

# CEN Workshop "Sustainable Aviation Fuel"

# Workshop description form

PART A – Workshop Summary PART B – Project Plan



## PART A – Workshop SUMMARY

1	WS details							
1.1.	Organization	CEN						
		Joint with CEN lead CENELEC lead						
1.2.	Title	CEN WS Sustainable Aviation Fuel						
	-	(select LEIN OF LLL OF leave LEIN/LLL IN case of Joint WS)						
1.3.	Scope	The upcoming workshop aims to provide comprehensive documentation covering the following key areas:						
		ionowing key dreas:						
		- Terminology about SAF						
		- Description of the value chain of SAF from production to fuelling the aircrafts, with						
		the reference standards at each sequence of the value chain						
		- A Generic mapping of the value chain and the required standards to support other e-						
		fuels value chain approach.						
		Confurther on everall goals and chiestives in Dart D. Charter 2 (Werkehen chiestives						
		See further on overall goals and objectives in Part B, Chapter 3 "Workshop objectives						
		and scope .						
1.4.	Does this WS stem from an EU	YES YES						
	Research project?	Name of the project: Horizon 2020 ALIGHT project						
		Grant number: 957824						
		End date 2025-10-31						
1.5.	Financial support	EU Research project						
		EC/EFTA Grant reference: Type here						
		Other Specify, if needed: Type here						
1.6.	WS Proposer	Horizon 2020 Lighthouse Alight project with its						
		17 partners.						
		Contact person:						
		Copenhagen Airports (CPH)						
		Sabrina Tekle Krarup Jensen						
		Mobile: +45 2062 6310						
		F-mail: sabrina iensen@cnh dk						
	Droposed Chair							
	Proposed Chair	Bernard Gindroz (Chair of Alight)						
		BMGI Consulting						
		+33 623 22 19 37						
		+32 490 19 25 46						
		Alight@bmgi-consulting.com						
		linkedin.com/in/bernardgindrozphd						
		Bernard Gindroz, <u>Alight@bmgi-consulting.com</u>						
1.7.	WS Secretariat	Organization: Danish Standard (DS)						
		Postal address: Göteborg Plads 1, DK 2150 Nordhavn						
		Email: dansk.standard@ds.dk						
		Phone: +45 6192 8230						



1.8.	CEN and CENELEC Management Centre (CCMC) contact	Webp WS Se Email: Phone Organ Posta Webp CCMC Email: Phone	age: ecretary name: : : : ization: l address: age: : Project Manager name: : :	www.ds.dk Birgitte Ostertag <u>bo@ds.dk</u> +45 6192 8230 CEN and CENELEC Rue de la Science 23B - 1040 Brussels, Belgium <u>https://www.cencenelec.eu/Pages/default.aspx</u> Kursley Alairy <u>KAlairy@cencenelec.eu</u> +32 2 550 08 07			
1.9.	<u>Tentative</u> date and place of the Kick-off Meeting	Date:	4 July 2024	Place: CEN-CENELEC Meeting Centre Rue de la Science 23 B-1040 Brussels			
1.10.	Does the proposed Workshop			YES			
	fall within the scope of existing			specity. Type here			
	Bodies? <sup>1</sup>			NO			
1.11.	Are there other Technical Bodies or Joint Advisory and Coordination Groups potentially interested in the Workshop? ? <sup>2</sup>	<ul> <li>YES</li> <li>CEN/TC 19 Gaseous and liquid fuels, lubricants and related products of petroleum, synthetic and biological origin</li> <li>CEN/TC 274 Aircraft ground support equipment</li> <li>ISO/TC 20 Aircraft and space vehicles</li> <li>ISO/TC 20/SC 9 Air cargo and ground equipment</li> <li>ISO/TC 20/SC 17 Airport infrastructure</li> <li>ISO/TC 28 Petroleum and related products, fuels and lubricants from natural or synthetic sources</li> <li>ISO/TC 28/WG 28 Aviation fuel test methods development</li> <li>ISO/TC 193 Hydrogen technologies</li> </ul>					
1.12.	Are the following aspects affected?	Safety matters Management system aspects Conformity assessment aspects Security matters Add information/explanations if Ma Assessment aspects are affected: Type here		YES <sup>3</sup> NO YES <sup>4</sup> 7 YES <sup>5</sup> NO YES <sup>6</sup> NO anagement System aspects and Co	onformity		

<sup>&</sup>lt;sup>1</sup> Part A and Part B of this form shall be sent by the WS secretary to the secretary of the Technical Bodies identified in this section to inform them about the creation of the WS and register any possible objection within 30 days (45 during the holiday period).

<sup>&</sup>lt;sup>2</sup> Part A and Part B of this form should be sent by the WS secretary to the Bodies identified in this section to inform them about the creation of the WS.

<sup>&</sup>lt;sup>3</sup> Work on the proposed CEN and/or CENELEC Workshop shall not be initiated.

<sup>&</sup>lt;sup>4</sup> The CEN and/or CENELEC Workshop proposal shall be submitted to the CEN/CENELEC BT(s) for decision.

<sup>&</sup>lt;sup>5</sup> CEN-CENELEC Internal Regulations - Part 3, Clause 33 applies.

<sup>&</sup>lt;sup>6</sup> For projects dealing with security matters the security risk analysis provided in Annex I shall be carried out.

<sup>&</sup>lt;sup>7</sup> See Note 2 in CEN-CENELEC Guide 29, Clause 3.

<sup>&</sup>lt;sup>8</sup> See Note 2 in CEN-CENELEC Guide 29, Clause 3.



2	WS Deliverables		
2.1.	CWA #1		
2.1.1	Title	$\boxtimes$	Same as WS title (1.2)
			Other: Type here
2.1.2	Scope		<ul> <li>Terminology about SAF</li> <li>Description of the value chain of SAF from production to fuelling the aircrafts, with the reference standards at each sequence of the value chain</li> <li>A Generic mapping of the value chain and the required standards to support other e-fuels value chain approach.</li> </ul>
2.1.3	Does the proposed CWA conflict		YES
	with a published EN		Specify: Type here
		$\square$	NO In case the answer is 'yes', the development of the CWA shall be stopped



<u>PART B – Project Plan</u>



#### **Abstract**

This CWA has been initiated as part of the Horizon 2020 Alight project to raise awareness and alignment about the key role of Sustainable Aviation Fuel (SAF) in the transition to carbon neutrality in the aviation sector, as well as to explain the environmental benefits.

The ALIGHT project is a Horizon 2020 EU funded project that addresses the global need to reduce greenhouse gas (GHG) and other air emissions in order to adapt to climate change and promote a sustainable future. It is doing so through the development and demonstration of two sustainable solutions to be implemented in Copenhagen Airport (the Lighthouse airport), namely

- 1) the supply, implementation, integration and smart use of sustainable aviation fuel (SAF) and
- 2) the development, integration and implementation of smart energy system (including renewable energy sources, energy storage and energy management).

On the SAF side, ALIGHT is tackling smart, sustainable and cost-effective handling of SAF in the operational context of a major airport. The project addresses the SAF chain from procurement to integration and demonstration and ensure compliance with all relevant criteria, including sustainability.

Among the advantages of SAF, we can underline that SAF doesn't need additional or retrofitted infrastructures, as it uses the same ones as for traditional aviation fuel. In addition, SAF value chain is fully covered by international standards, that ensure robust, relevant and sustainable implementation.

During the event organized on April 18<sup>th</sup>, 2024 in Brussels, by CEN CENELEC, about "<u>Navigating the Transition</u> (to carbon neutrality): Standards Powering the Journey of Alternative Fuel Infrastructure", conclusions from the aviation session can be summarized as follows:

- SAF will be the key driver of the transition
- SAF will be a reference for decades
- SAF value chain is covered by robust sets of standards from production to usages
- SAF definitely provide environmental benefits
- SAF related challenges are related to:
  - Strong need for increasing production
  - o Strong need from airliners to engage proactively in refuelling with SAF
- SAF can pave the way to scheming value chain management for other e-fuels, such as Hydrogen, electricity, ...

Recommendations from this event are the following:

- Raising awareness about SAF as a key driver of the transition
- Branding the role of SAF in meeting our EU decarbonization targets by 2050



- Boosting the production of SAF
- Boosting the engagement of airliners in refuelling with SAF (blending with progressive ratio as from the RefuelEU aviation)
- Mapping SAF value chain with related standards in support of scheming value chain and standardization needs for other e-fuels
- Supporting ALIGHT CWA proposal towards awareness raising in support of replication and deployment of SAF in all EU airports (and beyond)
- Supporting ALIGHT CWA proposal towards paving the way for other e-fuel scheme about value chain and standardization needs

## **1** Status of the project plan

Draft project plan for public commenting (Version 1.0)

This draft project plan is intended to inform the public of a new Workshop. Any interested party can take part in this Workshop and/or comment on this draft project plan by sending an email to the WS secretary.

All those who have applied for participation or have commented on the project plan by the deadline will be invited to the kick-off meeting of the Workshop on **2024-07-04**.

# 2 Workshop proposer and potential Workshop participants

## 2.1 Workshop proposer

The Workshop proposer is the Horizon 2020 lighthouse Alight project <u>https://alight-aviation.eu/about-us/lighthouse</u> with its 17 partners:

- 1) KOBENHAVNS LUFTHAVNE AS (CPH),
- 2) AEROPORTI DI ROMA SPA (ADR),
- 3) VALSTYBES IMONE LIETUVOSORO UOSTAI (LTOU),
- 4) CENTRALNY PORT KOMUNIKACYJNY SP ZOO (CPK),
- 5) TEKNOLOGISK INSTITUT (DTI),
- 6) BRAENDSTOFLAGERET KOBENHAVNS LUFTHVN IS (BKL),



- 7) SCANDINAVIAN AIRLINES SYSTEM SAS CONSORTIUM (SAS),
- 8) NISA (NORDIC INITIATIVE FOR SUSTAINABLE AVIATION) (NISA),
- 9) IATA ESPANA SL SOCIEDAD UNIPERSONAL (IATA ESPANA SL),
- 10) DEUTSCHES ZENTRUM FUER LUFT UND RAUMFAHRT EV (DLR),
- 11) AIR BP LIMITED (Air BP),
- 12) RSB ROUNDTABLE ON SUSTAINABLE BIOMATERIALS ASSOCIATION (RSB),
- 13) HYBRID GREENTECH APS (HG ApS),
- 14) BMGI Consulting (BMGI),
- 15) UNIVERSITA DEGLI STUDI DI PARMA (UNIPR)
- 16) TECHNISCHE UNIVERSITAT HAMBURG (TUHH),
- 17) AIRBUS (A-CE)





## 2.2 Potential participants

This CWA will be developed in a Workshop (temporary body) that is open to any interested party. The participation of the following persons/organizations would be helpful and is desired. It is recommended that:

- Alight partners
- Lighthouse sister H2020 projects and HEurope projects
- Airliners
- Aircraft manufacturers
- Airports
- Aviation fuels suppliers and distributers (i.e. AirBP, DCC Shell Aviation)
- SAF suppliers (i.e. SkyNRG)
- Policy makers (EU, National, Regional)
- EASA
- NGOs
- EU alliances (i.e. AZEA, RLCF)
- Any party concerned by SAF

take part in the development of this CWA.

# **3** Workshop objectives and scope

The CWA intends to raise awareness and alignment about the key role of SAF in the transition to carbon neutrality in the aviation sector, as well as to explain the environmental benefits.

## 3.1 Workshop background

This CWA is part of the Horizon 2020 lighthouse project ALIGHT. It aims to show that the SAF value chain is fully mature, with standards in support of each sequence along its full value chain, from production to fuelling, as well as fully compliant with existing traditional aviation fuel infrastructures.

The overall goals are:

- to contribute to boosting the deployment of SAF in all EU airports



- to contribute to accelerating the usages among airliners
- to propose a value chain approach with a mapping of standards in support of each sequence, to support a scheming approach for other e-fuels (i.e. Hydrogen, Electricity)

In addition, this CWA:

- Map all existing standards along the SAF value chain for easing replication and scaling up
- Propose a scheming approach for other e-fuels, based on the mapping of SAF value chain and its related standards

**Scope:** The future document will provide:

- Terminology about SAF
- Description of the value chain of SAF from production to fuelling the aircrafts, with the reference standards at each sequence of the value chain
- A Generic mapping of the value chain and the required standards to support other e-fuels value chain approach.

The CEN workshop agreement will focus on professionals from the sector and along the SAF value chain, and especially with inputs from the Horizon 2020 lighthouse project ALIGHT.

The main targeted users of this CWA will be airports, airliners, SAF suppliers, local authorities.

In addition to the ALIGHT proposal, there was a clear and full support of the panellists and participants to the event organized on April 18th, 2024 in Brussels, by CEN CENELEC, about "<u>Navigating the Transition</u> (to carbon neutrality): Standards Powering the Journey of Alternative Fuel Infrastructure", about the development of a CWA, to further brand SAF role in the transition to carbon neutrality and in support of scheming e-fuel value chains with related needs for standardization. These participants are invited to participate to the CWA development.

#### **European Policy and legal environment:**

#### EU Commitment about moving to carbon neutrality:

The European Union committed to be climate-neutral by 2050. This means having an economy with net-zero greenhouse gas emissions. This objective is at the heart of the European Green Deal, and is now legally binding through the European Climate Law. With the Green Deal, Europe is striving to be the first climate-neutral continent.



All economic sectors will have to play a role: power sector, industry, transport, buildings, agriculture and forestry.

EU aims at leading the way, and is, thus, investing largely in new technology and organization, as well as raising awareness among its citizens, for a just transition.

The implementation of the Green Deal is detailed through its "Fit for 55" roadmap, that paves the way towards climate neutrality with identified milestones for each sector of the economy.

#### **Transport Sector:**

With transport contributing around 5% to the EU GDP and employing more than 10 million people in Europe, the transport system is critical to European businesses and global supply chains. At the same time, transport is not without costs to our society: greenhouse gas and pollutant emissions, noise, road crashes and congestion.

Today, transport emissions represent around 25% of the EU's total greenhouse gas emissions, and these emissions have increased over recent years. The EU goal of being the first climate-neutral continent by 2050 requires ambitious changes in transport. A clear path is needed to achieve the sectorial contribution to carbon neutrality by 2050.

#### **Aviation Sector:**

While its contribution to global CO2 emissions is approximately 3%, the aviation sector will have to significantly engage in changes.

After two years of negotiations, the European Parliament has adopted the "ReFuel EU Aviation" legislation. This legislation defines the framework for sustainable fuels and encourages their use in the civil aviation industry.

RefuelEU Aviation is part of the 'Fit for 55' package and aims to enable the EU to reduce its net greenhouse gas emissions by at least 55% by 2030 compared to 1990 levels and to achieve climate neutrality in 2050.

RefuelEU Aviation represents a milestone in efforts to reduce carbon emissions in the air transport sector.

The adoption of this legislation is the start of a new framework in terms of public policies on sustainable fuels in Europe and worldwide. It results from the ambition to define a regulatory framework to encourage the production and use of sustainable fuels to replace kerosene in the long term.

#### Sustainable Aviation Fuel driving the transition to carbon neutrality:

The new legislation aims to put air transport on the trajectory of the EU's climate targets for 2030 and 2050.

The main objective of the RefuelEU aviation initiative, as a key part of the EU's Fit for 55 package is to increase both demand for and supply of sustainable aviation fuels (SAF), which have lower CO2 emissions than fossil fuel kerosene, while ensuring a level playing field across the EU air transport market. It should address the current situation which is hindering their development: low supply and prices much higher than prices of fossil fuels.



SAF is, indeed, one of the key short- and medium-term tools for decarbonising aviation.

The obligation for aviation fuel suppliers to ensure that all fuels made available to aircraft operators at EU airports contains a minimum share of SAF from 2025 and, from 2030, a minimum share of synthetic fuels, with both shares increasing progressively until 2050. Fuel suppliers will have to incorporate 2% SAF in 2025, 6% in 2030 and 70% in 2050. From 2030, 1,2% of fuels must also be synthetic fuels, rising to 35% in 2050.

The obligation for aircraft operators to ensure that the yearly quantity of aviation fuel uplifted at a given EU airport is at least 90% of the yearly aviation fuel required, to avoid tankering practices which would bring additional emissions from extra weight.

The scope of eligible sustainable aviation fuels and synthetic aviation fuels includes certified biofuels, renewable fuels of non-biological origin (including renewable hydrogen) and recycled carbon aviation fuels complying with the Renewable Energy Directive (RED) sustainability and emissions saving criteria, up to a maximum of 70% with the exception of biofuels from food and feed crops, as well as low-carbon aviation fuels (including low-carbon hydrogen), which can be used to reach the minimum shares in the respective part of the regulation.

# 4 Workshop programme

## 4.1 General

The kick-off meeting is planned to take place on 4 July 2024 in CEN-CENELEC Meeting Centre, Rue de la Science 23, B-1040 Brussels. A draft for public commenting will be published for 30 days.

A total of 6 Workshop meetings (kick-off meeting and Workshop meetings) and web conferences will be held, during which the content of the CWA(s) will be presented, discussed and approved.

The working language (language of meetings, minutes, etc.) of the WS will be **English.** The CWA will be written in **English**.

## 4.2 Workshop schedule

Table 1: Workshop schedule (preliminary)

CEN/CENELEC Workshop	M01	M02	M03	M04	M05	M06	M07	M08	M09	M10	M11	M12	
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Initiation	
1. Workshop description form submission and TC response	
2. Open commenting period on draft project plan (mandatory)	
Operation	
3. Kick-off meeting (4 July 2024)	
4. CWA(s) development (Monthly WG meetings)	
5. Open commenting period on draft CWA(s) (optional) (April 2025)	
6. CWA(s) finalized and approved by Workshop participants (June 2025)	
Publication	
7. CWA(s) publication (31 July 2025)	
Dissemination (see 6)	
Milestones     K     V     V     M     V	M/A P D

Legend

K Kick-off

M Workshop meeting

V Virtual Workshop meeting

A Adoption of CWA



Publication of CWA

D Online distribution of CWA



# **5** Resource planning

The registration and participation in this CEN Workshop are free of charge but each participant will bear his/her own costs for travel and subsistence.

The administrative costs of the Workshop Secretariat and other logistical support will be covered by ALIGHT.

## **6** Workshop structure and rules of cooperation

## 6.1 Participation in the Workshop

The Workshop will be constituted during the kick-off meeting. By approving this project plan, the interested parties declare their willingness to participate in the Workshop and will be formally named as Workshop participants, with the associated rights and duties. Participants at the kick-off meeting who do not approve the project plan are not given the status of a Workshop participant and are thus excluded from further decisions made during the kick-off meeting and from any other decisions regarding the Workshop.

As a rule, the request to participate in the Workshop is closed once it is constituted. The current Workshop participants shall decide whether any additional members will be accepted or not.

Any new participant in the Workshop at a later date is decided on by the participants making up the Workshop at that time. It is particularly important to consider these aspects:

- a. expansion would be conducive to shortening the duration of the Workshop or to avoiding or averting an impending delay in the planned duration of the Workshop;
- b. the expansion would not result in the Workshop taking longer to complete;
- c. the new Workshop participant would not address any new or complementary issues beyond the scope defined and approved in the project plan;
- d. the new Workshop participant would bring complementary expertise into the Workshop in order to incorporate the latest scientific findings and state-of-the-art knowledge;
- e. the new Workshop participant would actively participate in the drafting of the manuscript by submitting concrete, not abstract, proposals and contributions;
- f. the new Workshop participant would ensure wider application of the CWA.

All Workshop participants who approved the publication of the CWA or its draft will be named as authors in the European Foreword, including the organizations which they represent. All Workshop participants who did not approve the publication of the CWA will not be named in the European Foreword.

## 6.2 Workshop responsibilities

The Workshop Chair is responsible for content management and consensus building. The Workshop Chair is supported by the Workshop Vice-Chair (if any) and the responsible Workshop secretariat, whereby the Workshop secretariat will always remain neutral regarding the content of the CWA(s). Furthermore, the Workshop secretariat shall ensure that CEN-CENELEC's rules of procedure, rules of presentation, and the principles governing the publication of CWA(s) have been observed. Should a Workshop Chair no longer be able to carry out her/his duties, the Workshop secretariat shall initiate the election of a new Workshop Chair. The list below covers the main tasks of the Workshop Chair. It is not intended to be exhaustive.

- Content related contact point for the Workshop



- Presides at Workshop meetings
- Ensures that the development of the CWA respects the principles and content of the adopted project plan
- Manages the consensus building process, assesses when the Workshop participants have reached agreement on the final CWA, on the basis of the comments received
- Ensures due information exchange with the Workshop secretariat
- Represents the Workshop and its results to exterior

The Workshop secretariat, provided by a CEN and/or CENELEC Member, is responsible for organizing and leading the kick-off meeting, in consultation with the Workshop proposer. Further Workshop meetings and/or web conferences shall be organized by the Workshop secretariat in consultation with the Workshop Chair. The list below covers the main tasks of the Workshop secretariat. It is not intended to be exhaustive.

- Administrative and organizational contact point for the Workshop
- Ensures that the development of the CWA respects the principles and content of the adopted project plan and of the requirements of the CEN-CENELEC Guide 29
- Formally registers Workshop participants and maintains record of participating organizations and individuals
- Offers infrastructure and manages documents and their distribution through an electronic platform
- Prepares agenda and distributes information on meetings and meeting minutes as well as follow-up actions of the Workshop
- Initiates and manages CWA approval process upon decision by the Workshop Chair
- Interfaces with CEN-CENELEC Management Centre (CCMC) and Workshop Chair regarding strategic directions, problems arising, and external relationships
- Advises on CEN-CENELEC rules and brings any major problems encountered (if any) in the development of the CWA to the attention of CEN-CENELEC Management Centre (CCMC)
- Administrates the connection with relevant CEN or CENELEC/TCs

#### 6.3 Decision making process

The CEN and/or CENELEC Workshop Chair is responsible for ensuring that the development of the CWA follows the principles and content of the project plan described in this document and the requirements of CEN-CENELEC Guide 29. The CEN and/or CENELEC Workshop Chair may take decisions on the conduct of the CEN and/or CENELEC Workshop on the basis of the comments expressed by the participants and of CEN-CENELEC Guide 29.

Decisions shall be taken based on consensus of the WS participants.



# 7 Dissemination and participation strategy



Potential participants identified in section 2.2 and potential interested stakeholders identified in Part A should be informed of the open commenting phase, if any, and of the publication of the CWA.

In addition to the CCMC website, the final CWA might be advertised on:

- sector specific newsletter
  - social media, such as
    - Facebook
      - o Instagram
      - LinkedIn
      - X
  - Research Gate
- EC Newsroom
- Others





### Annex I – Security risk analysis

This annex shall be completed if section 1.12 of Part A indicates that security aspects are addressed by the Workshop.

I.I General

Security risk analysis is a process of identifying and analyzing the main negative factors that may affect a standardization project's objectives. The following is targeted at secretariats of CEN and/or CENELEC Workshop Agreements (CWA) dealing with security issues. Its purpose is to help them identify and mitigate the risks associated with their project. It is structured around two main security threats that can affect the success of the work: major diverging interests among stakeholders and sensitive information.

I.II Risk analysis on major diverging interest among stakeholders

Diverging interests among stakeholders can impede the process in reaching agreement on the CWA and even lead to failure to deliver the planned CWA. In order to identify and possibly mitigate the risks, the following questions should be reviewed:

- Is the planned CWA expected to have a major impact on the security policy/strategy of the core stakeholders?
- Does the scope of the CWA cover products or services with a clear dual-use purpose (i.e. which can be used for military purposes)?
- I.III Risk analysis on sensitive information
- In light of the scope of the CWA, is it likely that it may deal with sensitive information? If so, what is the information sensitivity level?
- Is there a need for a (non-)disclosure agreement?
- Is there any conflict of interest for stakeholders involved in the CEN and/or CENELEC Workshop, regarding
  especially the use they may make of any information they receive during the development of the CWA?
- What steps should be taken to manage information dissemination and storage (e.g. memory stick, emailing, storage) during the development process of the CWA?