

Federal State Unitary Enterprise
«STATE AIR TRAFFIC MANAGEMENT CORPORATION OF THE RUSSIAN FEDERATION»



Russia – Global ATM Interoperability



5-7 OCTOBER 2015, DUBAI, UAE



Company Overview

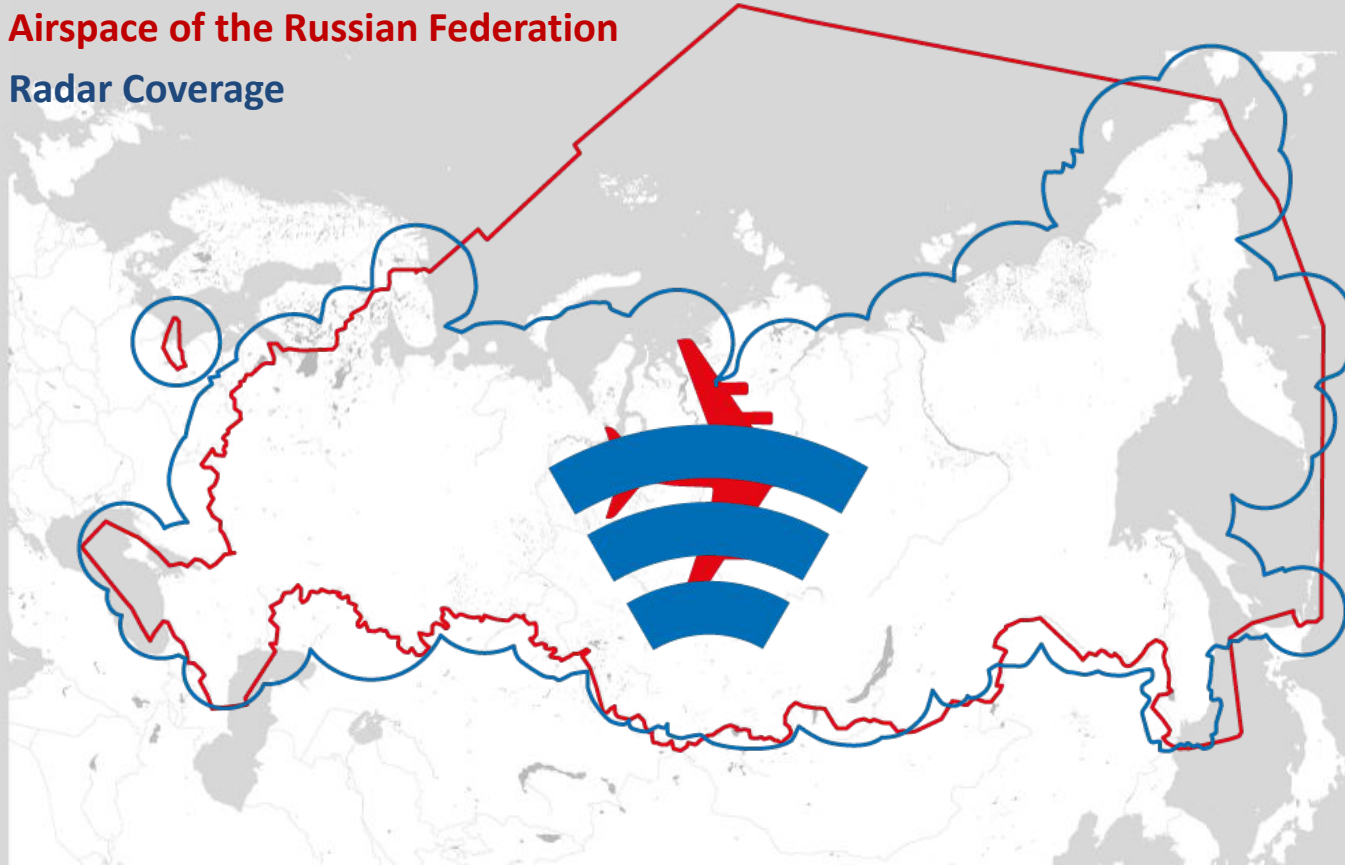
✓	Area of responsibility	26 million km ²
✓	Total route length	700 000 km
	of which international	530 000 km
✓	Flights controlled at a time	over 1 000
✓	Number of employees	over 27 000
✓	Number of ATCOs	7 500
✓	Total ACCs	40
	Main ATFM Centre	1
	ACCs	39
✓	Towers	265

Air traffic increase **3.0%** (2014)



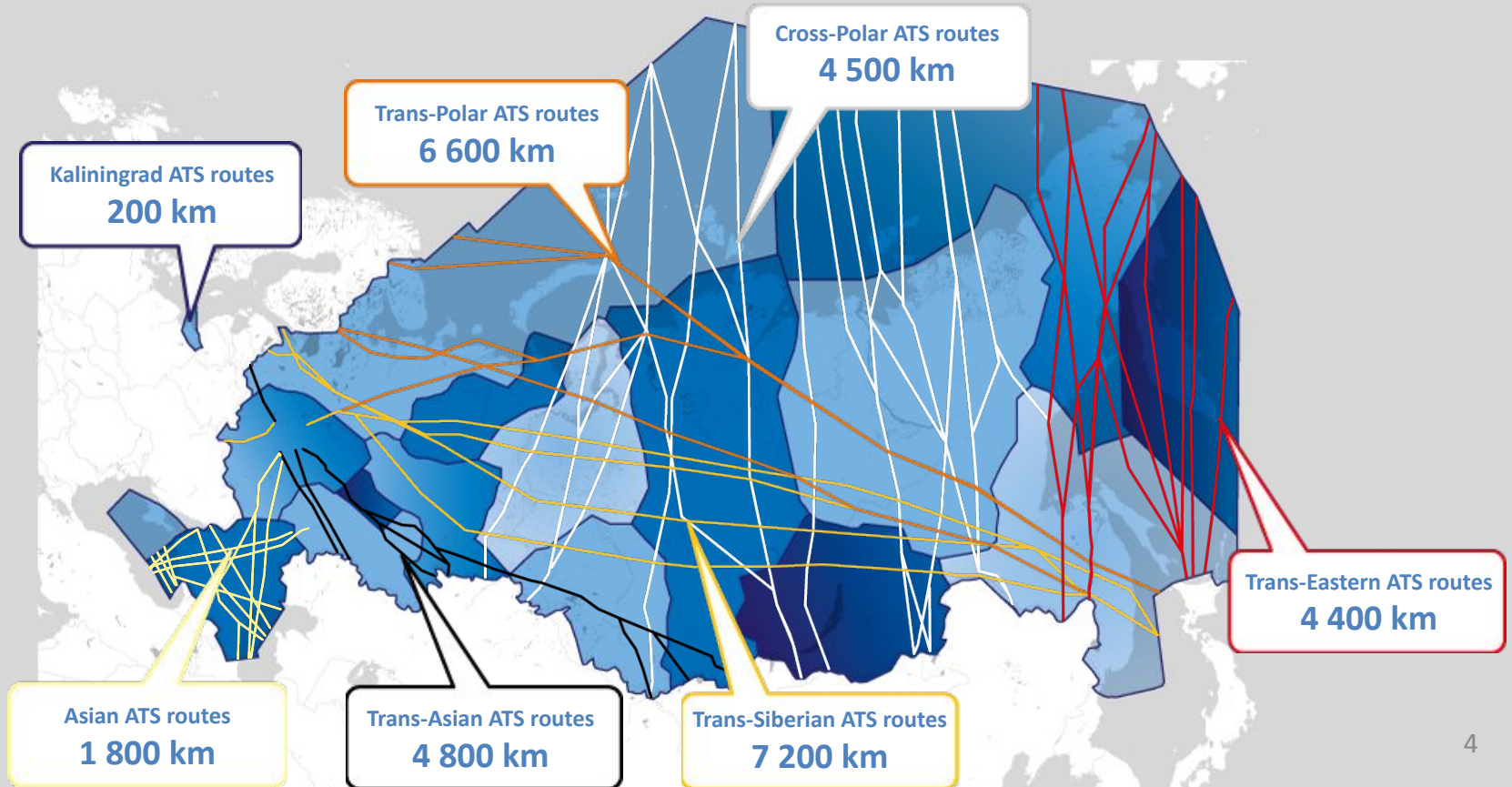
Radar Coverage

Airspace of the Russian Federation Radar Coverage



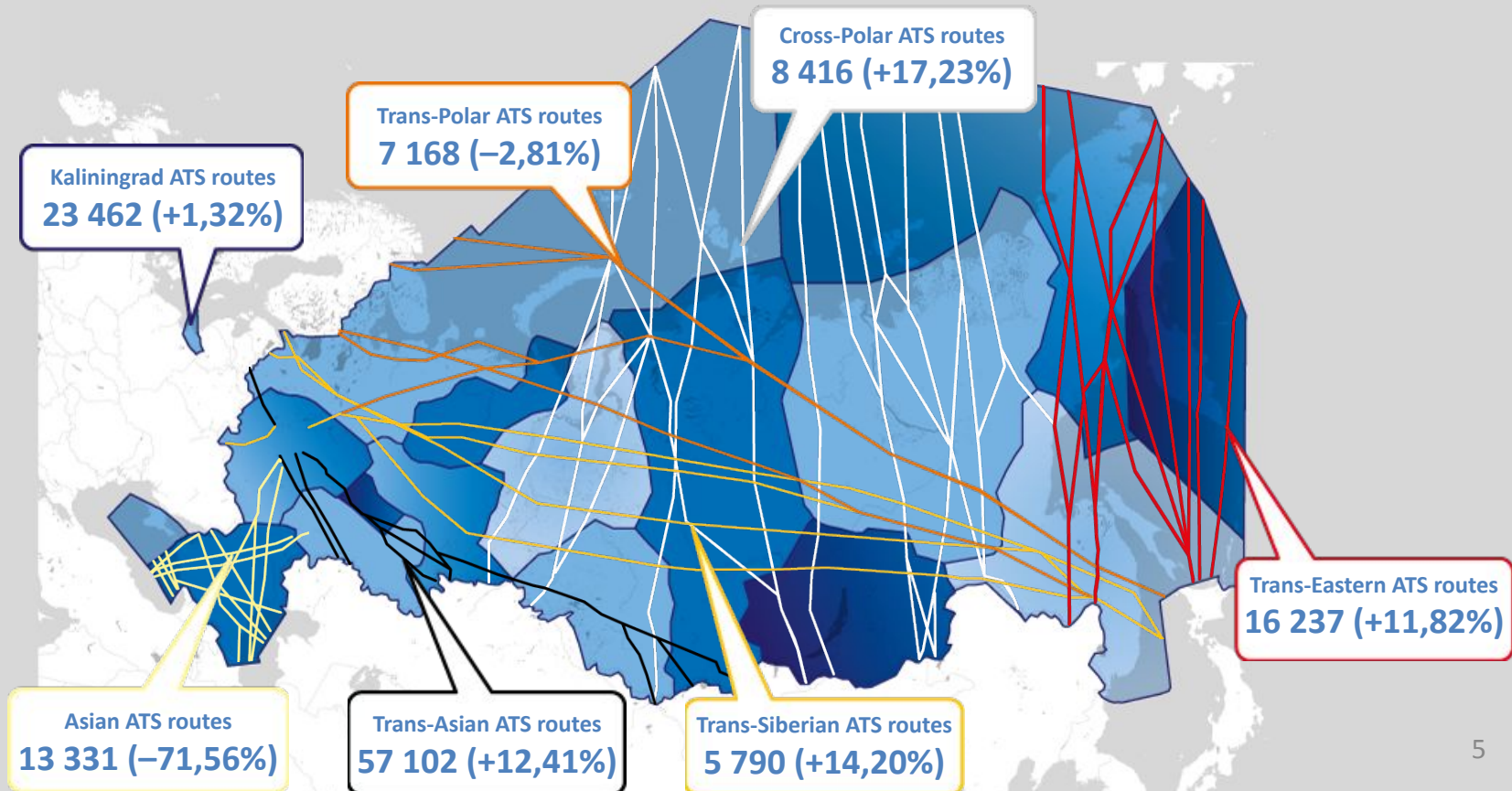


Major Transit Air Traffic Flows
























Major Transit Air Traffic Flows (January – July 2015)





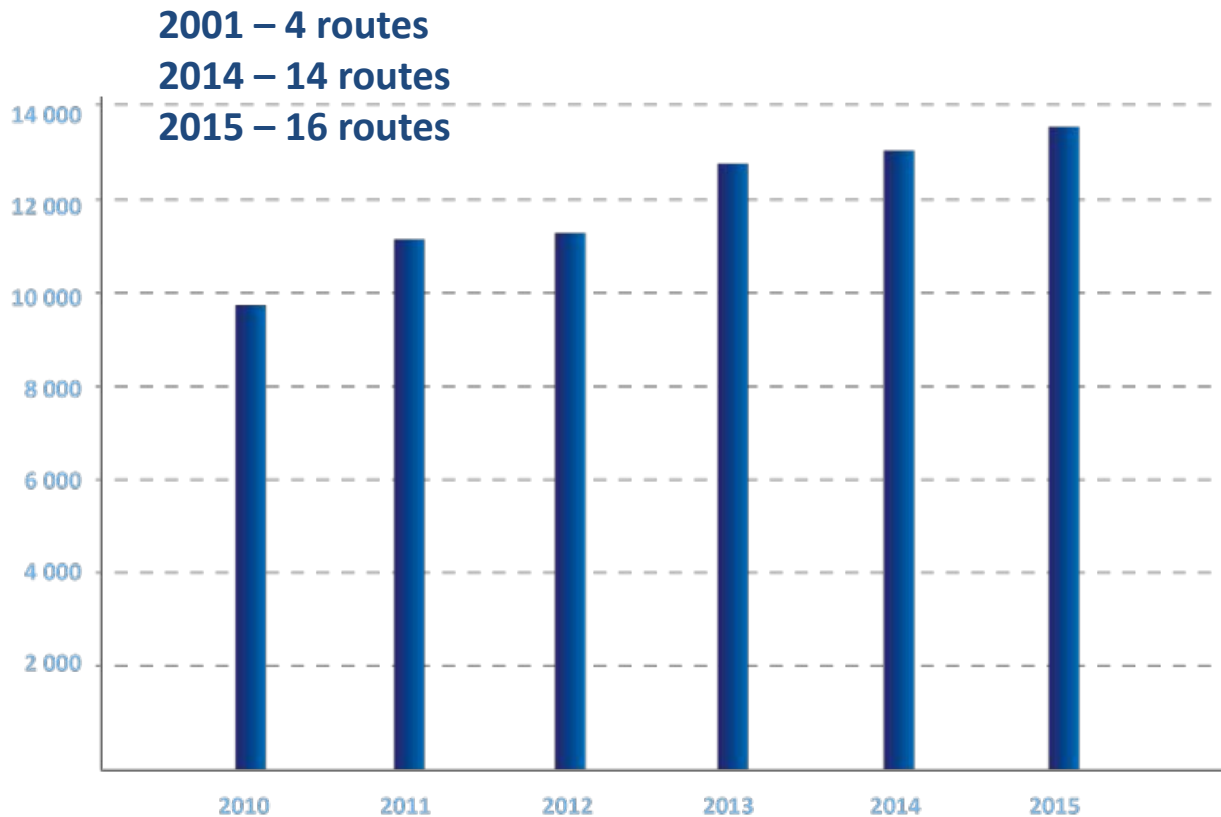
Entry/Exit Points with Neighbouring States (2007/2015)

	2007/2015		2007/2015		
	Azerbaijan	5/6		Latvia	3/3
	Belarus	9/13		Lithuania	6/10
	China	5/6		Mongolia	6/9
	Estonia	4/4		North Korea	4/4
	Finland	8/10		Norway	3/10
	Georgia	5/6		Poland	5/7
	Iceland	1/2		Sweden	0/1
	Japan	5/7		Turkey	3/6
	Kazakhstan	25/29		Ukraine	21/22
				USA	15/26

181 Entry/Exit Points with **19** Neighbouring States



Air Traffic along Cross-Polar ATS Routes (2010 – 2015)





Federal Target Programme

“Joint ATM System Modernization (2009 – 2020)”

- ✓ 13 Consolidated ACCs
- ✓ 100 short-range navigation systems
- ✓ Upgrade of over 100 terminal, en-route and secondary radars
- ✓ Upgrade of 79 message switching centres
- ✓ Upgrade of 770 HF and VHF voice communication stations and ATIS
- ✓ Upgrade of 57 satellite communication stations
- ✓ Installation of over 100 local augmentation stations
- ✓ Implementation of 100 full-scale and visual simulators



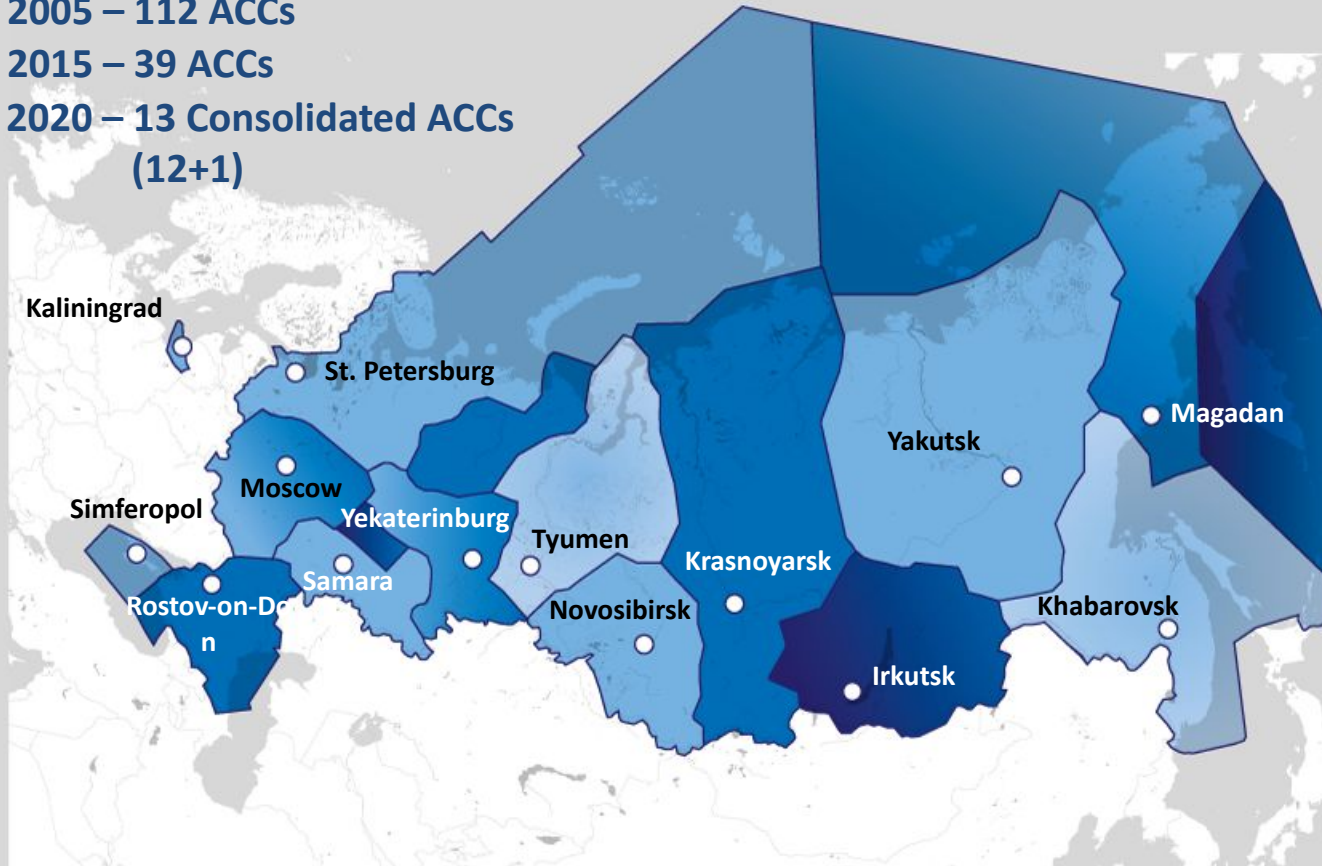


ACC Consolidation Programme

2005 – 112 ACCs

2015 – 39 ACCs

2020 – 13 Consolidated ACCs
(12+1)





ACC Consolidation Programme (2011-2015)

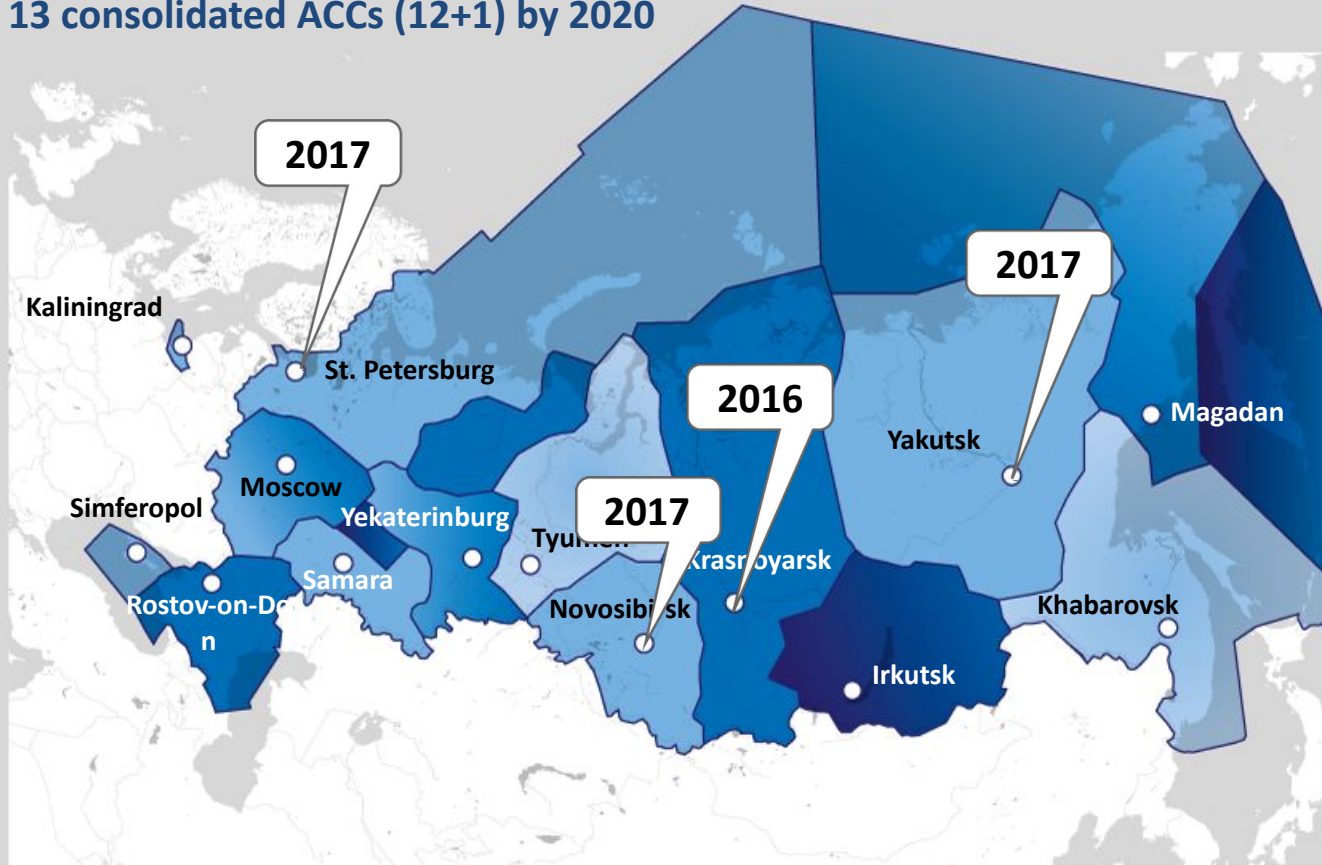
Flight Control Centre (Moscow Automated ATC Centre)





ACC Consolidation Programme (2016-2017)

13 consolidated ACCs (12+1) by 2020





Advanced Surveillance and Digital Communication Systems Implementation

ADS facilities implementation programme of the Russian Federation (2012–2020):

3 Pilot projects:

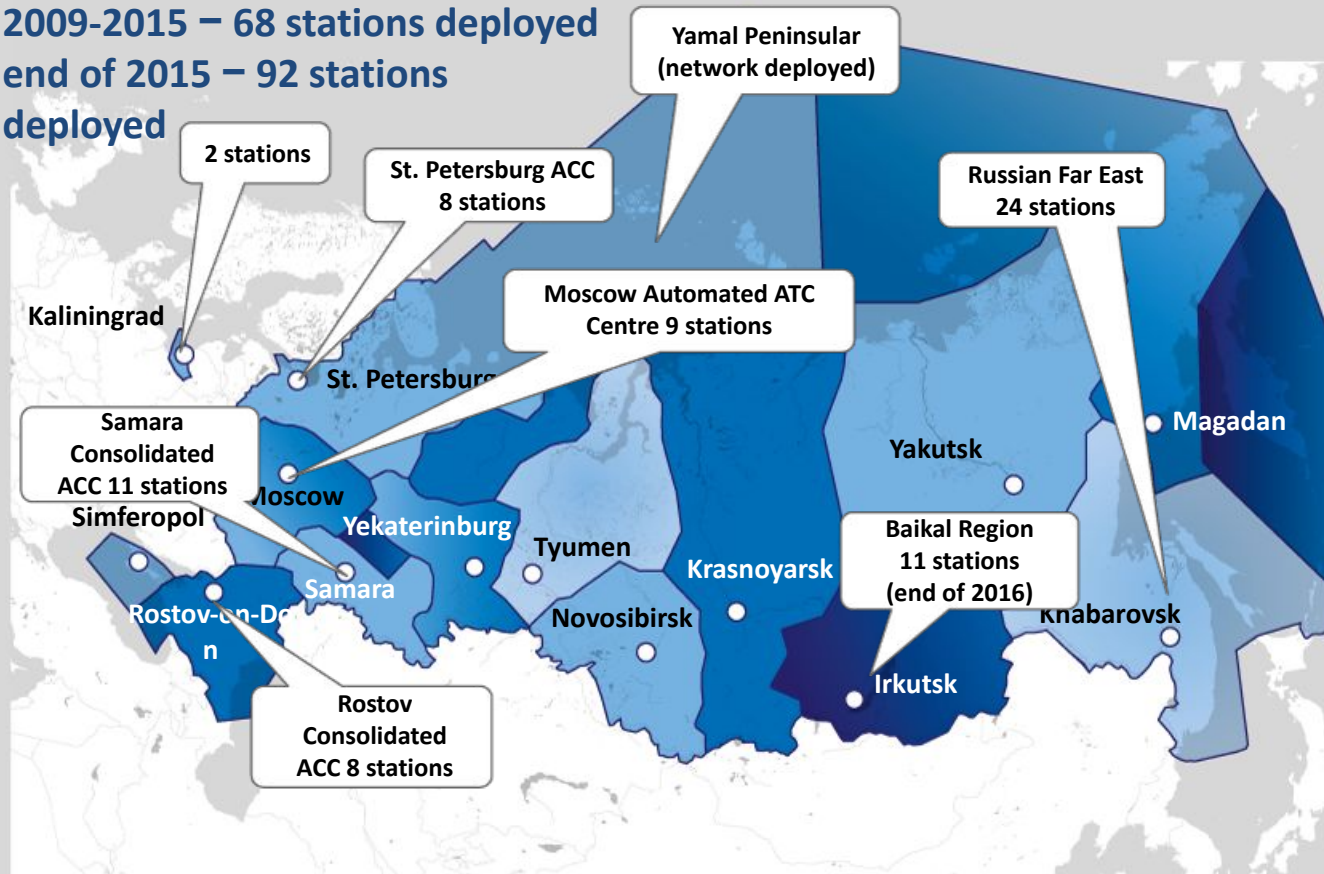
- «Yamal-ADS», ADS-B 1090ES network and VDL-4 deployment on Yamal Peninsula (Far North);
- «Moscow-MA», deployment of ADS-B 1090ES network and VDL-4 in Moscow area;
- «Baltic ADS», establishment of a seamless ADS-B 1090ES and VDL-4 route:
Moscow – St. Petersburg – Stockholm





ADS-B Implementation Programme (2009-2015)

2009-2015 – 68 stations deployed
end of 2015 – 92 stations deployed





Federal Target Programme “GLONASS System Maintenance, Development and Usage 2012-2020”

- ✓ GBAS stations installed at 78 aerodromes (5 aerodromes in 2014)
- ✓ 4 Regional Monitoring Centres established (Yekaterinburg, Tyumen, Rostov-on-Don, Samara)
- ✓ 2015 - GBAS stations to be installed at 20 aerodromes; 5 Regional Monitoring Centres to be established

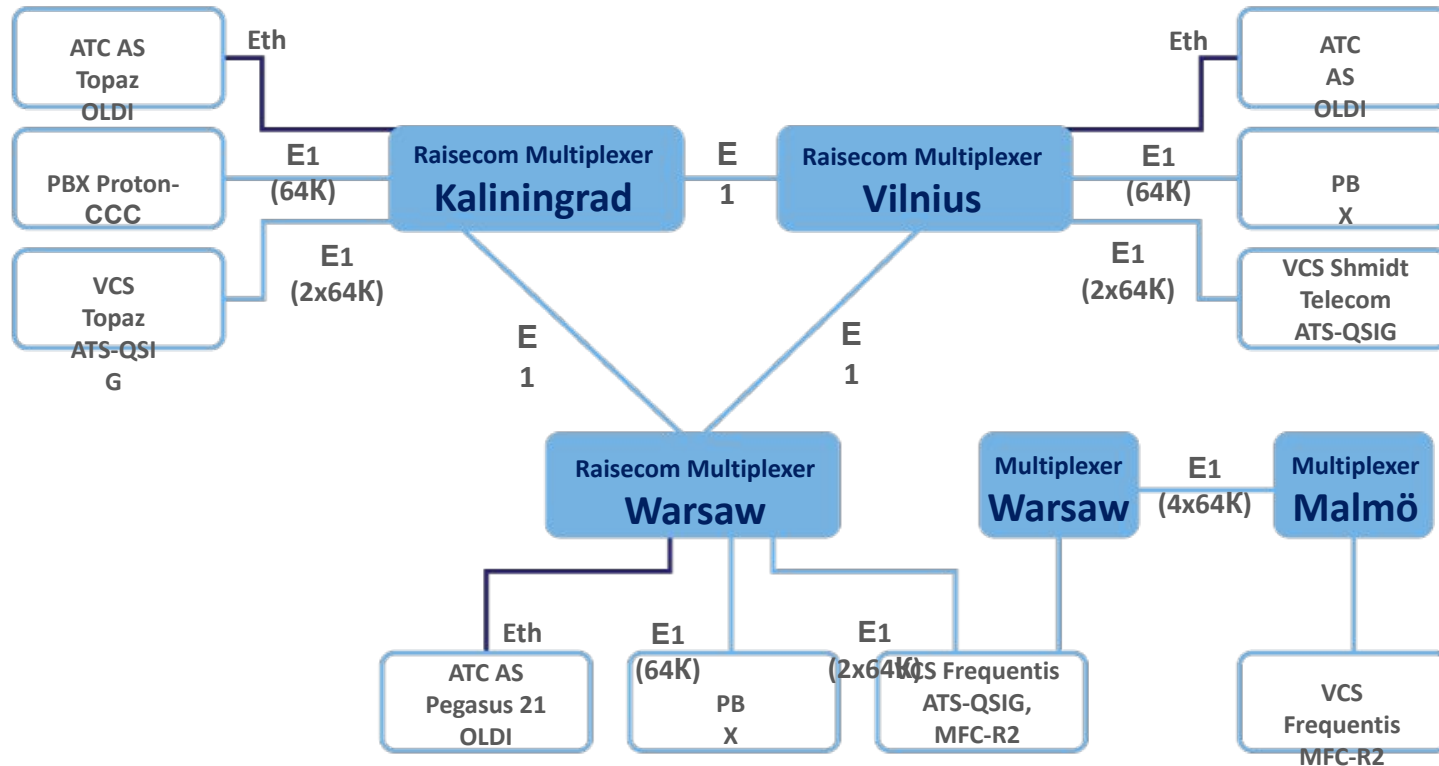


GBAS Antenna



OLDI and MFC-R2/ATS-QSIG Implementation in Kaliningrad for Communication with Baltic States

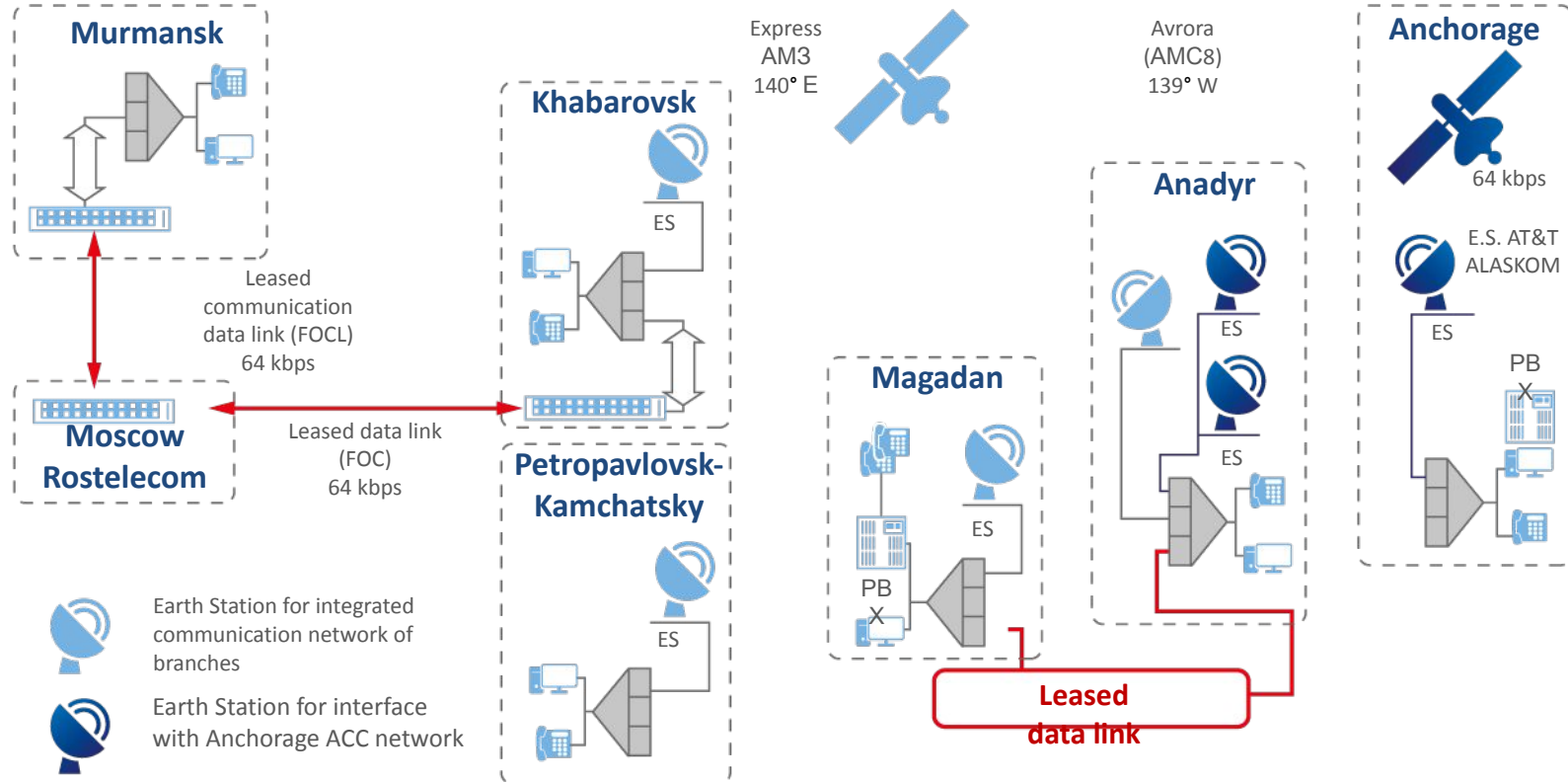
Kaliningrad (Western Russia) – Vilnius (Lithuania) – Warsaw (Poland)





Implementation of Digital Technology for Adjacent ACCs Communication

Communication channels between Russian ACCs and Anchorage ACC (US)





RVSM Implementation Outcome

17 November 2011 – safe transition to RVSM in the Eastern part of the ICAO EUR Region, including the Russian Federation.

- ✓ **ATS route capacity increase**
- ✓ **45% decrease in departure delays due to occupied levels**
- ✓ **Seamless airspace with adjacent States**
- ✓ **Fuel savings up to 5% of aircraft fuel consumption depending on the route length and aircraft type**
- ✓ **No flights operated at non-optimal levels**
- ✓ **5-fold decrease in the number of potential situations requiring flight level change**



Federal State Unitary Enterprise «State Air Traffic Management Corporation of the Russian Federation»



Thank you!