

# **Table of Contents**

Table of FiguresTables	
Abstract	
Abstract (Italian)	8
Introduction	9
Definition of a scope	10
Political dimension	11
Public choice theory	
Rational Ignorance	
Collective action problem	
Special Interest Groups	
Bounded rationality	
Space of possibility	
Political Set in Russia: Main Concepts	
General features	
Urban regime in favor of a infrastructural change  Pre-requisitions on Moscow Extension	20 <b>21</b>
Possible beneficiaries behind Moscow Extension process	
Grand Scale PremisesGrand Scale Premises	
Enclaves within extensions	
Roublevo-Arkhangelskoe	
Skolkovo	
Uspenskoe	30
Special Interest Groups: Summary	
Projectual dimension	4.3
Peculiarities of Moscow as a capital of Russian Federation	
Administrative Subdivisions	
Legislation	
Definition of the agglomeration	
Spatial and economic aspects	
Agglomeration Development Contest: Agenda Formation	52
Stages of the work performance	54
Competitor's Work	60
General remarks	
Team Proposals	
Ostozhenka	
Chernikhov	69
CNIIP	77
Antoine Grumbach Et Associes	82
L'AUC	
OMA	
Ricardo Bofill	
Studio Secchi-Vigano	
Urban Design AssociatesShared Elements	
Conclusion	118
Bibliography	120

Additional Sources of Information	122
Laws	122
Articles	122

# **Table of Figures**

Figure 1. Incremental decision making scheme combined with public choice	
theory	17
Figure 2. Space of possibilities for urban planner	18
Figure 3. Objective functions of involved actors	
Figure 4. Agglomeration Contest Timeline	
Figure 5. Moscow Expansion Map: second draft of territories included by	26
government decision as of 19.08.11	20
Figure 6. Formation of planning agenda in political framework: influence of	24
Special Interest GroupsFigure 7. Special Interest Group as a filter for public intervention	
Figure 8. Private parties interest in strategic expansion of Moscow Territory	33
(Schematic Representation)(Schematic Representation)	36
Figure 9. Megaprojects: OMA's insight	
Figure 10. Recommended relocation for Federal Center, option 1: Salaryevo an	
Roublevo-Arkhangelskoe (with adjacent enclaves) and Skolkovo	
Figure 11. Recommended relocation for Federal Center, option 2: Kommunark	
lands, Roublevo-Arkhangelskoe and Skolkovo	
Figure 12. Relocation for Federal Center, option 2: Moskovsky, Roublevo-	5)
Arkhangelskoe and Skolkovo	40
Figure 13. Plans of Subway Extension of 2010	
Figure 14. Amendment of Subway Prospect Development of March 2013 with	11
priority reassigned to southwest direction	42
Figure 15. Territorial Scheme for Moscow Region	
Figure 16. Territorial subdivision of Russian Federation	
Figure 17. Real (red) and perceived boundaries of agglomeration (presentation	
of Higher School of Economics, Seminar 2)	
Figure 18. International Contest Timeline	
Figure 19. Limits of the Moscow Agglomeration by different means (courtesy o	
L'AUC team and partners)	
Figure 20. Justaxposition of different types of agglomeration and virtual city	
limits	59
Figure 21. Initial breakdown on sectors; clusters of industry development on	
12's sector is shown	63
Figure 22. Industry clusters as points of growth combined from every sector	64
Figure 23. Division of extended lands as of three zones of stabilization,	
development, and defensive belt formation	64
Figure 24. Vacant Industrial Plots along Moskva River	
Figure 25. Railroad network + Industrial Plots	65
Figure 26. Scheme of municipal interrelation between Moscow River and	
Moscow Little Ring Road	66
Figure 27. Multimodal transport scheme as combination of different modes of	
movement	66
Figure 28. Combined scheme of protected (green) and brownfield territories	
(violet), imposing restrictions on further development	67
Figure 29. Conceptual scheme of New Moscow Development (red triangle	
denotes New Federal Center)	67

Figure 30. Slide from Seminar 2 concerning Creation of Moscow Agglomera	tion
Management System	70
Figure 31. Infrastructure as a backbone of a new development	71
Figure 32. Transport structure of Moscow and additional territories	72
Figure 33. Schematical representation of new clusters within area of New	
Moscow	72
Figure 34. Interrelation of clusters within New Moscow territory	73
Figure 35. Correlation of investments: phasing the cluster development	
Figure 36. Old and New Moscow Points of Potential Development	
Figure 37. Visualization of clusters	
Figure 38. Array of types of investments in development projects	
Figure 39. Creation of Federal Center: Development within urban tissue of a	
Moscow	
Figure 40. Green structure along Moskva river and industrial zones as point	t of
interest	
Figure 41. Spatial structure of Moscow Agglomeration	78
Figure 42. Formation of core city and sub-centers	
Figure 43. Schematic representation of development framework	79
Figure 44. Diagram of TOD with walkable cell	
Figure 45. Financial analysis of Financial Center Creation	
Figure 46. Prognosis of possible development	83
Figure 47. Moscow as a city within a forest. Visualisation	
Figure 48. 8 Gates of New Moscow	84
Figure 49. Density Profile & Planning Tools	
Figure 50. City within regional context	85
Figure 51. Principal section of development	86
Figure 52. Transport scheme with high-speed periphery train	88
Figure 53. Brownfield as a possibility for creation of new micro-centralities	88
Figure 54. Programmatic Layers	89
Figure 55. Cluster Functions	89
Figure 56. "Cloud Clusters"	
Figure 57. Layers with topology of existing city	90
Figure 58. 5 intensities for different set of guidelines	
Figure 59. Example of guidelines for given density	
Figure 60. Definition of Moscow as monocentric urban entity	
Figure 61 and initial proposal of polycentric agglomeration which extends	3
beyond initial preposition	
Figure 62. 7 main branches of OMA's research	
Figure 63. Fragmentation of land use as potential for new development	95
Figure 64. "Heat signature", dynamics of new polycentric cities	
Figure 65. Analysis of possible resettlement	
Figure 66. Visualization of main concepts of extension	99
Figure 67. Conceptual transportation network	
Figure 68. Principal distribution of land zones	
Figure 69. Replicability of southwest extension	
Figure 70. Section of transport corridor	101
Figure 71. Sketch of New Federal Station	102
Figure 72. Programmatic concept of urban tissue development through	
"quadrant"	104

Figure 73. "Civic Magnificence" as one of development guidelines	105
Figure 74. "Quadrant" as the main analytic tool (and consequent program	ımatic
proposal)	105
Figure 75. Spatial continuity of the city; transport system and spatial con-	tinuity
of the city	106
Figure 76. Spatial continuity concerning long-shot transportation	106
Figure 77. Triangulation of monumental spaces	107
Figure 78. Main principles: recycling of urban tissue and infrastructure	107
Figure 79. City in the Forest concept	111
Figure 80. Revitalization of the Old Moscow through brownfield redevelo	pment
and historic heritage recovery	111
Figure 81. Different clusters of activity within westward expansion	112
Figure 82. Creation of policentrality within new expansion	112
Figure 83. Low-Carbon Energy as one of main concepts of further develop	oment
	113
Tables	
Table 1. Possible Owners of New Extension Territories	31
Table 2. Agglomeration Development Contest Program	
Table 3. Chernikhov's Agglomeration Governance Types	
Table 4. Comparison Table: Distinctive Features of Contestants' Submissi	on117

# **Abstract**

The subject of this research covers initial approach to agglomeration development from the very inception point of a framework setup, from governmental side with expression of certain political will and formation of requirements for projectual teams to the execution and interpretation of a given data by contestants in a focus of international competition on a merit basis. Main field example is Moscow Agglomeration Development Contest of 2012, as author had an inside experience of projectual work inside one of planning teams.

Suchwise, the research is divided into two parts, namely political and projectual dimension; all links, connections and cause-and-effects events are explored.

The political dimension is analyzed from the research of actors involved in the process and distribution of power within the system; the formation of a planning framework is analyzed from institutional economy point of view and decision-making model imposed by bounded rationality paradigm.

The planning dimension, in turn, picks up where political dimension lefts off, intersecting with each other at crucial points of agenda formation. As of 2013, international contest of Moscow Agglomeration Development had resulted in several submissions by projectual teams, which had interpreted data and had conducted research for best possible option of Moscow city evolution and elaboration.

As a result, this paper mainly puts forward the formation of the objective planning task within government bodies in terms of political economy analysis and interpretative change of information throughout planning process with by-side products of interpretative models, distorted by deliverance of initial limits, shaped by political dimension.

# **Abstract (Italian)**

Questo progetto di ricerca affronta il tema dello sviluppo di un nuovo agglomerato urbano e della sua interpretazione nel contesto di una competizione internazionale. Il lavoro vuole analizzare il percorso sin dalla sua fase iniziale, con la costruzione di un particolare interesse e volonta' pubblica nella realizzazione del progetto, passando per l'esplicitazione dei requisiti per i diversi team partecipanti e il loro lavoro di interpretazione e rielaborazione dei dati. Il caso studio preso in esame e' il Moscow Agglomeration Development Contest of 2012, in cui l'autore ha avuto l'occasione di partecipare in veste di pianificatore in uno dei team partecipanti.

La ricerca si divide in due parti: la prima affronta il tema politico, la seconda la dimensione progettuale. I collegamenti e le connessioni causa-effetto sono ampiamente ed accuratamente esplicitate in tutto il testo.

La dimensione politica e' analizzata tramite una ricerca sistematica degli attori coinvolti nel processo e della loro suddivisione e distribuzione del potere. La formazione del sistema di pianificazione e' analizzato dal punto di vista dell'economia pubblica e secondo i modelli decisionali imposti dal paradigma della "razionalita' limitata".

La dimensione di pianificazione, invece, riprende quello che la dimensione politica non e' in grado di raggiungere, intercettando i punti cruciali comuni per la formazione di un'agenda condivisa. A partire dal 2013, il concorso internazionale, Moscow Agglomeration Development, ha portato alla partecipazione di diversi team progettuali, i quali hanno interpretato i dati e condotto ricerche sulle migliori opzioni possibili per l'evoluzione e la trasformazione della nuova Mosca.

Come risultato, la presente ricerca conferma come l'agenda politica e quella pubblica subiscano diverse distorsioni. La natura multilivello delle istituzioni pubbliche influisce sull'analisi politica ed economica e obbliga i pianificatori a considerare elementi preesistenti ed intrinseci al processo di pianificazione ed ai modelli decisionali attuali. La dimensione politica alimenta queste distorsioni.

# Introduction

This city isn't based on necessity of any kind but rather on income and speculation, that's why neither monarch nor mayor is able to do anything with its organic will.

(Ackroyd 2001)

Agglomeration management and development as research topics came into academic prominence in recent years. Of course, agglomeration in Europe as we can observe it today is mainly a result of burst-like growth of cities during industrial age (Beauregard 2006), with a consequent formation of specialized types of agglomeration with such urban tissues as dormitory islands or industrial clusters in dependence of initial socioeconomic profile and federal/local programs of the city as well as the country. The planning approach as a response emerged in the 1960s, with a dominance of rational paradigm. However, all efforts to equate and predetermine spatial and economic development of a city had failed.

Nevertheless, new challenge has appeared in the recent years: an overall management of a territory within a given framework. Is there a way to manage the city of XXI century within the limits and planning tools of XX century?..

With the acceptance of incremental approach to multi-faceted tasks, at the moment urban development processes are considered far too complex and contradicted to be understood and extrapolated in their entirety (Schwalbach 2009, p. 18). Theoretically this impossibility was coined by bounded rationality paradigm. According to founding father of incremental approach Herbert S. Simon there's no way to accept comprehend rationality in decision-taking model. In that case, extending the paradigm to urban development on a grand scale, with every institution and actor of planning processstriving for rationality and restricted within the limits of itsknowledge, some working procedures that partially overcome these difficulties mustbedeveloped. "These procedures consist in assuming that there is possibility to isolate from the rest of the world a closed system containing a limited number of variables and a limited range of consequences" (Simon 1978, p. 10).

Thus, with limits superimposed by the model of Herbert Simon, some evident question are emerged: which criterias must have be taken into account during initial preposition of a framework of agglomeration planning, which is a complex process with potentially unlimited data to re-process? In other words, is it possible to narrow down all necessary factors for agglomeration management in a rational and *unbiased* way?

Are limitations chosen are those that have been inherited by framework in its embryo phase? Who are the actors that create the system with limited number of variants? Is the creation of agglomeration planning framework is coherent with logical *rationale?* Is there a feedback loop in a planning process?

# **Definition of a scope**

Recent international attention onurbanist contests within the paradigm of agglomeration development can give us a short glimpse over the issue of complex agglomeration development issue. The main example and field case of a given research is the Moscow Agglomeration Development Contest and its political and projectual dimensions, broken down into parts for distinct storytelling.

The main hypothesis of the research is based on assumption that political dimension acts as a filter and narrow down the space of possibility of an urban planner. From a theoretical point of view, this phenomenon is explained by theories provided by Chicago Economic School: the public choice and special interest groups which are in favor of large innovations and institutional changes, cutting off general public from formation of agenda and, so to speak, contra-NIMBY attitude. Thus, every large innovation is pressed through modern societies not only by pursuit of achievement of public common good, but desire to obtain private benefits on the other side.

As a result, urban planners are in quite equivocal position between the corporate interest of a landlords and general interest of a public for equal rights and access to a common good, straitened by conditions of planning task. Repeating the questions mentioned above, we could extend it to the definition of role of urban planner: should it be considered as a mere technician and analyst job or should it rise on a level of politics? Where's the survey between dimensions of politics and planning?

# **Political dimension**

**Political dimension** part of a current research outlines main theoretical concepts of political economy, specifically public choice theory, that are necessary for further field example analysis. It represents real field example conditions as well, shaping the narrative from political point of view. Theory takes shape of a practice through introduction of political realities of Russian society today, focusing on real estate sector and post-communistic state of governance. Possible link between big landowners and political decisions, favoring well-being of Special Interest Group is investigated thoroughly through prism of public choice theory concepts.

# **Public choice theory**

"At the moment "rubber" Moscow is the utopian project dedicated for the tactic political tasks of the federal and municipal authorities with no prescription for actual borderlines of the megapolis and its image of a next decade." 1

Basically, the politic economy is the politics without romance, a socioeconomic process of decision and policy-making, described in terms of logic of power distribution. With that being said, one of the main axiomas of economy is evident to appear: a strive for well-being and maximization of profit. In conventional representation, all public servants are soaring up in the skies above their needs and faithfully carry out the will of the voters. The theory of public choice, in other words, simply transfers the rational actor model of economic theory to the realm of politics and removes naivety from the scope.

According to one of the founders of political economy James Buchanan, one of the definitions of public choice methodology of political economy is "the avenue through which a romantic and illusory set of notions about the workings of governments and the behavior of persons who govern has been replaced by a set of notions that embody more skepticism about what governments can do and what governors will do" (Buchanan and Tollison 1984, p. 23). As Phillip Fraietta describes in the paper "Contract And Conditional Zoning Without Romance: A Public Choice Analysis", the public choice is based primarily on the so-called **Special Interest Groups** inner goals, pushed to the governmental level rather than the wide choice of people. The mechanism of such a rationale explained below.

Lead government officials make decisions in their own interests, which may diverge from that of their constituents. Again, that's the very basic foundation of

<sup>&</sup>lt;sup>1</sup> Semyon Novoprudskiy, author column in Gazeta.Ru on extension of Moscow, accessed May 2013 http://www.gazeta.ru/column/novoprudsky/3695749.shtml

<sup>&</sup>lt;sup>2</sup>See Bi-Metallic Inv. Co. v. Bd. of Equalization, 239 U.S. 441, 445 (1915) (statingthat the people's "rights are protected in the only way that they can be in a complex society, by their power, immediate or remote, over those who make the rule") – cited by Fraietta

public choice theory: preassumption of authorities that act not in a way to maximize virtual common well-being, but are rational self-interest maximizers (Mueller 1979). Nevertheless, "because the political arena is not like a typical market, profit maximization cannot simply be pegged to monetary profit. Instead, it is thought the profit-maximizing action of the legislator or administrator is to maximize her likelihood of reelection or reappointment" (Fraietta 2001, p. 17). In this case, the so-called objective function of theauthorities is the reelection; however, this definition is discussable as the monetary profit motive is still concealed beneath the reelection. The primary assumption that flows out from the suggested utility maximization of authorities and policymakers lead us to conclusion that the well-doing and service for the society still is the motive as the society is in control; but it's not the case with further analysis over the matter.

# **Rational Ignorance**

The voters, which are in power for reelection of authority, can be affected by phenomenon of rational ignorance, a term coined by Anthony Downs in "Economic Theory of Democracy". The rational ignorance occurwhen the distribution cost of educating oneself about the issue or the process sufficiently to make an informed decision can outweigh any potential benefit one could reasonably expect to gain from that decision. Therefore, a rational decision on a smaller scale appears to be irrational within the larger paradigm. This phenomenon has consequences for the quality of decisions made by large numbers of people, such as general elections, where the probability of any one vote changing the outcome is very small (Downs 1957). Thus, on the notion of rational ignorance the link between action of authorities and adequate reaction of people is removed. Then, who's in control of the authorities?

#### **Collective action problem**

So-called collective action problem makes it difficult for majorities to form coalitions and thus it's much easier for special interest groups to gain influence in the political process. Collective action problem can be described as situation in which everyone (in a given group) has a choice between two alternatives. If everyone involved chooses the alternative act that is individualistically rational, the outcome will be worse for everyone involved, in their own estimation, than it would be if they were all to choose the other alternative i.e., than it would be if they were all to choose the alternative that is not individualistically rational. Therefore, the political agenda and decision-making process is transferred from random individualistic choice to the groups that are able to articulate its interest.

An interest appears when there is a goal.

The theory of public choice predicts that in modern democratic societies legislators will seek the condition that will appease the special interest group. As Fraietta mentions, "This is particularly troublesome in the contract/conditional zoning realm because the discretion and flexibility individual legislators are given

makes it easier for them to successfully appease interest groups at the potential detriment to the community at large" (Fraietta 2001, p. 4).

## **Special Interest Groups**

The term interest group refers to virtually any voluntary association that seeks to publicly promote and create advantages for its cause. It applies to a vast array of diverse organizations. This includes corporations, charitable organizations, civil rights groups, neighborhood associations, professional and trade associations(Baker and Losco 2008). "Pressure groups represent relatively narrow interests, for example of peanut farmers, auto workers, or shareholders of firms that produce semiconductors. They also represent broader interests, such as those of retired workers, capital owners, and those with special concerns for the environment" (Grossman and Helpman 2000, p. 58).

For one of the main theoretics of the concept Mancur Olson, the majority is a latent group that is difficult to organize and difficult to articulate its common position – exactly the collective action problem, mentioned above. Nevertheless, small groups are more easily organized and can dictate its will to a larger majority, if the transaction cost of such action will be less than the profit(Pennington 2002). Moreover, although the benefits forwarded to the special interest groups will likely be outweighed by the costs to the voting populace at large, the latter are unlikely to be politically active because of the rational-ignorance phenomenon explained earlier.

Public choice theory defines a special interest as "one that generates substantial personal benefits for a relatively small number of constituents, while simultaneously imposing a small individual cost of a much larger, *unidentified* group of voters. "The small oligopolistie industry seeking a tariff or a tax loophole will sometimes attain its objective even if the vast majority of the population loses as a result. The smaller groups-the privileged and intermediate groups can often defeat the large groups-the latent groups-which are normally supposed to prevail in a democracy. The privileged and intermediate groups often triumph over the numerically superior forces in the latent or large groups because the former are generally organized and active while the latter are normally unorganized and inactive." (Olson 1971, p. 16)

Fraietta links the harsh reality of political economy and zoning issues; but the analogy can be easily drawn to the formation of agglomeration issue, as it appears to be public process and relies on public and private actors, as well as the power which is redistributed unequally. The emergence and influence of a special interest groups in planning process will be explained in consequent chapter.

As a conclusion, it can be mentioned that on the grand scale the decisions take its place biased by two main factors: the special interest groups that lobbying their interests that level out and as well as its deliberative selection of information concerning the further development of a city. As interest groups devote their effort to protect market share from competitors (and rent-seeking), they

produce a significant bias on theoretically equal and merit-based selection for territory of further development.

The logical sequence is the following: large affairs appear as a result of conjuction of interest between Special Interest Groups and authorities, cutting off general public as a result of rational ignorance and collective action problem.

# **Bounded rationality**

As it was mentioned earlier, bounded rationality recognizes the lack of possibility to comprehend all the potentially relevant information during decision-making process.

Implementing bounded rationality to urban planners can be expressed in paradox that even with the most comprehensive information it is impossible to adequately process all amount of it. Thus, during the analysis of the decision-making process, it is not enough to know the quality and quantity of the given information, but rather we must know the cognitive process of the selection of a given information (Forester 1984). Speaking of individual perception, it can be cognitive (learned) and genetically programmed (visible spectrum range and certain frequencies).

"The amount of information is not simply a constraint. If the only problem is limited information, then the analyst can objectively measure the information the decision makers actually have and thus predict choice. But, if the decision makers necessarily select from available information, then analysts must inquire how that selection is made."

Shifting this example to a murky water of urban planning field, the cognitive perception can be changed for selective analysis, whilst genetical limits are the limits of regulations.

Is it possible to achieve positive course of action by incremental criterias and selective access to information? Yes, if the feedback is presented within the system. According to the hypothetised image of institutions, the course of actions must corresponds with following steps (Simonov 2002, p. 56):

- formation and definition of agenda;
- collection of information, filtering of information
- development of decision-making plan, including methodology of situation analysis, political prognosis, definition of actors for every stage of the process, definition of limits including:
  - o informational
  - o temporal
  - o financial
  - o organizational

<sup>&</sup>lt;sup>3</sup>Michigan State University UP810 Lecture notes, <a href="https://www.msu.edu/course/aec/810/bond-rat.htm">https://www.msu.edu/course/aec/810/bond-rat.htm</a>, accessed May 2013

- o miscellaneous resources
- analysis of political situation related to the problem
- definition of inertion scenario (conservation of tendencies)
- formation of alternative scenarios
- prognosis concerning possible outcomes for different alternative scenarios
- choice of the best scenario
- execution of the pre-requisites of scenario
- analysis of the feedback
- correction

In a given model, <u>underlined phases</u> are in hands of the authorities, whilst **bold ones** are given under protectorat of urban planners.

In this slightly modified model of incremental decision-making (with a certain bias to political analysis), three main phases of original model are still in place: the choice, the implementation, the feedback. Nevertheless, initial analysis well as the choice of the best scenario, are in hands of authorities; thus, the development of scenarios and formation of planning decision can be considered outsourcing of technical issues within the greater framework. 4Therefore, the vicious link is in the very beginning of the cycle: the initial choice, that is in favor of certain special interest group, determine the consequent development of urban tissue, which will lead to feedback for authorities; Special Interest Group is determined in profit only and therefore excludes itself from any consequent mediation between general public and authorities. Figure 1 represents such scheme in graphical way.

# Space of possibility

An analogous model of Tiesdell and Adams space of possibility model can be presented. In T&A developer's pre-requisites and room of operation that regulations provide restrain model space of possibility of designer. In case of big infrastructural projects, the space of possibilities is restrained by regulations on one side and special interest groups lobby, expressed in pre-requisites of the project on the other.

Thus, we introduce three dimensions for consecutive analysis on a grand scale (Figure 2):

- Legislation
- Political Will
- Special Interest Groups Lobby

This reproduction of space of possibility will be used for methodology of main field example analysis: Moscow Agglomeration Development Contest. First,

<sup>&</sup>lt;sup>4</sup>Converting bounded rationality in the field of politics, it is also necessary to introduce notions of stable preferences and behaviours that are independent of timeframe.

political realities are represented in a paragraph entitled "Political Set in Russia: Main Concepts"; the formation of political agenda will be present in "Pre-requisites on Moscow Extension". Special Interest Groups Lobby is analyzed within "Possible Beneficiaries behind Moscow Extension Process" and consequent chapters. Legislation and regulations are covered in Projectual Dimension part, precisely in "Administrative Subdivisions" and "Legislation" parts. Role of an urban planner, shaped by external conditions, is presented by analysis of Competitors' Work – submissions of 10 international teams that had been chosen to develop initial Moscow Extension pre-requisites of a contest.

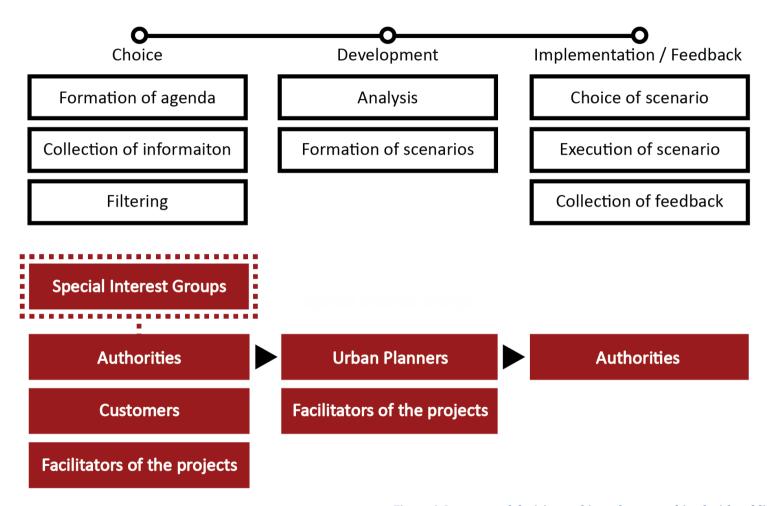


Figure 1. Incremental decision making scheme combined with public choice theory

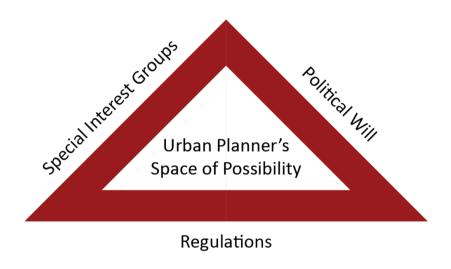


Figure 2. Space of possibilities for urban planner

# **Political Set in Russia: Main Concepts**

#### **General features**

Most of the researchers describe the current political framework as "quasi" and "proto" democracy, noting that with the external attributes of democracy there is internal content of authoritarian regime. The question is what exactly gives the dark shades for the overall picture? What characterizes the Russian political framework today? Behind the label of "sovereign democracy" lies ramified web of connections, checks and balances. As several researches point out, realities of Russian Federation's political system has following characteristics (Shevtsova 2007, p. 18):

- fusion of power and property;
- emergence of a state bureaucracy, with the energy-siloviki (representatives of the law enforcement agencies and security forces) lobby playing a dominant role;
- hybridization of economic, political, social and foreign policy, reflected in adherence to mutually exclusive principles such as market and bureaucratic control, authoritarianism and democracy, paternalism and social Darwinism, and anti-western and pro-western trends;
- replacement of any coherent ideology by 'pragmatism';
- adoption of a policy of imitation that allows the system to adapt to new realities without rejecting traditionalism.

Without going into the details, one of the characterizing features of a current political state in a country is protracted period of transition from communist regime to liberal democracy. At the given moment, most of the democratic institutions had been inserted into so-called "vertical of power" framework, sometimes imitating, but not executing the role implied. Moreover, newly established bureaucracy easily intercepted control over the decision-making process, as the general public had a very low trust in election-based procedures due to communist heritage in addition to common rational ignorance and collective action problems, described above.<sup>5</sup>

As a result of privatization of public assets in the beginning of the 90's, on the other side huge influential groups of "oligarchs" emerged as the financial elite(Gessen 2012).

Vertical of power, as the initial re-distribution of resources, lies within the socioeconomic profile of a country: and these distortions of above-mentioned checks and balances occur partly as a by-side product of transition period of political regime, and partly as a feature of petroleum-driven economics. As the rent from oil supports minimal well-being of the society, political elite is

<sup>&</sup>lt;sup>5</sup>Uncertainty is the crucial state of transition, and it's extremely hard to define interrelations between corresponding political institutions, which is lowering trust criteria as well.

interested in maintaining the status-quo, joining with "oligarchs" in this aspiration.

Main feature of the existing regime in Russia can be coined as the corporate-biased governance of so-called "petroleum" elite. "Ownership concentration in modern Russia is higher than in any other......the oligarchs' wealth was accumulated with a substantial support from the state (in the form of direct subsidies, tax breaks, land grants, subsidized credit and the like) and was deemed illegitimate by a substantial share of the public at some points in history" (Rachinsky and Guriev 2005, p. 148).

Just as links between financial and political elite grew stronger, assets of oligarchs and correlated groups diversified by type, and by the end of 00's capital turned out in multiple development projects, with a direct influence to urban tissue as a fact. Moreover, Special Interest Groups in this case are landlords and developers, who are in favor of big infrastructure change as the source of their further revenues. Again, returning back to Shvetsova's main features of "sovereign democracy", it's clear that pragmatistic approach, joined to extraconcentration of capital ownership, will lead to inevitable burst of urban tissue development.

### Urban regime in favor of a infrastructural change

Urban regime theories seek to explain relationships among elected officials and those individuals who influence their decisions (Mossberger and Stoker 2001).

Here is a breakdown of main urban regimes type, coined by Levine and Ross.

- **Corporate regimes** or development regimes promote growth and normally reflect the interests of a city's major corporations while neglecting the interests of poor, distressed areas of a city.
- Caretaker regimes normally oppose large-scale development projects in fear of increased taxes and disrupting normal ways of life.
- **Progressive regimes** respond to the needs of lower- and middle-class citizens and environmental groups rather than corporate-oriented growth.
- *Intergovernmental regimes* exist in cities of extreme need that are mismanaged and financially troubled. (Levine and Ross 2006, p. 50)

In spite of current power distribution in Russian Federation, it falls into category of corporate regimes, with great attention to development and neglection of a public sphere. Increasing inter-urban competition, local economic decline and an abundance of derelict land undermine the bargaining power of local government and tend to favour property investors promising new employment and investment, which, again, is especially true in post-communist reality of Russian Federation.

# **Pre-requisitions on Moscow Extension**

The future is never anything but putting the present in good order. You should not plan the future, but allow it to happen.

Antoine de St-Exupery

What's the difference between city and megapolis? The city can be governed by us; in the latter case we are governed by megapolis.

V. Glazychev

With the above-mentioned prepositions for formation of initial political and planning context, some criterias for extension form can be hypothetised: From public side of view, extension can be considered as an ultimate, "cut the knot" decision and panacea for hereditary disease of ring-structured city; from private side, nevertheless, it's the opportunity to provide long-term investments with low risk, which is guaranteed by new legal "capital ground" status of land assets. To formalize objective functions of public actors, following scheme of interrelations can be considered (Figure 3):

#### Public:

- Expansion of taxation base
- Shift to the polycentric planning scheme
- Shift to the grid-based transport planning
- Decongestion
- Economic Boost
- Resettlement

#### Private:

- Special Interest Group lobby for one-shot projects
- Increase in general interest rate of a land
- Long-term investments

Now, let's try to reconstruct formation of official disclosure of information concerning Moscow Extension process.

In fact, the question on extension has been raising significant number of times during 90's and 00's from general public to Moscow Municipality, but there was no feedback from executives. Still, the decision can be considered as purely political, as the project didn't pass any referendum activities or public hearings. Originally, the idea was presented by Dmitry Medvedev at economic forum in Saint Petersburg in 17 June of 2011: "For development of Moscow megapolis and its development as a financial center, as well as for increase of well-being for significant amount of people, we need to consider question on Moscow city

extension of borders"6. The speech, in fact, was general and neutral, delivering overall picture and checking reaction of general public. Main features of the extension were denoted as the creation of Central Federal District and decongestion of Old Moscow territory by relocation of administrative and governmental centers.

Responding on numerous questions from press agencies, Mayor of Moscow Sergey Sobyanin noted that workgroup of officials from Moscow and Moscow Region will be created to settle all issues and to deliver best performance in terms of decongestion and increase in well-being of Moscow city dwellers.<sup>7</sup>

Less than month after, on Monday, July 11, Moscow Mayor Sergei Sobyanin and Governor of the Moscow Region Boris Gromov passed to President Dmitry Medvedev their proposals to change the Moscow boundaries. The president made them public. The Moscow territory will increase from 107,000 hectares to 251,000 hectares thanks to the expansion to the Moscow Region. The Moscow City will be expanded primarily in the southern direction limited by the Kievskoye and Varshavskoye highways and the Grand Circle of the Moscow Railway.

Thus, the life-changing decision took its place in July of 2011 with the exact territory finally defined for consequent development.

In August 2011, second draft of extension was made available for general public (Figure 5). As it turned out, Rublevo-Arkhangelskoye in the western Krasnogorsk district will be also integrated in the Russian capital with an International Financial Center to be built in the settlement. The Moscow Region will be cut off about three percent of its territory. Some 250,000 people live now in the region and will turn in Muscovites. Nevertheless, there's no exact procedure for such an affair (see **Legislation** part); the question had been shifted to Federation Council for further examination. The general response was positive with decision coming through unanimously on December 27.

Meanwhile, preparation for Moscow Agglomeration Contest had been in process of preparation through November 12 to January 13 of 2012 by facilitators of the project and workgroup of authorities of Moscow and Moscow Region. International groups, in fact, were asked to prepare project for territory development within the general political framework, imposed by the government. Elaborated set of details was announced right away in January:

According to official press release, Moscow authorities intend to build 60 million square meters of housing and 45 million square meters of commercial real estate on new lands. About two million Muscovites will develop new territories of the country's capital. One million jobs and housing will be allocated to them outside the Moscow Ring Road, which encircles the current territory of the city. The

<sup>7</sup>Mayor of Moscow Sergey Sobyanin interview for Echo of Moscow radio station http://echo.msk.ru/news/785380-echo.html

<sup>&</sup>lt;sup>6</sup>Source: RIA Novosti video, accessed June 2013 http://ria.ru/analytics/20110617/389614571.html

Moscow expansion will be supported by a reform of the city transport network. The Moscow City is to pass from the radial-circular principal to the orthogonal one in the transport network in the region that will ease up a transit traffic load in the Moscow historical center. Several metro lines will be extended to "new lands" of the capital. The railway line between the Smolensky and Kievsky trunk lines of the Moscow Railway, a high-speed tramway lines and the hubs form a new transport infrastructure. One of the main features of New Moscow is the New Federal Center; a place to relocate authorities and officials of regional and federal significance; more than 100 federal agencies and ministries in order to decongest Moscovian centrality. The ambitious project of relocation of a federal center met significant resistance from authorities and officials. The date and budget of the whole enterprise were unknown. Numbers of the budget were unknown as well.

The real estate developers will primarily gain from the extension of Moscow boundaries, the experts believe. Some part of the Moscow regional lands integrated in the capital may result in a land price growth and higher costs of low-rise construction projects, which had already been launched in this district, the RBC daily cited the president of the Incom real estate corporation Sergei Kozlovsky as saying.<sup>8</sup>

Extension of Moscow Borders took its place on July 1, 2012, in fact, in the middle of international contest, which has officially started 13.02.12 and effectively ended in August (15.09.12) (for timeline seeFigure 4). Moreover, land plots that are denoted to host Federal Center were announced in last part of competition and are of particular interest, as they present possible conjunction of interest between authorities and big corporate land owners, (see **Possible Beneficiaries behind Moscow Extension Process**).

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<sup>&</sup>lt;sup>8</sup>Nikolay Mikhalev, Alexandra Golubeva and Alexei Pastushin, "Moscow extension will lead to "Cold War", accessed June 2013 http://www.rbcdaily.ru/market/562949984208391

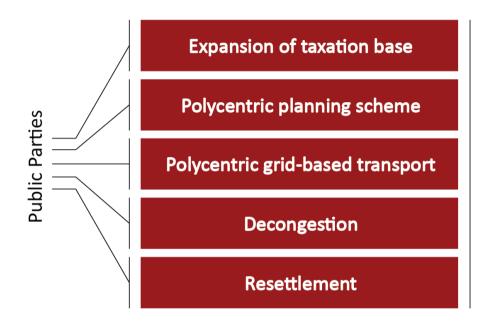
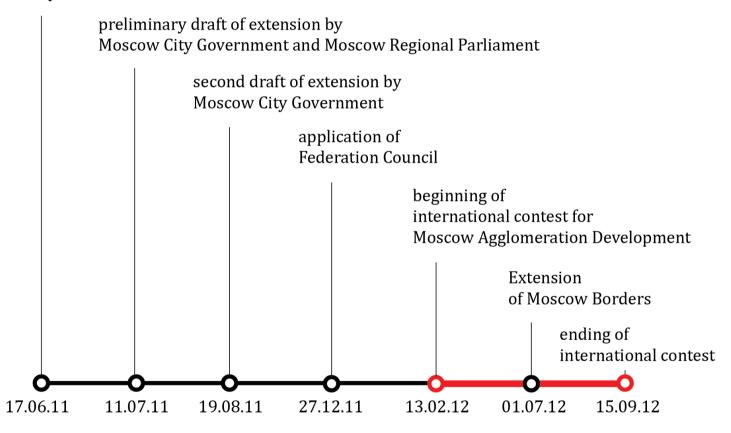




Figure 3. Objective functions of involved actors

initial preposition of ex-president Dmitry Medvedev for Moscow Extension



**Figure 4. Agglomeration Contest Timeline** 

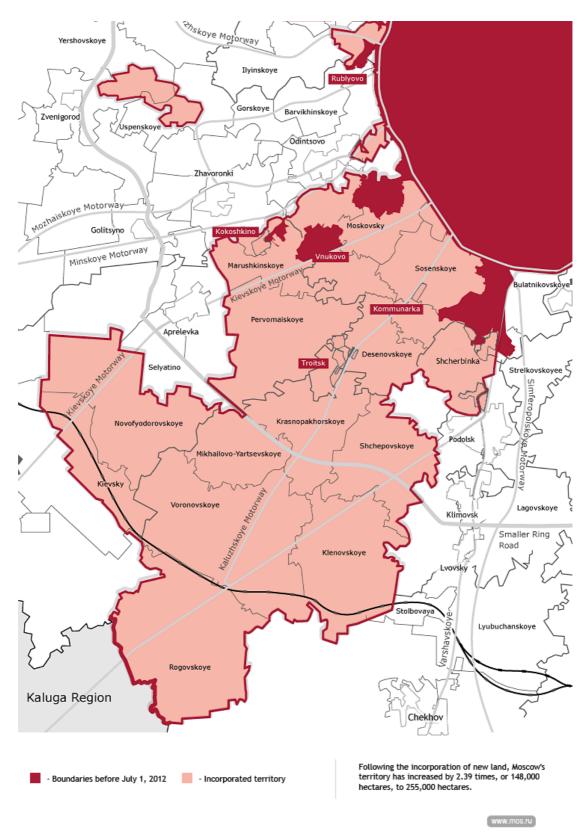


Figure 5. Moscow Expansion Map: second draft of territories included by government decision as of 19.08.119

 $^9 \mbox{Source:}$  official press release of Moscow Municipality of 19.08.11

# **Possible beneficiaries behind Moscow Extension process**

As it can be seen from initial contour, Moscow Extension process has developed rapidly in terms of events density. Nevertheless, in terms of option consideration several directions were selected.

The hypothesis of the research, in fact, relies on concepts that has been mentioned in theoretical preface: general public (as well as possible best option) is ousted from political process by Special Interest Groups with determined set of goals and tools for its achievement. Below an attempt to analyze such groups is present at hand.

Now, we can hypothetise of the premises that were used for construction of exact political preposition. A descriptive analysis of Special Interest Group follows; several sources were used, among them personal inquiry as well.

# **Grand Scale Premises** 10

The initial preposition included westward expansion, enclosing the territories that had been captured by the new project of Central Moscow Ring Road. In that case, Moscow could acquire land between Pyatnitzkoe highway and Dolgoprudny (excluding the latter). Second, more local variant includes west. Moreover, westward expansion is justified from the point of existing urbanized territories view; the city of Khimki is by fact merged with the present territory of Moscow, and the cities of Molzhaninovo and Kurkino in fact are part of the city already. The road construction is developing extensively in this direction; new autostrada is already built in this direction.

Another variant included territories on south owned by Coalco (Vitaly Anisimov) (20 000 he); in fact, enormous enclave was supposed to be developed as new satellite town, but plans have changed significantly after financial crisis of 2008.

Southwest territories are in development by Avgur Estatecompany, owned by senator Sergei Moshkovich (12 000 he). The lands of the Kommunarka sovkhoz were acquired by the affiliated structures. One of the premises of expansion was the trust with the condition of giving the land away free for a new federal center (300 he along Kaluzhskoe highway right after Gazoprovod settlement) and receiving profit by development of adjacent land.

<sup>&</sup>lt;sup>10</sup>This part of research contain information derived from several analytic articles: an interview of Vadim Moshkovich, one of big stakeholders within new Extension territories, entitled "I've got enough" by Bela Lyauv and Larisa Voronina by Vedomosti Paper, on 16.07.12 accessed June 2013 ,http://www.vedomosti.ru/library/news/2284876/ya\_vse\_svoi\_ambicii\_udovletvoril\_vadim\_mo shkovich\_chlen,

<sup>&</sup>quot;Who will benefit from Moscow Extension" by Bela Lyauv, accessed June 2013 <a href="http://www.vedomosti.ru/library/news/2284903/novye\_gosti\_stolicy?full#cut">http://www.vedomosti.ru/library/news/2284903/novye\_gosti\_stolicy?full#cut</a>

<sup>&</sup>quot;Is there money enough for New Moscow" of Kommersant newspaper that consists of official citations, 28.06.12, accessed June 2013, http://kommersant.ru/doc/1968553

Initial options for extensions combined with SIG interests are represented in (Figure 8).

The history of the southwest land, owned by Avgur Estate had a history of negotiation with the government of Moscow City. In 2007 conditions of negotiation included sale of the land from Masshtab to municipal bodies of capital city to locate satellite city for 400 000 people with a master plan realized on territory of 6000 he. However, according to official sources, financial crisis led to disruption of a plan and land was redistributed to various competitors during land auctions.

Main features of a new territory include the amount of free land free of urbanization. The logic of the extension is tax-based rather than planned development and can be considered as the compromise between city and the region, as the land contain almost no taxable enterprises. The link between the private and public enterprises is explained as mutually beneficial cooperation: by lending certain amount of lands from private company to "public" hands of the municipality, it receives infrastructure and "external economy" of the federal center. In a case of Moscow, private lands are stretched along the highway that is to be reconstructured.

As it turned out recently, senator and main owner of "Avgur Estate" company Vadim Moshkovich remains main beneficiary of Moscow Extension. Municipality will finance construction of a subway and two automobile roads to Moshkovich's land assets. Thus, Salaryevo and Kommunarka will have their own transport links.

At the given moment, in south-east there are 16,23 millions of square meters of new real estate to be developed, with 12,15 millions of residence as a fact. The most of developer activity occurs near Kommunarka land, where extension took its place. At the place between Moscow Ring Road, Kaluzhskoe and Kievskoe highway 7 millions of square meters of residential estate is being developed.

The reason behind development is the infrastructure load on a New Moscow: transport framework is capable only for 60 000 inhabitants, whereas there are 232 000 users of the network at the moment; let alone the fact that 2 million jobs and 1,5 mln. of inhabitants (around 100 mln. of square meters) are mentioned as a benchmark for Moscow Extension Development. New development is evaluated by experts as of 600 billions of roubles. Infrastructure, in fact, will be built "by clubbing together" in correspondent so-called Road Fund.

One of the megaprojects, entitled "A101", which is situated along Kaluzhskoe shosse, belongs to "Avgur Estate", company of Vadim Moshkovich. The structure of a project suggests 20 mln. sq. m. of residential estate, 0,6 mln. sq. m. of commercial estate and 0,6 mln. sq. m. of social infrastructure. Projects of lowand medium- rise are in competency of "Avgur Estate" subsidiary, as well as number of "Moskva A101", "Kvartal A101" and quartiers of townhouses "Kronburg", "Vyazemskoe" and industrial park "Indigo".

The Sokol'nycheskaya line of metro is being prolonged to the territory of New Moscow. Two new stations are to be present, entitled "Troparevo" and "Rumyantsevo". As of spring 2012, new metro was supposed to cover territory of an area "Solntsevo" with 160 000 inhabitantsbut recently (as of December 2012) plans have changed to prolong infrastructure to Salaryevo area with 200 inhabitants. Solntsevo will be included in subway system in 2015. New logistic center is situated in Salaryevo as well.

Need in metro in village is explained by potential of a territory and projects of logistic and commercial centers; "Indigo" technopark is one of them. This industrial complex of Vadim Moshkovich is one of the growth points of a new Moscow.

If there will be new governmental center in Kommunarka, the metro will be prolonged in there. Again, if there's 1,5-2 millions of work places denoted to appear within the extension's territory, there's only one way to enhance transport framework by the subway.

In 2013, 6 roads of so-called second territory will be built towards "Avgur Estate" assets. Priorities for the road construction are the central road of Kommunarka and area of 4,8 km between Salaryevo and Mamyri, which will link Kaluzhskoe and Kievskoe shosse.

All megaprojects, in fact, were coined by OMA's in their preliminary research of Moscow Agglomeration (Figure 9).

With all the facts at hands, projects of "Avgur Estate" have unique opportunities and conditions to grow. Territory of a New Moscow, planned infrastructure and Moscow Ring Road in vicinity will increase capitalization of a project. According to general director of "Miel-Novostroiki" Sofya Lebedeva, capitalization of new buildings will rise up to 15% with infrastructure provided by the state.

Total increase for the land price is ranged from 5 to 25 percent.

#### **Enclaves within extensions**

Apart from the main extension three enclaves were established, bypassing regulations of city and region governmental bodies: recreation center "Uspenskoe" around 2920 he, new financial center entitled "Roublevo-Arkhangelskoe" of 695 he and innovation center "Skolkovo" with a size of 618 he. According to the Moscow Agglomeration Contest Condition, all three of them marked as clusters of primary urban growth and New Federal Center placements (see **Agglomeration Development Contest: Agenda Formation part**).

Hypothesis of the research is that those points of growth are results of agreements between authorities and Special Interest Groups.

Roublevo-Arkhangelskoe

The main impetus for enclave of Roublevo-Arkhangelskoe is the presence of Sberbank as the main stakeholder for territory development. Several shareholders reselled the assets, include lands and the debt of Sberbank. At the moment, all the projects are frozen and the most optimistic payback date of the project is in 60 years. At the moment, negotiations are in process with banks to relocate back offices in Roublevo-Arkhangelskoe and allocate reginonal financial agencies.

#### Skolkovo

The idea to include Skolkovo belongs to vice-premier Igor Shuvalov, which has coincided with the will of president Medvedev. The logic of decision was to bring territory in control of municipality to achieve funding of infrastructure. For example, light rail transportation and roads will reduce access time to hiscoric core of Moscow to 30-40 minutes.

"Mostotrest" private construction company has already built significant amount of roads within paradigm of infrastructure development.

The innograd of Skolkovo has an area of 389 he; the total area of inclusion into the territory of Moscow is of 618 he. The rest of the territory is a golf club (78 he) and Skolkovo Park (34 he), as well as new residential complex in development by private company Millhouse.

# Uspenskoe

The history of Uspenskoe is very interesting. "Skolkovo" and "Roublevo-Arkhangelskoe" inclusions can be justified from the point of a need of innovation and financial center. Moreover, the land of Uspenskoe is divided in a way that all settlements and taxable enterprises are situated in Moscow Region, whilst Moscow holds all the vacant land. This decision spurred significant protests from inhabitants of Roublevka region: they are concerned about administrative issues.

1100 hectares owned privately by Vyacheslav Kantor; the bank entitled VTB owns another 1082 he. The lands included in the region have the same features as Roublevo-Uspenskoe assets: they were loaned to acquire credit of 2,4 billion of US dollars. As the private investor has failed to returned the credit, ownership of the lands has shifted to the bank. VTB, in fact, has started its own project of land development with the emergence of 20 he project entitled "Nikolo-Uspenskoe".

# **Special Interest Groups: Summary**

Finishing territorial analysis of the area, we can sum up land owners of the extension area in a following way:

**Table 1. Possible Owners of New Extension Territories** 

Company	Owner	Area
Avgur Estate / Masshtab <sup>11</sup>	Vadim Moshkovich	13 000
Absolut		7 000
Orion Estate	Martin Shakkum	5 000
Globex bank		2 000
Olympic City		2 000
RDI Group	Dmitry Sablin and	300-500
	Dmitry Aksenov	
Maryinskaya Poultry	Bilan Khamichev	400
Coalco	Vitaly Anisimov	20 000
Millhouse	Roman Abramovich	100
Sberbank		420
VTB		1000 - 1100
	Alexandr Klyachin	300
	Vyacheslav Kantor	1100

Thus, the actors involved in the formation of the political framework are the following (Figure 6):

#### **Political Framework**

- o Federal Authorities
- Local Authorities
- Municipal Authorities
- Public
  - Moscovites
  - o Dwellers of the Moscow Region
- Special Interest Group as Stakeholders
  - o Avgur Estate / Masshtab
  - o Absolut
  - o Orion Estate
  - o Globex Bank
  - o Olympic City
  - o RDI Group
  - o Maryinskaya Poultry
  - o Coalco

<sup>&</sup>lt;sup>11</sup>Detail: in march of 2013 "Avgur Estate" company signed the contract for transfer of 307 hectares into municipality's ownership within the territory of "New Moscow".

- Millhouse
- Sberbank
- o VTB

# Planning Framework (as of beginning of international contest)

- Governmental Customer
  - Committee for Architecture and Urban Development of Moscow in association with the Moscow Region
- Customer
  - State Unitary Enterprise Research and Development Institute for the Master Plan of Moscow
- Initial Planning Commissions (Facilitators of the project)
  - o Working group under President of the Russian Federation
  - Associate body of executive authorities of Moscow and the Moscow Region
  - o Ministry of Regional Development of the Russian Federation
  - o Russian Academy for Architecture and Construction Sciences
  - Union of Architects of Russia
- International Planning Teams
  - o Ostozhenka
  - Chernikhov
  - o CNIIP
  - Antoine Grumbach Et Associes
  - o UDA
  - o L'AUC
  - o OMA
  - o Ricardo Bofill
  - o Studio Secchi-Vigano
- International Experts
- International Jury

Now, how we can justify the linkage of megaprojects developments with political incentive to expand in southwest?

First conjuction between authorities and special interest groups can be traced in behaviour of Moscow Electoral Commision, an executive body for society initiatives consideration, to reject any attempt for referendum effectuation; two submissions were rejected in August and September of 2011. The official explanation in case of August rejection was purely technical: signatures of initiative group, political party "Spravedlivaya Rossiya", weren't verified properly as no quorum was assembled. September rejection was justified by Constitution Article 102, which delegates question of intersubjectory relations to Federation Council and no concern of Muscovites.

Consequent decision of Federation Council decision to block Moscow Extension referendum, again, confirms public choice theory principles of the preface (Figure 7). General public is cut off from decision-making by all means.<sup>12</sup>

Secondly, options (to be considered in **Agglomeration Development Contest: Agenda Formation** part) for relocation of New Federal Center, are biased towards certain land-owners. According to initial conditions of the contest, three options of Moscow Extension are present; nevertheless, Roublevo-Arkhangelskoe and Skolkovo are present in all 3 options for consequent elaboration, making choice imaginary. Kommunarka and Moskovsky, marked with links with big corporate actors, also present in options 2 and 3. (Figure 10, Figure 11, Figure 12).

Finally, the prolongation of Sokol'nicheskaya subway line to newly acquired territories is an evident fact of entering a zone of mutually beneficial agreements between authorities and Special Interest Group. General public is really out of the picture in the case, as the people of Solntsevo (around 100,000), a neighbor district, are delayed to have access to metro line, which is prolonged to adjunct Extension Territories instead, to the village of Salaryevo with a number of inhabitants around several hundreds. The official decision of subway prolongation took place in March 2013 (Figure 13, Figure 14).

By combining the general political framework and in-deep research of existing situation, posibility of connection between choice of initial direction and interests of landlords is increased significantly.

33

<sup>&</sup>lt;sup>12</sup>RBC Daily: "Federation Council in favor of Moscow Extension" http://www.rbcdaily.ru/politics/562949982400792, accessed June 2013

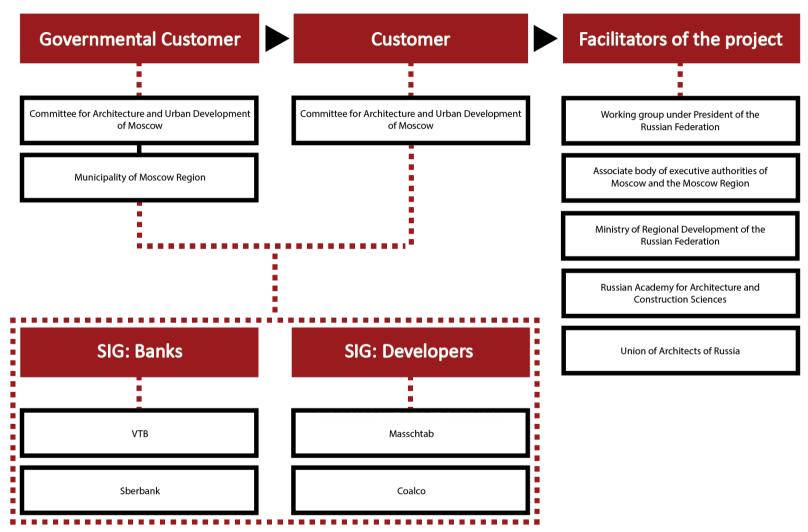


Figure 6. Formation of planning agenda in political framework: influence of Special Interest Groups

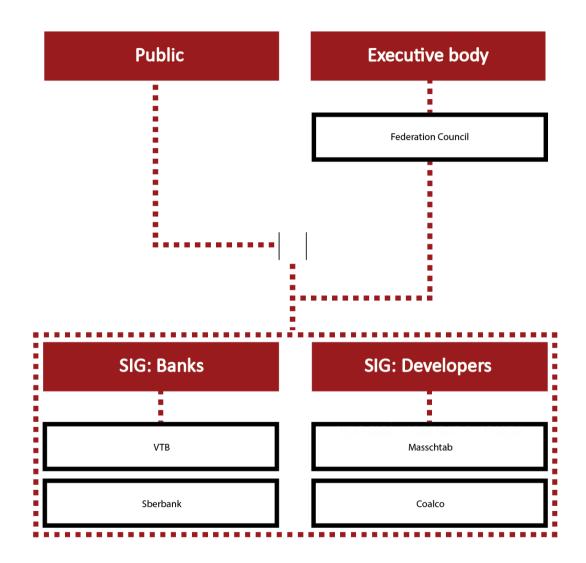


Figure 7. Special Interest Group as a filter for public intervention

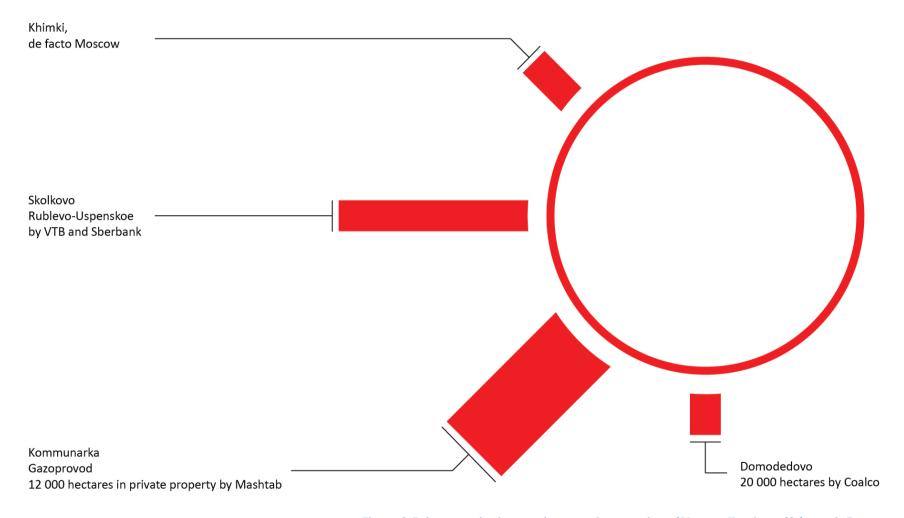


Figure 8. Private parties interest in strategic expansion of Moscow Territory (Schematic Representation)

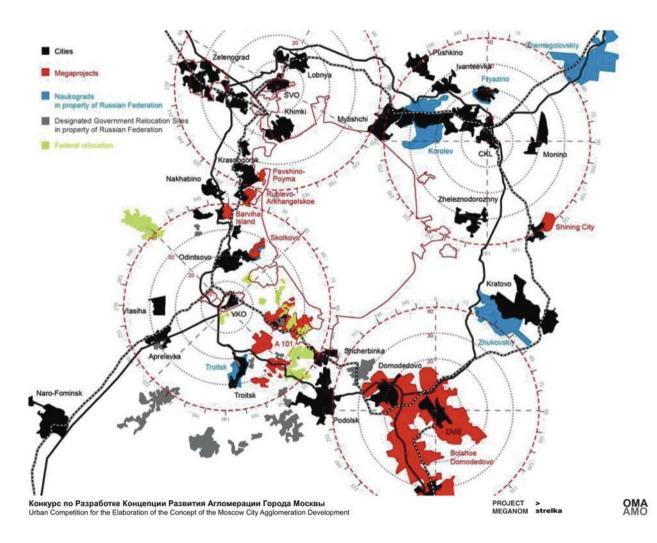


Figure 9. Megaprojects: OMA's insight

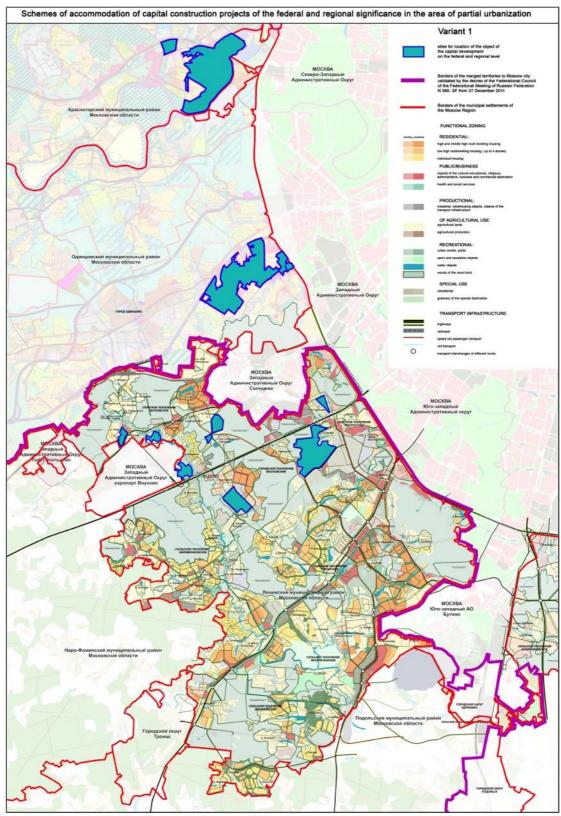


Figure 10. Recommended relocation for Federal Center, option 1: Salaryevo and Roublevo-Arkhangelskoe (with adjacent enclaves) and Skolkovo

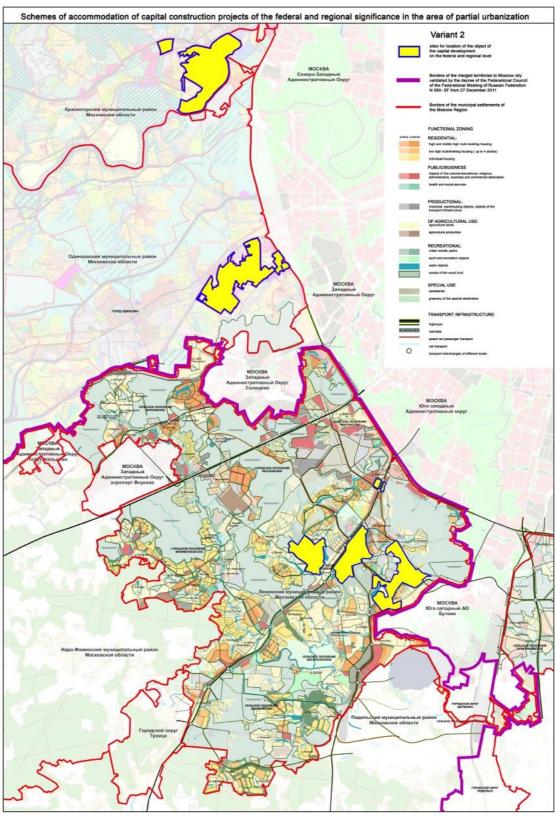


Figure 11. Recommended relocation for Federal Center, option 2: Kommunarka lands, Roublevo-Arkhangelskoe and Skolkovo

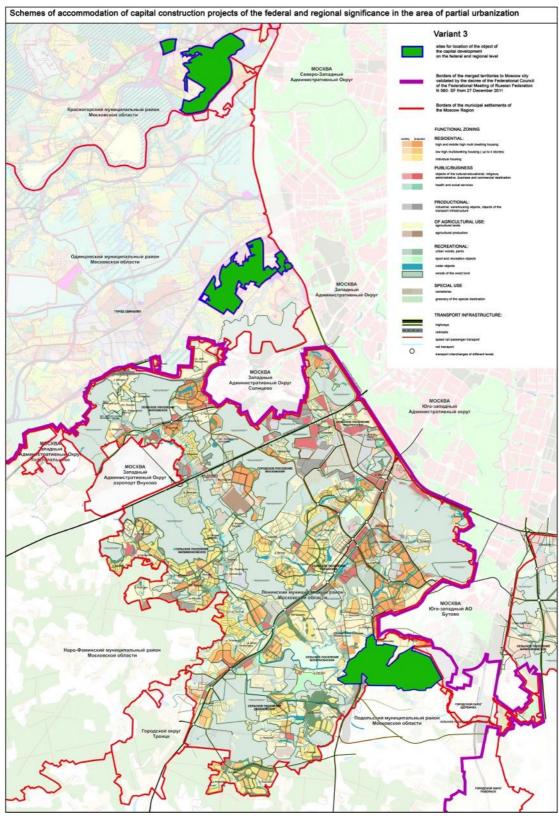


Figure 12.Relocation for Federal Center, option 2: Moskovsky, Roublevo-Arkhangelskoe and Skolkovo

# РАЗВИТИЕ МЕТРОПОЛИТЕНА В МОСКВЕ ДО 2020 ГОДА

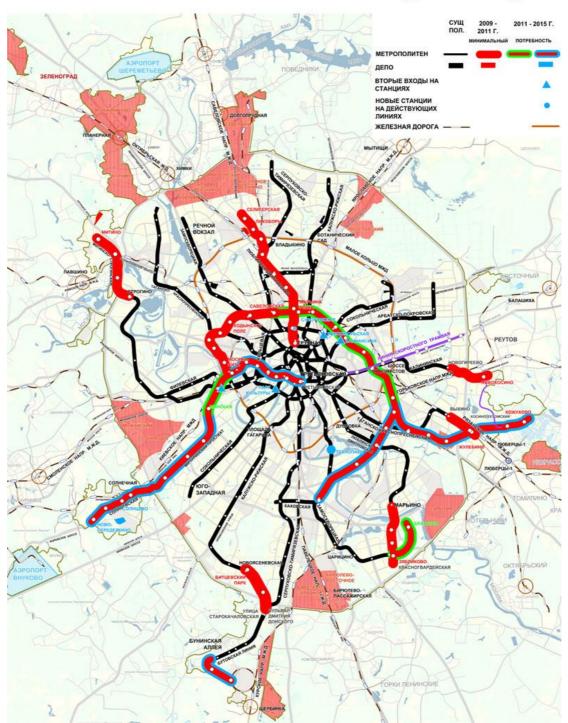
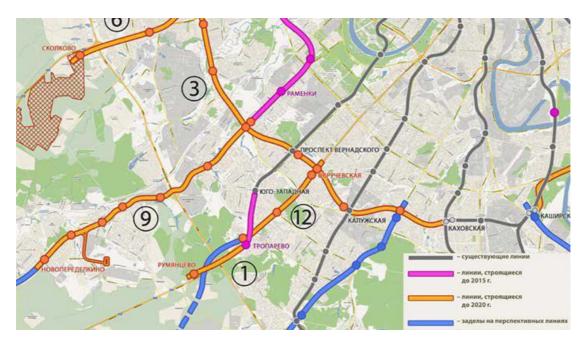


Figure 13. Plans of Subway Extension of 2010



Figure~14.~Amendment~of~Subway~Prospect~Development~of~March~2013~with~priority~reassigned~to~southwest~direction

## **Projectual dimension**

**Projectual dimension** part of given research isn't narrowed not only to technical analysis of agglomeration, but rather imposes question on interdependence of political and planning spheres, answering aforementioned assumption of its inseparability. Remembering the urban planner's space of possibility hypothesis, projectual dimension is shaped by first by formalities as administrative governance (Administrative Subdivisions part) and current urban planning legislation that delineates urban (Legislation part). Brief analysis of these topics gives some hints to actual space of possibilities of a planner; again, theory flows into practice through introduction of Moscow's agglomeration specificities (Definition of the agglomeration); consequent requirements of International Contest for Agglomeration Development are analysed from impartiality point of view (Agglomeration Development **Contest: Agenda Formation**), with respect of previous analysis of political will and lobby of Special Interest Groups. Finally, Competitors Work part actually analyzes submissions that were presented by international teams and explicit critique of pre-condition of the contest by some of the teams.

### **Peculiarities of Moscow as a capital of Russian Federation**

#### **Administrative Subdivisions**

A quite interesting issue of political power distribution lies in the administrative divisions and subordinance of okrugs to the metropolitan city. To present the vocabulary of the administrative divisions, following definitions must be considered.

The following types of high-level administrative divisions are recognized:

- **Raions** (administrative districts)
- **Cities/towns** and urban-type settlements of federal subject significance
- Closed administrative-territorial formations

In the course of the Russian municipal reform of 2004–2005, all federal subjects of Russia were to streamline the structures of local self-government, which is guaranteed by the Constitution of Russia. The reform mandated that each federal subject was to have a unified structure of the municipal government bodies by January 1, 2005, and a law enforcing the reform provisions went in effect on January 1, 2006 and amended in 2010  $^{13}$ . According to the law, the units of the municipal division (called "municipal formations") are as follows:

<sup>&</sup>lt;sup>13</sup>(<u>State Duma</u> of the Russian Federation. Federal Law #131-FZ of October 6, 2003 *On General Principles of the Organization of Local Self-Government in the Russian Federation*, as amended by the Federal Law #243-FZ of September 28, 2010. ).

- **Municipal district**, a group of urban and rural settlements, often along with the inter-settlement territories. In practice, municipal districts are usually formed within the boundaries of existing administrative districts (raions).
- **Urban settlement**, a city/town or an urban-type settlement, possibly together with adjacent rural and/or urban localities
- **Rural settlement**, one or several rural localities
- **Urban okrug**, an urban settlement not incorporated into a municipal district. In practice, urban okrugs are usually formed within the boundaries of existing cities of federal subject significance.

In Moscow, these are called municipal formations (which correspond to districts); Territories not included as a part of municipal formations are known as inter-settlement territories.

Moscow city, as fact, is a **city of federal significance** that is surrounded by urban and rural settlements, as well as inter-settlement territories and urban okrugs. Initiative of Moscow Extenstion came from the level of federal power, and, in fact, includes ex-Moscow Region territory in a higher level of hierarchy, which is federal (seeFigure 16). In fact, this peculiarity allowed Moscovian Electoral Commission to deflect possibility of applications for oblast-wide referendum, referring to Federation Council as ultimate decision-maker; in that case, law is on the Special Interest Group side.

### Legislation

One of the limitations imposed on contestants is urban planning legislation, which is strict for every level within the hierarchy of territories.

Legislation denotes interrelations between subjects of Federation in a very brief way, literally only by phrase in constitution: "The boundaries between the subjects of the Russian Federation may be changed by their mutual agreement". 14 Therefore, administrative management of the extension will be produced "from the scratch". This objection, in fact, was covered by one of the projectual teams later.

From normative point of view, the planning process is restrained by following laws and regulations:

- 1. Statute of spatial planning, including:
  - Tasks and objectives of territorial planning development of Moscow Region
  - Actions within the paradigm of territorial planning of Moscow Region Development

<sup>&</sup>lt;sup>14</sup>The Constitution Of Russian Federation, Article 67, p. 3

- 2. Schemes of spatial planning (urban planning development) for towns
  - General (projectual) plan an unified graphical representation of planning actions, reflected in Statute of spatial planning in maps and schemes of territorial planning (Figure 15)
    - Scheme of planned specially protected natural territories
    - o Scheme of planned specially protected natural historic landscapes
    - o Scheme of planned development of transport infrastructure
    - Scheme of planned of system-defining engineering communications and constructions
    - Scheme of territories under the risk of emergency natural and man-triggered situations (classified)
    - Scheme of capital development of object of regional significance and planning activity
    - o Scheme of priority change of urban tissue
  - Regional law "About Moscow region Master plan"
  - Urban planning standards
  - Landuse scheme (according to remote sensing data)
  - Basic economical data by municipalities

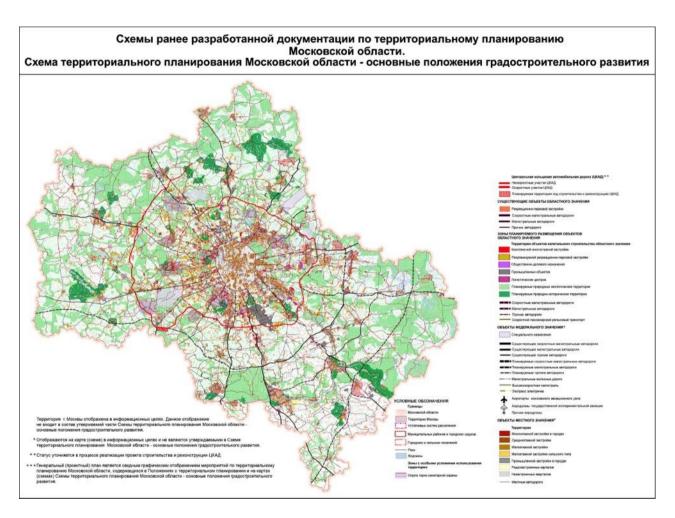


Figure 15. Territorial Scheme for Moscow Region

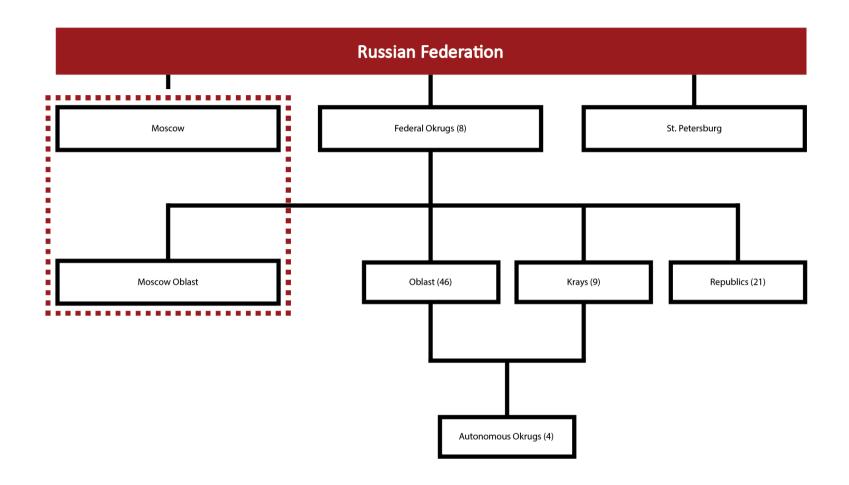


Figure 16. Territorial subdivision of Russian Federation

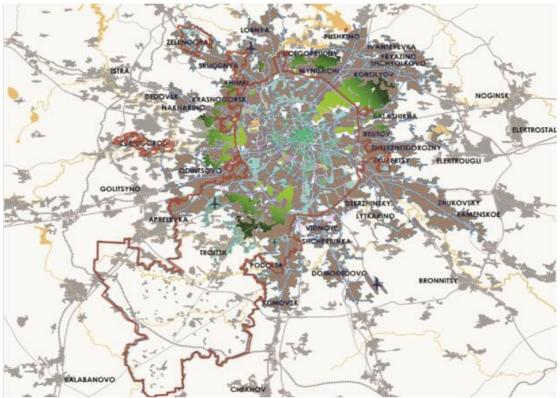


Figure 17. Real (red) and perceived boundaries of agglomeration (presentation of Higher School of Economics, Seminar 2)

## **Definition of the agglomeration**

In order to underline contradiction between initial condition of Moscow Agglomeration Development Contest and final premises for Federal Center relocation, it is necessary to define borders of Moscow agglomeration as well; however, the exact definition of agglomeration is a blurred thing to embrace. In the study of human settlements and conventional representation,

an urban agglomeration is an extended city or town area consisted of the builtup area of a central place (usually a municipality) and any suburbs linked by continuous urban area.

Because of differences in definitions of agglomeration, the statistical and geographical variances in methodology, it is problematic to define agglomerations in a nutshell. The main differences lie in a field of jurisdiction as well as banal perception, for example the question of belonging of satellite towns around the municipal area.

Again, because of differences in definitions of what does and does not constitute an "agglomeration", as well as variations and limitations in statistical or geographical methodology, it can be problematic to compare different agglomerations around the world. It may not be clear, for instance, whether an area should be considered to be a satellite and part of an agglomeration, or a distinct entity in itself. Figure 17 represents such a difficulty by contrasting real and perceived boundaries.

Nevertheless, we can distinguish several peculiarities that are common between agglomerations. By taking as a fact that urban agglomerations are the large scale urbanized areas characterized by highly dense agglomerations of population, industries, cities and towns, we introduce two main criterias, mentioned above.

### **Spatial and economic aspects**

From the geography perspective, this concept embraces the spatial structure characteristics of urban agglomerations — the close distributions of cities and towns in the certain areas.

Urban agglomerations are the spatial results of the evolution of production systems at different dimensions. The productions process determined by market play crucial role on the formation and development mechanisms of urban agglomeration at three different layers (Ji and Pengbo 2011). Agglomeration and diffusion of enterprises takes actions at microcosmic dimensions, the division of labor and cooperation functions at middle dimensions, and the interaction between industrialization and urbanization at macrocosmic ones.

Digging further into economical definition of the agglomeration, the concept of agglomeration is closely linked to the traditional industrial location theory, which is largely based on a quite straightforward view of the activities of (productive) companies. In his classic work, Alfred Weber (1929) recognised three general location forces:

- 1. transport cost differentials,
- 2. labour cost differentials and
- 3. agglomeration (deglomeration) economies and diseconomies.

Furthermore the agglomeration economies have traditionally been divided into three categories or factors as follows (Weber 1929; Ohlin 1933; Isard 1956):

- *Large-scale internal economies* that exist within a company and are based on the scale economies of production at one geographical point.
- Localisation economies result from the scale of a particular industry and they benefit all companies in a particular industry at a single location. Scale economies in intermediate inputs, labour-market pooling and knowledge spillovers are typical examples of positive localisation economies.
- *Urbanisation economies* result from the scale of an entire urban economy and they are available for all companies in all industries at a single location. Developed labour market and basic facilities (e.g. transportation, welfare and educational services), supply of private services (e.g. recreation) and considerable local market potentiality are typical examples of positive urbanisation economies (Kolehmainen 2006).

Nevertheless, a question still arises in terms of exact agglomeration definition (is there a way to define at least conceptual limits of it?). There is no legal definition

of agglomeration in Russian legislation; should it be based on physical proximity of towns or rather on economies? The answer is that there's no limit for model representations of such an entity.

From paradigmatic point of view and definition of methodology, it's necessary to point out some features of post-modern urban tissue of XXI century agglomeration, coined by David Graham Shane in his "Recombinant Urbanism" (Shane, Recombinant Urbanism 2005, p. 42-43):

- 1. The disappearance of a master plan. There is no one person in charge of the postmodern city; the age of the single authority in absolute charge of a vast city is over. There is no longer one logic, voice, or time-clock that can decree or coordinate comprehensive changes. Designers must work with multiple actors and multiple clocks.
- 2. The incorporation of the irrational in the postmodern city. Given the absence of a single center of control, the old codes of single-function zoning will inevitably give place to a heterogeneous and flexible system that accommodates multiple actors more easily. There will be in the city strange justaxpositions of wealth and poverty, efficiency and waste, industry and commerce, residential life and work, pleasure and pain.
- 3. The city is a chaotic feedback system. As net importers of energy and people, cities have always existed in a state of imbalance and disequilibrium. To propose a city that exists in a state of perfect equilibrium, ecologically or socially, is to propose an impossible utopia. Jane Jacobs highlighted the dynamic nature of cities in her work from the 1960s onwards, showing that it is based on urban actors' need to measure and mediate differences in contested spaces. Through conflict, contestation and negotiation of differences, urban actors create new knowledge and new products, which aids human survival.
- 4. The city is composed of heterogenous flow systems. A new urban patterns stars, nets, constellations and so forth held together by modern communication and transportation systems as essential armatures.
- 5. The city is a patchwork of heterogenous fragments. A city as a multiscalar system bound together by disparate urban actors and elements, a system of fragments.
- 6. Urban heterotopias are specialized patches, acting as testbeds of change. A particular places in the city where process of change and hybridization is facilitated. This heterotopic system is crucial to modernity, its goal being to rationalize society and to create a more open and equitable system through architectural means.
- 7. The city is a layered structure of heterotopic nodes and networks. Urban actors use collage and various bonding systems to form patches of order in the city; they also create heterotopias with multicellular internal structures to facilitate change. Urban actors can arrange such patches or cells in different way.

So, what's exactly Moscow Agglomeration? Different teams considered question differently, proposing methodology and research tools around all the spectre of sociology (see **Competitor's Work**). Running a little bit forward, Figures 18 and

19 represent one of the teams view on agglomeration from different point of view such as "dacha" agglomeration or "hi-tech industry" agglomeration, even presenting "university" agglomeration that are inside of the city.Rather than fixed definition, agglomeration is an array of concepts (Figure 19, Figure 20).

A citation from recent different research can draw the line, representing array on views on spatial configuration as well:

"Moscow agglomeration has not any political or administrative legislative base – it just a virtual spatial phenomenon. Some experts deny its existence at all. Other planners and geographers consider that agglomeration concentrates along the main transportation routes not further than 20-30 km from Moscow ring road (MKAD). According to another point of view the agglomeration includes not only Moscow region (40000 sq km) but parts of neighboring Tverskaya, Jaroslavskaya, Kaluzhskaya regions. Extreme theory defines "The Great Moscow from Volga to Oka rivers" as a territory of approximately 300x400 km." (Antonov and Shagova 2011, p. 1)

## **Agglomeration Development Contest: Agenda Formation**

International Urban Contest was a part of initial agenda, appearing in order of the day shortly after initial decision on expansion, in November of 2011. Several actors are present within contest provision; 10 of international teams (one was excluded later), invited experts to participate in projectual seminars and international teams.

Expert Groups, in fact, were formed from the specialists in the field of the urban planning and adjacent spheres and shall include the specialists of the Contracting Authority, Client, Ministry of Regional Development of the Russian Federation, Chief Division for Architecture and Construction of Moscow region, Union of Architects of Russia, Russian Academy of Architecture and Construction Sciences and representatives of other organizations including international ones.

The members of the Expert Group are not be allowed to bid or be a part of the 10 project teams for the Draft Concept of the Moscow City Agglomeration Development. The Expert Group is obliged to participate on the monthly basis in the project seminars with the selected project teams for the elaboration of the Draft Concept the Moscow City Agglomeration Development. The Expert Group subject to the agreement with the Contracting Authority is entitled to specify the list and the contents of the project materials being developed by the corporate authors of project teams bringing this information to the notice of the corporate authors and negotiating the alterations and amendments with them. 15

It's quite remarkable that Contest, in fact, took place in the end of decision-making process within political circles; in fact, Moscow has extended right between third and fourth projectual seminars. Let's look precisely at the timeline of agglomeration development contest agenda formation (Table 2 and Figure 18):

52

 $<sup>^{15}</sup>$ The information is received from the elaboration of the draft concept of the Moscow city agglomeration development on August 2011

Table 2. Agglomeration Development Contest Program

Nº	Actions	Actions Timeline		
1	Preparation of program and Contest's Specification	12.11.2011 — 13.01.2012		
2	Tendering process for selection of 10 projectual teams for development Concept of Moscow Agglomeration Development	13.02.2012 — 20.02.2012		
3	Conclusion of contracts with 10 teams	24.02.2012		
4	Provision of input data for projectual teams	24.02.2012 24.04.2012 23.06.2012		
5	6 seminars with projectual teams and international expert team	24 -     23 -     26 -       25.03.2012     24.04.2012     27.05.2012       22 -     23 -     22 -       23.06.2012     24.07.2012     23.08.2012		
6	Public exhibition for Moscow Agglomeration development, evaluation of proposals by jury	27.08 — 23.09.2012		
7	Preparation of report according to results of a contest and preparation of specification for scheme of Moscow Agglomeration Development	24.09 — 13.10.2012		
8	Preparation and development of Moscow Agglomeration Development Scheme, Master Plan and Land Use and Construction Plan	12.2012 — 12.2014		

#### Stages of the work performance

Now let's look at stages of work more precisely. Information is derived from official program of International Contest.

#### Stage 1:

Accomplishment of the comparative analysis of the submitted basic data and analytical materials received from the Client and from other sources with international analogs pursuant to the existing subsystems with the purpose of positioning of Moscow, Moscow region, the Moscow Agglomeration and distinguishing the main problems for the consequent project solution.

*Duration:* 60 days. The stage cost – 30% of the total project value

### Stage 2:

Development of the first edition of the concept of the Moscow Agglomeration Development including Moscow City and south-western sector of the Agglomeration.

Duration: 60 days. The stage cost – 30% of the total project value

#### Stage 3:

The development of the second edition of the Concept of the Moscow Agglomeration Development and its principle parts with the main performance indexes. The development of the proposals on the architectural and spatial arrangement of the federal and the multifunctional area in the south-western sector of the Agglomeration in the zone of Moscow development.

*Duration:* 60 days. Stage cost – 40% of the total project value.

The report on each project stage of all the corporate groups will be arranged in the form of a 2 day's seminar with participation of the Expert Group and the Client. The conclusion is made on the further financing of the development of certain project team after consideration of the results of the seminar and the submitted report of the c project team. The control of the work flow and assistance to the project team are performed on the monthly basis in the form of a two day's seminar and online. <sup>16</sup>

## Tasks:

To give proposals regarding the borders, structure (lay-out, transportation scheme) of the Moscow Agglomeration including Moscow City and Moscow region with the account to the strategic role of these territories in the international and national context; to determine the areas of the active urban planning development, stabilization areas, nature conservancy, zones, districts, and sectors of the functional specialization; to give aggregative indexes of the perspective distribution of the population and working places on the planning belts, sectors and areas of urbanization; to consider the directions of improvement of

<sup>16</sup> The information is received from Urban competition for the elaboration of the draft concept of the Moscow city agglomeration development (page 13)

administrative and territorial arrangement and administration of the Agglomeration territories;

To give proposals on the functional and planning and transportation infrastructure arrangements of the south-western sector of the Moscow Agglomeration and the zone of the Moscow development; to give detailed proposals on the perspective zoning within the planning belts of the south-western sector of the Moscow Agglomeration; determine the optimal and threshold values of the urban planning capacity of the considered territories;

To give the concept and the parameters of the spatial arrangement of the Federal and multifunctional zone in the south-western sector of the perspective territory of Moscow City

To secure the balanced location of the federal and regional perspective objects, objects of business, manufacture, dwelling and recreation of their parameters resulting in the increase of the comfort of living in Moscow City and on the adjacent territories in correspondence with the forecasted level of living and the level of the socio-economic development.

The estimated horizon for the Concept project – 30-50 years The implementation of the first stage – 10 years<sup>17</sup>

55

<sup>17</sup> The information is received from Urban competition for the elaboration of the draft concept of the Moscow city agglomeration development (page 9-10)

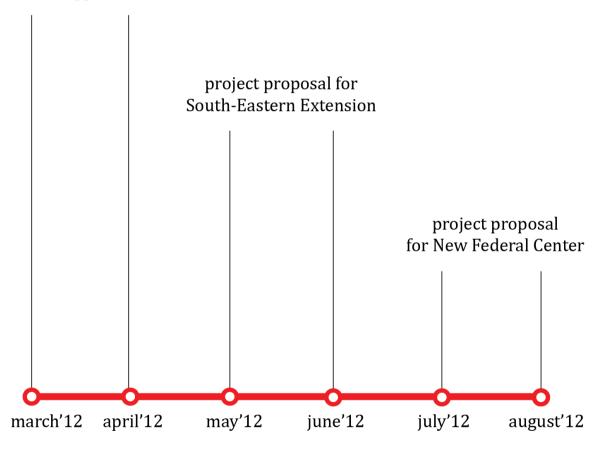
Let's revert back to Simonov's amendment on Simon's bounded rationality scheme that was mentioned in the very beginning:

- formation and definition of agenda;
- collection of information, filtering of information
- development of decision-making plan, including methodology of situation analysis, political prognosis, definition of actors for every stage of the process, definition of limits including:
  - informational
  - o temporal
  - financial
  - o organizational
  - o miscellaneous resources
- analysis of political situation related to the problem
- definition of inertion scenario (conservation of tendencies)
- formation of alternative scenarios
- prognosis concerning possible outcomes for different alternative scenarios
- choice of the best scenario
- execution of the pre-requisites of scenario
- analysis of the feedback
- correction

Now, comparing this framework to initial timeline it's obvious that planners' task in international contest are limited to carrying out planning task and analysis of agglomeration within paradigm of southeastward extension that was defined presumably by back-room agreements between officials and Special Interest Groups, consist of significant stakeholders within the area of new expansion. In fact, program of the contest underlines the imporantce of southeast development directly: "To give proposals on the functional and planning and transportation infrastructure arrangements of the south-western sector of the Moscow Agglomeration and the zone of the Moscow development... ... to give the concept and the parameters of the spatial arrangement of the Federal and multifunctional zone in the south-western sector of the perspective territory of Moscow City".

However, teams were reluctant in giving up common sense if outcomes of their research were conflictual with initial condition of a contest (see **Competitor's Work** part).

## project proposal for Moscow Agglomeration



**Figure 18. International Contest Timeline** 

### LIMITS OF THE MOSCOW AGGLOMERATION

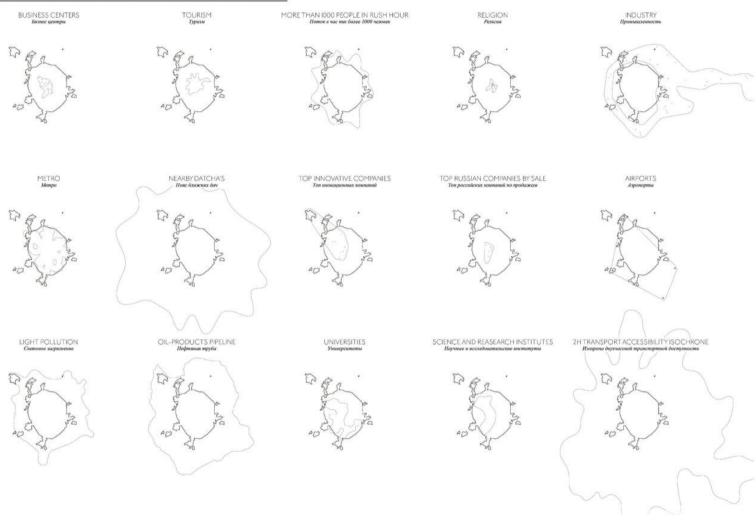


Figure 19. Limits of the Moscow Agglomeration by different means (courtesy of L'AUC team and partners)

## VIRTUAL CITY LIMITS

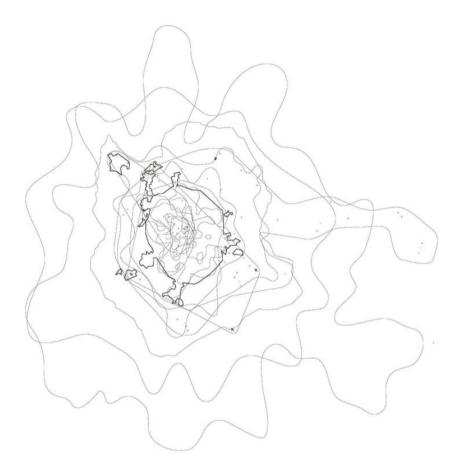


Figure 20. Justax position of different types of agglomeration and virtual city limits.

## **Competitor's Work**

#### **General remarks**

Before going into brief analysis of the competitor's work, it's necessary to mention common grounds and challenges that were presented in every team and its relation to general context. Considerations are taken from final notes of international jury and experts during Final Seminar 6 of Agglomeration Development Contest.

## **Methodology Positions& Results Delivery**

- Every team interprets conditions of the competition differently, creating array of methodologies and research activities
- Most of the results reject one-way extension, considering vacant space in the old city and its periphery
- A new space for the development is based on initial model of methodology and consequent research; resultsare not always coherent with initial conditions of the competitions

#### Scale

- Large scale approach present in all teams; Moscow and Moscow extension are well embedded into reseach context of existing agglomeration
- Oblast (region) scale taken into consideration as a whole and not only as southwest expansion
- There is no fix on existing administrative levels and they aren't considered as barriers
- Global level acts as a main shaping tool for agglomeration on grand scale
- Four levels of research are present: Global, National, Local and Municipal

#### **Structure**

- Radioconcentric structure which is challenged
- Several options are presented:
  - o Polycentric development
  - Linear city
  - Isotropic structure

#### **Applied Urban Models**

- Promotion of the radial model at the regional level
- New Linear development
- Mesh solution for the region and for the new development
- Polycentric metropolitan region with different ranks of cities
- Polycentrism using existing cities
- Renewal of the existing city (i.e. industrial redevelopment)

• Exploit the potentials parts of the city as identity element

## **Overall Challenges Observed**

- Formal concretion levels are very different between the teams
- Few teams cover all the themes in the brief
- Focus mainly on:
  - Network of protected green areas
  - o Transport network
  - City network
- Difficulty to address the right development scale
- Very different proposals are put forward

## Recommendations by jury:

- o To interpret all scenarios within a global approach
- o To consider all aspects of different scenarios

## **Team Proposals**

Team proposals analysis follows simple scheme: first, a short review on overall team submission feature peculiarities of approach; then, formalized proposal delineates accents and concrete features of a submission. Afterwards, an opinion of jury (as of final submission discussion during Seminar 6) is present.

#### Ostozhenka

Initial approach of Ostozhenka Bureau is based on a thorough examination of 12 sectors of Moscovian agglomeration – divided as clock hours. Therefore, sector 8 is the extension sector; after initial determination of growth points, the inner potential of industrial territories is uncovered in consequent research and potential. In terms of extension, three zones are considered as of contest conditions: stabilization zone with restriction of construction of buildings, development zone devoted to urban growth and construction of special public factories and so-called formation zone exclusively for nature saving. Quite interesting approach is present on city's development with conception of historic-cultural background as forming framework for further progress. Citing authors, "...the city can be considered as a serie of traces, where every new one covers the last, and there is no initial plan. Therefore, our task is to articulate existing links and connections. There is a great need in consolidation in every historical morphology".

Technical aspects of growth based on blue and green framework (so-called nature formation structure) with consideration of vegetation and irrigation, street network and railroad network. Intersection of those sub-systems creates natural points of growth and framework for consequent growth.

Within the railway network significant role is played by so-called Moscow Little Ring Railway, the cargo railway ring around Moscow, which is intended to be opened for passenger transport in 2015. The development of New Federal Center rejects land plots within New Moscow with relocation of existing buildings within existing borders.

#### **Proposal:**

- Restrictions on the development of territories of cultural and historic landscapes and creation three functional areas of the 8 sector (of a new land of extenstion)
  - o Stabilization Zone
  - Development Zone
  - o Formation Zone (Protective Belt)
- The division of the old city territory of the 1910 railroad ring MKMZHD<sup>18</sup> into zones

<sup>&</sup>lt;sup>18</sup>The Moscow Little Ring Railway (Russian: Малое кольцо Московской железной дороги) is a ring-shaped railway which encircles the center of the city of Moscow, Russia. It was built between 1902 and 1908 and is currently used for cargo traffic. The railroad is operated by

- Vacant lots and industrial objects of MKMZHD
- Working arc (continuity of business area)
- Green arc (continuity of natural landscape)
- o Monuments of the historical landscape
- The Intermodal transport scheme: Suburban rail network, aeroexpress, high speed Moscow metropolitan, new Moscow metro line, intermodal scheme, Moscow railroad change terminals, intercepting parking in a suburban areas, TPU with intercepting parking on the MKMZHD, the Land areas MKMZHD advanced development (hubs on intersection with normal transport).
- The Moskva river "Moscow's treasure" in conjunction with porous and green lands
  - o Moskva to link territories Federal center as a pretext
  - Coastal road
  - o Pedestrian river bank
  - o Infrastructure of transport-hubs
  - o 15 desirable sites of coastal development temporality

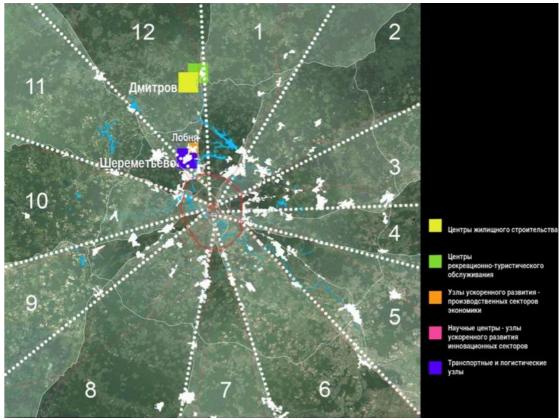


Figure 21. Initial breakdown on sectors; clusters of industry development on 12's sector is shown

the Moscow Railway, a subsidiary of the Russian Railways. Originally, the railroad has seventeen stations and was used for passenger connections. The station buildings are constructed in the same style and are referred to as typical samples of Russian industrial architecture of the beginning of the 20th century. As of 2011, twelve railway stations operated at the railroad. The total length of the ring is 54 kilometres (34 mi).

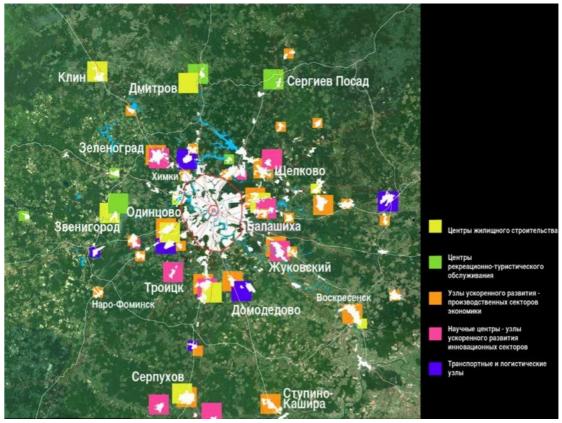


Figure 22. Industry clusters as points of growth combined from every sector

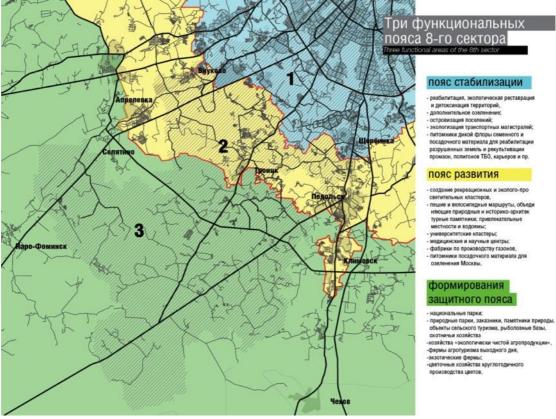


Figure 23. Division of extended lands as of three zones of stabilization, development, and defensive belt formation

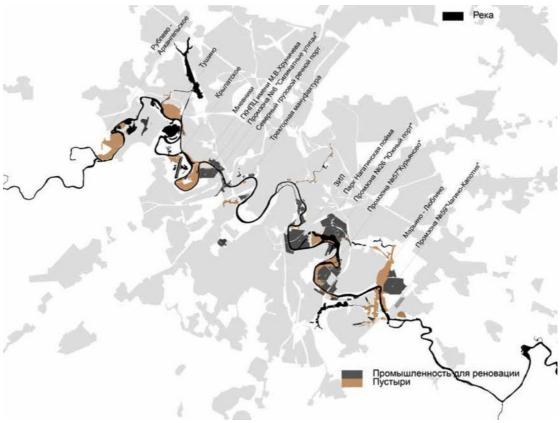


Figure 24. Vacant Industrial Plots along Moskva River

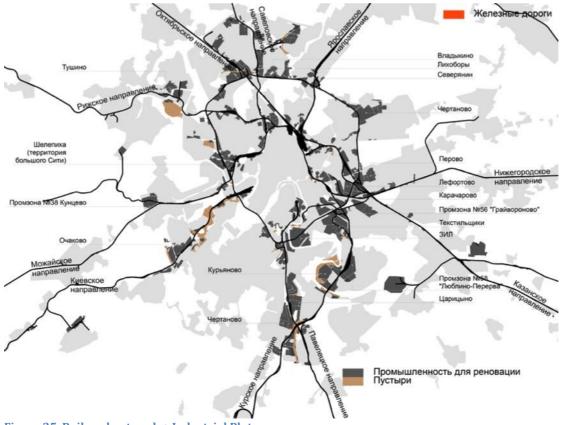


Figure 25. Railroad network + Industrial Plots

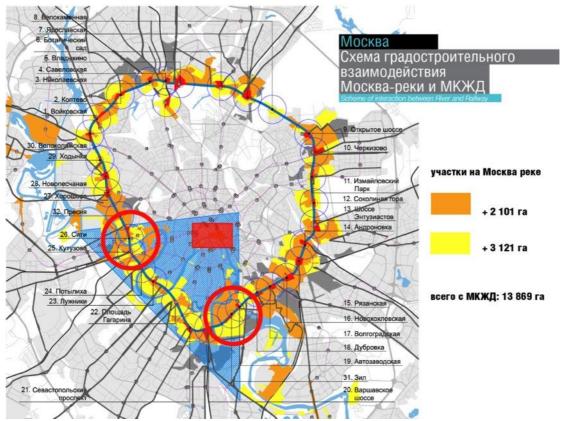
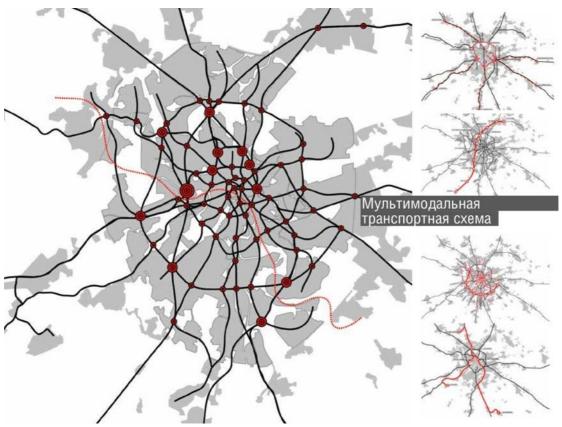


Figure 26. Scheme of municipal interrelation between Moscow River and Moscow Little Ring Road



Figure~27.~Multimodal~transport~scheme~as~combination~of~different~modes~of~movement

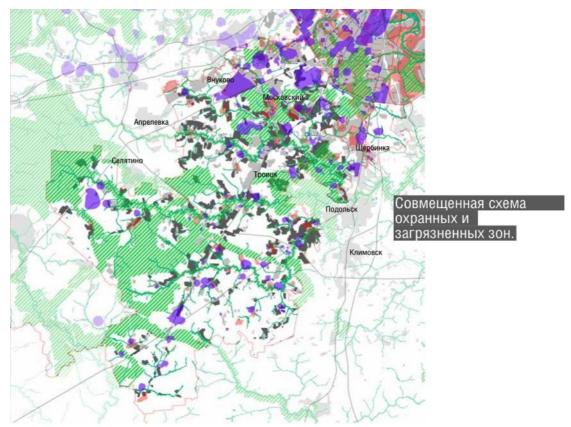


Figure 28. Combined scheme of protected (green) and brownfield territories (violet), imposing restrictions on further development

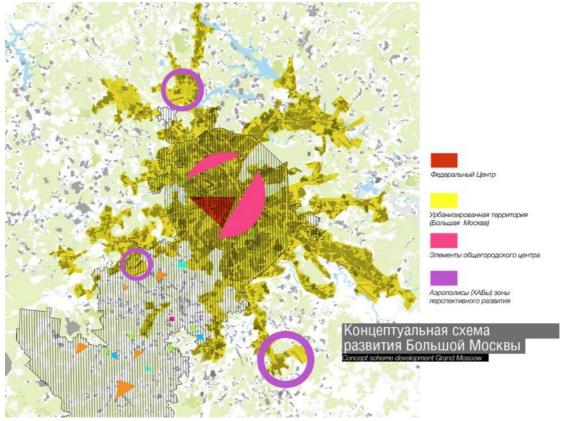


Figure 29. Conceptual scheme of New Moscow Development (red triangle denotes New Federal Center)

## **Strong sides**

- Integration of the new development within the city
- Careful approach of the history and sensible perception of the city
- Specific focus on the Moskva river
- Insist on potential of disused land (industrial, infrastructures...)
- Focus on mobility and importance of nodes + development of buses or tram lanes on existing highways
- Take opportunity of old infrastructures
- Development new centralities
- Allow the future to happen
- Explicit criticism of SW extension
- Opening the city to the river (Barcelona case)
- Recovering the river for the citizens of Moscow
- Soft proposal intervention for the new territories

#### Weaknessess

- Departure from the basic requirements of the competition brief
- Interventions are a series of points that lack physical continuity taking away from the overall vision
- Unclear position concerning voluntary planning capabilities for the future vs letting things happen

#### Chernikhov

Team of Andrei Chernikhov puts an economic and administrative dimension as a foundation stone of their research. It is worth to provide special attention to Chernikhov's submission;as team argues, at the given moment, there is no legislative act that would define the concept of "agglomeration". As Chernikhov team puts it in the Seminar 2,

"Russian legislative acts are insufficient:

- 1) Absence of "Agglomeration" notion in it and corresponding problems;
- 2) The Moscow Agglomeration "legalizing" is problematical for administrative-territorial system; distribution of authority between federal, regional and municipal levels; spatial and budgeting planning

*Thus, lack of jurisdiction concept spans number of important issues:* 

- Administrative-territorial division and administrative-governmental function
- Separation of powers and areas of jurisdiction between Russian Federation and local government
- Spatial planning (combination and interconnectedness of strategic and territorial planning)
- Budget planning

An evident management gap is present: the absence of the Moscow agglomeration operating body also responsible for global city function management. Agglomeration model hasn't been chosen."

Following models of agglomeration governance are present:

**Table 3. Chernikhov's Agglomeration Governance Types** 

Model	Type of Governance	Examples
1-level model	-level model   Creation of municipality which is united for	
	every piece of agglomeration by merger of	
	municipalities or its absorption.	
2-level model	Creation of the management body which is single	Grand Paris,
	for agglomeration.	Vancouver
Contractual	Contractual distribution of responsibilities	New York,
model	between levels of governments. Upper level is	Chicago,
	formed by municipality representatives.	Montreal
Model of	Direct distribution of responsibilities. Functions	Berlin,
regional	are strictly separated.	Hamburg,
governance		Bremen,
		Stockholm

For the effective response to a new paradigm, Chernikhov says, there is a need for creation of Federal Capital District for administrative and corporation of development for successful sustainable development of the region.



Figure 30. Slide from Seminar 2 concerning Creation of Moscow Agglomeration Management System

From the planning side of view, deep methodologic approach is presented, based on equal development of territories in conjunction of infrastructure growth. Nevertheless, spatial continuity of New Moscow cannot be limites only by redevelopment of old industrial zones (as it can appear from submissions from another projectual teams). Information concerning development of Old and New Moscow contains objects of new development, mechanisms of management and delivery of projects.

New Moscow is supposed to be formed out of 7 clusters – governmental, educational, communication, innovation, medicine, sport and logistic, which are situated along A101 shosse. Meanwhile, New Federal Center is supposed to be located within natural landscape of Old Moscow. Clusters situated in 5 zones of

One of the special features, presented by Chernikhov team, is the reconstruction and development phases, both in strategic and tactic levels: 5-10 years for Old Moscow redevelopment and progress, 5-15 years for New Moscow foundation and formation of new guidelines. Third etape includes Agglomeration development within timeframe of 5-30 years.

## **Proposal:**

- Potential development
  - o Old city/New development
  - o Moscow river for building the governments center
  - Linear extension to Southwest
  - o Polycentric system of new Clusters inner/outside
  - o Renewal post industrial plots in old city
  - o Housing for young people and different consumer needs
  - o Invest in economic an social projects
  - o Financial and legal scheme

## Transport

- o Highway chord, rapid railway express system
- o Hub system
- o Connections with the center
- o Highways
- o Heavy rail transformed to passenger
- o Multimodal hub transport ways intersection positioning.
- o Rapid railway express from south-west sector



Figure 31. Infrastructure as a backbone of a new development

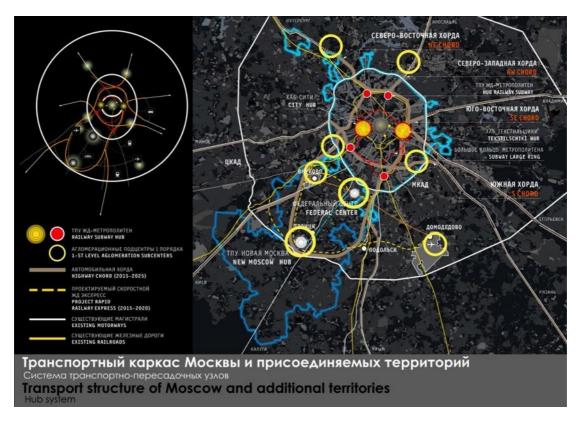
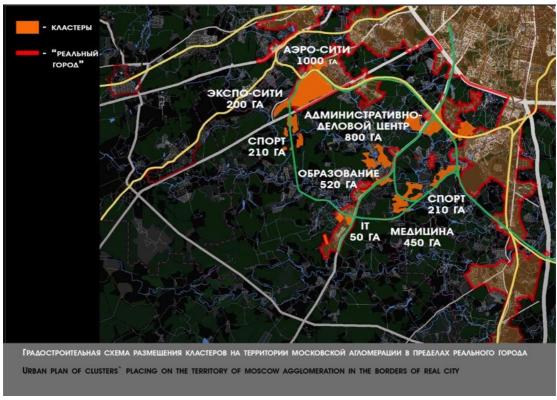


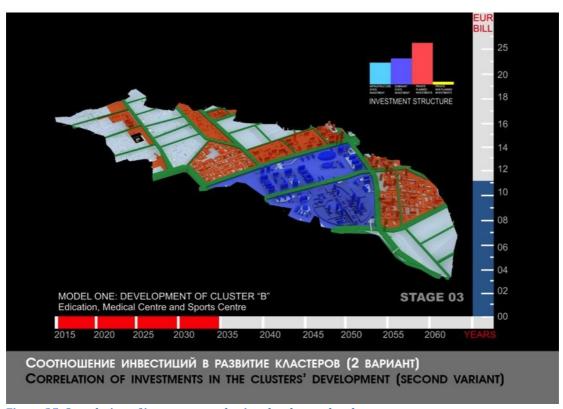
Figure 32. Transport structure of Moscow and additional territories



 $Figure\ 33.\ Schematical\ representation\ of\ new\ clusters\ within\ area\ of\ New\ Moscow$ 



Figure 34. Interrelation of clusters within New Moscow territory



 $Figure\ 35.\ Correlation\ of\ investments:\ phasing\ the\ cluster\ development$ 

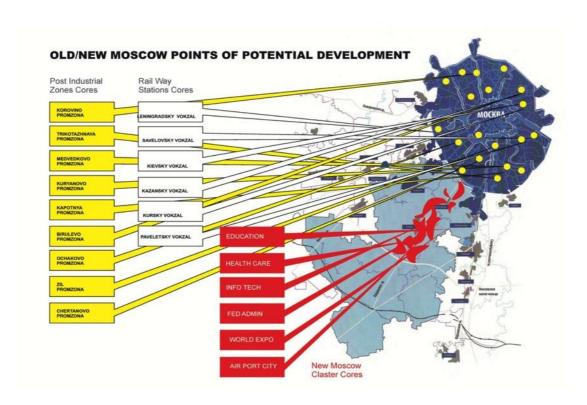


Figure 36. Old and New Moscow Points of Potential Development



Figure 37. Visualization of clusters



Figure 38. Array of types of investments in development projects



Figure 39. Creation of Federal Center: Development within urban tissue of an Old Moscow

Good analysis of the potential of the old city

- City management and corresponding issues of:
  - o population growth,
  - o young generation,
  - o offer-demand of houses,
  - o immigrants
  - social issues
- Focus on economic issues
- Fulfill requirements of the competition brief
- Stronger (conceptual) integration of old city and new city

- Railroad ring in new territory seems less efficient than a line
- Environmental aspects
- Presentation of the potential of the river, and then there is no corresponding proposal
- Planning schemes for the new territory don't link strongly to center
- Imbalance in transitions between scales
- What will the old Moscow become? Which character will it maintain?

#### **CNIIP**

CNIIP has deconstructed the territory in a series of towns, spurring the axis of development in conjunction with airports. Transportation system goes along with the hierarchy of towns presented. Concept of Transit-Oriented Development acts as a standart for sustainable expansion; 5 belts of agglomeration considered within the framework of development. 1st and 5th are supposed to save green/blue structure and intended to be purely functional. Second belt supposed to present high-density development, whilst third lowering the density to medium. 4th supposed to appear in Outer Cental Automobile Ring Road (western expansion of Moscow Ring Automobile Road) with consequent development of logistic center.

New Federal Center is situated within 2<sup>nd</sup> belt of high density construction, supported by new orthogonal structure of public transport. The importance of polycentricity is underlined by notion that creation of linear city will only worsen existing situation. Thus, polycentric structure must be maintained along the border of Moscow as well. Old industrial zones must include new links for densification of street and magistral network as well; uninterrupted system of natural territory must be restored and maintained.

- Region
  - o Decentralization,
  - o Recapitalization,
  - Improval of amenities
  - o Polycentrism
  - o Green areas network
- City
  - o Regeneration of the city and increased connectivity
  - Network open space
  - Modern mixed use sub centers
  - o Amenitizing the river front
  - Pedestrian friendly space
  - o Deliver value for business and increase the quality of live
  - Move industries out
- Southwest territory
  - o TOD
  - Hierarchical growth
  - o Circumferential growth
  - o Airport as anchor not hub
  - o Structural lands cape preserve the southern area
- Five belts
  - o Green belt

- High Density within denoted zones (Federal Center and Business Innovation),
- o Development Lower Density TOD
- o Logistic and New Industry
- o Recreation / Agriculture and Nature

# • Work-life balance

- o Absence of sprawl
- o Manage age structure social mix
- Walkable cell



Figure 40. Green structure along Moskva river and industrial zones as point of interest



Figure 41. Spatial structure of Moscow Agglomeration

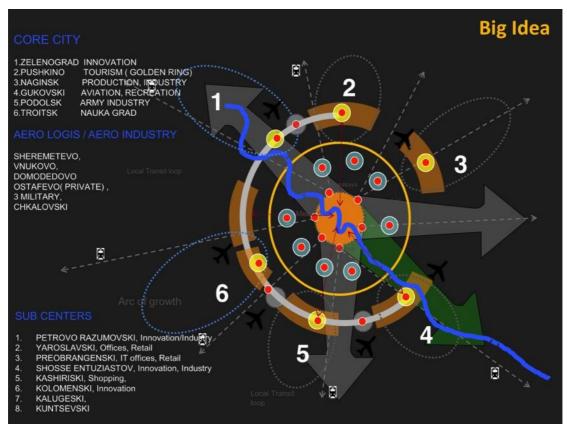


Figure 42. Formation of core city and sub-centers

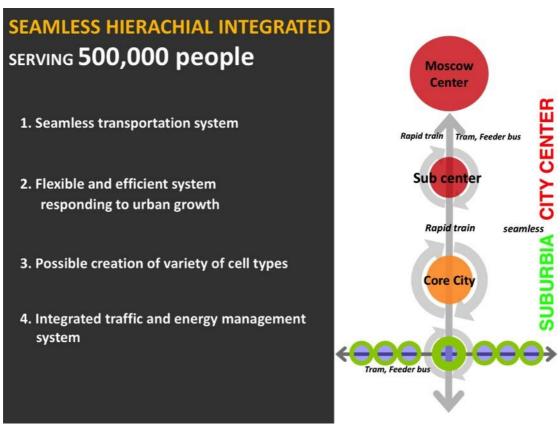


Figure 43. Schematic representation of development framework

# Initial diagram of TOD with WALK-ABLE CELL 45min COMMUTER 1. Time and Distance to the Core - 45min (Approx. 20km) 2. Distance between Stations - 1.5km (Preserve green area in between) 3. Service Area of Feeder Transport - 4 to 5km (Including several service stops) 4. Allocates Major Road out side of the Cell - Allocates logistics and supply and treatment facilities at the major road side 56 meters subway line CORE CITY 3D TRANSPORT SYSTEM

Figure 44. Diagram of TOD with walkable cell

# Where the Financial Center should be located



	Central area of Moscow	Rublevo-Archangelskoye	South West Expansion		
	200 ha – 300 ha	500 ha	Over 500 ha		
Primary components	Ineffective and scattered	will the customers move	Become a federal magnet, attract customers and sectors		
Secondary components	Limited land for large- scale development and expansion	Limited Land for expansion	Plenty of land to for large-scale development		
Tertiary Components	Same as above		Same as above		
Traffic jam Remedy	Poor	Improved	Improved		
3 Airports access	Fair	Good	Good		
Incentives Special Zone	Hard	Possible	Highly Possible* (because to near federal center)		

<sup>\*</sup> Locating both Federal Agencies and Financial Center in the same core can be justified by,

- · Efficiency of huge Investment on Infrastructures,
- · Economical sustainability of components mentioned following,
- Easiness of handling Administrative Issues, namely Special Zoning/Incentives.

Figure 45. Financial analysis of Financial Center Creation

- Polycentrism
- Analysis and sensibility within the old borders of Moscow
- Elegant connection of green spaces and corridors (in city center)
- Mixed uses and civilizing of urban streets
- Preservation of forests of the southwest
- Energy management
- A specific institutions and financial proposal to manage new development
- Move away from the centre
- Concept of satellite towns
- Good focus on infrastructures
- Benchmark with Tokyo, as model of redistribution of urban functions and links between new centres
- Development of ring roads around Moscow to be conducted in conjunction with logistics

- Planning schemes for the new territory don't link strongly to center
- Imbalance in transitions between scales
- What will the old Moscow become? Character?
- No real new strategic options except for satellite towns

## **Antoine Grumbach Et Associes**

Antoine Grumbach starts with geopolitics and shifts focus to international competitiveness of Moscow as a city, setting principal section also as a main standard for the expansion. As it has been mentioned by contest moderators and international jury, team has a great balance of architectural proposals, economic analysis, positive and negative consequences.

Within territory of Old Moscow team develops concept of so-called planning bundles, which is, in fact, mix of transport hubs, zones of high-density construction and cargo yards. This approach leads to the hidden potential of 1500 hectares within territories of an old Moscow. Moreover, territorial reserves of the city present the possibility of creation of so-called 8 Gates of New Moscow.

System of a new public transport with three encompassing rings is useful for every type of load. Nevertheless, some of the concepts come from area of utopia, as the public transport on Moscow Ring Road.

Main projectual motto of a team called "Moscow is a city within forest" is demonstrated by reconstruction of Old and New Moscow quartiers. Concept of 5 small cities along main A101 direction is, in fact, creates small New Urbanism model in a shell with formation of clusters of dacha and cottage settlements. Federal Center is located within option proposed by contest's condition.

- Governance and economic development
- A city in the forest
- Functional planning arrangement, moscow+new territories
- City upon the city: four types of intervention
- The three stations as the backbone of development
- A green block
- Housing state
- Dachas
- Mobility
  - Multimodality
  - High speed train ring
  - o Metropolitan high speed network
  - MKAD express
  - o Tramway network
  - Moscow new rail network
  - New metro extension
  - Model of financing transports
- Introducing and rethinking green spaces
- Interaction of Moscow city and new Moscow as a single urban planning object

- Localization of legislative and executive bodies of Russian government
- Sustainable development and innovation of engineering support

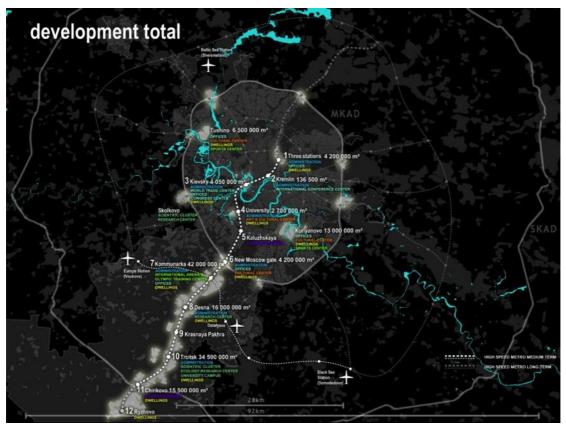


Figure 46. Prognosis of possible development



Figure 47.Moscow as a city within a forest. Visualisation

# 8 gates tomorrow / 8 ворот завтра

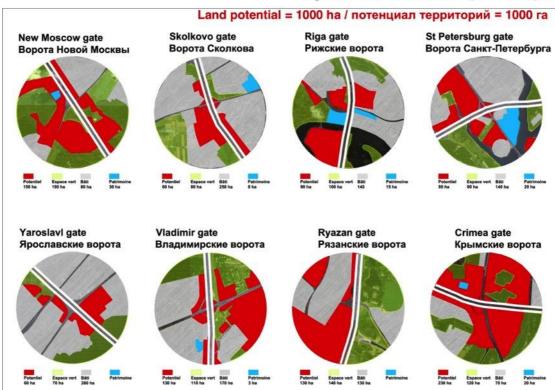
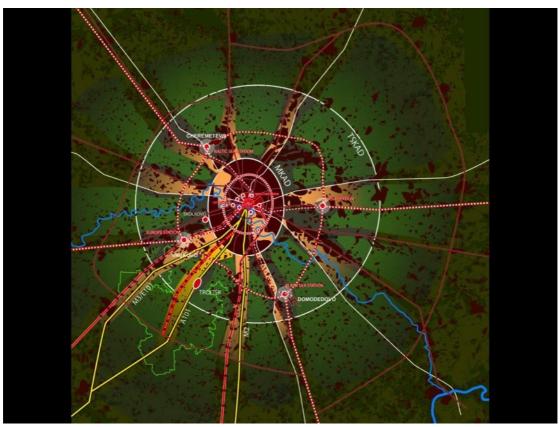


Figure 48.8 Gates of New Moscow



**Figure 49. Density Profile & Planning Tools** 



 $Figure\ 50.\ City\ within\ regional\ context$ 

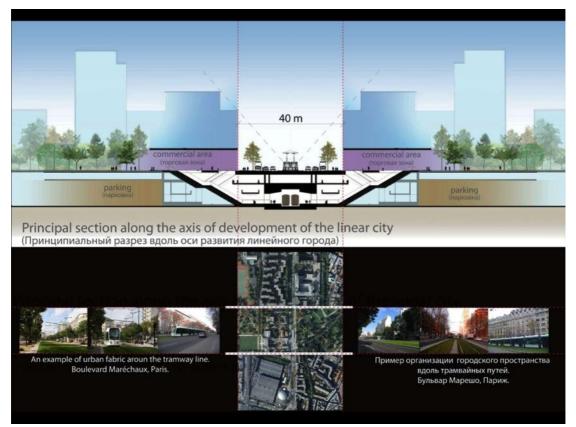


Figure 51. Principal section of development

- Powerful network of transports multimodality
- Proposal to integrate city with the new territory through the Moscow
- gate
- Sustainability green traffic, fair density, flexibility, social mixed, biodiversity
- Sustainable development and innovation of engineering support
- Proposal fulfills the requirements of the competition
- The evaluation cost of the new extension development
- Interesting geopolitics large scale approach
- Clear options for Moscow city limits (within the time frame of 1.30 hour)
- Ecosystem continuity considered
- Public transport system clearly addressed at all scales

No new towns but linear city option and transformation of existing city

- The proposal of new transportation systems is a bit far-fetched
- All urban growth goes to the new territories how will the rest of the region absorb growth?
- Linear city model still to be challenged as efficient structure

#### **L'AUC**

The agglomeration territory is subdivided on several programmatic layers and clusters that reappear on different levels. Five densities of urban intensities are present; every intensity, in turn, has its own set of guidelines. On a grand scale, territory is divided as IN:URBANISM for internal city and EX:URBANISM for external development. Nominal preposition for transport scheme provide basic connection between new urban formations. Conceptual model (which has been inspired by suprematism in aesthetical way) thoroughly saved in real linear extension. Citing authors, "Linear city is presented between Domodedovo and Vnukovo, along new route of high-speed train. New route, in fact, isn't based on center-periphery logic, but, in fact, provides direct link between urban formations on the periphery, thus forming basic infrastructure for new urbanization and development".

New clusters are not presented in clear way. Instead, a "cloud clusters", mix of functions are present. In that way, ideology of clusters is more feasible in terms of implementation to a real world. Nevertheless, clusters are still themed and have directions: for example, Domodedovo will have financial district, Konstantinovo will host creative clusters, Troitsk intended for scientific zone. Finally, Knutovo and Pushkino are mentioned as governmental clusters. Every of zones have prospect for economic development.

- A new solidarity between the old and the new Moscow
- No pure clusters appearance of "cloud clusters" as mix of functions. Diversity. Diffuse urbanity.
- Linear city between the two airports in the south. Parallel Moscow
- "AMENITY" Infrastructural as a basis for improving the Moscow of the future
- "IN:URBANISM"- Within Moscow's old Boundaries
  - Proposal for the conversion of the railroad around the third ring into a
  - Passenger network
  - Development proposals (based on "mutability" or likelihood of change around)
  - o 4 key transportation hubs on the third ring
- "EX:URBANISM" Concepts for the extension of Moscow
  - o Multimodal transport connection between Vnukovo Airport andDomodedovo to complete already occurring urban growth
  - o Distinct urban typologies to inhabit the new connection
  - A system of 3 connections between "IN" and "EX" the conversion of existing radial roads into complete urban corridors.
- BIG MOSCOW=MOSCOW ON MOSCOW+MOSCOW
   PARALLEL+MAINSTREETS+MOSCOW INTEGRATED+TAIGA
   METROPOLIS

# Express regional + 0 km Aeroexpress + 0 km LRT + 0 km Métro + 3,9 km Fast tram + 34,2 km BRT + 0 km 0 High-speed train station

Figure 52. Transport scheme with high-speed periphery train

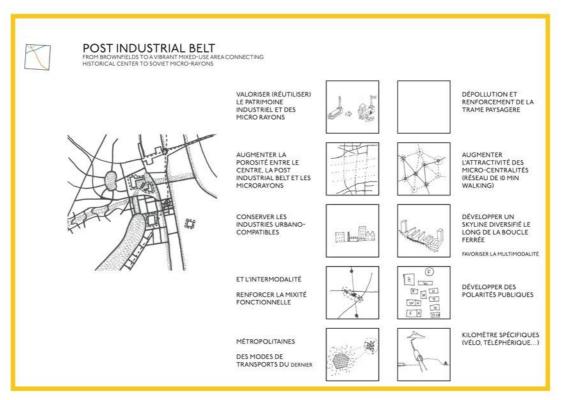


Figure 53. Brownfield as a possibility for creation of new micro-centralities

# PROGRAMMATIC LAYERS

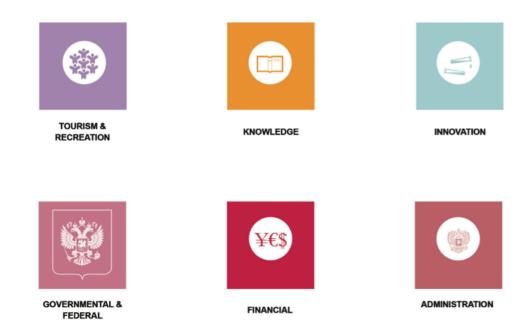
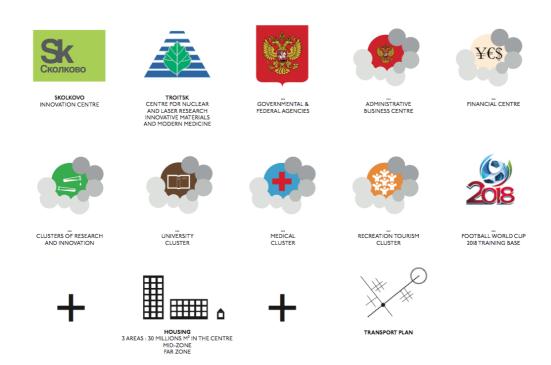


Figure 54. Programmatic Layers



**Figure 55. Cluster Functions** 

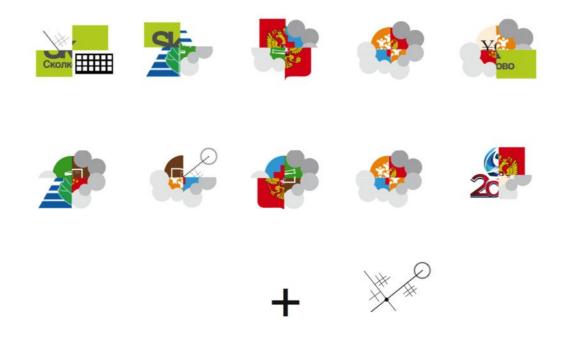


Figure 56. "Cloud Clusters"

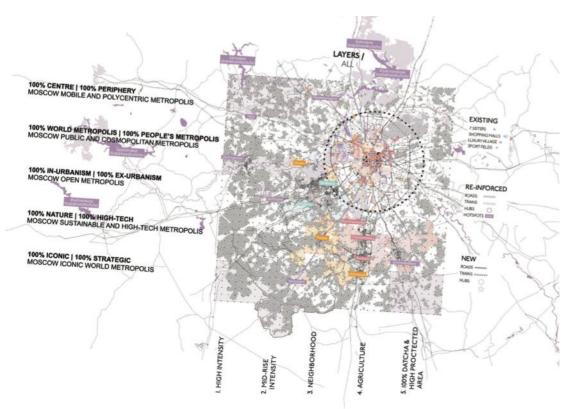


Figure 57. Layers with topology of existing city

# **DEGREES / INTENSITIES**

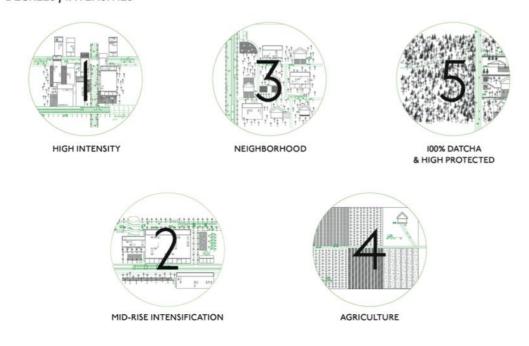


Figure 58. 5 intensities for different set of guidelines

# SUSTAINABLE GUIDELINES

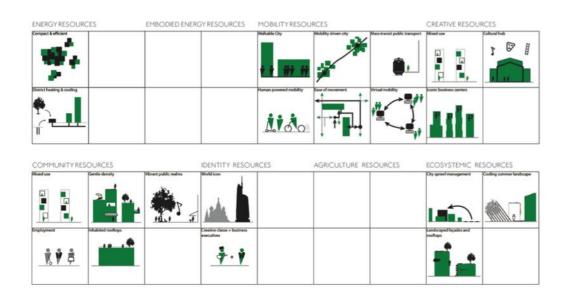


Figure 59. Example of guidelines for given density

# **Strong sides**

- Clear diagram of future planning schemes
- Flexibility and feasibility of implementation
- Social awareness
- Creative, theoretical and radical approach to city limits (square)
- New concepts, figures and paradigms proposed
- Specific proposals on transportation, extensions, post-industrial belt, SW extension
- Borderless agglomeration as characteristic of a contemporary metropolis
- 5 guidelines with clear strategies framing potential options

- The radial connections (amenity) between the new Moscow and the Old Moscow are still somewhat undefined. What types of infrastructure go here?
- Drawings are enigmatic concepts are difficult to understand in a presentation setting
- Proposed strategies need to be reassessed in a more practical and concrete way

## **OMA**

Mainstream theoretics OMA break down the research into 7 main parts, introduced below. The main concept embodies airports as the main drivers for the economic development; nevertheless, the whole project acts as the modernization effort. The Dutch team extracts three consistencies of their project concept:

- The use of ideal polycentrical four-core model;
- The creation of town-planning instruments for work with the existing development of the attached territories;
- The improvement of law base of the development and agglomeration management.

As a matter of fact, OMA's attention is focused on the definition of configuration of the urbanization territory around transportation hubs, considering current planning restrictions and potential transportational connections. As a result Vnukovo local agglomeration centre has shifted towards East having formed a new city around Troitsk with a huge amount of jobs not only for its citizens, but also for residents of Moscow periphery area Teply Stan and Konkovo as well.

Special attention was concentrated on the method of integration of dachas development into the New Moscow. OMA suggestfree migration of the residentional and non-residentional functions that denotes the formation of polyfunctional structure of dachas' blocks preserving finely dispersed planning organization. Moreover, team believes that the new territory requires only three types of lands: forests, agriculture fields and city buildings. Concerning a great diversity of functional types of land plots, OMA render these into 13 categories and mix them for creation of above-mentioned four-core model. New Federal Center option is highly criticized from feasibility point of view; no clear option is present.

- Decentralization
- Balance the region
- Manage the increased land value
- Polycentric ideal network of distinct cities
- Airports, magnets for new economic activities, over time the periphery
- emancipates
- Double loop transport system
- Electrical networks in the outskirts
- Concentrate growth
- Working with the existing elements
- Use the model to explore the political and legal system

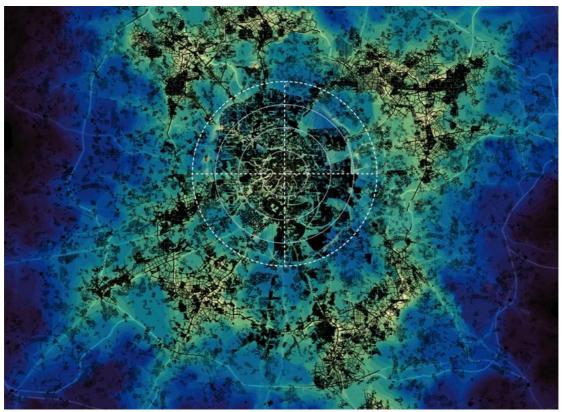


Figure 60. Definition of Moscow as monocentric urban entity...

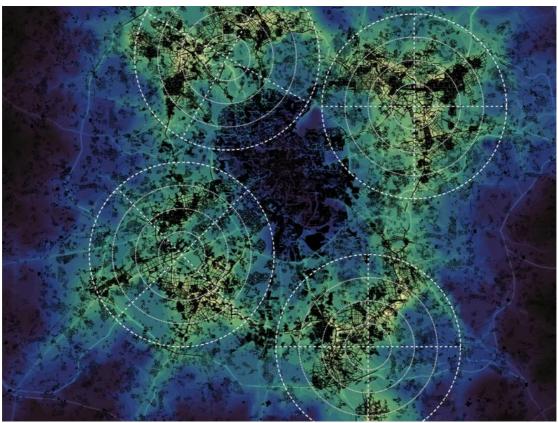


Figure 61... and initial proposal of polycentric agglomeration which extends beyond initial preposition



Figure 62. 7 main branches of OMA's research

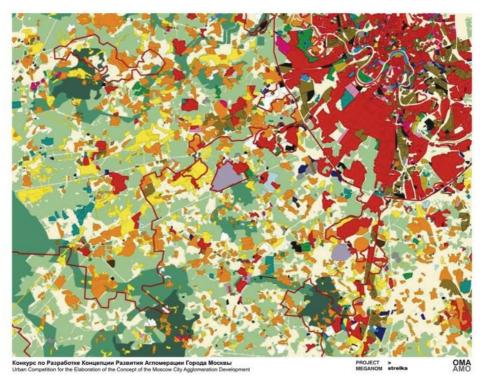


Figure 63. Fragmentation of land use as potential for new development

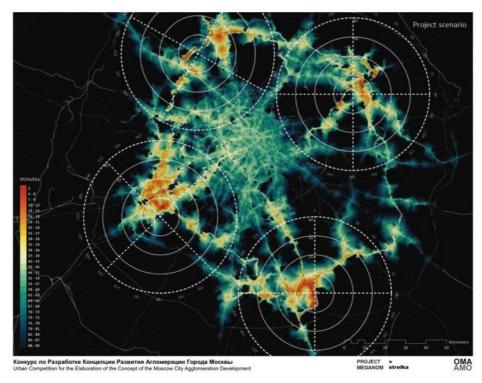


Figure 64. "Heat signature", dynamics of new polycentric cities

- Balance and integration in the region
- Large scale approach: includes a reflection on Oblast limits and role of SKAD Interrogation on the status of Moscow
- Interesting benchmark approach with Randstadt
- Taking into account social reform prior to city extension
- Proposal to enhance multipolarity with 4centres connected to the 4 airports
- Social worries: integration of the immigrants
- Public transport network and work with land uses avoiding commuters
- Preserved forest spaces
- Working with the existing elements and trends

- Departure from the basic requirements of the competition brief
- Missing link between analysis of city center and proposals on the periphery
- Difficult to understand the character of the proposed cities
- The 4 airports are not included in the city life at the moment (one is military)
- Development around airport is not usually efficient to develop a metropolis
- Development in SW is just one polarity among 4

• Polycentric Cities in metropolitan area

#### **Ricardo Bofill**

Bofill's ambitions include creation of the largest green corridor as a spine for economic development. It's combined with the clusters and districts imposed by customer's will. This linear city is based on 6 concepts:

- To support equalization of so-called biophysical matrix
- To protect natural and agricultural lands along vacant ones
- To foster integration and coexistence of habitual and other functions
- To provide compact and continuity growth
- To support polycentric structure of territory
- To give priority for public transport

One of the main features of Bofill's proposal is the concept of logistic center at the end of linear city, which structure the development as a whole.

- Unload 2,5 millions Muscovites from historic center, create 1,5 million jobs
- Integration, intensification, interrelated systems
- Improve water quality of rivers, resolve the connectivity of ecological network.
- From the concentration in the city center to the articulation of the periphery, lack of capillarity
- New Urban settlements mix of activities and functionalities, regeneration of new spaces, system of new centralities
- Public transport as the main axis of the mobility system, integration of the transport network, management to improve the quality of an organized public space
- Connected smart parks city parks and protected forest. "Intelligent" region and city. Protected the main axis of ecological connectivity, integrated secondary corridors, combine the suburban forest and the agriculture, National parks proposal
- Increase capillarity between old Moscow and SW territories, rapid transit
- network SW territories connected to old Moscow

#### OKRUGS FUNCTIONAL PLANNING INDEX

	GROSS LAND		F.A.R	BUILDABLE	SELLABLE	96	96	96	SELLABLE	SELLABLE	PROJECTED	PROJECTED
	AREA (m2)	AREA (m2)	20000	AREA (m2)	AREA (m2)	RES.	OFF.	OTH.	RES. AREA	OFF. AREA	RESIDENTS	WORKERS
NDUSTRIAL AREAS INTO EXISTING MOSCOW							-				0.000	
EAST	15.600.000	7,020,000	0,70	4,914,000	3.439.800	30	10	60,00	1.031.940	343.980	51,597	22.93
NORTH	17,920,000	8,064,000	0,70	5.644.800	3.951.360	30	10	60,00	1.185.408	395.136	59,270	26,34
NORTH-EAST	16.800.000	7.560.000	0,70	5.292.000	3.704.400	30	10	60,00	1,111,320	370.440	23,566	24.69
NORTH-WEST	8.700.000	3.915.000	0,70	2.740.500	1,918,350	30	10	60,00	575,505	191,835	28,775	12.78
SOUTH-EAST	33,630,000	16.033.500	0,70	11.223.450	7.856.415	30	10	60,00	2.356.925	785.642	117.846	52.37
SOUTH	23.670.000	10.651.500	0,70	7,456,050	5.219.235	30	10	60,00	1.565.771	521.924	78.289	34,75
CENTER	3.460.000	1,557,000	0,70	1.059.900	762,930	38	10	52,00	289,913	76.293	14.496	5.00
COUTH WEST	11,650,000	5,242,500	0,70	3.669.750	2.568.825	30	10	60,00	770.648	256.883	38.532	17.12
WEST	16.600.000	7.470.000	0,70	5,229,000	3.660.300	30	10	60,00	1.098.090	366.030	54.905	24.40
ELENOGRAD	1.970,000	\$86,500	0,70	620,550	434,385	30	10	60,00	130.316	43,439	6.516	2.89
SUB-TOTAL	152,000,000	63,400,000	0.00	47,850,600	33.516.000	1000			10.115.834	3,351,600	595,792	223.44
NEW TERRITORIES	1											
NEW TERRITORIES NOVO MOSKOVSKY												
	8.034.354	6.427.483	0,20	1.285.497	899.848	60,00	31,00	5,00	339.909	314.947	26.995	
NOVO MOSKOVSKY	8.034.354 4.523.893	6.427.483 3.619.115	0,20	1.285.497 3.619.115	899.848 2.533.380	60,00 73,00	35,00 22,00	5,00	139,909 1,849,368	314.947 557.344	92.468	
NOVO MOSKOVSKY FEDERAL DISTRICT	4,523,893 21,217,379	3.619.115 16.973.903		3.619.115 33.947.807	2,533,380 23,763,465	0.00			1.849.368 14.258.079	557.344 8.317.213	92.468 712.904	37.1 554.4
NOVO MOSKOVSKY FEDERAL DISTRICT	4,523,893	3.619.115	1,00	3,619,115	2,533,380	73,00	22,00	5,00	1.849.368	557.344	92.468	37.1 554.4
NOVO MOSKOVSKY FEDERAL DISTRICT	4,523,893 21,217,379	3.619.115 16.973.903 27.020.501	1,00	3.619.115 33.947.807 38.852.418	2,533,380 23,763,465	73,00	22,00	5,00	1.849.368 14.258.079	557.344 8.317.213	92.468 712.904 832.368	37.1 554.4
NOVO MOSKOVSKY FEDERAL DISTRICT EDU. CLUSTER FINANCIAL DISTRICT NOVO MOSK. SUB-TOTAL	4,523,893 21,217,379	3.619.115 16.973.903	1,00	3.619.115 33.947.807	2,533,380 23,763,465	73,00	22,00 35,00 35,00	5,00	1.849.368 14.258.079	557.344 8.317.213	92.468 712.904	37.1: 554.4 612.6
NOVO MOSKOVSKY FEDERAL DISTRICT EDU CLUSTER FINANCIAL DISTRICT NOVO MOSK SUB-TOTAL IROITSKY	4,523,893 21,217,379 33,775,627	3.619.115 16.973.903 27.020.501	1,00 2,00	3.619.115 33.947.807 38.852.418	2,533,380 23,763,465 27,196,693	73,00 60,00	22,00 31,00	5,00 5,00	1.849.368 14.258.079 16.647.355	537.344 8.317.213 9.189.503	92.468 712.904 832.368	37.1° 554.4 612.6°
NOVO MOSKOVSKY FEDERAL DISTRICT EDU. CLUSTER FINANCIAL DISTRICT NOVO MOSK SUB-TOTAL TROITSKY FINANCIAL DISTRICT	4.523.893 21.217.379 33.775.627	3.619.115 16.973.903 27.020.501 1.421.102	1,00 2,00 0,20	3.619.115 33.947.807 38.852.418 284.220	2,533,380 23,763,465 27,196,693 198,954	73,00 60,00 60,00	22,00 35,00 35,00	5,00 5,00	1,849,368 14,258,079 16,647,355	537.344 8.317.213 9.189.503 69.634	92,465 712,904 832,368 5,969	37.1° 554.40 612.6° 4.6° 221.5°
NOVO MOSKOVSKY PEDERAL DISTRICT EDU. CLUSTER PRANCIAL DISTRICT NOVO MOSK SUB-TOTAL TROITSKY FRANCIAL DISTRICT EDUCATIONAL	4,523,893 21,217,379 33,775,627 1,776,376 26,976,993	3.619.115 16.973.903 27.020.501 1.421.102 21.381.595	1,00 2,00 0,20 1,00	3.619.115 33.947.807 38.852.418 284.220 21.381.393	2,533,380 23,763,465 27,196,693 198,954 15,107,116	73,00 60,00 60,00 73,00	22,00 31,00 31,00 22,00	5,00 5,00 5,00 5,00	1.849.368 14.258.079 16.647.355 119.373 11.028.193	537.344 8.317.213 9.189.583 69.634 3.323.366	92.468 712.904 832.348 5.969 331.410	37.1° 554.40 612.6° 4.6° 221.5°
NOVO MOSKOVSKY PEDERAL DISTRICT EDU. CLUSTER PRANCIAL DISTRICT NOVO MOSK. SUB TOTAL PROTISKY PRANCIAL DISTRICT PRANCIAL DISTRICT PRANCIAL DISTRICT EDUCATIONAL	4,523,893 21,217,379 33,775,627 1,776,378 26,976,993 29,764,594	3.619.115 16.973.903 27.020.501 1.421.102 21.381.595 23.811.675	0,20 1,00 0,50	3.619.115 33.947.807 38.852.418 284.220 21.381.595 11.905.838	2,533,380 23,763,465 27,196,693 198,954 15,107,116 8,334,086	73,00 60,00 60,00 73,00 75,00	22,00 35,00 35,00 22,00 3,00	5,00 5,00 5,00 5,00 22,00	1.549.368 14.258.079 16.647.355 119.373 11.028.193 6.250.363	537.344 8.317.213 9.189.503 69.634 3.323.366 250.023	92.468 712.904 832.348 5.969 531.410 312.528	37.1 354.4 612.6 4.6 221.5 16.6 73.0
NOVO MOSKOVSKY  FEDERAL DISTRICT  FOUL CLUSTER  FRANCIAL DISTRICT  NOVO MOSK SUB-TOTAL  TROITSKY  FPLANCIAL DISTRICT  EDUCATIONAL  LAKE CITY  LOGISTIC	4,523,893 21,217,379 33,775,627 1,776,378 26,976,993 29,764,594 12,224,806	3,619,115 16,973,903 27,920,501 1,421,102 21,381,595 23,811,675 9,779,845	0,20 1,00 0,50	3,619,115 33,947,907 38,852,418 284,220 21,581,595 11,905,838 1,935,969	2,333,380 23,763,465 27,196,693 198,954 15,107,116 8,334,086 1,369,178	73,00 60,00 60,00 73,00 75,00	22,00 35,00 35,00 22,00 3,00	5,00 5,00 5,00 5,00 22,00	1,549,365 14,258,079 16,647,355 11,9373 11,928,193 6,230,565 203,377	517.344 8.317.213 9.189.503 69.634 3.323.366 250.023 1.095.343	92.458 712.954 832.348 5.969 231.410 312.328 10.269	20.9 37.1: 554.4: 612.6: 4.6: 221.5: 16.6: 73.0: 311.2: 923.8:

# **FUNCTIONAL PLANNING:**

PROJECTED NEW RESIDENTS: 2.2 MILLION PEOPLE PROJECTED NEW iJobs: 1.1 MILLION

# **MOSCOW ADMINISTRATIVE STRUCTURE & NEW TERRITORIES**

Figure 65. Analysis of possible resettlement



Figure 66. Visualization of main concepts of extension

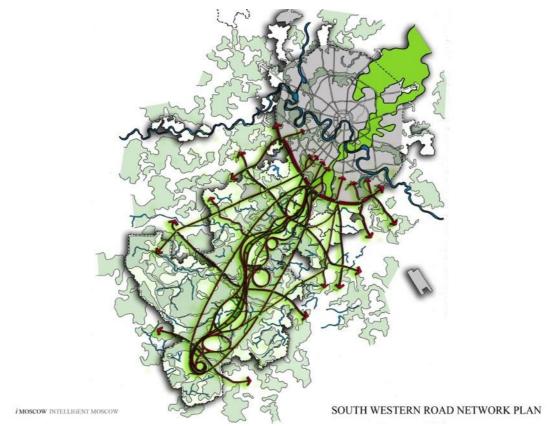


Figure 67. Conceptual transportation network

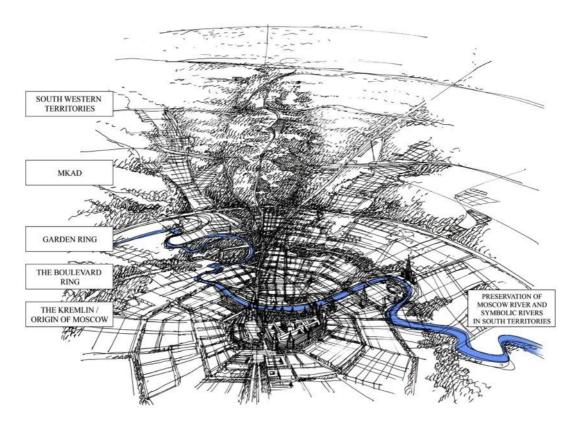


Figure 68. Principal distribution of land zones

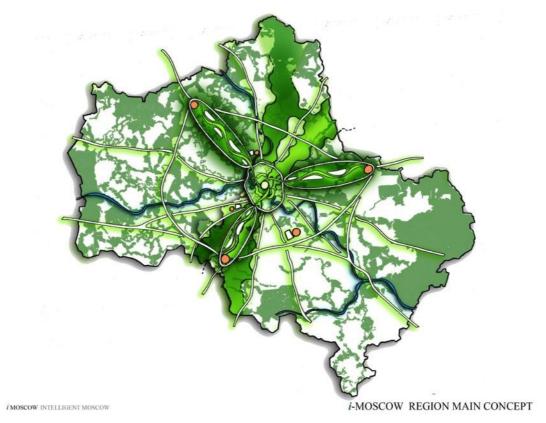
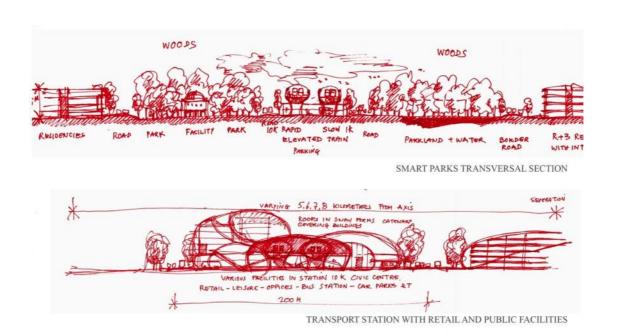


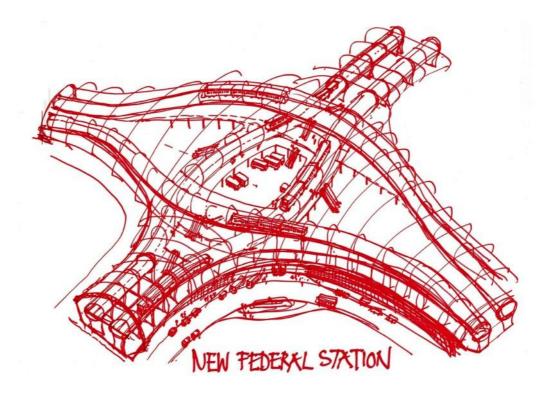
Figure 69. Replicability of southwest extension



URBAN SECTION SKETCH

i MOSCOW INTELLIGENT MOSCOW

Figure 70. Section of transport corridor



i MOSCOW INTELLIGENT MOSCOW

NEW FEDERAL STATION SKETCH VIEW

Figure 71. Sketch of New Federal Station

# **Strong sides**

- Approach based on a clear analysis of the city and its current dynamics
- Benchmarking on other metropolis
- Focus on nature (green corridor, green belt, forest preservation...) as key to the structure of central federal district
- Clear option for the SW extension as objects or centres positioned on an axis with transport connection, including reflection on logistics plan
- Integration between new development and old city (capillarity)
- In the old city: mix of activities, regeneration new space, new
- centralities
- Simple and clear proposal (strong diagrams)
- Strong ecological framework (at territorial scale)

- A conflict of scale between drawings and concepts
- Zoning of planned developments seems mono-functional in the drawings (more detail would helped support a very detailed set of proposals)
- Still unclear vision of global development and extension strategy

## **Studio Secchi-Vigano**

The methodology of S-V Studio is based clearly on nature as the urban-shaping system. All the projects must be in accordance to ecological situation in the area; thus, the valley system acts as the structure to develop along with. A brilliant report of SECCHI-VIGANO team starts with a key phrase that gives the understanding of their planning concept:" ... Moscow doesn't need new external poles or new towns-satellites. In fact, Moscow requires the central function continuity agglutinating the new extension with the already existing city and the introduction of the territories, formerly being satellites, into the capital city space".

It' necessary to mention that technically the "square" of the New-Old Moscow is an architectural mimicry of the historical Moscow. This is the core of the novelty of the SECCHI-VIGANO work and thus their concept is principally original. As authors report:" ... The square, as the main structural element of the South-West development, appears to be the net of 175 square kilometers, including the already existing city and an enormous open space in the centre. We should mention that inside the net the existing 85 million square meters have a FAR Index (the correlation of area of all the floors if the building and its land-acquisition) that equals 0.48. If we take FAR=1 as an example (minding Moscow urban tissue of the 20th century), we would have to build 175 million square meters of a new territory (renewals of the existing one (85 million)+ condensation),taking into consideration 90 million square meters that have been added after new programs. It is essential that, having multiple program scenario variations, the square could be resided by 1.4- 2.1 million of new inhabitants (if 70% of the 90 million square meters consist of mixed floor area and each inhabitant is given 25 square meters)..."- p. 217 of the Report.

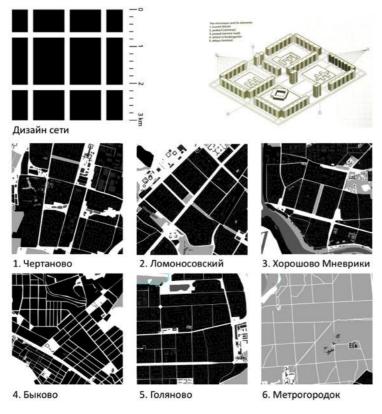
The unexpected paradox of the SECCHI-VIGANO concept lies in the invariability of the spatial model during its realization in the actual planning structure. The effect of the confluence of orthogonal net with the radioconcentric system is well-known since Roman Empire epoch and it is an implicent feature urban planning historysm. Thus, the method of spatial and transportational coherence increasing of Moscow periphery is becoming the historical dialogue method in each an every place of the South-Western Moscow. The only one question left is as follows: will the current land-use system allow us embody the above-depicted artistic and urban-planning conception?

- The regeneration of large areas of the city within its present limits.
- Recycle the existing spaces in the city and in the periphery industries
- A strong ecological improvement of all the metropolis
- The solution of the mobility problems
- "Civic magnificence", interaction of public and private entities in the formation of a new city, topography, empty center, the expansion of

- Moscow must be compact and to establish continuity with the existing city, diversity, density and visibility of the institutions
- Ecological and carrying structure, sustainable interaction of Moscow City and the south-western area of the Agglomeration as a single urban planning object.
- The shape of the new expansion resignes radial.
- Transport
  - High speed train,
  - o Intercity train,
  - o Commuter train,
  - Metro,
  - o Light Rail Transport,
  - o Express buses,
  - o Tramways
- Meshing the metropolis, green, transport as an equal urban condition
- A continuous centrality, densities, re-cycling the existing city, mixed uses



Figure 72. Programmatic concept of urban tissue development through "quadrant"



# 1 Городское великолепие

4. Выбор масштаба городской ткани: расширение Москвы должно быть компактным и устанавливать преемственность с существующим городом. Таким образом мы можем избежать периферийного характера новых расширений и наделить их истинной городской атмосферой.



Figure 73. "Civic Magnificence" as one of development guidelines



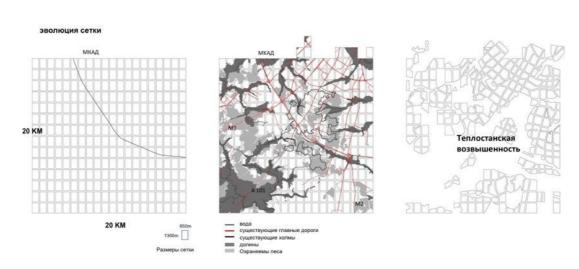


Figure 74. "Quadrant" as the main analytic tool (and consequent programmatic proposal)

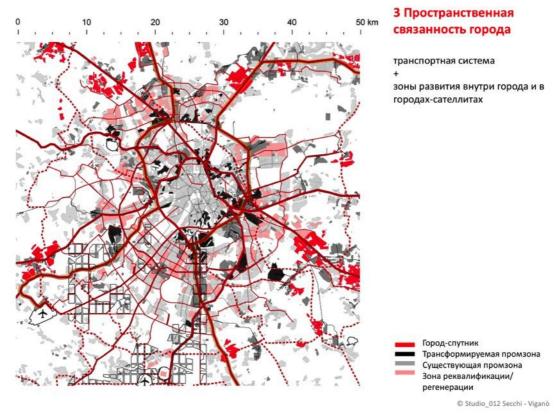


Figure 75. Spatial continuity of the city; transport system and spatial continuity of the city

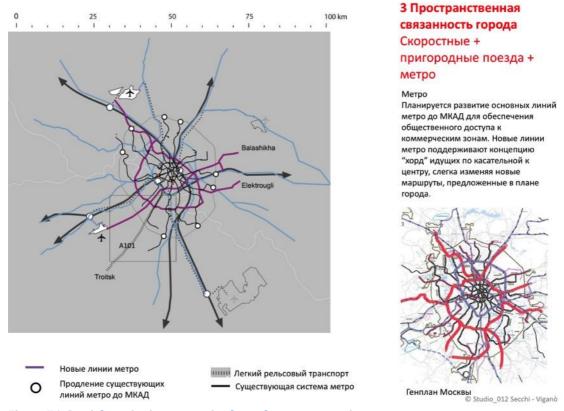


Figure 76. Spatial continuity concerning long-shot transportation

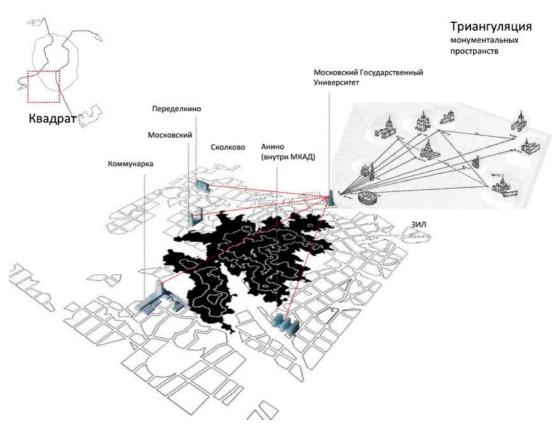


Figure 77. Triangulation of monumental spaces

- 1\_переработка: валоризация существующей городской ткани и инфраструктуры
- 1\_Recycle: valorization of the existing tissue and infrastructure



Существуюшая ткань + промышленность + жилье низкого качества + ж-д пути

Figure 78. Main principles: recycling of urban tissue and infrastructure

- A single urban planning object
- Good work in the old city
- A continuous centrality
- Powerful assessment of the territory:
  - Topography
  - o Landscape
  - o Urban tissue
- Magnificent study of integration between old city and new development
- Excellent integration of urban grid with existing landscape elements
- Take into account the understanding of Moscow reality
- Different city structure options are considered
- Specific reading of the territory through environmental approach
- Mobility issues are considered central
- Specific approach of SW extension as best area for living
- Scenarios based approach (urban form, traffic and program based)

- Several options which need to be more thoroughly explored
- Synergies or contradictions between options are to be more clearly defined
- Potential development scenarios are not mapped in a legible way over the proposed grid
- The concept of "Civic Magnificence" remains to be seen in practice

#### **Urban Design Associates**

UDA set ambitions to achieve status of the Zero Carbon city, and puts sustainability as a locomotive for further development. Thus, the first objective is to present clear framework for Moscow development and assess potential of removal of industrial zones within the city.

The SECCHI-VIGANO report reminds a specification for designers whilst American team's report is actually addressed to politicians and city managers who are in charge for the Moscow development. UDA's report is an emotional appeal and a clear and handy urban planning instruction which can easily be converted into regulatory and administrative document of Moscow government. The American specialists' Introductory says: " ... The basis of our concept of Moscow agglomeration development consists of ideas of positioning and transformation of Moscow as a historically important national property. Moreover, the suggested means and decisions have practical features, may be realized and, as the accumulated urban planning experience has shown, will definitely and by all means allow us to get a high-standard result in the end. The concept represented in the paper was chosen not just out of general good wishes but because of the possibility it provides to make Moscow the envy for all the rest World capitals..."-p.3 of the Report.

It is necessary to point out that the American specialists fill up sections of the paper with the contents that are extremely essential and actual for them in this context, not even changing the names of the sections, determined by the Thesis of the Contest. Thus, the section about urban planning centers system is represented in the format of six city strategy programs for the development of the most problematic Old Moscow territories and the building strategy of New Moscow. The strategy, concerning the procuring of the population and jobs balance is stated as follows:" ... 1. The shift of jobs to the new Federal center will lead towards the reduction of amount of enterprises and institutions and thereof the number of rooms and premises for other purposes ( such as: cultural and educational institutions) will increase. 2. The conversion of Federal institutions into lodging and accommodation will initiate the creation of high-quality housing and will by all means cause the increase of the percentage of well-off families among citizens of the central part of the city. 3. The reconstruction of the historical center and real estate of Stalin era will increase the percentage of the well-off citizens as well...".

- "...It is necessary to change the situation of the periphery districts built in the Sovietic epoch according to the following marks.
- -The initiation of the whole range of reconstructional programs of the districts with an active participation of people.
- -The target index of demography contents: 1/3 of families with a high income, 1/3 of families with a medium income, 1/3 of families with a low income.
- -The creation of jobs, stores, supermarkets and service enterprises with the development of pedestrians-orientated multifunctional districts as a final aim...."-p.33.

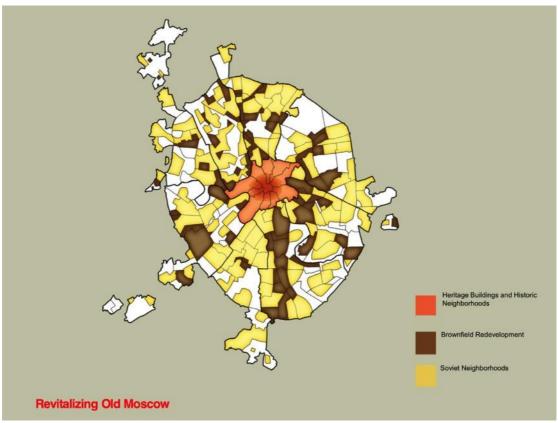
## **Proposal:**

- Triple helix economic synergy
- For One Vibrant Moscow a positive, symbiotic harmony is essential between New Moscow and Old Moscow – as the new is built, the old must be revitalized
- One fundamental transportation strategy: enhance public transit and manage the car
  - The best transportation plan is a good land use plan
  - Connect the New City to the Old City and all of Russia with Fast Trains, expand road and rail capacity with logistics centers, expand and optimize metro
  - Fix parking
  - o Moscow Central Station
- For One Vibrant Moscow an over-arching ecological and landscape consciousness must guide all decisions
  - o Sustainable change without harmful interventions.
  - Compensate losses of forest and other habitats with new ecological landscapes
  - Repair & enhance Moscow's existing environmental assets and ecological systems
- Narrative of revitalized brownfields, redevelopment of heritage buildings and historic neighborhoods, and Soviet neighborhoods
- Phasing the autonomous, growth must be protected for future generations



The City in the Forest

Figure 79. City in the Forest concept



Figure~80.~Revitalization~of~the~Old~Moscow~through~brownfield~redevelopment~and~historic~heritage~recovery

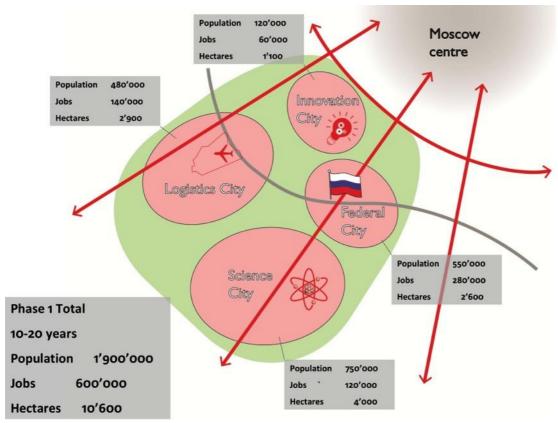


Figure 81. Different clusters of activity within westward expansion

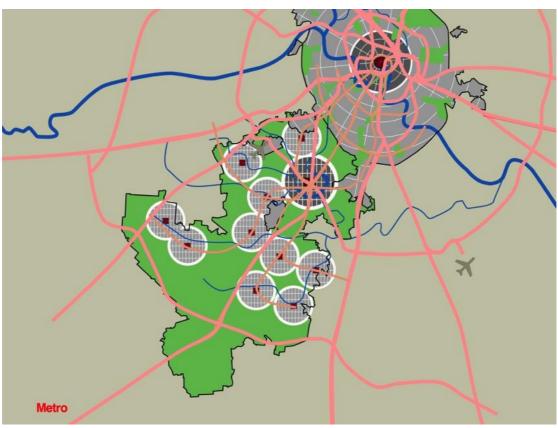
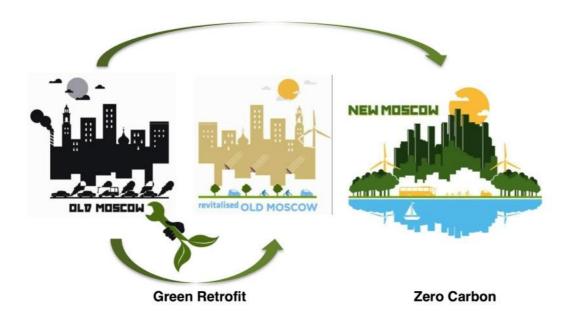


Figure 82. Creation of policentrality within new expansion

### Infrastructure Networks: Water, Waste, Energy



## **Old Moscow New Moscow Green Moscow**

Figure 83. Low-Carbon Energy as one of main concepts of further development

## **Strong sides**

- City growth described as an organic process
- Several imperatives are explored (capital imperative, great city, urban design, environment, economics...)
- Reflection on urban form integrated
- Constellation of cities proposal
- Interesting plural approach on different topics: forests, governance, structures...
- Powerful presentation about real issues and real solutions in Moscow
- Strong and credible concept of ecological corridors within the city
- Civic engagement and neighborhood scale intervention as a tool for revitalizing old Moscow.
- Among the scarce teams to consider phasing in a long-term project

#### Weaknesses

- No real options specified
- Needs to go beyond analytical position
- Good solutions seem generic or applicable in any city in the world (as drawn in this presentations)

#### **Shared Elements**

Most of the teams share common elements of their researches. Summary of them are present in consequent list and accompanied by general recommendations of juries that have been mentioned in final Seminar 6.

## **Shared Elements of Analysis Results**

- Fragmented periphery, growing as fractal and with diversity of uses
- Scarce control in the Oblast of many distinct urban activities
- The fringe industrial area as space of opportunity
- The advantage of living in Moscow
- High level of commuting
- A congested city
- High density on the periphery
- Under-utilized rivers and frontage industrial blocks
- The infrastructure which fragments the green network
- Government uses are highly concentrated in the center
- Mono-centric urban structure
- Degradation of open space in the high density blocks
- High respect for existing forests with regards to new development

## Recommendations by jury:

- o To integrate potential regeneration within the planning schemes
- o Potential of the existing city should be fully used
- Huge potential of the disused industrial plants must be analysed more thoroughly
- o To propose strategies for uses of old industrial areas
- o To connect new development areas with old urban tissue
- To consider another available land opportunities which exist within the city

#### **Shared General Issues**

- Relocation of activities
- Promotion of the low-carbon energy
- Appropriate density
- Promote and foster the use of public transport
- New networks, new node of interchange, exclusive corridor for public transports, management the use of the car, management the location of activities.
- Diversity a complex vision of the city
- Density as a factor of sustainability
- Design properly the urban form
- Reused the existing elements
- Use the vacancy land in the old city

## **Shared Elements in Environmental Analysis**

- Preservation of agricultural land is considered as part of urban development
- Protection the natural space and forests
- Nature which is closely integrated in planning proposals
- Integrated parks in the natural network with a defined hierarchy
- Network of green areas that enters into the old city
- Recovering process of river and its embankment as factor of identity and as cultural and civic corridor
- Ecological corridors
- Protected landscape as well as general natural aspects of the territory
- Management of the water cycle
- Usage of low-carbon energy

## **Shared Elements in Transport**

- Region
  - o A network of public transport
  - High speed
  - o Circular line mainly link the airports
  - o Radial public transport
  - o Modal Interchanges of transport in the fringe of the city
  - Multimodality
  - New circular motorways
  - New network for logistic
- In the old city
  - o Increase the underground network
  - o Create new stations and connections
  - New tram network
  - o Management of the use of private car
  - Make pedestrian friendly spaces
  - o Bus lanes and car sharing
- Between the old city and the new development
  - o High speed train in a linear way
  - o Improve the capillarity of the road network with the old city
  - New stations
- In the new city
  - o Improved network of public transport
  - o A Structure of transversal and radial transport connections
  - o Full network (hierarchical) of public transport

### Recommendations by jury:

- o Propose integrated public transport systems strategies
- Include alternative transport modes: trams, bicycles, cable systems...
- o Consider nodes and stations as focus for development

## **Shared Elements in Housing**

- Improval of social housing
- Improval of the rental market
- Improval of the quality of the new houses
- Design open spaces
- Proximity of public transport
- Social facilities in close proximity
- Mix employment an residential areas

## **Shared Elements in Analysis of Social Facilities**

- Presence of the social facilities near the living space
- Promotion of social and cultural facilities in high density block
- Decentralization social facilities

## **Shared Elements Study Economic Activities**

- Relocation the industrial activities located in the periphery of the old city
- Renewal all the obsolete industrial areas in the periphery of old city
- Creation of logistic city
- Relocation of the administrative headquarters
- Promotion of spaces of innovation, as cluster of:
  - o Administrative
  - Scientific education
  - Medical
  - Exhibition
  - Sports

## **Shared Elements in Energy Systems**

- Low carbon transport system
- Renewal energy
- Urban design
- Solar isolation
- Integrated Distribution Systems (Smart Grids)

### **Instruments for Managing the New Development**

- Consideration of new institutional administrative bodies
- New agencies to develop the area
- Cost-benefit analysis of the new extension development

### Aspects that need to be deepen

- Lack of vision of social reality and demographic issues
- Lack of concrete vision of reality vs cartographic approach

- Lack of cultural vision, taking into account the way of life
- Lack of vision on plurality of mobility modes
- Possibility of the infrastructure as main driver of development.
   Infrastructure could be a constraint for development
- A coherent strategic vision of Moscow future
- The identity of Moscow

The comparison table present main features of contestant's submissions. Although it present concrete criterias of comparison, they must perceive as accents. There is no exact definition for "Linear" of "Functional" cities, but these models act as anchors for proposal developments.

**Table 4.Comparison Table: Distinctive Features of Contestants' Submission** 

Team	Agglomeration Development Focus	Type of New Extension	New Federal Center Placement
Ostozhenka	Old / New	Polycentric City	Along Moscow River*
Chernikhov	Old / New	Linear / Functional City	Kommunarka / Old Moscow*
CNIIP	New	Linear City	Kommunarka / Old Moscow
Antoine Grumbach	Old / New	Linear City	Kommunarka / Desna / Troitsk / Chirikovo
L'AUC	Old / New	Transversal Linear City / Functional City	Kommunarka / Moskovskty
OMA	Old / New	Sattelite City*	Within Old Moscow*
Ricardo Bofill	New	Linear City	Kommunarka
Studio Secchi-Vigano	Old / New	Compact City	Kommunarka / Moskovsky
UDA	Old / New	Polycentric City	Kommunarka

• Interferes with initial conditions of the contest

It is necessary to mention that some of the teams bent the rules of contest, disregarding initial condition of contest as well. For example, OMA's preposition excludes consideration of south-eastward extenstion and concentrates on creation of satellite-cities belt around Moscow (see **OMA** team proposal part for additional info).

## Conclusion

The main question, implied within the title, is the interpenetration of political and projectual dimension in paradigm of consequent urban tissue development. As the study shown, in case of lack of public control with correspondent phenomenon of rational ignorance and bounded rationality, all the strings of process of urban development control are in hands of so-called "Special Interest Groups" that can exploit public issues (such as resettlement, decongestion and expansion of urban territory) for private reasons (increase in land value, provision of infrastructure by municipality and so on).

In case of Moscow Agglomeration Development Contest, pre-requisites for the contest were in favor of certain changes in urban tissue. Enclaves of extension included territories that are in private possession and certainly were in great need for municipality infrastructural support. As analysis of property has shown, general direction of extension towards south-west is also can be justified by reasons of property ownership and "pumping" of square meters price for consequent resale of assets. In latter case, political decision of capital's expansion also imposes psychological pressure over market, skyrocketing the expectations and boosting pre-sales for area. In latter case, it's also worth mentioning pre-requisites for relocation of Federal Center with three possible locations, all of them linked with ownership by big corporate actors. <sup>19</sup>

Analysis of projects, provided by international teams, share significant amount of common elements. One of them is marked as the danger of linear city creation: it's important for city municipality to foster growth of sub-centers around the main pole to decongest infrastructure network, as well as prevent uniformal megacity to appear, repeating the same issues seize the city today, resulting in congestion and malfunctioning of city as a whole. All that is made in favour of corporate actors must be checked for consistency with general public, as all megaprojects must fall within framework of long-term strategy of city's development. Some of the teams, such as OMA and Chernikhov, explicitly criticized chosen direction of agglomeration extension.

Another objection is the role of the planners itself. According to timeline that has been analyzed, competition for extension took its place in the end of extension process itself. This fact leads to conclusion that the whole affair wasn't looking for competition of ideas but rather for risk-assessment of suchturmoil within the grand scale. Raising the degree of conspiracy, it is also worth suggesting contest as a measure of legitimization of extension, bringing exports from abroad to justify pre-determined changes.

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<sup>&</sup>lt;sup>19</sup>Nevertheless, executive bodies and elected officials resist to relocate physical buildings and correspondent factories and jobs, marking clear distinction between the initiative group within governmental sectorthat favour change and general will of rest of parliamentaries.

Putting aside moral objections, there is no difference between provisors of public good; if there's a need that can be fulfilled by private investors, it will lead to increase in general well-being of the society. Nevertheless, checks and balances should be provided: in terms of economy, a feature of external control must be provided, expressed by intergovernmental commissions and public curatorship (which in this case acts like guaranteeing and licensing, ensuring the best result possible). Citing one of the Contest team proposals, it is necessary to provide clear system of agglomeration management and subordination along with distribution of responsibilities within the system, dealing with the big numbers and issues on the grand scale, encompassing interest of corporate actors and general public in one sounding plan, thus linking private tactics and public strategy in effective union. As Sun Tzu notably mentioned, "Strategy without tactics is the slowest route to victory. Tactics without strategy is the noise before defeat."

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