



CORE-JetFuel

**Coordinating research and innovation in the field of
sustainable alternative fuels for Aviation**

**Coordination and support action
FP7 – 605716**

**Stakeholder Working Group 4
Policies, incentives and regulation**

Minutes

**First WG4 Telephone conference
16 December 2013, 10:00 – 12:00**

Background - The CORE-JetFuel Project

Objectives

The CORE-JetFuel project supports the European Commission in its dynamic and informed implementation of research and innovation projects in the field of sustainable alternative fuels for aviation. It links initiatives and projects at the EU and Member State level, serving as a focal point in this area to all public and private stakeholders. CORE-JetFuel addresses competent authorities, research institutions, feedstock and fuel producers, distributors, aircraft and engine manufacturers, airlines and NGOs. The project is aimed to set up a European network of excellence for alternative fuels in aviation that brings together technical expertise from all across this complex thematic field and helps to coordinate R&D as well as implementation efforts.

More information can be found on the CORE-JetFuel official website: www.core-jetfuel.eu

Stakeholder involvement

CORE-JetFuel will ensure cooperation with other European, international and national initiatives and with the key stakeholders in the field. The expected benefits are enhanced knowledge of decision makers, support for maintaining coherent research policies and the promotion of a better understanding of future investments in aviation fuel research and innovation.

In order to ensure efficient involvement of international experts and stakeholders in the coordination of research and innovation throughout the duration of the project, four stakeholder working groups are established on the following topics.

- WG1: Feedstock and sustainability
- WG2: Radical concepts and conversion technologies
- WG3: Technical compatibility, certification and deployment
- WG4: Policies, incentives and regulation

CORE-JetFuel Working Group 4 – Policies, incentives and regulation

For a number of ecologic and economic reasons, the aviation industry is in great need for alternative fuels. Highly ambitious goals for the reduction of the sector's overall greenhouse gas emissions set from industry and politics imply sustainable alternative fuels as major contribution. To meet the high expectations research and innovation efforts are required in order to develop pathways for an economically feasible large-scale production of such fuels for aviation.

The transformation of its energy base from fossil fuels to a secure supply of renewable, climate-friendly, sustainable and sufficiently scalable alternative fuels represents a tremendous challenge for aviation. Many different types of renewable feedstock, most prominent biogenic materials (biomass), and various kinds of conversion technologies can be utilised for the production of alternative jet fuel.

Within **Working Group 4 of the CORE-JetFuel project** specific focus will be placed on the following topics:

- Recent European and international policy initiatives in the field of alternative aviation fuels
- Follow up of outcomes and conclusions of Flightpath meetings, ANCAT group and the new Alternative Fuels Task Group created under the ICAO Environmental Committee (CAEP)

First WG4 Telephone Conference – Timing, Organisation, Participants

Telephone conference timing: 16 December 2013, 10:00 – 12:00

Telephone conference organisation

SENASA (Contact - CORE-JetFuel Working Group 4)
César Velarde Catolffi-Salvoni
Tel.: +34 91 301 9887
e-mail: cvelarde@senasa.es

WIP Renewable Energies (Contact - CORE-JetFuel Stakeholder Involvement)
Dr Rainer Janssen, Dipl.-Ing. Dominik Rutz M.Sc.
Tel: +49 (0) 89 720 12743
e-mail: rainer.janssen@wip-munich.de, dominik.rutz@wip-munich.de

Participants

The following experts and members of the CORE-JetFuel Working Group 4 participated in this first WG4 telephone conference, representing several national initiatives on alternative aviation fuels, the European Advanced Biofuels Flight path Initiative, the Advisory Council for Aeronautics Research in Europe (ACARE), the European Civil Aviation Conference (ECAC), and the European Commission.

- Ralf Stoeckel, Total, France
- Lukas Rohleder, Aviation Initiative for Renewable energy in Germany (AIREG)
- Claudio Eminente, ENAC, Italian Sustainable Aviation Fuel Forum (ISAFF)
- Martin Porsgaard, SAS, Denmark, Nordic Initiative for Sustainable Aviation (NISA)
- Michael Lunter, Civil Aviation Authority, Bio jet fuels supply chain Initiative, Netherlands
- Cesar Velarde, SENASA, Spanish Bioqueroseno Initiative
- Thomas Roetger, IATA, ACARE WG3
- Bill Hemmings, Transport & Environment, UK
- Manfred Woergetter, Bioenergy 2020+, Austria
- Christiane Bruynooghe, European Commission – DG Research
- Sylvie Grand-Perret, European Commission – DG MOVE
- Rainer Janssen, WIP Renewable Energies, Germany
- Dominik Rutz, WIP Renewable Energies, Germany
- Johannes Michel, FNR, Germany (CORE-JetFuel Coordinator)

First WG4 Telephone Conference – Objective

The first conference call of the CORE-JetFuel Working Group 4 focused on the following topics.

- Identification of recent EU and international policy initiatives in the field of alternative aviation fuels, and EU policy gaps/needs/options.
- Possible role of CORE-JetFuel to facilitate coordination/connection of the different EU policy discussion forums. How to align objectives and avoid duplicities?

The objective of this first call of CORE-JetFuel Working Group 4 was to initiate a constructive discussion with representatives from existing groups and initiatives in the field of alternative aviation fuels in Europe and to facilitate further discussion and interaction.

This first telephone conference meant to establish the basis for a positive cooperation and information sharing during the implementation of the CORE-JetFuel project.

First WG4 Telephone Conference – Agenda

- 1) Brief introduction and presentation of participants
- 2) Overview of the current EU policy landscape in aviation alternative fuels and discussion groups
- 3) Questions for discussion:
 - a. Is the current EU policy landscape enough to achieve the Flight Path 2020 objective?
 - b. Which are the current EU policy needs/options to enable the deployment of aviation alternative fuels at large scale?
 - c. Role of CORE-JetFuel to facilitate policy-making and link among different EU Initiatives/Groups?
- 4) Conclusions and next steps

First WG4 Telephone Conference – Summary

This first CORE-JetFuel WG4 telephone conference was opened by Rainer Janssen (WIP Renewable Energies) with a brief overview on the stakeholder involvement process implemented within CORE-JetFuel. César Velarde (SENASA) presented overall activities and objectives of the CORE-JetFuel project and introduced the goals and discussion lines of this telephone conference.

All participants introduced themselves, their organisations as well as the national and international initiatives they are involved in. Information on respective initiatives may be found on the following websites:

- Aviation Initiative for Renewable Energy in Germany (AIREG): www.aireg.de
- Italian Sustainable Aviation Fuel Forum (ISAFF): <http://www.worldenergy.org/news-and-media/local-news/italian-aviation-forum-takes-off>
- Nordic Initiative for Sustainable Aviation (NISA): <http://www.cphcleantech.com/nisa>
- Bio jet fuels supply chain Initiative, Netherlands: <http://www.greenaironline.com/news.php?viewStory=1783>
- Spanish Bioqueroseno Initiative: <http://www.bioqueroseno.es>
- Advisory Council for Aeronautics Research in Europe (ACARE): <http://www.acare4europe.com>
- European Civil Aviation Conference (ECAC): <https://www.ecac-ceac.org>
- International Civil Aviation Organisation (ICAO): <http://www.icao.int>
- European Advanced Biofuels Flight Path initiative: http://ec.europa.eu/energy/renewables/biofuels/flight_path_en.htm
- IEA Bioenergy Task 39 – Commercializing Liquid Biofuels: <http://task39.org>

After the presentation of all participants, the following two main objectives were raised for the stakeholder working group:

1. What should the role of CORE-JetFuel be in linking the presented initiatives?
2. How should the stakeholder working group act to link all the initiatives represented?

Discussions were launched with the statement of César Velarde (SENASA) that the objectives of the European Advanced Biofuels Flight Path initiative, namely to achieve an annual production of two million tonnes of sustainably produced biofuel for aviation by 2020, will be very difficult to realize. The following main problems were identified hindering the large-scale market up-take of alternative aviation fuels:

- Lack of specific and coherent policies incentivising the scale-up of alternative aviation fuel production
- Lack of cooperation of civil aviation authorities with ministries responsible for policies on alternative fuels (e.g. Ministries of Environment)
- Lack of strong partnerships involving all actors of the aviation sector
- Current high costs of alternative aviation fuels hindering market demand
- Lack of investment and hesitation of the financial sector
- Difficulty to establish logistics for large-scale fuel supply (due to administrative barriers)

With respect to policy development it was stated that until today the aviation sector has not been strongly involved in the establishment of the Renewable Energy Directive (RED) and its alternative fuel target. Aviation fuels have not been specifically addressed in the RED, however they may be counted towards the fulfilment of targets reported by Member States (MS). A reason for this was the infant stage of alternative aviation fuels in 2009 when the RED was launched.

Sylvie Grand-Perret (EC DG MOVE) mentioned that there was an opportunity for European Member States during the revision of the RED in 2013 to take action when Finland proposed an amendment to the RED to include a compulsory percentage for the use of alternative fuels in aviation. This proposal was voted against by most Member States due to the following reasons (according to WG4 participants):

- There is no internal demand from national energy sectors in the different countries.
- National policy makers have not identified the aviation sector as an important sector for alternative fuel use.
- The aviation sector is not well represented in these policy discussions which mainly involve Ministries of Environment and often lack appropriate information and involvement of civil aviation authorities.

Thomas Roetger (IATA, ACARE WG3) stated that a mandatory target for alternative fuels is currently not supported by the aviation sector due to the high costs of such fuels and the limited ability of airlines to cover additional costs. Therefore, an appropriate and strong mix of economic incentives needs to be implemented, as done in the US through the introduction of the Renewable Identification Number (RIN) system. Such incentives need to cover the present price gap of alternative fuels and will thus trigger the necessary investment in production facilities. Currently, European alternative fuel producers are mainly producing for the more stable and consolidated US market.

Furthermore, national European initiatives need to be strengthened establishing partnerships involving all relevant actors of the aviation sector (fuel producers, airports, airlines, aircraft producers, civil aviation authorities).

Michael Lunter (Civil Aviation Authority, Netherlands) reported that the Dutch government and aviation industry have signed a Letter of Intent for the development of a bio jet fuels supply chain and market in the Netherlands. The joint ambition is to foster an increasing production and commercial use of bio jet fuel, which will position the Netherlands in the heart of the emerging European bio jet fuel market. It is agreed upon (by WG4 participants) that joint efforts of all stakeholders needed to realize large-scale alternative fuels production in the coming years. Currently, the Netherlands is the only EU MS introducing incentives for the use of alternative fuels in aviation.

Lukas Rohleder (AIREG) presented the multi-stakeholder „Aviation Initiative for Renewable Energy in Germany” launched in 2011 with the 2025 goals of blending 10% alternative aviation fuel in Germany (compensation for the initial price difference is a prerequisite), domestic biorefining capacity with at least one industrial-scale facility, and bilateral government agreements to safeguard provision of foreign feedstock.

Martin Porsgaard (SAS) presented the recently launched Nordic Initiative for Sustainable Aviation (NISA) involving as key actors the Nordic airports, airlines and their industry federations, and aviation authorities with the aim of realizing the development of new sustainable aviation fuels. The initiative is supported by aircraft manufacturers Airbus and Boeing as well as IATA (International Air Transport Association).

For the situation in Italy and Spain, Claudio Eminente (ENAC) and César Velarde (SENASA) reported that due to the current lack of interest of market actors, an initiative on European level is needed to facilitate market introduction of alternative aviation fuels.

Manfred Woergetter (Bioenergy 2020+), member of the IEA Bioenergy Task 39 – Commercializing Liquid Biofuels, and Bill Hemmings, representative of the NGO Transport & Environment confirmed their interest to contribute to activities aiming at the promotion of sustainable alternative fuels in the aviation sector.

It was agreed upon that the CORE-JetFuel project, and specifically the Stakeholder Working Group 4 on “Policies, incentives and regulation” will support the cooperation and coordination of national initiatives towards the common goal to improve the framework conditions for large-scale production and use of alternative fuels in the aviation sector.

Towards this goal César Velarde (SENASA) proposed the potential future establishment of an EU-wide initiative similar to the US Commercial Aviation Alternative Fuels Initiative (CAAFI) which aims to enhance energy security and environmental sustainability for aviation through alternative jet fuels.

As a conclusion of this first CORE-JetFuel WG4 telephone conference, participants agreed upon the following main activities and objectives to be addressed during the implementation of the CORE-JetFuel project:

- Working towards common policy positions by EU MS through coordination of national initiatives on alternative aviation fuels
- Identifying lessons learnt from existing successful national initiatives in EU MS (e.g. The Netherlands, Germany, Nordic countries)
- Supporting the cooperation of civil aviation authorities with ministries responsible for policies on alternative fuels (e.g. Ministries of Environment) and creating awareness at high level in the European Member States of the importance of the aviation sector in the use of alternative fuels.
- Implementing appropriate policy frameworks and incentives for the scale-up of alternative aviation fuel production
- Strong cooperation with international initiatives (ACARE, ECAC/ENCAT, EU Biofuels Flight Path)
- Strengthening of partnerships among all relevant actors of the aviation sector (fuel producers, airports, airlines, aircraft producers, civil aviation authorities)
- Strengthening the links between actors (engaged in RTD activities) in the aviation and the bioenergy sector and promoting the active involvement of NGOs in partnerships

The organisers would like to thank all participants of this first CORE-JetFuel WG4 telephone conference for their active contributions and fruitful discussions.

This telephone conference served well to initiate a constructive discussion with representatives from existing groups and initiatives in the field of alternative aviation fuels in Europe.

Further discussion and interaction will be facilitated via dedicated e-mailings and the organization of other telephone conferences.

Annex - CORE-JetFuel Consortium***FNR – Agency for Renewable Resources, Germany***

Project Coordinator CORE-JetFuel

Contact persons: Johannes Michel & Vincent Pelikan

BHL e.V. – Bauhaus Luftfahrt, Germany

Contact persons: Dr Arne Roth & Dr Andreas Sizmann

SENASA - Servicios y Estudios para la Navegación Aérea y la Seguridad Aeronáutica SA, Spain

Contact persons: César Velarde Catolfi-Salvoni & Africa Abajas Bermejillo

IFPEN – IFP Energies Nouvelles, France

Contact person: Dr Nicolas Jeuland & Dr Laurie Starck

EADS-IW - European Aeronautic Defence and Space Company EADS France SAS

Contact persons: Dr Isabelle Lombaert-Valot & Marc Maurel

WIP- WIP Renewable Energies, Germany

Contact persons: Dr Rainer Janssen & Dominik Rutz