Decision of the Governing Board approving the
Additional Activities Plan 2017

THE GOVERNING BOARD OF THE CLEAN SKY 2 JOINT UNDERTAKING,

Having regard to the Council Regulation n° 558/2014 of 6 May 2014 establishing the Clean Sky 2 Joint Undertaking ('Clean Sky 2 JU') and in particular Article 4(2);

Having regard to the Statutes of the Clean Sky 2 JU as annexed to Council Regulation (EC) No 558/2014 of 6 May 2014 and in particular Article 8.2 (i);

WHEREAS:
1) The Statutes of the Clean Sky 2 JU confer on the Governing Board the powers to approve the Additional Activities Plan 2017;

2) The private members of the Clean Sky 2 JU have submitted a proposal for the Additional Activities Plan 2017 which contributes to the objectives of the Clean Sky JTI.

HAS DECIDED:

Article 1
The Additional Activities Plan 2017 set out in the Annex is approved.

Article 2
This decision shall enter into force on the day following its adoption.

Brussels, 16 December 2016

Ric Parker
Chairman of the Governing Board

Enclosures:
- Additional Activities Plan 2017; (ref. CS-GB-2016-12-16 AAs Plans 2017)
<table>
<thead>
<tr>
<th>MEMBER NAME</th>
<th>Planning Period</th>
<th>Value of Additional activities (excl. Union funding)</th>
<th>Reference to CS Programme</th>
<th>Technology Streams / Demonstrator area in CS1/CS2 (if applicable)</th>
<th>Activity title and relevance</th>
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<tbody>
<tr>
<td>GKN AEROSPACE</td>
<td>2017</td>
<td>206,711,000 €</td>
<td>1,490,000.00 €</td>
<td>275,923.00 €</td>
<td>Manufacturing of LE_HLFC (2014) Additive manufacturing</td>
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<td>LE_HLFC: Parallel activities to improve HLFC manufactures.</td>
<td>Manufacturing solution for LE_HLFC in CS2.</td>
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<td>LE_HLFC: Internal structure joined to external microperforated</td>
<td>Manufacturing solution for LE_HLFC in ADDIFLY.</td>
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**Additional Activities Plans 2017**

Clean Sky 2 Joint Undertaking

Governing Board Approval -December 2016 -
Annex to Decision CS-GB-2016-12-16 AA Plan 2017
Demonstration of technologies contributing to WP3.1.2
WP3.4
LPA Airbus AA 2017-02
Provide facilities, instrumentation and skilled experts for large scale demonstrations covering all aircraft systems. This will help to reach the 10% of reduction of total operating costs vs 2014 reference air vehicles
Active Cockpit
Extended Cockpit
20,000,000.00 €

Environmental Benefits

120,000.00 €

2,000,000.00 €

Enable a technological leap in the face of 2017 SRIA goals for 2020-2050;
-Accelerate the progress towards the ACARE emerging competitors;
-Enable a technological leap in the face of SRIA goals for 2020-2050;
-Accelerate the adoption of new technology into those relating to small aviation, as well as to emerging competitors;
-Reduce the impact of aeronautical technologies, including those relating to small aviation, as well as to emerging competitors;
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LPA work packages WP1.1, WP1.4, WP1.5 and WP1.6, Airframe WP 2.2

The innovations to be tested in the EMAs refer to both the product features and the production process; among them, for instance:

- 2) The power conversion from renewable energy sources, especially waves (wave energy converters) applications are being studied for the design of energy converters based on Ball Screws: during specific phases of EMA operation.
- 1) Energy regeneration through EMA especially as for the first type of application – can be exploited also in the aeronautics sector, for instance by providing EMAs with the additional functionality of recovering energy during specific phases of EMA operation.

- EMA (Electro-Mechanical Actuation) - WP2.4.2

WP2 Technologies Development

WSA (Electro-Mechanical Actuation) - WP2.6.2

The WSA project aims to validate a new approach for VHM strategies by incorporating new failure modes (such as misalignment, assembly and manufacturing errors) into reliability models and new sensor technologies. Reliability of CS programmes: links are in ENGINE ITD and FAST ROTORCRAFT IADP at various levels; impact to CS is found in the field of environmental benefits (noise and CO2 reduction), efficiency increase, and Life Cycle Assessment and demonstration activities.

Total 2017
141,170,461 €

Total Planned 2014-2016
389,043,880 €

Total Planned 2014-2017
509,214,161 €