

# **Business plan investment project:** **Unitsky String Transport Strategy in UGRA** **(Khanty-Mansiysk Autonomous Okrug)**

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# Unitsky String Transport (STU) Strategy in Ugra Region

## Stage 1

**Khanty-Mansiysk – Surgut  
High-speed two-line two-rail  
STU track**

**1<sup>st</sup> order: local STU track  
Surgut – Belyi Yar**

**2<sup>nd</sup> order: itnercity STU track  
Khanty-Mansiysk - Surgut**

**Two-line city STU track  
in Khanty-Mansiysk  
(mono-STU or bi-STU)**

**1<sup>st</sup> order: STU track  
Ugra University – Campus**

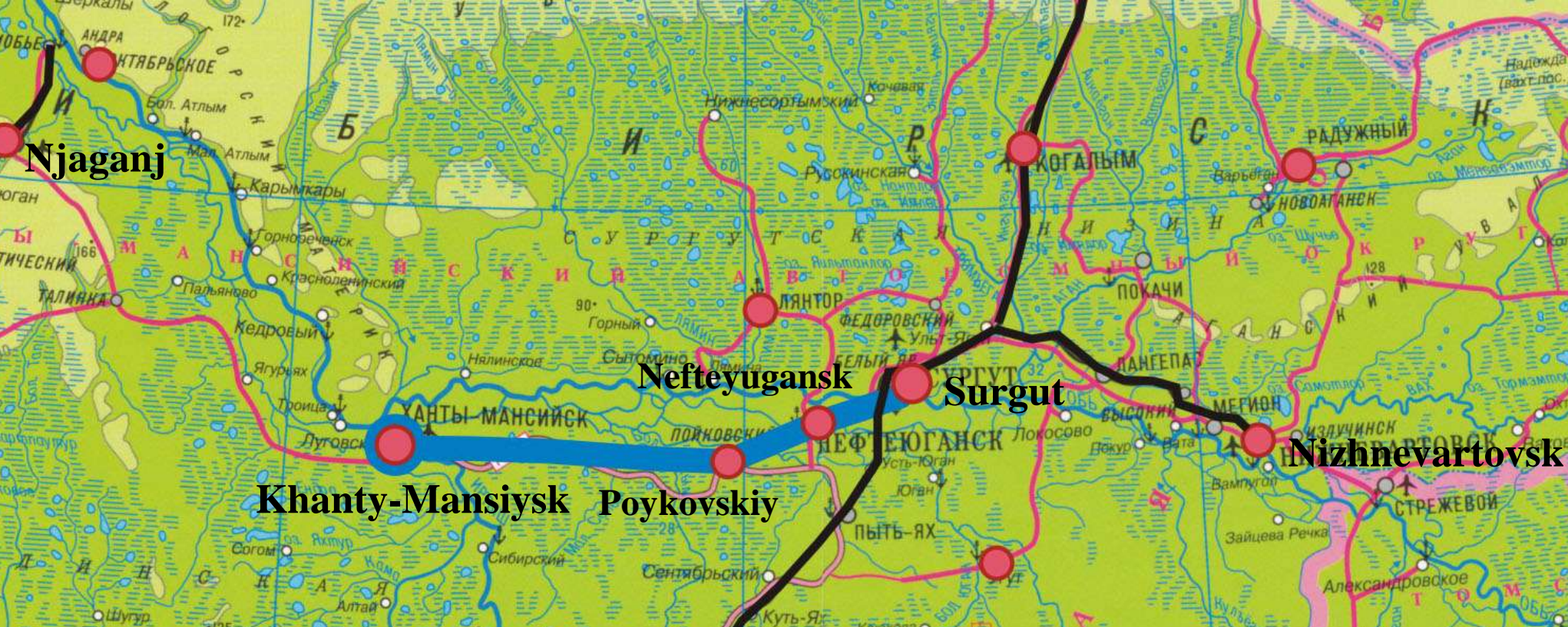
**2<sup>nd</sup> order: STU track  
Airport – River Port**

## Stage 2

**High-speed two-line two-rail STU tracks Surgut – Nizhnevartovsk and Khanty-Mansiysk – Njaganj; cargo STU track in the Urals**

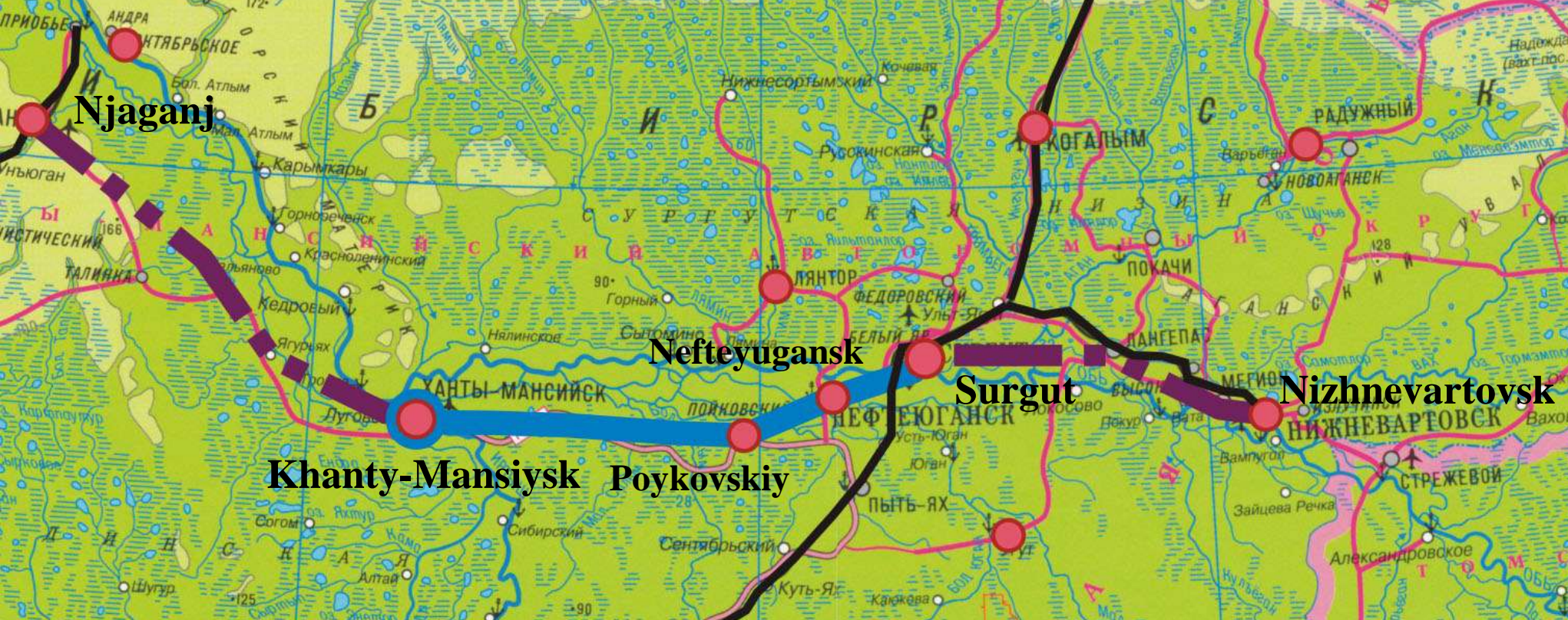
## Stage 3

**Creating the system of STU tracks in Khanty-Mansiysk region connecting it with Ural federal region, Industrial Urals, Yamal and other regions**



## **STU tracks of the first phase of the strategy:**

- 1. High-speed two-line two-rail cargo and passenger STU track Khanty-Mansiysk – Surgut**
- 2. City passenger STU track in Khanty-Mansiysk**



Track projects:



1<sup>st</sup> stage (up to 4 years)

2<sup>nd</sup> stage (up to 7 years)

**STU tracks of the 2<sup>nd</sup> strategy stage**

**High-speed two-line two-rail**

**STU tracks:**

1. Surgut - Nizhnevartovsk
2. Khanty-Mansiysk - Nyaganj

# STU strategy in Khanty-Mansiysk Autonomous Okrug (Ugra)

## The contents of the cargo flow in the south direction:

Oil, liquified gas, gas condensate, oil products, wood and wood materials, agricultural products, coal, chrome and iron ores, copper, tin, boxites, etc. From Indiga: machinery, construction materials.



## The contents of the cargo flow in the north-western direction:

Machinery, construction materials, oil and oil products, wood and wood materials, agricultural products.

### Track projects

- 1<sup>st</sup> stage (up to 4 years)
- - - - - 2<sup>nd</sup> stage (up to 7 years)
- - - - - 3<sup>rd</sup> stage (15-20 years)
- - - - - Railway: Polar Urals, Yamal:

# International multimodal corridor

## South East Asia –

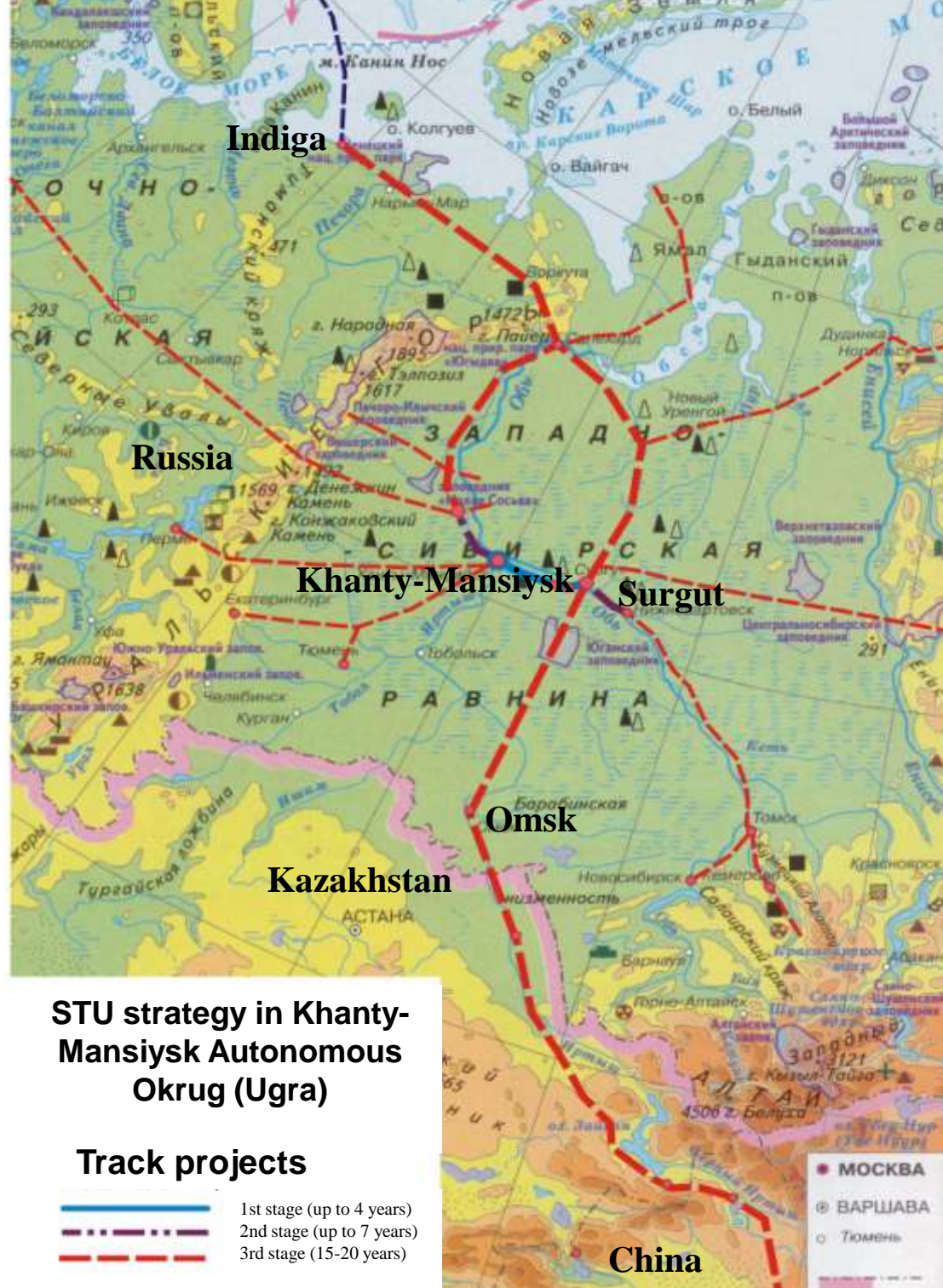
China – Kazakhstan -  
Russia (Omsk region,

## **UGRA**, Yamal onenezkiy

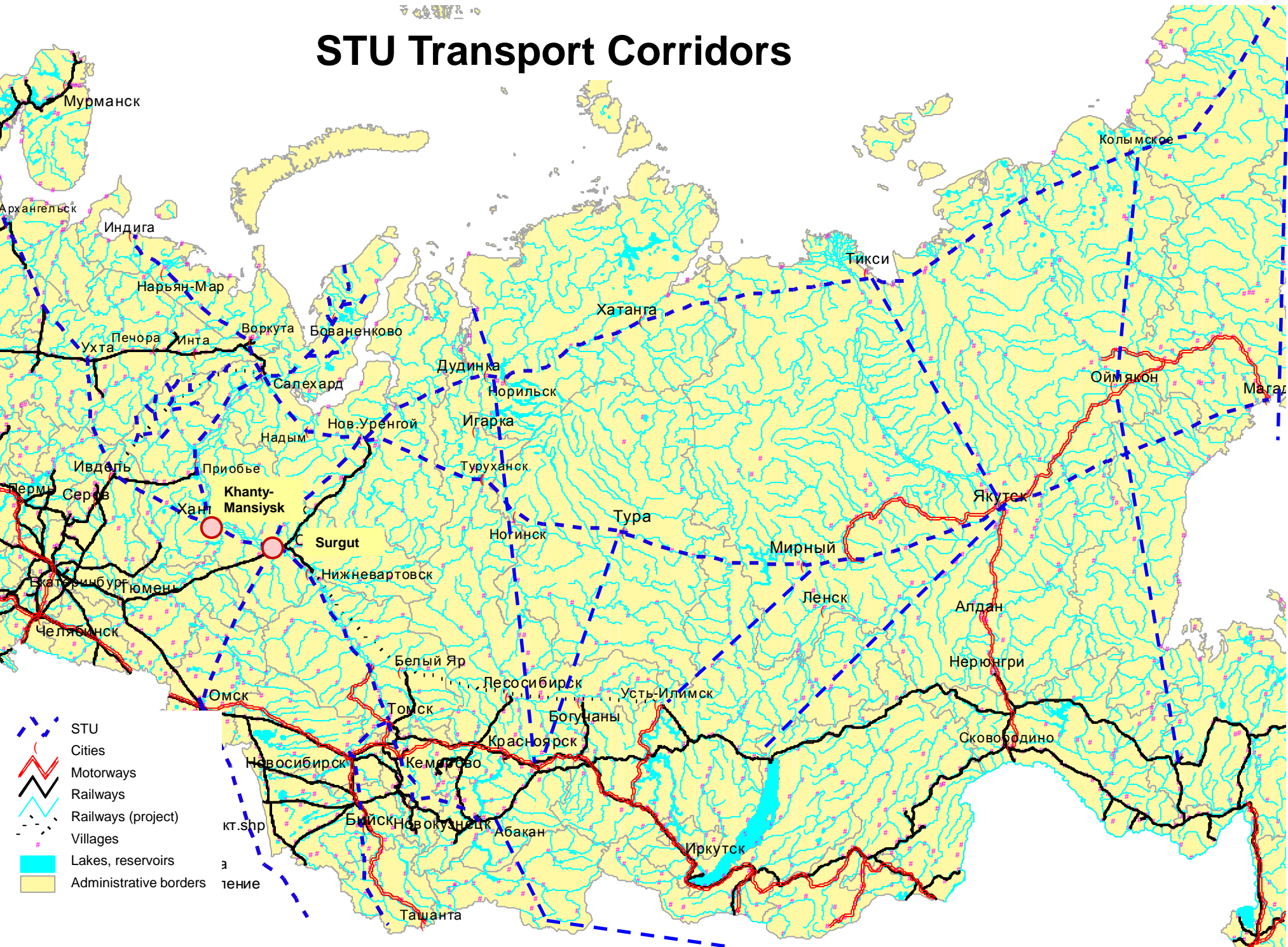
Autonomy Region,

Arkhangelsk region (Indiga

port) - **Europe**



# STU Transport Corridors



# STU track cost at the first stage of the strategy

STU track	<b>Basic strategy parameters</b> Track characteristics	Length, km	Cost of 1 km, mln rubles	STU track cost, mln rubles*
<b>Passenger track in Khanty-Mansiysk (1st order)**</b>	<b>Two-line city medium monoSTU track Ugra University - campus</b>	2.3	155.6	<b>358</b>
<b>Surgut – Belyi Yar**</b>	<b>Local two-rail STU track (first segment of the high-speed STU track Khanty- Mansiysk – Surgut)</b>	7.8	84.6	<b>660</b>
<b>Passenger track in Khanty-Mansiysk (2nd order)***</b>	<b>Two-way medium city mono-STU track Airport – River port</b>	9.8	70.5	<b>691</b>
<b>Khanty-Mansiysk - Surgut****</b>	<b>High-speed two-way two-rail STU track</b>	250	33.3	<b>8 315</b>

\* - cost in 4Q 2007 prices

\*\* - pilot STU tracks (initial costs taken into account)

\*\*\* - cost of Ugra University - campus segment is taken into account

\*\*\*\* - cost of Surgut – Belyi Yar segment is taken into account



## STU track cost at the second stage of the strategy

STU track	Track characteristics	Length, km	Cost of 1 km, mln rubles	STU track cost, mln rubles*
Nizhnevartovsk - Surgut	High-speed two-way two-rail STU track	176.0	31.8	<b>5 588</b>
Khanty-Mansiysk - Nyaganj	High-speed two-way two-rail STU track	235.0	29.2	<b>6 855</b>
Cargo STU track in the Urals	Two-way cargo mono-STU track (Yatrinsk chalk mine – quay (rivers Lapin and Severnaya Sosjva))	125.0	16.0	<b>2 000</b>

\* - cost in 4Q 2007 prices

## Cost of first-order segments of high-speed STU tracks

### Third stage of the strategy

First-order corridors		Corridor segment (3 stage of the strategy)	Length, km	STU track cost, mln rubles*	Length within Hantymansiysk Autonomy Region, km	Cost of track within Hantymansiysk Autonomy Region, mln rubles*
1 order	Nizhnevartovsk – Khanty-Mansiysk – Ekaterinburg (Tyumenj)	Khanty-Mansiysk - Ekaterinburg	700	19 600	300	8 400
		Khanty-Mansiysk - Tyumenj**	100	2 800	0	0
	Omsk – Surgut – Khanty-Mansiysk – Nyaganj – Salehard – Indiga	Omsk - Surgut	750	21 000	250	7 000
		Nyaganj – Salehard	480	13 440	250	7 000
		Salehard – Indiga	800	22 400	0	0
2 order	Tomsk – Nizhnevartovsk – Surgut – Nadym – Salehard – Bovanenkovo – Harasaway	Nizhnevartovsk - Tomsk	800	22 400	40	1 120
		Surgut – Nadym – Salehard	850	23 800	220	6 160
		Salehard – Bovanenkovo – Harasaway	700	19 600	0	0
<b>Total for all segments</b>			<b>5 180</b>	<b>145 040</b>	<b>1 060</b>	<b>29 680</b>

\* - cost in the prices of Q4 2007 of 1 km of the track is 28 mln rubles

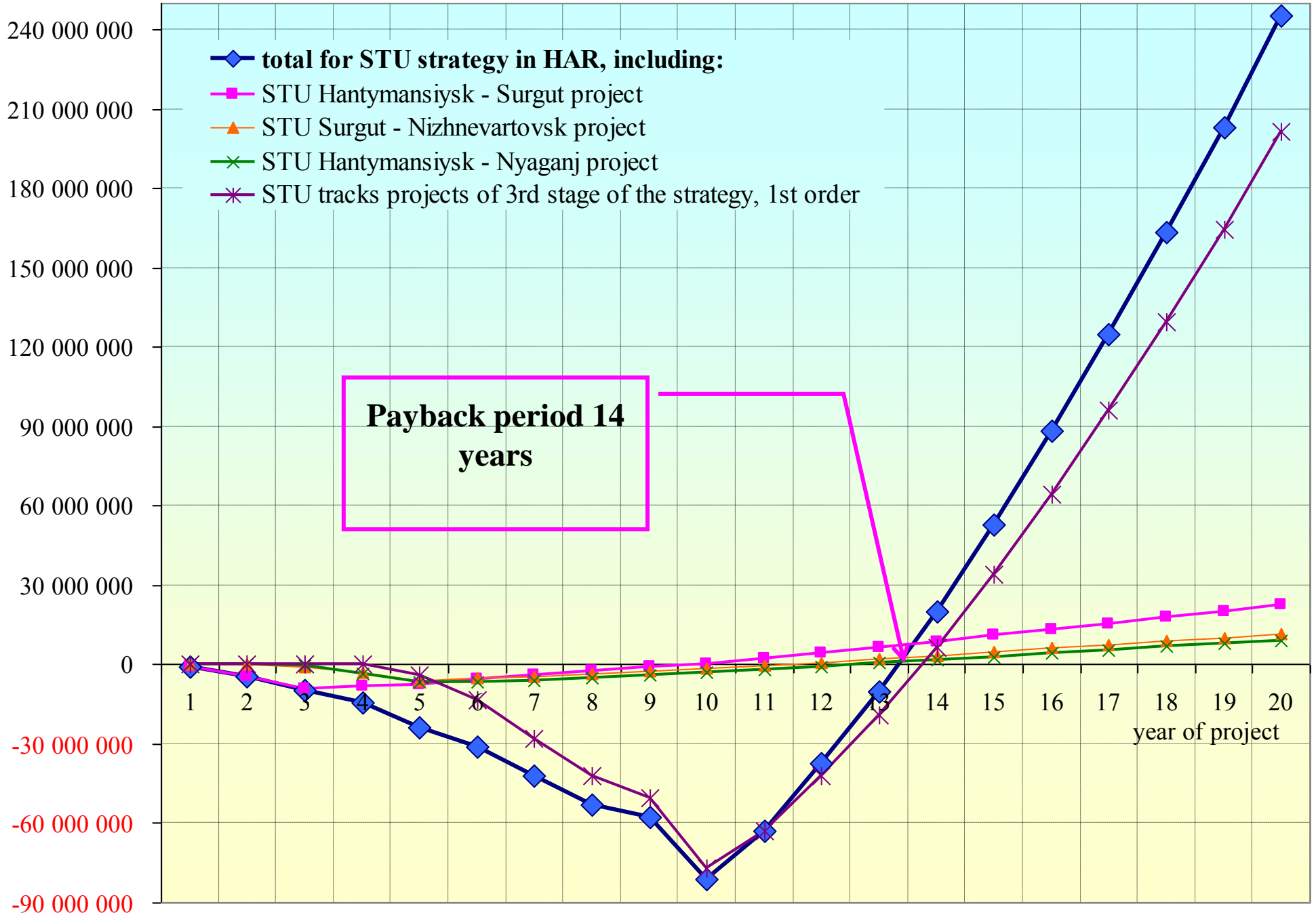
\*\* - length taking into consideration Khanty-Mansiysk – Ekaterinburg segment

# Main parameters of the STU strategy in Khanty-Mansiysk Autonomous Okrug (Ugra)

number of stage	title of stage (project) of STU strategy in UGRA	length, km	duration, days	beginning	end	investment, million rubles (in prices as of Q4 2007)	2007	2008			2009			2010			2011			2012			2013			2014			2015			2016			2017			2018			2019			2020		
							3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
0	<b>STU strategy in UGRA</b>	<b>5 978</b>	<b>4 875</b>	<b>01.06.2007</b>	<b>08.10.2020</b>	<b>168 625</b>																																								
1	Initiating STU strategy development			01.06.2007	01.06.2007																																									
2	Development of transport strategy of creating and implementing STU tracks in UGRA		214	01.06.2007	31.12.2007	10																																								
3	STU city passenger track construction in Khanty-Mansiysk		170	01.07.2007	17.12.2007	7																																								
4	Organisational activity for STU strategy implementation in UGRA		135	30.01.2008	13.06.2008	10																																								
5	<b>Implementation of STU transport strategy in UGRA</b>	<b>5 978</b>	<b>4 800</b>	<b>31.07.2007</b>	<b>08.10.2020</b>	<b>168 598</b>																																								
5.1	1st stage of STU strategy implementation in UGRA	387	1 230	31.07.2007	30.12.2010	11 115																																								
5.1.1	High-speed two-way STU track: Khanty-Mansiysk - Surgut	250	1 230	31.07.2007	30.12.2010	8 315																																								
5.1.2	City high-level passenger STU track in Khanty-Mansiysk	12	1 170	31.07.2007	30.12.2010	800																																								
5.1.3	Cargo STU track in the Urals (from Yatrinskiy chalk mine to the quay)	125	600	01.07.2008	20.02.2010	2 000																																								
5.2	2nd stage of STU strategy implementation in UGRA	411	1 050	04.07.2010	18.05.2013	12 443																																								
5.2.1	High-speed two-way STU track: Surgut - Nizhnevartovsk	176	870	04.07.2010	19.11.2012	5 588																																								
5.2.2	High-speed two-way STU track: Khanty-Mansiysk - Nyaganj	235	870	31.12.2010	18.05.2013	6 855																																								
5.3	3d stage of STU strategy implementation in UGRA	5 180	2 880	20.11.2012	08.10.2020	145 040																																								
5.3.1	Corridor: Nizhnevartovsk - Khanty-Mansiysk - Ekaterinburg (Tyumenj)	800	900	20.11.2012	08.05.2015	22 400																																								
5.3.2	Corridor: Omsk - Surgut - Khanty-Mansiysk - Nyaganj - Salehard - Indiga	2 030	1 620	15.11.2013	22.04.2018	56 840																																								
5.3.3	Corridor: Tomsk - Nizhnevartovsk - Surgut - Nadyrn - Salehard - Bovanenkovo	2 350	2 340	14.05.2014	08.10.2020	65 800																																								
6	STU strategy in UGRA implementation completion (in terms of bringing the main tracks in operation)			08.10.2020	08.10.2020																																									

# Dynamics of accumulated net discount cash flow of the projects and the strategy as a whole

thousand rubles



## Aggregate indicators of commercial effectiveness of investment projects of STU strategy in Khanty-Mansiysk Autonomous Okrug

Project / Indicator	Net present value, Bln rubles	Internal rate of return	Discounted payback period, years	Discounted investment payback index
<b>Integral indicators of the strategy, including the following projects:</b>	<b>245.1</b>	<b>27.15%</b>	<b>14</b>	<b>2.68</b>
Khanty-Mansiysk - Surgut	22.4	26.12%	10	2.96
Surgut - Nizhnevartovsk	11.7	25.39%	10	2.61
Khanty-Mansiysk - Nyaganj	9.3	21.05%	11	2.12
3 <sup>rd</sup> stage tracks, 1 <sup>st</sup> order	201.6	28.36%	10	2.70

# Externalized (social, economic and budget) effect of STU strategy in Khanty-Mansiysk Autonomous Okrug (Ugra)\*

## Integral social and economic effect of the strategy, bln rubles

Khanty-Mansiysk – Surgut project, 1 <sup>st</sup> stage	2 <sup>nd</sup> stage projects Surgut – Nizhnevartovsk Khanty-Mansiysk – Nyaganj	1 <sup>st</sup> order projects of the 3 <sup>rd</sup> stage
471	+	555
		+
		2 688
		= 3 714

## Budget effect of the strategy for Ugra, bln rubles

Khanty-Mansiysk – Surgut project, 1 <sup>st</sup> stage	2 <sup>nd</sup> stage projects Surgut – Nizhnevartovsk Khanty-Mansiysk – Nyaganj	1 <sup>st</sup> order projects of the 3 <sup>rd</sup> stage
68	+	82
		+
		326
		= 476

\* Within 20 years of strategy realisation in Ugra

## Integral indicators of commercial, social and economic effectiveness of the STU strategy projects in Khanty-Mansiysk Autonomous Okrug (Ugra)

Project/Indicator	Net present value, bln rubles	Discounted social and economic effect of the project, bln rubles	Integral effect, bln rubles
<b>Integral indicators of the strategy, including the following projects:</b>	<b>245.1</b>	<b>970</b>	<b>1 215</b>
Khanty-Mansiysk - Surgut	22.4	138	160
Surgut - Nizhnevartovsk	11.7	91	103
Khanty-Mansiysk - Nyaganj	9.3	68	77
3 <sup>rd</sup> stage tracks, 1 <sup>st</sup> order	201.6	672	874