessed with regard to its cost, but rather in relation to its outcome and contribution to the improvement of local transport conditions.

In a lively and partly controversial roundtable discussion the debate revealed in particular the different notions urban administrations, transport planners and financial advisors relate to the term "financial sustainability". Moreover, a number of participants addressed directly international institutions, which should give stronger support to urban transport projects. It was concluded that international institutions may support cities more in the future, however, the need to mobilise funding in the cities will not be diminished.





Working atmosphere during the Commission's round table debates in Seoul.

Public transport training in Seoul.

#### 2. Financing Infrastructure

Case studies that dealt with the subject of financing road and rail infrastructure were received from Bangkok, Antananarivo, Tehran, Sao Paolo, and Kathmandu. Thereby, it turned out that in general cities use their own resources and funds provided by the national governments. However, these are generally not sufficient to cover the estimated costs, leading to search for external sources of financing, mainly from the private sector. Furthermore, innovative models of generating revenues for example from increased land value after transport development are being developed, e.g. in Tehran.

Speakers also highlighted the importance of reliable and consistent long-term planning, first, because infrastructure development and financing is a process that may sometimes take years to complete, and second, because inconsistent, short-termed planning will further lengthen the process, thereby creating political difficulties as well as much higher cost than a strategic, continuous course of action.

#### 3. Financing Operations

The topic of financing operations was introduced by a keynote speech from the UITP, followed by presentations from Berlin, Montreal and Casablanca. The core of the presentations as well as the essence of the following discussions converged in the request to address operational financing in the same strategic way as infrastructure investments. Thereby, profitability must not be the only objective, since transport fulfils many functions in cities and for urban populations. For example, the improvement of travel times and travel conditions, the creation of provisions for a modal shift towards higher shares of public transport and the impacts thus generated with regard to the quality of the urban environment are all values that have an economic and, thus, financial dimension. Nevertheless, these are usually not considered in traditional cost-benefit-analysis. Berlin, however, proposed a method to integrate these aspects into financial assessment for planning alternatives, which was very positively received by the other cities.

For the financing of operations, a mix of financing alternatives involving the public and private sector as well as the transport users was furthermore recommended. Earmarking of taxes, the capturing of real estate value increases, the utilisation of commercial sources like advertisement, on-demand transport services, etc. were all suggested as promising options to raise money for operations. Such an approach would also assist in raising the financial return of operations above the coverage rate of operating cost, which is on average around 60%.

The Montreal case study consequently showed that the coupling of operational financing with transport operator performance may also result in the improvement of the quality of service. In addition, Casablanca suggested to apply public-private-partnerships also for the provision of transport services, as is done there with regard to bus services. However, the example quite evidently showed that private involvement in the transport sector needs to be guided by strong public leadership.





Commission 4's site visit to the Han River regeneration project in Seoul.

Hosting city of Seoul bids farewell to Commission 4 members.

#### 4. Public Private Partnership

The issue of public-private partnerships was more strategically addressed in the following session, where examples from Hong Kong and Seoul showed the approach of the private sector as regards transport investments. While both examples were presented focussing on the achievements and positive aspects of public-private-cooperation, the questions raised by the audience took on a more reflective and in cases somewhat critical undertone. Thus, it became clear in the discussions that any project involving public and private entities needs to pay attention to both the rights and the duties of the involved parties. Also, the different models of public-private-partnerships need to be carefully assessed regarding their advantages as well as downsides for both parties involved. What is more, the willingness of the private sector to get involved in a public task like transport provision strongly depends on the expected financial turnover. The private bodies, therefore, need to make relevant provisions ensuring that social, economic and developmental aims are met by the projects as well. Likewise, the private sector has very distinctive requirements regarding the legal, political and economic conditions in a city before any kind of involvement takes place.

An evaluation of the meeting carried out in September 2008 showed that the majority of participants were satisfied with the proceedings and outcomes of the meeting. The organisational set-up and the programme, the quality of the speeches and presentations, as well as the discussions were rated positively by those, who replied to the evaluation survey. Moreover, the diversity of presentation and opinions, the room and relevance given to each opinion and statement as well as the chance to meet other city representatives and experts for the exchange of ideas were additionally highlighted as positive aspects of the meeting. Critical comments mainly referred to the fact that more representatives of international institutions should have been present for the entire duration of the meeting. Likewise, the lack of participating cities from Europe and North-America was also noted. These comments should be taken as recommendations for the preparation of upcoming Commission meetings.

# 3.4 Outlook: Sydney, October 2008: Urban Commercial and Freight Transport

The next meeting of Commission 4 will be held within the framework of the 9th World Congress of Metropolis in Sydney. There, the agenda of the Commission will be concluded with the consideration of the final topic, which is Urban Commercial Transport.

The rationale behind this is that the movement of goods and the transporting of people for service and commercial reasons causes not only increased traffic volumes. It also affects the direction of traffic flows and traffic hours. Cities with large volumes of commercial and freight transport, moreover, experience their impact on the temporal appearance of traffic streams. Distinct peak traffic times are slowly dissolving into all-day traffic highs. As a consequence, urban roads are increasingly used to their capacity throughout the day by commuters, service providers and goods transporters.

It is well known that this is an issue, which is quite difficult to deal with. The transporting of goods has very strong links to the national economy, to consuming patterns and to globalised freight streams. Likewise, commercial traffic derives from changing work patterns, division of labour and the alteration of service demands. Thus, the meeting will aim at looking beyond the boundaries of individual cities and beyond traditional areas of transport planning in order to fully understand the why and whereabouts of these streams and to find suitable ways of organising and managing them in the cities.



# **4. TRAINING**

The second pillar of the Commission's work with and for cities is the organisation and implementation of training seminars with regard to transport topics that are of relevance particularly for planners, politicians and decision makers in metropolises of the developing world. Thereby, the Commission aims at fulfilling its mission to engage in capacity building by transferring knowledge in a practical, output-orientated manner. In general, the trainings are carried out in the context of the annual meetings with the support of experienced experts from institutions and companies. In this manner, three training seminars were offered to member cities in the past working period.

#### 4.1 Railway Transportation Technology, Berlin 2005

The first training seminar took place during the 8th World Congress in Berlin on the topic of "Metropolises and their Rail Transportation Technology – the Evidence of Use". Speakers during the Training included representatives from the Siemens AG, one of the largest providers of rail transportation technology globally, from the Berlin Public Transportation Company Berlin (BVG), from private consultancies as well as from representatives of city governments and transport providers from Asia, Latin America and Germany.

The two-day seminar aimed at providing evidence for the relevance of efficient transport infrastructure with regard to metropolitan development. In this context, the seminar focussed on three central questions:

1. What are the advantages of a rail system over public transport by bus?

2. Under what conditions are they economically advantageous?

3. Given certain conditions, what systems are to be preferred for a meaningful solution – trams, underground railway, regional rail system?

What is more, the seminar strove to integrate issues of infrastructure development and maintenance with the achievement of high-quality services and operational efficiency.

The different presentations all highlighted the necessity of urban land use and transport development to be matched so as to avoid the creation and/or increase of negative environmental and other impacts. Because of their ability to work at great capacity, even comparatively expensive rail transport systems can be quite effective in terms of finance when considering positive side- and follow-up effects.

# 4.2 Maintenance of Urban Infrastructure, Toronto 2006

The second training of Commission 4 was held in Toronto, organised by Commission 2 and the Metropolis International Network Women and Local Government. Taking the topic of the first training even further, the focus of this two-day training session was on the Maintenance of Urban Infrastructure, including roads, sewer systems, and aqueducts. As for the part dealing with transport infrastructure the focus was on the identification of strategies for the rehabilitation of roads, on calculation and evaluation methods and criteria as well as on planning issues, paying attention also to the refurbishment of road spaces. In addition, the method of life-cycle cost assessment and ways of integrating the technique into a comprehensive planning approach were introduced.

# 4.3 Mass Transit Planning, Seoul 2007

The third training within the considered working period was held in Seoul as part of the Metropolis Mobility Week. The training was carried out by the GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit – German Association for Technical Cooperation) together with the Technical University Berlin.

The training was tailored to planners and other stakeholders as an introduction to planning, designing and implementing Mass Rapid Transit (MRT) solutions with a special focus on Bus Rapid Transit. The examined topics included technical issues, such as corridor selection, infrastructure planning, furbishment of lines and stations, as well as the different steps of planning from prefeasibility studies and infrastructure and operational planning to participation, marketing and business planning. Likewise, political conditions and especially the need for political will and vision were also addressed. The presentations included several practical examples and lessons learnt from past planning endeavours, both successful and fruitless ones. This was made possible thanks to the trainers Mr. Paolo Custodio (GTZ) and Mr. Hans-Joachim Becker (TU Berlin), who have carried out practical work in



different countries, therefore, knowing local conditions and how to deal with them. In addition, the 64 training participants from 23 countries in 4 continents engaged in the discussions, stating examples from their cities and providing the audience with first-hand information on a very detailed level. The combination of lecturing and discussions supported the learning effect for all participants, which was positively rated in the training evaluation carried out in the immediate aftermath of the session.

# **5. CO-OPERATIONS**

As already mentioned in preceding chapters, in the past three years Commission 4 has engaged in numerous co-operations with different partners within and outside the Metropolis network.

Most noteworthy, the collaboration between Commission 4 and 2, which had been initiated rather incidentally and at a noncommittal level in Toronto in 2006, subsequently developed into an authentic, close co-operation that cumulated into the joint organisation of the Metropolis Mobility Week including the training and the meeting on Financing Urban Mobility. Case studies were provided by members of both Commissions, which greatly benefited the course and outcome of the conference. This co-operation also gave evidence to the notion that cross-cutting themes, which are addressed in the Metropolis Commissions in parallel, albeit from different point of views, should be tackled in a more integrated, collaborative manner.

Second, Commission 4 worked closely together with the Metropolis International Network Women and Local Government. The joint efforts of these two entities of the Metropolis Network was initiated in the course of the 8th World Congress in Berlin, where the Women Network had been launched. Auspiciously, it has greatly developed in intensity and frequency over the past working period.

During the Toronto Meeting of Commission 4, the Women Network contributed significantly by supporting the organisation of the event as well as the mobilisation of partners and participants, by providing presentations, and by actively engaging in the discussions on gender and urban mobility. Thus, mutual synergies could be achieved. On one hand, Commission 4 benefited by obtaining the view of women who are actively engaged in local urban government and administration on different levels, and who, at the same time, represented daily transport users. On the other hand, the Women Network gained input from the knowledge of the attending transport expert and took the chance to present the task and mission of the Network to a wider audience.

In order to continue the collaboration, Commission 4 delegated two representatives to the International Forum "Dynamic Cities need Women", which was held in Brussels in December 2007 by the Women Network. There, Ms. Maria Krautzberger, Secretary of State for Transport and Environment at the Senate Department for Urban Development in Berlin, chaired the Workshop on Urban Mobility. In addition, Ms. Diana Runge from the Technical University Berlin presented the results of the Toronto meeting of Commission 4, thus providing for continuity and enhancement of the co-operation between the more technically orientated work of the Commission and the government and gender focussed mission of the Women Network.

Third, the work of the Commission in the past three years also included a number of outreach activities directed at cities, networks and companies outside Metropolis. This was done in order to first, increase the visibility of the Commissions work among both, members and non-members of the network; and second, to ensure that the Commission and its members draw in the most relevant and up-to-date information and skills by renown experts. Thus, the annual meetings often included presentations by experts from universities, international institutions as well as private companies, while the discussions were moderated by an external, neutral facilitator. The same holds true for the offered trainings, which featured international development aid experts as well as private companies.

Furthermore, all information that has been generated and collected for the conferences as well as during the meetings was extensively published in writing and electronically and distributed through different channels. Hence, it was made accessible not only to members and conference participants, yet also to other cities and organisations outside Metropolis. Presentations given on the work of the Commission by members and representatives of the presiding city Berlin round up the co-operation and outreach activities.



# 6. ACHIEVEMENTS AND RECOMMENDATIONS

Considering the variety of actions – meetings, trainings, co-operations, presentations, distribution of results, etc. – named and described in the preceding chapters it appears reasonable to conclude that the Commission's aim for the past working period as agreed on in Berlin has been fulfilled. The intensity of exchange has increased over time, as has the level of detail of information as well as the factual content and, thus, the practical relevance of the meetings. Thus, a comprehensive knowledge base on conditions of urban mobility in cities around the world has been created that will benefit city representatives, planners and politicians as well as the academic world. What is more, a foundation of trust has been established between cities in the network, which has become obvious in every meeting were partly sensitive details of transport and planning have been laid open and discussed in a frank and open manner unusual and unique for events of the kind.

Despite the notion that there are still a number of relevant subjects left unexplored, it appears to be that there is a demand from the cities to move from the generation and exchange of knowledge on to a more practical course of action, for example:

• More flexible working approach favouring the annual specification of topics instead of the present practice of establishing fixed agendas for a three year time horizon;

• Establishment of task-forces that may work on special issues in selected, interested cities for a short duration of time and in combination with other Commissions in order to tackle cross-cutting issues and create and use synergies;

• Designation of central contact persons (a) for the Commissions, (b) in the Regional Secretaries; (c) in the cities at the side of both the technical and the administrational level;

• Stronger attention needs to be paid to the heterogeneity of member cities, which may result in different priorities thematic interests and, consequently, expectations regarding the topics, aims and procedures of the Metropolis network. Regarding the work of individual Commission, this might for example imply to stronger focus the meetings on cities with similar problems and conditions, either

o in form of regional meetings, i.e. organising two parallel meetings in different parts of the world instead of one big overall annual conference, or

o by means of carrying out workshops targeting certain cities or regions within the framework of one overall (annual) conference.

In any case, it needs to be ensured that despite the strengthening of the regional focus the work carried out always bears reference to the work of the entire Commission and the network as a whole.

• Improvement of knowledge management and administration and dissemination of available information, e.g. by further developing and maintaining a joint data basis, by opening up an online platform for cities to present their specific competencies, cases of best-practice as well as demand for support and co-operation. What is more, the already available information and state-of-the-art should be used more intensively by cities, institutes and public as well as private entities.

• Increased use of the opportunities for co-operation offered by Metropolis, as regards for example the available technical assistance schemes, co-operation with the Bank of Cities and the Metropolis International Network Women and Local Government.

• Continuation and enhancement of training opportunities, regionalised trainings, joint sessions with other Commissions, regular face-to-face trainings supported by the provision of training materials, both electronically and in print.

• More accurate distinction between events of different character, such as technical vs. formal and organisational meetings.

These and other suggestions have already been communicated by the Commission to the Metropolis Network, where they have been received quite favourable. Considering that the work of this Commission 4 is scheduled to end with the meeting in Sydney, they should be understood as suggestions for other Commissions as well as for the already envisaged reorganisation and enhancement of the network focus and proceedings for the years to come.



# 7. DECLARATION ON SUSTAINABLE URBAN MOBILITY MANAGEMENT

Joint Declaration of the C4 Member Cities, adopted at the 8th Congress of the World Association of the Major Metropolises, Metropolis in Berlin 11 – 15 May 2005

# I. Preliminary Remark

(1) We, the representatives of the member cities of Commission 4 "Urban Mobility Management" of the Metropolis network take up the opportunity provided by the 8th Congress of Metropolis in Berlin (Germany) from 11 to 15 May 2005 to state our commitment to the principles of sustainable urban mobility management and to pledge our support for its implementation

In our understanding, sustainable urban mobility intends to provide for the socially adequate distribution of mobility chances, economic efficiency and the reduction of negative environmental impacts.

# II. The Challenge - Urban Mobility

(2) Mobility and transportation are key components of urban life in cities all over the world. People desire mobility, first for its own sake as an expression of freedom, and second, because it enables them to overcome distances between different places that satisfy different needs. However, increasing traffic and the dominance of the use of the car both in passenger and freight transportation poses a major threat to the quality of life of the cities:

- city structures are destroyed and re-modelled according to the demands of the car,

- non-motorised means of transportation, i.e. walking and cycling, are neglected,

- noise and the pollution of air, water and soil as well as congestion threaten the life and the health of the urban population,

- particular groups of the population are systematically excluded from participating in transport and thus, their access to urban functions is undermined,

- large amounts of money are required every year to finance transport systems that often do not meet the expectations and needs of both politicians and users,

- transportation planning and policy often lack the foresight and strategic approach required to meet present demands without impeding on the rights of the future generation.

(3) The tension between the human desire for mobility and the concern about the negative impacts of the physical realisation of this desire in form of transportation raises the question on how to shape transportation systems that supply a maximum level of mobility while generating only a minimum of negative impacts. Hitherto, most cities have acknowledged the fact that they need to rethink mobility and implement measures for achieving urban transport systems that satisfy the claim for sustainability, however, the problems that arise and the challenges the cities are faced with are as numerous as the attempts made to tackle them. What is more, no two cities are the same, and any attempt to deal with the challenges of urban mobility in an international framework such as Metropolis must not only respect but endorse the uniqueness of each city, its particular line of development before a varying background of historical, cultural and economic conditions and the broad range of possible solutions to reach the common goal of sustainable urban mobility.

# III. Strategies for Urban Mobility in the Metropolis Network

(4) Taking into account the diversity of developments, the representatives of the C4 member cities agreed on the following strategies to be pursued by each city according to its actual situation:

#### (5) Mobility and urban development

We aim at encouraging land use patterns that curb the need for motorised travel. We will carefully monitor urban development and settlement patterns focussing on their impacts on transportation. Moreover, we will encourage land use and development in line with existing and planned transport infrastructure and thus guide urban growth to take place in conjunction with a more sustainable transportation provision. We will stimulate the distribution of urban functions to limit commuter travel and will explore possibilities for low-car or car-free housing. We also strive to balance transport systems according to the envisaged modal split. This also includes the protection of public space from the dominance of transport infrastructure and use, and particularly from deterioration through disproportionate driving and parking of cars. Revitalising urban space and making it available for



appropriate urban uses will be a central task for the future. For this purpose we also propose the better organisation of tourist travel and transportation, especially with regard to the overcrowding of areas near tourist attractions with tour buses that affects the quality of these areas for the local population and the tourists alike.

Also, we will co-operate with the areas surrounding the urban territory in order to combine urban and regional development and provide better development perspectives for both.

#### (6) Mobility and social cohesion

We acknowledge the importance of mobility for granting access and the possibility to participate in urban life for all citizens. We therefore attempt to establish transportation systems that include the needs of all groups of the population, especially the less-affluent, the young, the elderly, and the disabled. Particular attention also needs to be paid to gender issues, since we respect the different needs and demands arising from different gender contexts, and we are determined to give adequate consideration to this issue.

We will thus aim at developing and implementing appropriate measures and control mechanisms to grant equal access for all, e.g. by fare and pricing policies, flexible routing and servicing, the establishment of schedules and time-regimes that are considerate of people's activity patterns and time budgets, the introduction of innovative transport services that also make use of the opportunities provided by information and communication technologies, and by addressing the safety and other needs of transport users.

We are most concerned about the increase of road accidents and the number of people injured and killed by traffic. It is our aim to increase traffic safety by making use of the available technical, organisational and other measures.

#### (7) Environmental impacts

Air, water and soil pollution as well as noise deteriorate the life in the city and pose major risks to the health and well-being of the citizens. We therefore attempt to make use of the entire palette of measures – technical and non-technical – to reduce air pollution and limit noise. We will pay attention to the composition of municipal and public vehicle fleets and undertake efforts to have them equipped, maintained and inspected regularly and according to set emission standards. A special issue arises in cities of the developing world, where motorised two-wheelers provide an important means of transportation for low-income groups. However special attention needs to be paid to their environmental impacts, as well.

Air quality management is considered an important instrument for the establishment and implementation of a comprehensive air quality strategy. This will also serve the purpose of measuring the extent, to which urban transportation contributes to the emission of greenhouse gases and thus to climate change. Also, we will investigate measures of noise reduction, both active and passive, and implement them in order to protect the population. An overall strategy for environmentally friendly transportation is the strengthening of public transport system as a serious competitor for the private car. We strongly support measures that facilitate the shifting of transport modes and the achievement of a modal split that places public transport into a stronger position.

#### (8) Financing urban transport

In order to secure adequate transportation, we will investigate mechanisms for financing both infrastructure and the provision of public transport services. We acknowledge the role of national and municipal governments in providing necessary funds in order to support the role of transport for public welfare. Nevertheless, we would like to encourage the exploration and use of innovative and promising financing mechanisms for all modes of transport provisions –to name only a few – might be interesting options for a number of cities. However, we must take care to always follow the principles of efficiency, transparency and modal integration, and to give top priority to the well-being of the transport users and urban population before considering economic interests. What is more, we should think of transport revenues not only in monetary terms, but also in terms of their economic and social impacts, and their specific value for the life in and the functioning of the city. Likewise, the benefits of transport investments need to be distributed equally among the population.



#### (9) Urban freight transport management

For many years, freight transportation has been neglected in transport planning and policy and thus, practices and routines have been established, which now cause major problems for our cities. We therefore recommend that each city assesses the ways freight transport is being handled at the moment and the implications this might have in the future. We strongly support the co-ordination of freight movements, the strengthening of rail and water-bound transportation of goods, and the establishment, implementation and strategic use of innovative ways of handling freight. In order to do so, all possibilities should be explored and implemented according to the existing conditions and most pressing challenges.

# (10) Building strong planning institutions

We would like to highlight the importance of strategic planning in land use and transportation, and we put particular emphasis on planning at the interface of land development and transport provision. Building strong planning institutions appears to be a major prerequisite for comprehensive planning. We thus call for a consistent approach of all governmental and administrational levels and for the integration of different sectors of each administrational tier. Apart from the tasks of the cities, it is within the responsibility of the national governments to provide adequate legal and strategic frameworks for the cities to act upon. The need to co-operate across territorial boundaries and combine responsibilities and competencies arises especially in large metropolitan regions.

#### (11) Public participation.

Participation provides the opportunity to ensure that the public, i.e. citizens, stakeholders, nongovernmental organisations and interest groups, is an integral part of the decision-making and planning process. Benefits can be gained from the involvement of existing local agenda processes. We support a strong involvement and systematic participation of the public at various stages of the planning process. We need efficient mechanisms that provide for an effective, transparent, coherent and active planning process, in the course of which not only short-term needs but rather long-term perspectives are being considered. The public should be thoroughly informed about the various issues that make transportation a complicated and important subject not only of policy making but also of their own lives. What is more, the involvement of the population will also lead to an optimisation of planning and generate plans and strategies that are consistent with people's mobility demands.

# **IV. Call for Further Action**

(12) We believe that a thorough assessment of transport realities and the development of mobility visions in cities will reveal a number of further challenges, but also potentials for innovation in each city. Following the common goal of achieving sustainable urban transport, the cities will strive to find solutions to their problems; however, this process might be a lengthy one. In order to support each individual city we pledge for the continuation and strengthening of exchange and knowledge transfer.

We therefore appreciate this congress in Berlin, and we would further like to see it as both a milestone of the past work and the beginning of a new era of co-operation between metropolises around the world.



# METROPOLITAN PERFORMANCE MEASUREMEMENT

# METROPOLIS 2008 • COMMISSION REPORTS

# **CONNECTING CITIES • SYDNEY**

As cities continue to increase in size and complexity, decision-makers and planners need to have increasingly vigorous methods, skills and information to deal effectively with the challenges with which they are presented. A technical approach to information gathering and the measurement of performance can provide clear guidance as to the effectiveness of the strategies and projects of city managers.

The Commission (as a joint project of Metropolis and UN-Habitat), aims to provide practical technical assistance to a number of cities in developing countries to build their own local capacity to undertake the development of performance measurement systems. This takes the form of expert missions to the relevant cities.





Commission 5 was established as a joint project between Metropolis and UN-HABITAT's Global Urban Observatory (GUO).

### **C5: Metropolitan Performance Management**

Presidency – Melbourne (State of Victoria)

Vice-Presidency – State of Mexico

Chair – Justin Madden, State Minister for Planning, Victoria, Australia

Vice-chair – Enrique Peña Nieto, Governor of the State of Mexico

**Coordinator** – Mary Lewin, Department of Planning and Community Development, State of Victoria, Australia

### Participating cities, regions and international organizations:

Aden, Addis Ababa, Alexandria, Al Hodidah, Al Madinah, Antananarivo, Arriyadh, Barcelona, Belo Horizonte, Berlin, Brazzaville, Cairo, Cotonou, Guadalajara, Isfahan, Istanbul, Johannesburg, Kabul, Kampala, Kolkata, La Habana, Manila, Mashhad, Melbourne, State of Mexico, Monrovia, Moscow, Mukhala, Paris-Ile-de-France, Porto Alegre, Puebla, Shiraz, São Paulo, Sana'a, Sarajevo, Seoul, Stockholm, Tabriz, Tehran, Arab Urban Development Institute( AUDI), Regional Vancouver Urban Observatory (RVu), South African Cities Network, International Association of Public Transport (UITP), United Nations Environment Program (UNEP)

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**Report's Author:** Mary Lewin, Department of Planning and Community Development, State of Victoria, Australia





The purpose of Commission 5 was to encourage cities in developing countries to produce their own performance measurement systems specifically to address urban management issues.

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Commission 5 conducted a training workshop in Vancouver in June 2006 as part of the III World Urban Forum.

#### **Abbreviations**

C5	Metropolis Commission 5 on Metropolitan Performance Management
GIS	Geographic information systems
GUO	Global Urban Observatory
LUO	Local Urban Observatory
MDG	UN Millennium Development Goals
RVu	Regional Vancouver Urban observatory

# **1. INTRODUCTION**

This report is a summary of the work undertaken by Commission 5: Metropolitan Performance Measurement (C5) between 2002 and 2008. It aims to provide an overview of the major issues of metropolitan performance measurement faced by member cities, the approaches they have adopted to face the challenges, and an indication of the lessons learnt from the Commission's work. The report also makes a number of observations and recommendations for the benefit of future Metropolis projects and Commissions.

Commission 5 was established as a joint project between Metropolis and UN-HABITAT's Global Urban Observatory (GUO). The purpose of the project, as defined by the Commission's Terms of Reference, was to encourage cities in developing countries to produce their own performance measurement systems specifically to address urban management issues. The underlying rationale was that effective decision-making in an urban context requires reliable information on city performance, the ability to identify priorities, and the skills to work towards strategic objectives.

The Commission has operated within the broader global framework created by the United Nations Millennium Declaration and the Millennium Development Goals (MDGs). In partnership with the GUO, Metropolis has promoted the development of Local Urban Observatories (LUOs) in developing cities. The GUO has the responsibility for observing the world's progress towards achieving the MDGs, and LUOs are a central part of developing the capacity of cities to do this work. While the MDGs have a universal application, UN-HABITAT recognises that due to increasing urban populations, the struggle to achieve the MDGs must be fought in the world's cities. The 'Millennium Development Goals Report 2006' stressed that indicators are the primary tool by which the world's community can determine how it is making progress in meeting the MDGs. Despite this priority, there is at present a lack of adequate data for this work and an identified 'urgency to launch initiatives for statistical capacity-building,' to meet this shortfall. This identified skills shortage, combined with the difficult translation of global and national level MDGs to the local level, makes the capacity-building activities and technical support that Commission 5 provides to members cities all the more important.



### **Local Urban Observatories**

In 2006, seven out of ten cities in the developing world acknowledged that they do not have the capacity or the means to monitor urban indicators or trends, such as land consumption, growth of informal settlements, number of slum dwellers, proportion of rural land transformed into urban land, etc. Many cities in the developed world are unable to provide accurate, up-to-date information on urban conditions, as such information is not always readily available, and quite often, information at the neighbourhood level is non-existent in most cities.

Many local and national governments are, therefore, planning in the dark. As a response to this, UN-HABITAT's Global Urban Observatory has been helping to find creative solutions to the urban information crisis. Charged with generating "better information for better cities", the Global Urban Observatory began partnering with local and national officials in selected countries to develop systems for urban data collection that are locally relevant and globally linked.

Today there are more than 300 urban observatories around the world. Some work fairly well, others not at all. From Bangalore in India, to Aleppo in Syria, Nakuru in Kenya, Guadalajara in Mexico and even in Toronto, Canada, observatories are struggling to produce quality information that can be used to inform policies, and ultimately to improve the quality of life in cities.

Observatories are not only technical entities producing data and information; very often they are training places to learn how to use this information. Various observatories, supported by the UN global network, produce useful tools on how to capture the urban reality and transform it into relevant information that can support decision-making based on facts. Other observatories are actually schools of democracy, educating stakeholders and citizens at large on how to work together by sharing information.

Urban observatories can assist local authorities to plan the city of today and to visualize the city of tomorrow – a city that is more inclusive and productive, a city for all.

See Eduardo López Moreno

### 2. APPROACH AND OBJECTIVES OF COMMISSION 5

Commission 5 consciously adopted a practical approach aimed at providing a tangible benefit to cities in developing countries - extending the use of performance measurement systems in the operation of cities by providing practical training and technical assistance to practitioners and decision-makers. The Commission's Terms of Reference identified key objectives in the promotion of performance measurement, as follows:

- Information exchange
- Capacity building
- Promotion of LUOs
- Fostering a 'self-help' approach in participating cities.

The Commission pursued these objectives by conducting meetings, expert missions, networking events and training workshops. Through focused training and information exchange among local government officials the practice of urban management can be improved, with resulting benefits for the local populace.

### 3. MEETINGS, WORKSHOPS AND CASE STUDIES

The Commission meetings provided forums for information exchange among cities through the presentation of case studies on experiences and practice. Many of the presenters and guest speakers were academics or leading experts in their field, though the main purpose of the meetings was to provide practitioners and technical staff the opportunity to exchange information with their peers. The Commission focused its meetings and workshops on a number of specific issues, determined in collaboration with member cities. This approach promoted a high level of intellectual engagement with host cities and participants, and tangible policy results.





Tehran hosted the first C5 meeting in June 2007.

From left to right, Prof. David Wilmoth, Member of the Advisory Council, UNGCCP; Mary Lewin, Commission 5 Coordinator; and Josep Roig, Secretary-General of Metropolis.

Presentations and discussions were mainly geared to teaching practical lessons gained from hardearned experience. Many of the issues raised at the meetings are applicable to all cities and the following list of universal concerns emerged.

- Strategic planning and the use of technology.
- Environmental protection and sustainable development.
- · Governance and accountability.
- The role of women.
- Poverty and social inequity.

### 3.1 Strategic planning and the use of technology

The Commission's work is centred on the practice of strategic planning, as urban indicators are often a critical tool of strategic urban planners and are always relevant to the comprehensive goals of city governments. The work of the Commission amply demonstrates that metropolitan performance measurement systems are most effective when linked to a clear strategic and policy framework. Cities that adopt a strategic approach to urban management are well able to set clear goals and targets for their work through the use of city-wide plans, urban master plans and other strategic documents. Indicators expressed in these plans or developed at the implementation phase enable planners to measure progress towards these goals and to highlight the effectiveness of selected policies and projects. Practitioners must be aware that their selection of indicators and collection of data must be relevant or risk the results of their work being 'useless'.

Performance measurement is closely linked to the use of technology in urban planning, especially the use of Geographical Information Systems (GIS). A properly used GIS will provide urban managers with high levels of detailed information on significant changes and progress within a city but without proper use it can be an expensive folly. Commission members have used GIS to examine environmental and social-spatial aspects of their cities and to capture information to guide the measurement of performance of their strategic master plans. It has been used as a tool for highlighting zones of disadvantage and advantage, and assists city managers in determining sites for services provision. Alternatively, it has been demonstrated that it is possible to have effective, low-cost monitoring and assessment systems as part of a strategic framework without sophisticated GIS. Many cities gain real improvements by focusing their resources on developing simple indicator systems. Examples of such low-tech approaches include the use of 'Citizen Report Cards' in Bangalore to assess the progress of the city in meeting its service commitments and the city of Valle Cuautitlán's use of indicators based on simple Excel spreadsheets to enable identification of key objectives and priorities.



There are good opportunities for regional leaders, in the practice of performance measurement and strategic planning, to work with other cities to extend their capacity; for example Arriyadh, Belo Horizonte, Vancouver, and the State of Mexico can be strong guiding forces in their respective regions.

### Case study - RVu in Vancouver

Often cited as one of the world's most liveable cities, Vancouver has successfully applied performance measurement within a clear strategic framework. Metropolitan development occurs through a distinctive governance framework marked by federal division of powers and considerable autonomy at the municipal level for regional planning. The Regional Vancouver Urban Observatory (RVu) was established in 2004 as a response to the 'paucity of relevant, appropriate and accurate information at the urban scale' (http://www.rvu.ca/). The first local observatory of the global network of UN observatories to be established in the developed world, RVu guards its independence but has attracted support from city managers, policy-makers, businesses and citizen groups in providing timely, relevant and professionally-produced information and commentary. It is hosted by the Simon Fraser University. The observatory also makes a significant international contribution, taking part in Commission activities as participant, and as a case study and training resource.

### 3.2 Environmental protection and sustainable development

Issues of environmental protection, sustainable development and, more recently, climate change have been of rising concern to member cities: the Commission responded by including environment as a major theme of the June 2007 meeting and workshops in Iran. Presentations from cities as different as Moscow, Tehran and Paris-Ille-de-France stressed that the environment is inseparable from the economy and society. Members devised a number of monitoring responses to environmental concerns. Some cities have incorporated into their strategic frameworks the goal of becoming 'green' and sustainable, designating 'green zones' in city plans and taking other initiatives that can be measured and monitored. For example, in Addis Ababa a strategic plan has been developed which aims to make the city 'clean, green, safe and liveable' by 2025. Other cities - indeed, most cities now - use environmental and sustainability indicators to ascertain the breadth and depth of the environmental issues they face across the city and in critical districts and ecosystems. As cities set up systems to raise environmental awareness among the population and the administration there is growing recognition that achieving good environmental outcomes requires all key stakeholders to be involved in the process and that an adequate monitoring system is a necessary but not sufficient condition for success. In this, GIS has an important role to play in providing information on environmental changes within cities and in tracking the success of projects and measures for environmental protection.

### 3.3 Governance and accountability

Nation states recognise the importance of transparent and effective governance to development, better-known through recent examples involving corporations and international financial institutions. In tandem, often independently, many cities in developing countries are moving to more open and decentralised systems of governance, sometimes aided by devolution of planning and urban management powers from central government to provincial cities and local government. City managers are often more aware of the importance of governance in developing and implementing strategic visions than national politicians or administrators. In these situations managers require reliable information for making effective and accountable decisions.

The Commission examined the means of monitoring the performance of urban governance in the context of globalisation and privatisation, changes in the status of poverty absolutely and relatively, the persistence of corruption, the role of the state in changing economies and the multiplicity of agencies involved in managing urban centres. Governance was a key theme of the June 2007 Commission meetings held in Iran. The accompanying training workshop consisted of practical demonstrations of effective governance models and the use of indicators in achieving accountability objectives. The highly interactive sessions identified a governance model that reflected universal aspirations for:

- Leadership Having strategic plans in place that set priorities with clear goals.
- Accountability Transparent financial, judicial and decision-making processes.
- Empowerment through public participation Responsive government and access to decision-making.
- Gender equality Women in leadership, and targets in place to improve their status.
- Civil society Partnership with the private sector and NGOs.

In the Middle East and Central Asia there are substantial discrepancies between such popular aspirations and the sometimes more restrictive political frameworks of the state.





Commission 5 conducted a training workshop in Mashhad in June 2007.

### 3.4 The role of women

There is a growing awareness in developing and developed countries alike of the link between the role of women in society and the economic fortunes of the country. The cities of the developing world are often situated within, or include, traditional societies with strong views on gender roles. As these societies open up to global mobility and engage with strong currents of economic and social modernity these traditional views are under challenge. The role of women in city governance has been a focal area in the development of metropolitan governance indicators aimed at managing performance not only measuring performance.

The UN recognises the situation of women in the developing world, and Goal 3 of the MDGs seeks to 'Promote gender equality and empower women'. Target 4 of the MDGs specifically focuses on eliminating gender disparity in all education levels by 2015. There is evidence which indicates that issues such as economic prosperity and overpopulation are directly linked to the level of education of women, and their level of participation in society.

Women's participation in the political system is a subset of their role in wider society and their participation in wider processes of governance. Gender equality supported by targets to improve women's status are pillars of most governance models, including in traditional Middle-Eastern societies; though these goals do not necessarily reflect the experience of women in these societies. There is an argument that the needs of many women are different to those of men and as such women need to be able to participate at all levels of society to properly advocate for the issues facing them. This can extend to the issues relating to urban planning in the promotion of gender-sensitive design and planning, and to the provision of city services such as satisfactory public transport outside peak travel times.

# Case study - Tehran, Iran

Indicators of performance in meeting social and government goals in the area of governance can be challenging; no more so than the clear and strong efforts to devise working indicators for the participation of women in public decision-making in Tehran. The Global Campaign for Good Urban Governance includes indicators for civic engagement and citizenship. As in other countries, women in Tehran 'are usually excluded from critical decision-making processes. Participation and civic engagement are critical determinants of good governance...' Prerequisites for participation were identified as empowerment (literacy, education, economic activity), confidence (economic activity, candidacy) and acceptance (employment, administrative positions, elections), all of which are measurable and the subject of reform action. 'The women of Iran have proved their aim to change their lives and to influence the society in a more active way than before. Their first steps [were] educational and technical empowerment, now is the turn for a new step, one forward to more active participation both in public administration and decision making.'

See Dr Razieh Rezazadeh



Metropolis 2008



The Commission 5 workshop held in Mashhad focused on how to develop participatory policy indicators, concepts of governance and civil society. Mary Lewin, Commission 5 Coordinator, during the session.

### 3.5 Poverty and social inequity

The Commission recognises the dehumanizing impact of poverty and aims to improve the situation of those living in the worst urban conditions by promoting techniques for monitoring and assessing poor living conditions and their root causes in many cities of the world. In most developing cities the poor live in slums and informal settlements characterised by sub-standard housing with little, or no, access to essential services. Slums are formally defined in terms of lacking access to improved water, improved sanitation, security of tenure, durability of housing or sufficient living area. This economic and social-spatial segregation further concentrates the problems of poverty and can result in inescapable downward spirals for those living in disadvantaged neighbourhoods. Urban planning and performance measurement have a role to play in assisting those within this situation and in ensuring an equitable distribution of services amongst the populace.

Target 11 of the MDGs proposes to 'Have achieved by 2020 a significant improvement in the lives of at least 100 million slum dwellers.' The MDGs Report 2007 has indicated that the effort to upgrade slum conditions is falling behind the actual growth of slums. Slums will constitute 38 percent of the world's urban growth to 2020. There are over 800 million people in equivalent conditions now and another half billion will join them or make new slums by 2020, forced to live under everyday conditions unacceptable by any standard of human dignity. This is looming as a much greater problem for the managers of cities in the future, and puts urban planners and other service providers in a reactive position where they are forced to deal with problems inherent to unplanned, sub-standard neighbourhoods, rather than determining the best sites and infrastructure for a growing population.

A number of Commission members use indicators and GIS to map the occurrence and severity of poverty within their municipalities, sometimes with the participation of residents. This enables city managers to determine the areas that are most disadvantaged and to recognise the differing infrastructure needs and pressures on the city's inhabitants. Resources and projects can then be attributed to those areas of greatest need to ensure equity in service provision, and to improve residents' quality of life. This approach can also be used to coordinate separate programs aimed at alleviating poverty. Commission members apply performance measurement to monitor and assess the implementation of development activities. Such pro-poor approach to planning and service provision recognises that extreme poverty has impacts not only on the individuals affected, but the community and city as a whole. These technocratic methods are used by a wide range of cities with differing levels of development, reflecting the growing concern over sharply segregated cities, no matter the overall condition or wealth of the city. Longer-term sustainable development relies on fuller empowerment and a recognition of the fact of local autonomy from often-distant city governments – in this arena indicators of governance are usefully aligned with economic and social indicators.

### 3.6 Other potential themes and issues



Of course the above themes were not the only areas of concern and enthusiasm amongst Commission members: a remarkably wide range of issues emerged during the course of the work. This is to be expected, as there are no thematic boundaries to the choice of indicators for measuring performance.

Other issues of abiding interest, commended for further consideration should the mandate of the Commission continue, include the application of performance measurement to public transport, disaster management and reconstruction, health services, cultural heritage, tourism, education provision, mitigation of 'digital divides', security and policing, and the impact of public-private partnerships. In effect, all urban management responsibilities can be subject to, and would benefit from, effective performance monitoring.

### Case study - Monitoring Transit Cities in Melbourne

Developing effective metropolitan indicators is a challenge for all cities whether developing or developed, adequately resourced or with low planning capacity. Melbourne 2030, a long-term strategy for the Melbourne metropolitan region developed by the State of Victoria, identified a number of Activity Centres and a smaller set of Transit Cities among them, accessible places singled out for high-priority measures to improve accessibility, increase density and encourage social and economic diversity.

Considerable infrastructure funding and professional planning resources have been committed to implement this important part of the plan. The government of Victoria, the relevant metropolitan authority, set out to measure the effectiveness of the Activity Centres, including designated Transit Cities. Initially, a very detailed 'triple-bottom-line' set of indicators was drawn up. However, even this large set indicators covered only some of the aims of Melbourne 2030. A higher-level set of 'dashboard' indicators were commissioned but despite the investment of professional resources in monitoring and assessment by the State, the information foundations required even to monitor the 'top 10' indicators were not in place. Since then the Department of Planning and Community Development has focused its Transit City monitoring effort to better effect. But the case illustrates the need to devise top-level indicators early in planning cycles and to focus effort on indicators that are known and meaningful to key decision-makers.

See ACIL Tasman/ TRACT 2005 and Wilmoth 2006

### **4. EXPERT MISSIONS**

The expert mission program has been central to the work of Commission 5. It reflects the Commission's pragmatic approach to capacity building and is a tangible expression of the partnership with UN-HABITAT. A primary objective of this relationship was to promote the work of the GUO in setting up LUOs in developing cities.

The missions typically consisted of three day visits by experts which involved meetings with local decision-makers and administrators, to assess existing performance measurement systems within the city and to train local practitioners. The missions geared the training sessions to the level of experience of the hosting city. The training sessions promoted a 'participatory approach' to indicator development, recognising that performance measurement systems are most effective when developed by the people who will be applying them and are directly relevant to the situation of the city.

To qualify for expert missions cities had to meet the following criteria:

- Demonstrable organisational capability and ability to deliver outcomes.
- Commitment to develop performance and planning indicators and to improve outcomes in performance and process.
- Commitment of staff for the duration of the project.
- · Commitment to share experience with others.

The expert missions provided Commission members opportunities to see first hand the use of performance measurement in the developing world and in emerging economies. Some lessons learnt through the conduct of the expert missions have been in the following areas:

- · Growing interest in performance measurement systems.
- The MDGs impact on local strategic objectives.
- Cities' recognition of their role in successful performance measurement.
- Political systems guide performance measurement systems.
- Faith in technological solutions.
- The need for clarity when developing indicator sets.



#### 4.1 Growing interest in performance measurement systems

The high level of interest in the work of the Commission demonstrates the growing awareness and enthusiasm among city leaders around the world for performance measurement systems. City constituents are eager to develop these systems and increasingly see performance monitoring and assessment as important parts of strategic urban planning. Many leaders in developing cities have only recently adopted a strategic outlook to urban issues, having traditionally viewed urban management as a practice reactive to the forces of society, rather than seeing it as a means to produce policies that can identify desired outcomes and guide development towards city goals. Recent adoptions of strategic approaches are positive steps towards improving the state of many of the world's cities.

### 4.2 The MDGs impact on local strategic objectives

Adoption of the UN Millennium Declaration signified a renewed determination of the international community to improve the living conditions of those suffering from extreme poverty. The adoption and use of the MDGs as a major tool to achieve this outcome has shown the world the effect that performance measurement can have on achieving strategic goals. For some developing cities their country's adoption of the MDGs has been the stimulus for city leaders to develop performance measurement systems; then their sponsors through LUO support and good documentation have provided effective guidance on how to bring a rigorous and strategic approach to urban management.

Many city managers focus on the MDGs, seeking to align their cities' goals and aspirations with those outlined in the MDGs. However, the powers and responsibilities of municipal and provincial government differ from those of national government, and there is uneven correspondence between MDG goals and city activities. Therefore Commission 5, while promoting the localisation of the MDGs and encouraging cities to work within the broader global framework created by the MDGs, also fosters among member cities an understanding that local policy concerns are also important, and that performance measurement systems are most effective when they reflect the priorities and goals of the local community.

### 4.3 Cities' recognition of their role in successful monitoring systems

Commission 5 missions encourage developing cities to recognise that the primary responsibility for developing and applying urban indicators resides with the host city itself. The Commission is focused on capacity-building and seeks to ensure that the training it provides will empower recipients. Some cities hope or expect visiting experts to provide them with detailed strategic plans, complete with associated indicators. This is a difficult expectation to manage, and it has become necessary to explain to officers of participating cities that this is not within the scope of Commission 5. Rather, it recognises that local technical practitioners and decision makers themselves have to identify the key areas for performance measurement. It is true that the visiting expert can provide some basic information and skills for cities to develop systems that address local concerns and strategies, but not ultimate ownership. City managers have been encouraged to involve as many stakeholders as practically possible, including non-government organisations and community groups. They have also encouraged the creation of more inclusive and localised systems. The material developed during training sessions is essentially the work of the host city and its partners, and may form the basis of future projects.

Participating cities have pursued the application of performance measurement systems with different levels of effort and success. Those that have recognised their own role and agency in the training process have usually been able to apply the training most effectively. Some cities have taken no more follow up action, despite the efforts of Commission 5 to provide further guidance. The successful application of performance measurement systems require appropriate resource allocation, and sufficient interest and support at the political level. Essentially, for such missions to be successful in the future, the host city administration must take responsibility for resourcing and developing its own systems. They might take into account – but not necessarily follow – the advice offered and the training provided by the visiting expert.





The second Commission 5 meeting was held in conjunction with the Metropolis Board of Directors' Meeting in Antananarivo in September 2007.

### 4.4 Political systems guide performance measurement systems

The expert missions have been conducted in a range of cities with differing political systems and values. The Commission, and Metropolis, adopted a strictly non-political approach to its work and has focused on capacity building and training of local municipal staff. It does not make any comment on the relative values of political systems, though in the course of its work it acknowledges the impact of national political systems on local performance measurement priorities.

Central to the Commission's approach is that effective performance measurement systems must reflect local concerns and priorities. Many basic functions of city management can be viewed as universal and capable of improvements acceptable to all political sectors: e.g. public transport, waste management, health services, provision of open and recreational space, urban design and city master planning. Each of these areas of concerns can be addressed differently according to the dominant ideo-political system of the country and can result in divergent sets of indicators. It can also be difficult to reach agreed definitions of some concepts or terms as different cultures will have different interpretations and understandings. These differences have proven to be relatively minor, as representatives of host cities have welcomed discussion of new ideas and different approaches to urban management.

Performance measurement systems operate on information, data and analysis and are embedded in administrative and political systems. To be effective practitioners require some freedom of access to information and the ability to present unfavourable results as they occur. In countries where government is less open in this respect, constraints on practitioners and LUOs can inhibit the information gathering process as well as the conduct of performance management. The effective functioning of inclusive urban performance measurement systems requires open, decentralized societies in which the populace takes empowered roles within society. There is still scope within less open societies for the use of urban performance measurement, though the results are less likely to be as comprehensive or as successful.

### 4.5 Faith in technological solutions

Some city leaders look to technology as an answer to their problems. This is apparent in the requests of many cities for assistance with GIS and associated technology. Some cities have installed complete GIS hardware and software systems without trained staff to use them. In some other cases GIS has become technically operational but there are no defined strategic objectives to take advantage of the measuring and monitoring capacity. GIS and associated technologies are only one set of tools for the strategic planning process and should not be given precedence over other tools without examination. In isolation, the information that these systems gather simply enters a 'data graveyard'. When GIS is linked to indicators within a strong strategic framework, the technologies and ways of working can accelerate progress towards targets dramatically.





The third Commission 5 meeting was held in Toluca, State of Mexico, in November 2007.

# 4.6 The need for clarity when developing indicator sets

When developing performance measurement systems cities are faced with an abundance of choice and it soon becomes apparent that practically anything can be measured. The challenge then for the practitioner is to decide what needs to be 'in' and what needs to be left 'out'. Indicators that reflect the strategic goals of the city, and the capacity of the organisation using them, are more likely to be useful and sustainable.

Practitioners thus need to be careful in the selection of indicator sets that they reflect their city's needs. An indicator based on an area where there is no available information, or no practical way of getting that information, will not be of any use to the city. Likewise, coverage of areas where it is not possible to implement programs or projects may also result in wasted effort and be frustrating to practitioners. In such situations practitioners may feel overwhelmed with the task, fail to deliver any benefit or cease using the indicators. It is better that a city develop a simple system that can be applied easily, rather than a comprehensive system that cannot be maintained.

### **5. KEY OBSERVATIONS**

The following sections detail key observations drawn from examination of the approach and work of the Commission over the past two triennial periods. The Commission has made these observations to consider what has and has not been successful, and to raise important issues of concern.

# 5.1 Practical approach of the Commission

The work undertaken by C5 has sought to achieve a positive and tangible result for the membership of Metropolis, particular those cities in the developing world. The Commission's practical approach has been a shift away from the research focus of many earlier Metropolis Commissions. The high level of interest amongst Metropolis member cites and partner organisations shows appreciation for this practical approach. Importantly, many cities are now eager to adopt a form of performance measurement and have been taking active steps to improve the capacity of staff to do this work. The Commission has played a useful role in addressing some of this enormous need for capacity building. By focusing the efforts of the Commission on the training of practitioners, C5 has sought to bring tangible benefits to member cities.



### 5.2 The Role of MDGs and the partnership with the GUO

The MDGs have been a great force for highlighting development issues and promoting the use of performance measurement in developing cities. Linking poverty alleviation to a structured set of goals has communicated to the world's population that it is possible to approach these issues in a systematic and disciplined manner.

The partnership between the GUO and C5 has been valuable in promoting a more systematic approach to city management. It has played an important role in raising the profile of Commission 5 among non-Metropolis actors, and in enabling its work in the interests of both partners.

### 5.3 Expert missions

The expert missions have been a major component of the Commission's work. They have been designed to provide focused assistance to recipient cities by assessing the situation of city performance measurement systems, providing training, making suggestions on how cities can move forward with their own systems, and facilitating the establishment of LUOs where necessary. The expert missions have been successful in raising the profile of performance management in the recipient cities amongst decision makers and practitioners, and the majority of participating cities have endeavoured where possible to establish performance measurement systems.

These missions have faced limitations and have had varying levels of success. One key factor in the success of an expert mission has been the participation of the host city. For those with sufficiently developed administrative functions, staff and enthusiasm, the missions have proved to be the springboard from which they have launched successful local systems. The approach has been less successful where the recipient cities are expecting the visiting expert to provide them with a full performance measurement system, or where they have not committed the requisite staff to develop a localised system. Success depends on the ability and willingness of the city to apply the training and assistance. Some cities are unable or not prepared to develop their own indicator sets, preferring to adopt generic sets developed elsewhere. Often the key problem is a lack of political and financial commitment to the process.

Some city managers were unclear about the nature of the expert missions. As a result, they had unreasonable expectations of what could be achieved during a three-day mission. Some of the requests would have required major investments in equipment, taken months to establish and required continuing maintenance and involvement. Such levels of involvement were not within the ambit of Commission 5 expert missions. The Commission recognises that there are significant limitations to the 3-4 day format of the missions. The experts have stated in their reports that there is a need for longer term capacity building programs to allow experts to develop staff capacity further and to oversee the establishment of an operational system in host cities. This would require a greater financial input from Metropolis and would require input from potential financing partners.

### 5.4 Workshops and meetings

The meetings and workshops have proven to be among the most effective elements of the work program. Their great success has been demonstrated by the increasingly high levels of interest and active participation from members. In turn, this success can be attributed to the accessibility of the workshops to practitioners, and their responsiveness to training needs for performance measurement. Another factor has been alignment of the themes of the meetings and workshops to the concerns of members, host cities and other participants. The level of involvement in C5 events has been an encouraging sign that the Metropolis membership values practical training opportunities.

The events also provided good networking opportunities for participants, allowing them to make contact with colleagues dealing with similar issues. They provided opportunities for different views and opinions to be presented in open and accessible forums. The events were also open to individuals and non-Metropolis members, enabling the promotion of Metropolis to potential members. These events are a relatively economical way to reach a large and diverse audience.



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# 5.5 Strategic planning, data and performance measurement

Central to the work of C5 has been identification and promotion of the relationship between strategic planning and performance measurement. It is the experience of the Commission that performance measurement is a central part of a successful strategic policy. The use of indicators enables the policy maker to monitor whether policies and initiatives are working and achieving desired outcomes. Performance measurement allows city managers to gain a broader perspective of their work and the status of the city.

Data collection and management are essential in this process as they are the basis of any analysis of outcomes. Data collection must be done in an intelligent manner, with an understanding of what needs to be measured and what does not. It is also necessary to consider what data can be maintained and updated over time. City managers need to keep their awareness that policy formation is the central part of the process, and that performance measurement merely responds to the needs of policy.

# 5.6 GIS and performance monitoring

The use of GIS attracts strong interest among member cities and was the topic for a number of useful meetings. While many cities are eager to adopt performance measurement systems and have a good understanding of its uses, there is still a tendency to equate performance measurement systems with information technology and GIS. Success at performance measurement itself is not a function of a city's stage of development: the very difficult circumstances of post-conflict Brazzaville and the highly sophisticated use of data management and monitoring in Berlin do not stand in the way of useful dialogue and exchange. But as city leaders look to technology as a tool to facilitate development, they often ignore the tangible benefits that come from simpler systems. Before embracing complex technologies, cities should articulate their strategic planning objectives; and employ those technologies for which there is proper support with training in their effective commissioning and continuing use. The Commission has seen some excellent examples of the use of GIS and related systems in city monitoring, but also too many expensive 'data graveyards' that give no practical advantage to the managers or inhabitants of the city.

Like any business application, GIS needs to be the servant of the business, be rigorously project managed in its development and be dedicated to improving business outcomes. If not careful, GIS can become a burden - promising the world at first but then disappointing stakeholders and clients. With GIS it can be tempting to 'look smart', and use technology to create an impression of sophistication and the promise of a new range of management tools. These high expectations often result in disappointment, as it is not well understood how much data has to be collected and managed to support advanced GIS. To develop sophisticated GIS takes major investments in technology and data collection, skills development and most importantly time. The challenge instead is always to 'be smart': within resource constraints, deliver a succession of improvements to decision making in processes which openly support business development and corporate outcomes.

For these reasons it is often best to start with a simple unsophisticated GIS, something that offers small but significant improvements. Over time, as skills, technology and the professional culture develops, systems can become more dynamic, more powerful and quicker and become not only a day to day tool in city planning but also the backbone of strategic decision making.



### **6. RECOMMENDATIONS**

The case studies, expert missions and other work of the Commission have raised the issues discussed above. The question here is how these lessons can be turned to profitable use for future Metropolis Commissions, members and projects.

### 6.1 Wider involvement and partnerships

Metropolis Commissions should reach out further than the Association's membership. Commission 5 welcomed participation from a number of non-Metropolis individuals and organisations and found their involvement enriched its work. Other Commissions may benefit from such an outreach as they foster stronger linkages with the broader urban development community, and connect with global pace-setters in the areas in which the Commissions work. Cities in the developing world would benefit from this greater cooperation and exchange of information.

The Commissions should also seek active partnership arrangements with other organisations, as C5 did with UN-HABITAT. Partnerships would enable the Commissions to reach groups that they may not usually have access to. An effective partnership will also provide greater intellectual and resource input, and a potentially wider scope of projects.

Given the limitations that have been identified with short expert missions, Metropolis should consider whether it is possible to support longer term missions within the scope of its technical assistance program. Metropolis may be able to find financial partners who can assist in facilitating these programs.

It may also be worthwhile to test the willingness of cities in the developed world and in developing areas to create city-to-city partnerships to assist one another with performance measurement systems, as well as broader strategic planning practices. A variation of such a 'sister-city' plan could see cities exchange expertise – for example, an officer to assist for a period of time one way, and a training program the other way. It is also important to foster regional networks of practitioners, observatories and governments that can create further exchange of knowledge.

### 6.2 Practical case studies and manuals

The rich experience of Commission participants to date has produced some good shared case studies, only a few of which are able to be profiled in this report. Some of them have evolved over the period through several workshops, presentations and missions. With further resources, perhaps in conjunction with other centres for documentation, these experiences can be converted for wider use and housed to remain updatable and 'live' to those who access the documents and case studies.

## 6.3 Performance measurement not a stand alone function of C5

Performance measurement should not be seen as a stand-alone function of Commission 5. The use of indicators and performance measurement can be seen to touch every aspect of urban management. Indicators and performance measurement could potentially be incorporated into the functioning of all Metropolis Commissions, as the drivers of monitoring and assessment. This would help Metropolis measure the efficacy of its own programs and initiatives, and to promote this approach among members.



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# 7. CONCLUSIONS

In conclusion, Commission 5 has worked hard to fulfil the Terms of Reference and to provide a positive outcome for member cities through its practical capacity building approach. This work has been most successful in the exchange of information and ideas among practitioners, raising awareness among decision makers of the benefits of performance measurement, and developing relationships among participants.

The Commission has provided opportunities for developing cities to benefit from the experience of world-class trainers and leaders in the field of performance measurement. The events have succeeded in reaching a wide audience by bringing the trainers to accessible regional cities, rather than expecting those in the developing world to travel great distances to the training sites.

Through the last two triennial periods Commission 5 has seen the great work being done by participating cities from all around the world. Performance measurement and monitoring are being used in many ways and are helping city managers do their work in smarter and more efficient ways.

Commission 5 does not have access to the resources to meet all requests for assistance in developing performance measurement. This demand reflects an absence of other adequate capacity building projects in the area, but it also demonstrates that professionals in the developing world recognise the benefit of performance measurement. This is an encouraging sign, and demonstrates that in developing the Commission 5 project, Metropolis and UN-HABITAT correctly identified an area of major importance which has the capacity to improve the management of cities - the locales that now house half the world's population.



### **APPENDIX: SUMMARY OF COMMISSION 5 ACTIVITIES**

#### Meeting and Networking events 2003-2008

• 12-13 May 2003 – Melbourne, Australia – Commission 5 Orientation Workshop. The meeting provided an introduction to the proposed work of the Commission, and basic training in generic performance measurement models.

• **29-31 September 2003 – Istanbul, Turkey – Commission 5 Meeting and Training Workshop**. The meeting provided an opportunity to offer practical training to the participants through a number of case studies on various applications of performance measurement systems.

• **31 March - 2 April 2004 – Ixtapan de la Sal, Mexico - Commission 5 Meeting and Training Workshop.** The focus of the meeting was on the 'effective application of GIS in managing urban development.' (minutes p 3) The training workshop focused on the use on poverty indicators and monitoring systems for urban development plans. (p8)

• 13-17 September 2004 – Barcelona, Spain - World Urban Forum II (WUF) – *Cities: Crossroads of Cultures, Inclusiveness and Integration?* - Commission 5 participated and presented a case study at the networking event: "Urban Inequities and GIS – Putting the Poor on the Map"

• 11-15 May 2005 – Berlin, Germany – 8th World Congress of Metropolis - Metropolis 2005: Tradition and Transformation: the Future of the City.

• 19-23 June 2006 – Vancouver, Canada - World Urban Forum III (WUF) – *Our Future: Sustainable Cities* – *Turning Ideas into Action.* – Commission 5 conducted a training workshop as part of a networking event.

• **19-20 June 2007 – Tehran, Iran– Commission 5 Meeting**. The key themes of this meeting were 'environment' and 'governance'. A number of presentations were delivered addressing these issues.

• 21-23 June 2007 – Mashhad, Iran– Training Workshop. The workshop focused on how to develop participatory policy indicators, concepts of governance and civil society.

• **18 September 2007 – Antananarivo, Madagascar – Commission 5 Meeting**. This meeting was held in conjunction with the Metropolis Board of Director's meeting.

• 26-28 November 2007 - Toluca, Mexico - Commission 5 Meeting

• (forthcoming) October 2008 – Sydney, Australia – 9th World Congress of Metropolis - Metropolis 2008: Connecting Cities

#### Expert Missions 2003-08

- Addis Ababa, Ethiopia 20-23 April 2004 Experts- Mr Tanzib Chowdhury, Dr Joe Flood
- Aden, Yemen 24-26 April 2004 Expert Dr Joe Flood
- Addis Ababa, Ethiopia 23-24 July 2004 Expert Mr Tanzib Chowdhury
- Tehran, Iran 21-32 June 2004 Expert Dr Joe Flood
- Isfahan, Iran 24-26 June 2004 Expert Dr Joe Flood
- Mashhad, Iran 27-29 June 2004 Expert Dr Joe Flood
- Brazzaville, Congo 19-21 July 2004 Expert Mr Nicholas Njoka
- Sana'a, Yemen 25-27 June 2007 Expert Dr Joe Flood
- Belo Horizonte, Brazil November 2007 Expert Dr Joe Flood



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# **CREDITS**

#### Editor:

Ariadna Pujol, Secretariat General Metropolis

# Translation:

Lynda Trevitt Raquel Valle

Discobole Barcelona, Spain

# Graphic design:

Judith Martínez, Bird Creative

# Maquetación y tratamiento fotográfico:

Roger Masdeu

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Ajuntament de Barcelona

Avinyó, 15 08002 Barcelona (Spain)

metropolis@bcn.cat

www.metropolis.org

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# About Metropolis

Established in 1985, Metropolis is the world's leading association of major metropolises. Its mission is to promote cooperation and knowledge exchange, and its international leadership is recognised by the UN and other international organizations.

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The reports presented at the Metropolis triennal congress respresent the outcomes of the association's standing commissions.

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The Eco-region concept can be defined as all policies which a metropolitan area implements in order to promote sustainable development polices within the limits of its own economic basin, and beyond its territory, interregional or decentralized cooperation to tackle existing imbalance and identify ways of re-establishing a new equilibrium.

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The Commission (as a joint project of Metropolis and UN-Habitat), aims to provide practical technical assistance to a number of cities in developing countries to build their own local capacity to undertake the development of performance measurement systems. This takes the form of expert missions to the relevant cities.

The Commission reports can also be downloaded via: www.metropolis.org

# **Metropolis**

Secretariat General Avinyo 15 – 3a planta 08002 Barcelona

**T** +34 93 342 94 60 **F** +34 93 342 94 66

metropolis@bcn.cat www.metropolis.org

