



Sustainable Skies Conference: Contrails in Focus

7-8 November 2023

EUROCONTROL's Brussels HQ

Non-CO₂ Monitoring, Reporting and Verification (MRV)

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Context

- ✈ IPCC, 1999, 2022
 - Sectoral levels of ambition vary, with emission reduction aspirations in international aviation and shipping lower than in many other sectors
 - Between 2010 and 2019, aviation grew quickly (on average, 3.3% per annum).
- ✈ In 2022, aviation emissions reached almost 800 MtCO₂, about 80% of the prepandemic level
- ✈ ICAO (LTAG, etc.)
- ✈ EU
 - 2006 Commission's Impact Assessment, Directive 2008/101/EC
 - Article 30(4) of Directive 2003/87/EC, as amended by Directive (EU) 2018/410, required the Commission to present an updated analysis of the non-CO₂ effects of aviation, accompanied, where appropriate, by a proposal on how to best address those effects. → EASA Nov 2020 report on non-CO₂



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EU ETS Directive text

- ✈ Art3 (v) : Definition of non-CO₂ effects
- ✈ Art14.5 : MRV framework and further mandate

- **By 31 August 2024** – Implementing act including non-CO₂ effects in MRV framework (to contain, at a minimum, the 3D aircraft trajectory data available, ambient humidity and temperature) enabling CO₂e per flight to be produced. The Commission shall ensure, subject to available resources, that tools are available to facilitate and, to the extent possible, automatise MRV in order to minimise any administrative burden.
- **From 1 January 2025** – MS shall ensure that each aircraft operator monitors and reports the non-CO₂ effects from each aircraft.
- **From 2026** – EC will publish the results from the MRV framework once a year.
- **By 31 December 2027** – based on the results of the MRV of non-CO₂ aviation effects, the EC will submit a report and, if appropriate legislative proposal after having carried out an impact assessment to mitigate such effects by expanding the scope of the EU ETS to include non-CO₂ aviation effects.



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Objective of the tender work



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✈ *Archive : <https://etendering.ted.europa.eu/cft/cft-display.html?cftId=13809>*

- ✈ **Objective 1** – the contractor will provide advice on what data is necessary, on collecting, storing, and securing the monitored data, including on appropriate interfaces for collecting large amounts of data as well as, provide an IT solution. In case of data gaps, the MRV framework should enable the use of conservative default values.
- ✈ **Objective 2** – the contractor must provide an overview of models for MRV non-CO₂ effects to allow the calculation of non-CO₂ equivalents per flight, and advice on how the MRV data can be included in these models.



The tasks under the tender

- ✘ Identify the **minimum** and **additional data** to be contained in the MRV
- ✘ Determine **data gaps** and **default values**
- ✘ Ensure **data collection, storage** and **protection (create IT tool)**
- ✘ Identify **CO₂ equivalent approaches** and **climate-response models**
- ✘ Ensure the **calculation of non-CO₂** for **different fuels**
- ✘ **Support the EC** in **further work** and **stakeholder engagement**



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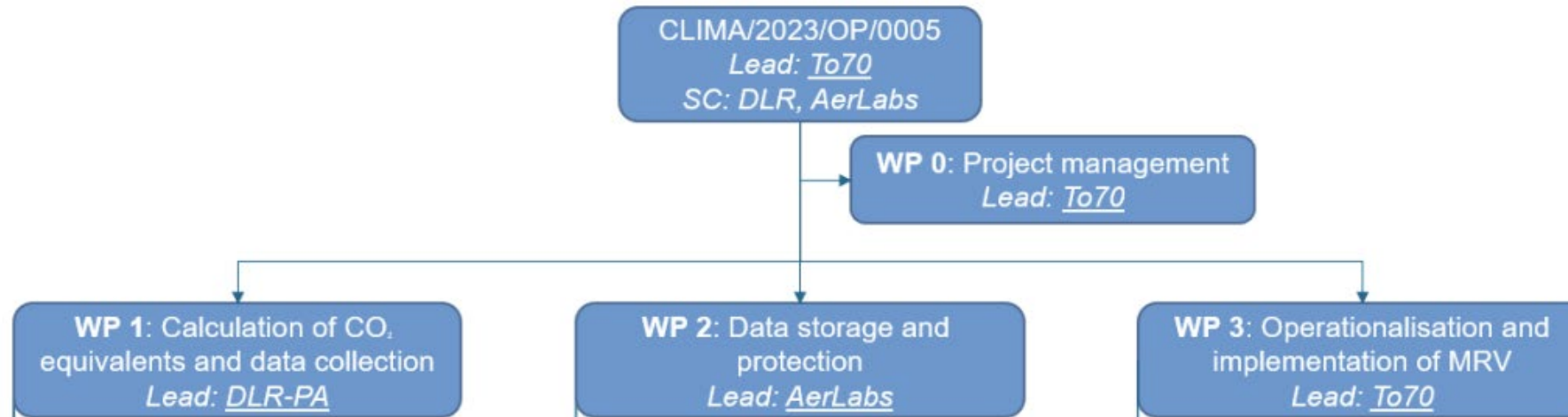


Implementation of the tender objectives

- ✈ WP1: Data needs assessment
- ✈ WP2: Data storage and security
- ✈ WP3: Implications and operationalization



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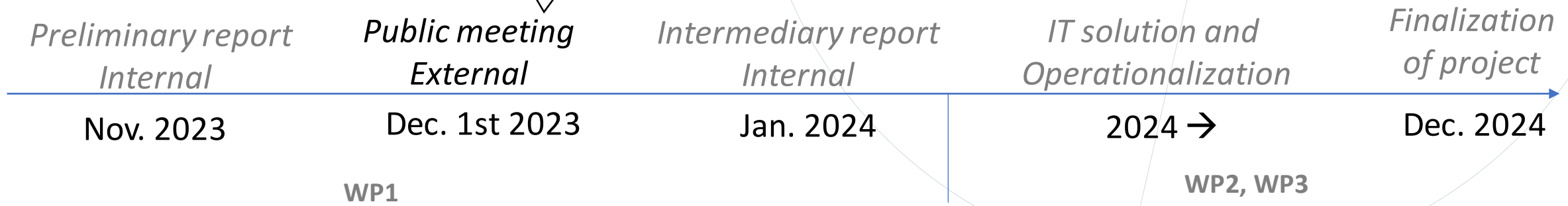


Planning MRV



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Open event in Brussels for all interested parties*



[* Consultation on monitoring, reporting & verification of aviation non-CO₂ impact on the climate \(europa.eu\)](https://europa.eu)



WP 1 - Overview



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Scope of work:

- ✦ Analyse **approaches, models and metrics** to calculate CO₂-equivalent emissions on a per-flight basis
- ✦ Identify **minimum and additional data** to be monitored, reported and verified
- ✦ Consider **data gaps** and recommend default values in case of missing or partially collected data

Preliminary report
Internal

Nov. 2023

Public meeting
External

Dec. 1st 2023

WP1

Intermediary report
Internal

Jan. 2024

IT solution and
Operationalization

2024 →

WP2, WP3

Finalization
of project

Dec. 2024



CANSO

WP 2 - Overview



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Scope of work:

- ✦ Develop the user-friendly and **secure** IT solution prototype that ensures the **collection and storage** of the monitored data.

*Preliminary report
Internal*

Nov. 2023

*Public meeting
External*

Dec. 1st 2023

WP1

*Intermediary report
Internal*

Jan. 2024

**IT solution and
Operationalization**

2024 →

WP2, WP3

*Finalization
of project*

Dec. 2024



WP 3 - Overview



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Scope of work:

- ✘ Preparing for the operationalisation the MRV
- ✘ Analysis of administrative and cost impact of implementation
- ✘ Workshop(s) / training for sector to review MRV and provide feedback on integration of MRV

*Preliminary report
Internal*

Nov. 2023

**Public meeting
External**

Dec. 1st 2023

WP1

*Intermediary report
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Jan. 2024

**IT solution and
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2024 →

WP2, WP3

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Dec. 2024

