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EU – Russia cooperation in Green Aviation

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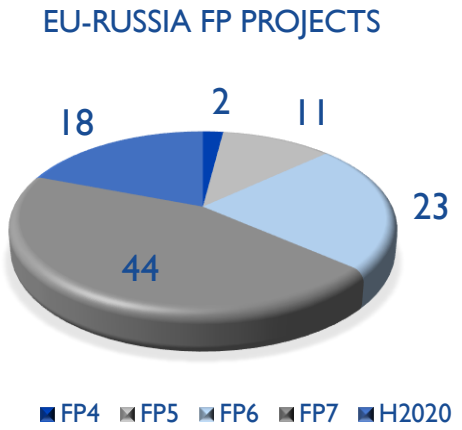
NATIONAL CONTACT POINT AERONAUTICS
НАЦИОНАЛЬНАЯ КОНТАКТНАЯ ТОЧКА АЭРОНАВТИКА

Central AeroHydrodynamic Institute
named after professor N.E. Zhukovsky

EU-Russia cooperation in aeronautics

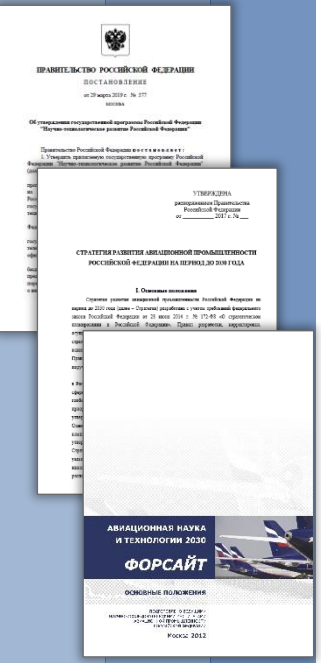
NCP "Aeronautics":

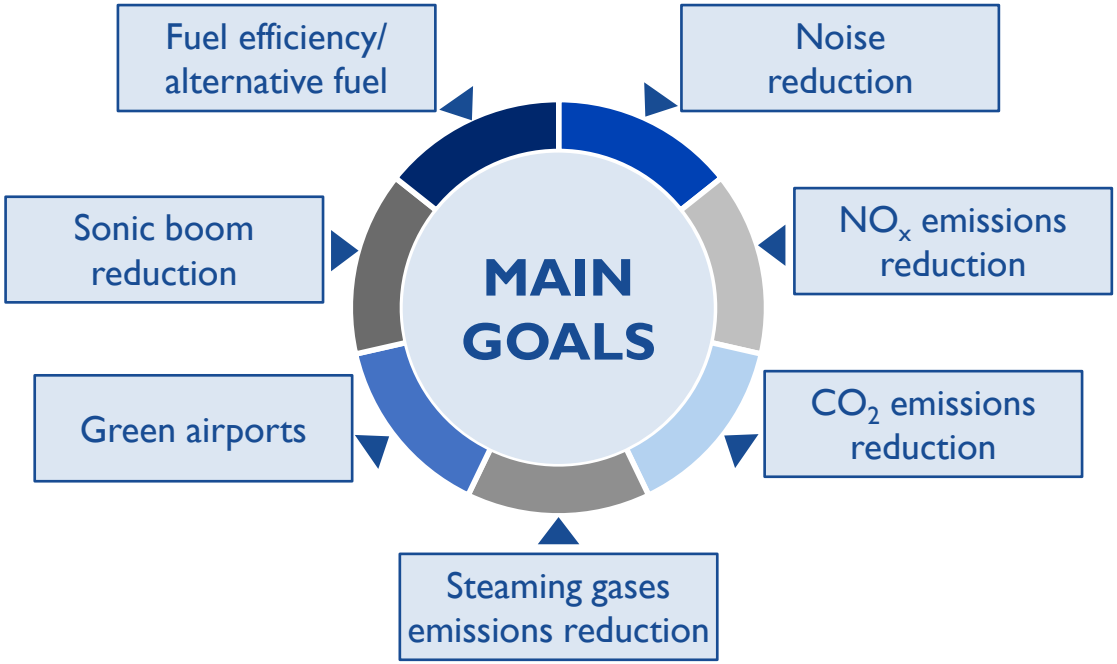
- since 2004 based at TsAGI (NRC)
- EU – Russia international cooperation development*
- information, consulting and methodological assistance
- year-to-date over 90 projects realized under EU FP



* Agreement on Cooperation in Science and Technology between the European Union and the Government of the Russian Federation (signed in 2000 and renewed in 2003, 2009 and 2014).

Green aviation – key challenges





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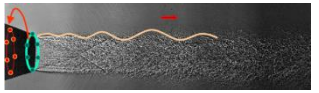
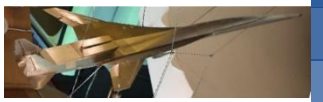
Russian experience in EU Green Aviation Initiatives

Key topics (projects examples)

Aircraft performance improvement for more environmentally sustainable vehicles	HISAC, Buterfli, IMOTHEP, ASPIRE, DeSiReH, FUTPRINT50, AFLONext	
Noise reduction	SADE, VALIANT, OPENAIR, ОРИНОКО ORINOCO, X-Noise, ARTEM	
Emission reduction	dream, Telfona	
Sonic boom reduction	RUMBLE	
Climate impact	QUANTIFY, AFLONext	

Green aviation challenges

Horizon 2020 current priorities

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Aviation International Cooperation Flagship
"Safer and Greener Aviation in a Smaller World"

ICE GENESIS SENS4ICE

Innovative technologies for improving aviation safety and certification in icing conditions*

IMOTHEP GETTING HYBRID ELECTRIC

FUTPRINT50

Future propulsion and integration — Towards a hybrid/electric aircraft*

SAFEMODE

Human Factors in Transport Safety**

ANIMA Aviation Noise Impact Management through Novel Approaches

TsAGI is a focal point of Aviation Noise Research Network and Coordination in the framework of ANIMA project

MINPROMTORG RUSSIA

Ministry of Science and Higher Education RF (Minobrnauki RF)

* financing of the Russian consortium has been provided by the Ministry of Industry and Trade

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Green Deal Call — areas of interest (suggestions)

Call area 5: Sustainable and smart mobility

Topic I:

Green airports and ports as hubs for sustainable and smart mobility

- Small size passenger aircraft (air taxi) using hydrogen energy / electric propulsion
- Unmanned transport platforms for the collection and delivery of goods to a hub (seaport, airport)

! Support is needed

Green Deal Call — areas of interest (suggestions)

Call area 1: Increasing climate ambition: cross-sectoral challenges

Topic 2:

Preventing and fighting extreme wildfires with the integration and demonstration of innovative means

- Development of methods and means to increase the efficiency of aerial firefighting operations
- Atmospheric satellite for 24/7 monitoring of fire-prone areas
- Robotic system which is able to contain wildfire fronts and is based on a swarm of small-sized unmanned aerial vehicles
- Conceptual design and creation of a demonstrator of multipurpose amphibious UAV
- Robotic aviation platform for environmental monitoring
- Development of an efficient automated platform to control the location and routes of ground/air fire vehicles in real time

! Support is needed

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Thank you for your attention

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