A RUSSIAN - AMERICAN COLLABORATION
FOR THE ST. PETERSBURG MASTER PLAN COMPETITION

by

Mark P. Dinaburg

Submitted to the Department of Urban Studies and Planning
in Partial Fulfillment of the
Requirements for the Degree of

MASTER OF CITY PLANNING

at the

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MASSACHUSETTS INSTITUTE
OF TECHNOLOGY

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A Russian - American Collaboration
for the St. Petersburg Master Plan Competition, 1991 - 1992

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Abstract

The thesis is concerned with revision of the master plan of St. Petersburg, Russia. It documents a one year collaboration, for which the author served as instigator and co-ordinator, on an entry in the city’s master plan competition; the collaborators were a group in MIT’s School of Architecture and Planning, and representatives of Lengiprogor Institute, St. Petersburg. A range of topics crucial for the city’s post-Communist transformation is discussed: property markets, development zones, trade infrastructure, historic center, citizen participation, public regulation and intervention, and housing reform. Some conclusions are drawn about current conditions in St. Petersburg, and possible strategies for effective western technical assistance to Russian cities.

Thesis Supervisor: Professor Philip Herr

Title: Professor, Department of Urban Studies and Planning

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General Introduction

This thesis is the record of a practical exercise: a limited collaboration between two teams of urbanists, from MIT and from St. Petersburg, Russia. The collaboration has aimed at two kinds of results: a conceptual one, embodied in a Master Plan Concept for the city of St. Petersburg, and a practical one, in a joint project(s), to be paid for and realized, towards some version or part of this Plan. Since this has been a practical exercise, the quality of the results should serve as a standard by which to distinguish successes and failures in the collaboration. At the time of this writing, both results may well be in process, but neither has been arrived at yet. My record will depend upon extrapolation and conjecture.

The value of this record will come from its ability to illuminate more general questions: What kinds of planning collaboration can work between Americans and Russians? Towards what ends, through what means? My specific collaboration serves as a case to argue from. The arguments too will depend upon extrapolation and conjecture; I will try to keep them from empty generality. But I am convinced that some kinds of technical collaboration in Russian cities, can serve the ends of both sets of collaborators, and that we can usefully consider what these might be. Hence, I want to look towards models of effective action, by evaluating this case.

I want to present this collaboration in the light of its results: as concept, or project. For this, I need to give an account of the results. I had hoped to be able to work back from an analysis of a conceptual document, a completed Master Plan Concept. But the document is still being prepared. The projects which might come out of the collaboration, are also only in preparation. These projects, however, are more due to our (MIT group’s) initiative, than is the concept proposal. Perhaps for this reason, their outlines at this point seem clearer than those of the master plan. So I will ask of our collaboration: where did our respective notions of what should be done in St. Petersburg, overlap sufficiently with one another, and with effective forces, to give rise to a joint project with some prospects of realization?

In large measure, the work of which this collaboration has been a part is just beginning. My documentation has suffered from constraints of time and communication; but more fundamental have been the limits imposed by a new, unknown field. Transition from a Communist regime and economy has no clear precedents. Not only as student, but also as professional, one is thrown back on "learning by doing".

I have tried to respond to these limitations in the organization of the thesis. I have tried to gather documents and
perspectives, especially Russian ones, that will be of use in future work. In general, I have been held back from offering what looks like a worked out analysis; the analysis is rather implicit in the commentary on the speeches and documents presented. This leaves, at the end, a certain lack of closure. Perhaps this is as it should be.

Concerning the Russian documents, I have either translated them directly from Russian, or (what turned out to be considerably harder) from English translations provided by the Russian authors. I have been the primary author of the ports planning document included in the Appendix to Chapter II; therefore I felt its inclusion justified here.

My thanks above all to the many MIT faculty whose ongoing response to this project nourished it from an outlandish idea, to the brink of maturity.
Chapter I: First Phase of the Collaboration  
August, 1991 - January, 1992

Introduction

The events of rapid and uncertain transition in the former Soviet Union form the background to the St. Petersburg Master Planning Project at MIT. St. Petersburg - then, Leningrad - elected a new non-Communist mayor and Council (Soviet) in 1990. Among its projects of reform (chief of which was perhaps the proposal to create a Free Economic Zone in the region) was the announcement, in May, 1991, of a competition for fundamental revision of the 1987 City and Regional Master Plan. Five existing city planning institutes were invited to submit Concept Proposals for a new Master Plan.

Among those invited was Lengiprogor State City-Planning Institute. They have done master planning for cities, towns, parks, nature reserves, throughout the former Soviet Union, for over 60 years, but never worked in Leningrad itself. Experience in "public participation" in national parks planning, and subsequent co-operation with National Center Associates, Spokane, Washington (specialising in conflict resolution), convinced Lengiprogor's directors that collaboration on these and related themes with an American institute, could be beneficial to their competition entry. Personal contacts led to a formal proposal for exchanges with a group from MIT's School of Architecture and Planning.

The group which formed at MIT to act on this invitation saw the collaboration both as possibly useful to Lengiprogor, and as a means to further some of our own goals: an introduction to one of Europe's great cities; insight into the process of transition in a Russian city especially accesible to the West; clarification of how (and how far) American urban theory and practice can be made relevant to the transformation of Eastern European cities. Institutionally, this project could amplify themes raised in other current MIT work in Eastern Europe (most particularly the SIGUS Poland Initiatives), and help strengthen our discourse on and with post-Communist cities. In addition was the allure of perhaps being associated with the winning entry in a competition of real importance.

A series of exchanges was agreed upon. The first two form the subjects of this Report (Chapter I):

The SIGUS Workshop (November, 1991)
MIT delegation to St. Petersburg (January, 1992)

Two further events, taking place before the close of the competition in May, 1992, are covered in a second Report (Chapter II):
The Master Plan Workshop (March, 1992)
Final meetings in St. Petersburg (April, 1992)

A central purpose of this Report has been to prepare the ground for more fruitful collaboration in the exchanges still to come in our project. Disparity of experience and conception between the American and Russian collaborators stands as an obstacle to fruitful interchange. In order to bridge this disparity, I have sought in this Report to present, as far as possible, both Russian and American views of our joint work. I have included Russian documents and projects, rather than our digests of them; and have tried to make our own interests and reactions clear throughout.
### Timeline

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<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>May, 1991</td>
<td>Passage of legislation by Leningrad City and Regional Soviets, setting up a competition for Revision of 1987 City and Regional Master Plan.</td>
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<tr>
<td>August, 1991</td>
<td>Invitation by Lengiprogor to MIT to consult on Lengiprogor’s planned competition entry.</td>
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<td>October 1, 1991</td>
<td>Official opening of competition</td>
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<td>November 14 - 16</td>
<td>SIGUS workshop with Lengiprogor representatives, at MIT</td>
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<td>January 8 - 23</td>
<td>MIT delegation hosted by Lengiprogor in St. Petersburg</td>
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<td>March 2 - 6</td>
<td>Master Planning workshop, with chief of Lengiprogor competition team, at MIT</td>
</tr>
<tr>
<td>May 1</td>
<td>Competition officially to close</td>
</tr>
<tr>
<td>Summer, 1992</td>
<td>Expected announcement of competition results</td>
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The SIGUS workshop

SIGUS (Special Interest Group in Urban Settlements, Director, Dr. Reinhart Goethert) has long experience in organizing role-playing, exploratory workshops on questions of urban settlements. Since 1990, they have mounted a series of linked activities, centering around strategies for housing in Lublin and Warsaw, Poland. Attempts to integrate public involvement, at a variety of levels, into urban decision-making, have been an ongoing part of the project.

Since there have been connections, of concept and personnel, between the SIGUS Poland project, and our work in St. Petersburg; and since our Russian collaborators are quite interested in (although also skeptical of) the possibilities of "participatory methods" in clarifying urban issues, a SIGUS workshop seemed a good introductory vehicle for our work together. Accordingly, a three-day event was held at MIT in November, 1991, with participants from the MIT School of Architecture and Planning, and representatives of Lengiprogor Institute.

The workshop was an experiment: to explore how fruitful co-operative work would be for either side, and to gauge interest at MIT for supporting further exchanges. On both counts, despite real limitations, the experiment was a success, and laid the groundwork for substantial collaboration.

Program: From Leningrad to St. Petersburg

November 14  The Changing City
* The city in continuity
* The struggle for change
* Competition for revision of City and Region General Plan

November 15  The Context: City Image, and the St. Petersburg Waterfront Area
* Memories, hopes, symbolic places
* Resources, constraints
* Waterfront as a paradigm

Vision: Transforming the St. Petersburg Waterfront
* A Boston example: Charlestown Navy Yard
* Question to multi-disciplinary teams: What urban design principles are needed to guide development here?
November 16
Instruments and Methods: Implementing the Master Plan
* Some American cases of large scale urban master planning: Oregon; Washington D.C.; Minneapolis/St Paul; Metropolitan Boston
* Transitional planning in Poland, Bulgaria, Russia
* Planning technology
* Public participation
* Plans as shared intentions

Chief MIT participants:
Dean John de Monchaux
Professors Jack Myer
    Julian Beinart
    Gary Hack
    Phil Herr
Dr. Reinhart Goethert
Mr. Paul Barrett (Boston Redevelopment Authority)
Co-ordinators: Mark Dinaburg, Christina Wasch

Lengiprogor representatives:
Vladimir Schitinsky (Lengiprogor)
Alexander Karpenko (Association in Support of Ecological Initiatives)
Yevgeny Nikolaev (ASEI)
Vadim Feofanov (Architectural Atelier)

Workshop Sessions
I. The Changing City, November 14

The first Workshop session, which had been preceded by four days of discussions, private meetings, and preparation of documents, aimed to serve three main functions: (1) introduction, by Lengiprogor representatives, of their Master Plan revision project; (2) initial responses by MIT participants; and (3) generation of enthusiasm, for the workshop and project, among an MIT community which displays developed consumer behavior within an extremely well-stocked intellectual marketplace. The first two aims were relatively well carried out; the third, less so. This disparity of effect would seem to reflect Russian practice:
concentration on content to the exclusion of style, and not much feel for showmanship and mass-marketing. It also reflects a difference, at MIT, between the deep interest on the part of a number of faculty in the issues raised by this project, and a relative lack of engagement with these issues by most of the current student body.

After formal introductions, Vladimir Schitinsky, Chief Engineer of Lengiprogor, spoke on the history of St. Petersburg as a planned city, and particularly, on the series of Soviet Master Plans, which began in 1935. Each of these plans was identified with a single author, their content highly physical and determined. Among the continuing themes of these plans have been: movement of population from the densely inhabited historic center, to outlying new districts; renovation/preservation of the historic center; development of the (still largely neglected) Baltic Sea waterfront. Attention has been increasingly drawn to severe ecological problems, needs for industrial restructuring and relocation, and the extension of services and employment into (almost exclusively residential) new outlying districts. In addition, the gathering momentum of perestroika has introduced major new themes: transition to market conditions; new residential forms (of tenure, construction, management); public participation; foreign investment; decentralization of authority. The Master Plan concept that Lengiprogor is preparing must differ in form, as well as content, from the 1987 Plan it is meant to supplant.

Comments, by John de Monchaux and Jack Myer, pointed up deep differences between Russian and American understanding of the uses of a master plan as an instrument. Conditions of economic and political pluralism require that a master plan allow for processes of consultation, flexibility of detail, and multiplicity of actors. How, and to what extent, to reshape the strong tradition of St. Petersburg city planning in these directions, is a central question for future work.

II. The Image of the City: Transforming the St. Petersburg Waterfront. November 15

The premiss of Friday’s all-day workshop session was that the economic, institutional, and form issues which a Master Plan must address, can be approached through team design sketches of a particular waterfront site in St. Petersburg. The Lengiprogor group was skeptical. The disproportion between such sketches, and the themes of a master plan, seemed too large; the approach perhaps displayed superficiality, and a too-great interest in sites accessible to Western investment. Or perhaps it showed instead American pragmatism and willingness to consider many variants.

The morning session, led by Professor Julian Beinart,
had two goals: (1) to give participants a feel, however impressionistic, for the physical fabric and historic spirit of this place, and (2) to begin to formulate possible futures, that could respond to this fabric and spirit.

A series of slides, and a discourse on the city's memories, addressed the first goal. One striking line of development: The 1917 revolution was made in this city, but by 1919, it was abandoned as the country's capital, in favor of the "more Russian" Moscow. Leningrad was considered too European, cosmopolitan, Imperial. The bold Soviet city planning efforts of the 1920's by-passed this city. The first city plan, of 1935, proposed a new Soviet city growing to the South, to replace the historic core. Only after the destruction, and revived Russian patriotism, of the Second World War, were concerted efforts made to preserve and restore the city's historic fabric. Plans of the 1960's added to this concern with the historic center, a need to reach out to the Baltic, through development of the sea border. This recognized need to strengthen the city's character, was simultaneously undercut by building of massive, standardized, under-serviced new residential districts surrounding the old city. Goals of the next Master Plan should include re-integration of the new districts, linking up with the pre-Revolutionary core, and opening the city to Scandinavia and the West.

Through what images, and with what means, could these master plan goals be articulated? Workshop teams produced versions of Image, Priorities, Mechanisms. Images included: the equalized city (Bologna); market driven development; return to Europe and the Baltic. Mechanisms emphasized: many actors; Baltic trade; nodes and corridors of growth; linking education and high technology; cultural tourism.

The afternoon session was devoted to consideration of a prime St. Petersburg waterfront site, between the Prebaltiska Hotel, and the Passenger Port (site 1 on Map of Development Zones). Paul Barrett, Boston Redevelopment Authority's director of waterfront planning, opened the session with presentation of a strong Boston parallel, Charlestown Navy Yard. Professor Gary Hack then set the terms of an urban design problem, emphasizing the need for clear program, linkages with the city, economic feasibility, timing and process. Workshop teams come up with three quite different solutions. They had in common wishful answers to the question: Where will the money come from? There were important divisions about control of the site: was there to be a powerful development agency, with a unified program, or, rather, clear street grid and procedure, to allow a variety of smaller actions and actors?

An evening tour of BRA offices and projects, and the Charlestown Navy Yard, strengthened the attractions of an interventionist development authority, able to orchestrate
private and institutional actors, along with local interests, in defining and implementing a (flexible) master plan.

III. Instruments and Methods. November 16

A sparsely attended Saturday morning session (three of the four Lengiprogor representatives were already on their way home) closed the workshop. Our intent had been to consider the role of public authorities in formulating and implementing a master plan. To that end, Professor Phil Herr prepared four cases of US master planning at a scale commensurate with Leningrad city and region: Oregon (1970’s); Washington D.C. region (1950’s); Minneapolis/St. Paul (1960’s); and Boston Metropolitan region (1970’s). These present quite distinct models, from hortatory, to offering of incentives, to mandating of strong statewide measures. They also present a wide range of degrees of effectiveness. A key underlying variable seemed to be: how well did the plan, and its process of implementation, conform to the "political culture" of the place? A slogan which aimed to sum up this experience was "Planning as articulation of shared intentions".

Lacking Russian representatives who could speak to St. Petersburg’s political culture, and possible shared intentions, the discussion took another direction: reflection upon the difficulties of translating systematically distinct experiences and concepts. The joint MIT/Lengiprogor project has displayed these difficulties again and again; the attempt to forge a common planning language is perhaps the most challenging part of the collaboration.
MIT Delegation to St. Petersburg, January 8 - 23, 1992

The results of the SIGUS Workshop suggested to both Lengiprogor and MIT participants the usefulness of further collaboration on the Master Plan competition. Their respective motivations differed somewhat.

For Lengiprogor, these included: low cost consultation with leading western specialists; the opportunity to have MIT’s name in their competition entry; and low-risk exploration of a potentially valuable long range connection.

For the MIT group was drawn by the intrinsic interest of the city; the project’s potential value as an educational tool; clear limitations of commitment; the possibilities of using this work as a stepping stone to larger scale U.S.-funded technical assistance; and hopes raised by involvement in a significant competition.

A schedule, and format, of exchanges was agreed upon. An MIT core group was formed, and support enlisted from the Departments of Architecture and Urban Studies and Planning, and from the Bemis Fund (administered by the School of Architecture and Planning.)

The MIT delegation to St. Petersburg, led by Professors Julian Beinart and Gary Hack, with Mark Dinaburg and Bjorn Slade as research associates, was received by Lengiprogor between January 8 - 23, 1992. Conversations were intensive and consequential, in spite of important areas of mutual incomprehension. The chief Lengiprogor interlocutors were: Dr. L. Puterman (head of Master Planning competition team); V. Schitinsky (the Institute’s chief engineer/manager); V. Polichuk (chief architect); and two economists serving as consultants in the competition team’s "brain trust", N. Agafonov and S. Rafikev.

The contents and direction of the discussions are indicated in this Chapter by four appended documents:

(1) A list of topics for further collaboration, jointly agreed upon at the close of the delegation. This list represents an attempt to merge our often quite different notions of the tasks of city planning, and the ways in which Western experience can be relevant to conditions in St. Petersburg. It forms the basis for the program of the March workshop at MIT.

(2) A precis of one of Dr. Puterman’s central city planning concepts, “flexible norms”. This might serve as introduction to where his thinking stands in relation to past Soviet practice, and to possible Western models.
(3) A detailed map (Map 1) of possible "development zones" in St. Petersburg, based upon extended discussions with chief architect V. Polichuk. An important feature of each of these zones is their relation to the strongly protected Historic Center of the city. There were disagreements among the discussants concerning the political, and economic, feasibility of (partially private) development within these zones. Attempts, during the last two years, to redevelop one of the sites, New Holland, have led to sharp conflicts within the city: conversation returned often to the implications of this example.

(4) A list of the members of the Lengiprogor competition team, showing the extent of consultation outside the Institute, and the specialties included.

The Guidelines for the Master Plan Competition have also been included. These were prepared by the City Architect's office in May, 1991. In addition to outlining the scope and format of the competition entries, this document illustrates, at several points, the state of conceptual debate about St. Petersburg's future urban process.

Two particular limitations on the success of our delegation are worth noting: (a) It seemed obvious to us that we should talk with some members of city government and administration, to get insight into what they considered the tasks and limits of city planning, and how they regarded this competition. Our Lengiprogor hosts were not at all comfortable with this, fearing the possible political fall-out of visible Western presence in a highly charged situation. No direct contacts with city officials were made. (b) Interests outside of this collaboration led to meetings with members of two of the three other teams in the competition. These were Lenititag, a two-year old private consulting firm, and Lenipigenplana, the State Institute primarily responsible for drafting the 1987 Master Plan. Although there was no discussion of the contents of their respective competition entries, both groups, in several respects, spoke a city planning language closer to ours than that of Lengiprogor. The extent to which our work with Lengiprogor can generate a common language, and the appropriateness of Lengiprogor's approach for their city, are matters still to be determined.
Guidelines, St. Petersburg Master Plan Competition

Supplement 1

to a decision of the
presidium of the
Leningrad regional and
city Soviet

Program/Task

Call for a Competition for the Elaboration of a
Concept of City-Construction Development in the Leningrad Region

Leningrad, 1991

1. General considerations. The aim of the competition.

The Master Plan of Leningrad City and Region of 1987, was the first attempt to develop a single document governing the interconnected processes of city construction management for both the city and region. It was proposed to revise the plan every five years.

The first five years of attempted realization of this plan have shown that the Master Plan, elaborated on the basis of the command-administrative system of city construction and economic management, was not functional in contemporary conditions. In the process of city construction management of Leningrad city and region, new issues have arisen, for whose resolution we have no appropriate experience:

* planning for the development of the national economic complex (NEC) of the Leningrad region;

* de-centralization of the NEC production system;

* de-centralization and plurality of persons/organizations/institutions building their own houses;

* de-centralization of project planning and contracting activities;

* new land uses; land costs, leasing arrangements;

* democratization and other changes in the system of management of territories and settlements, enhancing the role of local Soviets in city construction process management;

* interaction/co-operation between central and Republican legislatures, and organs of local self-management;
* bulkiness and excessive specificity of the main documents of city construction management (i.e. the Master Plan itself);

* enhancing the role of historico-cultural, and ecological, factors, which had not been taken into account at the time of the Master Plan elaboration;

* the inflexibility of the Master Plan, which must be considered a shortcoming in a document governing city construction management in a period of rapid and irreversible economic change;

* the influence of agricultural production on the system of settlements.

The need for new forms of influence on processes of material-spatial development in the Leningrad region, is especially pressing. The present situation is characterized by under-utilized cultural/historical and economic potential, and extremely aggravated social, economic, and ecological problems.

An elaborated "Concept" should put forward an integrated perception of the region's development, which must comprise not only strategic directions of development, but also organizational, legislative, economic, and technological means to manage this development.

The competition organizers hope to get comparable variants of models for city construction development of the region. These should provide the best conditions for life activity of the populace, along with unconditional protection, preservation, and restoration of the historical-cultural and natural resources of the region. The variants must include both description of conditions, and means for their realization.

The competition results will form the basis of a program to elaborate consequent stages of project planning documentation. The team of judges will prepare recommendations concerning the composition of the creative team which will be responsible for elaborating the new plan.

2. The Contents of the Concept of City Construction Development.

On the basis of initial materials, and taking into account received absolute city construction limitations, each competition entrant must present its own understanding of the following items:
2.1 What is to be understood by "Concept of City Construction Development in the Leningrad Region".

(By the term "Leningrad region", the competition organizers understand the city of Leningrad itself, as well as the Leningrad region. The entrants may make their own proposals concerning the proper borders of the region, but they must justify their proposals.)

The competition entrants must expand their notion of the Concept for city construction development as a collection of necessary and sufficient documents, by means of which it will be possible effectively and flexibly to carry out city construction management, and to introduce new principles for the city construction process. These documents should reflect at least the following:

* the nature protection aspects of the region's development;
* social and historical-cultural aspects (objectives, tasks, stages);
* economic foundations of city and regional development (objectives, tasks, stages), and their influence on city construction development;
* the system of the city construction planning process: objectives and contents of the main projects; general requirements for project planning;
* principles of economic and legislative relations; main juridical documents needed for the Concept's realization, including proposed City Construction Regulations;
* organization of monitoring and management of the city construction development;
* general positions and features of the Concept proposal (affirmative section).

Participants can present other of their proposals and perceptions, in order to enrich the understanding of their Concept.

2.2 Analysis of the Leningrad region in terms of national economic development, and city construction development. What is the entrant's attitude to "General Positions of the Master Plan of Leningrad and the Leningrad region development up to the Year 2005" (the 1987 Master Plan)?

The subjects of analysis, in accordance with the definition, are the appropriate conditions and processes.
Conclusions must be consistent with presented conditions and processes (reason-consequence, problem priorities, etc.).

Changes in the economic activity of the Leningrad complex do not always result in territorial and spatial manifestations. This section should concentrate on those processes or aspects which directly or indirectly influence the territorial or spatial development of the region.

The entrants must express their attitude to the general positions of the 1987 Master Plan, and especially concerning its proposed process of realization.

2.3 Objectives of the Concept of City Construction Development in the Leningrad Region.

The entrants must express their opinion concerning two possible alternative kinds of objectives:

First, traditional for our society, the setting up of concrete objectives for the specific term of the plan, which objectives have been determined for the planners from outside. By this we refer to the administrative and command regime for realization of city construction documents.

Second, a complete rejection of purposeful planning process. Here, we suggest the possibility of maximum flexible change of objectives in the process of city construction self-development: a system with functioning feedback connections.

2.4 Principles of Economic and Legislative Relations Concerning the Use of Land and Real Estate.

Entrants must formulate a position about these main principles of economic and legislative relations in the use of land, without which it would be impossible to accomplish their Concept plan. They must present proposals on the "City Construction Regulations for the Leningrad Region", and provide figures showing how the system proposed in their Concept can grow out of the region’s current conditions.

The questions listed below can be answered with any degree of completeness, but in comparing entries, preference will be given to the most complete characterization of principles:

* Conformity of existing Union, Republican, and local legislation to the possibilities of realization of the Concept proposal;

* The meaning, for the realization of the Concept proposal, of the juridical and economic status of Leningrad and the Leningrad region; of relations between city and region; of
the forms of ownership and uses of land and real estate projected up to 1995, the period 1995 - 2005, and further;

* Sources of city, district, and regional budgets under conditions of the Leningrad Free Economic Zone.

2.5 General Position on "City Construction Regulations for the Leningrad Region".

It is necessary to consider the role, in management of the Leningrad region’s development, of new "City Construction Regulations", in accordance with Republican City Construction Code (now being elaborated), and with the "Foundations of the City Construction Legislation of the USSR".

The entrant's positions should be clarified by discussing the following points:

* The territorial jurisdiction of the Regulations;
* The Regulations’ principles and limitations;
* The rights and obligations of official organs at various levels, concerning the city construction process;
* Public participation in considering and resolving issues of territory use, building activity, and real-estate;
* Requirements of planning documentation, norms, and rights, on the All-Union, Regional, and Ministerial levels;
* Regulation of construction, reconstruction, repair, and demolition of buildings, improving of territories, etc; legislation concerning constructors’ rights, and the financial interconnections of constructors, planners, and clients;
* Attitude towards real-estate markets, and means to bring it about;
* City construction monitoring; amendment of regulations; sanctions for violations.

2.6 Actual Problems and Concrete City Construction Issues which the Concept proposal might bring forward.

Besides the general requirements made as to the contents of the Concept proposals, the organizers of the competition request the entrants’ attitude towards the following issues of city and regional construction:

A. The region’s potential in natural resources; its
productive forces’ distribution; their influence on zoning of territory; the population dynamics and its influence upon settlements.

B. Conversion of the Military Industrial Complex (MIC); decentralization of production, and the need for work for the population; interconnection of these processes with the system of settlement and re-settlement; the possible influence of conversion upon the spatial organization of the Leningrad region.

C. City construction aspects of the Open Zone for Free Enterprise.

D. Development of the Leningrad region as the North West center of entrepreneurial activity and tourism.

E. Easing of ecological crisis, including nature protected areas, diversity of different kinds of preserves of different status (both those already in existence, and those proposed).

F. Easing of crisis in construction technology and production; changing the essential organization of the construction industry.

G. City and agricultural/country settlement features, specifically, of gardens, dachas, ministerial settlements; and also of farms/farmsteads.

H. Ways to resolve the housing problem: multi-storeys, cottages, country estate construction forms, search for territories to be utilized as building sites.

I. Preservation of historico-cultural resources, under conditions of market relations, and unfolding of the cultural potential (including protected zones).

J. New approaches to distribute ecologically dangerous enterprises.

K. Dumping and processing of dangerous wastes (chemical, radioactive, etc.).

L. Purification of water basins, sewages, and waste processing.

M. Access to the Baltic Sea on the coasts of Kingisepskiy, Lomonosovsky, and Viborgskiy districts of the Leningrad region.

N. The provision of energy for the region.
O. Relations of city construction management and architecture; land inventory under the proposed system of land management and regional/national economic management.

P. Intra- and inter- administrative territorial borders: limits of Leningrad and the Leningrad region, advisability of changes.

Q. The following specific projects:
   
   * Dam, protecting Leningrad from flood;
   * New airport (in Tosno);
   * New sea port in the bay of the Luga River;
   * High speed rail line, connecting Helsinki, Leningrad, Moscow, and the South;
   * North-west heat/electric station;
   * Complex of purification systems/sewage processing plants;
   * Mass-transit and automobile systems; ring road;

R. Green zone of Leningrad, and the city's park belt.

S. Leningrad recreational zones (both local and all-Union).

3. Material which must be Presented by Entrants to the Competition, and the Conditions of the Competition.

3.1. Explanatory note: concerning the volume of the Concept entry, it should be not more than 100 typed pages, in four copies (with explanatory graph materials), in accordance with Item 2 of the given program, and including photos of demonstration materials.

3.2. General plans of the region's development for the period 1995 - 2010:

   * the city of Leningrad in its current administrative borders, at a scale of 1 : 25,000
   * the Leningrad agglomeration, at a scale of 1 : 100,000
   * the Leningrad region, at a scale of 1 : 200,000
* the Northwest region, 1 : 500,000 or 1 : 1,000,000

* General plans of proposed development for other periods can be presented, according to the authors' choice, at the same scales.

Notes: 1. Participants can determine territorial borders and divisions in accordance with the logic of their own concept proposal. Information on the effects of proposed border changes must be presented in a supplement, in order to provide comparability of the variant Concepts.

2. Standard plan indications are to be used by all participants.

3.3. The general positions of the Concept must be presented in no more than 16 typed pages, along with descriptive graphs and materials (for publication in newspapers).

3.4. A list of authors must be included, with information about the degree of participation of each in preparation of the proposal.

3.5 Entrance have the right to create temporary creative teams, and to attract specialists from other organizations, and independent persons.
St. Petersburg: Growth, Decline, and Future Tendencies

Dr. Leonid Puterman
Lengiprogor State City-Planning Institute
St. Petersburg, Russia

St. Petersburg was founded and grew due both to the will of Peter the Great, and several centuries of Imperial consolidation. Its decline began when the capital was moved to Moscow: the main function of the city was lost. The fundamentals of handicraft, manufacturing, culture, and enlightenment still remained, but the city could not maintain its former position. Moreover, the population of the city, who were the keepers of its cultural traditions, suffered heavily during the Second World War. Petersburg could not compete against Moscow, as the new capital drew away the material and intellectual resources needed for development.

The city’s present differs sharply from its past. The population living in the new residential districts are largely transplants to Petersburg, physically and culturally. The degradation of the city center, poorly preserved, and often divided into communal apartments unable to meet current needs, is still proceeding. There is a long-term, accumulating effect of divergence of function and form in the city’s fabric. Roughly speaking, Petersburg today is a city of facades.

What city-building processes have been taking place in the past decades? The city’s life can be divided into three periods: dynamism, conservation, and stagnation. An underlying problem is that the normative approach has been used mechanically across quite different city environments. This normative approach established generalized average levels of provision for nearly all forms of vital activity (i.e. the same occupant space and public service requirements, etc.). These were applied to the historic center, the districts of pre-war urban development, and the various strata of new residential communities. As a result, the potential unique resources of each of these different regions were lost: first there was distortion, followed by decline. Having reached a certain level of equilibrium with the city’s infrastructure, the residential districts of pre-war and post-war development arrived at a state of prolonged conservation. The needs and expectations of people continue to grow, but the urban fabric, bound by the normative approach, fails more and more behind these needs. The result is stagnation. Thus, what was good at the time it was built (e.g. Khruschevka apartments, built in the '60's, which helped many people move out of communal apartments) have now become a hindrance, and intensify the shortage of city terrain for construction. The normative approach to city planning must be replaced with a versatile instrument, able to vary its effects with the age and
function of each district.

However, to ease the crisis properly in a city which rather resembles the ruins of St. Petersburg, the whole concept of city development should be revised. There are several possible models:

1. The city of heavy industry: continuation of trends of the last decades.

2. The museum city, having income mainly from "cultural tourism".

3. Re-birth of a European (and world) scientific and cultural center.

It seems obvious that the former importance of St. Petersburg cannot be restored. It is also evident that none of the above functions can exist independently. An account of their possible interdependence is to be presented at a conference on "European Cities: Growth and Decline", The Hague, April 13 - 16, 1992.
Flexible Norms: a precis of discussions with L. Puterman

Puterman knows that "market relations", particularly in the development (and, one supposes, ownership and management) of new "service/commercial centers" within the various existing areas of the city, is coming. His planning response is to look for "norms" for various functions, within the various zones of the city. He feels that the "former system of norms" was far too simplified and rigid, and that by treating large parts of the city uniformly, it served them all ill. He would devise a system of "flexible norms", that would vary according to the character of the area in question. There is both a method, and an art, in distinguishing the city's different "functional zones", and (correlated with this), the appropriate "normative requirements" for each. He is looking at two models for these norms:

(a) Any of a variety of Soviet-developed "land valuing methodologies". In making allocation decisions concerning land heretofore, relative or absolute cost of land played no part. Since there is no current land market to indicate (market) values, a system which would use land value in allocation decisions must use some method to calculate "shadow prices". (What criteria, in what sorts of combinations, are used? This is perhaps a "technical question", within this rather odd procedure, about which we might ask intelligent questions, or even offer advice.) Method, embodying criteria: through this we can distinguish what are the functional zones of the city, and, for each, what are the appropriate norms for service areas of various kinds, commerce, apartment size and type, etc.

(b) Correlations, standards, etc. as compiled or used authoritatively in various Western countries: relations between unit population in various settings/densities, and various functions (retail space, schools, gross parking spaces, etc.). Perhaps he wants information on how we divide up our cities into "functional zones", to be treated differently from one another.

He wants this system of functional zones, and appropriate norms for each zone, to be able to treat the entire city, including the historic center; redevelopable, close-in industrial areas; waterfront; various historic strata of residential regions.

The Master Planner is to lay down this system. Who is to interpret it, administer it? With whom ("market agents") are they to act in conjunction? What kind of conjunction?
Lengiprogor Competition Team

A. Lengiprogor staff

Leonid N. Puterman, Doctor of Architecture (Chief of group)
Emilia S. Gorbacheva, Architect
Victor E. Polichuk, Architect, Chief Architect of Institute
Natalia E. Volberg, Economist
Yevgeny V. Yudenich, Economist
Valery A. Kim, Urbanist, Director of Institute
Vladimir A. Schitinsky, Urbanist, Chief Engineer of Institute
Nellie P. Ivanova, Architect
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B. Consultants

Nikolai T. Agafonov, Doctor of Geography, Institute of Social-Economic Problems
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Sergei A. Rafikov, Doctor of Economics, University of Finance and Economics
Nora A. Gaidukova, Doctor of Economics, Research Institute Lenniiep
Sergei E. Mozgalin, Doctor of Geography, Institute of Social-Economic Problems
Proposed themes for Lengiprogor/MIT collaboration

as agreed in discussions between L. Puterman, V. Schitinsky (Lengiprogor), M. Dinaburg, B. Slade (MIT), St. Petersburg, 1/22/92


   a. Historic center
   b. Post-revolutionary districts

3. Development zones and projects: locations, criteria, institutions, processes.

4. Social/political questions: citizen participation in planning, processes of decision, existing and new institutions.

5. Aims and methods of planning regulations.

6. Transformation to market conditions: standards, correlations, methods.

7. New flexible building forms and techniques.
St. Petersburg: Historic Center, Potential development zones

1. Under-utilized waterfront site: anchored by passenger port at southern end, large tourist hotel (Pribaltiskaya) at northern. Includes Former military lands, ship repair lagoon.

2. Zoo-park. Still heavily used, but run-down: potential cultural re-development.

3. Finland rail station, flanked by prison complex. Potential mixed-use redevelopment; will be impacted by decisions on Moscow - St. Petersburg - Helsinki high speed rail.

4. "Bridge Square". Abandoned furniture factory and warehouse, adjacent to historic center, and River Neva.

5. Defunct docks and warehouse complex.


8. Frunzenskaya department store. Large complex, recently burned.

9. Institute of Technology.


11. New Holland. Abandoned factory/warehouse complex. Recent development plans and architectural competition have been much discussed, perhaps primarily as how not to do foreign sponsored development.

12. Moscow rail station. Planning underway for consolidation of rail yards, commercial redevelopment; will be impacted by high speed rail decisions.


14. Park Pobeda (Victory Park). Includes a large defunct sports and recreation complex.

15. Victory Park west. Site of a proposed theme park.

16. (Omitted)

17. Wharf, main cargo port area. Could undergo extensive redevelopment as new port facilities are built away from the
city.


19. Renewed commercial district. Currently, a large open-air market.

20. Arzhekov (new residential) area.


22. Ozerko district. Site of recent "experimental" low rise housing development.

23. Zones for potential suburban growth.
Chapter II: Second Phase of the Collaboration
March - May, 1992

Introduction

This Chapter documents the second phase of the nearly one year collaboration on issues of master planning in St. Petersburg, Russia, undertaken between a group at the MIT School of Architecture and Planning, and representatives of Lengiprogor Institute in St. Petersburg. As described in the first Chapter, the work began in August, 1991; a first Report, which introduced the aims and organization of the project, was issued in February, 1992. At the time of this writing (May, 1992), the project is not yet complete: significant steps, by Lengiprogor and the City of St. Petersburg, are still underway. But because the work of the MIT group, under its initial organization and limitations, is substantially finished, this seems an appropriate point at which to summarize the accomplishments of the project.

The primary subjects of this Chapter are the two exchanges which make up the second half of the project:

The Master Plan Workshop at MIT (March, 1992)
Meetings in St. Petersburg (end of March, 1992)

The clearest goal of our collaboration has been to devise a Master Plan Competition entry able to address St. Petersburg’s situation. This would mean, in the first place, some synthesis of the contributing teams’ views into a coherent Concept document; and, secondly, a constructive response to this Concept by the competition organizers. It must be said that the synthesis of views so far is at best only partial. There have been continuing obstacles, both conceptual and procedural, to detailed exchange of ideas. The submission date for the Competition entry was changed from end of March to end of April, 1992; therefore, the last exchange covered in this Report (at the end of March) was less effective than had been hoped. The finished competition entry is still not available for analysis by the MIT group. As for the reception of the completed entry, this also lies in the future. For a variety of reasons, this Competition cannot be considered part of a settled procedure of urban decision and development. The makeup of the jury, extent of public discussion, and criteria for judgement, are still under consideration; there has been no unambiguous commitment that the winning group will be authorized to make the detailed Master Plan. More fundamentally, the future role of a Master Plan is itself unclear. One sign of this can be found in numerous major initiatives (some of which are discussed in this Report) being explored outside the context of an agreed Master Plan. Actions on any of these (ports, airports, power generating systems, new residential neighborhoods, etc.) would have large impacts on master planning possibilities; yet, deliberation is apparently
not being guided by any plan, or planning process, in place. In
sum, the MIT group may indeed be involved in consequential master
planning for St. Petersburg; but whether, how, and when, it is
not now possible to say.

But Master Plan preparation is not the only outcome of
this collaboration. Both partners have seen the co-operation as a
way to explore practical joint projects; for Lengiprogor, given
the drastic effects of transition and government down-sizing on
their formerly secure economic base, the need for such projects
is urgent. Several promising projects are in fact under
discussion: these are documented in the appendices. For the MIT
group, these project discussions are important not only for their
possible practical results, but also for how they further one of
our central goals: the development of models of effective
technical assistance to post-Communist cities. We hope that
explicit formulation of such models will be one of the products
of a continuing involvement with St. Petersburg.

And the formation of a common framework for discussion,
across such disparate experience and concepts, is itself of
value. For the MIT group, not only have the discussions broadened
our perceptions of the range of urban processes and city planning
tasks, but they have also forced us to reflect upon which of our
concepts and practices are in fact fundamental, and hence, of
importance for cities and peoples very different from ours.
The Master Plan Workshop at MIT, March 2 - 6, 1992

Introduction

The Master Plan Workshop was based upon an uneasy compromise between MIT and Lengiprogor interests in this collaboration. It was the most intensive interchange of our work together; since it took place near the competition deadline (originally April 1, only later changed to May 1), there was a need to arrive at usable formulations and proposals. The Russians came with well worked out versions of their Concept's centerpieces, detailed land use maps at the scales of port, city, and region. Because of proprietary interest in what they had brought, they had concerns about how open the meetings would be. In the event, very little of the Workshop discussion dealt with these land use maps: the MIT participants talked mostly about systems, principles, and directions of growth. And our purpose, being in part educational, in part publicizing, called for an event that made some public show, and assumed openness of information. These sorts of cross purposes have been a continuing part of our collaboration, and have shown up also in the details of the discussion. In spite of this, the Workshop proved a consistently engaging event, on both sides. The compromise, though uneasy, served us well.

The topics were largely determined by a list of themes for Lengiprogor/MIT collaboration (see Appendix to Chap. I), which had been progressively refined since the start of our work together in September, 1991. Our general organization was to hold separate morning and afternoon sessions, each devoted to a single topic; topics were paired, with some sense of progression. The Lengiprogor delegation consisted of Vladimir Schitinsky, Lengiprogor Chief Engineer, who had led the Russian group in November's SIGUS Workshop, and Dr. Leonid Puterman, Chief of the Competition team. They participated in every session. Each meeting was chaired by one or more MIT faculty, with Professors Julian Beinart and Gary Hack providing overall continuity. Representatives of the Boston Redevelopment Authority played a prominent part, as did, to a lesser extent, participants from Lincoln Institute and Boston Chapter AIA. Because interest in taking part among MIT faculty was high, it was not possible to reduce the number of formal sessions by combining themes; rather the reverse. Therefore the pace for a five day workshop was rather punishing, with twelve formal sessions in five days.
The Workshop sessions and chairmen:

March 2  Opening, Ports  Dean John deMonchaux, Professor Ernst Frankel
        Property Markets  Professors Jerome Rothenberg, and William Wheaton, Omar Razzaz
March 3  Transportation  Professors Ralph Gakenheimer, Ernst Frankel
        Housing Reform  Professor Eric Dluhosch, Reinhart Goethert
March 4  Historic Center  Professor Julian Beinart
        Development Zones  Professor Gary Hack, Victor Karen (BRA)
        Soviet Planning  Dr. Leonid Puterman, (Lengiprogor)
March 5  Airports  Professor Richard deNeufville
        Means of Public Action  Professor Philip Herr, Michael Wheeler
        Citizen Participation  Professor Michael Wheeler, Tom O’Malley (BRA)
March 6  Residential Building Forms  Professor John Myer, James Kostaras (BRA)
        Closing

Co-ordinator: Mark Dinaburg

On certain themes, the approach of the MIT group coincided with the more physical emphasis of the Russians: it was here that tangible agreements could be made concerning the competition entry. These themes were, above all, ports, airports, and siting of parts of the new central business district. On other themes, the discussions, though most often quite engaged, did not clearly move to conclusions or agreements: one felt more strongly the disparity of experience and concepts between the two groups. These discussions, however, perhaps laid the groundwork for more complex processes of change and co-operation yet to come.
The Sessions

I. Opening, Ports

The first session began with a ceremonial greeting by John deMonchaux, Dean of the School of Architecture and Planning, and quickly moved to substantive business: overview, by Dr. Puterman, of key portions of his proposed land-use maps, with special emphasis on port planning. This immediate focus on ports was in part a response to scheduling needs of the chief MIT interlocutor, Professor Ernst Frankel. More importantly, it was due to the centrality for St. Petersburg of port and trade development, and a surprising directness of Russian - American communication on this subject.

Current port facilities are located near the city's center, leading to pollution and transportation congestion. Facilities are antiquated, and freight volume small (10 -12 million metric tons/yr., compared to e.g. Singapore's volume of over 160 million m.t./yr.). Because of the independence of the Baltic Republics and Ukraine, and consequent loss to Russia of Baltic and Black Sea ports, the port of St. Petersburg must become Russia's main overseas trading center, with expected capacity by 1997 of 140 million m.t./yr (more than 10 times current capacity). Major new facilities must be built.

After discussion of alternative sites (existing port; Viborg; Luzhskaya Bay), Dr. Puterman presented his new port proposals. Their most prominent features included:

* New container and general cargo port on the south shore of the Gulf of Finland, west of Kronstadt dam, near Chernaya Lachta.
* Facilities to be built on islands, located in deeper channels, with causeway links to shore.
* Oil terminal to the west, in Narva Bay; population needed to support this facility (estimated at 50,000 -70,000 people) can be located in nearby town of Ivangorod.
* Major rail links to the two new ports would by-pass St. Petersburg.
* The city's "face to the sea" would be oriented towards the new port, through westward facing landfill on Kronstadt Island, able to accommodate residential and commercial development.

Dr. Frankel, in addition to agreeing with proposed main lines of development, made certain critical points:

* Designs of proposed oil and cargo terminals fail to incorporate current technologies: they need to be far smaller, more mechanized, more capital intensive.
* Estimates of work-force are greatly exaggerated (for example, Singapore's oil facility employs 360 people). The largest part of a new work-force will be involved in service and commercial infrastructure, and maintenance and supply activities: these needs have been systematically underestimated. This reflects...
old style Russian principles of industrial organization and planning.

* Land transport should emphasize oil pipeline (rather than rail tankers), and containers on rail flatcars.

The discussion closed with implications for the city.

(1) For St. Petersburg to become a modern sea-port, the services and facilities that support trade ("intermediation") must be introduced, and located; a master plan should think of where and how.

(2) The existing port occupies valuable urban land: perhaps plans for its phased re-development should include provisions for the growth of these services.

(3) This project, as well as associated trade infrastructure, will involve large private (and foreign) investment, with deep effects upon the city.

II. Property markets

This session turned out to be the best attended, and yet in some ways the least successful, of the Workshop. To our way of thinking, it dealt with the central process (markets) we have to teach them. Our hope was to introduce concepts here, that would come up in many contexts throughout the week. Therefore, the invited MIT participants included two distinguished urban economists. But the gap in experience, and in expectations of what a master plan should include, led to a disappointing exchange. Aspects of markets and their influence on planning may well have become clearer during later sessions; but the phenomenon itself proved too large, ramified, and foreign to the Lengiprogor team, to approach directly, as we attempted to do here.

The focus of the session was on the role of markets in housing and related services (large capital projects, and high profile commercial development, were discussed on other occasions, as were other aspects of housing reform). MIT participants stressed the role of markets in allocation, stimulation of investment, growth of small private producers, and making the population more active for their own welfare; it was also made clear that ownership, and the division of a bundle of rights, can take many forms. Examples were cited of auction or free transfer of occupied units, and new production of middle income units (at medium or low density), as well as private development of residential services and commerce, occurring elsewhere in Russia.

Dr. Puterman acknowledged both the need to reform a distressed housing system, and the usefulness of certain suggested approaches (particularly private production of suburban type neighborhoods, which are proposed in the Lengiprogor plan). He pointed out, however, that in St. Petersburg, debate and action concerning transformation of ownership of existing housing has barely begun (unlike e.g. in Moscow); that the juridical
basis of such transformation does not yet exist; and that, most importantly, the influence of 70 years of ideological training concerning private property, can hardly be undone overnight, but will take two or three generations. His sense of the need for continuity and only gradual change is exemplified in his Master Plan proposal to continue the construction, in several new neighborhoods, of large blocks of publicly financed, kombinat built, apartment towers.

III. Transportation

On the topic of land transportation, Dr. Puterman introduced several key issues, under the general heading of "therapy, not surgery":

(1) The need, particularly acute in the city center, to separate passenger and delivery systems. Concentrated industrial districts grew up during late 19th - early 20th century industrialization in a ring around the historic core; their heavy transport needs conflict with downtown passenger flows. With expected rapid increase in private autos, this conflict will only worsen. Relocation of industry/redevelopment of territory, which is desirable for a number of reasons, will be slow, as will decrease of downtown trips through growth of outlying service/commercial districts. Shorter-term solutions might include systems of one way streets, adaptable public transport (e.g. jitneys, vans), and a separate network of freight roads. Production and use of small delivery trucks (not now produced in Russia) might be encouraged. The extensive, and very heavily used, subway system can be improved with a circumferential or transverse line.

(2) Reconfiguration of rail system. In addition to lines and yards to serve the proposed new port complexes, St. Petersburg’s major initiative will be a high-speed rail link, between Moscow-St. Petersburg - Helsinki. For historic reasons, current lines end in unconnected termini (as in e.g. London or Boston); locating the high speed station near the city center, and establishing a through right of way, presents real difficulties. Alternatives were still under discussion.

(3) Ring road, over the Kronstadt dam. Work on this project is already far advanced; Lengiprogor proposes to continue it. MIT participants questioned its ultimate rationale, and its effect on addressing the ecological impacts of the dam.

Prof. Ralph Gakenheimer raised questions about policies towards private cars. At present, St. Petersburg has ~1 car/60 people, and is already suffering from downtown congestion. In light of the troubled experience with autos of western cities (congestion, parking needs, population sprawl, atrophy of public transport), ought St. Petersburg to take strong steps to limit
increased auto ownership (as in e.g. Singapore)? Government action at this point will be far easier than later attempts to roll back an already swollen auto population. To the Lengiprogor team, this was a provocative idea, but not one they could subscribe to: it went counter to current trends in Russia towards liberalisation and individual autonomy and consumption.

IV. Housing Reform

This session focussed on two aspects of housing: (a) technology of production, and (b) forms of ownership, organization, and control. The Lengiprogor group were primarily listeners in the first part (their chief architect, V. Polichuk, who is most involved in these questions, did not come on this trip; his perspective was missed in several other sessions as well, particularly that on residential building forms); the second part was more of an exchange.

Professor Eric Dluhosch opened with a tightly organized discussion of housing production. His themes included:

(1) Resources: land, labor, materials, finance. In general, among the three variables of housing (quality, cost, and size of unit), gain in one comes only at the expense of the others, unless it is possible to change the prevailing systems of production.

(2) Procurement: what is available; how it is distributed; how value is added (off-site or on-site); how it is paid for; who controls it.

(3) Building industry: in the US, as an instance, there are five, largely separate, branches of the industry: new housing; renovation; small commercial; large commercial; civil engineering. The first three in particular include independent tradesmen, and small to medium sized firms. The growth of analogous firms in Russia seems particularly important to the transformation of its system of production.


Reinhart Goethert began his discussion with some general questions (based upon his work with housing both in countries of the 3rd world, and in Poland):

Is there a housing crisis, or rather a problem to be addressed over time? Should (can) there be a radical new start (as e.g. shock therapy privatization of dwelling units), or rather reform and re-use of existing systems?
What is the priority of housing in Russia's overall needs?

He offered some assertions:
(1) Future patterns of housing ownership will retain significant degrees of communal ownership. We should look for tenure models (along lines of e.g. community land trusts, or limited equity co-ops) to mesh with existing ownership forms, and allow transition to new patterns. Russian housing traditions (czarist as well as Communist) may well call for larger communal groupings than are found elsewhere (e.g. Poland).
(2) The centralized planning system must decrease in power and effectiveness, to be replaced by a multiplicity of actors (owners, producers, developers).

Housing systems in Egypt and Poland were presented as analogies. Egypt, from 1955 - 1973, had centralized planning, nationalized housing industry, mass housing estates. Resources were insufficient for demand, leading to severe shortages; rents were too low to cover even maintenance costs; long waiting lists encouraged corruption, discouraged mobility; production was dominated by state conglomerates (like Russian kombinats). Responses included extended-family households, delayed family formation (very familiar to the Russians), and an extensive informal housing sector (how to translate this into Russian?). This informal sector relied upon sales of privately owned agricultural land, construction by small builders, large scale evasion of regulations, black market in materials (this is easy to translate into Russian). With no effective mortgage system, the sector was fueled by savings, remittances from Egyptian workers abroad, and incremental building. - Poland presents strong parallels, but the informal sector is much less developed (due to, among other causes, more effective state controls, harsher climate, less tolerance for temporary housing). At present, investment in small business presents an attractive alternative to housing investment, which is slow to expand.

These examples suggest the need to open up the housing process. How to prevent chaos, or destructive development? In particular, what becomes of land use regulation? There are simple methods of regulation (as e.g. subdivision plans, or Houston's market-regulated, no-zoning system) which allow many degrees of freedom. A "master plan" can concentrate on the spheres of public action (infrastructure, roads, etc.) and leave wide scope to private initiative; this suits rapidly growing areas (e.g. American west). In a city that is largely built up, with little public money being spent, existing context can set terms of individual regulatory decisions.

Talk of maximizing scope for private initiative is all very well, but, for 70 years, the Communist regime has built a new man, who distrusts individual action, expects communal provision. Might private co-operatives (as in e.g. Austria, or
Scandinavia) be a transitional form for such a society? Perhaps, if regulation, financing, production units, made such forms possible.

Goethert closed with a slogan: If you want to reform housing, don't build houses; build instead processes that allow a variety of housing actors.

V. Historic Center

Dr. Puterman began the discussion. He takes as an aim the return of the historic center to functions of the kind it had before the Revolution. Today, it is filled with museums and preserved palaces. Over 200 years, the city was built according to strong city-building principles (as e.g. the vertical dominance of churches, and strict height limitations between them). During the Communist period, these were in some cases disregarded (churches destroyed); in other cases, as with height limitations, they continued to be strictly enforced (along with notable failure of height limitations elsewhere in the city). The center, however, has become a shell; ways must be found to return it to life, without undermining its character.

As a contrast to a single detailed master plan, Professor Gary Hack suggested another approach: grades of public involvement, for different zones of the historic city.

(a) Historic monumental center (centered around the Peter-Paul fortress and Winter Palace): calling for public ownership, public investment, and restoration of historic character.

(b) "Urban conservation area" (including old residential areas surrounding the monumental center): this needs regulation to preserve a certain texture, but not much public money. There should be scope for private investment. Design review should be an important tool.

(c) Individual landmark buildings, distributed throughout the city, where the public planner is not so interested in the surroundings, but can act to preserve the landmark.

(d) Other areas, calling only for ordinary zoning regulations, not oriented towards questions of design.

The public authority should do only what it alone can do.

Professor Julian Beinart spoke about how the center might be brought back to life. There are currently obstacles to any change at all. Taking Prague as an analogy: the historic center is treated as a single, large, area; there is no clear method of decision on where large private investment could go, so the situation is frozen. Investment requires security of regulation, and knowledge of which resources will be protected. In such a case, an authoritative and detailed master plan map may indeed be a useful document. With investment will come foreign
penetration, which has its costs, real and perceived, to the Russians. Bologna, which has made it an aim to keep access to the city open to all its citizens, may be an important example.

Tony Pratt, of Boston AIA, spoke of the work of civic design review commissions; Schitinsky commented that in St. Petersburg currently, there are many powers and commissions contending with one another: "too many chiefs, not enough Indians".

What kinds of demands, for buildings and land use, will private investment make? In western cities, we can make correlations between population, and various expected space requirements: Puterman is quite interested in these. What of a demand for tall buildings? Can parts of St. Petersburg be allowed to grow tall? (Boston as an example, where tall buildings have been allowed in the CBD and along the western spine.) For Puterman, this is a painful question.

The session closed with Gary Hack's praise of diversity: areas bound together, not simply (functionally) separated, without losing their character of place.

VI. Development zones

This has been a central, and contested, topic throughout our collaboration. Both because international private investment seems to us an essential engine of growth for the city, and because it has special importance to potential western sponsors of our work, the MIT group has emphasized sites and processes for such investment. We are aware that there are no accepted procedures for private development, and considerable opposition. Hence, we have tried to approach the topic piecemeal, through development zones, rather than through a more unified development regime. Dr. Puterman, in particular, has stressed Russian obstacles to such development: fears of foreign domination, popular protest, corruption, mutually cancelling authorities. He hesitates to raise this issue in his Concept proposal; if it is to be raised, it must be with a fine sense of where and how.

Dr. Puterman opened with his view of development zones. To point at a place is easy; to do something there is more difficult. The population, with 70 years of Communist training, is not prepared for this. Working with the population and with local institutions, is essential. Planners, now, must also ask about the mechanism of transformation to private investment: not only how to regulate this investment, but also how to build a healthy process, healthy for the city. We have seen alot of bureaucrats or ex-bureaucrats, taking but not giving, to say nothing of other businessmen. But it is clear that the city alone cannot provide the investment: the city now hasn't even revenue
to keep up old levels of maintenance.

Robert Einsweiler of Lincoln Institute of Land Policy asked about forms of municipal finance in St. Petersburg; he suggested ways in which private development can generate public revenue, including lease and sale of property assets. Puterman replied that business (and municipal) mechanisms have been lost in Russia: they exist only at the street level, and among the "high priests of ideas", and nowhere between.

Gary Hack suggested that, rather than making an inventory of developable sites, we might ask first: what kinds of development do we want to attract? Four categories were offered:

(a) commercial services to support a world trading center;
(b) new commercial services for a regional population;
(c) high technology new enterprises;
(d) cultural tourism.

Of these, the three involving significant foreign use and investment (a, c, and d) were the subjects of the ensuing discussion.

For the first, world commerce, we might look towards a new region, away from the historic center (as with e.g. London’s Docklands), perhaps in new territory freed up by the moving of current port facilities. What of instability, risk management? There are means: US Export-Import Bank; joint ventures; foreign developers building for foreign (hard currency) customers.

Victor Karen of Boston Redevelopment Authority spoke of the interplay of BRA with private investment. The BRA, through its ownership of large sites, can invite in investors through guarantee of exclusive development rights for some period: earlier investment sets the stage for profitable later investment. Over-all strategy is guided by a master plan. A clear example is the development of Charlestown Navy Yard. Analogies to the BRA were mentioned: Chinese Tourist Development Corporations, Port and Turnpike Authorities.

A Tourist Development Authority could manage a range of projects: cultural events and festivals ("White Nights"); canal transportation; small hotels for independent tourists; a convention center; downtown airport center; enticing signage in Latin as well as Cyrillic script. Successful public entrepreneurship may need stability vested in a plan, even a physically elaborated plan, during a time of great institutional change.

What development decisions could the city make to stimulate growth of high-tech industry? Incubators, linked to universities; industrial parks. Perhaps the coastal area between the passenger port and Hotel Prebaltiskaya (#1 on our map of Development Zones), could serve as an incubator, with spill-over
of more mature enterprises into Puterman's proposed south-east high-tech corridor.

Over-all, the city must look for strategies that are self-reinforcing, where some assurance can be given that those whose initial investment sets the stage for future profit, will be rewarded.

VII. Soviet Planning

Dr. Puterman has been a planner of cities, parks, and regions under a fairly stable Soviet planning regime for nearly forty years. He has designed new towns (Tynda, Kogalym); major elements of existing towns (Ulan Ude, Magadan); national parks (Kamchatka, Buriatiya, Karelia); and numerous regional studies and specific design projects. Although, as a native Petersburger, he has a deep knowledge of his city, and serves on various St. Petersburg planning and architectural boards, his current work on the master plan competition is his first design for the city. He is well aware that the conditions of Russian urban planning are changing dramatically. In order for a group of western urbanists to work effectively with him, it might well be important to understand what, according to his views, must change and what will remain the same in his practice. His talk on past Soviet planning presented a chance to pursue these questions.

The session began with an introduction by Vladimir Schitinsky. He is the manager of Lengiprogor's 800 person staff, and has been a prime mover in his Institute's foreign contacts. Up until 1990, Lengiprogor, as a chief design institute of the Soviet Union's Ministry of Construction, received central orders for projects throughout the USSR. The breakup of the Union has greatly diminished Ministerial power, and freed the Republics and regions to organize their own projects. Lengiprogor must compete for contracts to survive. This has pushed the Institute towards a breakup of its own, into quasi-autonomous sections, each with its own specialization; Dr. Puterman's group would be one such section. Foreign contracts, for work both inside and outside the former Soviet Union, are seen as important future sources of revenue and influence.

Dr. Puterman described planning hierarchies, and correlated techniques, from regions, to administrative districts (oblasts), to systems of settlements, to towns and their parts: in principle, these hierarchies governed each level of detailed planning. In practice, the needs of special projects (e.g. Baikal-Amur Railroad in southern Siberia) often dictated unique solutions. These could be heroic and un-economic, such as the new town of Kogalym for the western Siberian gas-fields: pre-cast concrete panels for this forbidding site were brought in on a newly built rail line from 1500 kms. away. It was not the planner's job to evaluate or estimate the cost of these projects,
but to efficiently and artfully dispose the elements called for.

The MIT audience heard this account with a certain degree of amazement, as another instance of Soviet gigantism. They failed, however, to press for the bearing of this practice on what Dr. Puterman understands to be the present tasks of Russian urban planning.

VIII. Airports

Lengiprogor's regional master plan had included a proposal for a new domestic airport at Tosno, some 55 km. south-east of the city. Both passenger and freight service were to be divided between the new facility, and the existing international airport at Pulkovo. Professor Richard deNeufville suggested, on the basis of wide international experience in airport design, and examination of satellite photos of St. Petersburg, that a better plan might be to expand the current Pulkovo airport (which should be sufficient for 20 + years), and hold the Tosno site in reserve.

Among his considerations:

* The configuration of the current airport, with two parallel independent runways, ~1500 m. apart, can support traffic of some 20 million passengers/yr. (Boston's load is ~22 million/yr.) Current traffic is only 3 million passengers/yr.: there is room for a great deal of expansion.
* The existing wide buffer zone between the airport and surrounding development will likewise support much more intensive use of the airport.
* In general, splitting international from domestic traffic is counterproductive: modern hub and feeder systems depend upon efficient connections between long and short range flights. Those few large airports (such as Tokyo, or Washington/Dulles) which are exclusively domestic are increasingly bypassed in favor of international hubs.
* Freight and passenger service likewise need to be combined in a single facility: a high proportion of air freight is carried on passenger flights. Worldwide, there are essentially no important cargo airports.
* Support facilities at the current airport are insufficient for projected heavy use. New facilities, including trade and communication infrastructure, should be planned. Private investment could well help finance needed development.

Professor deNeufville's comments were well received. His approach would save the large outlay needed to build a new airport; it validates, in this case, the foresight of Soviet planning; and, as with ports (another instance of a facility serving equally Russian and foreign users, where world standards and experience are directly relevant), discussion here proceeds
IX. Means of Public Action

The role of public authorities as regulators, as distinct from prime actors, in urban development, is somewhat unfamiliar in Russia. Dr. Puterman has been consistently interested in the content of regulations; he has spoken of the need to compare codes from a variety of systems, as a basis for compiling a new code for St. Petersburg. A more fundamental question, which was the theme of this session, is the place of regulation in an over-all system of public and private action.

Professor Phil Herr began by citing the strong American tradition of private property, especially in land; our belief in the efficiency and equity of markets; and our distrust of (particularly distant) government. Public regulatory intervention is resisted. There is no designated national system, but rather a collection of systems at many levels. We are aware of the costs of regulating, that is, of removing decisions from markets.

US public land-use authority is exercised in three ways:
(a) public authority as owner;
(b) controls outside of market structures: regulation;
(c) offering incentives: tax benefits, regulatory relief. This last joins regulatory and market powers; perhaps it is a wave of the future. Instances are: trading of permission to pollute, or public authority as joint venturer. In each case, the public interest is in a certain over-all outcome, and markets can be used to efficiently allocate the accomplishment of this outcome.

For us, as a planning tool, the master plan as physically based (naming of conditions and states of use for each of the places in the area) is now supplemented or even replaced by systems which prescribe performance standards. These too have their difficulties, as the interaction of different dimensions of performance is hard to foresee.

Michael Wheeler spoke of contests between private property rights, and public interest. In some cases these work together: where stability and protection of my surroundings, accomplished through regulation, offsets the cost to me of obeying the regulations.

How explicit ought rules (however formulated) to be, and how much scope should be left to negotiation, administrative discretion? This might be considered a burning issue in St. Petersburg. Discretion and negotiation seem to imply flexibility, but can be arbitrary, easily abused. Yet, standards remain
political judgments, comparing and choosing, between costs and benefits which are felt by different groups in different ways.

Dr Puterman, who had been listening carefully to an account of a system very foreign to him, asked: how do you document the rights which an owner has in your system? - For the most part, these are not permanent, owned rights, recordable on a deed, but established through systems of transient, often overlapping, regulations.

The session, moving from the general to the specific, ended with a joint discussion of documentation of ownership rights: deeds, cadastral system, recordation, financing. The need to discuss such basic instruments underlined the distance between our respective contexts of action.

X. Public participation

Lengiprogor, and particularly Schitinsky, have been extensively involved in a Soviet-American program on Conflictology; they have tried to apply principles of negotiation and consultation in their planning of national parks in territories with large populations of native peoples, for instance. But participation now, in an embattled Russian city, that doesn’t simply invite stalemate or worse, seems difficult, or doubtful, to them.

Tom O’Malley, of the Neighborhood Housing and Development division of the BRA, talked about how a public authority managed processes of participation. His background is as a community organizer, and CDC (community development corporation) activist. What are the St. Petersburg analogues? He has seen the effects of top down planning; he is willing to give up a degree of efficiency in a planning process, to gain more democratic control.

Dr. Puterman asked about selfishness on the part of public groups. Of course, it is often found (it still may balance professional or political arrogance). To deal with it, the planner must play an active role: build consensus. Extreme elements must be isolated, and seen by others as extreme. - How can a planner find groups with whom to build coalitions? - They must be sought out and cultivated.

To whom are public processes typically open? People in the immediate area; local public media; businesses. Those who actually show up, however, are mostly: the professionally interested; those fearing adverse effects; local institutions; special interests (e.g. historic preservationists); entrepreneurs or businesses which would be effected. Such a process, of course, presupposes political and planning stability.
and decisions. It also, in Boston, relies on local master plans, (as agreed, authoritative documents), and professional planners who run participation processes.

What kinds of documents come out of these processes? Tom O'Malley was able to show the Master Plan for Boston's South End, which had been one of his projects. Its combination of physical specificity, political publicity, and definitions of rules and conditions, made a strong impression on the Lengiprogor team.

XI. Residential Building Forms

Professor Jack Myer has worked with questions of form and space in a variety of high-rise residential environments. Most recently, he has concentrated on redevelopment and expansion in a typical Polish project. The features that have characterized this project over 25 years are certainly familiar to the Lengiprogor group: pre-fabricated panel construction; anonymous open spaces; underprovision (both planned and economically constrained) of services and shops; little scope for individual initiative; heavy subsidy of housing costs; long waiting lists; decline over time of architectural and construction standards. Through slides, Myer illustrated these conditions, and suggested possible alternative directions.

His alternatives included:

* in-fill of existing high-rise areas, in order to re-define public spaces, efficiently use already serviced land, and allow for market-driven development of shops and apartments.

* mid-density row housing, integrated with services and positive open spaces, in areas of the city newly opened to development. These new areas could encourage the growth of new networks of small to medium suppliers, builders, finaciers, and developers.

* for those many recent housing projects where service centers have been planned but never built, a mixture of new master planning, local public authority, public participation, and private investment to begin a cycle of flexible growth.

Jim Kostaras, of the BRA, presented some recent housing redevelopment projects. These projects were in Boston's South End, whose master planning process had been discussed at an earlier session by Tom O'Malley; this increased the impact on the Lengiprogor group of the mix of form issues, community involvement, and BRA action which went into the results. Stress was put on BRA's ability to provide cross-subsidy of moderate income residential projects; the availability of State and Federal subsidies (which could scarcely be matched in St.
Petersburg) was perhaps understated.

XII. Closing

After a relentless five day Workshop, the closing was very brief. Schitinsky spoke of what had most impressed him: concrete proposals for seaport and airport; participation of citizen groups; the manifold work of BRA; and concrete examples from practice in Boston, which he saw as similar in many ways to St. Petersburg. Dr. Puterman talked of his cumulative impressions of the workings of a market economy. Gary Hack suggested that master planning needs a degree of stability, predictability, and social consensus, which perhaps does not now exist in St. Petersburg. Rather than a Master Plan, Lengiprogor might design a "strategic plan", which looks for a small number of key actions, able to shape growth. To the question: what forms of public action, as presented during the workshop, seemed feasible for St. Petersburg, and who might be the actors?, Schitinsky described a possible scheme, with local, experimental variations of a three part structure which includes mayor's representatives, public authority, and private enterprises. With such a flickering vision, the Workshop closed.
Closing visit to St. Petersburg

At the end of March, 1992, the MIT project co-ordinator, Mark Dinaburg, returned to St. Petersburg for a brief visit. The main tangible purposes of the trip were two:

(a) Discussions during and after the Workshop had convinced the participants that the joint project most likely to be funded, and feasible, was planning for new port facilities. Initial contacts on both sides had located officials and organizations whose support would be necessary to develop such a project. The MIT group needed documentation of Russian support to show to American would-be funders.

(b) The Master Plan Competition entries were to have been submitted on April 1. The MIT representative hoped to bring back what Lengiprogor actually submitted as their Concept proposal, as well as some sense of how the Competition was regarded by city officials, and by other competitors.

As it turned out, these were over-optimistic expectations. The competition deadline had been moved forward one month, to May 1; therefore, neither finished maps, nor written documents, were yet ready. Nor were draft documents made available, due perhaps to traditionally guarded Russian work habits. Since the primary focus of the Workshop sessions had been on institutions and processes, rather than on land-use proposals, the unavailability of Lengiprogor's formulated policy positions left a large hole in the evaluation of the results of our work. This hole was only partly filled by general discussion, and by land-use maps in preparation. Discussion of the Competition, with organizers or other competitors, proved not possible. It was clear that the MIT group have acted as consultants to Lengiprogor, who have kept sole responsibility for the completed proposal; and that American and Russian expectations concerning open sharing of information, do not yet co-incide.

Certain concrete results of the collaboration, however, were made clear. These include:

(1) **Ports:** reconfiguration and intensification of both proposed new port sites (general cargo, and oil terminal). The oil terminal is now proposed to include offshore facilities, connected to shore by pipeline. The proposed expansion of Ivangorod (support city for new oil facilities) is to be downsized, following revised projections of man-power needs for a new port. No mention is to be made of phased re-use of existing city port lands: this was felt to be too politically sensitive to discuss at this point in the competition.

(2) **Airports:** proposal for major airport development at Tosno has been abandoned, in favor of expansion and re-development of existing facilities at Pulkovo.
Residential building forms: several new sites for low to mid-density development have been specified. Detailed proposals concerning guidelines, organization, technology, etc. for these sites, were not yet available.

Details of these three themes can be found in the appended maps.

Development authorities: Schitinsky, (who, as Lengiprogor manager, is most concerned with institutional questions) has been formulating organizational schemes for new public development entities; final proposals were not yet ready. Dr. Puterman remains considerably more skeptical of the city’s readiness for any such innovations.

Results were rather better concerning documentation of Russian support for a joint port planning project. It seemed possible that the seeking of such support might conflict with the timetable of the Competition: the proper approach to development of ports and related facilities is a central issue for any master plan, and a serious Competition would surely want to judge among alternatives. This conflict may yet arise. At the moment, there is a multiplicity of authorities and processes of decision in St. Petersburg, more or less uneasily co-existing; the Master Plan Competition is one such, and its ultimate role is not yet settled. In any case, the Vice-Mayor of St. Petersburg, V. Scherbakov, wrote letters in support of both ports and airport planning; these letters have served as an important step towards developing a US-funded project. The drama, and exploitation of contacts, that led to these letters, served to re-inforce one’s sense of the fluidity of the current structures of decision in the city.

That these letters were written, however, and on just these topics, underlined a continuing lesson of this collaboration: the most likely theme for Russian-American joint projects in St. Petersburg is development of trade infrastructure. This is so for a number of reasons: Russian national needs for a port; St. Petersburg’s re-assertion of its historical orientation; American willingness to support trade-related projects; and (not least important) the relative independence of trade facilities and institutions from Russia’s inward-turning social structure. This relative independence is both a strength and a weakness for joint projects. The projects are feasible, but their influence on the city itself may be limited. This suggests a strategy for urban intervention: to begin with ports or airport projects, and, through them, to identify and emphasize those of their aspects able to have deeper influence on St. Petersburg’s urban process. The draft ports planning proposal, included in the Appendix, presents a first formulation of such a strategy.
Appendices

Six sets of documents are here included to illuminate the outcome of phase II of the St. Petersburg master plan project.

1. MIT/Lengiprogor Memoranda of Understanding. These agreements were reached in executive session of the March Workshop. They outline themes of possible joint projects, to be carried out beyond the scope of the current Master Plan collaboration. Of course, such projects require the support of public authorities, and of funders; proposals must be tailored to fit their requirements. The search for such support, and a corresponding definition of feasible projects, is currently underway.

2. Draft Proposal for Ports Development Planning (MIT group). This proposal to the Trade Development Program, US Department of State, represents our most advanced practical project to date. In the absence of Lengiprogor's final competition entry, this may be our best present evidence by which to answer the question: What have been the results of this collaboration?

3. Proposal for Urban Demonstration Projects (Lengiprogor). These proposals, for projects aiming not at international investors and users, but rather at local inhabitants, are Lengiprogor's first concrete response to the understandings reached in March. As with the ports project, discussions with St. Petersburg authorities to generate support for this work have followed a number of channels outside the framework of the competition.

4. Proposal for a Master Plan Study of Cambridge (Lengiprogor). During their visit to MIT in March, the Lengiprogor group was introduced to the Mayor of Cambridge, and given a key to the city. This proposal is a response. It should serve as a reminder (if one is needed), that the flow of information and technique in this collaboration could well be two-way, and that, in particular, the Lengiprogor group is far from thinking that their planning methods have been invalidated by the fall of the Communist regime.

5. Maps:
   (a) Main (Lengiprogor) proposals for greater St. Petersburg development (Map 2);
   (b) St. Petersburg, existing conditions, 1986 (Map 3);
   (c) Main proposals for oblast (regional) development (Map 4).

6. An outline discussion of the possible roles of development authorities in St. Petersburg. As presented, some of
these roles may well be contradictory, calling for trade-offs between them. It is hoped that further practical work can fill out this sketch, and indicate the feasibility and value of variously conceived authorities.
Memorandum of Understanding

Continued preparation of the Master Plan of St. Petersburg

Representatives of Lengiprogor and members of the MIT faculty have collaborated in the preparation of ideas for a new master plan of St. Petersburg, in response to the invitation to present proposals from the City of St. Petersburg. The following MIT faculty (professors and lecturers) have been involved:

- Julian Beinart, Architecture
- Richard deNeufville, Civil Engineering
- Gary Hack, DUSP
- Ralph Gakenheimer, DUSP, Civil Engineering
- Ernst Frankel, Ocean Engineering
- Reinhart Goethert, Architecture
- Eric Dluhosch, Architecture
- Philip Herr, DUSP
- Michael Wheeler, DUSP
- John Myer, Architecture
- Omar Razzaz, DUSP
- Jerome Rothenberg, Economics
- William Wheaton, DUSP, Economics

The collaboration has included consideration of proposals for port facilities, airport facilities, road and rail facilities, residential restructuring and development, development of commercial facilities, conservation of the historic center, parks and recreation facilities, tourism facilities, the design of the city, and other aspects of city development.

The two groups agree to jointly seek funding to support continued research and planning in developing the proposals included in their master plan submittal.
Memorandum of Understanding

Airport Planning

Representatives of Lengiprogor and members of the MIT faculty met in Cambridge, Massachusetts from March 2 - 6, 1992 and discussed the future needs for airport facilities in the St. Petersburg area. We agreed that:

1. A modern airport and terminal facilities, efficiently linked to the city and to industrial enterprises, is a critical component in the strategy of making St. Petersburg the trade and commerce center of Russia.

2. The current Pulkovo Airport is well located, and it appears that it can be developed to accommodate 20 to 30 million passengers per year.

3. It is important to prepare a long range master plan for the Pulkovo Airport, to guide its development.

4. Such a master plan should be based on a detailed analysis of current and future trends in international and national air travel, freight potential, environmental impacts, and future air technology.

5. This analysis and planning could avoid unnecessary expenditures in new airport construction and potential transfer problems between airports if investments are spread across facilities.

The MIT faculty team is prepared to collaborate with Lengiprogor in studies and planning for St. Petersburg's airport facilities. The MIT faculty will include:

Richard deNeufville
Ralph Gakenheimer
Julian Beinart
Gary Hack

The two groups agree to jointly pursue funding to support this work.
Memorandum of Understanding

Planning of the Port of St. Petersburg

Representatives of Lengiprogor and members of the MIT faculty met in Cambridge, Massachusetts from March 2 - 6, 1992, and collaborated in preparation of proposals for a new master plan for St. Petersburg. The following conclusions were reached:

1. St. Petersburg has the potential to become the new trade and commerce center of Russia, oriented to the west.

2. Creation of a modern port, with adequate loading and multi-modal transfer facilities, is critical to becoming such a center. We imagine the new port as having a capacity of approximately 140 million metric tons annual throughput.

3. There also appears to be potential for creating a new oil export terminal in the St. Petersburg area.

4. The success and economic importance of a new port will depend upon the ability to develop new business services in St. Petersburg to support commercial activities of the port.

5. Creation of the new port will release valuable lands that could be used for new commercial development including a new international business center.

6. The capital for construction of the port and international business facilities can be largely raised from private sources in the maritime and development industries.

7. Planning for the port and associated facilities needs to proceed immediately, to realize the city’s competitive advantage and solve the critical need created by the international political realignments which have resulted in the loss of Russia’s other European port facilities.

The MIT team and Lengiprogor agree to collaborate on detailed studies necessary to examine the feasibility of new port and commercial facilities, and prepare master plans and detailed project plans. The MIT faculty team will consist of:

Ernst Frankel
Ralph Gakenheimer
Julian Beinart
Gary Hack
Memorandum of Understanding

Mixed use development

Representatives of Lengiprogor and members of the MIT faculty met in Cambridge, Massachusetts from March 2 - 6, 1992, and discussed the future needs of retail, office, and residential environments in the St. Petersburg area. We agreed that:

1. St. Petersburg has the potential to become the new trade and commerce center oriented toward the west.

2. One of the important components of this international role for the city is to build new office, retail, and residential space, in both urban and suburban areas of the city, which is attractive and comfortable to both westerners and Russians.

3. To do this, there is a need to have a building and design system for achieving an urbanism and architecture that can make such products.

4. Experience in Poland has shown that large pre-cast units are not sufficiently flexible in their use to permit such products.

5. There is however in Poland, and to some degree in Russia, the capability of small developers/builders; in Poland they have produced some 40% of the housing stock. It is thought that, building on such strengths, St. Petersburg can additively approach the urban and suburban aggregations required.

6. This requires an approach which includes planning, design, development institutions, development management and finance.

7. Further, it will require a new distribution system for building materials in the St. Petersburg region.

The MIT faculty team and Lengiprogor agree to collaborate in planning, design studies, the organization of development processes, and the search for financing of such development. The MIT faculty team will consist of:

John Myer, Architecture
Reinhart Goethert, Architecture
Christie Baxter, DUSP
John Crowley, Architecture
Julian Beinart, Architecture
Gary Hack, DUSP
I. Objectives

The aim of this preliminary proposal is to seek support for a development study of a system of ports, freight logistics, and related facilities in St. Petersburg, Russia, able to handle the expected increase in Russia's seaborne international trade.

With the dramatic recent changes underway in the former Soviet Union (turn towards markets, independence of Baltic Republics, break-up of East European socialist trade bloc (CMEA), need to expand openings to the West), it is clear that large resources must be dedicated to rebuilding St. Petersburg's trade infrastructure. Financial crisis, shifting structures of authority, and relative isolation from world trading technologies and systems, hamper the ability of the Russian authorities to effectively plan for this rebuilding. The nearly one year involvement of the MIT St. Petersburg Group with issues and institutions of master planning in the city, has convinced us that we can play an important role in helping to formulate policies necessary to bring St. Petersburg (and through it, Russia herself) back towards the mainstream of the world economy. In particular, our work will aim at the development of a St. Petersburg ports/logistics system which can serve as an effective gateway for trade between Russia and the US.

II. Introduction and Overview

A. Historical Background

St. Petersburg was founded as Russia's window to the West. For 200 years, it served this function, economically, militarily, and culturally. On the eve of the Russian Revolution, it was one of Europe's great cities, as deeply involved with the life of the Baltic basin and northern Europe, as with its own Russian hinterland. Development of trade and industry, involving both Russian and foreign capital, was dramatic.

The Communist period was especially hard on this city. When Moscow was made the capital, the ruling institutions of St. Petersburg (later, Leningrad) became dependent on distant central offices. Stalinist autarky, followed, after the Second War, by the CMEA trade bloc, shrank the volume of ocean borne trade, and all intercourse with the West. The 900-day Blockade during the
Second War took a terrible toll on the city’s people and physical fabric. The main lines of development after the War aimed to strengthen the city’s technically advanced industries, which have been closely tied to the military establishment. These technical industries now present a challenge of conversion, relocation, restructuring, or closing: most cannot survive in their present form. Over-all, connection with the West was not encouraged: neither trade volume, nor port facilities, nor trade services, were well developed.

The break-up of the Soviet Union has had two central effects on the city: (1) The importance to Russia of St. Petersburg as a trading and shipping center, is greatly magnified. Both the perceived need to re-integrate with the world economy, and the loss to Russia of the other Baltic ports, make the development of St. Petersburg’s trading capacity, a high national priority. (2) At the same time, the decentralisation of national power has allowed St. Petersburg to claim a more independent role for itself. This was expressed as early as 1990 in proposals for a Free Economic Zone, growing through interchange with the West. The city is re-asserting its historic orientation. In addition, the government of Mayor Sobchak exercises wide powers, and perhaps is more inclined and able to co-operate with new forces, than are the Russian central authorities. - The interplay between national and local agendas for the city, is, of course, complex and not resolved. Both, however, agree on the priority of developing St. Petersburg as Russia’s world trading center. This means, in the first place, major re-working of its port facilities.

B. Port system

The port of St. Petersburg, (as shown in Maps 1 and 2), is located in a restricted port basin, adjacent to the inner city. Both land and water access are severely limited. It consists largely of an array of very old, traditional cargo handling facilities. It can only accommodate medium sized vessels, of ~20,000 DWT or 10 m. of draft, and has no modern container or bulk handling facilities. As a result, it is largely served by feeder vessels or medium-sized Russian multi-purpose vessels. The total volume of cargo handled by the port in 1990 was of the order of 14 million tons, of which about half consisted of bulk cargo (mostly dry bulk such as foodgrains). There are no modern silos or large capacity grain handling facilities.

Long distance transport by rail, and local distribution/collection transport by road, are both severely hampered by lack of adequate infrastructure, facilities, vehicles, organization, and management. The current location of the port, next to to the city center, increases transport congestion, and precludes effective expansion.
The present port facilities also stand as an impediment to re-organization and growth of the city itself. Centered in the Kirovskii and Leninskii districts, just southwest of the city's historic core, they monopolize territory potentially quite valuable for location of new services and commerce, waterfront development, and new residential areas. Port development will most likely have to occur at new sites, west of the Kronstadt dam.

It is conservatively estimated that the port and logistics system of St. Petersburg will have to handle ~140 million tons of cargo by 1997 (ten times its current throughput volume) if it is to effectively serve as Russia's major gateway for international trade. This large increase in demand is the result not only of Russia's exclusion from ports in other newly independent republics, but also of the expected redirection of Russian trade from the CMEA bloc, to Western Europe and North America. Of total trade volume, some 85% was transported by rail and pipeline in 1990; by 1997, sea borne traffic to/from overseas partners is expected to make up over 60%.

The general tasks of planning these new facilities include: (1) needs assessment and traffic forecasts (2) survey of sites (3) hydrology (4) land transport infrastructure survey (5) port facility survey (6) conversion and development planning (7) economic and financial appraisal (8) strategies to develop service/commercial infrastructure (9) port/logistics plan and investment requirements (10) management and operational plan. Our proposal will address each of these tasks.

III. The MIT St. Petersburg Group

The MIT St. Petersburg group brings together senior faculty from the Departments of Architecture, Urban Studies and Planning, Ocean Engineering, and Civil Engineering. Between them, they have extensive world-wide experience in planning of ports, airports, transportation infrastructure, urban master plans, development zones, and waterfronts. The group was formed in 1991 to collaborate with a leading Russian urban institute, Lengiprogor, on a proposed major revision of the Master Plan of St. Petersburg. Our work on the master plan has shown that comprehensive ports and trade facility development will be the central initiative for the city's revitalization; this is the focus of our proposal. We see this proposal as part of a continuing engagement with the city of St. Petersburg, and with the wider issues of planning and technical assistance for the former Soviet Union.

A. Background

MIT's School of Architecture and Planning has a well-
established tradition of study and intervention in cities throughout the world. Beginning in the 1960’s, its involvement in developing countries has been particularly strong. The collapse of Communist power in eastern Europe from 1989 offered an opportunity to bring to bear urban skills and understanding, in a distinctive part of the world, which was newly open to practical co-operation with the West. Learning from successes and failures in previous development work, we proposed to try out, and to formulate, effective models of technical assistance, and of autonomous change, for post-Communist cities.

Among the School’s first initiatives in this area was the SIGUS Poland project, begun in 1990. The project’s focus has been on housing reform, public planning for commercial development, and the framework of municipal land use decisions; it has received continuing USAID support. Members of this project found a means to expand their work to the Soviet Union in an invitation, from a large Leningrad state planning institute, to collaborate in a competition to revise the master plan of the city and region of Leningrad.

In May, 1991, the Mayor and Council of Leningrad, seeking an urban planning response to increasingly rapid change in Russia, announced a competition for a new Master Plan of the city. Of the four Leningrad planning institutes invited to take part, one, Lengiprogor, through previous contacts with MIT’s SIGUS Poland project, proposed a collaborative entry. The St. Petersburg group was formed at MIT in response to this invitation. Beginning in September, 1991, through intensive workshops, delegations, and ongoing consultation, the group has been engaged with Lengiprogor in formulating proposals across the range of St. Petersburg’s master planning issues. The joint entry is to be submitted at the end of April, 1992; results of the competition are expected to be announced this summer.

During our work on the Master Plan, we found development of the port and related systems to be the city’s highest priority; in addition, it has been a topic on which direct exchange of views is least hampered by divergent presuppositions. The urgency of this project is reflected in conversations Lengiprogor has carried on, outside the frame of the Master Plan competition, with those responsible for ports decisions: the office of the Mayor of St. Petersburg, Russian Ministries of Construction and Transport, and the Baltic Shipping Company. All four have responded with interest to the Letter of Understanding on Port Development between the MIT St. Petersburg group, and Lengiprogor; the Vice Mayor’s written response stressed his office’s desire to move quickly on this project. These responses, and the close working relationship established with Lengiprogor, have convinced us that we can make a valuable contribution here.

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B. Qualifications

Members of the MIT St. Petersburg group have directed a wide array of urban and transportation planning projects. Among these are: over 60 ports (including Singapore, Shanghai, and Melbourne); 12 North American waterfronts (New York, Montreal, Vancouver, among others); transportation infrastructure in Cairo, Jakarta, Guadalajara, and other cities; master planning in Riyadh, Jerusalem, and Prague; and numerous more circumscribed urban development projects. The Institute’s libraries, design studios, computer facilities, laboratories, and research and support staff, are of course well equipped to aid in the proposed work.

Lengiprogor, our principle collaborator in St. Petersburg, has extensive experience in planning of new and existing towns, ports, and transportation systems, throughout the former Soviet Union. Established in 1927, their staff currently numbers over 800 specialists. Their knowledge of local conditions and current planning approaches, data banks, survey and design facilities, and access both to specialists and political and economic authorities, will be invaluable to a successful project.

C. General approach.

We are concerned with the over-all development of St. Petersburg as a world trading center. This development must be anchored in new ports facilities; but it depends also on new urban systems, of transportation, service and commerce, land use, administration, and finance. In addition to thorough evaluation of needs, sites, sea channels, and land transport networks, our proposal stresses certain urban issues:

1. St Petersburg’s growth as a trade center requires greatly expanded service and commercial facilities. This expansion in turn depends on effective physical planning of appropriate development zones in the city, and proper management, financial and political, of these zones. We will stress means to carry this out. Redevelopment of portions of the existing port facilities, or of redundant military territories on Vasileostrovskii Island, may offer good sites for this expansion.

2. The development of the port and related facilities will be a complex undertaking, involving co-ordination of large private investment, more or less autonomous Russian enterprises (Baltic Shipping Company, Oktyabrisky railroad), and several quite distinct levels of government. This co-ordination must occur in a context of unclear and often contested relations of authority. Some form of port authority, with clearly defined powers and limitations, may be an appropriate means to organize
this work. Our project is prepared to offer technical assistance on organization, drawing on wide experience with public authorities and super-agencies.

3. Port development, and the city’s reorientation as a trading hub, will be St. Petersburg’s central initiative for the near future; but this depends upon, and will effect, a broad range of urban issues. The MIT St. Petersburg group, through its involvement in master planning, and expected proposals for selected demonstration projects, is developing a detailed grasp of how change may be effected in the city. Connections between the ports planning project, and our other work in St. Petersburg, should not only strengthen our work on ports, but increase the influence of successful co-operation between the US and Russia, and between private business and public authorities.

IV. Work Statement

This project differs from many other port, logistics, and regional planning efforts: it not only involves a great degree of urgency, but must be accomplished in an environment of fragmented authority, economic decline, and disorder. Successful planning will require collaborative effort to pull together the various interests, in order to assure that an evolving plan will not only be accepted, but that institutions can reform to support the city’s new functions. It will be necessary to work incrementally: to develop a clear, realistic, short-term improvement plan, which can serve as a stepping stone towards master planning an effective port and logistics system. This must include planning of physical and operational port and logistics systems, and also the development of financial, trading, communication, repair and maintenance, supply, and related systems.

Because of the special needs of consultation and consensus, we propose to divide our work into two phases:

Phase I: Survey and clarification of conditions, needs, options for development.

Phase II: Detailed development proposals.

We would underline two preconditions of success:

(a) Planning materials, data, and systems, have been, until most recently, closely held. In order to gather information and understand currently operational plans, a planning group needs the full co-operation of a properly placed Russian planning institution. Our collaboration with Lengiprogor has laid the foundation for this necessary co-operation. We will rely on their knowledge, resources, and access, to carry out our joint work.
(b) Fragmentation of authority, suspicion of collaboration with Westerners and with private investment, present real hazards to joint planning efforts, especially those dealing with trade development. It will be most important to establish clear lines of communication with those Russian authorities whose decisions will ultimately shape the port. This communication has already begun, as evidenced by official responses to our joint work with Lengiprogor. Our connection with Lengiprogor, and through them, with responsible Russian authorities, convince us that this project can gain the full and effective support of the City of St. Petersburg, and the Russian government.

A. Phase I

1. Survey of layout and facilities of existing port, as to land use, ownership, infrastructure, soil and water conditions, buildings, storage areas, equipment, and land and water access.

2. Forecast projected traffic by ship type, cargo type, and shipment method.

3. For sites considered for new port development, survey existing population, land uses, resources, open space, and transportation access. Delineate existing authority structures, and possible transformations in response to major development. This will include both land and off-shore water sites.

4. Map major regional land transportation networks, and possible variants to serve projected new port functions. Determine line capacity, infrastructure, and equipment conditions.

5. Project demands generated by new trade and port capacity, for service and commercial facilities, housing, transportation, and related facilities. Survey sites, and structures of authority and financing, potentially able to respond to these demands.

6. Establish options for conversion and re-use of existing port lands, as to possible phasing, structures of control, and development programs; indicate connections with main lines of the city’s master planning.

7. Survey existing structures of authority and finance for port development. Estimate existing obstacles, and possible restructuring, to accomplish development and management of new facilities. Develop alternative ownership/operations management plans, including privatized and commercialized port or terminals.

8. Perform feasibility study and preliminary financial and economic appraisal.

B. Phase II
1. Develop **detailed port layout**, establishing equipment and facility requirements, and operational port activity plans.

2. Develop **port investment plan**, including facility and infrastructure development plan.

3. Establish **preliminary port facility technical specifications**.

4. Prepare **development options** for re-use of existing port lands, including programatic and design guidelines, and possible means of organization.

5. Recommend **sites and means of development for new service and commercial facilities** required for functioning of new ports.

6. Provide **general land use and planning guidelines for new harbor sites**.

7. Prepare **phased transportation plan**, for new port sites, and for redevelopment of port and waterfront sites in the city itself.

8. Make **staging and implementation proposals for land development**, co-ordinate with projected timetables for port and trade development.

V. Work plan

Month 1

Definition of research and planning tasks, co-ordination with St. Petersburg counterparts.

Month 2

**MIT delegation** to St. Petersburg: Ports team (Frankel, two assistants); Urban team (Beinart, Dinaburg, one assistant). With Lengiprogogor group, survey available data, site conditions, demand projections, existing development plans. Establish communication with relevant authorities. Determine needs for special studies; prepare co-ordinated research agendas for Lengiprogogor and MIT groups.

Months 3 and 4

Compilation, preliminary analysis of findings. Production of reference maps and graphs. Special on-site studies; co-ordination with parallel work of Russian counterparts. Two-person MIT
delegation to St. Petersburg at end of month 4, for consultations, gathering of local results.

Month 5

Preparation of Phase I documentation, findings, and Report, at Lengiprogor and MIT. Four person MIT delegation to St. Petersburg, at end of Month 5, to present and discuss findings and Phase II plans with Russian counterparts. Implementation of Phase II preparatory steps.

Month 6

Final preparation of Phase I Report, presentation to Trade Development Program and Port of St. Petersburg. Drafting of detailed proposals for Phase II.

VIII. Summary: Value of this project for TDP

During our work to date in St. Petersburg, it has become quite clear that major planning and development of new ports facilities will soon take place. In fact, it seems to us that the urgency of this project is such that any agency seeking a leading role must be prepared to act with dispatch. Why ought the Trade Development Program to play such a role?

1. St. Petersburg is to become the main trading outlet and commercial center between Russia and the West. Delayed or ineffective port development could undermine its ability to play this role, with serious consequences for the economy, level of co-operation with the West (particularly with the US), and political stability, of Russia herself.

2. In Russia, as in Eastern Europe as a whole, there is intense competition for influence, investment opportunities, and market share, among the Western trading nations. In those countries and regions oriented towards overland trade, continental European nations (Germany, Italy) have an inherent advantage in this competition. St. Petersburg, as the major port and trans-shipment point of Eastern Europe, offers the US a unique opportunity to begin to redress this balance. American involvement in planning and implementation of port and trade development would serve as a point of entry for US business: shipping and engineering firms, heavy and cargo handling equipment manufacturers, computer and communication equipment firms (areas in which the US leads the world), and land developers, as well as for the import/export firms who would follow them. Through the port, trade with the rest of Russia can be strongly influenced.

3. Due to the Cold War, American cooperation with, and influence upon, Russia's development, has been quite restricted.
The fall of the Communist regime offers new opportunities; these, however, are limited by residual suspicions, mutual unfamiliarity with one another’s modes of organization and operation, and the absence of a background of successful joint projects. Effective joint port planning can have important impacts on each of these limits. The MIT St. Petersburg group, as part of a world class research and educational institution, is favorably placed not only to carry out such a project, but to reflect upon and generalize its conditions for success. The influence of this project can extend well beyond its immediate focus.
I. Proposals to MIT group, led by Prof. John Myer, in response to Memorandum of Understanding on Mixed Use Development

by L.N. Puterman,
V.A. Schitinsky,
Lengiprogor

March 31, 1992

According to our discussions in Cambridge, we hereby suggest three themes of principal importance for St. Petersburg, for possible joint projects by the MIT group and Lengiprogor Institute.

Theme I. "Renovation of groups of blocks, in late nineteenth century residential and industrial sections of the northern part of Moskovskii District." This project could realize our idea of consecutive transformation ("adaptive re-use") of historical residential and industrial areas, into zones of residential and commercial re-development. The practicality of this theme is based upon the prime location, and currently non-effective use, of territories situated between the city's historic center, and the residential blocks of central Moskovskii District. These should be considered as part of the city's downtown.

Theme II. "Experimental model of planning and building blocks of middle density, low-rise flats, and free standing cottages, for new districts of St. Petersburg." This project has to solve a complex of problems that arise when a new district is formed, taking into account the creation, under market conditions, of a new system of social services.

Theme III. "Creation of service facilities which are necessary for the development of a market system, in existing recently built residential districts." This work has to make up the deficit, in design and in quantity, of the structures needed to support services. It will propose architectural and planning directions for construction and organization.

We welcome your comments on the themes.

II. Commentary

M. Dinaburg
MIT

A. Lengiprogor is here seeking to define possible themes for fruitful, fundable, joint demonstration projects. General criteria for such projects include:

(1) They must demonstrate modes of organization, planning, or design which can be important in the transformation of St. Petersburg's urban system. The principles demonstrated must be
new to the city; unlikely to arise through existing processes (i.e. in need of intervention); able to spread, once having been demonstrated; and part of a larger strategy of transformation.

(2) The projects themselves must be clearly defined, relatively small scale, and feasible. Sponsors, investors, regulators, abutters, and users, must be able to support the work.

(3) There must be sponsor(s) whose purposes are served by the demonstration.

Whether specific projects, satisfying these criteria, can be formulated according to Lengiprogor’s themes, depends upon the outcome of future work.

B. Some details of the three proposed themes:

Theme I. The rapid industrialization of St. Petersburg in the late 19th - early 20th centuries, led to the growth of a band of new districts around the historic center. The northern part of Moskovskii district is among these. The city’s renewed growth during the 1930’s was concentrated just to the south of this area: showpiece public facilities and substantial residential blocks were built along the Moskovskii Prospekt axis, which was to become the new city center. This left the earlier industrial, warehouse, and residential blocks uneasily sandwiched between two "city centers".

A major challenge for St. Petersburg will be industrial relocation and re-structuring, for reasons of profitable production, ecological protection, and re-allocation of urban territory. The first Theme speaks directly to this challenge. Territory currently occupied by obsolete or dangerous industry can (after plant closing or relocation) be re-used for functions which serve and connect the two adjacent "downtowns". In particular, opening of this area to commercial redevelopment and modern business activities, may relieve certain development pressures on the city’s historic center, which Lengiprogor is anxious to protect.

Puterman and Schitinsky were struck with adaptive re-use of industrial and warehouse districts in East Cambridge and Cambridgeport: these areas have seen rapid growth of high-tech industry, as well as of back office functions. Their proposed theme looks for a way to stimulate this growth in St. Petersburg.

Theme II. Lengiprogor, in their Master Plan Concept, have proposed a number of new medium density residential districts. Most are suburban; some few are urban in-fill. (Other urban sites in their proposal are to be built at high density, according to
recently prevailing slab high-rise patterns.) Of the two building types mentioned for these new districts: (a) detached cottages with gardens can be a transformation of current country dachas, or of village types; (b) low-rise flats may draw on the example of Khruschevka blocks, typically five stories (the maximum residential height without elevator), or introduce articulated row housing, which has been quite foreign to St. Petersburg.

Development of such districts raises questions about the start of suburbanization; it seems, however, likely that market conditions entail weakening of controls and outward spread of the newly wealthy classes. This kind of development, especially with its supporting commercial facilities, could very well be market driven, not subsidized. A demonstration project of this sort could also stimulate small-scale, private, production and supply networks.

Theme III. This seems the most daunting of the three proposals. The need is great, but available resources very few. Newer, bleak residential neighborhoods are likely to need major subsidies, for maintenance, re-organization, rents of poorer people, to say nothing of rebuilding, repairing the environment, or providing services. Subsidies seem to sit badly with US funding sources; therefore, the likelihood of a US sponsored project on this theme is slim.

These neighborhoods themselves, and their needs for transformation, remain as a huge potential task for the city. Proposed policies of privatization of individual flats, re-organization and ownership changes of blocks and projects, misestimate financial and institutional resources. What approaches remain, aside from piecemeal reforms or benign neglect, is not clear.
Proposal for a Master Plan study for Cambridge, Massachusetts
Dr. Leonid Puterman, Lengiprogor

During our stay in Cambridge, we were given a chance to make acquaintance with the town itself, and with plans for reconstruction and renovation of its buildings.

We found Cambridge to be a town of mixed historical development, where modern buildings are tightly intialeced with residential and industrial areas having deep historical roots. We were aware of the undoubted success of the town’s development. But at the same time, being city planners, we began to form the idea of a multifunctional town-planning project for Cambridge, which might present to its population and authorities a flexible conception of the town’s development in time and space. This could combine consideration of environmental priorities, modes of living, and current legislation, with tactics and strategies of town-planning.

Naturally, the task is rather complicated. But a planning conception for Cambridge can allow the presentation of an algorithm for the solution of separate problems.

Lengiprogor Institute proposes to provide creative support to the town’s authorities, and to work out a master plan for the town in conjunction with local organizations and firms. We realize our proposal is not traditional. But the town’s originality gives grounds for thinking that such an experimental planning project could be expedient.

What might Cambridge hope to see as part of such a planning conception?

1. Actual and possible use of territorial resources might be determined, based upon a multi-factorial complex analysis of modern land-use patterns. Integral characteristics may be represented by algorithms of functional town zoning.

2. A program of planning works for certain periods of time can be prepared in correspondence with election terms of the City Council (perhaps until the period 2000 - 2005).

3. A basis can be created for architectural and compositional development of the town’s built structure. This should be tightly connected with changing land values, as well as with the historical, architectural, and cultural potential of the town.
4. Volumes and functions of the underground infrastructure can be determined, according to current and possible development.

5. Sections will be included on social, infrastructural, transportation, and other aspects.

The proposed experimental conception may be worked out on a non-currency basis, covering only direct expenses for transportation, room, and board of the specialists.
Main proposals for greater St. Petersburg development

1. Medium density, low rise residential buildings, instead of standard 12 story + slabs, as currently planned.

2. Park zone, replacing any existing dachas and private gardens.

3. Light lines indicate a current planning proposal to be rejected: Natural Preserve/Forest Preserve to be established instead of residential expansion in the Primorskaya district. Preserves to include extensive wetlands and bird sanctuaries.

4. Dense residential micro-raion (9 - 12 story slab buildings) already constructed.

5. Existing small town (Olgina Lakhta), with wooden, cottage type buildings, to be preserved, incorporated into park/dwelling system.

6. Heaviest dark lines ("a") indicate rail beds and marshalling yards; new high speed rail line is shown by a thinner dark line ("b"). Proposed Ring Road is shown by lighter parallel lines ("c"); this continues over the Kronstadt dam. In part, these three systems will run parallel in single rights of way.

7 & 8. Newly developed residential area (Maly Divetkina), primarily for returning Army families. Medium density walk-up buildings, perhaps incorporating cottage-like features.

9. Green zone (forest parks) surrounding new areas of city.

10. Park zone (Bolshaya Okhta river) within new residential region.

11. Kronstadt dam, carrying new ring road.

12 & 13. Small infill development area, surrounding existing crematorium.

14. Existing suburban small town (Ceveleshka) maintained as distinct area.

15. Industrial relocation park, for factories moved out of city for ecological, economic, or development reasons.

16. New residential zone (20 kms. to city center) for relocation of workers in new industrial zone. To be a separate administrative unit; buildings to include detached cottages with gardens (good agricultural land).
17. Existing waste dump; location to be maintained, facilities upgraded.

18. Pulkovo Airport: following suggestions of deNeufville, to remain main passenger/freight terminal for both domestic and international traffic. Enlarged service infrastructure and expanded residential region for workforce included in future development.

19. New municipal construction site, continuing to use existing designs, technologies, and building organizations (9-12 story slabs, built by Kombinats). This area, largely surrounded by major rail lines, is something of a "backyard of the city".

20. Railway switching yards.

21 & 22. Historical towns of Pushkin and Pavlovsk, preserved.


24. Existing port lands; no current proposals to phase out port functions; this can only be considered after construction of new facilities.

25. Light line indicates previously proposed landfill and development of port facilities: this to be rejected in favor of port relocation west of Kronstadt.

26. New land fill, residential micro raion, using existing building techniques, as in (19).

27. Infilled urban park.

28. New mid- to low-density residential areas; mixed building types, services, as in (16).
MAIN PROPOSALS FOR GREATER ST. PETERSBURG DEVELOPMENT
Map 4
Main Proposals for Oblast Development

1. New cargo port complex at Chernaya Lachta: off-shore docks, connected to land transport by causeways, freight lines.

2. New oil terminal at Narva. In submitted Concept proposal, the facility is much smaller than shown on this map.

3. Major new rail lines, to serve port.

4. Existing port facilities.

5. Proposed land-fill, extension of Kronstadt Island, as St. Petersburg’s most visible sea-face.

6. Existing Pulkovo Airport: to be expanded at current location.

7. Possible site for airport expansion (freight, rather than passenger, loads) -- abandoned in final proposal, in favor of further development of existing Pulkovo site.

8. Viborg harbor: for use of coastal vessels only.


10. Projected economic/population growth corridors, along lines of existing rail.

11. Kronstadt Dam: to be maintained largely as built, with ring road to be completed over it.

   Major growth poles:

12 & 13. Tosno and Chudove: Centers of a (perhaps high-tech industry) growth corridor.

14. Lodejnoe pole, along the Svir River system.

15 & 19 Gostilitsi and Ivangoord, part of the (secondary) western growth corridor.

16. Krasnobirski

17. Zaborye: major freight transfer point.

18. City of Novgorod: closest large city to St. Petersburg
19. Ivangoord: to become service city/population center for oil port at Narva.

Key to Symbols:
Limits of St. Petersburg agglomeration

Oblast borders
St. Petersburg Development Authorities

M. Dinaburg, MIT

At the simplest level, our collaboration has been a consulting relation concerning a specific project. The MIT group have acted as consultants for Lengiprogor's concept master plan of St. Petersburg. I have acted as scribe, but also as consultant. For Lengiprogor's proposal, I would like to argue in favor of an emphasis on, and a general approach towards, St. Petersburg development authorities.

Let me begin with Lengiprogor, or, more particularly with Dr. Puterman. The Master Plan Concept is is finally his proposal. The proposal as such is not (yet) available to us, which forces a certain amount of speculation in my discussion here with him. But since I hope to continue some work with him, the question still holds: What do I want to advise him as consultant? - That he ought to pay special attention to the work of development authorities, approaching this work along certain lines; and that this would have broader (beneficial) effects on other aspects of his master plan proposal.

Why development authorities?

1. As necessary partners, with non-state actors, in transition of urban systems.

2. As market actors, on behalf of the city's patrimony, and able to mobilize large investment.

3. As self-financing entities.

4. As able to cross-subsidize certain social needs.

5. As training grounds for urban planning, sites for technical assistance, and strongholds of urban technocracy.

6. As sites for variant models: some experimental action.

7. As means to distinguish between planning areas having different kinds and degrees of (physical) determination.

A different, though overlapping, set of considerations would be appropriate for an American audience: the MIT consulting group, or policy makers, or potential funders.

Why emphasis on development authorities?

1. As counterparts in any large-scale investment project.
2. In order to establish (relatively) transparent, legitimate processes of decision.

3. As agents of privatization.

4. As self-financing.

5. As a means to establish, progressively, what kind and degree of state ownership and intervention in urban processes, will suit this city.

6. As training ground for urban planning and management.

If these are convincing arguments to their respective audiences, what sorts of institution and action would do what is asked for? What are the dimensions of performance according to which to evaluate specific proposals for development authorities?

1. Privatization: towards growth of non-state ownership, market relations.

2. Entrepreneurship: able to effectively act in public interest.

3. Cross-subsidy: commercial development to subsidize infrastructure, public monuments, social needs.

4. Transparency, democratization: "public participation".

5. Immunity from self-perpetuation, corruption.

6. Master planning: that the outcomes of decisions and plans, enhance the city.

7. Replicable models.

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