QUESTIONNAIRE

In the frame of the AirTN FP7 ERA-Net project, it is proposed to make a survey of all European civil aeronautic facilities and to introduce them in a "wiki" like web site. The result will be a unique inventory of all relevant research facilities which will be accessible to the European Commission and ACARE stakeholders.
The practices with respect of access, investments and support will help to upgrade existing key facilities, to avoid duplication for future facilities and to identify the domains where European community has a lack of facilities.

Identification of the installation/facility :

Country: Spain
Location (city): Seville
Name of the facility:
Date of construction or of acquisition or of main refurbishment: 2009
Owner: ANDALUSIAN FOUNDATION FOR AEROSPACE DEVELOPEMENT
Contact point: Silvia de los Santos Trigo
Internet site: www.catec.aerpo

Technical characteristics:

1 - Type of infrastructure

Wind tunnel	☐
Propulsion bench	☐
Structures facility	☒
Material facility	☒
Simulator (ex. Flight simulator, tower, …)	☒
Flight test bed (aircraft, embedded facilities, …)	☒
Supercomputers	☐
Other:UAV platforms,	☒

2 - Main technical characteristics:

See document attached.

3 - Research domains which can be addressed (refer to ACARE taxonomy http://www.acare4europe.com/docs/ASD-Annex-final-211004-out-asd.pdf):

- 1.Flight physics
  - Composites Materials and basic processes
  - Metallic Materials and basic processes
  - Non-Metallic Materials and basic processes
  - Structural Analysis and Design
- 4. Aircraft Avionics, Systems & Equipment
  - Navigation/Fight Management/Autoland
  - Identification
  - Electronics and Microelectronics for on-board systems
  - Sensor integration
  - Comunications systems
  - Identification
  - Avionics integration
  - Optics- Optronics-Lasers-Image processing and data fusion?
  - Aircraft security
- 6. Integrated Design & Validation
  - Collaborative Decision Making
  - Simulator environments and Virtual reality
  - Decision Support Systems
  - Autonomous operation
  - Development of synthetic environment and virtual reality tools
  - Real time simulators
  - Numerical Models
  - Methods and IT tools for Collaborative Product and Process Engineering
- 7. ATM
  - Overall ATM
  - Airspace management
  - Communication Systems
  - Navigation Systems
  - ATC Automation/DSS Decision Support Systems
  - Avionics
- 9.Human Factors
  - Human factors Integration, machine interface
  - Human Information Processing
- 10. Innovative Concepts & scenarios
  - Breakthrough Technologies

4 - *Main (or specific) associated measurement techniques:*

- *Non Destructive Testing:*
  - *Laser Shearography*
  - *Ultrasonic Phase Array*
  - Infra-red Termography
  - X-Ray Tomography
- Universal Testing Machine for large composite panels (4MN max.)
- Hall-Hass Testing
- Rapid Manufacturing Facilities
- 2D/3D displacement & strain analysis
- Drop tower for impact testing
- Environmental Testing

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5 - Operational status

Fully operational (1750 h/equip. available in 2010)

6 - picture available ?
See document attached

Financial elements:

Replacement cost (M€uros)

Less than 10	☐
10 to 30	☒
30 to 60	☐
60 to 100	☐
More than 100	☐

Practices concerning:

Access policy: contract, free access for research under collaboration agreement.

Support: Regional, National and European

Comments:

- ATLAS Laboratory: Atlas is an **Experimental Flight Center** that is been setting up at this moment and located in Jaen, which will provide the international aeronautics community with an **airfield** with superior facilities and an **airspace**, suitable for Unmanned Aircraft Systems (UAS) testing. Its main goal is to offer manufacturers, regulation authorities, Academia and technology centers, a unique scenario for research and technology development of UAS and air traffic control.
- CEUS: The Center of Excellence on Unmanned Systems, would to be a center exclusively dedicated to air tests on unmanned systems with great MTOW (maximum mass authorized for taking off), over 500 Kg. Nowadays, CATEC is carrying on the required previous studies in order to evaluate the viability of this project.

Origin of information ('signature'): Juan Pedro Vela Martínez- January 2011

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Fecha: 2011.01.14 11:34:24 +01'00'

The information will be implemented in the AirTN web site.
Do you agree to publish the information related to your IR :

In the protected part of the site ☒ **YES** ☐ **NO**

In the public web site ☒ **YES** ☐ **NO**

This questionnaire is sent by AirTN –FP7 team and must be returned the latest by 31 December 2010 to :

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