



# Agenda

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- **Decision-Makers – Who are They?**
- **Scientists – From Where and Whom Supported By?**
- **Evolution of Forms of Cooperation.**
- **Projects and Activities – From Separate Solutions to the Interconnected Activities.**
- **Scientific Knowledge + Traditional Knowledge**

# Decision-Makers – Who are They?



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- As before as now Decision-Makers – administrative bodies or boards of directors of big companies.
- Decision-makers – not easy to recognize, especially in a frame of process of fast changes taking place.
- Main tendency – concentration of all main decisive solution on top of administrative pyramid – i.e. executive bodies at federal level.
- All principal issues of Arctic zone development – prerogative of federal level. As subjects of Federation as NGO as local based movements – are among participants of the decision elaboration process.

# Scientists – From Where and Whom Supported By



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- Traditionally – Russian Academy of Sciences, Branch Academies, Specialized Analytical Groups, Universities.
- Since 1991 first two groups declined form 3 to 6 times. Among main reasons – inertia and low administrative flexibility.
- Newcomers are – groups and companies closely related as with business as with authorities.
- Main disadvantage of the latter groups – lack of deep complex expertise of the subject working over.

# Evolution of Forms of Interaction



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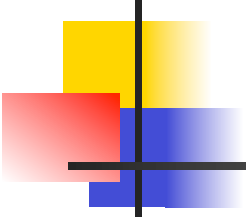
- Initial stage – late 80<sup>th</sup> – early 2000<sup>th</sup> – flow of specialists and expertise to Newcomers. Attempts to invite “academics” to work over acute themes as usually failed.
- Current stage – since end of the first decade of 2000<sup>th</sup> – interaction of “academics” and newcomers – as in form of transfer basic research results as in forms of co-participation in decision-making process (attendance in a form of expertise) .
- Russian Government is positioning RAS as one of the main expertise centers.



# Why are forms of cooperation changed?

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- As soon as development of the Arctic getting acute lack of basic knowledge of the processes became evident – especially in a period of climate changes.
- Overestimation of market oriented procedures of coordination of efforts of various actors as in Russian economy in general as in case of Arctic in particular.
- Interaction and interrelation of events much more complex and much more destructive as been seeing before (social processes in Northern communities and development of the traditional activities formed in a new environment explosive situation).



# Crucial Subjects of Cooperative Efforts

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- Resource management issues – not only development of new fields but also closure of old and depleted. In this respect most important support or modernization of existing settlements.
- Environmental issues – how to introduce Arctic best practices into going activities?
- Indigenous people way of life and restore traditional way of life with its intensity.
- Sustainability of Arctic eco-social systems in a period of rapid climate, economic and industrial changes.

**Center of cooperation – way of resources development.**

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# Projects and Activities – From Separate Solutions to the Interconnected Activities

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- Separate solutions are leads to short term effects in a near future and creates a big problems in a longer run (minerals development oriented to fast and highly profitable way – leads to the destruction of the monoindustrial cities in the Artic).
- Neglect ion of the traditional knowledge creates waste of time and resources (Yamal peninsula development is a bright example).
- Traditional activities of the people of the North needs to be embedded into decision-making process.



# Interconnected Activities in Arctic – Needs for Scientists

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- Arctic Economy faced outcomes of the changed within industrial organization took place for the last years.
- Arctic transportation infrastructure changes result of industry structure in general (several ports are disappeared due to lack of convenient size of timber delivery contract).
- Fields development strategies – settlements development intensities (too fast leads to high growth and too sharp decline in a long run).
- Fields decommissioning process – traditional activities.

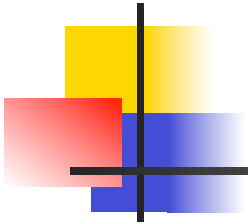


# Medvezie - gas processing unit – time to utilize



New problems are: recultivation of tundra, utilization of scrap and installations, restoration of traditional use of land.

# Scientific Knowledge + Traditional Knowledge – Form of Combine?



# Decision-makers and Scientists –

## spheres of cooperation

### Decision-Makers -

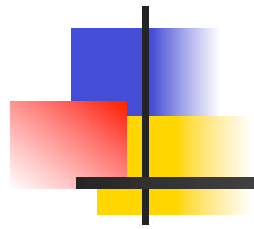
#### Solutions and Actions

- Legal-making process
- Project appraisal and development
- Regional development
- Fiscal and tax policy issues
- Technical regulations

### Scientists –

#### Expertise and Knowledge

- Basic structure and main principles and interconnections
- Expertise – special emphasize to ethno-cultural components
- Sustainable based model
- Long-term outcomes of projected measures
- Environmental side of innovative technologies



**Thank you!**  
**Questions are welcome!**

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