

80 Million Tons of Freight on the Northern Sea Route in 2024: Cargoes, Shipping and Shipbuilding

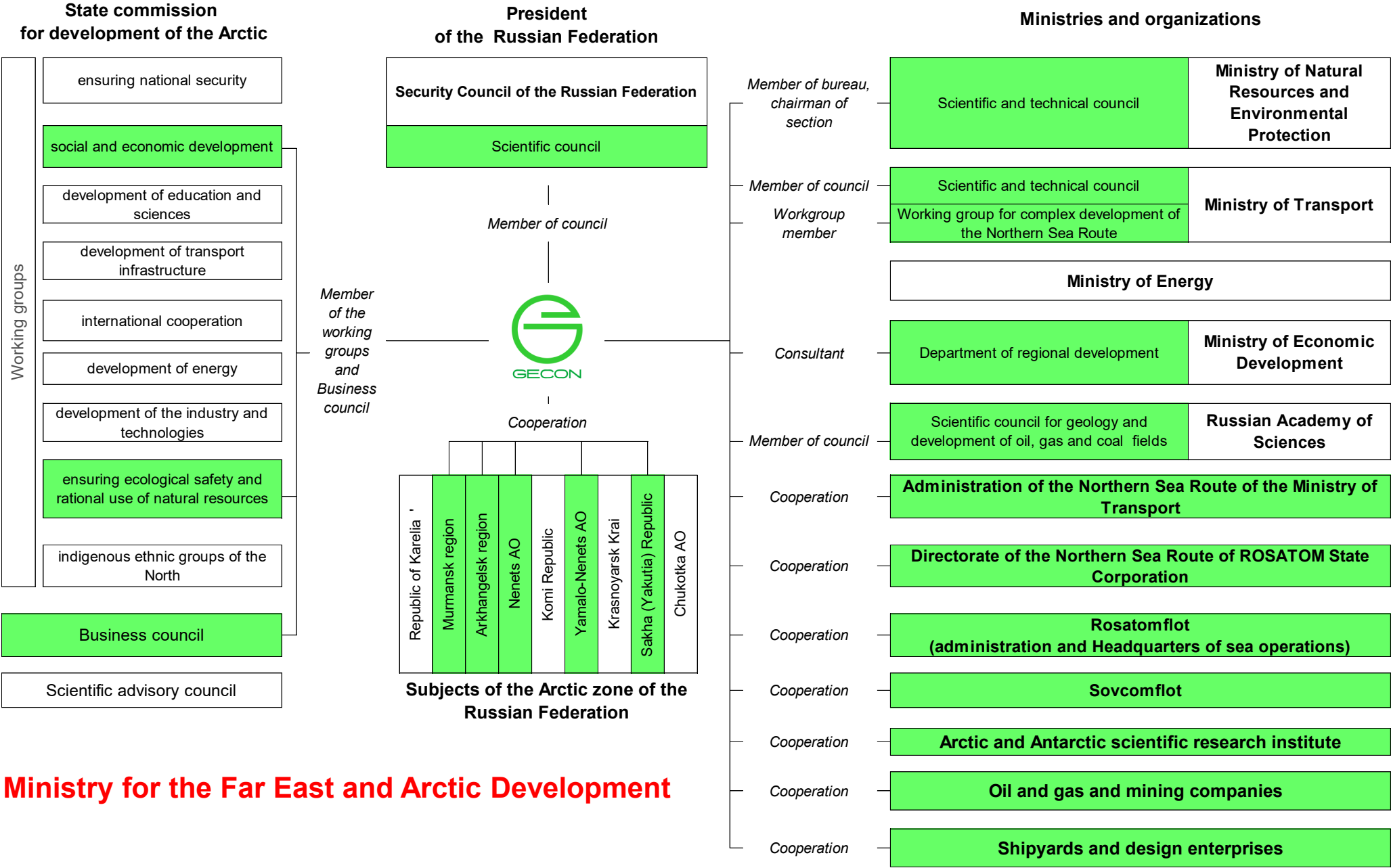
Mikhail Grigoryev

GECON

14th ARCTIC PASSION SEMINAR

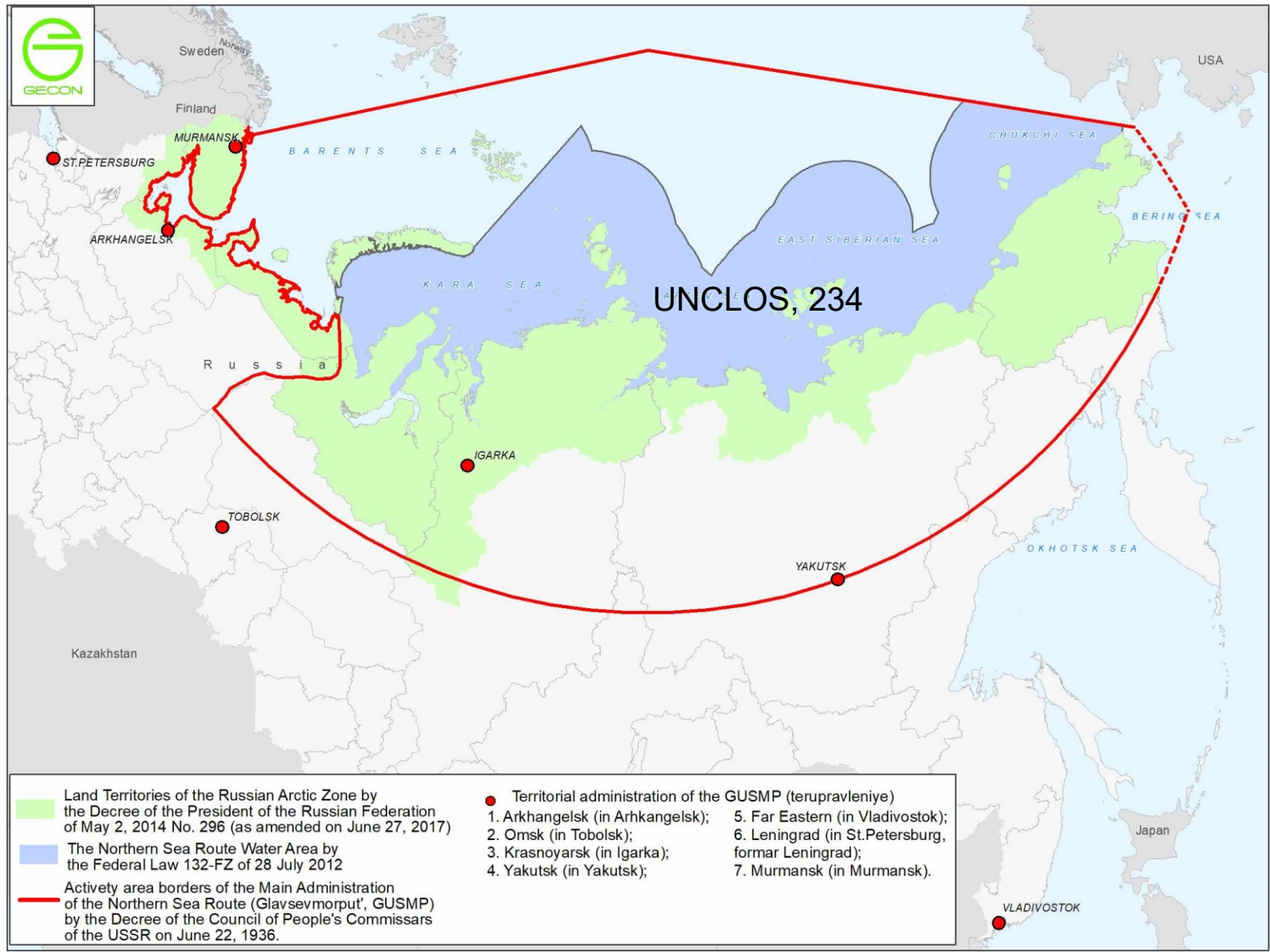
February 28th , 2019, Helsinki

RUSSIAN ARCTIC SHIPPING - STAKEHOLDERS AND DECISION MAKERS



Resources licensing
Production approval
Ecology
Hydrometeo

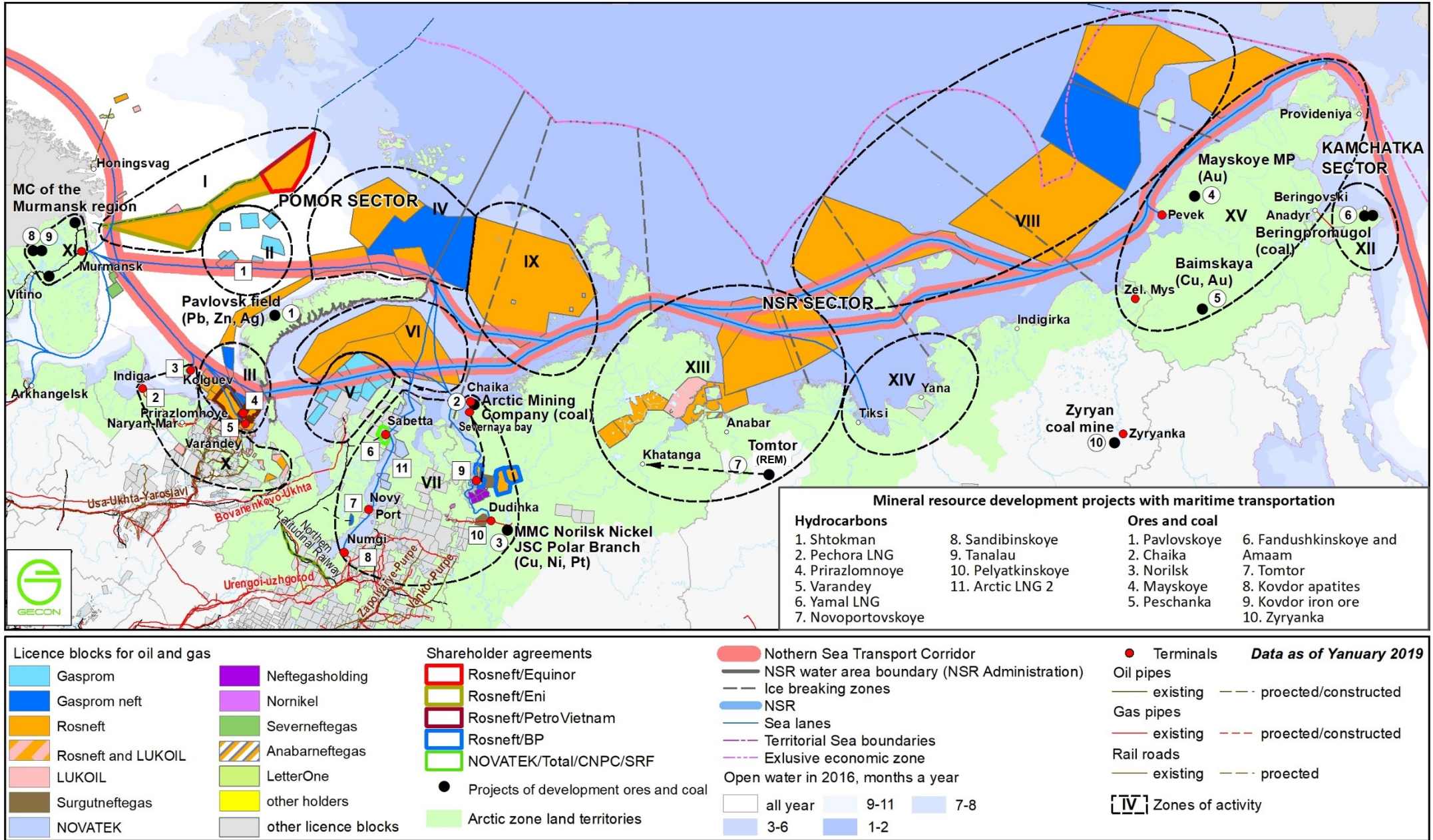
RUSSIAN ARCTIC DEVELOPMENT



Tasks of NSRA-1936

1. final development of the Northern Sea Route **from the Barents Sea to the Bering Strait**;
2. the organization of sea, river and air traffics, a radio communication and research work in the Soviet Arctic;
3. **development of natural resources of the Far North**,
4. assistance to economic and cultural raising of indigenous people of the Far North

ARCTIC MINERAL PROJECTS WITH MARITIME TRANSPORTATION (NMTC)



ARCTIC PROJECTS AND CONDITIONS OF SHIPPING



Readiness of transport infrastructure	Navigation	The highest extent of industrial development of fields		Logistic schemes	Arrangement of license areas				Icebreaking providing by Atomflot	Ice classes of cargo vessels (Russian Maritime Register of Shipping)															Restrictions of transportations (the vessel under the flag of the RF)
		Developed	In exploration		Land	Internal sea waters	Territorial sea	Continental shelf		Barents sea				Kara sea (SW)				E.Siberian sea (NE)				Bering sea			
										Arc 4	Arc 5	Arc 6	Arc 7	Arc 4	Arc 5	Arc 6	Arc 7	Arc 4	Arc 5	Arc 6	Arc 7	not defined			
Active	Seasonal	Peschanoozerskoye		1	-																				
		Sandibinskoye		2	-																			RF	
		Mayskoye		3	-																				
	Year-round	Varandey		4	-																				
		Prirazlomnoye		5																					
		Novoportovskoye		5	-																			RF	
		Norilsk		6																					
		Pelyatkinskoye		7	-																			RF	
Under construction		Chaika	8																					RF	
	Seasonal		Fandushkinskoye pole and Ammamskoye	9																					
	Projected	Year-round	Yamal LNG		10	11	-																		RF
Pavlovskoye																									
Arctic LNG																								RF	
Announced	Seasonal	Tanalau																						RF	
		Peschanka																							
		Tomtor																							
Not defined	Year-round	Pechora LNG																							
		Shtokman																							

crude oil

condensate

LNG

coal

ores

2 export

transshipment abroad

transshipment in RF

1 number of the logistic scheme

Operation

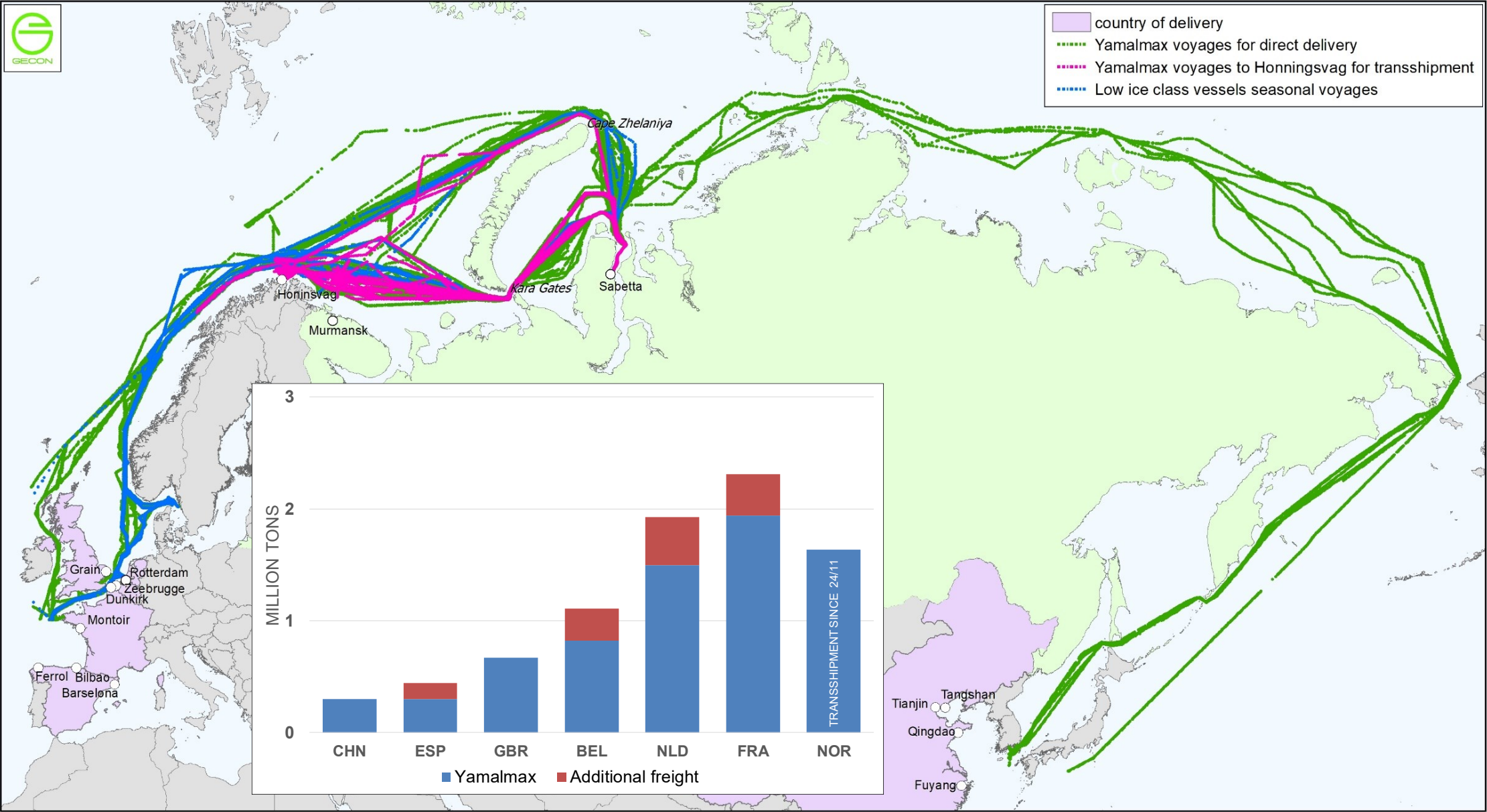
is allowed

is connected with the increased risk of receiving damage

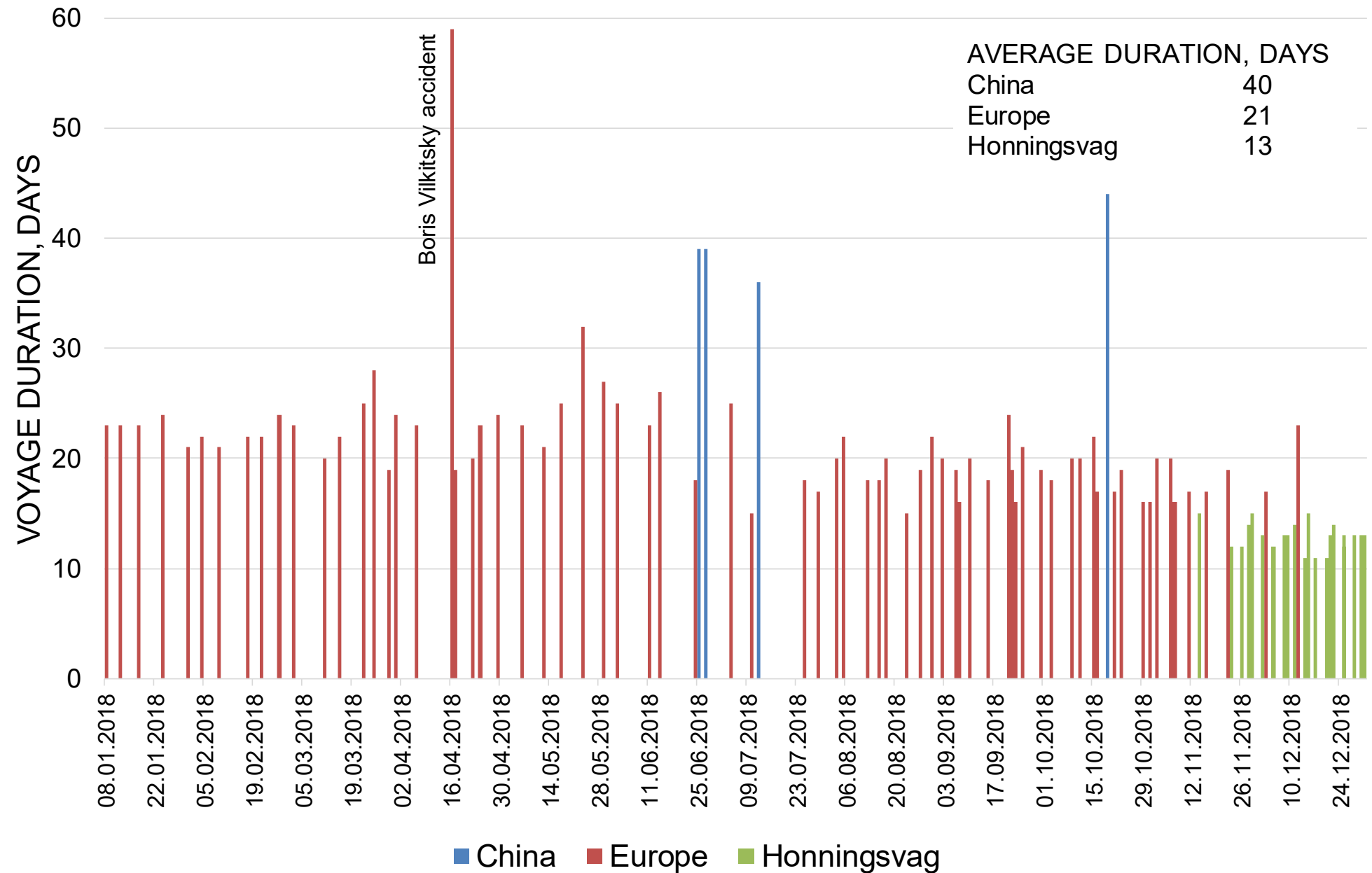
isn't allowed

Navigation	Shipping	Conditions	Possibility of shipping											
Winter and spring	independent	extreme												
		heavy												
		intermediate												
	under the ice breaker assistance	easy												
		extreme												
		heavy												
		intermediate												
		easy												

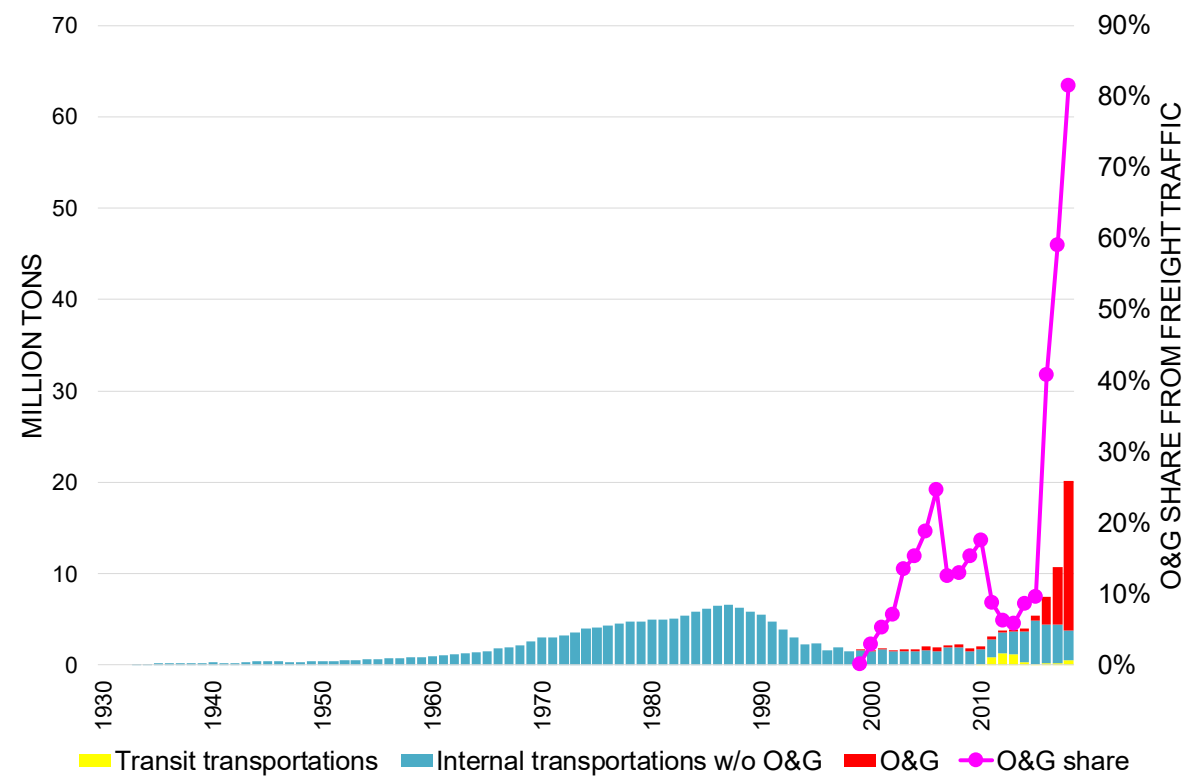
YAMALMAX GAS CARRIERS ROUTES (2018)



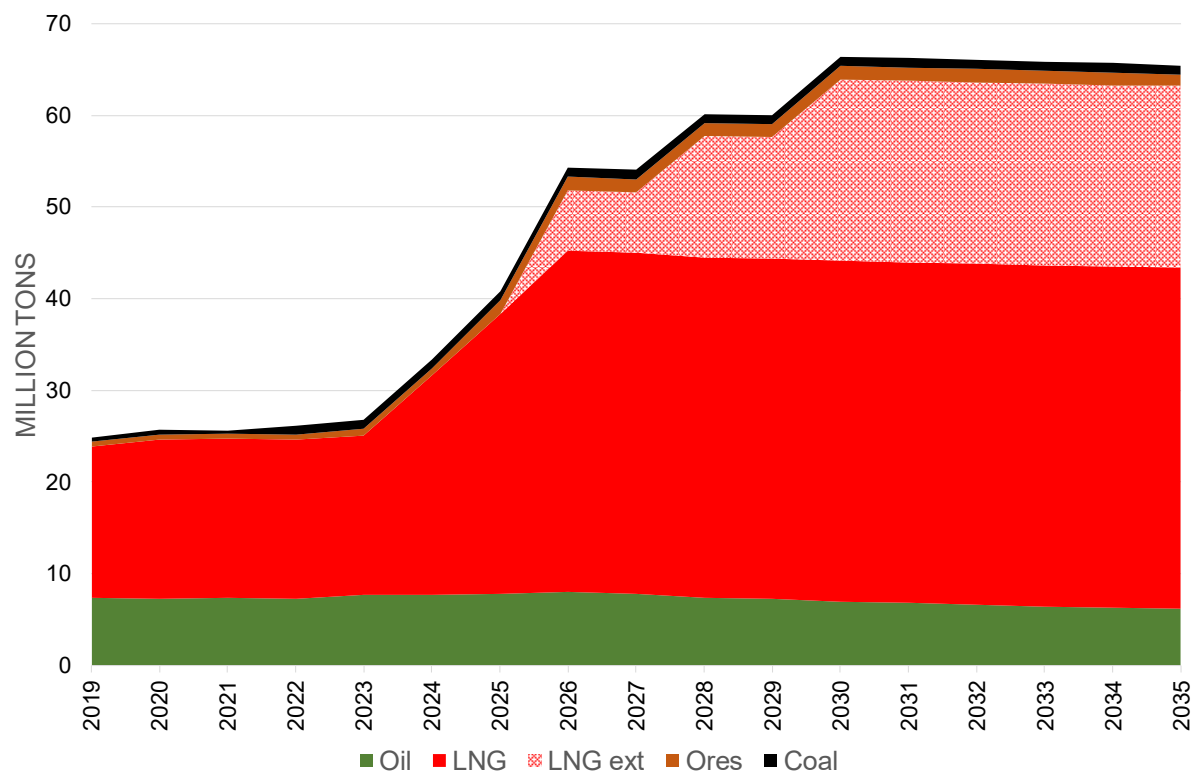
DURATION OF ROUND VOYAGES OF YAMALMAX GAS CARRIERS (2018)



NORTHERN SEA ROUTE SECTOR RETROSPECTIVE AND FORECAST OF TRANSPORTATION OF MINERAL RESOURCES



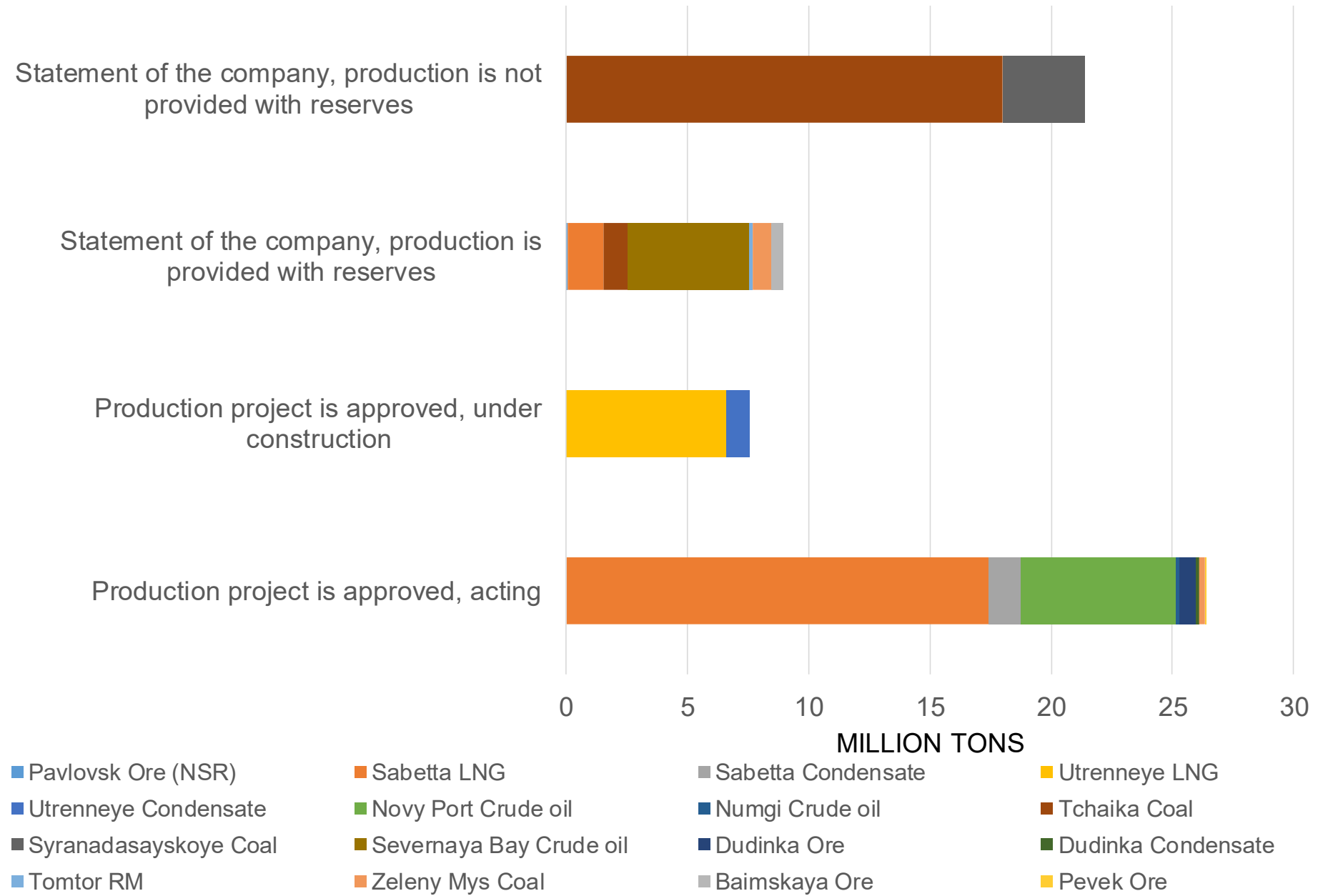
w/o allocation of freights of Norilsk Nickel



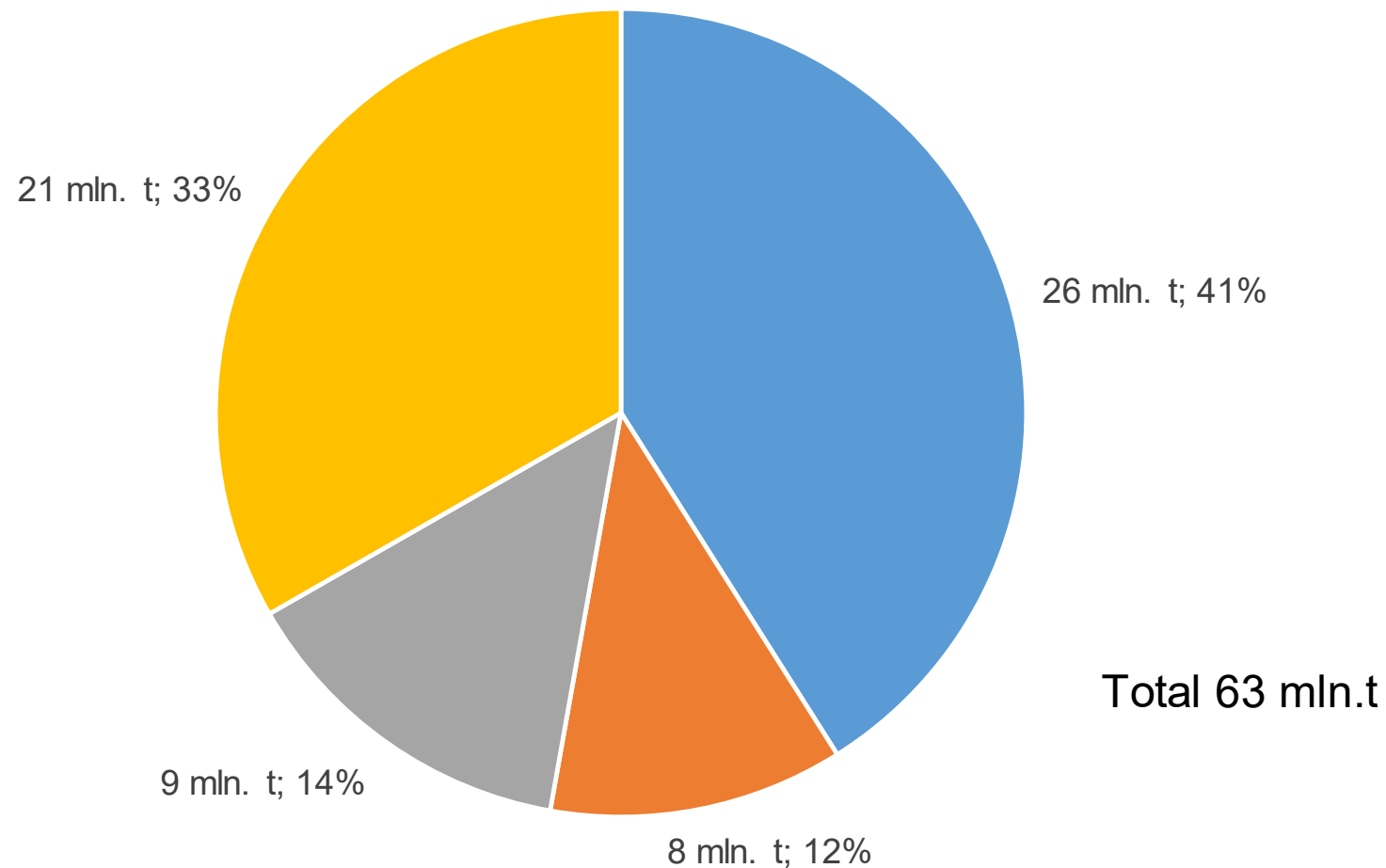
approved projects and projects provided with reserves

Uncertainty of volumes of extraction of coals of the Western Taimyr and crude oil of the Payakha field

EXPECTED VOLUMES OF TRANSPORTATIONS IN 2024

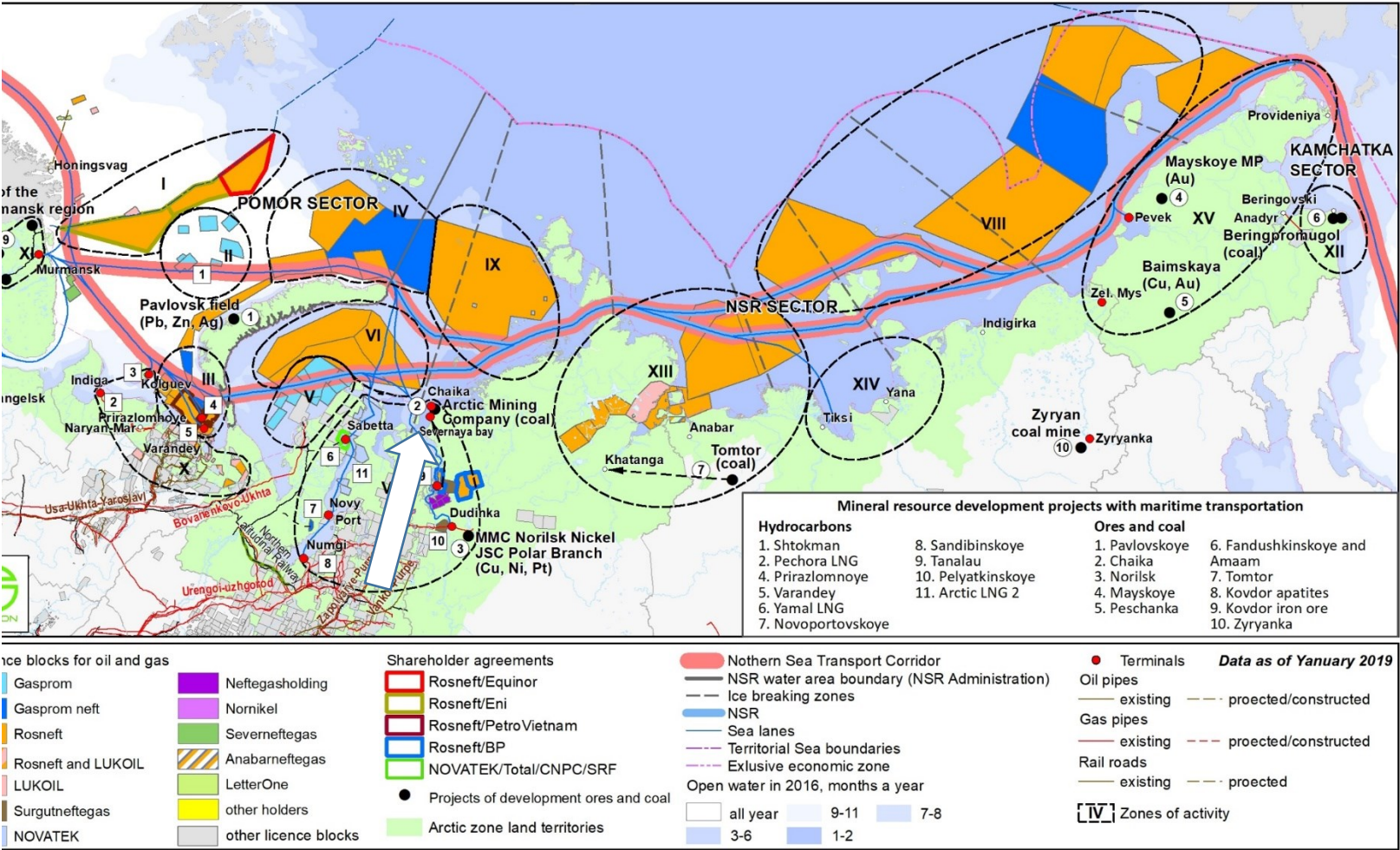
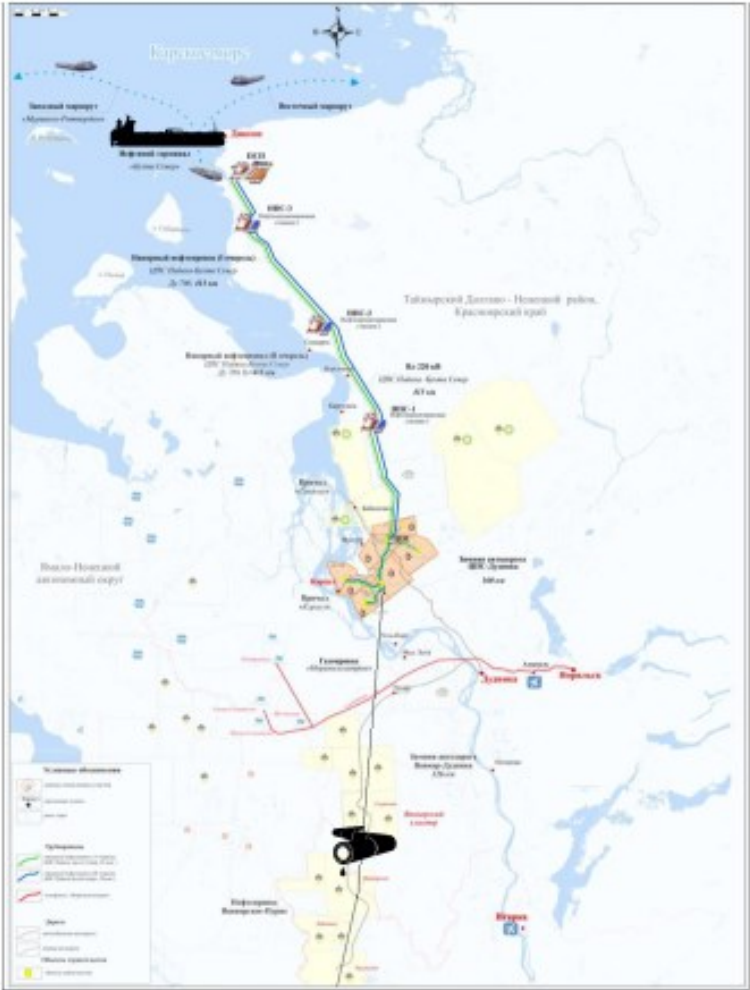


SHARES OF PROJECTS IN PROVIDING FREIGHT TRAFFIC IN 2024

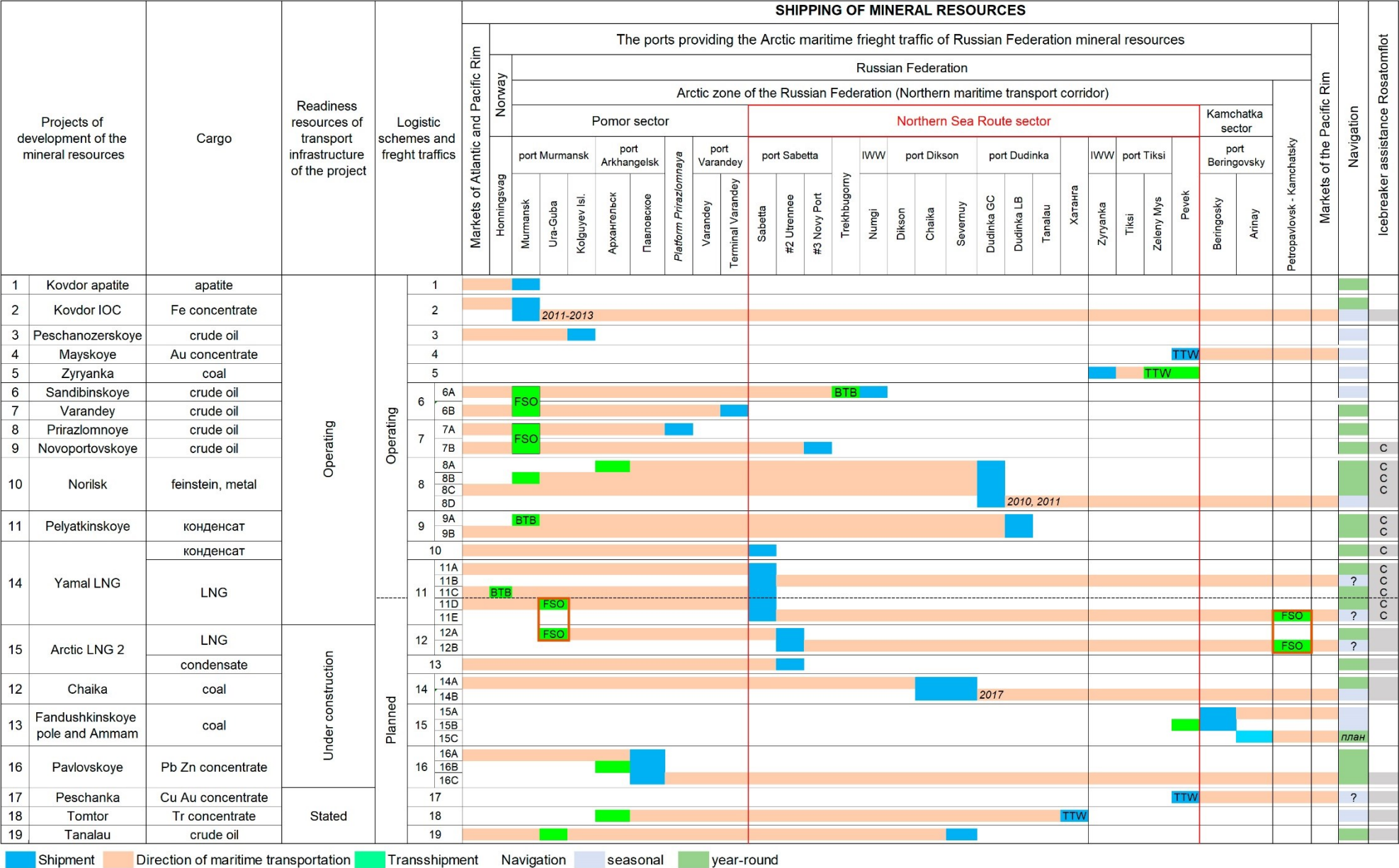


- Production project is approved, acting
- Production project is approved, under construction
- Statement of the company, production is provided with reserves
- Statement of the company, production is not provided with reserves

ROSNEFT: PLUS 25 MILLION TONS OF CRUDE OIL TO THE NORTH (DIKSON PIPELINE)



SHIPPING OF THE MINERAL RESOURCES OF THE ARCTIC ZONE



Abbreviations: IWW- internal waterways; FSO - Floating Storage and Offloading ; BTB - transfer according to the scheme "board-to-board"; TTW - transfer through a warehouse; C - the contract is signed

SHIPBUILDING: CARGO AND SUPPORT VESSELS



The status of the project	Title	Freight	Cargo in 2024, Mt	Vessel type	Dwt, Kt	Ice class (RMRS)	Numb.	In operation	In construction	Prospect of construction	Prospect of a freight
Production project is approved, acting	Yamal LNG	LNG	18.9	gas carrier	97	Arc 7	15	10	5		+?
				tanker	51	Arc 7	2		2		
				icebreaker	2	Icebreaker7	1		1		
		Condensate	1.4	tow	0.3	Arc 6	2	2			
				tow	0.1	Arc 4	2	2			
	Novy Port	Crude oil	6.4	tanker	41	Arc 7	7	6	1		
				tanker	20	Arc 4 (5)	3	3			
				icebreaker	5	Icebreaker8	2	2			
	Numgi	Crude oil	0.1								+
	Dudinka	Ores	0.7	icebreaker	1	Icebreaker6	1	1			
		Condensate	0.1	container carrier	18	Arc 7	5	5			
Production project is approved, under construction	Arctic LNG 2	LNG	6.6	tanker	19	Arc 7	1	1			
				tanker	18	Arc 7	5	5			
				icebreaker	2	Icebreaker7	1				
		Condensate	1.0	tow	?	Arc 6	4				
				basis of gravitational type			3				
	Pavlovskoye (NSR)	Ores	0.1	gas carrier	97	Arc 7	15			15	+?
				tanker	51	Arc 7	2			2	
				icebreaker	2	Icebreaker7	1			1	
	Payakhskoye	Crude oil	5,0	tow						4	
				basis of gravitational type						3	
Statement of the company, production is provided with reserves	Pavlovskoye (NSR)	Ores	0.1	container carrier	33	Arc 5	1	1			
	Payakhskoye	Crude oil	5,0	tanker	100-150	Arc 7	up to 10			up to 10	
				tanker	150	-	?				
				port fleet	?	?	4			4	
	Tomtor	Ores	0.2								+
	Baimskaya	Ores	0.5	bulk ship	40 -60	Arc 5/7/8	2-4			2-4	
	Tchayka	Coal	1.0	bulk ship	12-24	Arc 4 (5)	9				9
			19.0	bulk ship	33	B1	2				2
	Syradanasayskoye	Coal	3.4	bulk ship	23	A1, A2	4				4
				bulk ship	45-50	Arc 6 (7)	6			6	

17.06.2018 Sea channel of Gulf of Ob. Drift of fields of the fast ice. The channel laid by the nuclear Vaygach icebreaker squeezes at once. Transit of Yamalmax across the Sea canal was suspended for 7 days.

Everything
is not so
simple



Photo: Courtesy of Rosatom

1. Development of mineral resources is the main incentive motive of development of the Arctic shipping for Russia, as well as for other countries - Canada, Denmark, USA, Norway.
2. Priority of development of navigation in the sector of the Northern Sea Route is ensuring transportation of mineral resources and ensuring activity of the mining companies.
3. Creation of a steady system of transportation of the Arctic mineral resources defines problems of development of icebreaking, navigation and hydrometeorological providing.
4. Transit voyages, both internal, and international, will have irregular character and are limited on freight traffic volume (Ministry of transport evaluation for 2024: internal and international transit 1 Mt).
5. Creation of a system of transportation of LNG from Kara to the Bering Sea on the sector of the Northern Sea Route within expanded or year-round navigation will allow to create the regular system of escort of transit and coasting vessels as a part of caravans.

Thank you for attention!

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