



PolyMETREXplus RINA

Gulf of Finland



Helsinki–St. Petersburg–Tallinn Spatial Vision



PolyMETREXplus RINA

Gulf of Finland Spatial Vision

Helsinki



St. Petersburg



Tallinn



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Graphic layout: Olli Turunen | Tovia Design Oy

Front and back cover concept: Douglas Gordon

Front and back cover designs: Douglas Gordon and Salla Kaaronen

Cover graphics: Salla Kaaronen, Mikko Marttila and Douglas Gordon

Pohjakartta: © Kaupunkimittausosasto, Helsinki § 002/2007

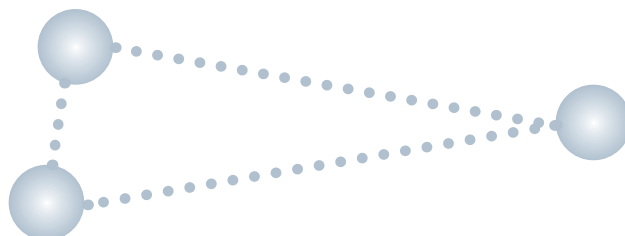
Printing: Edita 2007

ISBN 978-952-223-030-0

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Gulf of Finland Spatial Vision

Edited by
Douglas Gordon



Polymetrex Gulf of Finland

Participating Cities and City-Regions

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Introduction

PolyMetrexplus is an EU funded project promoted by Metrex, the Network of European Metropolitan Regions and Areas.

PolyMetrexplus aims to contribute to the effective polycentric metropolitan relationships based on complementarity and cooperation in respect of the European Union's European Spatial Development Perspective (ESDP) and its Territorial Agenda.

PolyMetrexplus is an Interreg IIIC project to improve the effectiveness of policies and instruments for regional development and cohesion.

The working approach of PolyMetrexplus produced a Framework for a Polycentric Metropolitan Europe. It created an Action Plan and a Polycentric Practice Benchmark derived from a programme of Representative Interregional Networking Activities (RINAS). The RINAS test the scope for additional polycentric clusters and visions within PolyMetrexplus.

This Gulf of Finland RINA represents part of the PolyMetrexplus Action Plan. It forms one of a series of RINAS in the 'Outcomes and Output' practice component element of PolyMetrexplus.

Aims

PolyMETREXplus RINA
AIMS of Gulf of Finland

Helsinki

St. Petersburg

Tallinn



Aims



PolyMETREXplus RINA AIMS of Gulf of Finland

- to exchange practical knowledge and experiences of spatial planning between the Gulf of Finland city-regions
- to cooperate between the city-regions in the Gulf of Finland with the aim to create spatially, polycentric regions in the future
- to identify the key challenges and opportunities for the triangle of city-regions and translate these into policy options
- to develop a spatial vision for the Gulf of Finland and prepare a joint statement action plan.

Why the Gulf of Finland RINA?

The Gulf of Finland structure, from Helsinki in the northern most part of EU to Tallinn in the south and St. Petersburg in Russia to the east, is recognized as one of the key gateways of the EU to Russia. The Gulf of Finland represents the EU **periphery**, bordering as it does with Russia. At the same time, the Gulf of Finland represents a key opportunity to open up an important economic dialogue between Helsinki and its Russian and Estonian neighbours. The development potential for the Finnish Gulf is considerable and to the advantage of Europe overall.

There are several key challenges – to realise the economic development potential that the Gulf of Finland offers to the EU, to recognise the need to create high-quality transnational connectivity within the development triangle of the Gulf, to achieve territorial cohesion and to promote better relations with the EU and Russia on the periphery is why the Gulf of Finland should be viewed as a unique opportunity today to influence the EU of tomorrow.

Polycentric development of the Gulf of Finland

The polycentric process is considered so far to be the most viable process that can support the future mega-city region. The future cities of Europe will no longer be independent. The future polycentric city-region process is already gathering pace (Hall, et al, Capital Regions 2006). Metropolises worldwide consist of highly concentrated central urban cores of mixed uses surrounded by suburbia at lower densities with secondary cores of district regional centres. Beyond the immediate city level there now appears to be the process of a polycentric urban form of hierarchical smaller sized regional city-structures on the periphery of the main city core. This is the case with Helsinki. Here, the fundamental driver of growth is the informational economy. Castells refers to Finland and the Helsinki metropolitan region as being one of the leading technological regions in the world (Castells, Finnish model of the Information Society). The key emphasis is the organisation of space and of the space of where information flows. The metropolitan economy has key activities and as some activities move out other activities grow to take their place.

The identification and promotion of polycentric city-regions in the Gulf of Finland triangle is essential in order to create a long term vision of better territorial balance with the EU pentagon core.

Identity of the Gulf of Finland Development Triangle

In the countries and cities that form the Gulf of Finland there is a long history of dense relations either cooperative or competitive. The Gulf of Finland RINA is the economic and cultural interface of the EU to Russia. The triangle has a combined population of 10 million people. Population trends show decline in Tallinn and



St. Petersburg; the exception being Helsinki, which has a high positive rate. The GDP per capita is weak overall. Only Helsinki has a high GDP of nearly €40,000 per capita. The other two city-regions in the RINA have less than 50% of Helsinki's GDP.

TEN priorities

The European Commission has long recognised the imperative of improving transport infrastructure between the Union and Central Europe. The Trans European transport network (TEN) is a programme of priority projects which will support better territorial balance. An augmented TEN-T programme to take account of the developing initiatives with Russia would greatly assist the Gulf of Finland considerably. The current rail corridor network requires to be significantly upgraded. This centres upon more investment being laid in the form of a high-speed rail network from Helsinki to St. Petersburg. A future Gulf of Finland envisages the possibility of a rail tunnel then connecting Helsinki with mainland Europe through Tallinn.

Connectivity of the future Helsinki–St. Petersburg–Tallinn polycentric region will not only depend upon implementing TEN but re-assessing the future potential for upgrading this peripheral part of the EU as a key priority in achieving better territorial balance and cohesion. A further key issue is how this could be achieved in a carbon light way to reduce greenhouse emissions.

Transnational dimension

An important feature of the Gulf of Finland RINA will be the transnational connection. All the capital city-regions involved will have future relationships with ad-

joining regions and countries within the RINA. Equally important may be the viability of linking up to the eastern borders with Russia. Helsinki, for example, has St. Petersburg as its key window of opportunity. It is only 375 kilometres from Helsinki. Tallinn to the south, is only 80 kilometres by sea. Each in turn could open up markets of millions of people. Such possibilities create the necessary conditions transnationally for the development of a linked polycentric mega-city-regional structure across national divides. The exchange of information flows and business interchange could quicken the pace of development within the Gulf of Finland triangle and have major positive knock-on effects for the centre of the EU and in particular, the Pentagon core.

Spatial Vision

An essential key component of the Gulf of Finland is the creation of an agreed vision. The vision sets out the



The EU TEN's programme.

strategic ideas that can help create a modern competitive economic space within Europe. This in turn can provide higher quality of living for its citizens, support a widening business culture, and design a matrix of connectivity to give accessibility and maintain environmental standards.

What are the Future Challenges and Actions of the Gulf of Finland RINA?

- the exchange of knowledge and experience throughout the Gulf of Finland development triangle in terms of spatial planning that will help build a better understanding of how the organisation of space can improve the quality of life
- to promote greater economic development within the Gulf of Finland
- the need to implement a clean, efficient, affordable and effective high-speed transnational public transport system in order to improve connectivity between the city-regions as a starting point for developing the city economies
- City-Regions will be the drivers of economic development in the future EU. In order for the Gulf of Finland to ensure its position as a European dynamic network of urban metropolises, Helsinki-St.Petersburg-Tallinn by 2050 will need to consider new forms of Governance, such as a single authority for each city-region, or a regional tier within their respective remits.
- the Gulf of Finland city-regions will, from a spatial planning perspective, produce a joint statement of intent to improve city-regional competitiveness, create regional clusters of cooperation, and ultimately achieve polycentric regions.

Methodology

The Gulf of Finland RINA made a series of practical workshop meetings. The kick-off meeting was held in Helsinki, in June 2006. Each meeting was structured around a framework of the host City-region presenting a spatial analysis of today and tomorrow. Each workshop had a specific theme to work to, with Helsinki describing the City-level of today and how the city intends to meet the development challenges of the future. The participating cities had been provided with a Core Framework by the Lead Partner of the RINA, namely, Helsinki, in order to present their own city's development scenario. The second day of the workshop tended to focus on reaching base-line conclusions,

achieving a consensus on the key issues, followed by a Management meeting to discuss work programme, timetable and finances. The concluding part of the workshop involved a study tour by bus around each city-region examining the future development potential of new major projects and how these would fit into the future city-regional structure.

An important part of the RINA was the getting together in the evenings, usually funded by the hosting city, to participate in further discussion of the key issues of the Gulf of Finland project.

Since Helsinki concentrated on the City-level, the next meeting in St.Petersburg (November 2006) steered the workshop to understand the relationship between the City and its region (the **City-region**). The third level, the Transnational-level, was held in Tallinn (April 2007). Helsinki (November 2007) hosted the **FINAL Report-level**, placing the main emphasis on building a joint statement of intent for the RINA.

Summary of the Gulf of Finland RINA AIMS

There is an unbalanced distribution of competitiveness between our city-regions situated within the Gulf of Finland triangle and also with the core (Pentagon GIZ). There is a need to strengthen urban networking to create strong clusters of innovative activities. Strategic cooperation between city-regions can take place by means of shared advanced infrastructures and access to the provision of services. In addition, city-regions need to work together on environmental pressures, examine the links in transport and traffic and ICT, energy networks, and the challenges ahead for trans-European risk management. All in all, this Polymetrex Gulf of Finland RINA identifies how city-regions can improve the spatial development potentials in a more effective and integrated way.

The RINA employs the urban planning organisations of the key city-regions in the Gulf of Finland triangle from the farthest capital in the North, Helsinki, to Europe's main eastern neighbour, St. Petersburg in Russia, and Tallinn to the south in Estonia, connecting the Gulf to mainland Europe. These three cities came together in order to develop a common spatial vision and strategic set of ideas that can help create a more competitive Gulf of Finland within Europe.

Douglas Gordon

(on behalf of the RINA Lead Partner, Helsinki, and contributing cities, St.Petersburg and Tallinn)

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Helsinki

Helsinki: CITY

Final Report

1

A 'Smart-city' on the edge of Europe

Douglas Gordon
architect
City Planning
City of Helsinki



Introduction

The experiences of Helsinki are relevant in respect of City Planning and the way forward for EU territorial cohesion. Finland's capital has been one of the main economic power houses of the European Union in the past twenty years and is now experiencing the most dramatic changes to its city structure since the Empire City was built in the 1820's. The changes occurring to Helsinki offer an insight into how a city can manage growth and still maintain a high quality living environment. Because the city is a relatively unknown quantity within the EU it is even more important that its current sea change is understood for others to consider what to do in similar circumstances.

There are three key subject areas: the first is looking at spatial cohesion and the need for good and strong urban planning in order to have a successful city. It is about how urban planning can manage the growth of a city and in particular how Helsinki has managed to successfully control the city structure in a sustainable manner as the city grows during periods of extreme change.

Secondly, to examine what has happened to Helsinki in practice using this planning process. What do the new areas of change look like on the ground, and does the city continue to function at a high level? Have house prices risen dramatically, or are there huge increases in congestion? And what of social exclusion? Has there been a rapid increase in exclusion, recognised through social disparity? In doing so, issues such as land use development, land management, the types of mixed use developments will be described.

And thirdly, the final part examines the reasons behind Helsinki's ability to accommodate and manage the resultant growth within its city structure without displaying the normal disadvantages associate with rapid growth such as traffic chaos, London-style rise in house prices, growing segregation spatially, or huge changes in social disparity between the 'haves' and 'have-nots'.

Living on the Margins

Helsinki sits on the very northern periphery of the EU. In standard economic theory Helsinki's position being furthest away from the economic centre of the EU should, in practice, make it more difficult to achieve success. Yet Helsinki has demonstrated that one can be successful both economically and spatially even though the city is literally on the margins of Europe.

In terms of spatial planning, the population of Helsinki is 565,000. This is expected to grow by a further 27,000 in the next 30 years. The city is 186 km². It is a compact, reasonably dense city, based round a high quality public transport network, primarily rail: metro, commuter rail, and trams.

Helsinki has built its city concentrating on domestic internal investment. Helsinki's growth has largely been about Finns coming from other parts of the country. Few residents are from outside Finland, and until very recently, immigration has been rather low. That is beginning to change. In comparison to the number of residents born outside of their respective countries in other parts of Scandinavian, then the differences are striking. Oslo has 22%, Stockholm 23% and Copenhagen 18%. Helsinki's numbers are marginal, so far.

Spatial Cohesion and City Planning

A spatially cohesive city structure is an essential part of managing the city. Helsinki is a city of two extremes: It is a Summer city as well as a Winter city, and both of these elements have to be taken into account in the design and building processes. Overall, Helsinki is a highly planned city. It is also a modern city, a garden city and a maritime city. Helsinki is a city that's developed significantly since the Second World War. In the past twenty-five years the city has doubled in volume, not in terms of expanding outwards, but in terms of the actual amount of building that has taken place. And despite that, 35% of the city is still green. So in relative terms it's very much a garden city and yet it is also a maritime city, being that water surrounds it on three sides by the Gulf of Finland. Indeed, Helsinki has 220 kilometres of shoreline.

Planning hierarchy

In terms of the planning hierarchy the Regional Plan (2006) is a structure plan, which is a legal statutory



plan that sets out the green areas and the transport corridors. There is, therefore, a working hierarchy whereby all other plans should broadly complement the regional plan. The City Master Plan 2002 is a land-use plan. It is not a statutory plan, but is City Council approved. There is also a 'city structure plan' that shows all the new areas of change defined in red. This demonstrates where the major changes will take place in the city over the next 25 years. There are some 15 major development projects taking place within the City, the smallest being the 'Arabia Waterfront' project for 7,000 people and a major commercial centre, and the largest situated in Vuosaari for 40,000 residents. This 'red' map therefore clearly shows where new investment is directed. In historical terms, these structural changes represent the greatest spatial development taking place since the early nineteenth century.

Regional Plan.

The City of Helsinki is managing these massive structural shifts in spatial terms to the existing city structure without eating into the green areas, without creating massive traffic congestion, or without letting house prices soar. All new development is concentrated into brownfield areas (areas of degradation or industrial land surplus to requirements), thereby keeping the use of greenfield sites to almost a negligible level. The City pays attention to social exclusion and generally, achieves 50% minimum of social housing in each major scheme. The ability to do so is two-fold: the public sector owns the vast majority of land, nearly 80%, enabling a virtual monopoly of planning, and secondly,





this allows for a plan-led system to operate effectively and efficiently. Hence, spatial planning has been capable of taking into account the huge growth that has been taking place over the past 25 years precisely because a plan-led system married to a land management strategy ensures a smoother transformation of wide-scale change within the city.

In doing so, Helsinki and the metropolitan region aim towards a more polycentric structure. A polycentric structure consists of a lively city centre and a balanced number of district centres in the outlying neighbourhoods. This is replacing the old monocentric model, where nearly all activities are concentrated in the city centre whilst the suburbs are at a major disadvantage by comparison. What Helsinki has tried to do to overcome the disadvantages of living on the periphery has been to build major district centres to the east and to the north of the city, but still within the city boundaries. So, there are no edge cities or out-of-town centres. The new centres are meant to achieve a better balance within the city structure whilst at the same time not to undermine the importance of the downtown area. In Helsinki's new strategic plan for 2040 the comprehensive idea is to strengthen the city centre at the core whilst creating a balance with the suburbs in terms of social and health services, recreation, culture and shopping. By this strategy, Helsinki aims to have a well-structured form of spatial cohesion within its boundaries. A further aim is to repeat this strategy on a regional basis. The future aim is for a unified Greater Helsinki.

Helsinki promotes a plan-led system. In most cities, planning is developer-led, meaning, the developer will submit the plans to a city for planning permission to build. A plan-led system in Helsinki ensures that the plans are made in the City Planning department for new development areas, whereby private investment then follows-on by adopting these plans for implementation. This enables land-use planning to be integrated with land management and with traffic and transport. That is why all the major project areas are being built around the main transport interchanges of metro, rail or the tram network. If that is not possible, then the metro, rail and tram networks are extended into the new areas. Helsinki City Planning,

therefore, acts as the coordinator for making sure the new areas are 'urbanised' through new tram or metro routes into the heart of each development, all paid for by the City. Indeed, in many of these areas, the argument has been that trams and metro must be a part of the considered planning options in order that the areas become identified as urban quarters with their own trademark identity.

Master Plan 2002 – the key changes

The overall strategy of Helsinki's Master Plan is to create a vision and set of planning actions for the future. Indeed, the new strategic advisory plan for 2040 offers three alternative visions of the future for discussion.

The key to the Helsinki master plan is where the new areas of change are to be located and how they must fit neatly into the existing city structure. The existing harbours to the south west and eastern border of the city centre are being transferred 14 kilometres to the east to a new high-tech goods harbour in Vuosaari. There will be a new railroad and a new connection to the ring-roads from the harbour.

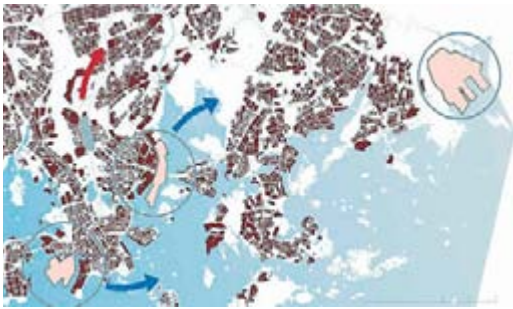
The resultant freeing-up of the brownfield sites in the city centre offer major redevelopment poten-



tial to build new residential neighbourhoods. The key aim will be to supplement and support the city centre and public services, making the latter more viable and better value for money. An additional 25,000 population is expected to the south-west area in the Western Harbour, and a further 13 to 15,000 residents for the eastern Fish harbour development.

Another major change will be in Central Pasila, which is 3 kilometres to the north of the city centre. It is old railway yards. The City will aim to build one million square metres of commercial, offices and residential over the next 20 years. Additionally, the City is building new residential districts to the east in Vuosaari for forty thousand people. There will also be a new linear development from the old Fish harbour right up into the ecological village of Viikki (13,000 people), which will then connect up to the new village called Aero Malmi for up to 20,000 people.

In public transport terms, the aim is to build a new western metro to our neighbour Espoo, a new metro



to the south-east of the city to Laajasalo, and a circle line metro covering the inner-city. In addition, a metro or commuter rail option exists to link downtown with the City Airport. The extension of the existing metro eastwards forms a major part of new public transport investment over the next 30 years.

Competitive City – Nordic Welfare City

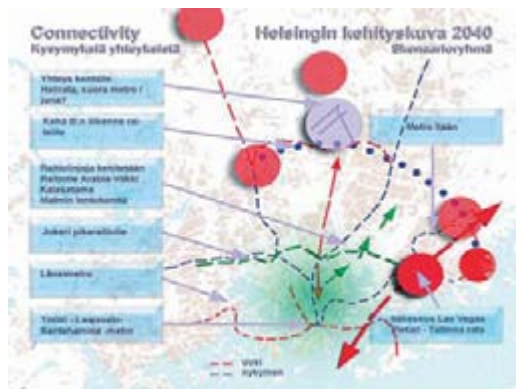
Despite Helsinki being a medium sized city of 565,000 people, with a metropolitan region of 1.2 million, in terms of the new scenarios being created, it is essential to take a global perspective. World cities are no longer simply about critical mass - it is also about com-

for that. Countries that have low taxation are more likely to have wider disparities in society in comparison with Nordic countries.

All of Helsinki's developments are made on brown-field sites. It's an important policy statement and it adds up to an overall set of policies which aim to create a socially sustainable city and a high quality, easily accessible public transport network and equally high quality environment. The City of Helsinki invests greatly in creating a well-managed and qualitative public transport system. In 2002 and 2003 the European Union gave awards to Helsinki for the high quality levels of its public transport system. For a city of over half a million the connectivity within the city is excellent. The metro, with two branch lines, covers the eastern areas. The overland rail system runs north, north-west and directly to the upper-west region. There are 10 tram lines covering the entire inner city, and a feeder bus system operating around each of the metro and commuter train lines. That's why 72% of people choose to use public transport coming into the city centre core at rush hours every day, which is one of the highest in the EU.

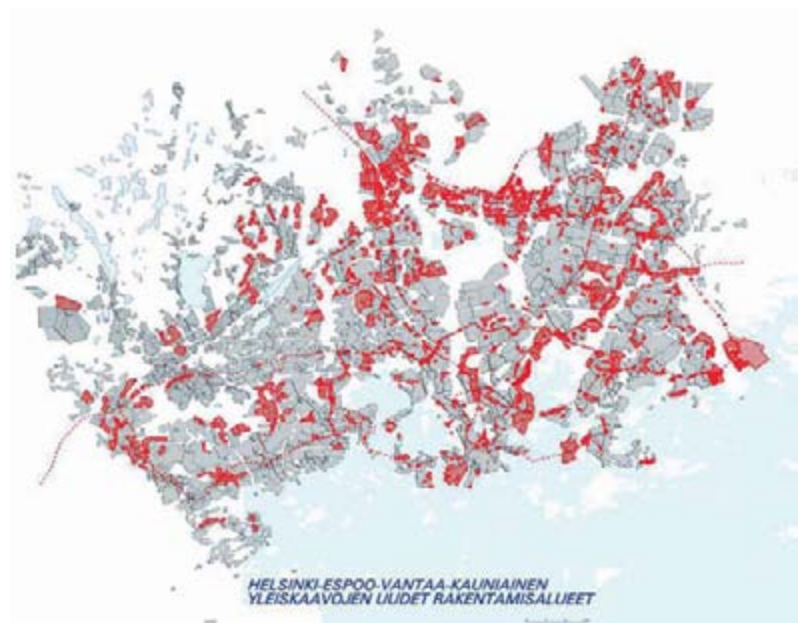
City-Region

In terms of the Metropolitan area, Helsinki has to the west, Espoo, with 232,000 people and 190,000 to the north in the city of Vantaa. To the east, is Sipoo. There are only 18 thousand people in Sipoo even though it's double the size of Helsinki geographically. The difference between Helsinki and the surrounding municipalities is that they base their city planning on low density, single family houses, with uneven clusters, and it is recognised that the private car is the primary mode of transport. New investment in the public transport infrastructure is essential to combat sprawl and lower energy consumption. It means that there are unconnected clusters filling up the geographical base of the region without spatial cohesiveness taken into account.



petitiveness and the quality of life. According to latest figures, Finland, in recent times, is the most competitive country in the world, secondly comes the USA, third is Sweden, fourth is Denmark. Up until last year fifth was Norway. What this means is that there is a very healthy Scandinavian Nordic grouping which offers a significant level of competitive mass within the world economy.

Helsinki, Stockholm, Copenhagen and Oslo all operate a Nordic social welfare model, based upon dynamic economies aligned to strong levels of social justice in the city. Each has relatively higher levels of taxation and market regulations. The Scandinavian countries form a rainbow of activity across northern Europe, and each have quality environments and healthy living indices. And yet they represent at the moment the most competitive connected area in the world. The high standard of living epitomises the view that by re-investing taxes into the physical and economic structures, the levels of return in human capital justify the national policy direction. It is about the 'will' to achieve a quality city. To do so, society has to be willing to pay



In practice, within the metropolitan area, Helsinki's plan-led, Nordic welfare model co-exists with neighbouring cities that contain sprawl similar to the north-American model. Such planning inconsistencies produce contradictions as to how the metropolitan area should develop cohesively. Certainly, the European Union is now advocating that cities create strategic alliances at a city regional level in order for the city core to be successful, but based upon a polycentric structure spatially at the metropolitan level. This would provide a greater form of balanced competitiveness in the regions across the EU. That is why Helsinki is buying up land on the eastern fringes of Sipoo on the open market. It offers the opportunity in the future to extend the metro eastwards into new development neighbourhood clusters forming part of the Capital city and help maintain cohesiveness. At the same time, there is now greater cooperation at the spatial level between the surrounding municipalities, so it appears that for the first time in a long time a level of strategic alliance is paying dividends spatially. The surrounding cities recognise the need to build more compactly and densely in order to create a more cohesive regional structure for the future.

Planning for the Future

Helsinki

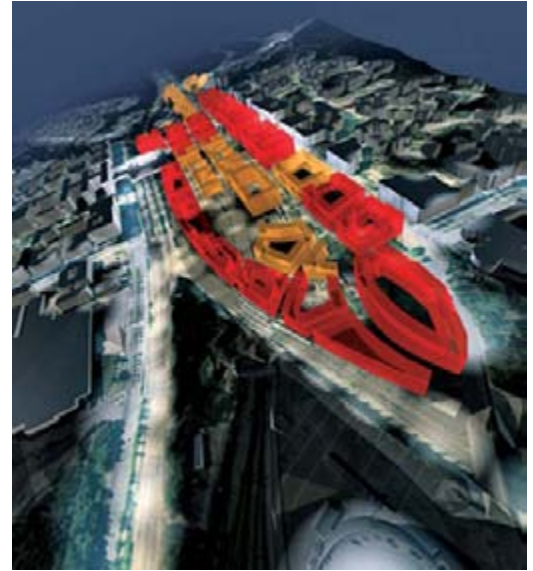
The future of Helsinki is based upon the Master Plan 2002 and the Regional Plan 2006. The Helsinki Master Plan sets out the various material development changes that will shape the future of the city's structure. The significant number of development projects is briefly explained, providing a snapshot of what is to come.

Kamppi – Töölönlahti Bay

The Kamppi-Töölönlahti bay lies in the heart of the city centre. Kamppi is the first PPP public/private part-



nership in Finland. City planning has a major say in the urban design process as the City owns the land. The Töölönlahti Bay area, adjacent to the Central Railway Station, is situated right in the very heart of the city centre. The entire area is to be redeveloped for the 21st Century for commercial and residential purposes.



Central Pasila

Central Pasila is three kilometres to the north of Central Station. The area is a valley-like landscape between two city districts, occupied by redundant railway yards. A new vitality of residential towers and commercial landscapes will complete the city's new urban identity. Some one million square metres of offices and residential is the key aim.

Ruoholahti – Jätkäsaari – Hernesaari (3 new areas)

These areas sit adjacent to the city centre within walking distance. There are three development projects. The first is Ruoholahti, which is nearly complete. This new high-rise waterfront development is built round a new canal, primarily residential for 8,000 people, and nearly the same number of jobs. A new metro and tram line into the heart of the development ensures that it has an urban identity and close affinity with downtown.

Jätkäsaari and Hernesaari are old port and warehouse activities. The City, by shifting the old harbours in Jätkäsaari and the Fish Harbour to Vuosaari, will open up the inner city to new urban quarters that feature apartments, businesses and an extensive urban park acting as its main spine. These extensions aim to reverse the trend of falling residential population in the very heart of the city. Additionally, it offers new investment to downtown and upgrades the use of local services. So Helsinki's answer is to expand the city centre with an additional twenty five thousand people, including nearly 10,000 workplaces. New jobs and workplaces are located along a northern spine, including the new Nokia headquarters. Jätkäsaari will be built in the next twenty years.



Kalasatama – Fish Harbour – Building a waterfront city quarter in central Helsinki

The Fish Harbour development initiates a new linear plan for the City. It includes following a line up from the Fish harbour to the Arabia development and then continues up to the new Eco-Viikki village. The linear formation follows through on to the forthcoming Aero-Malmi development in the north. Together, it creates a linear development axis for the city that will over the future 40 years continue up to the City Airport. The initial local plan for the Fish harbour has been made and an international ideas competition has been carried out. It is intended to build dense commercial offices around the new metro station, and housing for 15,000 residents and 6,000 workplaces. State-of-the-art housing is to be developed along the waterfronts.



Construction of the Vuosaari Harbour will completely transform the inner city. All cargo harbour functions will be transferred from the West and Sörnäinen Harbours to Vuosaari. Railway carriage operations will also cease in Central-Pasila. These measures will free seven kilometres of shoreline and a large piece of land next to the second largest train terminus in Finland. Helsinki is faced with change of a magnitude not seen for more than nearly two centuries. Planning for the replacement of Sörnäinen Harbour and Hanasaari power-plants with the Kalasatama Fish Harbour is already in progress. A two-stage international competition secured a new master-plan for the development, which is likely to be built in stages over the next two decades.

Arabia Waterfront

This is the first ICT 'wired' village in Helsinki. The underlying basis of this new urban quarter is to create a hi-tech innovation centre. It aims to attract new innovative industries.

The waterfront project is for 7,000 residents. The City owns the land. The linear park dominates the urban design of the plan. It is an 'open' system of parkland, as Helsinki does not plan for walled or gated communities. The aim in Helsinki is to create neighbourhood clusters that are of a high quality and designed in such a way that it is impossible to distinguish between private and social housing. The City generally aims for 50% social housing. The tram has also been extended from downtown into the heart of this development.

← Jätkäsaari.



Eco-Viikki

This is an eco-village development for 13,000 residents and some seven thousand jobs, mainly in the university sector and associated bio-med businesses.

The area directly to the south of the eco-village is the nature reserve. There is medium density terrace housing to the south, rising to much higher densities nearer the northern motorway corridor. The key idea of the ecological village is that all the materials had to be made of natural materials. The aim has been to save 50% energy costs through generating electricity with the aid of solar panels distributed throughout the project area as well as saving 40% in consumption of water, a good percentage of it being recycled. There



will also be 3 new public parks. Each park will have its own specific theme.

Eco-Viikki demonstrates the close relationship to nature and water. The sea is close at hand, parks and garden allotments enclose the village inside and out. The solar panels are an added feature on most buildings as are the chimney stacks which act purely to increase the circulation of air into dwellings by as much as 40%. The extreme range of temperatures between summer and winter are taken into account in the building process. The minimum number of glass is four panes per window. The amount of insulation being built into every single dwelling is a significant element to keep the house warm in winter and cool in summer.

Eco-Viikki has a variety of housing types. In the medium density terraces, gardens feature as a common element, both front and back. Together with the communal garden allotments, gardening and ecological form aim to be an important element of the village community. These communal areas are used for growing vegetables and fruit. All the space is allocated and efficiently used. The medium density housing is staggered towards the front of the village, with high-density blocks in the middle and top-end of the area.

Aero Malmi

Aero Malmi is now being planned. It was the former inner-city light-aircraft airport. It is expected that construction will commence within the next 15 years, and the building process will last for about the same. By undertaking the planning now, it allows the City to budget for the new infrastructure required, including the likelihood of a tramline into the heart of the scheme. The area is intended to contain between 18,000 to 20,000 people and will primarily be high density, low-level forms of residential.



Vuosaari

Vuosaari is 14 kilometres to the east of the city centre. It will be for forty thousand inhabitants. The whole



area encompasses the new hi-tech goods harbour. A number of the new neighbourhoods have already been built. It includes a major local shopping centre. During the 1990's, the social mix was predominantly 75% social housing. This kicked-off a debate about the need to create a better balance. To this degree, the social mix was re-planned, and a new area for private housing was approved, in order to attract more private investment into this 'new-town district'.



Blocks of flats predominate in these new developments. The aim is to create high density, compact urban quarters. In Helsinki generally, 85% of people live in apartment blocks, 4% live in terraced housing and 8% live in detached or semi-detached housing. Helsinki is a European city with a European solution to housing.

Public transport is the key form of connectivity to the city centre for those living in Vuosaari which ultimately, will boast 3 metro stations. The metro takes only 20 minutes to downtown. The bus operates a circular feeder service, which means that the buses no longer go into the city centre, but instead go in a loop into the neighbourhoods, collect the passengers, then feed them back to the individual stations. In this way, people have a high quality alternative to the car. The new high-tech goods harbour is located on the fringes of Vuosaari and it is expected that there will be up to 10,000 workplaces.

Herttoniemi Waterfront

Herttoniemi is one of seven new waterfront development areas currently under construction. Water offers significant potential to stimulate investment interest as well as providing high quality social housing. Herttoniemi waterfront is built around the new metro for the area. Some 8,000 residents live here by the sea. Approximately 65% of people living in this new neighbourhood live in social housing. Social housing is successful in this area as it offers a high quality of life 10 minutes from the city centre.



Kruunuvuorenranta

Kruunuvuorenranta could be considered as the jewel in Helsinki's crown. It sits directly opposite the city centre. It is an area that has been used for the past eighty years as an oil depot. The City owns the land, as it does with all the new development areas, and in its place the City will build a new village for ten thousand people. An ideas competition is now being held. The highly diversified archipelago landscape and waterfront shoreline offers immense potential to create an elegant urban village format. The highly maritime



flavour will enable a broad mixture of high and medium density living to be achieved side-by-side. The scenic views to the city will enhance the natural environment and its surroundings.

Pikku Huopalahti

This is a new area to the north-west of downtown for about 7,500 people. It contains 4 separate villages, echoing the 'empire city' ideal from the downtown quarter. It is a high density, compact set of neighbourhoods that prefers to be urban rather than suburban. In order to achieve this basic goal, the tram is built into the heart of the development to give urban connectivity.

Kuninkaantammi

The new Kuninkaantammi residential and job area is being planned at the northern part of Hakuninmaa on the very outskirts of the city. It is formerly a sewage treatment plant and reservoir. It is intended to exploit the water resources in the area as well as the forested landmarks of majestic oaks. The master plan for the area will maximise the public transportation connections, which will allow for a mixed high density and low-rise apartments development to take shape. It is expected to have 5,000 residents. The townscape image is modelled round a diverse 'medieval' form of town housing in the central core, with commercial and shopping interspersed in the compact urban form.



City Centre – A New Vision

Helsinki's city centre is Finland's number one shopping and office location and in the forthcoming Strategic Plan 2040, the vision is to strengthen the role of the city centre and, at the same time, develop a more evenly balanced polycentric structure to the region. In practice, this supports a strategy of building more regional centres to maintain a better balance with the centre and the peripheries, thereby overcoming the traditional disadvantages of suburban living. In absolute terms, such a strategy will enable the city centre economy to continuously grow, although the total level of sales of the city downtown will marginally be reduced overtime as the number of regional areas develop.

There are nearly 400,000 jobs within the city of Helsinki, and about 700,000 in the Metropolitan area. The majority of workplaces are in the main downtown peninsula. Office and shop rents are at a premium, reflecting the continued high demand for such floor-space.

The Land-use Master Plan 2002 identified the need for a minimum of 320,000 m² of office floorspace annually for the whole of Helsinki, with the aim to build over 4,462 million m² in the next 20 years. In this respect, the immediate core city central area cannot accommodate all demand, and therefore it is essential to create overspill within the neighbouring areas. This in turn will relieve pressure on the key office locations within the downtown whilst applying a more even balance spatially. Five new zones for the extended city core are envisaged, all of which are brownfield sites.

In this respect, the key area will be Central Pasila, approximately 3 kilometres to the north of the Central Railway Station. At least 1 million m² of offices and residential is planned to be built in the former railway yards, primarily commercial offices, and residential. The second and somewhat separate development is the Töölönlahti Bay and Kamppi development. This is located immediately adjacent to the Central Railway Station downtown, and the Kamppi section is nearing completion. The Töölönlahti Bay and Kamppi area forms an L-shaped plan linking both sides of the main Mannerheim road that dissects the cultural downtown in two. A total of 625,000 m² of mainly offices and shops, with some residential will eventually be built. By placing greater emphasis on the actual peripheral



areas of the city centre, the intention will be to help pull the shape of the city core into a wider domain physically. The current main axis of Alexander Street and North Esplanade will come up against greater competition from the north-west section of downtown, thereby increasing competition and simultaneously, increasing the level of choice.

The Kamppi-Töölönlahti Bay development is only one of five key new areas being designed to improve and strengthen the downtown. Another area is Ruolahti/Jätkäsaari/Hernesaari, a mere kilometre from the centre of the city, represents a major extension of the city centre. Ruoholahti was built during the past 10 years, creating homes for 7,000 people and nearly the same amount of jobs. At least 250,000m² of office floorspace has been built together with a new shopping centre. The adjacent area of Jätkäsaari, planned for 2020, will ultimately create a new city centre district for up to 25,000 residents linked by metro and tram, and an almost doubling of workplaces. In previous decades, the city core has witnessed a steady decline in the population. By increasing the number of residents and workplaces in the heart of the city will help sustain public and local services as well as regenerate downtown living.

The Fish harbour, some 2 kilometres to the north-east of the centre, and still considered part of the growing city central area, is expected to have 15,000 new residents and 12,000 new jobs by 2025. In a linear progression, the connecting area to the Fish Harbour is a high-tech new 'Wired Village', Arabia. It consists of 7,000 residents and jobs for nearly 8,000 workers.

A further extension will be the South Harbour, which is now under review with the intention of initiating an International Competition in 2008. The possibilities to build new commercial and residential apartments for the area will help strengthen the overall inner city economy.

The City of Helsinki's overall strategy is clear. The existing city centre cannot exist in a vacuum, nor remain with economic inertia. The Strategic Plan for Helsinki aims to widen the city centre's franchise to the areas that immediately border it on the basis that the built-up city centre does not allow for extensive new build possibilities, due in part to conservation



Proposed Inner City Developments

	Size ha*	residents	jobs	commercial m ²
Central Pasila	59 ha	2000	10.000	500.000
Kamppi-Töölö	83 ha	nominal	12.000	625.000
Ruoholahti	50 ha	7.500	14.000	420.000
Jätkäsaari	80 ha	15.000	3.500	105.000
Hernesaari	60 ha	900	1.800	10.000
Fish Harbour	175 ha	15.000	12.000	535.000
Arabia	85 ha	7.000	7.900	315.000
Total		61.200		2.510.000m²

*ha = hectares

policies and partly the limited scale of development choice. Hence, developers prefer to invest in the new areas located within easy distance of the key department stores and the city centre core. By doing so, the cultural heart of the city will be revitalised, with the aim to build half as much again of office floorspace as exists now in order to generate a new wave of residents living and working down-town and aid the sustainability of the city centre core.

Plan Led

In setting out these conclusions, the visions once created by the town planner Ebenezer Howard of a hundred years ago needs to be put in place. Howard realised his visions with the setting up two corporations in Welwyn Garden City and Letchworth just north of London. Ebenezer Howard's idea was that in order to create a harmonious city one not only had to control the construction of an area through its physical layout, but to also control its social context, and in perpetuity. The community had to own the land. This principle has been at the forefront of city planning in Helsinki. That is why some 80% of land is in public ownership. It means that the City council decides what is going to be built, where it's going to be built, how much is going to be built, when it's going to be built, (ten years, twenty years, or forty years into the

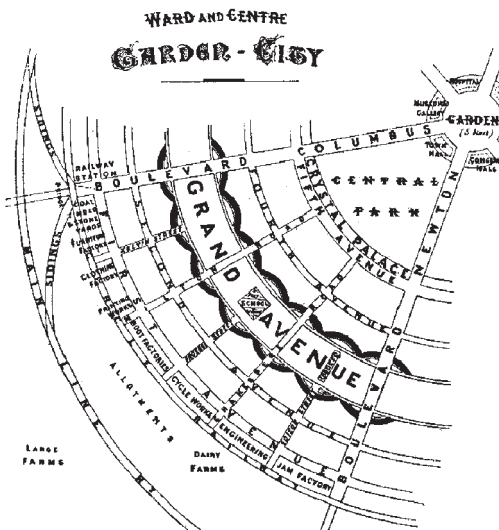


future), and most important of all, the City decides 'who' is going to build it.

Now according to the OECD Finland has the lowest level of corruption and particularly Helsinki as a city has probably one of the lowest level of corruption in the world. So, even though the City controls the development process, it still manages to negotiate the building process in a fair manner and in a highly competitive tendering process. This is an important point, as every single building, every single block of flats, every single line of terraces is subject to competitive tendering. It means that every housing block normally has to have a dual-level of a price control mechanism as well as overseeing quality control by staging architectural competitions.

Key Issues

In addressing the key issues there are no slums in Helsinki. As a city, Helsinki has nearly four hundred thousand jobs, and there are nearly six hundred and ninety thousand jobs regionally, which provides Finland's know-how economy and it is one of the key Nordic power houses. In terms of Connectivity, public transport covers the city admirably, with clear investment guidelines for the future. All new major district developments are being built round the public transport interchanges and on brownfield land. All the land is in public ownership. Future investment in public transport is ensured. There are a thousand kilometres of cycle routes. The environment is probably one of the highest quality environments in the European Union. There are 48 parks. Environmental issues are taken seriously. For example, Helsinki owns its energy. It owns its harbours and ports, Helsinki oversees all the public works. Basically, Helsinki owns its city. This means that all profits are re-invested back into the public domain. It means that Helsinki has 93% efficiency in the distribution of heating. i.e. 93% of all houses and commercial buildings in the entire city are connected to the district central heating system. In addition, there are two hundred kilometres of underground tunnels - a world record for a city of this size. These are service tunnels built into the granite rock underneath the





city, and not just within the city centre, for the tunnels stretch out fourteen kilometres to the east and up to the north and west, because that's what carries the district central heating pipes. And the tunnels are large enough for an articulated lorry to go through and there are sufficient tunnels that already take future needs into account.

It is also the case that the treatment of water is handled by the City. A total of 96 per cent of waste water and waste elements are cleaned to 100% efficiency (good enough to drink/re-circulate) but instead, it is pumped through a natural granite tunnel under the city that stretches out ten kilometres into the Bay. This has improved the quality of the sea round the city. But it also demonstrates that the City of Helsinki views the need to be involved at all levels of the development process, and attaches great importance to having joint partnerships with the private sector. The City does so knowingly because it wishes to remain in control of the city structure and aims to have a direct say in how the city shapes its own future.

Plan-led City Planning

Managing rapid growth and fitting all these new development areas into the city structure with minimal problems, is a massive challenge for city planning. City development can best be controlled when there is a high value society with a high tax base. In this way, public money is used to invest in the city's infra-

structure and resources are distributed more evenly throughout the city. By doing so, Helsinki raises the city's profile through creating a high quality of life for its citizens. When public money is used in a highly organised and disciplined manner, it creates a circle of improvement. It enables a smoother relationship between the different departments within the City Council. It allows for greater levels of integration and coordination between departments. And it is city planning, spearheaded by a plan-led system, which coordinates the development areas because it is City Planning that has made the physical plans, design and layouts for all these new areas.

Integrated Planning and Transport

Strong city planning needs to lead the city structure, and for that, a city requires a strong, efficient and well-educated planning department. This is one of the key components to success. It equally requires that planning and transportation are married together, automatically, so that when new plans are being prepared, traffic and transport are one of the main starting points in the planning process. In the new ascension EU countries it may be the case that 'roads' have a particularly strong emphasis on paving the way for new development rather than using investment in a more overall balanced manner by inputting first and foremost into public transport.

Smart City-regions

The European Union in its future regional policy of Territorial Agenda, places importance first and foremost to allocating structural funds to city regions that will uphold the new sets of standards being promoted by the concept of 'territorial cohesion'. This can only be done by integrating planning and public transport in particular, and that's where the word 'Smart City' comes into being. Why? The answer is that in order for the future of the European Union to succeed, the EU needs to promote the ESPD, the European Spatial Development Perspective. The key issue is based on creating polycentric city regions all round Europe. The city is viewed as the engine and the core of development within a city-region. In order to make cities 'smart', cities will need to stop sprawl, be compact, high density city-regions, with public transport as an essential component in the planning of cities, and keeping environments sustainable. By doing so, city-regions will require to build a polycentric city structure. The sprawl city, which is a serious problem for the future of the EU, will need to prevent further sprawl from taking root. In some cases, the car is taking pride of place and motorways have been given a high priority, at the direct expense of providing new investment in public transport. In particular, there is poor connectivity to the outlying, disadvantaged suburbs. The aims of the EU need to address some of these major problems. But it will be a long struggle to ensure that we can create polycentric smart city-regions and build a polycentric Europe.

Finland has emerged as a leading centre for information technology. The Finnish model combines a dynamic informational economy with a strong sense of social justice. This is in line with the Nordic countries overall welfare system. There is a strong social democratic set of values and consensus. This in turn has produced low levels of social polarization compared to the typical developed national economies. Central to this, is the fact that the information economy is concentrated on the Helsinki metropolitan area within Finland. Yet, within this heterogeneity there are clear signs of spatial differentiation that has opened up between Espoo (232,000) to the west of Helsinki, Vantaa (190,00) to the north, Sipoo (18,700) its eastern neighbour, and Helsinki (565,000) itself.

These spatial differences appear through different urban forms. Helsinki is a compact, high density city of 186 km² shaped in a five-fingered pattern of green wedges round a high quality and efficient public transport system.

Helsinki's housing form is dominated by apartment blocks (85%), with less than 12% of housing being terraced or detached/semi-detached. The city, by this very nature, has a highly concentrated centre together with compact, dense neighbourhoods in the suburbs. The suburbs are primarily characterized by apartment blocks closely knitted together between the 'forest-city' landscape. So, whilst the neighbourhood clusters are high density, the overall density of Helsinki is slightly lower than its European cousins due to the originality of its star-shape enabling settlements to open up to nature on its doorstep. This contrasts greatly with the presence of detached, suburban sprawl that dominates its Espoo neighbour. Vantaa, on the other hand, is a broad mixture of compactness in part, and suburban sprawl along its northern and western perimeters. Sipoo is the odd one out. Geographically, it is almost twice the size of the Capital city, yet only has 18,700 inhabitants. It can be argued convincingly that these dis-

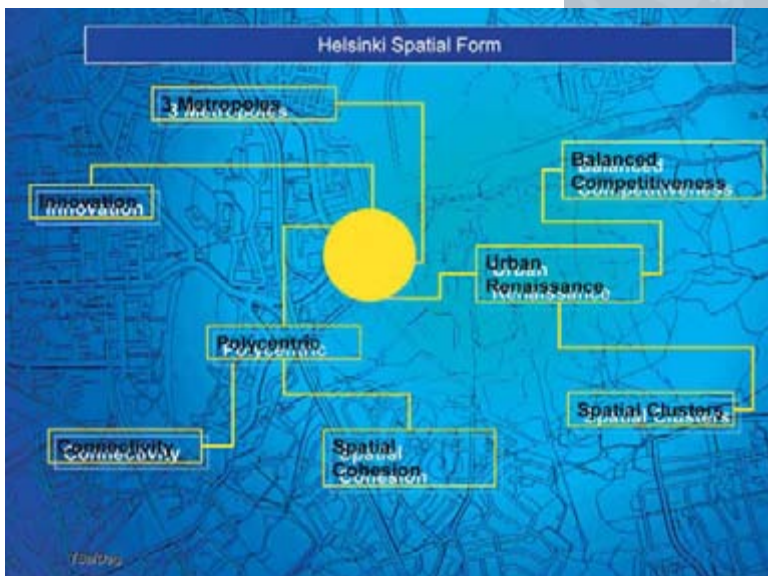
Helsinki: CITY-REGION

Final Report

2

Greater Helsinki Region

Douglas Gordon
architect
City Planning
City of Helsinki



Helsinki spatial form.



Helsinki Metropolitan Master Plan 2002.

tinct urban forms have come about precisely because of the different social and planning models adopted by each City or municipality, and in particular, the planning process of urban development leads to these contrasting spatial cohesion settings.

Helsinki is unique in Finland in that the majority of the land is in public ownership. Nearly 80% of all land belongs either to the City (66%) or the State (13.4%). This has enabled a competitive dualism to grow up. Helsinki has a history of strong self-government that works in unison with the guiding hand of Central Government that can be considered in Nordic welfare terms as of being an equally massive interest in pursuing a social justice policy for the nation as a

→ City of Espoo map.

whole. Espoo, on the other hand, owns approximately only 40% of the land.

Hence, within the metropolitan area, there is a severe contradiction between Helsinki's compact urban form and the more suburban sprawl of Espoo, based upon car-dependence. This dispersed pattern of urban development has been subsequently rationalized in the Espoo development plans (yleiskaavat). The irony is that the initial plans for growth in Espoo centred round the garden city of Tapiola, itself a compact urban framework. Subsequent patterns of urbanization have essentially become unplanned within the 312 km². The 1970's saw Espoo emerge as five district centres formed as spatially unconnected clusters. Hence, unlike Helsinki, it can be argued that the formal planning process in Espoo has been based upon development leading the way on greenfield pastures with single family dwellings predominating. The key single difference was the area 'Leppävaara' in the north-central belt of Espoo. This is more compact and based upon apartment blocks. It is no coincidence that the City



Helsinki city center.



Helsinki city center.

of Helsinki owns large tracts of land there, hence, the immediate dichotomy of style and spatial cohesion for the area. A further material point is the location of the commuter suburban rail network to Leppävaara that operates nowadays almost as a metro style system during rush hours.

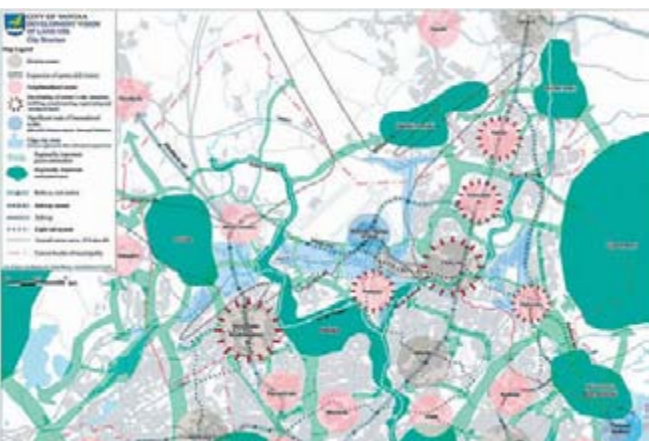
Tapiola is now considered a regional centre and the prime urban model for Espoo as a whole. This provides at least a better spatial balance in the metropolitan area, given that Helsinki built its own regional centres in the Eastern Centre and Malmi (north) over the past 30 years.

The city structure of Vantaa is a mixture of Helsinki's compactness and Espoo's fragmented spatial character. It is essentially two wings, east and west, with a heavy proportioned central frame (240 km²). The administrative centre is clearly defined by the area Tikkurila in the eastern sector, centred upon the main Helsinki-Tampere railway network. The districts of Martinlaakso and Myyrmäki make up a dual link with the west. They too are modeled by the suburban rail system. The key make-up of employment in Vantaa is characterised by mainly Finnish mainstream compa-



nies, such as Finnair (airline) and Fazer (confectionary), with a growing limited number of electronic component firms located within the Helsinki-Vantaa international airport arena.

Sipoo is a vastly underpopulated municipality situated to the east of Helsinki with a land area of 364



km², almost double that of Helsinki. It is primarily a haven for summer cottages. The administrative centre is in the village of Nikkilä. In the past 10 years, Sipoo has had some initial growth, primarily families searching for the idyllic setting of a detached house in the countryside near the sea, and within easy commuting distance from the workplaces in downtown Helsinki. Both Vantaa and Espoo have adopted pro-growth strategies. Only Sipoo has maintained a fragile



← Espoo Keilaniemi.

Säterinmetsä Espoo.

existence based upon low levels of population growth. The establishment of YTV, the metropolitan planning association for the region (which excludes Sipoo), has helped shape a less fragmented metropolis, and the density levels of Espoo to the west and Vantaa to the north have achieved levels that justify improved rates of public transport use to and from the Capital city. To the west, the State Railways (VR) suburban line commutes via Leppävaara, through Espoo Centre and onto a future growth pole, Kauklahti. To the north, Vantaa is served by two main commuter lines, the north-eastern line via Tikkurila and Koivukylä and secondly, to the north-western direction that includes the key development areas of Myyrmäki, Martinlaakso and Vantaankoski. The latter two suburban lines have been the main reason why Vantaa has tended to concentrate its urban structure through high rise, compact, dense neighbourhoods built specifically round the rail network.

The future metro extension from Helsinki into Espoo via Tapiola will help upgrade the level of transport connectivity as well as place greater emphasis on higher density living. However, the weakest point for using public transport is between the various district centres within Espoo. Vantaa, however, expects an urban line extension from Vantaankoski up to Klaukkala within the next generation and in doing so, will ensure the development potential of Klaukkala to be realized through high density design guidelines. The other key development area for Vantaa's future will be built around Marja-Vantaa, a 30,000+ district for living and working. Beyond 2025, the area of Hyrylä, just

← Vantaa.



← Vantaa Kartanonkoski.

Sipoo.



Suurpelto.

north of the International airport, offers a similar line of potential.

Economics is also beginning to play its part in reshaping our city structures. Economically, the major companies in Espoo, such as Nokia, Kone and Fortrum will benefit from being located near first class interchanges with superior accessibility. A picture emerges of a contrasting spatial planning programme that appears to be merging over time into an understanding that Espoo needs to create a new-style development structure to contain urban sprawl and devote land in the future to more concentrated forms of planning, such as the forthcoming SuurPelto development. The Suurpelot development area rekindles the apparent overtures Tapiola did in its conception in 1950's. The new urban setting is likely to engender similarities as that with Tapiola, being that it is centrally located and integrated within an environmental ecological design. This can only come about through political and planning consensus with clear aims and guidelines.

Sipoo remains an agrarian culture and outmoded spatial patterns. The spatial potential for growth is



Sipoo shoreline.

high. The City of Helsinki has already purchased on the open market getting towards some 2,000 hectares of land on the eastern perimeter of Sipoo. Helsinki aims to use some of this land with the specific aim of continuing the metro eastwards and for Helsinki to develop its eastern perimeter to accommodate further growth.

Still, it is difficult to understand that Espoo, unlike Helsinki, is a 'city' without a centre. There is no traditional 'downtown'. Each of the five centres is as big as a traditional Finnish town. Vantaa does have a recognised centre, Tikkurila. The key aim, therefore, ought to be for the future to redefine Espoo as a city, or better still, one alternative could be for it to be incorporated into the City structure of a single administration Greater-Helsinki. This may never happen, of course. Nonetheless, in order for Espoo to be defined as a city, it would require a clear cut symbol of space that identifies itself as having a city centre and linkages to its five corners.

So, it is partly the planning process which initially contributes to the spatial planning of a city, but it appears that land ownership also plays a leading role. Additional key issues are the housing form, the level of density and the compact nature of development if a city is then capable of structuring its built environment round a high level public transport system. The need for urban neighbourhood clusters to be self-contained in terms of initial public services is essential. In terms of spatial cohesion, these clusters then need to identify themselves within a hierarchical order that connect to local, district and regional centres as well as being defined through a high-quality connectivity to the city.

The Helsinki city-region, it can be argued, has emanated from a single, historical core point and grown radially following the course of rail transport over the past 50 years. The contribution of setting up different municipal authorities has led to new development being directed according to the different planning philosophies upheld by each administration within the region, with Helsinki adhering to a more compact city plan, Espoo more fragmented, and Vantaa a mixture of both models, the latter two contributing to greater sprawl. But in recent times, both Espoo and Vantaa are beginning to merge towards the Helsinki structure, and away from sprawl. Only by pulling in the same direction can a more polycentric system of urbanity emerge in order to achieve a better balance, socially and competitively, between the city central core and the outlying regional suburbs.

City-Region Dimension

Greater Helsinki is one of the most dynamic metropolises in Europe. In the next 50 years its population is expected to grow from 1.2 million to over 2 million. With over 70 million square metres of new construction foreseen during this period, the overall physical structure of Greater Helsinki will be re-shaped in a way that will maintain its leading technological edge in the Baltic

sphere of influence as well as being a prominent force in the wider Europe. Such an increase in growth and significant structural transformation will require to be placed in a sustainable manner and take particular account of Finland's special relationship with nature.

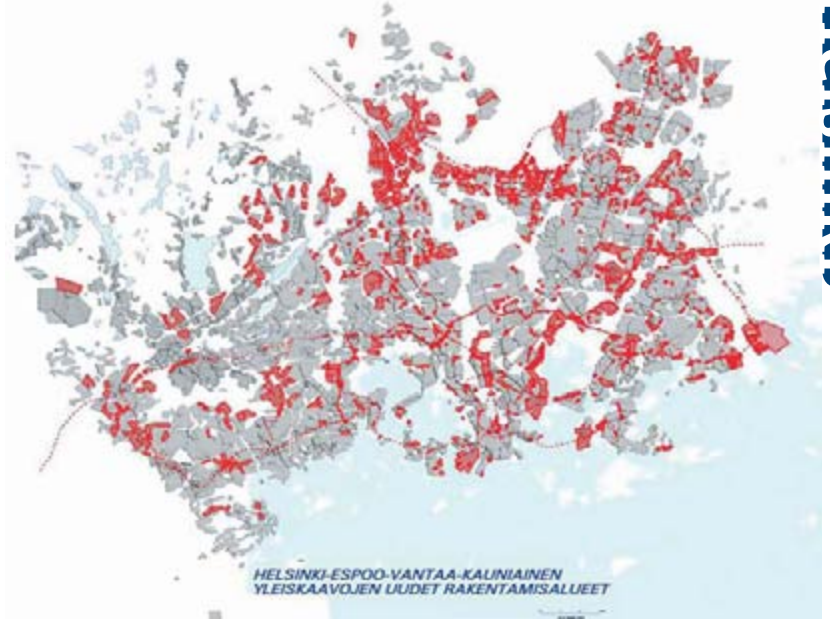
Greater Helsinki consists of Helsinki, the capital of Finland and the 13 municipalities that surround Helsinki, namely, Espoo, Vantaa, Kauniainen, Kerava, Tuusula, Järvenpää, Nurmijärvi, Mäntsälä, Pornainen, Hyvinkää, Kirkkonummi, Vihti and Sipoo. The main aim is to develop sustainable strategies for strengthening the competitiveness of Helsinki and for it to remain an attractive place to live and conduct business. Helsinki is highly placed in many international arenas of comparison, such as Global Competitiveness, OECD, and Economic Forum.

There are both centralizing and decentralizing forces in action in Finland at the present time. Global competition, a strong Helsinki brand and demands for concentrating and intensifying the urban structure to achieve more critical mass for clusters of innovation, speak for the need for centrifugal forces. On the other hand strong preferences for closeness to nature and single family houses speak for decentralized and multicentral tendencies, which lead to, for example, interpretations like the contemporary garden city. The planning problem is very challenging because during the next 50 years or so there will probably be more new housing built than the whole of the existing housing stock. In fact it has been estimated that due to the need for more space per capita and population growth, some 70 million square meters of new house construction are needed in the area. New housing is also needed to decrease the pressure of growing house prices.

Prices are now twice as high in Helsinki compared to many other parts of Finland. In addition the proportion of senior citizens relative to the whole population is increasing dramatically over the next decades. This is leading to a dramatic rise in single households. This sets another challenge for the whole society in terms of social care structures, the level and type of services available and the type of accommodation to be provided. This in its turn has led to a reappraisal of immigration levels for Finland and in the future it is expected that the population of this region will become increasingly multicultural.

In the age of the Information Society urban development is again relatively fast and metropolises play an increasingly important role in international competition. The economic development of the Region is dependent on high technology and knowledge. New technologies and communication systems demand again new models and solutions for human habitation and workplaces. Economic growth is mainly expected to be based on post-industrial and ICT-industry as well as on growth of services, higher education and research. An important part of the future task is to study the impact of the Information Society on city development and structure.

The present structure and location of key work environments and clusters is also causing problems, giv-



ing rise to excessive levels of commuting. This imbalance between the eastern and western parts of Helsinki as well as the relationship of peripheral municipalities with the core centre sets another challenge for finding suitable and sustainable future strategies. With the current increase in polycentric settlements within the region, the role of the traditional main centre, Helsinki, is also under pressure. The relationship between the region's various centres needs to be carefully studied. It is of the greatest importance how the new living and social environments strengthen ecologically, socially and culturally sustainable development in the area, and in addition the competitive advantages of Greater Helsinki. The location and quality of such new areas, their public acceptability and their ability to attract qualified labor and foreign investments are key factors for the long term success of the region.

City-Regional structure 2025
– new build areas.

Quantitative challenges

Finland is a large country and has been urbanized relatively late. Fifty years ago a significant per cent of the population was still linked to agriculture. The rate of economic growth and urbanization was at its peak during the 1950's and the 1960's. Greater Helsinki municipalities have shown continuous growth: even now people are moving from other parts of Finland to municipalities in the Greater Helsinki region. At the moment the rate of growth in the region is the fastest growing within the European community, and only Dublin has a similar rate of success.

There are tremendous pressures to increase the supply of urban construction sites as the prices of land have increased unsustainably already for several years. The lack of suitable sites within the main settlements has led to an increase in urban sprawl in the region. The total population of Greater Helsinki is 1.2 million. The population growth will probably continue at the rate of 1 to 1.5 per cent per annum for a considerable period of time. In other words the population of the

area may well be approaching two million within the next fifty years. Since the housing conditions are quite modest when measured in per capita square meters available, long-term loans and historically stable interest rates brought in by the introduction of the euro will increase the demand for more spacious apartments and houses. At the moment, for example in Helsinki, the average area of home living space per inhabitant is 33 square meters. In other municipalities in the Greater Helsinki these figures are little bit higher but still do not meet the future needs of inhabitants. These needs and estimations are based on existing development figures for population growth for the past 50 years as well as the growth of housing square meters available per person during the same period of time. However high this predicted volume of building area needed might seem, it is no more than a consequence of old predictions, trends that are expected to slow down compared to the rate of change during the last half century.

Since Finland is sparsely populated and the growth of urbanization is a relatively new phenomenon, land use planning has a long tradition of allocating land generously for recreational and other non-residential uses. In the Finnish Modernist tradition most of the efforts have been concentrated on planning suburbs and developing the relationship between the built environment and nature. Many of the post-war planners had in mind as their ideal to mix nature and town into a new synthesis, a reinterpretation of Garden City ideals. The huge demand for new housing during the 1960's and 1970s, when people were moving from the countryside to cities seeking employment, led to a strong emphasis on using blocks of flats for housing developments. In some cases this paradigm emerged for example, as a garden city, such as Tapiola, and in other cases as 3 to 8-storey apartment buildings located freely within existing forest areas. Central European urban densities are rare in Finland and even in the city of Helsinki there are only 3,200 inhabitants per km² while the corresponding figure for the Greater Helsinki is only 350.

It is a well-known fact that energy consumption for transportation is negatively correlating with popula-

tion density. In other words low density means high energy consumption. With sky-rocketing energy prices and increasing consciousness of world climate risks, Greater Helsinki has to rely in the future more on high quality public transport systems and make more efficient urban structures for the range of services available. Where, how and with what kind of high quality integrated public transportation system this development will happen is the crucial question and key challenge for the region in terms of cultural, economical, ecological and social development.

Qualitative challenges

Densification to create sustainable structures for the whole area demands new planning and spatial concepts.

The city of Helsinki cannot grow much more within its existing borders without radically renewing existing built-up areas or sacrificing parkland and other open spaces, options which are both politically and culturally difficult to implement.

The total efficiency of the region can be improved and hence encourage a steadiness in house-pricing. Since the majority of the population is living in suburbs, revitalizing and improving living conditions in these suburbs has recently been and is still one of the most urgent tasks facing the planners. New concepts such as urban villages, new garden cities, and ecological alternatives have been discussed but have not as yet been widely realized in the region. Helsinki is a green metropolis and the Helsinki region is a unique combination of sea and green areas. Finland has high international standards of protection for the natural environment. The provision of a high quality natural environment will in all likelihood be one of the important competitiveness factors among countries in the future.

Traffic system plans

According to international comparisons, the usage of public transportation into and out of the Helsinki peninsula during rush hours (some 72 per cent of all motorized trips) is very high. Yet in the whole Helsinki region public transportation covers only one-third of all trips. Without special efforts this share will continue to decline. The energy use per capita for transportation is double that of an average European city. In addition it is clear that the existing traffic system has until now emphasized dependency on one major urban centre, Helsinki itself. Helsinki region municipalities have approved several traffic system plans concerning their area in order to implement new infrastructure (names of these plans are PLJ, KEHYLI, Eastern Uusimaa and Western Uusimaa traffic system plans). The longest tradition has the PLJ traffic system plan approved by the municipalities of Helsinki, Espoo, Vantaa and Kauniainen. The latest plan was approved in the year 2002 and the review of the plan is under way.

The usefulness of the traffic network plans will be tested in the future. Their aim is to increase coordi-



Helsinki tram.

nation and proper timing of the new infrastructure projects in the region, ensure their realisation and financing and add sustainability in transportation systems. Potential new projects within the next 50 years may include among other things:

- Rapid coastal rail-link to St. Petersburg
- Direct rail /metro connection to Helsinki-Vantaa airport
- New light rail/metro lines along ring road II and III, i.e. so-called Jokeri II and III

In the long run there may be a tunnel/bridge connection to Tallinn to give a boost to the Helsinki-Tallinn twin city development as well as a more direct road/rail link to central Europe. It is also possible that the Turku and Lahti highways will be connected by a tunnel (Ring Road 0) and that the Western and Eastern highways will be connected by a tunnel under the centre of Helsinki.

Top Priority development zones

Greater Helsinki municipalities have identified 12 development zones, which form the basis for mutual future cooperation and cooperation with state officials, like ministries. These zones are considered to have the greatest volume for new housing and other developments within the region. Some of them create new development potential around existing infrastructure, some of them are already under realization, while some of them are just targets for future planning. The Top Priority development zones (listed below) for Greater Helsinki are physically combined into a single territorial map (The Top Priority development projects of the 14 municipalities) to provide an overall summary of the expected total development potential until 2040. These development projects are primarily aimed to create new residential and business areas for the future of the Region, and include open space, traffic and transport connectivity, tied together to create a spatially cohesive whole for the Greater Helsinki region.

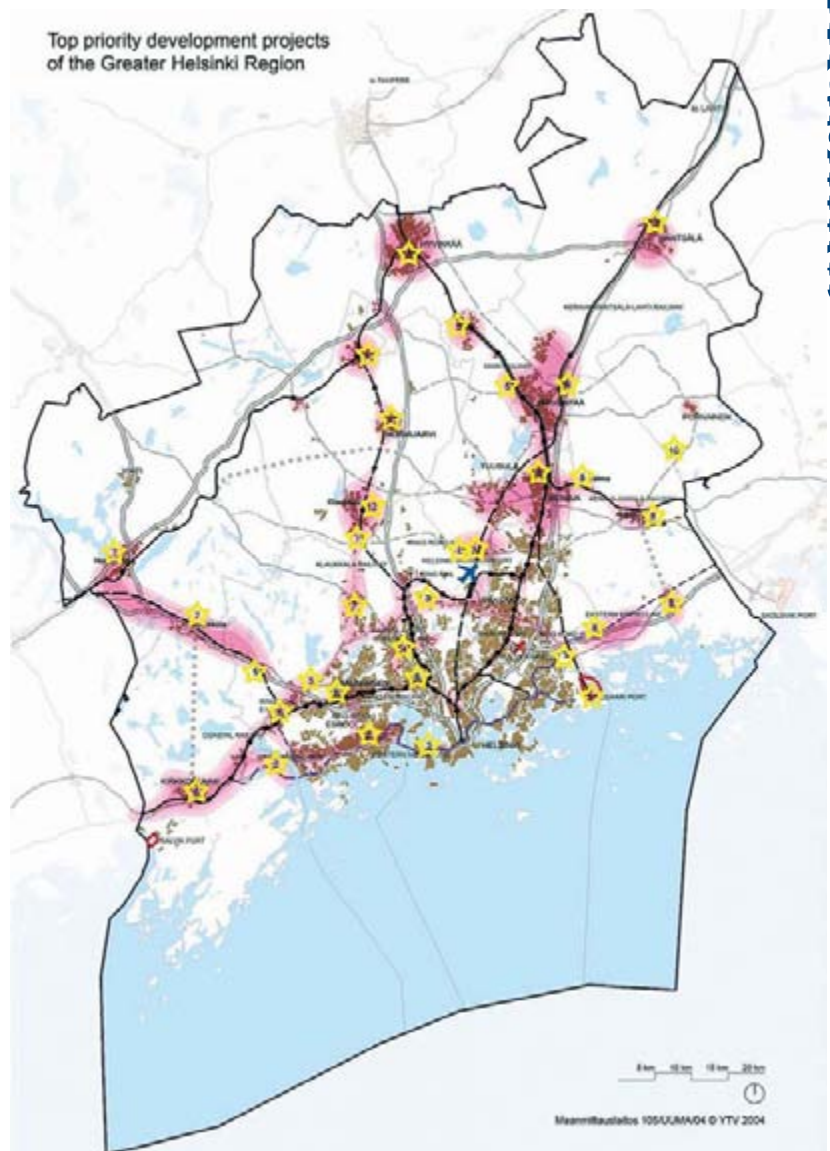
Top priority development projects of the Greater Helsinki Region

The above Map is a combination of three different development plans that have been put together, namely:

- i the top priority development projects of the Greater Helsinki Region (Helsinki, Espoo, Kauniainen, Vantaa, Kuuma – group and the ‘Fours’ group of municipalities),
- ii the strategic plan of the Kuuma – group of municipalities (Järvenpää, Kerava, Mäntsälä, Nurmijärvi, Pornainen and Tuusula), and
- iii the strategy of land use, housing and traffic development for the ‘Fours’ group of municipalities (Hyvinkää, Kirkkonummi, Sipoo and Vihti).

1 Ring Rail development zone

The new regional railway line connecting the Main Railway line and Martinlaakso suburban line improves



transversal connections between Vantaa district centres and opens a rail connection to Helsinki-Vantaa Airport. Some 200,000 new inhabitants with the same number of employees are expected to occupy the area along with some 2.5 million gross square meters of building potential.

2 Western Metro line and the Western Highway development zone

The Western Metro line and Western Highway unite the coastal zone between Helsinki, Espoo and Kirkkonummi into a network of existing and future residential areas, business and public service areas. The plans assume 1.4 million gross square meters of building potential for the area.

3 Vuosaari Port impact area and Ring Road III (E18) development zone

The commercial and industrial zone from Vuosaari Port to Helsinki-Vantaa Airport and further to Espoo along Ring Road III creates possibilities for com-

Top priority development projects of the Greater Helsinki Region.

mercial, industrial and regional logistical functions. Building potential of several million gross square meters is expected in the region.

4 Ring Road II land use zone

The regional co-operation target project encompasses areas in Espoo, Helsinki and Vantaa related to the development of Ring Road II. According to present day plans, building potential of 1.85 million gross square meters is envisaged primarily for residential use.

5 Main Railway route (Helsinki-Tampere) development zone

There is strong pressure to increase land use in the Main Railway route development zone north of Helsinki and to enhance the use of public transportation due to increased commuter traffic by private means. The development zone includes development areas for residential and business use.

6 Coastal Railway line development zone

The urban Coastal Railway line with its frequent metro-like service improves commuter connections in areas along the line and creates possibilities for new projects in Helsinki, Espoo and Kirkkonummi. Western extension would increase the use of the rail and facilitate the land use along the line and its stations.

7 Northern Espoo development zone

An economical and less compact form of housing is being sought in northern parts of Espoo. The natural expansion of the Metropolitan area continues in Kirkkonummi's Veikkola, Vihti's Nummela, Lohja and Nurmijärvi's Klaukkala.

8 Expansions in middle and southern Sipoo

Extending urban structure to Sipoo; deployment of Kerava-Nikkilä railway line and development of southern zone based on Metro or some other rail connection. Sipoo municipality expects to have population increase of 40,000 by year 2025.

9 Kerava-Lahti 'shortcut' rail development zone

The new Kerava-Mäntsälä-Lahti 'shortcut' rail connects these areas to Helsinki. Mäntsälä municipality is prepared for new residential and business, especially logistics, areas.

10 New Airfield for light aircraft

Malmi airport is planned to be replaced with a new airfield of 200–300 ha. Municipality of Pornainen has expressed their interest towards offering the new location.

11 Ring Road zone IV

The future peripheral Ring Road IV (Tuusula-Vantaa-Nurmijärvi) growth zone in the north of the Metropolitan area offers possibilities for business and services areas, especially for logistical functions.

12 Klaukkala railway zone

Railway connection from Vantaa to Klaukkala's Nurmijärvi has been envisaged. Further extensions to Nurmijärvi and from there, the existing rail to Hyvinkää have potential for developing new residential and business areas.



Greater Helsinki 2050.

This is the third and final report to complete the EU Polymetrex RINA on the Gulf of Finland project, the previous levels having described the city and the city-region. The transnational level addresses the issues of developing joint cross-border and transnational territorial development strategies with the project partners, the Cities of St. Petersburg (Russia) and Tallinn (Estonia).

Transnational Cooperation

The final arm to this RINA project concentrates on Transnational identity. Trans-European cooperation can not only increase economies of scale and synergies, it can also diminish trade-offs and inconsistencies in policies. In doing so, many regions try to position themselves better in the European perspective by overcoming borders and developing joint cross-border and transnational territorial development strategies, but these regions face huge challenges of differences in administrative systems, competences, languages, policy cycles, political priorities, culture etc. It appears that EU Cohesion Policy, especially the instruments for European territorial cooperation, in many cases provides a *conditio sine qua non* for such cooperation.

It is essential that in order to understand the scope and intention behind Transnational cooperation that the project returns to its roots of ESDP (European Spatial Development Perspective). ESDP is a set of spatial planning initiatives which aims to promote a collective approach to spatial planning within the EU in order to achieve a better urban balance between city-regions in the future. Spatial policies are clearly defined through a combination of sectoral policies and strategic actions that will impact upon a city-region positively. In doing so, ESDP applies the dictum of creating better harmony between city-regions through the choice of using polycentricity as a means to achieve such a balance. ESDP sets out the *core principles* of spatial development. City-regions are expected to respond to these relatively new principles, namely, balanced polycentric territorial development, access to better infrastructure and knowledge, and management of the natural environment. The ESDP highlights the relationship between territorial and polycentric devel-

Helsinki: TRANSNATIONAL

Final Report

3 Transnational Identity

2007

Douglas Gordon
architect
City Planning
City of Helsinki



opment. As well, the ESDP highlights the special role which could be undertaken by Euro-corridors, global integration zones, gateway cities, urban clusters and individual urban poles in support of a better territorial balance within the Union.

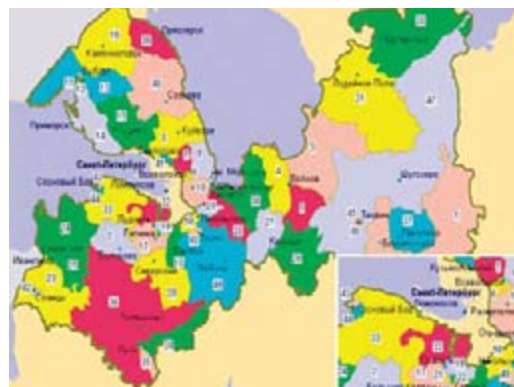
It is well to remind the EU RINA project that in analysing the City and secondly, the City-Region levels, the issue of polycentricity, being the core mantle upon which the EU wishes to build upon in creating a more uniform spatial network or city-regions, was referred to but never developed further other than by reference to ESDP objectives. The next part of the work now turns to examine in more detail what are the general aims of the EU spatially, what territorial cohesion adds to a metropolitan area, and what exactly polycentric city-regions may be in practice.

EU Aims

The EU aims to create more dense urban networks which can develop into a highly **integrated regional polycentric system**. A wide range of cities have the potential to increase their demographic mass through increased cooperation with neighbouring areas, and ultimately, between neighbouring cities at the international level. Helsinki is one such city. By strategic co-operation, polycentricity offers the opportunity to attract or establish a higher level of services between the city-regions in the Gulf of Finland. In principle, cooperation can support a better territorial balance and polycentric development right across the entire Gulf of Finland.

Territorial cohesion and the added value of territorial development policies

In this respect, territorial cohesion plays an important part in the whole process of establishing a polycentric region. Public policies aimed at promoting territorial development and limiting disparities should first and foremost help areas to develop their territorial capital and to maximize their competitive advantage. The promotion of regional innovation strategies and

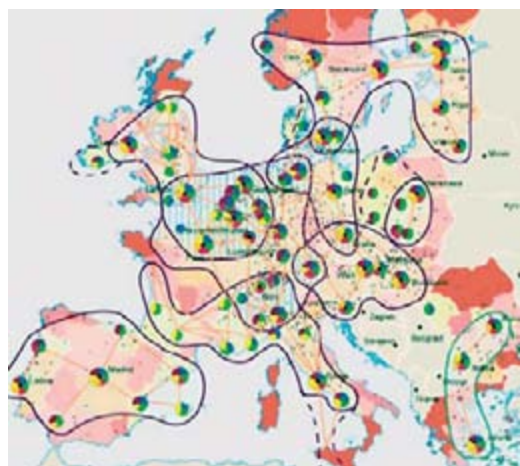


the exploitation of regional territorial capital is therefore an important prerequisite for improving the global competitiveness of the whole EU territory. **Economic growth is based in part on the organisation of space** which is shaped by a range of policies at all levels of government as well as by social trends, technological development and market forces. **Some of these mainstream economic and sectoral policies have unintended spatial impacts which can compromise territorial development**, but overall, territorial cooperation seeks a more integrated role between city-regions.

European Territorial Cooperation and the Gulf of Finland

It is proposed that ETC should have a stronger focus on strategic projects in addition to a continuing emphasis on the development of innovative approaches and the exchange and dissemination of best practices on common issues. Strategic projects may cover multiple (sub) projects and investments. Improving (trans-)European territorial governance i.e. by developing common approaches, networks and integrated development strategies could be an important element of such projects as:-

- the integrated development of metropolitan axes with a cross-sectoral focus. This encompasses optimizing multimodal infrastructure and flows of transport; supporting economic activity; improving the (peri-) urban environment of living and working; connecting urban networks; the development and protection of natural resources, e.g. measures to minimize the effect of infrastructure on nature and to reduce negative environmental effects; synchronizing plans and procedures for planning and procurement, including the promotion of trans-European consortia for public-private-partnership preparation and implementation of infrastructure projects. Helsinki and St.Petersburg are already implementing joint co-operation along environmental lines, such as the new oil terminal at Vysotsk near Viipuri. This uses Finnish knowledge and oil-gathering equipment. St.Petersburg new sewage treatment plant is a further example of cooperation between the Finnish Ministry of the Environment, the City of Helsinki, and the City of St.Petersburg.



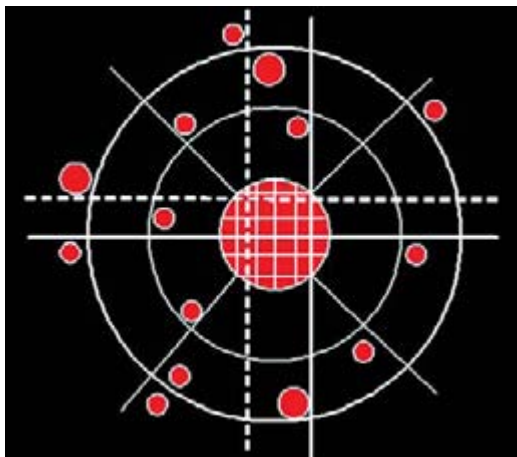
- projects leading to strategic trans-European partnerships between knowledge institutions and other partners in the innovation process. A chain of industrial villages under Finnish ownership are to be set up in Karelia, on the Russian side, near the Finnish border, with the aim on the knowledge economy.
- in general there may be a case for supporting projects that aim at urban growth poles and networks and connecting them to other networks, aiming at strategic alliances. This would be the case with linking up with St.Petersburg and Tallinn in order to create open-systems of governance that would allow easier flow of goods and services between the city-regions.

But first, the question has to be posed as to why city-regions as the main vehicle, and not cities?

Why city-regions?

The competitiveness and well-being of Europe's metropolitan areas is essential to the achievement of the objectives of territorial cohesion. Competitiveness requires an economically and socially inclusive and environmentally responsible approach to urban affairs. Urban competitiveness and cohesion can be progressed most productively through the establishment of effective means for strategic decision making and action over Functional Urban Regions and Areas. In essence, Europe's future will depend to a great extent on the longer-term competitiveness and well being of its 120 or so recognised metropolitan regions and areas, which contain over 60% of Europe's population. This is the city-region *dimension* to European affairs.

An integrated city-region strategy will have a spatial dimension because of the need to balance urban renewal with urban expansion, integrate land use, transportation and infrastructure, sustain the vitality and viability of city and town centres, enable economic competitiveness through the provision of development opportunities, promote social inclusion, assess the environmental impact of development and safeguard valued resources. By promoting greater territorial cooperation between the 3 city-regions on the Gulf of Finland



it is anticipated that this could create new opportunities in the knowledge economy, in public transport, in culture and the environment, particularly the eastern part of the Baltic Sea.

In essence, city-regions are the key component for cities and their surrounding environs to act as the engine in developing the necessary integrated city-regional structure that will aim to achieve a better cohesiveness. For this, the issue of polycentric development requires to be explored to the next level.

What is Polycentricity?

Polycentricity means 'many centres'. It is a hierarchy of centres at a city-regional level closely associated around a primary central core, the key city, in a spatial structure that allows *complementarity and connectivity* between the centres and the core form. To this, must be added the term '*territorial cohesion*', which

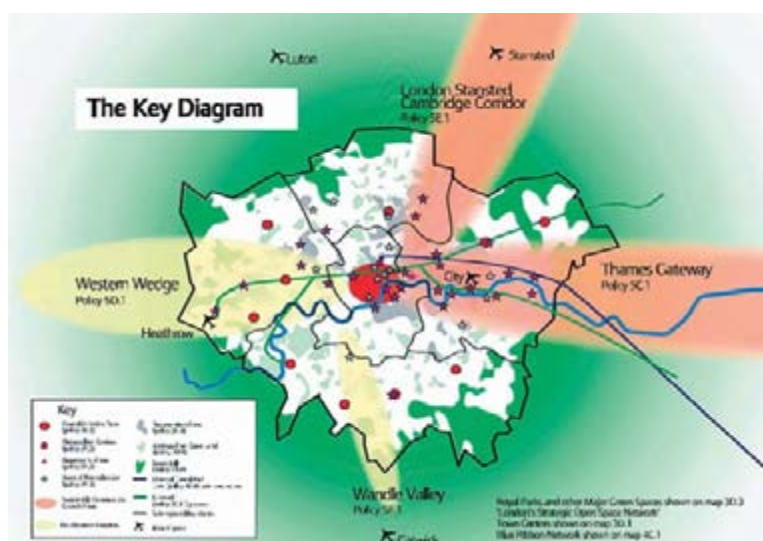


aims to uphold spatial awareness in respect of economic and social objectives for its citizens by reference to the spatial planning process. Its meaning in spatial planning is also a question of scale, for example, Greater London in respect of the whole of the South-East of England can be seen as being polycentric, but at a European level, it can be viewed as having a monocentric character.

Polycentric Development – Regional Competitiveness and Cohesion

The key concept of polycentricity is to bridge the different interests of neighbouring cities/municipalities within the three underlying objectives of ESDP (European Spatial Development Perspective, 1999), namely, (1) economic and social cohesion, (2) conservation of natural resources and cultural heritage, and (3) a more balanced competitiveness of metropolitan territory.

In practice, polycentric urban development is a means by which regional competitiveness, environmental sustainability and balanced city-regional development (spatial cohesion) can be implemented under a single framework: polycentricity. The idea is to prevent urban sprawl in the peripheries of cities and



their immediate hinterland, as well as avoiding wasteful competition at the city-regional level. Strategic alliances are viewed as the means to benefit from specialisation and complementarity.

Planning for the city-region as a single entity, or 'space', rather than a collection of independent municipalities, is more likely to improve the connectivity within the region, thereby adding to the economic value of the area. It will also reduce uneven development pressures and create a better cohesive planning unit. In order to do so, the concept of polycentricity has to feature in a more detailed and explicit format. The idea is for urban centres to be networked together using their specific economic strengths. By linking them through an upgraded public transport connected system as promoted by the newly adopted Territorial Agenda, the Regional Framework will become more comprehensive and far-reaching in its positive set of consequences.

Polycentric development can be seen therefore, to be more a process than a physical structure phenomena. This new urban centrality aims to create a polycentric city and city-region, replacing the existing model based on an historical centre and disadvantaged peripheries. Marginality will be reduced as the transformation upgrades new functions and services to the outer areas. Large-scale transformation around a theme of urban quality of life will improve the overall balance of a city-region. Uncontrolled growth will be halted. New neighbourhoods will be based around a public transport expanding regional network, and public services, universities, museums, congress centres and recreational facilities will be given greater emphasis to create a proper balance between quality and development of the centre and the expanding new periphery growth centres. The new polycentricity will shape a new accessible city-region.

European cities are characterised by their compact, higher density, mixed use, public transport, centre orientated urban form. In this sense many are polycentric and they have often grown from the accumulation of smaller independent urban settlements to form one in-

terdependent urban area. Larger cities of this kind have wide areas of influence beyond their immediate urban boundaries and the term Functional Urban Region/Area has been adopted to describe what can be thought of as city-regions, or metropolitan areas.

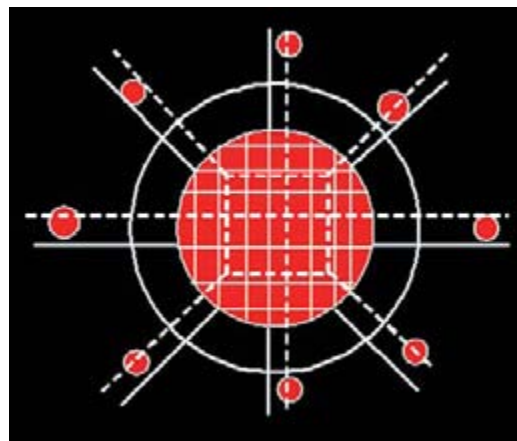
Polycentricity is essentially a concept that recognises the benefits that can be gained through the linking of urban areas to create markets for the higher-level services, activities and functions required to sustain competitive, high quality European urban life.

Polycentricity can be based on the complementary nature of related metropolitan areas and the specialised services that they offer (their diversity) or their collective activities (their common interests). A polycentric approach allows city-regions to respond to change more positively through more robust labour markets and a more diverse economic and social base. Hence, spatial developments have to take account of their spatial dimensions following through on spatial policies and strategic actions.

Where does Polycentricity start?

In terms of city-wide urban planning, polycentricity by its very nature needs to start at the city level and mirror what is happening at the city-region level. By doing so, a city structure can develop in a form that adheres to a polycentric model internally so that the district and local neighbourhood centres can substantiate their role within the city-wide framework by means of clusters. By promoting polycentric development at the city-region level, the notion of better connected urban networks within a wider spatial development strategy provides a better understanding how the different parts of a city-region function in relation to each city or municipality, what specific infrastructural investment is required, and identifies what is creating change. By harnessing potential conflict between cities and exploring ways of promoting joint tourism or transport investment, making better links between key economic drivers and the universities, can only benefit a region as a whole.

Polycentricity and FUA's. Polycentricity in the European urban system shows that the 76 most pow-



erful functional urban areas (FUAs) measured by demographic mass, competitiveness, connectivity and knowledge base are defined as MEGA's (Metropolitan European Growth Areas). The core area (Pentagon II) consists of London, Hamburg, Munich, Milan and Paris. In addition, cities such as Berlin, Madrid, Barcelona, Rome and Vienna can currently provide as high a level of functions.

How to Achieve Polycentricity?

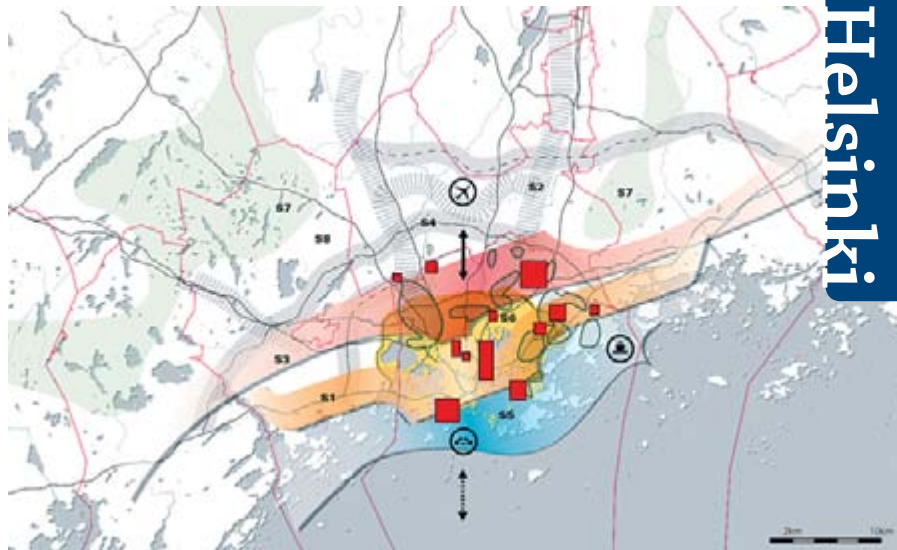
Strategic cooperation between city-regions can take place by means of complementary specialisations, or by co-operation and creating shared advanced infrastructures and access to the provision of services. Complementarity is not simply about economic competition, but includes urban and strategic planning, culture, education and knowledge, and infrastructure. Hence, under what conditions competitiveness can be improved, and how can co-operation of spatial strategies be achieved? In terms of the Gulf of Finland project, the initiative aims to explore those questions and by doing so, to close in on urban functions by examining the possibilities for cooperation.

Before doing this, it is necessary to consider some of the problems associated with polycentricity as well as examining the relationship of spatial visions and how visions are translated into strategy.

Possible Problems of a Polycentric city-region?

Some doubts are being expressed about the validity of the claim held in the Territorial Agenda that a polycentric framework within Europe will aid economic growth and development. The concept is considered by some to be too loosely defined. It is unclear how close different cities need to be in order to achieve a polycentric structure. It may be the case that as in east Germany, the Saxon triangle of Dresden and Leipzig, or in Scotland, with Glasgow and Edinburgh being 70 kilometres apart, that the benefits may not accrue so easily. In such instances, the low percentage of work-force going to and fro between these destinations (under 2%) is unlikely to achieve major change.

So, to reinforce a polycentric pattern and introduce its processes within the Helsinki–St. Petersburg–Tallinn city-regions for the future benefit beyond 2050 will require to set out a clear, unified spatial vision that challenges the need for an integrated approach to spatial development, to sort out the city-regional priorities, to defend the need for greater public transport connectivity regionally, improve geographically the links within the regions, particularly cross-town connections and to the International City-Airports, and to maintain social justice in the city-regions for all. These visions then need to be reinforced at the transnational level in order to maximise the potential for increased cooperation in order for the Gulf of Finland to achieve long-term success.



Polycentricity and Territorial Cohesion

The EU report on 'Territorial Agenda' aims to create more dense urban networks which can develop into a highly integrated regional polycentric system. A wide range of cities have the potential to increase their demographic mass through increased cooperation with neighbouring areas, and ultimately, between neighbouring cities at the international level. Helsinki is such a city. By strategic cooperation, polycentricity offers the opportunity to attract or establish a higher level of services both within regions and also between city-regions, for example, St. Petersburg and Tallinn. In principle, cooperation can support a better territorial balance and polycentric development.

Spatial Visions

Spatial visions set out strategic ideas that can help create a modern competitive city-region. It is the spatial vision that creates a scenario for the future as to how a working partnership can be created through the design of a regional-wide connectivity matrix to give accessibility and maintain environmental standards. In more detail, a strategic vision examines a city-region's future development perspective. The vision





provides a clear picture of how the city-regions can develop in unison, what the principles are for future growth spatially, and sets out the required infrastructural elements.

Spatial Visions are considered a new form of planning instrument within the EU. The City of Helsinki started to develop the use of spatial visions through its 'Strategic Planning Advice' (Kehitys-kuva) as early as 1992. The idea is for city-regions to prepare a spatial vision for its wider region. The vision statements are intended to provide the bridge between the European wide ESDP and the regional level.

The future of transnational and inter-regional spatial visions will require to meet head-on the spatial challenges in terms of economic competitiveness, social equity, connectivity and spatial cohesion for city regions. As a first step towards achieving a better understanding of how the Gulf of Finland triangle of city-regions can cooperate together it requires to formulate an agreed spatial Vision transnationally.

Spatial Vision for the Gulf of Finland RINA

By 2050 the Vision for the Gulf of Finland region will be to work towards creating smart compact and dense city-regions at a transnational level of World importance, with greater equality of spatial and business cohesion, strong balanced economies, a unified and connected transport and traffic network, safe and secure city-regions with Social Equity, energy efficient and low carbon emissions, geared to clean and city-landscaped environments.

This transnational vision provides the spatial framework for the strategies required to achieve the vision. By setting out the policies and pulling the various approaches of the economy, social equity, connectivity and spatial cohesion, the Gulf of Finland transnational vision will take account of the physical demands of city growth and population needs within the existing city-regional structures of Helsinki, St. Petersburg and Tallinn.

Transnational Vision – KEY THEMES

The four KEY THEMES for the Gulf of Finland city-regions are *balanced competitive* city-regions, *social equity*, greater *connectivity* and a *spatially cohesive* set of city-regions. These are the drivers of change. *Balanced and competitive* city-regions set out the economic development strategy for sustained, balanced growth and competitiveness, including improved access to employment and clear goals to reduce energy dependence within a climatic change scenario. *Social equity* concentrates on creating more housing to prevent acute housing shortages, maintain reasonable equilibrium in house price rises, whilst upgrading the older suburban areas to enjoy tomorrow's standards today. A high emphasis is on maintaining a unique quality and attractive city-regional environs. A *Connected* transnational space provides the issues surrounding the need for compact city-regional linkages as an essential element of a Transnational spatial strategy, none more so than issues affecting energy, transport infrastructure, brownfield development and open spaces. A spatially *Cohesive* strategy pulls together the physical demands of integrating significant growth within the existing city-regional structures to achieve sustainable metropolises in order to make the Transnational Gulf of Finland dimension succeed as a high-quality World Network of integrated city-regions based upon a strong economy, a stable society, and an accessible city structured around a spatially cohesive poly-centric framework.

Vision to Strategy (Implementation)

The Transnational Gulf of Finland Vision four key themes dominate the strategy. By bringing these approaches together, the Gulf of Finland spatial strategy will seek to achieve a coordinated approach to realising the transnational Vision. The four key themes are developed into a series of policies under each heading of the Spatial Strategy. The integrated nature of the strategy means that elements are no longer compartmentalised by functions, but are brought together

into a cohesive whole, as in real life. So, the issue of the environment therefore runs through each of the key themes as an integral part of the economy, of societal issues, of accessibility and of territorial cohesion, and not dealt with independently. In doing so, the vision can be implemented by making a set of objectives and policies for each main strategy contained in the vision. The policies are then visually transferred into a set of plans. There are four plans. The long term aim of the project should it continue into Interreg IV would be to arrange a series of trays for each main integrated policy. The first three plans would take account of the economic circumstances, then would come the social aspects visualising future development potential, and the third 'tray' would set out the traffic and city-landscape components. Individually, the series of trays would not stand alone, but form a part of a cohesive whole. It is this final 'cohesiveness' which integrates spatially the key elements from each of the other 'trays'. The fourth and final map would show the future spatial cohesion collectively for the whole of the Gulf of Finland and illustrate how the city-regional structure would be managed for the next 50 years.

An Integrated Approach – the Transnational Key Objectives of the Gulf of Finland City-Region

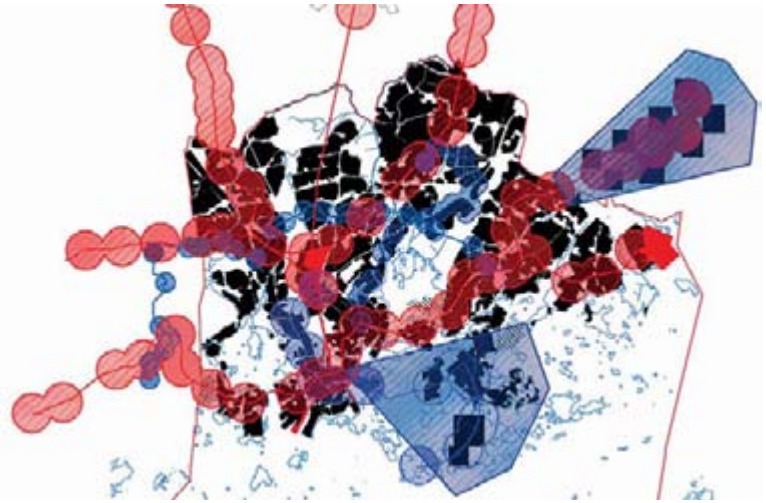
At this stage of the proceedings, the transnational level can only hope to identify the way forward. Such has been the short time available to develop the Helsinki-St.Petersburg-Tallinn RINA in less than 18 months that it is no surprise that the policies emphasise the way forward in a set of action plans. These policies are policies of intent.

Helsinki–St.Petersburg–Tallinn: Working City-Regions

aim: Balanced Competitiveness

to create a balanced development approach to growth and jobs in order to achieve a high-quality settlement structure

- by having a more integrated approach and better connectivity, it will help achieve the wider European aim of creating a balanced competitiveness and sustainability within the territorial setting. Balanced competitiveness can be achieved through synergies and clusters of competitiveness and innovative activities.
- to generate growth and jobs, each city-region requires long-term visions, action plans and critical mass for financing. By maintaining a joint spatial planning programme married to land ownership will target social and economic cohesion through an integration of economic, social, environmental and spatial practices.
- Europe faces two key challenges: increasing global competition and a rapidly ageing workforce. The three metropolises must adapt by encouraging innovation and the growth of the knowledge



economy through establishing more innovative living centres, improve the public transport services, and protect the environment.

Helsinki is developing into a world-class innovative city-region. The speed of change is electrifying. The





capital of Finland is most probably the fastest growing city in the EU in relative terms. Major capital investments for the next half century are already planned. The new Strategic Plan 2040 identifies the key growth areas and planned infrastructural changes required to ensure Helsinki is not simply aiming to maintain its existing position within the EU but wishes to develop into one of the most innovative and competitive metropolises in the World.

Helsinki's location within the Gulf of Finland near two major cities of St. Petersburg and Tallinn gives it an edge in terms of logistical and economic potential. But this feature equally applies to the Gulf of Finland region as a whole, provided the region can cooperate at a transnational level to raise the status of the region into a dynamic transnational linked and unified city-region.

The economics of Helsinki and the St. Petersburg region are growing at a rate close to 10 per cent. Allied to the fact that Helsinki is ranked amongst the top three regions of the EU in respect of issues such as safe and secure cities, competitiveness and ICT innovatory clusters, makes for good economic and spatial planning sense for these three regions to work closer together and ensure effective cooperation at all levels of local government and business partnership.



Greater Helsinki has one of the highest GDP figures for similar regions in the EU. The city-region of nearly 1.2 million inhabitants enjoys a high quality life based around the principles of Nordic social welfare and a plan-led spatial economy. Helsinki and Finland are also ranked as the least corrupt in the world. The message is clear. Doing business in Helsinki enables for a safe environment, transparency and quality of service to be achieved.

Helsinki is a modern metropolis. It continuously is building its future through world networking. The most important partners of the future are Tallinn and St. Petersburg. Both cities are more independent after the changes in August 1991. Many Finnish companies now invest in both of our neighbouring cities of St. Petersburg and Tallinn. Finnish expertise in retailing, real estate, construction, design, logistics and ICT has spread next door east into Russia and south to Estonia.

The future, therefore, is to create new opportunities to build even more cooperation with these city-regions. So what may that entail? For the long-term future, it is envisaged to create a high-speed TGV dedicated rail link between the three cities. In the short term, they may not be capable of being realised due to levels of critical mass. There are about 1 million residents in the Tallinn wider metropolis of the future, whilst Leningrad Oblast region, based around St. Petersburg will have some 8 million consumers within its jurisdiction. Together with Greater Helsinki, it could offer up to 10 million residents. This represents huge opportunities commercially to unify and help support the business potential of the Gulf of Finland. Hence, the possibility of linking St. Petersburg to the centre of the EU through Helsinki as a major hub becomes reality. A high-speed train link with a 375 kilometre long development corridor to Helsinki makes for realistic planning. A tunnel from Helsinki to Tallinn may be the catalyst that connects Russia's city-window through the Gulf of Finland via Helsinki to Europe Central.

A tunnel may take a significant period of time to achieve. In the meantime, the cross-channel ferry links between Helsinki and Tallinn have some of the highest frequency services in the world. A joint rail tunnel between the two city-regions could make the journey time from St. Petersburg to Berlin as competitive as flying, taking into account that the maximum time would be four hours, door to door. And given that carbon emissions by electric trains are substantially less than air-flights, it is also an environmentally superior mode of transport.

Social Context

Strategic alliances and City Governance

aim: City-regions will be the drivers of economic development in the future EU. In order for the Gulf of Finland to ensure its position as a European dynamic network of urban metropolises, Helsinki–St. Petersburg–Tallinn by 2040 will need to encapsulate their surrounding city-regions into single metropolitan authorities.

- cities are key players in regional development but cannot operate in isolation. The rise of global competition also within the EU cities need greater critical mass. This will require levels of agglomeration at the metropolitan level. St.Petersburg, Tallinn and Helsinki will flourish if the wider region flourishes. Greater fiscal and urban planning coordination will maintain a superior level of services and ensures people who pay taxes in the hinterland contribute to the wider regional balance.
- coordination of land-use policies in a single unitary authority will help manage and contain urban sprawl, thereby contributing to a reduction in green house emissions and energy resources.
- flexible cooperation is needed to allow differences at the territorial regional level to prevail yet devise arrangements that allow municipalities to work together on economic development, infrastructure and transport.
- complementarity through strategic alliances will focus on cities cooperating at all levels of urban functions



Attractive city-regions

aim: to create an attractive, liveable and sustainable environment, to bring about a compact, high density, connected set of city-regions, and to reduce sprawl.

- people want to live and work in cities with clean air, green and secure spaces, attractive city centre and high quality services, including cultural and recreational amenities. In order to attract mobile and skilled knowledge workers and high value activities, environmental quality will be a long-term investment.
- urban sprawl and suburbanisation can leave city centres depressed and make them uncompetitive, and consumes energy resources.
- in the past, work came to the cities and people followed work. Today, cities must attract key knowledge workers and the key input is the attractiveness of a city's quality of life and environment.
- redevelopment of brownfield sites and public spaces improves local services, adds to the value



of a city-region and avoids the use of green areas and loss of environment.

People

aim: the involvement of citizens in the planning process helps promote a better sense of competence and transparency in the community.

- transparent planning system develops trust with its citizens.

Connectivity

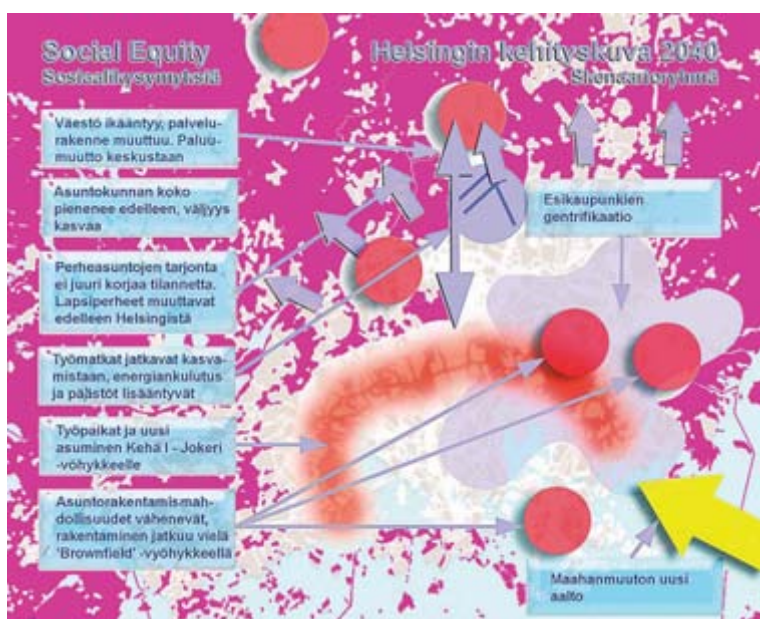
to create a clean, efficient, affordable and effective public transport transnational system of connectivity in order to improve mobility, accessibility, and reduce congestion.

- it is important to improve the connectivity between the metropolises to achieve a unified and integrated series of links between the spatially connected city-regions and to Europe.
- improve connections to inter-urban and long-distance network between the 3 cities through a high-speed TGV train network between the city-regions.
- create efficient mobility within cities by having compact, dense neighbourhood system allied to high quality public transport
- transport hubs of the future through new investment in the City Airports and City Harbours





- the cost of allowing car-usage to increase is too great a problem for future generations. The policy needs to be to reduce the volume of traffic and congestion through creating a high level alternative of public transport, controlling parking in the city centre, restricting the city centre access to cars, prioritising pedestrianisation
- provide high quality public transport
- improve better management of traffic in city centre through traffic calming measures
- integrate land-use planning decisions with traffic and transport with integrated management strategies for urban transport
- making public transport more affordable and improving overall quality
- walking and cycling in city centre to be encouraged for better health, to contribute to sustainability and lower carbon emissions
- there is a strong link between mobility and social and economic exclusion; prioritise the making of public transport more affordable
- good links to central airport hub through direct public transport connections



The transnational level long-term goals for Helsinki have to be first and foremost, developing a new high-speed TGV train link with St.Petersburg that would aim to connect each other in around an hour, covering a distance of 375 kilometres. A feasibility study would be required to determine the potential benefits and cost associated with such a project.

The second part of a study would be linked to the Helsinki-Tallinn rail tunnel. In 2004 the Rail Baltica link was included in the list of TEN-T priority projects. This railway project consists of new and improved railway from Warsaw to Tallinn. In 2005 the City of Berlin suggested to extend the Rail Baltic from Berlin to Saint Petersburg. The Helsinki-St.Petersburg fast train connection (note: this is not a high-speed dedicated line) is also developing. So, the remaining missing link is a rail tunnel linking Finland with central Europe from Helsinki to Tallinn. The Final Report on the feasibility study on Rail Baltica concluded that large investments are likely to be economically feasible as a whole (Feasibility study on Rail Baltica 2007). The possibility of a tunnel requires to be investigated with long-term vision as a key feature.

Territorial cohesion: City Structure and Physical Environment

Polycentric Metropolises

to improve the effectiveness of Helsinki-St.Petersburg-Tallinn transnational city-regions through improved spatial cohesion by the development of polycentric metropolitan areas and a more balanced system of clusters and networks within each city-region operated by a high level of public transport connectivity.

- Europe is characterised by a growing polycentrism. Polycentrism seeks to improve competitiveness through re-allocating resources to disadvantaged areas on the periphery. By strengthening territorial cohesion within the city-region this will create greater integration and connectivity within the transnational Gulf of Finland city-regional metropolises.
- polycentricity may be essential to link up urban areas into a series of markets for high-level services and activities in order to sustain competitiveness, enable the cities to address issues collectively and achieve a common approach at a spatial level, such as transport and workplace locations, and provides greater critical mass.
- a polycentric metropole encourages greater energy efficiency, wider use of public transport systems, promotes a superior jobs and homes spatial network and enables greater complementarity between districts.
- spatial plan-led polycentric region will be able to manage the spatial structure more effectively and in a more balanced manner.

Interaction between the cities of Helsinki and Tallinn in recent times has grown enormously. There are 6 million sea-passengers a year travelling between the two

cities. A twin-city development is considered to be a key strategic objective for the future.

Equally innovative are the new initiatives taking place between the cities of St.Petersburg and Helsinki at a number of different levels, none more so than at the spatial level. There are a number of knowledge-economy mixed developments taking place, cultural exchanges are gaining pace, and environmental concerns are high on the agenda of the future.

Smart city-region

In order to achieve a successful city requires a strong planning process and city planning department to oversee and manage development. The preferred manner is to use a plan-led initiative. Developers and the private sector work in partnership with the city-region to agree where the best place spatially would be for future development and how this fits into the city-regional structure as a whole and based around the infrastructural interchanges and hubs. This is best achieved through smart city-region criteria. In practical terms, to develop a metropolitan region within an urban cohesive setting will require the adoption of a 'smart city-region' strategy. What will a smart city-region look like, and how to achieve a smart-city region in the future?

- smart-city regions can be described as being compact, high density cities based around a highly competitive public transport network, economic and neighbourhood clusters, with economic and social cohesion set within a sustainable environment that reduces carbon emissions. This can best be achieved through the development of a polycentric model of urban development and move away from the more traditional monocentric city. If each city-region in this Gulf of Finland RINA pulled together along similar lines, the probability would be that much greater to ensure more even development would be achieved in the



joint region. Disparities would most likely be reduced. However, the key achievement of pulling in a similar direction within a plan-led environment is that the city-region would be more likely to be compact, dense and capable of controlling urban sprawl.

Helsinki–St.Petersburg–Tallinn

to promote a polycentric inter-regional structure within the Gulf of Finland to improve competitiveness by shared common goals, to give better urban balance through more compact and to achieve denser urban city-regions with greater spatial cohesion.

- climatic change requires shared responses to common problems; by focusing on improving rail and maritime connections between these 3 cities will help reduce green house emissions, reduce time between cities and increase cross-border co-operation and use of services by a large population.

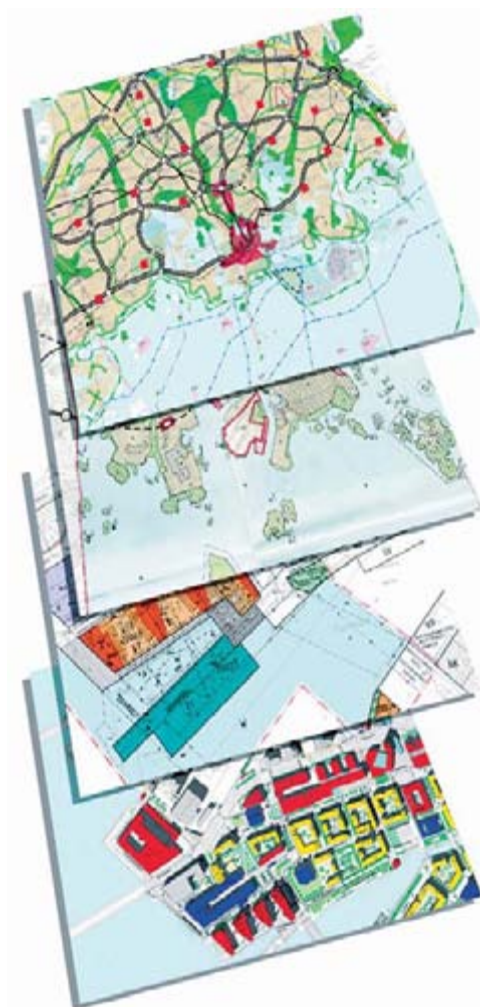


Conclusions

What does this mean for Helsinki?

The Territorial Agenda promotes transnational planning between city-regions in neighbouring countries such as Russia and Estonia.

Polycentricity explores the inter-relationships between urban settlements within a metropolitan area, and attempts to help set up a more balanced approach within a city-region in order to achieve greater unified competitiveness, such as can now be seen in the forthcoming Helsinki Strategic Planning Advice 2040 (Kehityskuva). A polycentric approach also intends to open up a new discussion on how structurally this may directly affect the strategic planning of a city-region, with the aim of preventing further sprawl, making the outer rings



more compact and dense, thereby allowing a high-quality public transport to spread-out in relation to new developments.

The impact on Helsinki's spatial planning is seen more and more as an essential component for an economy to succeed. Globalisation, technological advances in ICT and traffic and communications suggest that greater emphasis will be placed in the future to cities needing to widen their franchise beyond their limited boundaries, require a more balanced regional approach and implies a wider context at a transnational level if city-regions are to be at the forefront of economic and societal development.

Competence

i. Administrative areas

It is clear that the EU now looks at cities as needing to depend upon the wider city-region. In Helsinki, the metropolis is sub-divided between four cities. The City of Helsinki's new Strategic Plan is now underway and it represents a step towards greater strategic metropolitan overview rather than simply keep strategies to within its legal boundaries. The first round of discussions with politicians received acceptance that the new Strategic Plan can overstep administrative boundaries

and provide a common analysis for the entire Great Helsinki Region.

ii. The Planning Process

Although the planning system in the Helsinki city-region is the same legal benchmark as its neighbours Espoo and Vantaa, the planning processes and spatial cohesion results have been quite different, resulting in Helsinki employing the process to achieve a compact, high-density, sustainable city based round high-quality public transport and a Nordic welfare system of social justice. To varying degrees, Helsinki's neighbours have been unable to achieve such a compact city form, leading in part to sprawl and a region based on unconnected clusters. A more unified approach through strategic alliances at the spatial level is now beginning to show some benefits, and it is expected that over the next 30 years the entire city-region will become more compact, have a unified public transport system, and may even have a single unitary authority for the entire region.

The EU spatial agenda at a practical level will enable the Helsinki planning system to be reviewed in terms of how the processes can end up achieving somewhat different spatial results. By applying spatial cohesion more objectively, it can be seen for the region as a whole, the need to pull more together to achieve common goals on spatial compactness, transportation, and issues concerning the environment, especially if the growing trend of universal urban sprawl is to be halted and energy consumption savings maximised.

iii. Interreg III and IV.

Exchange of Experience and Knowledge

Funding helps bring international experience to bear on local work as well as to export tried and tested ideas from Finland to other countries. The need for practical exchange and transfer of ideas is essential if the





EU is to manage programmes which ensure that the projects deliver in terms of improved regional development solutions, benchmarking, and to maintain the momentum for inter-regional work.

Helsinki's Capabilities

- i. Spatial planning is concerned with key strategic issues for the long-term. To make long term strategies requires dedicated professional teams and a clear capability for informed decision making. In this respect, the EU spatial agenda will provide greater emphasis on the need to make joint decisions through strategic alliances, to work with the different cities in pooling data resources, and create effective cooperation with FURs (Functional Urban Regions). Ultimately, however, governance for city-regions will need to be re-assessed along a single governing city-regional authority.
- ii. Additionally, the need to balance development over a long-term perspective will lead to a wider understanding of the region's development potential. With this in mind, Helsinki has prepared a regional map showing all the potential development sites that are likely to be built until 2025 and a new 'Top Priority' map showing the key development priorities until 2050.
- iii. Urban form and polycentricity will, by definition, become a major issue for discussion due to the EU Territorial agenda and the EU Polymetrex projects currently in progress. New polycentric strategies may become part of the region's agenda.
- iv. In order to implement a strategically orientated planning process this will require a more policy aware approach.

Policy

- To promote a polycentric Greater Helsinki Region and a unified urban system in line with EU policies. This requires strengthening the city-

region and outlying areas into an agreed set of regional centres to support the diversity and potential of this Northern capital.

- There are city-regions outside the core of Europe which can be strengthened to better utilise their territorial potentials and counteract current imbalances, supporting a more balanced and polycentric EU territory. Helsinki is one of the leading examples of such potential.

EU Perspective of Finland as a periphery

The future of northern and southern regions might lie in very different fields of activity. Many Northern regions can benefit from their current strength in relation to ICT and innovation and further capitalise these. The North may manage to keep its image of being "cool" while they may face severe challenges in terms of low accessibility, demographic development and consequence of possible increases of energy prices. Many southern regions can benefit from their pleasant climate and a population density which also in times of population decline will allow for the provision of a suitable level of service of general economic interest. Thus the south has perspectives of becoming a "hot" location which easily can attract knowledge workers, mobile retired people as well as holiday and second homes.

ESDP and Territorial Cohesion policy options for Helsinki: Helsinki is already well on its way to implementing these key issues of Territorial Cohesion by the following actions:

- expansion of the 'gateway' role to Russia via St.Petersburg
- improving Helsinki's 'attractiveness' to attract more mobile investment.
- economic diversity to prevent single dependency of an economic activity
- to restructure derelict urban sites and areas (brownfields).
- promote a 'caring' policy to the eco-system
- create accessibility within the city-region through appropriate land-use plans to stimulate mixed urban functions, aiming for a polycentric structure with high-quality public transport connectivity.





- emphasis on creating a high-density, compact city-region, instead of 'sprawl' and uncontrolled expansion of the urban framework.
- coordination between land-use planning and transportation and traffic plans.
- reduction of negative side-effects of areas subject to high-concentrations of traffic. Helsinki, through its road barrier, noise-reduction programme, environmental traffic initiatives in the city centre and suburbs, is already implementing such a programme.
- to improve freight transport with special regard to shipping navigation. Helsinki's new high-tech goods terminal harbour in Vuosaari should assist greatly in achieving this particular ESDP policy.
- coordinated and integrated infrastructure and land-use planning to maximise the spatial investment programme. It could be reasoned, that by owning nearly 66% of land (together with Finnish State, nearly 80% of land is municipalized) an integrated framework for spatial planning already exists and is being implemented effectively through the Master Plan (Yleiskaava 2002).

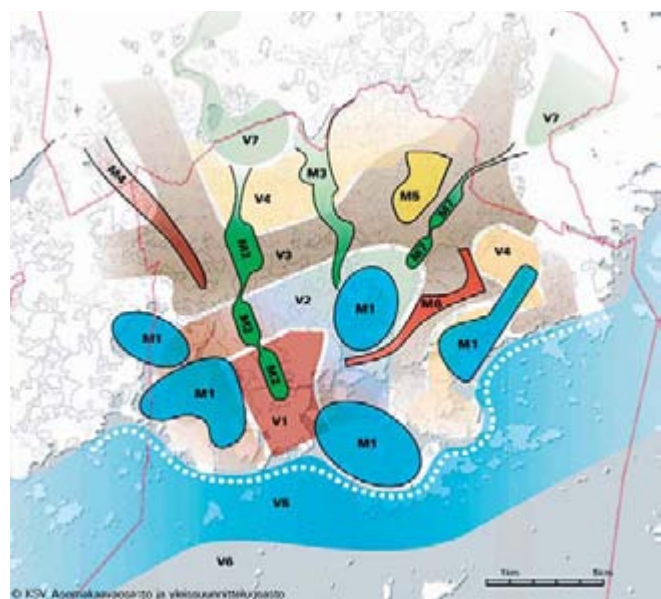
Policy

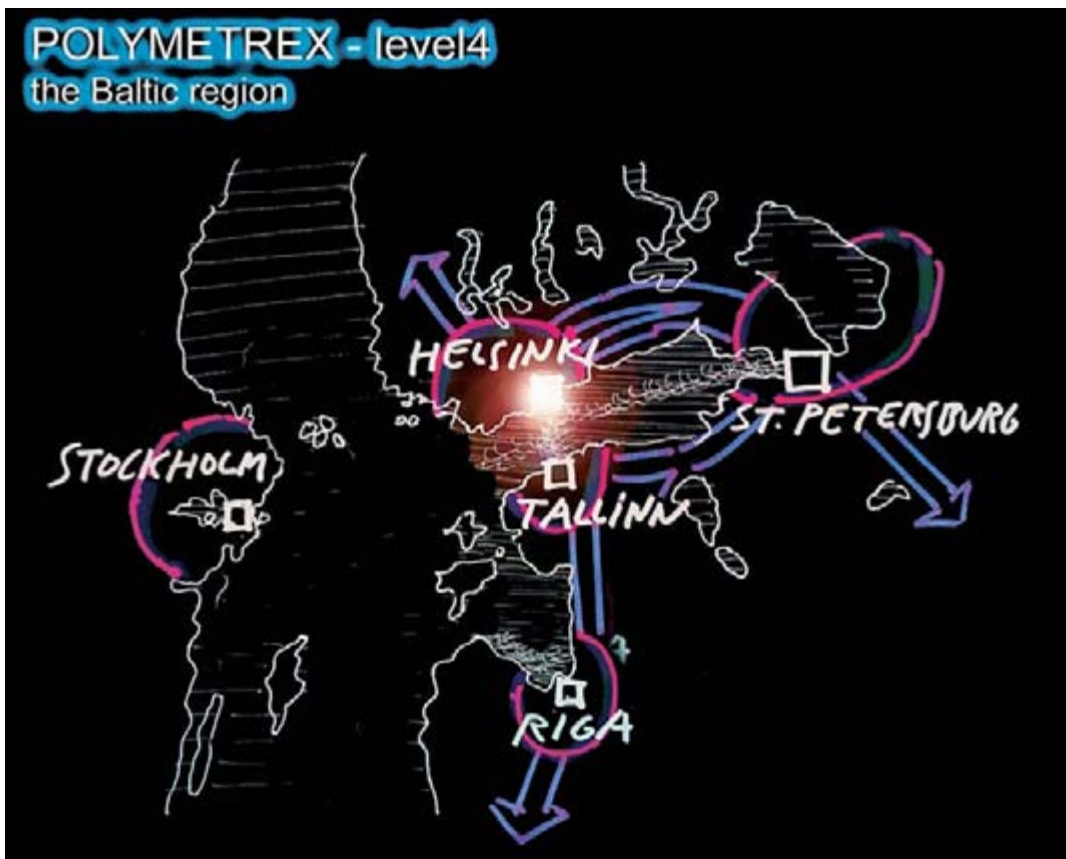
To support *polycentricity* as a means by which Greater Helsinki region can develop as a hierarchy of centres at a city-regional level closely associated around a primary central core, the key city, in a spatial structure that allows *complementarity and connectivity* between the centres and the core form.

Building Clusters and the Territorial Dimension

Information and communication technology (ICT) are important means of the citizen's daily life and business communication in enterprises and industry. To foster growth and jobs and to enhance the quality of life, access to modern information and communication means is needed.

ICT innovative clusters are taking place both within functional urban areas and regions and also tak-





ing place between them. Links between urban areas and regions have been built primarily within the national context since the early 1990s. Now it is time to build clusters internationally. Transnational links are built with cross-border neighbouring areas and development zones, but also within Europe and globally. Hot spots of competitiveness and innovativeness are also outside Europe. Europe can not turn inwards but it must build active links especially to North-America and Asia.

Policy

To recognize the need for closer cooperation between Helsinki-St.Petersburg-Tallinn geographic city-regions as near-by polycentric neighbours in order to strengthen Helsinki's international economic standing and expand the region's critical mass capabilities.

By promoting transnational clusters of competitive and innovative activities through strengthening the international identity and specialisation of cities/regions and identifying priorities for cooperation and synergies in investments, such as co-operation on territorial development, job markets, training, education, R&D.

Transport Networks and Accessibility

Accessibility is one of the most important indicators used to describe the territorial aspects of transport systems. The quantity and quality of a region's infrastructure endowment, as well as distance (travel time) to

population and/or economic centres play an important role.

Policy

High-speed rail lines can support cities between main nodes through strategic planning at a transnational level. Priority needs to be given to developing a TGV style high-speed train between Helsinki and St.Petersburg. Further consideration will then be required to research similar means for a high-speed connection between Helsinki-Tallinn, connected via a tunnel.

Environment and Culture

Natural heritage is an essential component of the environmental situation and living environment. The European Union established a network of especially protected areas "Natura 2000". Europe has many reasons to care for its great cultural diversity and the thousands of outstanding examples of ancient architecture, artifacts and landscapes which attract millions of tourists to renowned cities and historic sites. The importance of this cultural wealth can be measured in economic and social terms, in employment, job creation and a unique quality of life. Cultural heritage plays an essential role for Europe, in particular in enhancing the integration process of the new enlarged Europe with its complex cultural diversity. Failure to conserve and protect these treasures for future generations will be reflected in loss of cultural patrimony and reduced quality of life. Accordingly, spatial plan-

ning should approach this issue in a comprehensive manner.

Policy

To support an integrated and sustainable development and maintenance of the European urban and rural environments through planning designed to protect, conserve, and enhance the natural and cultural heritage for improved quality of life.

In Summary

SMART-CITYREGIONS and SPATIAL COHESION

Promoting Urban Development in a Polycentric Pattern

In order to promote polycentric EU territory, a more balanced European urban system of city-regions and other urban areas is to be achieved. This requires strengthening of city-regions, especially outside the core areas of Europe.

BALANCED COMPETITIVENESS and INNOVATION

Promoting TransNational Competitive and Innovative Regional Clusters

In order to create trans-European clusters of competitive and innovative activities, urban areas and regions are encouraged to strengthen their international identity and specialisation and to identify priorities for cooperation and synergies in investments.

CONNECTIVITY

Strengthening Trans-European Networks and ENERGY

In order to improve the accessibility of all the regions of the EU and especially the peripheral areas, the relevant regional actors need to upgrade to high-speed train systems. This in turn will support the need to lower carbon emissions, and also utilize territorial potentials for efficient, safe and environmentally friendly production of renewable energy.





St. Petersburg

St. Petersburg: CITY

Final Report

1

A 'Gateway City' of Russia

Anna Katkhanova

Committee for the City Planning and Architecture
Government of St. Petersburg

Introduction

More than 300 years history of St. Petersburg city planning could roughly be divided into 3 periods: The first is the longest – from the beginning of the 18th century (the city of St. Petersburg was founded in 1703 and became the Capital of Russian Empire in 1712) till the October Revolution in 1917. In the beginning of the second period the city was named Leningrad and received status of the regional centre of the USSR.

From its foundation till now St. Petersburg has never been developed without city planning and city regulations documents. About 200 master plans have been made during the city's history. Initially St. Petersburg was created as a Sea Port, the European Gateway of Russia, as a sign of the turning-point of economy and culture of the country.

The legacy of the Soviet period mainly reflects in the ineffectual models of land use without considering the price of land as a mechanism of land use regulation. Also huge city areas were developed by poor housing, with buildings based on the single model pre-fabricated multistorey apartments.

Current period is connected with the social economic reforms in Russia which started in the beginning of 1990's. Now St. Petersburg is "the city of federal significance" and a subject of Russian Federation and administrative centre of the North-West Federal Region as well. City planning and construction process changed in connection with the private ownership rights on land and real estates.

The previous Master Plan of 1986 included the Leningrad Oblast area. The new Master Plan was adopted by the City in December 2005. It comprises a number of attachments concerning different aspects of city development. The main issues of the Master Plan are the Scheme of boundaries of the functional zones with the main parameters of further development, Scheme of the development and location of main objects of transportation included outlet roads and inner streets network etc.



Among the main goals of the Master Plan are the following:

- Stable increase in the quality of life for all categories of city inhabitants towards European living standards
- Forming St. Petersburg as a multifunctional city integrated into the Russian and World economy;
- Strengthening the role of the city as a contact point for the Baltic Sea Region and the North-West Region of Russia.

1 Background for the Master Plan production

Geographic overview

- St. Petersburg – the largest northern city in the World
- Population – 4,6 million
- Territory – 1439 km²

The strengths of the geopolitical location are: close to the border with the EU, maritime location, important transit hub for sea, river, air, road and railway routes, and pipelines; location at the key point on European priority transport corridor #9.

The weaknesses are: northern peripheral location, far from important Russian, European and world centers; unfavourable climate and hydro geological conditions.

St. Petersburg is the biggest city in the Baltic Sea Region and the 4th city in Europe.

Population, migration and social diversity

Dynamics of city population in St. Petersburg for the last century is demonstrated in the diagram – “demographic saw”.

Area, land use, population density

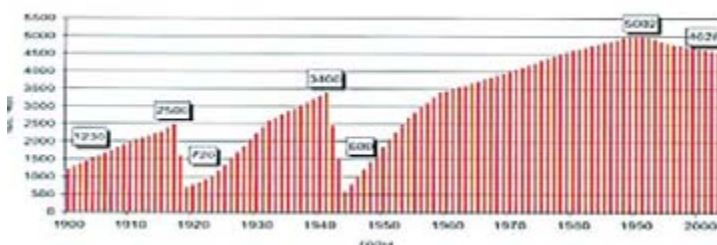
St. Petersburg is the centre of the metropolitan area comprising St. Petersburg and the adjacent part of Leningrad Oblast. It is a part of the North-West district, which takes 11% of the population and 10.5% of the territory of Russia. In the course of its development St. Petersburg has acquired a concentric structure. It can be seen in the existence of belts varying in form, function and attractiveness for investment.

St. Petersburg metropolitan area

The historical centre occupies about 4.4% of the city's territory and is included in the UNESCO World Treasure Heritage List.

More than 3,000 landmarks of high historical and cultural significance are located within the boundaries of the historical centre. The average density of the population is 250 people per hectare; the job density is 220–494 jobs per hectare (the highest in the city center).

The inner industrial and residential belt occupies 30% of the territory of the city, which is too much for a city like St. Petersburg. Land use model is a result of the soviet practice of obtaining the land and looks like



a mixture of industrial and residential blocks of low quality. There is a shortage of all kind of city infrastructure, especially transport network. City planning and regulation measures are directed to increasing the territory efficiency by land use changes and transferring the prior part of the area into business, commercial and housing. Both density of population and job density are low now – some 50 people per hectare.

The so-called “new residential belt” was formed during the Soviet Period mainly by prefabricated housing blocks. Architectural ensemble of the housing development along Moscovskiy prospect is one of the not numerous exceptions from common practice. Housing blocks developed during the soviet era cover about 20% of the city territory. First generation typical housing which was built in accordance with the “Khrushchov’s” conception of cheap mass housing for quick solving



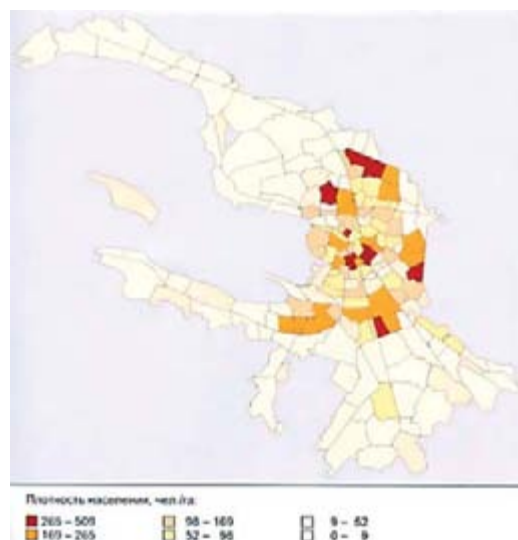
the housing problem in the USSR now occupies a lot of high value land plots with good transport accessibility. The city Government will make decision on city planning policy concerning 1st generation prefabricated housing stock to solve the problems of renovation and upgrading the area and street network. It could be provided by several alternatives: by the way of resettlement, demolition and new construction of high quality housing on the free sites, or complete modernization of the old buildings with existing householders.

The next period of multistorey apartment blocks – built during the 1970 and 1980s – is connected with increasing the number of storeys, length of building and upgrading the appearance of large scale blocks which are currently in poor condition and low-level of environment. The situation with these huge almost “sleeping” districts in the west-north and in the south of the city center, with rather high density of population and low density of jobs (30 jobs per hectare), is creating a lot of transport problems.

St. Petersburg has a huge area within the boundaries of the city of federal significance. Within the high density urban area there are located 82 municipal districts out of a total of 111. Other municipal units belong to settlements which are located through the open space areas – these kind of settlements with the open spaces of agricultural fields, forests and parks are comprised of so-called “suburban belt” which occupies 45.6% of the territory of the city. Functionally, it consists of towns and villages, new industrial zones, recreational zones, and “special districts”. Along the south sea coast there are palaces and parks of high historical and cultural value. According to the specifics of environment planning and land use policy these areas should provide the balance with new development and protection of landmarks, greenery and open spaces.

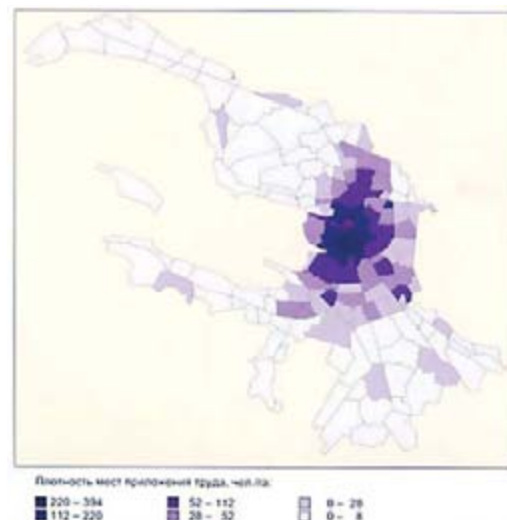
Population density in St.Petersburg

- The historical centre – 250 people per hectare
- The inner industrial and residential and new residential belts – 50 people per hectare



Work places density in St.Petersburg

- The historical centre – between 220 and 494 jobs/hectare
- The inner industrial and residential belt – 50 jobs/hectare
- New residential belt – 30 jobs/hectare

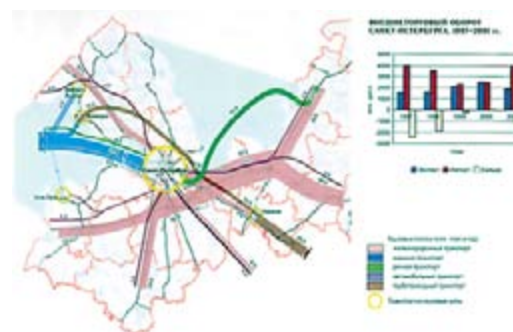


Urban transport system

The urban transport system is comparable with major world cities, with above-ground rail network being one of the most extensive in the world. The metro extends for 90 km, and surface transport extends for 1350 km and includes the following:

- 300 km of tram routes,
- 340 km of trolley-bus,
- 710 km of bus;
- 74 km of electrified railways within the city

During the 90s the level of provision of transport services fell sharply as a result of cuts in funding from the city and federal budgets. St. Petersburg's road network is at crisis due to the increase in private cars (183 per 1 000 residents in 2000 and rising fast). The city centre is in an especially difficult situation due to the large volume of transit freight traffic. To solve the problem the Ring road is under construction. In the future the Western Speed Road should connect the northern and southern districts of the city. New logistic service will



Transit flows.

develop at junctions of the main roads with the rail-way network.

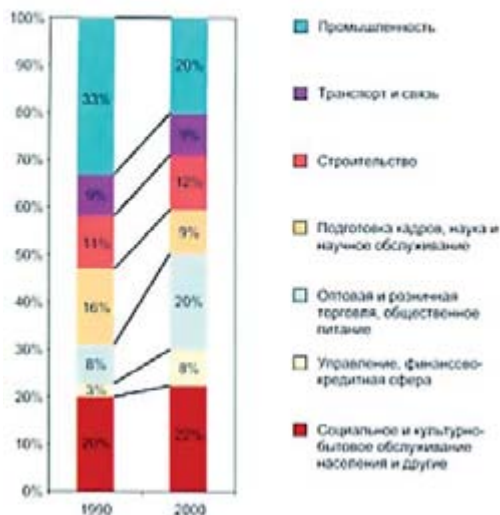
Economy

St. Petersburg is the second largest manufacturing centre of Russia. The city industrial complex includes: engineering, ship-building, metal working, food industry, electric power, chemical, manufacture of construction materials, timber processing and paper industry.

One of the new directions in the economy activities is car production. There are three Strategic projects of St. Petersburg which provide development of the famous world car enterprises: Toyota, General Motors, and Nissan.



ИЗМЕНЕНИЕ СТРУКТУРЫ ЗАНЯТЫХ В ЭКОНОМИКЕ САНКТ-ПЕТЕРБУРГА. 1990–2000 гг.



Administrative structure

The City Government of St. Petersburg comprises central office which included a set of branch Committees and 18 territorial departments.

Branch committees of the City Administration are responsible for specific areas of the city development.

The Committee for City Planning and Architecture is in charge of city planning, land use regulation, architecture approval, and issue of construction permits.

St. Petersburg consists of 111 municipal units: 82

are within the city, 8 municipal units in towns, 21 independent settlements

2 Master Plan of St. Petersburg

The city planning and city regulation agencies were founded in the same time as St. Petersburg was.

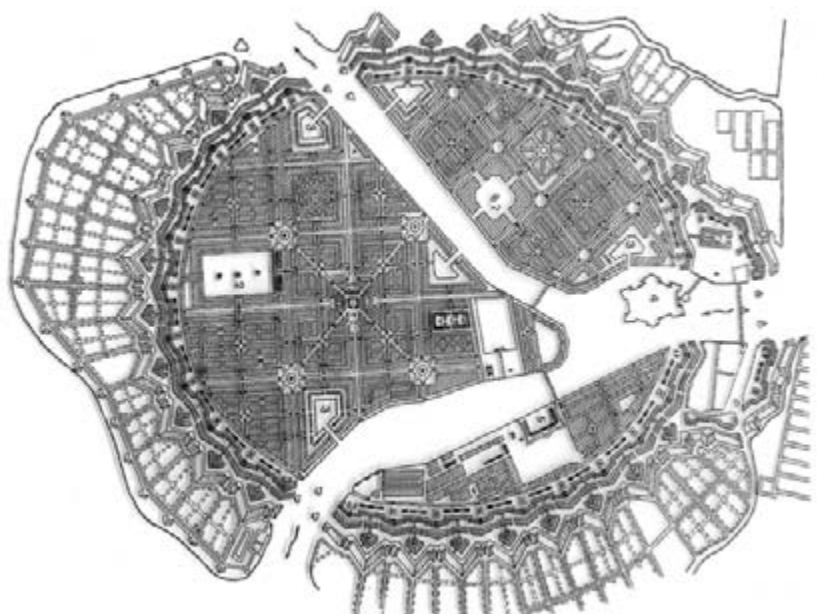
The first plans were produced by the famous European city planners and architects: J-B Leblon and D. Trezini (see above). After 1737 when the Master Plan produced by Russian City planner P. Eropkin defined the structure of the city centre at the Admiralty side of the city, creating the famous three-rays of three main streets which focused at the admiralty Tower.

In the later periods the structure of the city did not change dramatically but improved by detailed planning and landscaping designs.

Three main rules existed: do not build higher than the cornice of the Winter Palace; develop the blocks according to the red lines and without gaps “uninterrupted facade”, which, for a long time, regulated the city development.

Now the historical ensembles of the “late baroque and classicism period” are included into UNESCO

← Change in the employment structure in St. Petersburg in 1990–2000..





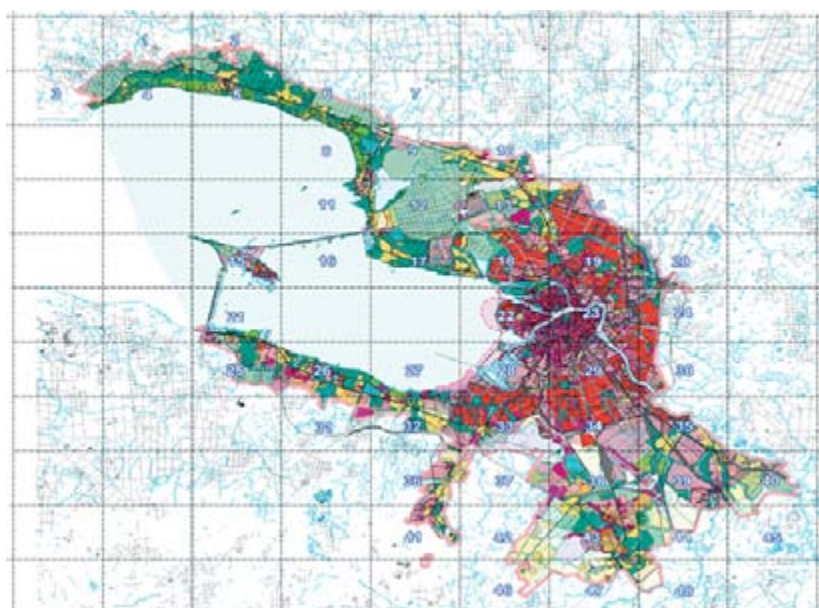
Scheme of the transport infrastructure development (appendixes ##3–5).



Scheme of Ring Road Around the City.



Map of land use (appendix #2).



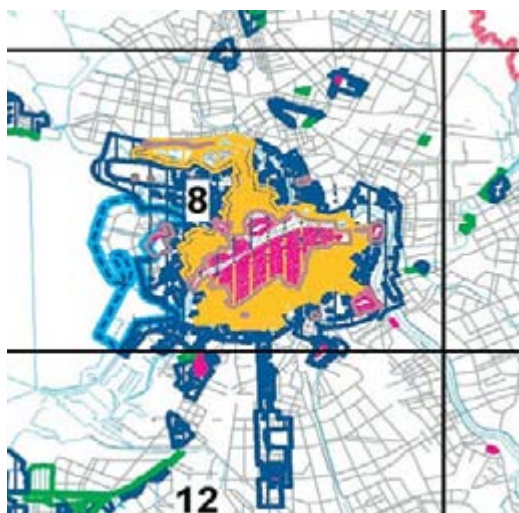
World Treasure List. The city has obligations to protect them with their initial characteristics intact.

One of the main problems of the current period is how to save the historical heritage of the city center and to be a world city by high dynamic economic social and cultural development. Many people believe that one of the obligatory conditions of the modern world city is high-rise development. The active invasion of the high skyscrapers into the city landscape is a challenge to the city authorities which are responsible for the regulation process. Business companies like Gazprom should know where and in which parameters they could satisfy their ambitions.

The new Master Plan of St. Petersburg was adopted by the City Government and the city legislative Assembly in December 2005. The content of the Low concerning Master Plan adoption included the text and a set of maps.

Goals of the Master Plan

- growth of the quality of life for all categories of the city population;
- further development of St. Petersburg as a multifunctional city, sea port and contact junction of the BSR and North-West of Russia integrated into the world and Russian economy
- Sustainable urban development of the city
- Upgrading quality of the city environment
- Protection and saving historical and cultural heritage
- Development of the engineering, transportation and social infrastructure
- Providing interests of the Russian Federation, interests of the city society and municipalities
- Preserve the historical character of the city planning structure
- Significant increasing efficiency of land use and quality of environment of existed urban areas
- Development new city areas according to the master plan
- Provide the basis for economic development with necessary planning documentation
- Safe open spaces and nature recourses by developing the greenery infrastructure
- Develop St. Petersburg centre by changing the land use of old industrial areas
- Develop polycentricity land use in connection with the transport network development
- Develop new business centers in transport junctions



Scheme of historical and cultural heritage protection zones (appendixes #12).

- Envisage coordination between the city and its subordinate areas
- Include cultural , historical and natural landmarks into new city planning projects
- Develop the legal system of the city planning process

3 St. Petersburg Strategic Projects as an instrument of implementation

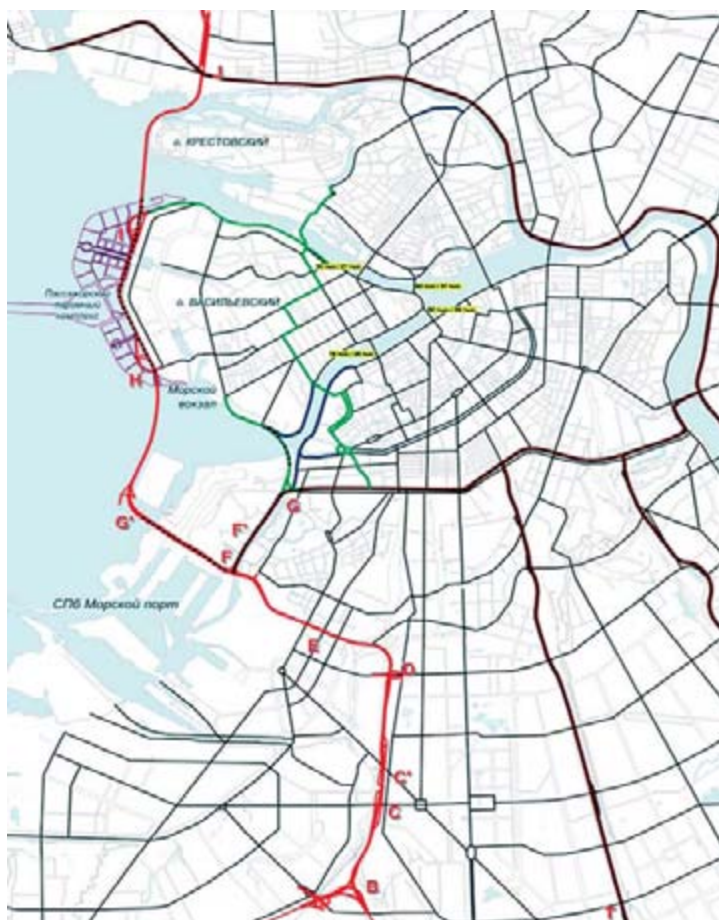
St. Petersburg Waterfront development projects

Historically St. Petersburg has been formed as a city confronted by water: sea and rivers.

During its development the waterfront partly was occupied by industry. This situation has existed till now.

According to the new master plan a new “west-north speed diameter” road will connect the south and north part of the city going by the islands.

The biggest island – Vasiljesky ostrov – will get additional area at the west part. “Morskoy Facad” is one of the Strategic Projects of St. Petersburg. Now the process of creating the 1st plot of a 459 new land is started. The city planning documents are working out now with the Gensler company participation. The new city passenger terminal will be developed there. It is an example of one of the PPP (public-private partnerships) city projects. In the project financing there are involved money from the federal and from the city budgets and private investment. The total capacity of the project – about 6 million m2 real estate of different types: housing, business, and commercial.





Multifunctional Project Baltic Pearl

Another Waterfront development project which is under construction now is the multifunctional Complex «Baltic Pearl», which has constructed the first building. The first building is a multifunctional commercial center with the total area of 10,000 square m², which will consist of a VIP reception, exhibition and negotiating rooms, offices, sales offices.

Multifunctional Complex «Baltic Pearl» is a strategic cooperation between Russia and China. Construction of a multi-purpose complex is according to the timetable approved by the government of St. Petersburg. Multifunctional Complex «Baltic Pearl» is the largest in St. Petersburg project with foreign capital and the first project of the construction of a multi-pur-

pose complex that will be an effective tool to improve the investment attractiveness of the city. The development will cost in the region of 1.3 billion dollars – the sum of investment in the project; 205 hectares – the total area of the complex. Uniqueness of this project is that there will be located as entertainment, business complexes, as well as residential buildings. The building is scheduled for June 2009. In the northern part of Multifunctional Complex «Baltic Pearl» is planned construction of exhibition centre and commercial area of 50 ha. The total area of residential buildings in the Multifunctional Complex «Baltic Pearl» is 1.07 million square m². This means that the project will be able to provide homes for about 35 thousand people. Nearly 15,000 people get jobs created for their liveli-





hoods. Residential quarters of the project will be provided with full social infrastructure. There are plans to build schools, kindergartens, clinics, etc. The project involves the development of transport infrastructure of Krasnoselsky district.

Project called "Morskoy façade" is the largest project in Europe for the establishment and development of areas in the coastal zone. The newly formed territories offer a total area of 476 hectares being built in Russia today – a new sea passenger port, which will accommodate cruise and ferry boats up to 311 metres in length and a draught of up to 9 meters. The length of the new Standards channels 10 km depth Standards canals and water project – 10 metres. The total number of berths – 7, the length of quay wall – 2100 m. (sm.shemu) in the first stage of the operation will be three berths with the attendant shore facilities. The first trial terminal will be able to be used as early as 2008. The capacity of the passenger terminal (seven berths) will be 12,000 tourists per day (up to 1.5 million passengers per year). Also at the newly formed territories will create a new business center in St. Petersburg, the capital of Northern Russia, modern residential areas and recreational areas. On the newly formed territory will be Highway "Western High-Speed Diameter".

Dates of the implementation of the programme is expected to be between 2006-2012. The programme is being financed from the budget and extra-budgetary funds from Petersburg with Total financing activities of 6871.3 million rubles.

The territory is using new technology. Sand will be extracted from marine deposit. The Business Center to the newly formed territory on the coast of the Gulf of Finland has a number of significant advantages. The newly formed territory is free from the need of reconstruction; has thoughtful engineering solutions and minimum limit restrictions. There are no legal encumbrances. The new district of St. Petersburg will directly adhere to the historic city centre.

The creation of real estate : residential neighbourhoods, shopping malls and business services, restaurants and entertainment centres, education institutions a new business centre in St. Petersburg, hotels, exhibition and congress centre, museums, theatres and other cultural institutions. Highway "Western High-Speed Diameter" the inner and central electric lines provide accessibility : 10 minutes to the historic center, 15 minutes to the airport, easy connections to the residential areas of St. Petersburg. Construction of two underground stations is planned. During navigation tourists can travel on the river Transport.





Orlovsky Tunnel

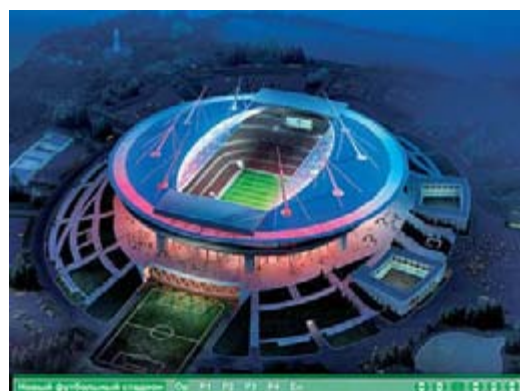
The tunnel connecting the coast of the Neva river Piskarevsky prospectus on the right bank and Orlovskaya street on the left. The biggest transport project of Petersburg in the past decade. The length of the tunnel is 1,600 meters. Four lanes of two in both directions. Diameter boards 11.6 – 13 metres. The project cost is 270 million euro. The tunnel will be opened in 2008. Travel on it will cost from 10 to 15 rubles per vehicle. The first phase of reconstruction of the Piskarevsky prospectus will release tramways from the roadway and the prospectus for a strip through the demolition of green space. To translate Piskarevsky speedboat regime will be built several solutions, including through the City, as well as the bridge for the movement of trams.

New football stadium in the western part of the Krestovsky Island in St. Petersburg

A new modern football stadium, with 62,167 capacity, is to be built which will meet UEFA and FIFA requirements. The project purpose is the creation of a football stadium in order to organize Russian championship games and matches at international level, to support the coaching process and comprehensive preparation of FC "Zenit" for future matches during Russian championships and international tournaments and for preparation between seasons, to develop mass physical culture and sport opportunities for residents of the neighboring areas, to organize new childrens' sports groups, to provide recreation and entertainment for residents of



Saint-Petersburg. Stadium is located in St. Petersburg in the western part of Krestovsky island. Project timing: 2006–2009. Project budget: 225 149 200 USD. Source of financing: budget of Saint-Petersburg. The competition project for construction of a new football stadium was won by the architect from Japan – Kisho Kurokawa. His project is called "SPACE SHIP". A landmark stadium making full use of the most advanced technology and design for the suspended roof structure; also, a movable Field system enabling the field to be taken out of the stadium for the realization of fresh turf all year round. Retractable roof with a hot air inflated membrane structure enabling the melting of snow. Stadium height – 56.6 m. The stadium cup is covered with a roof looking like a floating sail, which is supported by 8 masts. There is an open parking area for 1 720 parking lots. The new stadium can be used for concerts, business meetings, exhibitions, conferences and trade fairs. Commercial infrastructure: shops – 3,395 m², VIP zone – 11,109 m², sporting center (sport gym, pool, beauty treatment salon, SPA, saunas), exhibition gallery. Project features: making full use of the most advanced technology and progressive design, movable field system, movable stairways, the world biggest LED screen, viewing terrace, complex development of the site, including creation of group of parks, environmentally-friendly Eco-architecture.





A dam connecting Kronstadt with northern coast of the Finnish gulf

The dam is being created (construction goes very slowly nowadays, due to the 300-anniversary of Petersburg, though talks activated) with two purposes:

1. Protection of Saint Petersburg against flooding.
2. As part of a belt line (to unload city from autos, especial lorries which go now through the historical center). The dam should connect southern coast of the gulf with the north (Oranienbaum with Gorskaya) through Kronstadt.

Now there is only a part of the road Gorskaya (near to St.-Petersburg, on Primorski highway) – Kronstadt. And it should be strongly expanded and strengthened, taking account of the width of the future “city ring”.

It is interesting, that field-marshal B.Minih in 1727 already suggested to build a dam. The system of dams with 4 meters height should fence each island and entire city. In XIX century P.P.Bazen has developed the project of a protecting stone dam. Other offers existed also.

The current project has been developed by 1978,

with the help of 66 organizations-participants. From the beginning of construction (1979), and especially during “Perestroika”, were a lot of talks about infringement of ecology after construction of a dam (stagnant water, seaweed excessive growth, etc.). In 1990 construction was stopped.

However, solving a problem for a long time is not obviously possible, the case is complex and profitable – experts are involved with all parties.

New Holland

New Holland is the only one of the 42 islands of St. Petersburg, built by people. New Holland is the first military port of Russia, which was founded by decree of Peter I on September 21, 1721. Some of the buildings here are considered valuable monuments of industrial architecture XVIII century. In total there are 26 buildings with a floorspace of 68,000 square meters. The total cost of the project of reconstruction of New Holland-\$ 400 million. New Holland is a unique monument of industrial architecture of early classicism.



St. Petersburg: CITY-REGION

Final Report

2

Leningrad Oblast'

Natalia Gutman
The Head of Regional Planning Department
Leningrad Oblast'

Preface

Leningrad Oblast' area is 84 thousand sq. km, the population is 1.6 million inhabitants.

Since 1992, St. Petersburg and Leningrad Oblast' are both subjects of the Russian Federation that can independently define their actions and policies. Yet, the two administrations are responsible for an area that makes up one socio-economic whole, with multiple interactions in the economic, social and territorial spheres. A total of 44% of Leningrad Oblast are urban inhabitants on territories adjacent to Saint-Petersburg.

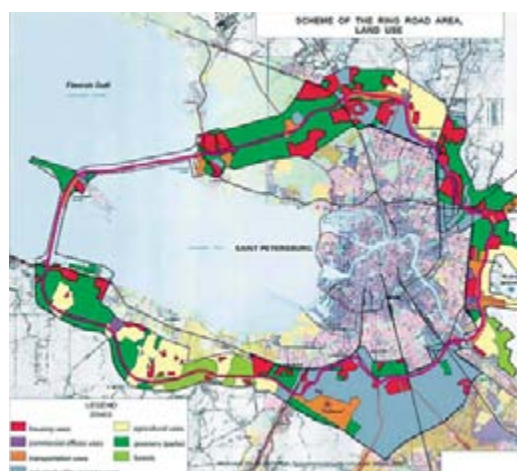
It is widely felt that crucial development opportunities are missed due to insufficient co-operation and the problems arise in the mentioned above spheres. The socio-economic situation of the Oblast' requires increased action in the area of strategic policy integration and co-operation.

To achieve the greatest possible efficiency of co-operation of two subjects of Federation, an overall view should be adopted as the guiding principles in spatial planning and improvement of infrastructure. To this end, the City and Oblast' worked together in a TACIS (European Union) project "Enhancing Synergy": Integration of Strategic Policies of the City of St.-Petersburg and the Leningrad Oblast' in the context of the Northwest Region"¹ (1998–2000). The Governors of the City of Saint-Petersburg and Leningrad Oblast' signed the declaration of co-operation (2000).

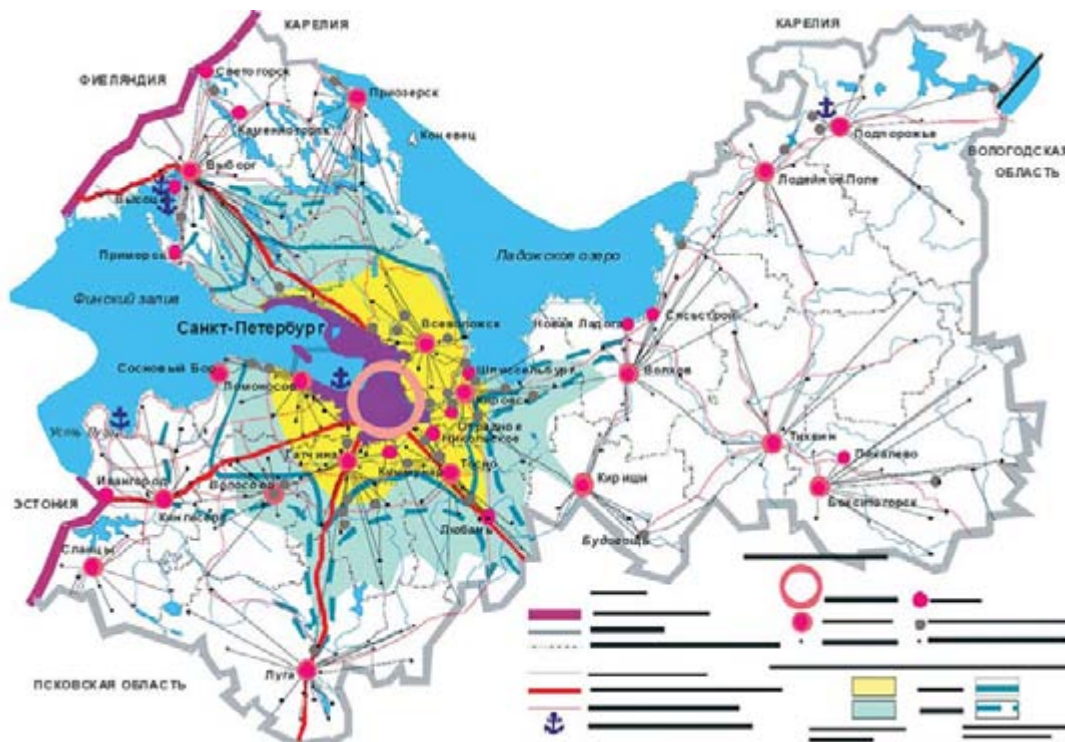
The construction of Ring Road Round Saint-Petersburg is the bright example of common view on spatial planning principles and infrastructure improvement.

The Ring Road round Saint-Petersburg

The length of the Ring Road of St. Petersburg is 150 km, among them 85 km (57%) are on the territory of the City of Saint-Petersburg and 65 km (43%) – on the territory of the Leningrad Oblast'. The adjacent area influenced by the RRR is the zone of mutual interests of



¹ Association of Nord-West – the organization joining 12 subjects of Nord-West of RF for economical cooperation. PolyMetrex, Leningrad Oblast', 2007



Saint-Petersburg and Leningrad Oblast' and the zone of polycentric development. This area has high investment attractiveness for housing, social, communal and industrial constructions. The RRR of Saint-Petersburg consists of two parts on territory of Leningrad Oblast' – the Eastern Semi-circle that crosses land areas of Vsevolozhsky Municipal district, and the Southern Semi-circle that crosses land areas of Lomonosovsky Municipal district. The Eastern Semi-circle is in operation now; the Southern Semi-circle will be completed in 2012.

The territories enclosed to the route of RRR contain agriculture lands and forests in Leningrad Oblast'.

Cities and Towns Situated along the Eastern Semi-circle of RRR Influenced Zone

Some projects on land use plans, master plans for the cities and rural settlements situated on the adjacent area influenced by the RRR have developed during 2001–2005 in compliance with the Leningrad Oblast' Government programme.

Aim of these spatial planning projects is to define the territories (land plots) for different kinds of housing construction inside the invested-attractive zone.

Two cities and some rural settlements are situated on the territory in Vsevolozhsky district enclosed to the Eastern semi-circle of RRR.

All settlements are located very close to Saint-Petersburg and have a good connection by electric railway (Vsevolozhsk City), electric railway and metro line (Novoe Deviatkino and Murino), bus and mini-bus (Sertolovo city, villages Yanino-1 and Kudrovo). There is a steady pendulum labour migration (cen-



tripetal commuters), and recreation migration (centrifugal commuters) between these settlements and Saint-Petersburg.

Accessibility to the City of Saint-Petersburg centre is a little more than 1 hour by public transport.

The Vsevolozhsk city is one of the nearest to the City of Saint-Petersburg. Present population of the town is about 50,000 inhabitants. It is the typical small

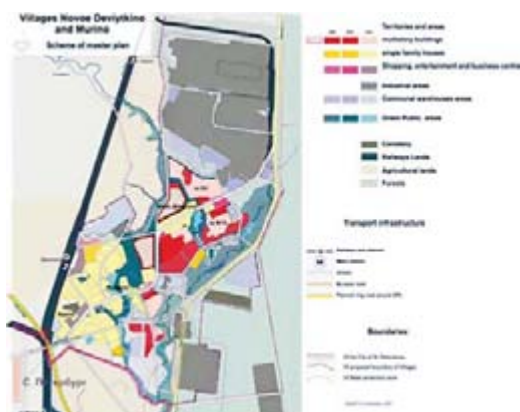


city of the agglomeration – there are an industrial zone with such plant as “Ford”, for example, multistorey residential areas and one family dwellings residential area of houses with rooms for rent in summer. Dachas of kinder-gardens, children’s camps and family recreational bases are situated in Vsevolozhsk city. It used to be a recreational area for St. Petersburg historically. The city has significant reserves for housing, mainly block apartment houses and one family houses.

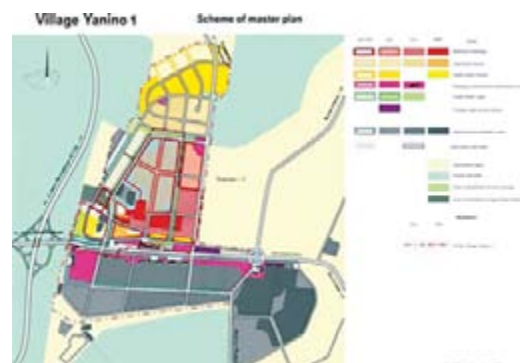


The Sertolovo city is situated 10 km away from metro station “Ozerki”. Accessibility of the City of Saint-Petersburg centre is about 1 hour. The population is 29,000 inhabitants now. The city is surrounded by forests. It has an exit to the E-18 highway by the motorway Pargolovo-Ogon’ki”. The nearness to St.Petersburg, security with engineering networks, green surroundings of the city made it very attractive for investments to construct townhouses and one family houses in spite of existing multistorey residential areas.

The villages Muruino and Novoe Deviatkino are situated relatively close to the northern quarters of the City of Saint Petersburg. The accessibility of the St.Petersburg centre is about 50 minutes. The metro station “Deviatkino” is the only metro station on the territory of Leningrad Oblast. It is located in the village Murino A large industrial zone and multistorey housing made the territories of these villages more urban than rural. There is a sustainable pendulum mi-



gration in two ways between the City and the villages. Historical past of the village Murino that was known from the times of Peter the First and was used as a summer residential place have initiated a high investment interest for construction of townhouses and one family houses equally to multistorey houses too.



Village Yanino-1 is situated 2 km away from the housing of the City of Saint-Petersburg. The buses and mini-buses operating on the Koltushi motorway connect the village and the City. It is a typical settlement of the agglomeration of the largest City as some city large communal objects are located on the territories enclosed to the village. There is the sustainable pendulum migration between the City and the village. The village is attractive for both housing and terminals and communal objects.

Village Kudrovo is an unique example of polycentricity development of territory of St. Petersburg agglomeration. It provides by links with city metro infrastructure and by the junction of RRR and outlet Murmansk highway intersection. This node comprises of existing shopping centre IKEA, shopping and entertainment centre MEGA and the area of future housing, business and commercial development.



A future residential area with high multi story houses is planned for 40,000–50,000 habitants. A new metro station will be located on the South of the residential area. Sport and green zones, a network of auto service objects for users of RRR and the federal Murmansk highway are supposed to be constructed.

Saint-Petersburg Agglomeration

Saint-Petersburg together with the adjoining settlements of the Leningrad oblast within 1–2 hour transport accessibility area forms the Saint-Petersburg city agglomeration. It is not an object of the state or municipal government system, the state statistics on the agglomeration does not exist. The necessity to study it derives from the fact that the social-economic development of St. Petersburg and Leningrad oblast should be forecasted.

The Study of agglomeration processes is being done both in St. Petersburg and Leningrad oblast. The boundaries and structure of the Saint-Petersburg agglomeration revealed in the project "Concept of social-economical and town-planning development of Leningrad Oblast" (1997), "Concept of the Master Plan of St. Petersburg" (2002).

The transport system is a core of the agglomeration. Any spatial planning deals with the development of transport infrastructure. Mentioned above examples of territorial development of settlements situated in RRR influenced area showed that settlements of Leningrad Oblast situated on borderland close to Saint-Petersburg have a potential to settle people in new places, have the plots for intensive construction of many storied and family (individual) buildings.

The integrated city and suburb transport system is the base of the housing construction development (there is one operated metro station on the territory of Leningrad oblast' now and one planned).

Transport Accessibility

The main public transport servicing suburban passenger flow is an electrified railway that is well developed in the Leningrad Oblast'. Besides, there is an extensive bus network of intercity and commuter on the territory of the Region. However a number of electrified suburban trains pairs in 24 hours decreases, as well as a number of bus routes and bus trips connecting settlements of the Region with St. Petersburg and districts centres with other districts settlements.

However, the electrified railway line services practically one half of urban settlements. The largest concentration of electrified double-track railway lines is observed in the areas closely adjacent to St. Petersburg in the suburban area.

Analysis of suburban train schedule has shown that the average speed at double-track electrified railway is in the range of 53–57 km/h. High-speed suburban electric train on the line St. Petersburg–Vyborg makes 94–95 km/h. A total of 20% of the whole number of urban settlements are serviced by intercity and suburban

bus routes using federal motor roads. An average speed varies in the limit 42–47 km/h depending on direction. Due to the highest speed of buses in the Western direction (motor road "Narva") the intercity bus services most of passenger flow in comparison with non-electrified single-track railway. Thus, urban settlements located in 50-km radius from St. Petersburg have one-hour accessibility from the main peripheral city interchange nodal points, those ones located in 95–100-km radius have two-hour accessibility, those ones located in 140-km radius have tree-hour accessibility.

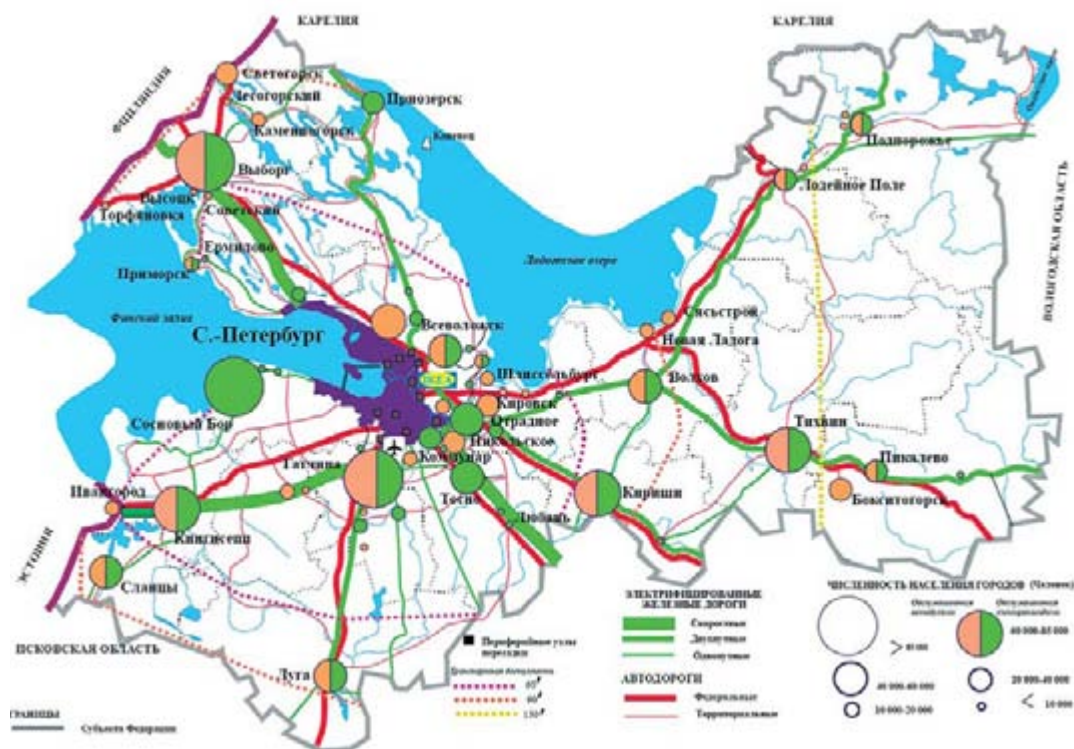
Transport accessibility was defined till peripheral interchange nodal points where main sections of railway lines or main sections of motorways are intersected with metro (subway) lines or other modes of urban transport.

The following potential centres of the Leningrad oblast within the agglomeration should be considered: Roschino, Sertolovo, Toksovo, Vsevolozhsk, Shlisseliburg, Kirovsk, Nickolskoe, Tosno, Gatchina, Taitzy, Kommunar.

Removing of «bottle necks» of the transportation system and further development of the transport infrastructure will allow to increase speed of traffic communication, especially in those railway directions (as railway mode of transport will have a priority in future) where electrified double-tracks are expected to be installed, as well as reconstructed and newly constructed motor roads with cities' bypasses and artificial constructions along the routes.

Improvement of transport system taking into account high-speed traffic in some directions (St. Petersburg–Vyborg–state frontier; St. Petersburg–Narva; St. Petersburg–Moscow) with availability of speeds up to 200 km/h and introduction of non-stop trips to industrial centres similar to Vyborg experiment will assist to include such towns as Novaya Ladoga, Syas'troi, Volkhov, Kirishi, Kingisepp, Ivangorod, Luga in the area of 1.5–2-hour transport accessibility of St. Petersburg.





Conclusions

The Leningrad Oblast adjacent to the city is an area of mutual transportation and social infrastructure. Many St. Petersburg inhabitants live in summer cottages in Oblast and a lot of people from Oblast work and go to school in the city.

It is necessary to develop a common scheme of transportation and land use development for these areas of mutual interests in order to increase living standards and the efficiency of land use. For successful solution of spatial planning development problems and to form polycentric structures it is necessary to return to idea of creation of the consolidated organ to administer the territory of agglomeration in the territorial and transport system planning spheres as it was fore-saw in the project "Enhancing Synergy" Integration of Strategic Policies of the City of St.Petersburg and the Leningrad Oblast' in the context of the Northwest Region'.

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Key Issues

Conception of the socio-economic development of Saint-Petersburg for the period up to 2025 includes the main objectives of the socio economic directions of the city development, main instruments of their implementation and the system of indicators of the life quality of the inhabitants.

The content of the Conception accords with the Master Plan of St. Petersburg and other city planning documentation and targets on sustainable, balanced growth and competitiveness.

1) Social equity concentrates on completing the Federal programs ("National projects"): "Affordable Comfortable Housing", "Education", "Public Health".

The city Housing programme concentrates on the following:

- to reconstruct (demolish) the first generation of the prefabricated buildings;
- to resettle the communal apartments;
- to build enough affordable comfortable housing to achieve not less then 35 sq.m2 per person in 2025;
- to finalize development of the efficient system of housing maintenance;
- to finalize development of the efficient system of the property rights. state registration.

2) Development of St. Petersburg as a transport and logistic node of transnational level in accordance with development of the adjacent city and regions.

The main goals are: developing transitional transport system between Russia and European Union; increasing the Baltic Sea region significance and competitiveness in the world economy. The total cargo volume is planned to be not less then 500 million tonnes per year in 2025.

- a St. Petersburg Cargo Port as the 1st place in Russia cargo operator development.
- b Creation of the new South – North highway corridor through finalizing of RRR + WHSD Construction.
- c Creation of the New Sea Passenger Terminal at the western part of the Vasilievsky Island.
- d Airport "Pulkovo" as the biggest hub in Northern Western Russia reconstruction and development (up to 30 million passengers per year)
- e Development of St. Petersburg Rail infrastructure, including new line construction.

St. Petersburg: TRANSNATIONAL

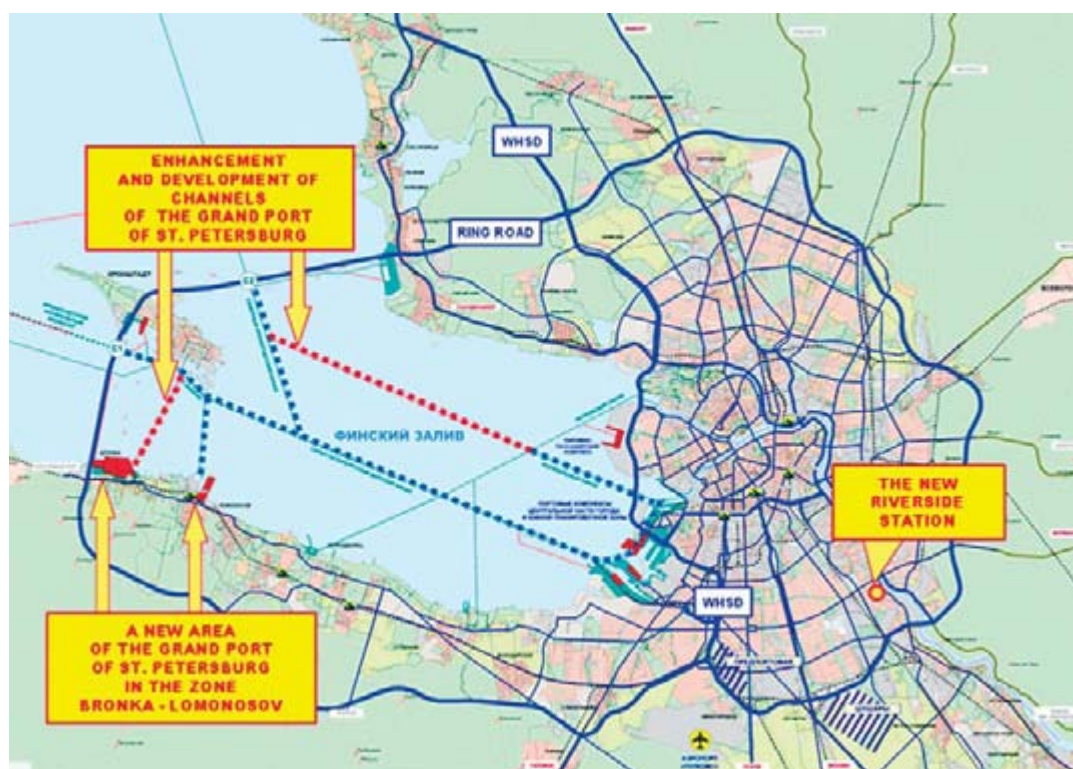
Final Report

3

Anna Katkhanova

Committee for City Planning and Architecture
Government of St. Petersburg





f Reaching new level of connectivity between regions through the development of corridor #9: complex measures including new rail and high-way links between Moscow–St. Petersburg–Helsinki.

3) Implementation of the National Project “Education in Russia” within the strategy of development of St.

Petersburg as a “Smart City”.

The process of transforming the city economy on the innovating way of development should be supported and followed by the development of high school education system, IT-parks development in different parts of the city. They will be constructed in the basement of the technical Universities and with participation of foreign specialists.



4) Increasing the role of tourism in the city economy through developing of the tourism infrastructure and transport system.

5) Increasing the system of professional knowledge exchange between St. Petersburg and Helsinki mainly in the city planning and regulation, housing, waterfront development.

The Special Economic Zones (SEZ)

The special economic zone – the part of the territory of Saint-Petersburg (by means of the Federal Government decision) with the special entrepreneurship regime.

The purpose of the SEZ – is to develop processing industries, high-tech, new kind of products and transport infrastructure development.

Saint-Petersburg is the winner of the competition for establishing of the special economic zone in Russia.

In accordance with Russian legislation, innovation and research work comprises new product development, implementation and commercial application, including pilot batch production, testing and selling; software and data collecting, processing and communication systems; development of distribution-computing-systems; and a provision of implementation and maintenance services for such products and systems.

Research & Development hub

Historically, St. Petersburg has been amply endowed with solid scientific resources.

- 329 scientific institutes
- 190 branches and representations of the various scientific organizations
- about 2900 small and medium-sized innovative businesses
- more than 172 000 research staff
- more than 23 000 Pre-Doctors of Science



Education hub

There are 95 universities, including 48 state universities in St.-Petersburg. In average St.-Petersburg's universities turn out 72 000 specialists annually, including 83% of them – state universities.

Among state universities, which turn out specialists:

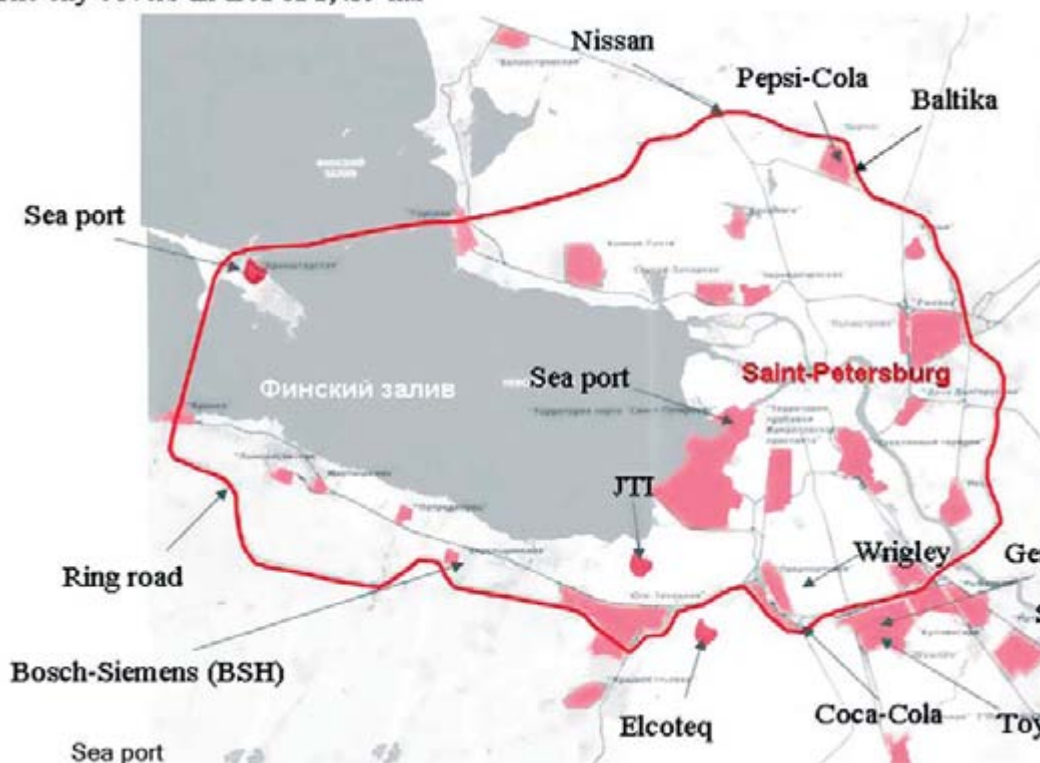
- for industry and construction – 19;
- for transport and communication – 6;
- for economy and law – 6;
- for education – 5;
- for art and cinematography – 5;
- for health service, physical culture and sport – 5;
- for agriculture – 2.

St.-Petersburg's universities turn out approximately 10 000 IT-specialists, in average, every year.

Number of students, studying 2-3 foreign languages is equal to 15 000.

Petersburg's universities annually turn out 4 500 specialists with finance and economy, management and PR specialization, speaking 2-3 foreign languages.

The city covers an area of 1,439 km²

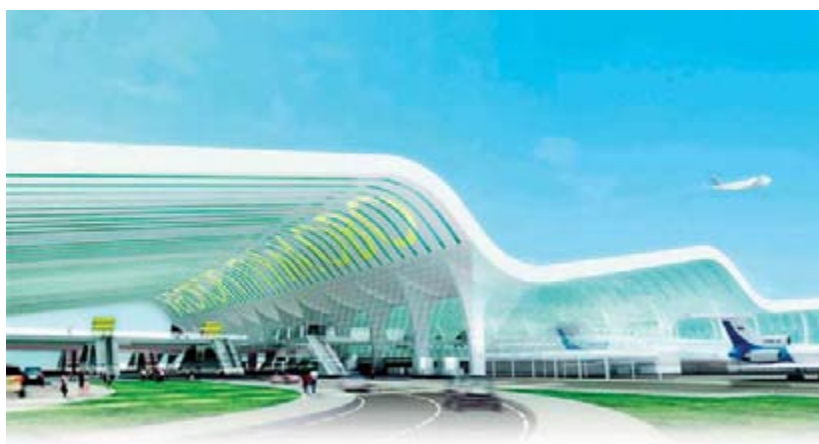
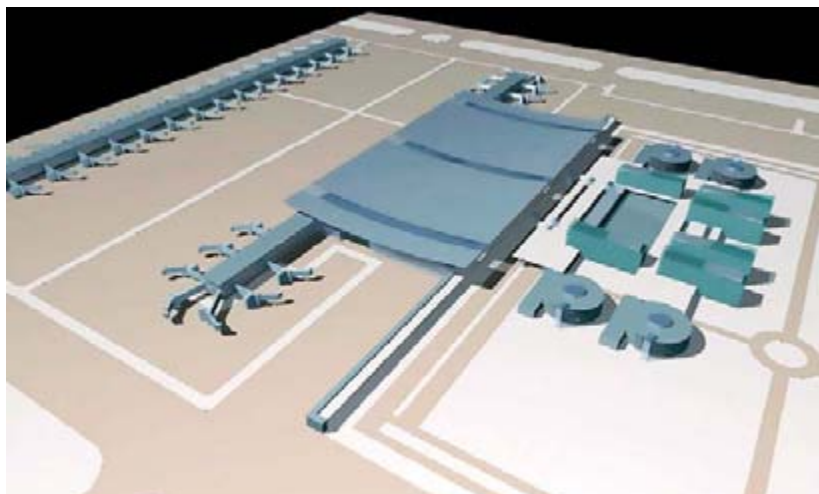


Key industrial investment projects for the future Transnational Level. Cooperation with Major Foreign Investors.

Future Airport

Special attention shall be put to Pulkovo airport renovation. The airport will have a capacity to receive heavy passenger airbuses A-380. According to forecasts, the total passenger flow of Pulkovo airport will be 8 million passengers per year in 2015 and 11.8 million passengers per year in 2025.

Up to 2010, the transit container cargo will increase 20 times and in particular on North-South direction will reach 100 000 units.



Development of the “North-South” TEN is one of the most important for Russia.

This project could be overseen in touch with the European Ten #9 – Helsinki–St. Petersburg–Moscow with development of the project “Northern Bridge”, which is providing the complex transport links between Northern Germany and St. Petersburg.

According to the President RF Order the Project of new railways connection between St.Petersburg and Helsinki is now under development with the aim of shifting the cargo flows by another way from St. Petersburg through Losevo–Kammengorsk–Vyborg.

St. Petersburg Government envisages the creation of further development of the transport links between St. Petersburg and Moscow. Particularly, a new highway is planned to connect the city with the Russian capital. The road Moscow-Saint-Petersburg is going to connect the cities by 2014. At the moment the project documentation is under expertise.

Besides this, the new high-speed railroad is planned to connect the two Russian capitals and should be completed by 2014, but no project is yet approved.

Strategic project of Airport Pulkovo reconstruction and development

The main project goal is creation of a new passenger terminal capable of serving domestic and international flights through the reconstruction of the existing airport building and the construction of a new one on the territory adjacent to the “Pulkovo-1” terminal. Additionally, the second landing strip and taxiways will be reconstructed. The project also involves the creation of support infrastructure: hotel, business center, office buildings, commercial zones and parking.

Development concept

“Airport “Pilkovo” JSC, together with the Federal Agency “Rosaviatsia” and with the experts of the German company Hochtief Airport, devised the development concept for 2006–2025.

During the planning phase, the creators took into account past international experience in planning and arranging airports and their supporting infrastructure.

Evaluation of the existing infrastructure was carried out and possible variants of its modernization were considered, in particular, the development of Pulkovo as a St.Petersburg hub. On the basis of the data received from the project’s feasibility study the requirements for the modernization of the future airport infrastructure were formulated. For example, Pulkovo Airport currently has 43 check-in desks for international and domestic passengers. This figure will rise to 98. The airport has 47 gates which can be utilized without restrictions. This figure will increase to 100. The quantity of passenger passageways is planned to reach 18, i.e. 14 more than there are at the moment. Currently, minimal transit time is 2.5 hours. By the end of the project, estimated transit time will not exceed an hour.

Project time 2006–2025

Project budget approximately is 30 billion roubles.



Tallinn

Tallinn: CITY

Final Report

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Natural conditions of Tallinn

- **Coordinates** – latitude 59°26' and longitude 24°46'
- **Landscape** – North-Estonia coastal lowland, North-West Estonian limestone, North Estonian Glint
- **Resources** – Clay, limestone, sand, groundwater, lake sediments
- **Water bodies** – Gulf of Finland, lake Ülemiste, lake Harku, river Pirita
- **Climate** – in average per year air temperature is +5.0°C and precipitations 550 m, vegetation period 175 days
- **Bogs** – Pääsküla, Tondi, Suursõjamäe, Õismäe
- **Nature protection areas** – for bird protection Natura 2000 area in peninsula Paljassaare, Pirita and Nõmme landscape protection areas, several parks (biggest Kadriorg), many single object like trees, boulders, species.
- **Population** – 396 000
- **Area** – 158,27 sq km
- Land is private or state owned, municipal land suitable for construction 1-2%
- Strong competition with neighbouring local authorities over private income tax
- About 70% of budget comes from private income tax, only a couple of % from land tax.
- Land reform started development activities covering most of Tallinn
- The first stage was applying for hundreds of small detail plans.
- Law of Planning obligates local government to create planned infrastructure.

The administrative territory of Tallinn has remained unchanged for the last couple of decades but the overall density would allow the city to plan spatial development within the present borders for some time. Nevertheless the fourth dimension in spatial planning i.e. time – has created the situation where more intense development of residential space has moved



over the borders of the city, leaving the problems of improving necessary social and technical infrastructure to the City of Tallinn.

The increasing number of cars has enabled the former inhabitants of city areas to move outside city borders as the time needed to commute between home and office has seemingly decreased considerably. On the other hand the same increasing number of cars travelling through the 2.8 km wide city centre of Tallinn has decreased the speed of movement and actually the total time consumption has been growing, instead of getting smaller. The only way to deal with the issues is to fully implement the time dimension in the planning decisions and procedures.

Suburbanisation zone – an area behind Tallinn border where 15% of inhabitants in local governments are working in Tallinn: ca 50 km from Tallinn (up to Paldiski, Rapla, Aegviidu, Loksa). From neighbouring local governments (Harku, Saku, Saue, Rae, Kiili, Jõelähtme, Viimsi) even 50% of inhabitants work in Tallinn.

In Tallinn and in its metropolitan region lives 39% of population of Estonia; in the city of Tallinn 75% of the metropolitan region (in 1950 it was 94%, in Scandinavia its 50%).

During the last decade in neighbouring local governments many new residential areas (876 areas with 13,720 one family houses, 1,887 houses with flats) have been built and summer cottages (8,841) reconstructed for living all year around (in future home for 50,000) – many inhabitants of Tallinn have and will be settled there

One of the difficult tasks of the present-day city planning is to find the balance between investment and planning based urban spatial development.

Planning in Tallinn

Main objectives

- Condensing city centre
- Cultural institutions
- Densifying the vicinity of Inner City
- Defining of district centres
- Self-definement
- Placation of construction pressure in the suburbs
- Revitalization of former industrial areas
- Creating modern living environment
- Preservation of recreational areas

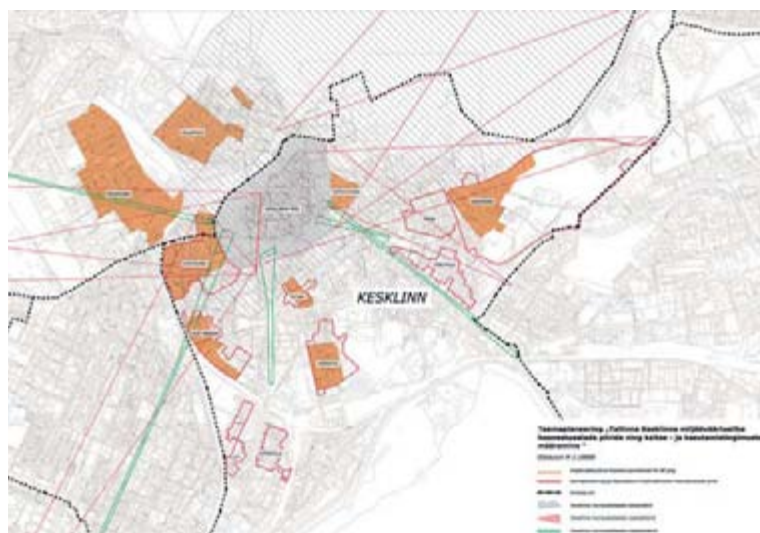
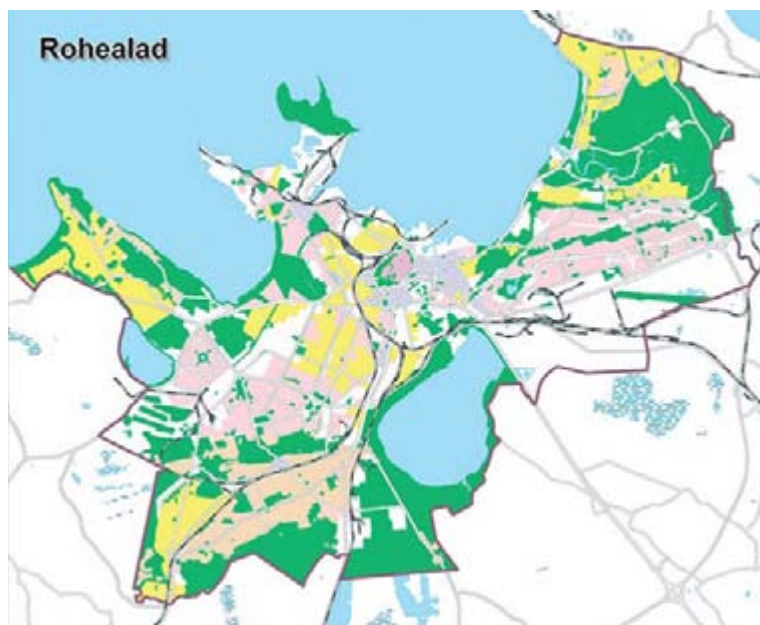
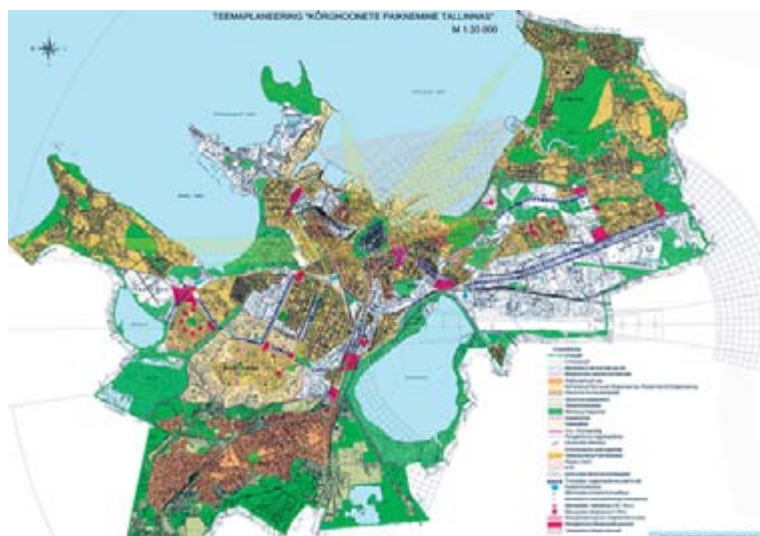
Being administratively a part of Harju County, the overall planning document of the city has to consider its activities in respect of the regional County Plan, with the aim of defining the prospective development of the territory of a county in a generalised manner and determining the conditions for the development of settlement systems and the location of the principal infrastructure facilities. The county plan was adopted in 1999 and covers the very general issues of road networks, big transport junctions and principles for residential area development in the county.



Tallinn Comprehensive Plan was adopted by the city Council in 2001 and is in principle a land-use plan, creating necessary conditions for preserving and connecting green areas and parks, increasing the functional balance and even distribution between the commercial and cultural centres and residential districts, guaranteeing diverse location possibilities for businesses, decreasing traffic load in the inner city and increasing the role of public transport, creating a healthy and socially balanced living environment. One of the main principles of the Tallinn Comprehensive Plan is economical use of land by increasing compactness through redevelopment of Brownfields that enables to use the existing social and technical infrastructure networks and regulate the urban environment.

Between 1995 and 2005 the City of Tallinn dealt mainly with planning of single land units. The process was the result of Property Reform that started in the beginning of the 1990s. The lack of general planning documents has created a slightly chaotic situation the city is still dealing with today. In 2005 the Comprehensive Planning Division was created within the Urban Planning Department of the City of Tallinn with the task to compose and implement several more general spatial planning documents. Due to the administrative structure of Tallinn with eight city districts one of the main aims is to support the development of different districts of the City of Tallinn by mainly





concentrating on possibilities of increasing the density and strengthen district centres through implementing new functions, such as cultural or recreational and also by improving the existing street, light traffic and green area networks.

The second type of general planning documents composed today in the City of Tallinn are various theme plans that by territory cover the whole city but deal with a special topic or problem that needs comprehensive handling. The theme plans in work today are:

1. *The Location of High-rises* – main purpose of the plan is to set suitable locations for buildings higher than 45 m, considering the positive and negative influence of very high density urban planning.
2. *The Location and Regulations of Parks and Green Areas* – fixing the existing and creating new principles of urban green network, setting the rules and development needs for nature reserves within the urban context
3. *The Street and Light Traffic Network* – the increased number of cars within the city has created a need to look through the necessity of improving the street network and also to implement a rather new concept of light traffic and pedestrian roads in order to reduce the very intense pressure of automobile transport to all aspects of urban environment in Tallinn
4. *The Protection and Usage Regulations for Protected Housing areas in the Inner City* – about 10% of the city centre is covered by wooden housing areas that were built at the end of the 19th and the beginning of the 20th century, mainly as a by-product of industrialisation. Today the need to regulate the building and preservation activities in those areas in order to keep historical urban patterns and atmosphere has resulted in composing a special planning document.

The next level of planning hierarchy in Tallinn is regulated by structure plans – documents that cover smaller areas that need a unifying spatial planning approach due to the fact that their location or content or both are to some extent at least strategic for the overall development of urban space in Tallinn. The implementation of this planning level is still in process, the City Government has of today approved the first of such documents. The main purpose of structure plans is to create a framework for common planning understanding in an area with several landowners in order to establish a reasonable amount of public urban space with contemporary quality.

The lowest level of planning in terms of size of the planned area is the detail plan that usually covers just one building lot and its surroundings. The quality of detail planning is hindered strongly by the quantity and the pressure of single real estate developers. The planning legislation in Estonia does not set an order of planning documents to be implemented by a local au-



thority and this has created a situation where for some period of time the main level in city planning was the detail plan that could not foresee wider development needs of the city, but was based on the concrete investment plans of private landowners/real estate developers. On the other hand the detail planning procedure was too slow to ensure the final approved outcome to be as contemporary as possible and corresponding to the quickly changing real estate market.

Spatial development priorities

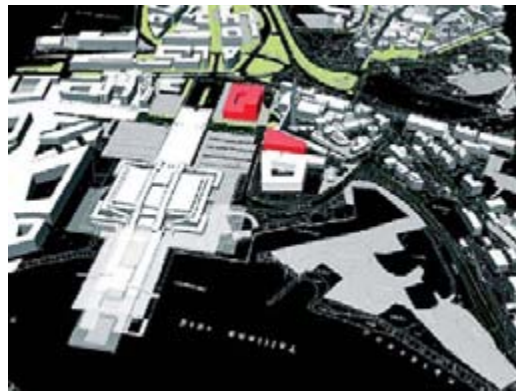
The ongoing tendency of urban sprawl has brought forward a strong necessity to find possibilities of developing alternative multifunctional areas with high enough quality to attract the most probable target group – younger, better educated families with an above average income – who today form the main group of people moving outside the city borders.

Tallinn's main attraction is the sea. As the years of Soviet regime closed the waterfront for the people, there are several undeveloped areas or areas with a

strong development perspective and need for regeneration and new functions on the coast.

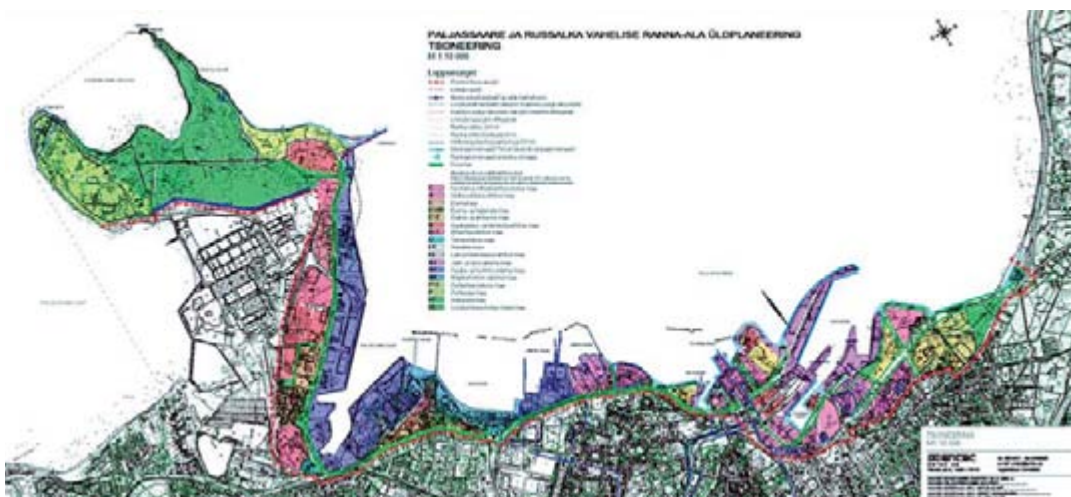
In 2004 the City Council approved the Comprehensive Plan of Coastal areas between Paljassaare and Russalka, the main purpose of that plan was to determine suitable areas for spatial development.

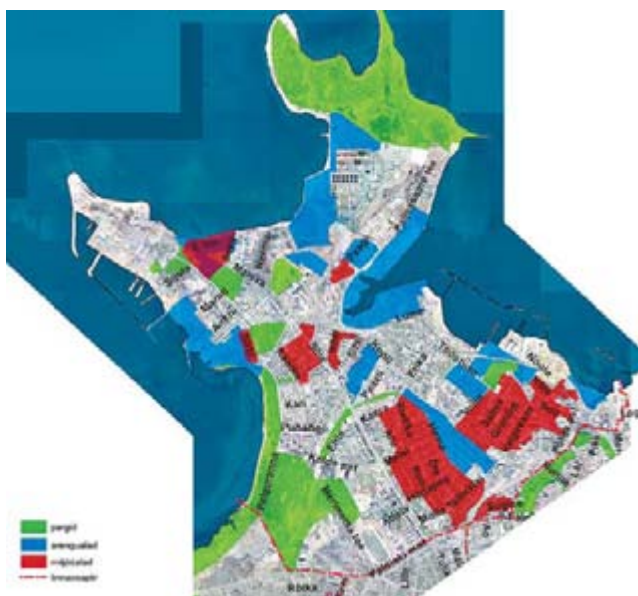
The concept to open the city to the sea is being worked out at present in the Urban Planning department of the City of Tallinn. The preliminary project of the Coastal Promenade that will run along the coast for 27 kms and with an average width of 25 m has been agreed upon together with all possible functions that can be implemented in the near vicinity of the Promenade, enabling to enliven the today somehow neglected waterfront of Tallinn. Special attention is paid to the coastal area within the Inner City in order to widen the centre and create a mixture of cultural, administrative and recreational functions there. The key point is the location of the new City Administration



Office that is planned in the location just next to the Inner City Harbour and concert hall "Linnahall".

Today the main attention is paid to developing Northern Tallinn – one of the eight city districts, till now connected with industry, harbours and railway. With a population of 56 000 it is one of the most densely populated regions of Tallinn, but the diversity of functions and social backgrounds has made the unified





urban development in the area difficult. Nevertheless the number of private and public investors who have declared their interest in the region has been growing for the last couple of years and through several planning documents the city authorities have also declared the region to be the top priority spatial planning region in Tallinn in the next years. Altogether ca 2,250,000 square meters or 13% of the whole territory of Northern Tallinn is already involved in spatial development projects.

1. *Paljassaare Harbour Area* – 517,097 sq meters of former cargo and industrial port are developed into a multifunctional district centre within the next 10-15 years. Estimated number of population in the area is 16,000.



2. *Ecobay* – 488,747 sq meters of former wasteland around the Tallinn Sewage Treatment Plant will be developed into an urban environment that includes also technology park, recreational area and housing

Place Marketing

The information era has involved changes at social, economic, political, business and communication levels. The importance and functions of cities are changing. Travelling has become easier, the growth of urban population impacts the quality of life and sustainability of environment.

Place marketing has an important role in the process. It is a necessary tool to propose changes that new situation demands. It is not just the promotion of a city or area image, but intends to design strategies to find successful solutions in strategic spatial planning and development.

The tool can be used in increasing the not so good image of some city areas that are crucial to be developed in order to provide alternatives for urban sprawl.

1 Tallinn City Region

The definition and scope of Tallinn City Region (TCR) is cognitively different, depending on thematic framework discussed. Estonia should be considered as a small integrated country with relatively high level of urbanisation. The longest journey from or to Tallinn within Estonia takes approximately three hours by car, the scope of TCR in broader context includes all mainland part of Estonia. More narrow approach will consider only urban sprawl area as TCR. However, as sprawling is continuous and will affect larger territories, we consider in the current report TCR as a territory within the borders of Harju County. The borders of Harju County are approximately 60 km to West, 60 km to East and 50 km to South from Tallinn.

Harju County is one of fifteen counties in Estonia. Harju County consists of 24 local governments, one of them is the capital city of Estonia – Tallinn. Tallinn is also the administrative centre of the county.

520,000 inhabitants live in Harju County and about 400,000 of them in the City of Tallinn. As the number of inhabitants remains unchanged in Tallinn, the number of people living in bordering rural municipalities is growing fast. Growth rate is represented in chart 1:

Municipality	inhabitants 1999	inhabitants 2006	% 2006 from 1999
Harku	5 143	8 739	170%
Jõelähtme	4 971	5 412	109%
Kiili	2 052	3 224	157%
Rae	7 342	8 666	118%
Saku	6 674	8 031	120%
Saue	6 676	7 752	116%
Viimsi	7 951	12 295	155%
Total	39 156	54 119	138%

Chart 1

Growth of inhabitants in municipalities bordering City of Tallinn. Source: Statistics Estonia 1.1.2006

Immigration to TCR origins from peripheral regions of Estonia. The main model of relocation is based on low-income labour-related relocation to the City of Tallinn and medium-income lifestyle-oriented relocation from City of Tallinn to adjoining local governments as traditional urban sprawl process.

Sprawling is continuous and fast, boosted by low mortgage rates from 2003 to 2006, affordable housing and fast real estate development in the sprawl area. However, relocation of jobs is still extremely slow and people are commuting to and from the city on daily basis. As sprawl process as a whole is not managed by authorities, the infrastructures, public transportation as well as educational, social and culture establishments in TCR are clearly underdeveloped.

As a result of urban sprawl, the quality of life becomes lower and is affected by fast growth of use of private car transportation. Negative impact is caused by growing traffic congestion and time taken to city cen-

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2 Spatial Cohesion, Urban Sprawl and Future Trends

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When spatial development of TCR is considered, we can state that:

- The general plan of Harju County has very limited influence on the development processes in TCR. The County does not have sufficient administrative capacity for the execution of the county general plan;
- The municipalities follow on the county general plan only on selective basis;
- The general plans of the municipalities are not connected with each other over TCR or are not developed;
- Usual practice is to lead development process only through detail plans, mostly adopted on the basis of private interests. Public interests are not represented in the spatial planning process of the TCR as a whole as well as in the municipalities.

Polycentricity as a leading concept of spatial planning is not used in the course of planning of TCR.

Planning decisions of adjoining municipalities have serious negative impact on the spatial development of the City of Tallinn. The need for new intersections in the city borders, growing problems with parking and traffic are just some examples of fast growing urban sprawl.

So far Estonian urban policy as an independent document has not been drafted. Estonian regional development strategy 2005–2015 presents a general overview of the Estonian urban policy. The goals of the strategy are to ensure state-wide fulfillment of the basic needs, constant competitiveness of separate areas and stronger association with cross-border regions and the rest of Europe. The means of strategy provide the increase of international competitiveness of growth areas, particularly the TCR area and Tartu growth, through international co-operation, research and development, innovation etc., maintaining the sustainability and preventing the increase of problems associated with demographic and economical concentration.

According to the strategy, it is possible to achieve the general goal of the state regional policy only in co-operation with national, regional and local levels of government. Action plan 2005-2007 for Estonian regional development strategy includes mapping of the city specific development problems and drafting state urban policy, by Ministry of Interior in co-operation with Association of Estonian Cities, to ensure integrated development of the emerging growth areas.

The share of commuting workforce from TCR to City of Tallinn.

tre, growing air pollution, fade of efficiency of existing infrastructures.

The Map 1 represents TCR and share of workforce commuting to City of Tallinn daily.

General plan of the County has been prepared by Harju County Government and was adopted on 19.04.1999. Within the scope of county general plan, the development of county-wide infrastructures includes main roads network, Tallinn railway bypass, bus station in Ülemiste, Tallinn. General plan validates also the development principles for new settlements.

However, it should be considered that the influence of the county general plan for development and spatial planning in the municipalities of TCR is weak.

Local governments tend to ignore the county general plan, relying upon their independence and take advantage of the lack of state government regulatory arm, resulting in wild and unregulated urban sprawl.

The general plans of each municipality play relatively important role. However, only few of municipal-

Status of general plans in
TCR as of 01.01.2006.

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As of today Estonian urban policy has not been drafted, nevertheless the above mentioned subject is widely discussed.

To achieve the goals of the Lisbon Strategy, it is necessary to involve additional actors and resources. The national authorities are invited to discussion with local authorities and the regions, applying the possibilities for intervention by the Structural Funds if required. European Union will pursue its objectives of economic growth and jobs more successfully if all regions are able to play their part. Cities are particularly important in this context. European Commission has realised that the cities are home to most jobs, firms and institutes of higher education. Cities are home to changes based on innovation, spirit of enterprise and economic growth. European Commission considers cities as the partners for innovation and the knowledge economy promoting growth. Cities should take a leading role in promoting competitiveness of SMEs and micro-enterprises, as well as supporting innovation and knowledge economy. The guidelines for action include preparing an innovation strategy for the urban region, involving cities in European R&D activities (FP7). Cities should support the introduction of technological innovations and should work towards making regional R&D innovation and education supply more efficient and accessible to local firms, in particular SMEs and social enterprises. Cities can stimulate and co-ordinate partnerships and clusters of excellence with universities and other institutions of higher education, creating business incubators, joint ventures and science parks.

The proposal to support early adoption of eco-innovations and environmental management is remarkable.

The European Commission considers developing partnerships between cities, regions and the state,

within the framework of an integrated and coherent approach to urban development, to be a remarkable administrative tool. It is necessary for European cities to elaborate strategies co-ordinated at the level of agglomerations or urban networks in order to achieve critical mass. Responsibility of city is to create consistent plans, where as the private sector, the community and NGOs, as well as local, regional and national governments should be mobilised in the planning, implementation and evaluation of urban development.

A defined problem of missing coordination in TCR planning processes and intraregional reconstructing exists. Existing administrative system of regional and local governance in Estonia should be reassessed and amended for the reason to create prerequisites for developing integrated, highly effective, well connected polycentric city-regions. The ultimate aim is to create a showcase region, where independent municipalities are working towards common spatial structure, counting on each other's development, cooperating in the development of infrastructures and competing for the people, based on quality of life.

4 Potential and perspective of the spatial cohesion in the TCR

New model for spatial development

One of the main obstacles of balanced spatial development in the TCR is uncontrolled sprawl. Main difficulties, caused by sprawl, are:

- Residents of the city are leaving Tallinn, causing diminishing of city's tax base;
- Traffic problems on intersections and highways, caused by daily commuting;



- Shift of city's building initiative to suburban areas, causing need for new technical, social and educational infrastructure and public transportation.

Intersection in Ülemiste. Highways to South (Tartu), East (St. Petersburg) and connection to Via Baltica meets here. Construction of the new intersection will start on 2009. Part of the funding is expected from EU Structural Funds. However, most prominent influence to the traffic jams is resulted by urban sprawl and daily commuting.



Scheme 1

Transport Scheme of Tallinn General Plan, adopted 1971.

Spatial planning is not sufficient instrument for planning decision-making. Main determinant to count on is connectivity, transport connection. Short time distance enhances options for new development areas without significant loss in quality-of-life, public services, entertainment options, social networks. This makes planning decisions of local governments more sophisticated and crossing the borders. The planning decisions of adjoining local governments have significant negative implication to Tallinn's spatial development, exceeding implication to adjoining local governments themselves. For the City of Tallinn, the lack of planning competence of adjoining local governments is considered as an area to be promoted.

Consequently, the general plans of adjoining municipalities should change towards more comprehensive ones, focusing more on local issues at the same time. *The planning of the development of new residential areas insists for planning of local polyfunctional centers.*

Existing and emerging local centers are in need of sufficient number of inhabitants to grant quality of life and economic reason to build up and create physical, social and cultural infrastructure, services, workplaces. Polyfunctional local centers are one precondition for regional connectivity and effectiveness of public transportation and use of energy.

Top priority development areas and corresponding projects

Based on above-mentioned reasons, top priority development areas for the period until 2015 are focus-

ing on strengthen local centers and developing their connectivity, more precisely:

- Local centers in TCR as an attractive public space;
- Social and culture infrastructure;
- Day care and primary education establishments;
- Small scale office space in local centers.

List of local centers to be developed is following:

- Haabneeme, Viimsi parish
- Pirita, City of Tallinn;
- Jüri, Rae parish;
- Kallavere, City of Maardu;
- Kuusalu, Kuusalu parish;
- Saku, Saku parish;
- Saue, City of Saue;
- Tabasalu, Harku parish.

Local centers should be interconnected with road network. First visions were made already in 1960-s. Scheme 1 presents the development of road networks and intersections at the borders of the city as origin from Tallinn Transport Scheme from 1971.

The road network and road planning does not follow actual development of housing and industrial areas.

The development of coastal areas at East from Tallinn is related with the development of cargo port Muuga. This port is one of the three biggest in the Baltic Sea Region, still in the phase to be developed.

Port of Muuga. Port will be built extensively further in next years.



As cargo from Russia (mainly oil) is expected to double over next 15 years, the port and related settlements will continue to develop. Therefore we do not see coastal area at East from Tallinn having development potential for housing and living.

Beyond 2050, development will focus furthermore to the new development areas, connected to the city by rail. As the main energy supply to the TCR is from East Estonia and areas bordering rail at East direction are not used yet for housing, industry (mainly forest and fields), we are assuming the development perspective will direct to the East of the city, to the direction of St. Petersburg. The development area could be up to approximate 100 kilometers (distance from city of Tallinn to city of Rakvere).

We see connectivity as a main determinant for further spatial planning of TCR. We see the existing rail connections as a potential for future. As coastal areas are often related with NATURA 2000 nature protection and therefore could not be developed en bloc, the railway from Tallinn to St. Petersburg should be considered as a huge potential for spatial development of TCR.

However, it is too early to indicate the concrete development areas and corresponding projects. A new general planning exercise of Harju County will be necessary. It seems that the new planning regulations and institutional framework are the precondition for respective actions.

The influence of demographical situation and ageing process of the population, the demand of public services in the following decades can be predicted. The necessity to decrease the 'environmental load' and the cost of energy derives from international agreements and from the rising cost of energy resources. This requires an innovative approach to provide public services. Proceeding with the innovation in the public sector requires more effective involvement of academic circles and institutions in discussion over the roles of cities providing and developing public services. Ecological technologies, e.g. in public transportation, housing economy, new approaches to road construction, municipal engineering, energy sector; energy saving options in public buildings and residential areas – immense possibilities for Estonian scientists and researchers to propose and implement new and innovative technologies and solutions. Therefore, new residential areas beyond 2050 should be built as energy efficient, more counting on ecological ways to live, attractive, in line with new environmental paradigm.

For the further planning activities in TCR, there is essential need for co-operation between adjoining municipalities, County Government and central government institutions, having role on spatial development in Estonia. We see improvement of co-operation in concrete areas as following:

- Between municipal institutions
- Conducting thematic development plans
- Realization of Projects (road construction)
- Development via leasehold (preconditions)
- Between City and adjoining municipalities
- Common main road network (little circle)
- Unified public transport
- "Park & Ride"
- Between City and State
- Development of the airport and ports
- Bus station for local and international lines
- Removal of dangerous rail-sea freights from Tallinn City Center
- Completion of the Land Reform (municipal and state-owned land)

For the period 2007–2013, the use of EU Structural Funds is one of the options to finance TCR infrastructure projects. However, funds available from Structural Funds can cover only the marginal part of the need of financing. The budgets of local governments are also not sufficient. Adjoining municipalities are already using high leverage and exceeding the sums allowed by law many-fold. Therefore the new concepts of financing should be considered and adopted.

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Tallinn: TRANSNATIONAL

Final Report

3 Transnational Cohesion

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1 Influence of global trends: GoF region geo-economic perspective

Continuity of urbanisation and rise of the role of cities

OECD Secretary-General, Angel Gurría, has said, “Cities are the engines of national economies and crucial nodes of innovation and competitiveness. Cities are where innovation takes place. In fact, cities are where we will fail or succeed in achieving what I see as the three dimensions of successful globalisation – prosperity, equity, and sustainability.” Contemporary view states that competitiveness is associated with the openness to changes, and ability to address constant changes of surrounding environment. Prospect of competitiveness and innovation potential are in tight correlation.

Role of cities in the globalisation process will continue to grow.

Urbanisation in Gulf of Finland region started rather late. Today, St. Petersburg is a dominant metropolis in the region, based on heavy industries, science and higher education. Latest development includes opening of the city for global travel industry. Large investments are placed to consumer goods and automotive industries, retail trade and transport infrastructures. St. Petersburg has defined its strategies in main development areas. Innovation, utilisation of scientific capital is one of key challenges for the city.

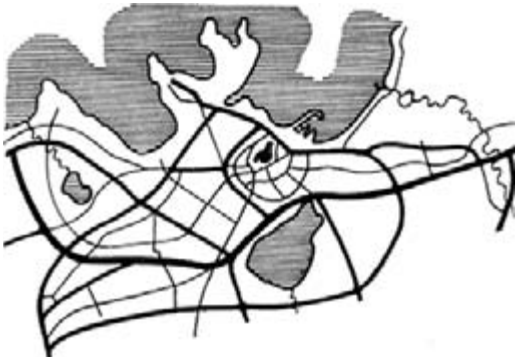
Helsinki is the capital of EU country Finland. As administrative centre of Finland, Helsinki region is growing with its sprawl area. Main challenges for Helsinki lie in innovative fields as telecommunications etc. Helsinki has defined its interdependency from St. Petersburg and has clearly stated two parallel strategies: to be a middleman between EU and Russia, as well as to grow as logistic and scientific hub between Europe and Asia, Silicon Valley and Asian mega cities (Shanghai, Bangalore).

Tallinn has a growing importance to become a mediator between Russia and Europe, however, such strategies are not so clearly defined yet.

For strategic planning exercise, assumptions must be in line with EU-wide leading strategies. To achieve the goals of Lisbon Strategy, it is necessary to involve additional actors and resources. The national authorities are invited to discussion with local authorities and regions, applying the possibilities for intervention by the Structural Funds if required. European Union will pursue its objectives of economic growth and jobs more successfully if all regions are able to play their part. Cities are particularly important in this context. European Commission has realised cities are homes to most jobs, firms and institutes of higher education. Cities are homes to changes based on innovation, spirit of enterprise and economic growth. European Commission considers cities as the partners for innovation and for promoting the growth of knowledge economy the knowledge economy promoting growth. Cities should take the leading role in promot-



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Cities can stimulate and co-ordinate partnerships and clusters of excellence with universities and other institutions of higher education, creating business incubators, joint ventures and science parks.

The proposal to support early adoption of eco-innovations and environmental management is remarkable.

Gulf of Finland region geo-economic perspective

Gulf of Finland region is main gateway for Russian trade. The dependency of Russian developments is the main driver of the region's development. It is necessary to state the main trends for geo-economic perspective:

- Trade flows between Russia and the World will continue to grow. Transit of Russian oil is expected to double within next 15 years;
- Continuous growth of Russian economy will have

most significant influence to GoF Region industry and logistics lay-out in coming decades;

- Lack of energy resources in European Union will lead to large projects directed to energy resources purveyance;
- There exists serious problem with Baltic Sea and GoF ecology. Environmental dimension is a main factor of uncertainty for strategic planning exercise.

St. Petersburg has stated an ambitious goal to become global centre of innovations. City has accountable scientific potential for this goal. Only the number of students in St. Petersburg is comparable to number of people living in Helsinki or Tallinn.

This goal of St. Petersburg could be used as a leading aim for the development directions of Helsinki

Digital Map of the Baltic Sea Region (MapBSR)
Administration





and Tallinn. Knowledge-based economy, strong ties between academia and cities are already a common approach for those cities. Recent projects as “Twin city of art and science” have been elaborated. Bilateral co-operation between universities of Helsinki and St. Petersburg, and Tallinn and St. Petersburg, has been established. However, it could be right timing for joint co-ordination of scientific and universities co-operation, specialisation and respective recognition of academic results.

2 Development of infrastructure projects

To develop cooperation between Baltic Sea Region countries, many of international networks and organisations are established. There are also joint initiatives between Tallinn and Helsinki.

Signals of losing advantages in global competition should be taken seriously. As development of EU-Russia relationship is emerging, there could be alternative to develop Gulf of Finland regional cooperation instead of BSR. GoF region should strengthen its position as fastest-developing European region, with emerging new types and fields of co-operation. GoF intraregional cooperation is still not reaching his potential. For this reason, development of the infrastructure is highly important.

For GoF region, it is utmost important to have fast and reliable, cost-effective connections with the core of EU. To develop further on the concept of well-integrated and jointly functioning GoF region, the development of infrastructures inter GoF region cities has almost the same priority.

Better planning, cooperation between Helsinki, St. Petersburg and Tallinn in the field of infrastructure projects will be finally leveraged to have well-functioning GoF region-EU core connectivity.

Development of the integrated GoF region is prerequisite to benefit from potential of Helsinki, St. Petersburg and Tallinn. Following list of infrastructure projects is part of approved document by Mayors of Baltic Metropolises, a network including Helsinki, St. Petersburg and Tallinn.

The Baltic Metropolises, the member cities of the BaltMet, are the major hubs and junction locations in the Baltic Sea regional transport and logistics networks. The European Commission in the TEN-T transport network defines the transport corridors, with the extensions defined by the High Level Group. As a whole, the TEN-T corridors in the Baltic Sea Region with their extensions to Russia form the backbones of the region, providing best cost-benefit value for internal and external connections of the BSR. Still, there are many missing links in the network and capacity problems especially in cities' connections to the main transport corridors.

No transport infrastructure alone is sufficient without appropriate logistics. The EU policy objective to remove transport from road to rail and ships emphasises the importance of multimodal logistical chains.

Prospective strong growth of the BSR economies, mobility and transport, all this calls for continuous efforts and investments in improving our common asset - the Baltic Sea environment. The major cities themselves are key actors contributing to the state of the environment. They have a role in diminishing emissions, in environmental safety policies, and in the global challenge to rapid improvement in energy efficiency.

By the Mayors, the national governments and the EU should find the ways to prioritise investment in projects with highest added value to the whole of the GoF and BSR. The overall integration and cohesion of the Baltic Sea Region should be the decisive factor in preparing the EU Structural Fund programmes for the period 2007–2013 and beyond.

The following projects represent part of projects that have been presented by the 11 BaltMet cities. The projects include both completed and ongoing projects as well as more initial and tentative strategic projects:

Rail Baltica

Warsaw–Kaunas–Riga–Tallinn

- TEN-T project 27
- New and upgraded railway
- 1 269 MEUR

Warsaw–Berlin

- Upgrading of the existing railway
- estimated cost n.a.

Tallinn–Helsinki

- Rail ferry / tunnel
- cost n.a.

Helsinki–St Petersburg

- Nordic Triangle TEN-T project 12 with the extension trans-national axis
- Fast train connection, new railroad (completed 2006), upgrading of the existing railway
- 1 800 MEUR

Tallinn–St. Petersburg

- TEN-T extension trans-national Northern axis
- Railway and road connection; rail and road bridges on the river Narva
- 64 MEUR

Via Baltica

Riga Northern Corridor as part of Via Baltica corridor

- TEN-T funded, the EU cohesion funds
- 1 000 MEUR

Logistics

The Motorway of the Baltic Sea

- TEN-T project 21
- A cross-sectoral programme aiming for higher capacity, shorter time and improved safety in short-sea-shipping to the BSR
- 221 MEUR

Vuosaari Harbour in Helsinki

- New harbour, road and rail links under construction (to be completed 2008)
- total cost 468 MEUR

Orlovski Tunnel

- The road tunnel under the river Neva in St. Petersburg
- A prerequisite for opening of the Russian inland shipping to international transport
- PPP finance, cost 779 MEUR

The Speed Diameter

- The road connection from St. Petersburg harbour to the Ring Road
- Under construction, PPP, cost 2 430 MEUR

Baltic Sea environment

Northern Collecting Sewer in St. Petersburg

- Priority in the Northern Dimension Environment Partnership
- The 12 km of the main sewage collector
- estimated cost 500 MEUR

Common monitoring system for maritime transport

- Harmonising rescue systems and environmental standards in shipping
- Implementation of Tetra technical standard and roaming agreements
- costs n.a.



However, it is necessary to note that not enough attention has been drawn to the planning of regional infrastructures between Tallinn and St. Petersburg. Further spatial integration is clearly needed. Also smaller cities (Narva, Kingissepp, Jõhvi, Sillamäe) must be interconnected. Connectivity with smaller cities and rural areas is needed for reason to diversify different options of living, providing more as we call “Quality of Life”. Good local governance in bordering regions is a prerequisite for innovative agriculture, farming, leisure etc.

Considering needed improvement of infrastructure until 2050, this list is not complete and will need

for specific planning exercise. Clearly, road connection between Tallinn and St. Petersburg should be extensively improved.

To develop globally competitive region, with high quality of life as good environment for living, studying and to invest in safety, low crime level, sustainability, it is important to develop backyard, “second-tier” cities, connection with and between those cities.

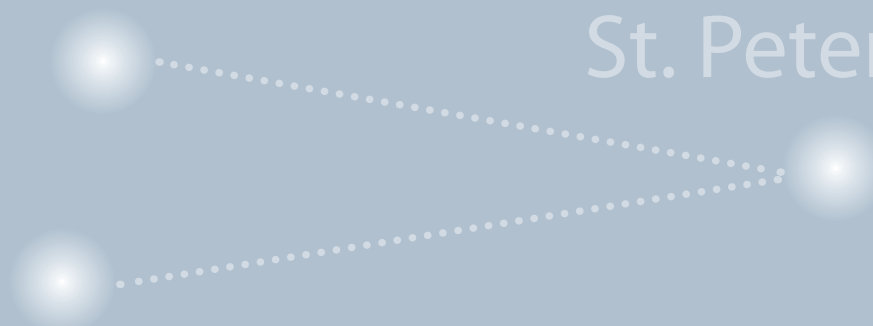
Smaller cities and local governments in Northern Estonia and Leningrad Oblast are in need of improving administrative capacity of local governance, cross-border and regional strategical and spatial planning.

Conclusions

Helsinki

St. Petersburg

Tallinn



Conclusions

Douglas Gordon
Architect
City Planning
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The Gulf of Finland RINA Results

- **FRAMEWORK for a POLYCENTRIC Gulf of Finland:** the cities of Helsinki, St. Petersburg and Tallinn that make up the Gulf of Finland RINA project agree to the forming of *polycentric relationships* as a means to foster their collective economic and social strengths and address common environmental issues within the Gulf development triangle. An Action Plan, entitled '*Joint Statement of Intent*' delivers the necessary Policy Options as agreed by the three participating cities to implement collectively. In doing so, all new development will be managed and controlled in line with the agreed set of policies. This in turn promotes a *Polycentric Benchmark* that can be drawn together as a direct input from the collective views of the triangle of city-regions to the future well-being of the EU and western European Russia spatially.
- **POLICIES & INSTRUMENTS:** The Gulf of Finland RINA has realized the objective of Interreg IIIC, which is to improve the effectiveness of policies and instruments for regional development and cohesion. This has been achieved in this RINA by the creation of policy options at a spatial planning level as to how the Gulf of Finland city-regions should develop in the future as a group in order to form polycentric regions.
- **BALANCED EUROPE:** These key policy options will be directly linked to the relationship with the Pentagon (Global Integration Zone) in the long term through creating polycentric city-regions, which in turn, will support the Territorial Agenda goal of creating a balanced sustainable Europe.
- **COOPERATION:** PolyMETREX seeks to enable metropolitan areas to become as collectively strong as possible through the development of effective polycentric relationships *between city-regions*. This can only be done through long-term cooperation between the three participating city-regions.





- **TRANSNATIONAL CONNECTIVITY:** The Gulf of Finland development triangle recognises the importance of transnational connectivity in achieving better economic balance with the EU's Pentagon, and in particular, to evaluate the possibility for High-Speed Train Network especially between Helsinki and St. Petersburg. In doing so, this may kick-start transnational economic and cultural development as well as lowering carbon emissions for travel.
- **KNOWLEDGE & EXPERIENCE:** The Gulf of Finland RINA has exchanged spatial planning knowledge and experience between the triangle of Capital city-regions as a means to contribute to the metropolitan dimension of European affairs.

A SPATIAL VISION: Setting the context

The PolyMETREX project envisaged that all the RINAS would be represented through 'themes', spatial visions, or corridors and clusters. In this respect, the Gulf of Finland RINA places its prospectus in relation to an overall VISION based around a linked-corridor of high-speed rail connectivity, initially between Helsinki and St. Petersburg, and in the long-term, the possibility of a high-speed rail tunnel link with Tallinn. In effect, polycentrality would be achieved through a series of 'transnational development tiles' comprising inter-connected city-regions operating through their complementarity of functions and critical mass.

The Gulf of Finland has recognised that there are four KEY Challenges for the triangle of city-regions. These challenges are taken from ESDP and Territorial Agenda. These challenges are the drivers of change. **Balanced competitiveness** sets out the economic development strategy for sustained, balanced growth and competitiveness, including improved access to employment and clear goals to reduce energy dependence within a climatic change scenario. **Social equity** concentrates on creating better urban living to prevent acute housing shortages, maintain reasonable equilibrium in house price rises, whilst upgrading the older suburban areas to enjoy tomorrow's standards today. A high emphasis is on maintaining a unique quality and

attractive city environ. A **connected** Gulf of Finland development triangle provides the issues surrounding the need for compact city-regions as an essential element of spatial strategy, none more so than issues affecting energy, transport infrastructure, brownfield development and open spaces. A **spatially cohesive** strategy pulls together the physical demands of integrating significant growth within the existing city-regional structure to achieve a sustainable metropole in order to make the Gulf of Finland triangle into a high-quality area of Europe based upon a strong economy, a stable society, and an accessible city structure. This is based around a spatially cohesive polycentric framework with waterfront regeneration acting as a spearhead to strengthen the city-centres.

It is also clear that additional support for the 'Lenigrad Oblast' to be able to produce a long-term strategic plan for their region, is essential.

Vision to Strategy (Implementation)

In recognising these key challenges as being central to achieving a better quality of life in the participating cities of Helsinki, St. Petersburg and Tallinn, respectively, Finland, Estonia and Russia, it is essential to create a vision. The Gulf of Finland **Vision** of balanced competitiveness, social equity, a connected city-region, and spatially cohesive polycentric frameworks, are the four key challenges that dominate this vision. By bringing these approaches together, the Gulf of Finland vision can create a series of spatial strategies that seek to achieve a coordinated approach in realising the future Vision. The four key challenges are developed into a series of **policies**. *The integrated nature of the vision means that elements are no longer compartmentalised by functions, but are brought together into a cohesive whole, as in real life.* So, the issue of the environment therefore runs through each of the key themes as an integral part of the economy, of societal issues, of accessibility and of territorial cohesion, and not dealt with independently. In doing so, the vision can be implemented by making a set of objectives and policies into a collective vision for all three city-regions of the development triangle.



Spatial Plan for the Gulf of Finland: Helsinki–St.Petersburg–Tallinn.

What is the Vision for Gulf of Finland?

The four Key Challenges set out the understanding of what the Gulf of Finland development triangle requires to do collectively over the next 50 years if it is to meet the challenge of competing with the Pentagon and offering a better balance within the EU overall. To do this, the Gulf of Finland RINA has agreed and adopted a VISION for its future, together with the spatial plan showing the spatial development and HST corridors, set out below. This vision is:-

By 2050 the Vision for the Gulf of Finland will be to create a compact and dense set of polycentric city-regions operating at a transnational level within a unified economic and development triangle of Helsinki-St.Petersburg-Tallinn that will create spatial and business cohesion, offer a connected high-speed public transport network transnationally and locally, ensure safe and secure city-regions with social equity, be energy efficient with low carbon emissions, and geared to making clean and healthy environments.

How to achieve this Vision?

In order to achieve the Gulf of Finland Vision, the development triangle is divided evenly into three inter-connected sub-territories. In this way three overlapping sub-areas can be identified:

- (a) A northern development belt along the Helsinki–St.Petersburg shoreline
- (b) A southern vertical tranche between Helsinki and Tallinn and to mainland Europe
- (c) A southern horizontal belt Tallinn to St.Petersburg.

These sub-areas could be perceived mainly as intermediate cooperation areas, where the proximity and traditional relations of metropolitan city-regions might form the basis for the development of common strategies. This structure of the Gulf of Finland can help to identify the steps ahead in order to achieve sustainable development for the whole triangle.

The Conclusions now turn to setting out these policies within a Joint Statement of Intent.



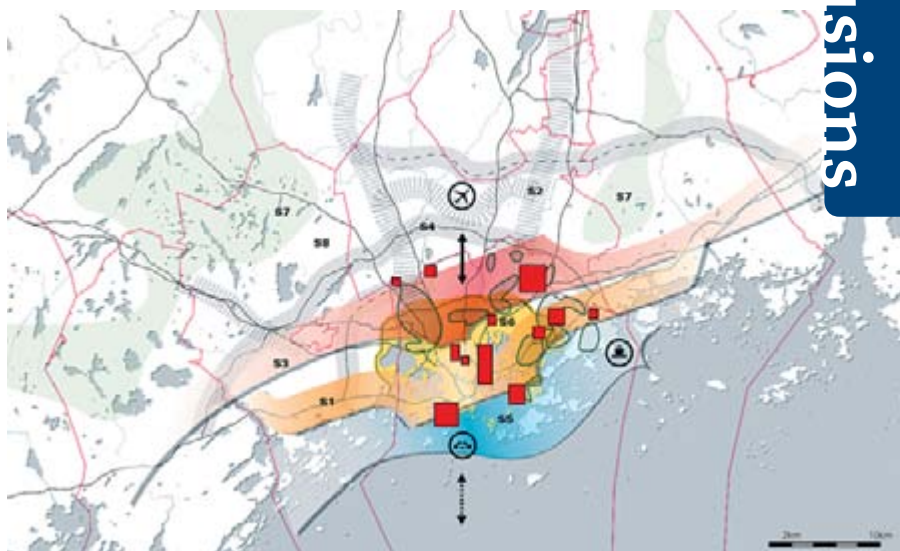
JOINT STATEMENT of INTENT

Spatial Planning Policy Options for the forming of Polycentric city-regions in order to achieve cohesion in the Gulf of Finland development triangle of Helsinki–St. Petersburg–Tallinn.

The Gulf of Finland RINA, consisting of the cities of Helsinki–St. Petersburg–Tallinn, has adopted the following policy-options as a means of achieving the Vision:

- the management of growth and regeneration of our city-regions through creating more **compact, high density ‘smart’** city-regional structures (a ‘smart’ city-region is compact, dense structure with a strong centre, based round high-quality public transport networks)
- making city-regions more **polycentric**, with high-density development within the new hierarchical city-regional centres and recognising that in order to do so, there is a need to complement the polycentric balance by **strengthening of each of the 3 city centres**;
- to place greater emphasis on making new development to be confined into specific **new corridors of development in order to prevent urban sprawl**;
- to prioritise EU and Russian spending on developing a high-speed (TGV-style) dedicated train network between Helsinki and St. Petersburg, and in the long-term, to consider a high-speed rail tunnel to be built between Helsinki and Tallinn;
- to prioritise government and city-region spending on creating **high-quality public transport** to encourage consumers to leave their cars at home, thereby helping to mitigate CO₂ emissions;
- to concentrate clusters of development around **key interchanges** of public transport, particularly rail, metro and tram networks;
- to create **synergies of employment clusters** within the city centre and in appropriate key locations within city-regions around key interchanges in order to create better urban balance with the periphery;
- to support ICT innovatory cluster development through the **re-organisation of space** within city-regions, and in particular, locating near **new synergies** such as city Airports, connectivity rail-hubs, and port harbours;
- aim to create **high-speed train networks** connecting Europe as an alternative to air travel, and highlight the opportunity to build new-towns alongside the new high-speed rail development network
- by examining new forms of city-region governance applicable throughout the Gulf of Finland triangle

Instruments to be applied in terms of follow-up actions to achieve a polycentric Gulf of Finland development triangle in order to achieve better territorial cohesion:



- to use spatial planning as the main instrument in the future for city-regions to be developed in a polycentric form
- investigate fresh, new, innovative approaches in spatial planning for the future of city-regions
- to support a new Interreg IV project for the Gulf of Finland RINA triangle
- for each Gulf of Finland city-region to develop **long-term strategic plans** to take account of the overall objectives and policy options contained in the RINA conclusions Joint Statement of Intent
- to explore the possible **city-region Governance** options that best fit the means to achieve polycentric city-regions
- to develop **maps** for the whole of the Gulf of Finland RINA in more detail to provide better **conceptual** understanding of the strategies
- to produce a more detailed spatial **transnational profile** for each circle of cooperation within the Gulf of Finland triangle and then to develop an integrated, more detailed vision for a more unified development triangle
- use Public Private Partnerships (PPP) between public and private sector to deliver large projects
- to consider Securitisation as a means to pool assets in the form of securities backed by cash-flows from assets to fund major projects.



Documentation Page

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Title

GULF OF FINLAND: SPATIAL VISION

Series title

Helsinki City Planning Department Strategic Urban Planning Division report

Series number 2007

Date 30.11.2007

Pages 90

ISBN 978-952-223-030-0

Language ENG

Abstract

The PolyMETREXplus project aims to realise the objective of Interreg IIIC, to improve the effectiveness of policies and instruments for regional development and cohesion, by contributing to the Territorial Agenda sought by the European Convention and the balanced and sustainable development of Europe sought by the ESDP. In effect, the PolyMetrex project has contributed to the effective polycentric city-region relationships and a better understanding of European Territorial balance.

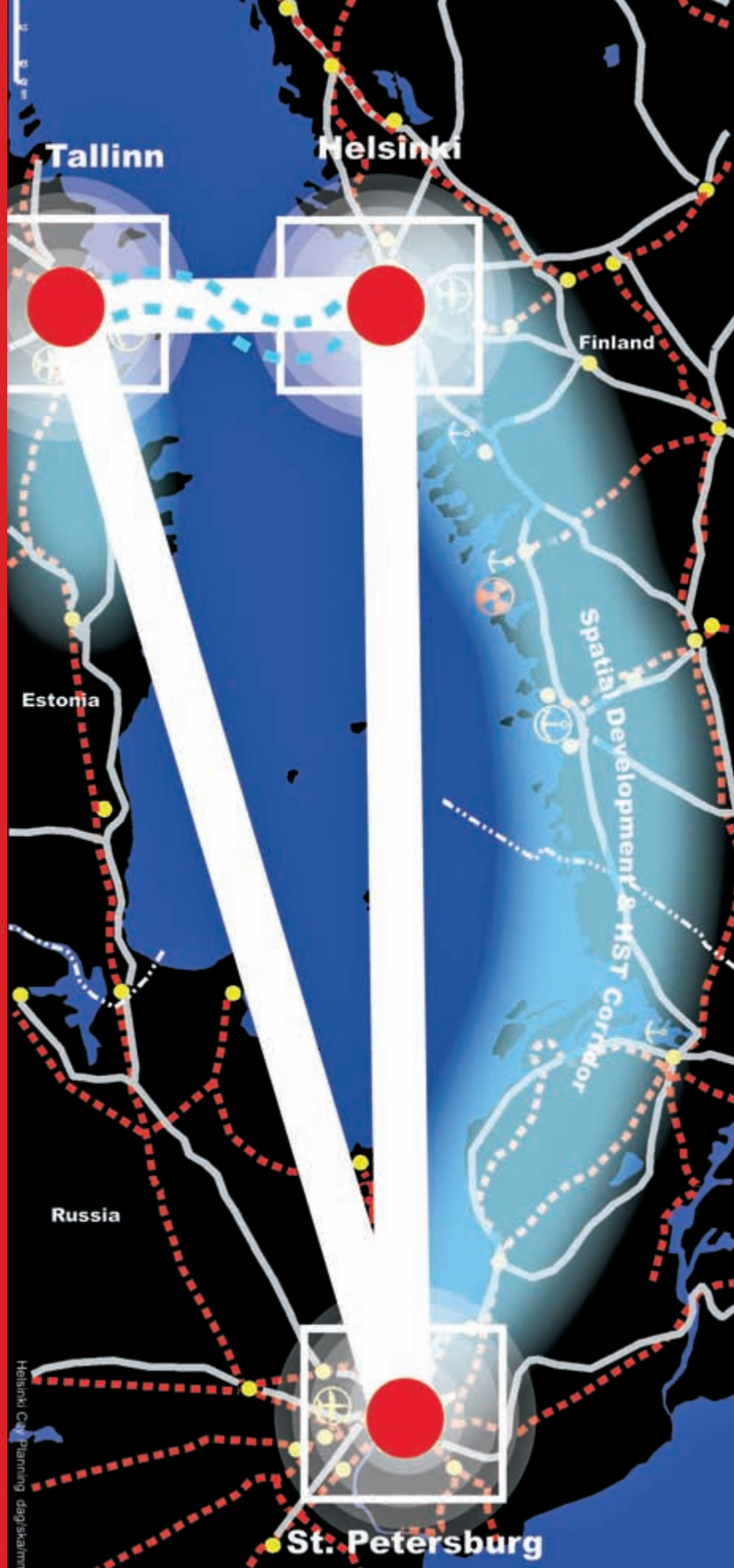
The outcomes and output of the PolyMETREXplus has been formalised into RINAS – Representative Interregional Networking Activities. The Core objective has been to support Interreg IIIC "to improve the effectiveness of policies and instruments for regional development and cohesion" by producing a Framework for a Polycentric Metropolitan Europe, a related Action Plan and a Polycentric Practice Benchmark derived from a programme of RINAS.

The Gulf of Finland RINA focuses on creating key policy options and instruments to guide the participating city-regions of Helsinki, St.Petersburg and Tallinn towards better cooperation and in doing so, develops a spatial vision for the Gulf of Finland development triangle. The key policy options are directly linked to the relationship with the EU Pentagon Global Integration Zone. The main thrust of the RINA is to create a unified polycentric set of city-regions with high-speed train connectivity between Helsinki and St.Petersburg.

The setting out of a broad strategic Vision within which city-regions can consider the possibility of forming polycentric relationships will help foster their collective economic and social strengths and address common environmental issues. Additionally, agreement enabled an Action Plan, entitled 'Joint Statement of Intent' to deliver the necessary proposals to ensure the key policy options are implemented. In doing so, it is intended that these conclusions will highlight the effectiveness of having a Polycentric Benchmark of instruments that can be drawn together as a direct input from the collective views of 3 city-regions to the future well-being of Europe spatially.

Keywords

POLYCENTRICITY, SPATIAL VISION, TERRITORIAL AGENDA, GULF OF FINLAND, SPATIAL PLANNING, INTERREG IIIC



North East SOUTH West
INTERREG IIIC

METREX
 The network of
 European Metropolitan Regions and Areas

