





*FEDERAL TARGET PROGRAMME*

*“MODERNIZATION OF THE JOINT ATM SYSTEM (2009-2020)”*

In 2015, the implementation of the Federal Target Programme “Modernization of the Joint ATM System (2009-2020)” will be continued with the aim to enhance safety and increase efficiency of airspace usage through the modernization of the Joint ATM System, its facilities and related systems by the establishment and development of the Russian Air Navigation System based on advanced technical aids and equipment compliant with ICAO SARPs.



## **Major Programme activities :**

- ✓ establishment of consolidated ACCs;
- ✓ ANS improvement in the terminal area and en-route;
- ✓ modernization of aeronautical telecommunications network and data link;
- ✓ installation of secondary radars on radar sites;
- ✓ implementation of the Joint airspace planning and utilization System;
- ✓ transition to advanced ATM technologies based on CNS/ATM aids and systems;
- ✓ implementation of integrated civil-military automated ATC systems.



## ACC Consolidation

**Irkutsk Consolidated ACC has become operational.  
Moscow Consolidated ACC to be completed in 2015**



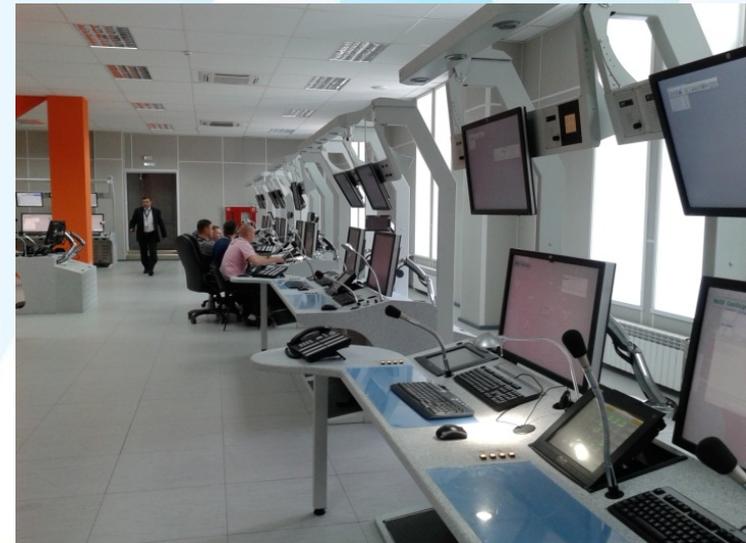
**Irkutsk Consolidated ACC and control tower**



# Irkutsk Consolidated ACC



**ACC building and TWR**



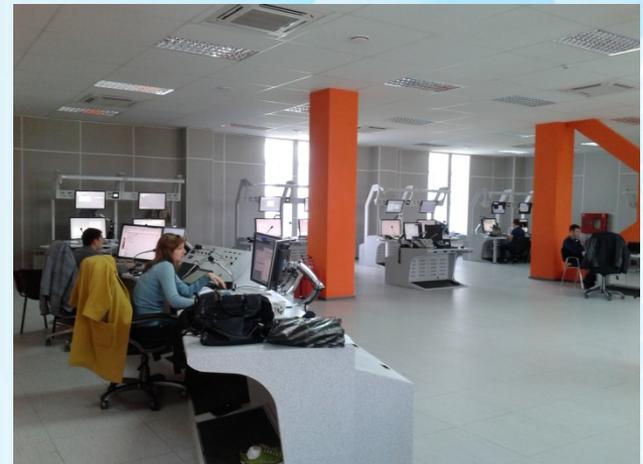
**Ops Room**



# Irkutsk Consolidated ACC



**Technological building**



**Ops Room**



## Flight Control Centre (Moscow Automated ATC Centre)

Today, the building construction, delivery, assembling and commissioning of engineering and technological equipment have been completed. Acceptance tests of technological equipment at Flight Control Centre (Moscow Automated ATC Centre) have been conducted.

The Centre will to be put into service in December 2015.



**Building**



## Flight Control Centre (Moscow Automated ATC Centre)



**Ops Room**





## Operational Units Equipped with ATC Automation Aids

### **In 2015, it is planned to:**

- further equip ATC Centres with ATC automation facilities;
- continue modernization of VHF air-ground aeronautical telecommunication system;
- deliver switching centres;
- install fixed satellite communication facilities;
- continue upgrade of ATC Centres with ADS-B facilities: Sheremetyevo, Domodedovo (“Moscow-ADS” pilot project); Pulkovo, Kaliningrad, Velikiye Luki (“Baltics-ADS” pilot project); ADS-B network is to be established in all State ATM Corporation consolidated ACCs (**Mode 1090 ES**):
  - 24 facilities in Khabarovsk Consolidated ACC;
  - 11 facilities in Samara Consolidated ACC.



## AIDC Protocol Coordination Activities

- In December 2014, an international working meeting of ATM and CNS experts of adjacent oceanic ATS sectors in Murmansk (Russia) and Reykjavik (Iceland) was held; major activities on non-voice communication through AIDC protocol and its further transmission by AFTN network were defined. AFTN network has been successfully tested to determine data transmission rate between switching centres of Reykjavik (Iceland, Isavia) and Murmansk (Russia).

### Proposal

**when establishing an automated interaction between Khabarovsk-Sapporo and Magadan-Anchorage ACCs it is suggested to take into account AFTN network cooperation experience between Murmansk and Reykjavik**

- No requests from Norwegian ATS Centres with regard to similar working arrangements.
- **In 2015, following activities will be continued:**

Reykjavik (Iceland) ATS Centre is to host a working meeting of ATM and communication experts from Murmansk (Russia) and Reykjavik (Iceland) oceanic ATS sectors on communication equipment specifications, approval of coordination procedures as well as terms and conditions of system testing commencement. By the end of 2015, modification of Murmansk Automated ATC System has been scheduled which ensures AIDC protocol interaction. Activities will be completed in 2016.



## AIDC Protocol Coordination Activities

- In accordance with Protocol dated 18.07.2014 of the 3<sup>rd</sup> ATM Coordination Meeting between representatives of the State ATM Corporation and ATC Division of Civil Aviation Bureau of Japan coordinated actions on AIDC implementation (ATS data operational exchange) between Khabarovsk and Sapporo ACCs. **Japan Civil Aviation Bureau** has notified the State ATM Corporation that 2020 is regarded as the earliest deadline for AIDC implementation between Khabarovsk and Sapporo ACCs. **However, the Bureau considers a deadline reduction (March 2018).** Further updated deadlines will be announced later.



## Coordination Activities between ATC Centres

The State ATM Corporation has noted information on the Bureau's plans on AIDC implementation.

The Parties have come to an agreement: the JCAB will forward the State ATM Corporation a detailed Plan on AIDC implementation with Khabarovsk ACC.

- AIDC coordination activities between Magadan and Anchorage Centres will be carried out after such coordination is arranged between Khabarovsk and Sapporo.
- CPDLC at Murmansk ACC. CPDLC implementation in Murmansk as well as subsequent ADS-C implementation in the oceanic area will be feasible after results of the Moscow TMA pilot region are available.

Today, Murmansk has only ADS-B available, which has been implemented and become operational since 2013. **ADS-C issues can be raised not earlier than 2018.**



**THANK YOU  
FOR YOUR ATTENTION!**