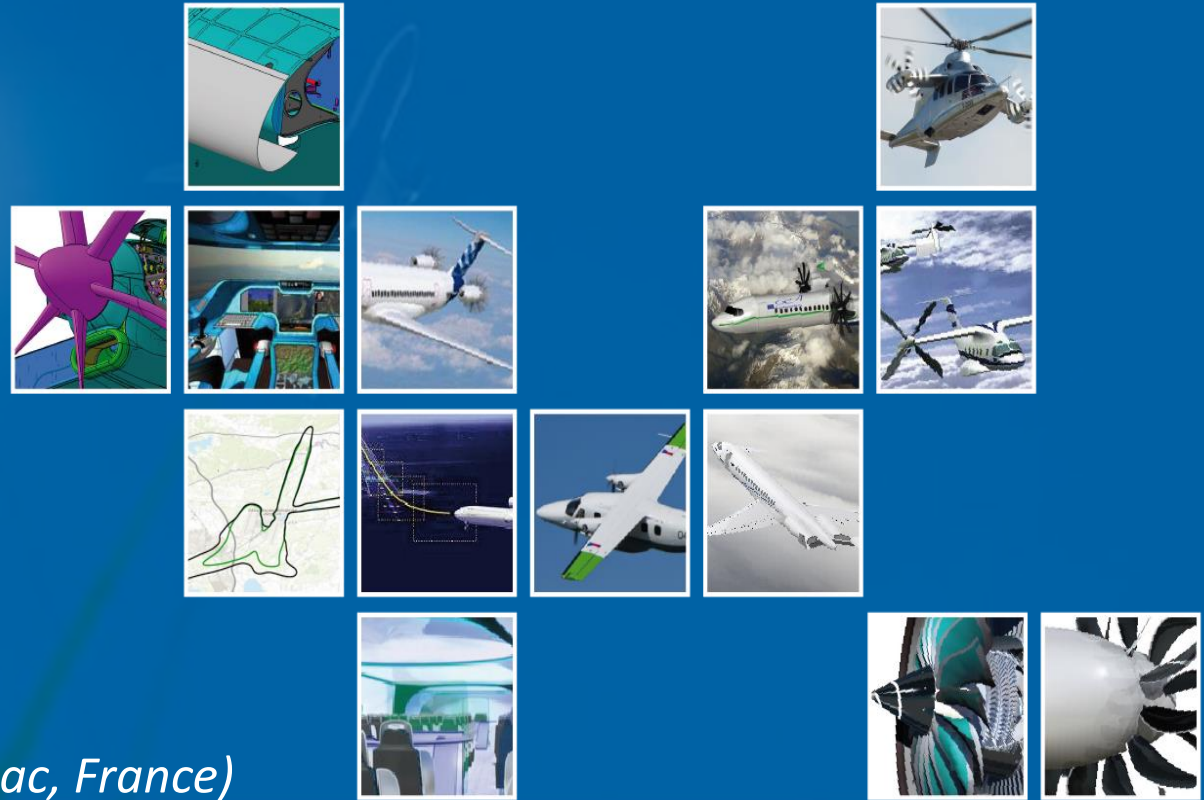


CfP10 Info Day: Technical Session



7th May 2019

Location: CCI Occitanie (Blagnac, France)



Title: Innovative Noise Generation System for testing of Regional Cabin Interior Noise reduction.

WP Location: REG IADP - WP 3.2

Objectives:

- Research of innovative solutions for the design of Noise Generation System (iNGS) and, based on results of such research activities, design, development, manufacturing and integration of an innovative Noise Generation System to test and validate new technologies for Regional Cabin Interior Noise reduction.
- The activity shall include the definition and implementation of advanced algorithms able to automatically simulate the real noise spectrum distributions and levels for all the flight conditions



Tasks description:

- Task 1: Requirements Analysis

Main activities are:

- Review of the of the state of the art of fully circumferential fuselage Noise Generation System
- Selection requirements of Innovative closed control loop with control strategies in order to reduce set-Up time
- Additional requirements formulation for providing innovation with respect to the state of the art of the fully circumferential fuselage Noise Generation System



Tasks description:

- Task 2: Design of iNGS

Main activities are:

- Design of Main Control subSystem
- Design of Sound Waveform Generation and Acquisition subSystem
- Design of Electroacoustic subSystem
- Release of CAD drawings
- Release of beta version of the software Graphical User Interface



Tasks description:

- Task 3: Production of hardware and software

Main activities are:

- Production of the hardware according to the approved design of task 2.
- Final coding of control algorithms and related software
- Final realization of the software Graphical User Interface
- Shipping of the system to Leonardo



Tasks description:

- Task 4: Integration and Validation

Main activities are:

- Preparation of the Acceptance test procedure for the Hardware and software
- Integration of the system at Leonardo Pomigliano d' Arco plant
- Validation Test
- Release of the Validation Test Report



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Major Deliverables:

Deliverables			
<i>Ref. No.</i>	<i>Title - Description</i>	<i>Type*</i>	<i>Due Date</i>
D1.1	Analysis phase: Requirements matrix and support documentation	R	T0+1
D2.1	Preliminary CAD drawing	R+D	T0+3
D2.2	CAD Drawings release	R+D	T0+5
D3.1	Hardware and software produced and documented	R+HW	T0+13
D4.2	System integration and validation: Validation tests report	R	T0+14

*Type: R=Report, D=Data, HW=Hardware

Milestones:

Milestones (when appropriate)			
<i>Ref. No.</i>	<i>Title - Description</i>	<i>Type*</i>	<i>Due Date</i>
M1.1	Analysis phase Review	R	T0+1
M2.1	Software GUI beta release	R	T0+5
M3.1	Hardware delivery	HW	T0+13
M4.1	System Integration and validation	R+HW	T0+14

*Type: R=Report, D=Data, HW=Hardware



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Special Skills:

- Expertise in Acoustic Data acquisition and Generation System
- Recognized experience in advanced control system techniques
- Experience in aerospace R&T and R&D programs is an asset
- System requirements capture and analysis
- Demonstrated expertise in project participation, international cooperation, project and quality management

Indicative Funding Topic Value: 550 K€

Duration of the action: 14 Months



Any questions?

Info-Call-CFP-2019-01@cleansky.eu

Last deadline to submit your questions:
5th July 2019 (17.00 Brussels Time)

