



Deliverable 7.6: Report on the Associate Partnership Programme

Authors: Mikhail Paramonov, Ewan O'Connor

Work package no	WP7
Deliverable no.	D7.6
Lead beneficiary	FMI
Deliverable type	☒ R (Document, report) ☐ DEC (Websites, patent filings, videos, etc.) ☐ OTHER: please specify
Dissemination level	☒ PU (public) ☐ CO (confidential, only for members of the Consortium, incl. Commission)
Estimated delivery date	M30
Actual delivery date	20/08/2026
Version	Final
Reviewed by	Niku Kivekäs
Accepted by	Ewan O'Connor
Comments	

Contents

1. Introduction.....	3
2. Involvement of the Associate Partners	4
3. Bilateral visits.....	6
4. Challenges and outlook	6

1. Introduction

CARGO-ACT (Horizon Europe) is a three-year project that started in March 2024. The project is intended to deliver a clear roadmap for sustainable global cooperation between key organisations in Europe and in the United States to provide all users, in the scientific community and beyond, with the best possible services for accessing and using information from monitoring climate- and air quality-relevant properties of aerosol, cloud and trace gases in the atmosphere. As the first step towards global convergence, CARGO-ACT brings together the European RI on short-lived atmospheric constituents of aerosol, clouds and trace gases (ACTRIS) with four US counterparts (ARM, NOAA-GML, MPLNET and ASCENT), each having invested in long-term observing infrastructures and associated user services.

Due to administrative, logistical and legal hurdles, most of the US-based organizations could not join the project as beneficiaries. As of time of the writing of this document, CARGO-ACT has nine beneficiaries, of which only one is US-based. To include the other US-based partners, an Associated Partner program was introduced already in the proposal writing phase. Associate Partners contribute to the project without having their own budget allocated within the project; however, some travel money is available to them for attending in-person meetings. At the time of writing this document, seven US-based organizations are involved in the project as Associate Partners (Table 1). Considering the abovementioned, it is clear that the CARGO-ACT Associate Partnership programme is vital to and is the backbone of the success of the project.

Table 1. CARGO-ACT beneficiaries and Associate Partners. US-based organisations are marked with an *.

Beneficiaries		
1	Ilmatieteen laitos	FMI
2	Helsingin Yliopisto	UHEL
3	Stiftelsen NILU	NILU
4	Institut Royal D'Aeronomie Spatialede Belgique	BIRA-IASB
5	Consiglio Nazionale delle Ricerche	CNR
6	Centre National de la Recherche Scientifique CNRS	CNRS
7	Institutul National de Cercetare Dezvoltare Pentru Optoelectronica INOE 2000	INOE
8	Leibniz Institut fuer Troposphaerenforschung e.V.	TROPOS
9	Regents of the University of Colorado	CIRES*
Associate Partners		
1	National Oceanic and Atmospheric Administration OAR Earth System Research Laboratories	NOAA GML*
2	National Aeronautics and Space Administration	NASA*
3	Oak Ridge National Laboratory	ORNL*
4	Battelle Memorial Institute Non Profit Corporation	PNNL*
5	Brookhaven Science Associates LLC	BNL*
6	University System of Maryland	UMBC*
7	California Institute of Technologycorp	CALTECH*

The ASCENT network joined the project shortly after the project commenced adding one additional AP to the consortium. Initially, ASCENT was represented by the Georgia Institute of Technology; however, it is now represented through CALTECH following the move of the contact person.

2. Involvement of the Associate Partners

Already at the proposal preparation phase, special attention was paid to make to ensure that US-based institutions would be involved in all processes and activities of the project, including proposal preparation, decision-making and deliverable and milestone preparation. This was achieved by appointing two persons as leads for each Work Package. Table 2 shows that, with the exception of WPs 2 and 7, each WP has an EU-based lead and a US-based co-lead. As the project progressed, it became clear that appointing a US-based WP co-lead had been essential for ensuring the involvement of the APs and the success of the project. In addition to this, while no deliverables have been assigned to the APs, one milestone (MS12) has been assigned to an Associate Partner (BNL).

Table 2. CARGO-ACT WP leadership.

WP	lead	co-lead
1	NILU	ORNL
2	TROPOS	INOE
3	CNRS	CIRES
4	CNR	NASA
5	CNRS	PNNL
6	UHEL	PNNL
7	FMI	

At the time of writing of this document, three CARGO-ACT project and community meetings have taken place. All of these meetings were held in a fully hybrid format, allowing full remote participation. Table 3 shows the attendance of these meetings by the APs. It is evident that CARGO-ACT project meetings were attended by most, if not all, APs, demonstrating the desire of all APs to collaborate and network. It should be noted that, due to reasons described in chapter 4, on-site participation of APs has been rather limited, much less than anticipated at the time of the proposal preparation. This, for the most part, was out of the control of the project partners. However, the CARGO-ACT Final Meeting is currently planned to be held in San Francisco, USA, during the American Geophysical Union AGU26 Annual Meeting, giving the US partners an easier possibility to engage in person. This meeting is expected to be critical for the success of CARGO-ACT and its impact after the project completion.

Table 3. Attendance of the CARGO-ACT project meetings by the APs.

Meeting	on-site	remotely
CARGO-ACT Kick-Off Meeting, Rennes, France, May 17, 2024	Georgia Tech, ORNL, PNNL	UMBC, BNL, NASA
CARGO-ACT Project Meeting, Matera, Italy, November 8, 2024	ORNL, NASA	PNNL, UMBC, BNL
CARGO-ACT Project Meeting, Evora, Portugal, October 21, 2025		PNNL, UMBC, Georgia Tech, ORNL

12 Executive Board (EB) meetings have taken place so far in the project. These meetings were all held in late afternoon in Europe to allow for and ease the participation of the US-based APs. All EB meetings have been well-attended by APs.

Associate Partners are also heavily involved in deliverable and milestone preparation. Table 4 summarises their involvement in each CARGO-ACT WP. Associate Partners are involved not only as co-authors, but also as reviewers.

Table 4. Contribution of APs to CARGO-ACT deliverables and milestones.

WP	Associate Partner
1	ORNL, NASA, NOAA GML
2	NASA, BNL, PNNL, UMBC
3	NASA, BNL, PNNL, UMBC
4	NASA, BNL
5	Georgia Tech, NASA, PNNL, ORNL, NOAA GML
6	CALTECH
7	

Based on previous experience, the contribution of APs in CARGO-ACT goes beyond what is normally expected of such entities in EU projects. As can be seen in Tables 2-4, APs made significant contributions to each WP and associated tasks (except for the managerial WP7).

The deadline for this deliverable is M30. This means that there are still six more months of the project after the submission of this deliverable, and the contribution of APs is certainly expected to continue and likely increase as the project moves towards its completion. EB meetings continue; the CARGO-ACT Final Meeting is still to be held, as mentioned above; and WPs 3 and 6 have most of their output towards the end of the project. It is, therefore, essential to continue efficient cooperation with APs. The CARGO-ACT consortium, including all APs, were also heavily involved in the CARGO-ACT 2 proposal preparation (call HORIZON-INFRA-2026-DEV-01-06).

During the project's lifetime there were other, smaller, non-project meetings where CARGO-ACT consortium members intersected and held informal discussions. This includes, for example, FMI, NILU and CNRS joining the ASCENT Annual Meeting.

3. Bilateral visits

Several bilateral visits took place within the framework of CARGO-ACT. These visits highlight the importance of the cross-domain knowledge exchange and discussions, and their significant role in efficient global cooperation.

- In the spring of 2024, BNL representatives visited TROPOS and the World Calibration Centre for Aerosol Physics (WCCAP) facility twice. The visits delivered knowledge transfer about the WCCAP facilities to BNL partners for the establishment of the BNL Center for Aerosol Measurement Science (CAMS) facility in the US. In December of the same year, CIRES also visited TROPOS for the calibration and training of various particle instrumentation.
- In the autumn of 2024, NASA representatives visited INOE providing opportunities for insightful discussions among researchers and the exchange of perspectives on advances in aerosol measurements and environmental monitoring technologies. These discussions opened avenues for potential collaborations and deepened the mutual understanding of the fields' challenges and innovations.
- In the spring-summer of 2026, TROPOS held two online workshops and visited BNL. The main focus of this visit was to set-up the infrastructure of BNL CAMS according to ACTRIS WCCAP standards with a focus on several particle in-situ instruments.

4. Challenges and outlook

The proposal for the CARGO-ACT project was written in late 2023, and in the following years the geopolitical landscape of the countries involved in the project has undergone significant changes and perturbations. This has been especially true in the United States. Since the entire context of the project relies on collaboration between European and US partners, these changes have had a non-trivial impact on the project processes and outcomes. In addition to the well-anticipated challenges associated with the time zone differences, some of the project partners experienced temporary issues with their ability to travel and participate in the project activities. At some points during the project, these issues put important workflows at risk, and it was necessary to implement certain contingency measures to ensure appropriate progress of the project. As the project draws to a close, it is evident that project consortia involving non-European partners require considerable effort and flexibility in managing basic project workflows and processes, which may then impact the delivery of milestones and deliverables.

With a potential view towards a truly global research infrastructure, many similar issues can become significant obstacles in establishing and coordinating global activities. In addition to the challenges in, for example, scheduling online meetings with partners across the globe, these hurdles also include the simple inability of certain countries to participate in such coordinated activities, mostly due to geopolitical tensions. How to navigate such waters, therefore, becomes an important aspect of a future global research infrastructure strategy.