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Mid-term evaluation of PI/2019/408-604 EU-Southeast Asia Cooperation on Mitigating **Climate Change impact from Civil Aviation** (EU-CCCA)

Contract N° 300033212

Final Evaluation Report

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Disclaimer:

This report was produced by the Evaluation Team of the "Mid-term evaluation of PI/2019/408-604 EU-Southeast Asia Cooperation on Mitigating Climate Change impact from Civil Aviation (EU-CCCA)" project, Contract N° 300033212, an assignment funded by the EU and implemented by a Consortium led by Particip GmbH.

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List of Acronyms and Abbreviations

ACCSQ	ASEAN Consultative Committee for Standards and Quality
AeDMS	Aviation emissions Data Management System
AEPCG	Aviation Environmental Project Coordination Group
AESA	Agencia Estatal de Seguridad Aérea (Spanish Aviation Safety and Security Agency)
AMS	ASEAN Member States
AO	Airline Operator
ASEAN	Association of South-East Asian Nations
BAR	Brunei Aviation Regulations
BNCCP	Brunei Darussalam National Climate Change Policy
CCC-A	Cooperation on Mitigating Climate Change impact from Civil Aviation
CC	Climate Change
CERT	CO ₂ Estimation and Reporting Tool
CNG	Carbon neutral growth
CO ₂	Carbon Dioxide
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
COSCAP	Cooperative Development of Operational Safety and Continuous Airworthiness
DAC	Development Assistance Committee (from OECD)
DG CLIMA	Directorate-General for Climate Action
DG MOVE	Directorate-General for Mobility and Transport
EASA	European Union Aviation Safety Agency
ENAC	Ente Nazionale per l'Aviazione Civile (Italian Civil Aviation Authority)
EMP	Emissions Monitoring Plan
EMSDB	Environmental Management System Data Base
ER	Emissions Reporting
ERG	Evaluation Reference Group
ET	Evaluation Team
EU	European Union
EU DEL	European Union Delegation

FPI	Foreign Policy Instrument(s)					
FPI-RT	FPI Regional Team for Asia/Pacific					
GHG	Green House Gas					
ICAO	International Civil Aviation Organisation					
IEA	ternational Energy Agency					
IPCC	Intergovernmental Panel on Climate Change					
LTAG	Long Term Aspirational Goal					
MRV	Monitoring, Reporting, Verification					
NAA	National Aviation Authority (State Aviation Authority)					
NAB	National Accreditation Body					
OECD	Organisation of Economic Cooperation and Development					
OVI	Objectively Verifiable Indicator					
00	Overall Objective					
PBN	Performance Based Navigation					
PDSF	Policy Dialogue Support Facility					
PMB	Project Management Board					
PSC	Project Steering Committee					
SA	State Authority					
SAF	Sustainable Aviation Fuel					
SAP	State Action Plan					
SARPS	Standards and Recommended Practices (ICAO)					
SDGs	Sustainable Development Goals					
SOVs	Sources of Verification					
SO	Specific Objective					
VB	Verification Body					

Preamble

This document, the (Draft) Final Report, is structured in line with Annex III of the Terms of Reference of the Mid-Term Evaluation as follows:

- ⇒ **Executive Summary:** focusing on the key purpose and issues of the evaluation, outlining the main analytical points, conclusions, lessons to be learned and recommendations.
- Section 1 Introduction: outlines the background of the Action and the scope of the Mid-Term Evaluation.
- Section 2 Evaluation findings: provides analyses of the findings and answers to each evaluation question.
- Section 3 Conclusions, Lessons Learned and Recommendations: presents the overall and specific conclusions, a set of lessons learned and proposes a number of recommendations for the European Commission as well as future related Actions.
- ⇒ Annexes: provide further details on the evaluation methodology, together with:
 - Annex 1: Mid-term Evaluation Terms of Reference
 - Annex 2: Evaluation Timeline
 - Annex 3: Profile of Evaluators
 - Annex 4: Evaluation Methodology details including Assumptions, Risks
 - Annex 5: Evaluation Matrix
 - Annex 6: Logical Framework Matrix (planned/real and improved/updated)
 - Annex 7: Evaluation Tools (KII/FGD)
 - Annex 8: Literature and documentation consulted
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1. Introduction

Brief introduction to the assignment

The Service for Foreign Policy Instruments (FPI) of the European Commission (EC) has awarded a contract under the Multi-annual Financial Framework 2014-2020 package of instruments for financing EU external Action to the consortium led by Particip GmbH to conduct the Mid-Term Evaluation (MTE) of the PSF- 2019-10528, "Mid-term evaluation of PI/2019/408-604 EU-South East Asia cooperation on mitigating climate change impact from civil aviation (EU-CCCA)", the "Project" or the "Action").

This report is the final deliverable of this evaluation and develops on the findings provided in the Desk and Interview notes.

Project Background

The Association of South-East-Asian Nations' (ASEAN) aviation industry offers compelling potential for growth. Although uneven levels of development, cautious reforms, government protectionism, and inadequate infrastructure may impede development in the short term, the region's vast long-term potential outweighs these issues.

As this regional bloc pursues greater regional integration and the development of a single economic bloc, advancements in the region's aviation industry are essential to boost economic connectivity and tourism. In addition to promoting free movement of labour, liberalisation will open the industry to unfettered competition between airlines and allow for regional expansion of national carriers. Half the world's population live within five hours of ASEAN, making South-East Asia a natural transportation hub not just for visiting the region's landscapes, but also for accessing the bloc's growing economic opportunities as well as those in neighbouring India and China.

The role of air transportation is vital in the region's growth process by enabling connectivity and the transport of goods and persons.

Growth in air transportation has directly translated into economic growth due to spill over effects through the creation of direct and indirect jobs in the industry and other auxiliary sectors such as tourism and further service sectors. Expansion in air transportation creates market opportunities for local entrepreneurs by creating regional and global economic centres. While this sectoral growth represents a positive trend for the ASEAN economy, the increased air traffic in the region presents a growing source of Green House Gases (GHG) emissions and adversely affects local air quality.

The Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report asserts that international aviation accounts for about 1.3% of the global GHG emissions. International Energy Agency (IEA) data suggests that Carbon Dioxide (CO₂) emissions from jet fuel used for international flights amounted to 557.7 million tonnes (Mt) in 2016, having more than doubled compared to 1990 levels. These are projected to grow 300% by 2050 unless Action is taken according to International Civil Aviation Organisation (ICAO).

The overall objective of the Action that was evaluated is to enhance political, economic and environmental partnership between the EU and partner countries in South East Asia in the areas of civil aviation environmental protection and climate change. The specific objectives of the Action that was evaluated are to develop or support existing policy dialogues with the partner countries in South East Asia on mitigating GHG emissions from civil aviation; and to contribute to the 'CORSIA readiness' process of partner countries in South East Asia to implement CORSIA in line with the agreed international schedule and to join the voluntary phase

The four expected results under the Action that was evaluated are: (a) established conditions for State Action Plans submitted to ICAO to reduce CO2 emissions from international aviation / State Action Plan updated, upgraded in terms of mitigation measures; (b) established conditions for CORSIA implementation process as per ICAO SARPs; (c) increased knowledge of climate change and environmental protection tools and mechanisms; and (d) established conditions for the National framework for accreditation and verification system designed and used.

The Action that was evaluated has been funded by the Partnership Instrument (Annual Action Programme 2018). Designed to advance and promote the EU and mutual interests abroad, Pl-funded Actions have promoted a more joined up Union by supporting the external projection of EU internal policies, ranging from competitiveness and migration to research and innovation. They have been addressing major global challenges such as energy security, climate change, environmental protection, as well as specific aspects of the EU's economic diplomacy, at bilateral, regional and multilateral level. It has also covered public and cultural diplomacy, and outreach activities to promote EU values and interests. PI Actions are managed by the European Commission's Service for Foreign Policy Instruments (FPI) in close collaboration with the European External Action Service (EEAS) and relevant European Commission services. PI works on a non-development logic and the supported Actions pursue primarily the EU or mutual interest.

The starting date of the Action was 29 August 2019 and the scheduled end of the Action until 28 August 2022. However, a no-cost extension extended the Action for ten months and its new ending date is 28 June 2023. The Action's budget is €4,000,000, with a 100% financial contribution from the EU.

Evaluation objectives and scope

The main objective of this evaluation is to provide the users of the evaluation with:

- an overall independent assessment of the past performance of the EU-SEAN CCCA-CORSIA Action paying particular attention to its intermediate results measured against its expected objectives; and the reasons underpinning such results; and
- key lessons learned, conclusions and related recommendations in order to improve current and future Actions.

The main users of the evaluation include the European Commission in particular the FPI, the European Union Agency for Safety and Security in Aviation (EASA), DG MOVE, DG CLIMA, DG ENV, DG ENER, the European External Action Service (EEAS), EU Delegations (EUDs) in the ASEAN region, and stakeholders in partner countries.

Limitations and challenges of the Evaluation Exercise

The desk-based evaluation exercise relied almost 100% on remote communications to obtain the information presented in this report. While the evaluation team did foresee a difficulty in establishing a connection and/or getting responses regarding stakeholders' contribution to be interviewed, the evaluation still faced some challenges which are summarised below:

- The timing of the evaluation: the start of the summer period increased the potential for a reduced availability from all stakeholders, particularly those based in Europe or those linked to the European holiday season.

The EASA project management team did try to contribute to the evaluation exercise but other work commitments, workload prior to summer holidays, business trips, were the main factors why the information provided was partial and, in some cases, tardy. This was partly offset when the evaluation team changed approach and suggested to hold a face-to-face meeting with the project management team at EASA's headquarters in Cologne, Germany.

- Low response from final beneficiaries

For all of the above, the evaluation team had pre-emptively taken measures (see risks and assumptions Annex 4) which, given the nature of the problematic, it meant that the recourse was to insist, up to a point, for the beneficiaries and stakeholders to participate, while respecting the potential interviewees' personal contact information. While this approach did increase the stakeholders' participation it had a limited success. Early attempts to contact beneficiaries did not entirely yield the expected response levels. For more information, see *Table 2: Number of interviews and informants by type of organisation*.

For these reasons, the evaluation team made itself available for interviews that fell earlier than normal working hours in order to accommodate Asia-based interviewees.

For Group 1, while the number of interviewees varied from an expected number, 21 vs 6 (see Table 2 (1)), in practice, the fact that most EU Delegations have not been involved in the Action, the added value from their contribution did not affect its qualitative aspect. Various attempts from FPI to engage them throughout the execution period had not elicited a response, hence their non responsiveness was to be expected. However, just as in the case of Myanmar and Indonesia, two EU Delegations that did participate in the interviews, it would have been a positive aspect for other EU Delegations to have been informed more about the Action and its objectives, and then hear their responses to this information. In the case of the participating EU Delegations their feedback was positive and demonstrated an interest to know more about the project and possibly engage with it.

Regarding Group 2, (see Table 2 (2)) while only two of the stakeholders contacted to be interviewed as members of the Project Steering Committee responded to the ET's messages, one of these two members had not participated in the PSC meetings yet and the other had not participated in the PSC meetings in spite of being a member. However, the information provided by DG Move and DG CLIMA and FPI, interviewed as stakeholders of the project but also members of the PSC, together with the information gathered during the review of PSC meetings documents, allowed the ET to have a general overview of the project from this point of view.

Whilst no interviews took place with the private sector (see table 2), the ET received nine responses to the questionnaire sent to them. Their (airlines) response was mostly favourable about their participation in the Action commenting on its relevance and how this facilitated their understanding on certain aspects covered by the Action. However, a more solid contribution would have probably allowed the ET to find out their opinion on how the Action dealt with SAF.

Consequences of the limitations: As some information that would have come from having more time to interview the project management team, the evaluation team attempted to retrieve it during the interviews with the beneficiaries. Simultaneously, the interviews with the beneficiaries would have been more productive if the evaluation team had had more early access to the management team. A level of triangulation of information would have been more thorough while early information would have provided a more defined focus during some interviews or while analysing certain documents.

In spite of the above, the evaluation team considers that the information contained in this report is foremost independent and objective, and that it still encapsulates and rightly assesses the performance of the Action.

Evaluation Methodology

The evaluation format was homebased. Due to the COVID-19 pandemic, all evaluation phases have been carried out remotely. Bar a one-day series of meetings at EASA's headquarters in Cologne, Germany, at the end of the evaluation process, all other interviews were held remotely.

The evaluation was driven by the following guiding principles:

- Focused approach to data collection from most relevant documents and informants.
- Ensuring the externality and independence of the Evaluation Team.
- Ensuring informants who provide feedback remain anonymous and the respect for privacy.
- Integration of gender considerations in the evaluation process including gathering disaggregated data on male and female informants.
- A structured approach to the collection and analysis of data to ensure rigor and comparability of findings and consistency in approach.
- A robust, evidence-based approach using mixed-methods to answer the Evaluation Questions (EQ).

Given the constraints described in the Limitations and Challenges section, the evaluation used a mixed methods approach as much as possible. This provided a richer set of qualitative answers for the EQs. Both primary and secondary data was collected to answer the evaluation questions. Primary data focussed on key informant interviews (KII) and focus group discussions (FGD). Secondary data included project derived and other documentation. Findings were developed through a 2-stage analysis process and triangulation to ensure they are evidence based. Further methodological details are provided in *Annex 3*.

Data collection overview

Primary data collection, via KIIs and FGDs was undertaken via two phases. Phase 1 was carried out from 14th to 23rd July and phase 2 from 26th July to 20th August. *Table 1* provides an overview of the number of interviews carried out and number of informants.

Phases	No. of completed interviews	No. of FGDs	No. of Klls	Gender Male	Gender Female	Total informants
Phase 1 + 2	39	0	48	33	15	48
Total	39	0	48	33	15	48

Table 1: Number of interviews carried out and number of informants

A total of 39 interviews were carried out. This compares very favourably to the target of 35. *Table 2* provides an overview of interviews and informants by type of organisation.

ASEAN and Private EUDs/EC Project Intl. org. Total **PMB** (4) sector Nº of interviews 8+2 32 + 3 planned-Inception 5 + 1 recurrent 13 2 4 recurrent recurrent report N° of informants 21 (1) 18 (2) 37 2 6 (3) 84 planned-inception report No. of interviews 8 + 9 39 (27 + 12 4 + 3 recurrent 14 1 0 conducted recurrent recurrent) No. of informants 28 0 6(1) 11 (2) 3 48 responding

Table 2: Number of interviews and informants by type of organisation

(1) Deviation due to the non-response of the EUDs and AEPCG

(2) Deviation due to the non-response from PSC members

(3) Deviation due to non-response from airlines. As an alternative, a questionnaire was developed by the ET that elicited responses by 9 stakeholders.

(4) All ASEAN MS were interviewed. No response from Brunei CAA, Thailand NAB, Cambodia NAB, Singapore NAB and Laos NAB

Table 3 provides an overview on the number of interviews and informants from targeted ASEAN countries conducted according to Country

Table 3: Number of interviews and informants by Country

	Brune i	Cambodi a	Indonesi a	Lao s	Malaysi a	Myanma r	The Philippine s	Thailan d	Singapor e	Vietna m	Tota I
No. of interview s	1	1	2	1	2	1	2	1	1	2	14
No. of informant	1	3	4	1	4	3	3	3	2	4	28

In terms of secondary data, *Annex 8* contains the bibliography used during the evaluation.

2. Evaluation findings

The evaluation assessed the Action using 7 assessment criteria. These include the following Organisation for Economic Cooperation and Development (OECD) Development Assistance Committee (DAC) evaluation criteria: relevance, coherence, effectiveness, efficiency and sustainability; and 2 EU evaluation criteria: EU added value and cross-cutting elements. A total of 20 EQs and gender issues were used for the evaluation.

Findings by Evaluation Questions

Relevance

EQ1.- To what extent do the Specific and Overall Objectives, as well as the design of the Action, respond to the EU foreign policy and relevant sectoral strategies and priorities.

The Action is highly relevant and aligned with two of the European Union's strategic agenda for 2019-2024's four priorities. By addressing one of the key global environmental issues, it is aiding to building a climate-neutral, green, fair, and social Europe. Environmental matters related to CO₂ emissions are borderless and by addressing them in Southeast Asia, the direct and secondary effects not only will they benefit this region and its inhabitants, but also European citizens. The Action will further help decrease the effects GHG from civil aviation coming from South East Asia as their airlines will implement mitigation measures, included in their SAPs, when flying over European Union territory.

Secondly, in line with the fourth priority, "promoting European interests and values on the global stage" the Action is addressing this by sharing its know-how on civil aviation by transferring information that seeks to ultimately allow for the ASEAN countries to adopt and implement a series of rules and regulations that will diminish the environmental impact of its civil aviation industries, whilst opening business opportunities for the EU-based private sector.

In terms of sectoral EU policies, this Action is aligned with:

EU Policy on Climate Change (CC) is based on the United Nations (UN) Convention on Climate Change, the supplementary Kyoto Protocol, and the Paris Agreement. The project's objectives are congruent with the latter one, having set targets to reduce GHG emissions which are linked to an increase on global temperature and change in weather cycles and patterns.

Climate change and human rights are intrinsically linked as the adverse impacts disproportionately affect the most vulnerable, including the elderly, women and children, affecting their human rights to life, to access to water, to a healthy lifestyle, to food, to work, to receive an education, etc, which are affected at the local level by changes in weather patterns, landslides, poor crop yields, disruption of communication and transport channels, etc., which lead to increased poverty. The fight against poverty is one of the specific social policy goals of the EU and its Member States.

In terms of transport policies, the Action was designed to contribute / support the ASEAN CATA (ASEAN-EU Comprehensive Air Transport Agreement) discussions, which eventually successfully culminated in signing in October 2022.

EQ2.- To what extent do the Specific and Overall Objectives, as well as the design of the Action, respond to the strategies and priorities of the Partnership Instrument as defined in the programming documents.

In terms of the Partnership Instrument objectives¹, the project's overall and specific objectives, as well as the design of the action, were in line with the following ones:

(1) the support to the EU's bilateral, regional and interregional cooperation partnership strategies by promoting policy dialogues and developing collective approaches. The project's two specific objectives can be summarised as supporting policy dialogues to mitigate GHG emission from civil

¹https://ec.europa.eu/info/sites/default/files/about_the_european_commission/eu_budget/programme_performance_overview_-_pi.pdf

aviation and to contribute to CORSIA readiness to allow ASEAN countries to implement it². Additionally, this project has been designed for regional and interregional cooperation partnership and to support CATA as part of the policy dialogue. The Action uses collective approaches to implement activities related to common needs, such as CORSIA, SAP or SAF.

2) implementing the international dimension of Europe 2020 – a strategy for smart, sustainable and inclusive growth. The Action develops and supports EU aviation framework in line with the Europe 2020 strategy and the European Commission's Aviation Strategy for Europe, by promoting regulatory harmonisation, supporting environmental protection and climate Action, strengthening institutional links, and addressing capacity limitations. The Action operates by promoting EU policy, standards, and technology.

3) improving access to non-EU markets and boosting trade, investment and business opportunities while eliminating barriers to market access and investment, by means of economic partnerships, business and regulatory cooperation. In this case, the Action promotes the regulatory cooperation under the international CORSIA programme and the implementation of mitigation strategies for reduction of CO2 emissions by civil aviation, which could improve the access to EU industry actors and support the appearance of new business opportunities, such as the case of SAF certification, production and distribution.

4) enhancing the widespread understanding and visibility of the EU by means of public diplomacy, people-to-people contacts, cooperation and outreach activities to promote the EU's values and interests. By enhancing the political and economic and environmental partnership between the EU and ASEAN in the areas of aviation, facilitating the contact between EU stakeholders and ASEAN institutions, and sharing EU best practices in the case of SAPs, mitigations measures for reduction of CO2 emissions and implementing SAF in aviation.

In terms of indicators the design of the Action is limited to the spectrum of the indicators within the "List of core indicators for Partnership Instrument (PI)", which are largely quantitative and relatively few. The project's log frame matrix reflects this limitation which leads to the reporting to the FPI Bangkok to be of a similar reduced nature. This limitation is partially solved by the fact that PIMS/OPSYS reports allow for a narrative where some description is provided of the activities carried out and outputs achieved in a similar way that the yearly reports are written. However, there are no sub-indicators used that can aid in the objective monitoring of the Action's progress and attainment of its outputs and outcomes for project management purposes (short term use), for reporting purposes (medium term use) or to facilitate external evaluation or results oriented monitoring exercises.

EQ3.- To what extent do the Specific and Overall Objectives, as well as the design of the Action, respond to the global, regional, and country contexts in the aviation sector.

On a **global** scale within the context of the project's overall objective, and its two specific objectives, the Action is responding to the International Civil Aviation Organisation's (ICAO) CORSIA scheme and its three implementing phases. ASEAN MS, currently being EU partners within the Action, which will participate in the volunteer phase implementation of CORSIA³, are Cambodia, Indonesia, Malaysia, Philippines, Singapore, and Thailand⁴.

At the **regional** level⁵, the project, as designed, was timely as negotiations with ASEAN on a Comprehensive Air Transport Agreement began in 2016. It aimed, among other objectives, to positively influence on the outcome of those negotiations which have ended favourably with an agreement concluded in at the end of 2021. The relevance of the Action was enhanced by these ongoing negotiations, as air traffic is expected to increase between the two regions. Similarly, at the

² In line with the agreed international schedule and to join the voluntary phase

³ ICAO Annex 16 – Environmental Protection, Volume IV – CORSIA

⁴ The CORSIA has three phases: a pilot phase (2021 – 2023); a first phase (2024 – 2026); and a second phase (2027 – 2035). The difference between the phases is that the participation of States in the CORSIA offsetting in the pilot phase and in the first phase is voluntary, whereas the second phase applies to all ICAO Member States. https://www.icao.int/environmental-protection/CORSIA/Pages/CORSIA-FAQs.aspx

⁵ Regional level refers to ASEAN MS

regional level, the Action responds to the ASEAN environmental programme. ASEAN cooperation on environment is guided by ASEAN Socio-Cultural Community (ASCC) Vision 2025 that strives to promote and ensure balanced social development and sustainable environment⁶ and the ASEAN Joint Statement on Climate Change to UNFCCC COP25. Actions for reduction of aviation emissions are considered under the ASEAN Climate Change Strategic Priority Area⁷. ASCC Vision 2025 Blueprint document highlights Sustainability and Resilience as two of the Characteristics and Elements of the ASEAN Community Blueprint 2025, aligning it to the scope of the Action. Recently, (September 2022) ASEAN MS agreed to develop the so-called ASEAN Sustainability Action Plan, aiming at fostering cooperation and collaboration among the ASEAN MS and ASEAN MS industry/stakeholders in the upscaling of Sustainable Aviation Fuel (SAF).

At the **country** level, the beneficiaries are the Civil Aviation Authorities, Directorate General for Civil Aviation or Departments of Civil Aviation as the main target, followed by the National Accreditation Bodies. The project supports also those actors in establishing common understandings on specific topics with their aviation industry and other stakeholders, such as aeroplane operators, verification bodies, fuel suppliers and airport operators. The objectives of the Action can be considered a priority in all the ASEAN MS as all of them have adopted, to different degrees, rules, regulations or laws supporting the necessary means to reduce GHG emissions e.g., aviation environmental policies and strategies linked to environmental policies and to reduction programmes of aviation emissions, as well as other indirect policies aimed at cutting emissions in all fronts.

The Action is relevant in each country as, in the case of **Brunei** it published in December 2018 the Brunei Aviation Regulations (BAR) 16 – Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), drawn upon ICAO Annex 16, covering CORSIA's administrative requirements, as well as CORSIA monitoring, reporting and verification (MRV) requirements including: Emissions Monitoring Plan and CO2 emissions monitoring requirements; reporting of CO_2 emissions and Emissions Report, as well as verification requirements. CORSIA regulation adoption falls under the Brunei Darussalam National Climate Change Policy (BNCCP, 2020), Brunei Climate Change Secretariat of 2020.

Cambodia developed its National Environment Strategy and Action Plan 2016 – 2023 where it provides the country with a road map for achieving many of its Sustainable Development Goals including those in line with this Action. The Cambodia Climate Change Strategic Plan (2014-2023) outlines the need to reduce GHG emissions from the transport sector by adopting low carbon emission technologies and to raise awareness about the effects of GHG on climate change.

Indonesia is projected by the International Air Transport Association (IATA)8 to become the world's fourth-largest air transportation market by 2036, a factor that enhances the relevance and appropriateness of this Action. However, Indonesia published its Indonesia's Action Plan on Aviation and Climate Change already in 2010. In 2014 the Indonesian Aviation Biofuels and Renewable Energy Task Force (working closely with ICAO) was created, composed of four sub-task forces to work on formulation of policy, regulation and capacity-building program, research and development, testing and certification, commercial, risk analysis and sustainability (ICAO working paper Assembly 40th Session). Additionally, Indonesia has established a Task Force for Mitigation of Climate Change and Green House Gas Emissions for Air Transportation Sector demonstrating its commitment to reducing GHG emissions. Further cementing Indonesia's commitment to curve its civil aviation emissions it has been a member of the Committee on Aviation Environmental Protection (CAEP) since 2016 and has been an active member of the Sustainability Certification Schemes Evaluation Group (SCSEG).

Laos is a landlocked country with few commercial flights and few international routes. Nevertheless, in the Country Programme Document for the Lao People's Democratic Republic (2022-2026) and the Strategy on Climate Change from 2010, there is a commitment to tackle GHG emissions from all its sources. Furthermore, the Natural Resources and Environment Strategy (2016-2025) from the

⁶ https://asean.org/our-communities/asean-socio-cultural-community/environment/

⁷ https://environment.asean.org/climate-change/aboutHLS

⁸ https://www.iata.org/en/pressroom/pr/2018-10-24-02/

Ministry of Natural Resources and Environment⁹, based on the National Social and Economic Development Plan, the National Strategies for Economic Development and Poverty Reduction, highlights climate change as a significant threat and calls for preventive measures.

Malaysia's Strategic Green Initiatives calls for the adoption of green management strategies for its fleet of commercial planes and the introduction of the carbon-offsetting scheme in response to local and international carbon emissions reduction performance targets. Similarly, Malaysia's Technology Master Plan Malaysia 2017-2030 calls for the utilisation of green technologies in the field of aviation to reduce carbon emissions, a commitment backed up by the establishment of the Malaysian Aviation Commission (2015).

Myanmar's National Environmental Policy (2019) supports environmental governance, monitoring and enforcement of environmental laws and regulations, as well as monitoring and an increased governance in environmental matters. This is of particular importance as Myanmar is considered one of the most vulnerable countries in the world¹⁰ to the impacts of climate change, and its renowned biodiversity and natural resources are under increasing pressure as the country develops. More frequent floods, cyclones and droughts have caused immense damage to its population, infrastructure, and economy. Additionally, Myanmar's Climate Change Master Plan (2018-2030) calls for low carbon transport and development solutions for inclusive and sustainable development.

The National Framework Strategy (2010-2022) on Strategy on Climate Change from the **Philippines** calls for a reduction in GHG and to enact the Renewable Energy Act and the Biofuels Law which would see a greater adoption of the production of biofuels. More specifically, the Philippines' Action Plan on CO2 Emission Reduction Action Plan¹¹ developed by the Ministry of Transport and the Civil Aviation Authority, recognises the effects of global warming, and calls for a reduction in GHG emissions, both in domestic and international aviation operations. It also highlights the need for cleaner fuel production and for a higher efficiency in fuel consumption. The Civil Aviation Authority Philippines has published the Aeronautical Circular (AC) 2018 for the Carbon Offsetting and Reduction Scheme for International Aviation¹².

The Civil Aviation Authority from **Singapore** states that in spite that aviation contributes to 2% of total CO2 emissions, its aviation industry is willing to reduce emissions. Since 2008 the Asia and Pacific Initiative to Reduce Emissions (ASPIRE) initiative has worked with the authorities and air navigation service providers (ANSP) and airlines to reduce the fuel consumption through best practices and air traffic management. Indeed, Singapore has already produced carbon emission cuts not only in airplane management but also in airport terminals' management. Singapore Airlines states that it aims at achieving to grow carbon neutral as from 2020 and achieve 50% absolute reduction in carbon emissions by 2050. Being the most advanced among all ASEAN MS, since 2011 Singapore Airlines¹³ have become part of the Sustainable Aviation Users Group (SAUFUG).

Thailand's Civil Aviation Authority's Action Plan to Reduce Aviation Emissions (2018) pinpoints climate change as its central challenge. The plan calls for increased efficiency and greener and sustainable transport modal systems as well as to explore mitigation measures which date back to its previous Action plan of 2013, including the adoption of biofuels and other Actions to reduce GHG. Additionally, the implementation of introducing new technologies and improved air traffic management, is part of its strategy, which is aligned to the project's specific objectives.

Vietnam's Power development Plan commits the country to be carbon neutral by 2050. It also calls for the country to diversify its energy sources but acknowledges that if faces many challenges. On the other hand, pursuant to the Law on Environmental Protection from 2014, and in line with the requirements of ICAO, the Ministry of Transport issued a Circular on the management of Fuel Use and CO2 Emissions of Aircrafts in Civil Aviation. This Circular and guideline regulate collection and

⁹ http://extwprlegs1.fao.org/docs/pdf/lao170969.pdf

¹⁰ https://www.unep.org/news-and-stories/press-release/myanmar-announces-national-environment-and-climate-change-policies

¹¹ https://caap.gov.ph/wp-content/uploads/2022/03/PHILIPPINES-ACTION-PLAN-ON-CO2-REDUCTION-1.pdf

¹² https://caap.gov.ph/download/2447/

¹³ https://www.singaporeair.com/en_UK/gb/flying-withus/our-story/giving-back/environmental-efforts/

reporting on fuel use and CO2 emissions from aircraft in the civil aviation sector¹⁴, including guidelines on fuel use optimisation.

The Action has not only contracted key experts who are familiar with the sub-region but it also took into account local capacities and limitations at the stakeholders' level. It conducted a comprehensive exercise to locate the level of expertise and translated into each countries readiness level in terms of developing a State Action Plan, CORSIA implementation level and the Aviation Emissions Management Systems Database. This has allowed the Action to apply as much as possible an adequate level of information transfer that would be suitable for each of the MS involved in the project. This is an important factor in the development of the project's knowledge transfer methodology as ASEAN MS capacities and development stages vary extensively.

EQ4.- To what extent do the Specific and Overall Objectives, as well as the design of the Action, respond to the EU and EU MS' strategic interests in Southeast Asia.

EU-SEA CCCA CORSIA has no immediate links to EU's industry business development in the sense that it does not promote directly their technical solutions and products. Still, enhancing the economic partnership between the EU and partner countries is part of the overall objective of the Action. To this effect the Actions operating in an industry dominated by Western businesses interests where the EU has a large comparative advantage and a substantial potential for economic opportunities exist. While the project objectives do not explicitly aim to facilitate access to the ASEAN market for the EU industry, the area of action on SAF and SAP may represent a good opportunity for the EU industry and EU standards to be presented to and be adopted in the AMS.

In terms of the medium- and long-term measures within the State Action Plans include the renewal of airlines' fleets where Europe is a leader in the largely duopoly world industry. Within the industry related to Sustainable Aviation Fuels, Europe also has a leading edge as some of its firms are already doing business in the subregion. They are also benefiting from the expertise of having been supplying this type of fuel to European airlines. Similarly, in the market of emission verification audits, European companies are also at the forefront. All these professional and specific aviation related industries are required to move to the emission targets the Action advocates. The carbon trading market is also an area where European private interests are leaders. Furthermore, an indicator of the private sector participation is the involvement of private companies in the Steering Committee Meetings of the project.

The potential for European companies to engage in all aspects of the business side of the aviation industry in Southeast Asia is considerable. However, the Action has been careful not to be seen as a commercial tool on behalf of the EU industry.

Effectiveness

EQ5.- Are the outputs being achieved with the expected quality?

In terms of achieving results, the evaluators concluded that the Action has made different progress in relation to the annual work plans implementation with a high level of quality, given the chosen experts for the tasks ahead, the right material for the right candidates and using an appropriate PM methodology. Therefore, the results obtained so far can be deemed of good quality and attaining the right effects on the target beneficiaries (SAP, ERs, CORSIA framework).

The implementation of the Action began in August 2019, but from March 2020 the impact of COVID19 pandemic made impossible any travel from/to the EU/ASEAN. Due to this situation the intended format of the activities changed to the use of remote delivery (Zoom, Skype, Webex). Also, due to the impact of COVID19 pandemic, there was period when the number of activities was reduced (March to May 2020) and the workplan had to be adapted to the new working conditions.

The Action has been able to attain several results including readiness by several countries to develop their Emissions Report, at the same time that some have made progress towards their respective

¹⁴ <u>http://ikinews.climatechange.vn/vietnams-civil-aviation-sector-prepares-towards-corsia/</u>

CORSIA accreditation system, whilst most of them have been able to present State Action Plans. Additionally, the States' AeDMS are becoming progressively operational.

This is a brief description of what was done during the Action implementation:

During the inception phase (August to December 2019) five Action activities were planned (WorkPlan (WP) Nov 2019; I1 to I5), and 100% completed. An additional activity I6, which is the remote support to Thailand Civil Aviation Authority of Thailand (CAAT) and their National Accreditation Body (NAB) was conducted and three Project Management (PM) activities were completed as planned.

During the period of January to 31 December 2020:

Regional support was provided to all MS, with three planned activities, including PM participation at the ASEAN Consultative Committee on Standards and Quality Working Group 2 (ACCSQ WG2), 100% were competed with an additional regional activity was conducted on the Emissions reporting workshop¹⁵ (R1)

In the case of the multilateral support, three 3 activities were planned and the three of them completed;

43 bilateral support activities were planned, with 20 of those activities rescheduled to WP 2021. Following there is an account of all bilateral activities planned and completed in 2020:

Brunei	2 activities were planned	100% completed.
Cambodia	9 activities were planned	44 or 4% completed.
Indonesia	2 activities were planned	0% completed.
Laos	7 activities were planned	85 or 7% completed.
Malaysia	1 activity was planned	100% completed.
Myanmar	6 activities were planned	83 or 3% completed.
Philippines	6 activities were planned	66 or 7% completed.
Thailand	2 activities were planned	1 or 50% completed.
Vietnam	8 activities were planned	0% completed.

Table 4.- For 2020 WP, the first COVID year, 53,5% of activities were completed.

At the December 2021 PSC it was determined that out of 77 activities in the work plan, 33 activities were fully implemented, other 33 have were brought to the Work Plan 2022 and the 11 activities were put on hold or cancelled. At the September 2022 PSC, it was determined that the work plan contained 59 activities, out of which 23 activities were fully or partially implemented, another 28 were retained for the Work Plan 2022-2023 and the 8 activities were put on hold or cancelled. In other words, during the period from the 1st January to 31st December 2021, 4 project management activities were planned and 75% completed (3); in the case of regional support 5 activities were planned and 28,6% implemented (2), and for the case of the bilateral support 62 activities were planned and 42% were implemented (26). Of the latter ones, 25 activities were rescheduled to WP 2022 and 11 activities remained on hold or declined by the States.

According to the feedback from the beneficiaries interviewed and the records for the methodology on the implementation of the activities, the beneficiaries largely expressed their satisfaction with the outputs achieved so far with a satisfactory level of quality.

The implementation of the work plan has been mostly affected during the period March 2020 - December 2021. The COVID pandemic led to the project management team requesting an addendum for a no-cost extension (approved by FPI) of the execution period until June 2023. The completion of the planned activities has been adjusted and the achievement of the outputs has been affected accordingly.

¹⁵ All activities' codes were changed by PM

In the case of the State Action Plan (SAP) the Action has included updated and upgraded mitigation measures, submitted to the International Civil Aviation Organization (ICAO), the achievements upon until include: Brunei and Laos, have produced their 1st SAP; Myanmar has developed it and not presented it as support to this country remains on hold¹⁶; Support to Cambodia has resulted in the submission of their 1st SAP scheduled for December 2022. Mitigation measures are part of the SAP, a qualitative aspect of these reports, however, the evaluation team could not access the contents of these SAPs¹⁷.

The Action has assisted all States mentioned above to either elaborate their 1st or 2nd and 3rd versions of the SAP, including sets of mitigation measures adapted to the classification defined by ICAO and to the needs identified by the States' stakeholders in line with the quality criteria of ICAO's guidelines. The support provided by the Action for the elaboration of the 2nd and 3rd versions of the SAPs indicates an additional effort and increased quality for the necessary comparison to be made with previous versions, which should had been already evaluated by ICAO. The Philippines, Malaysia and Vietnam have submitted their 2nd SAP to ICAO, with Malaysia already having submitted its 3rd edition. While the assessment of the quality of SAP was coming from the ET, beneficiaries expressed their satisfaction with the overall quality of the processes to develop them taught by the Action. The evaluation team assessed these reports and could appreciate an increase in their quality, taking into considerations the respective local circumstances and capacity baselines.

The main achievement up to now in the Carbon Offsetting and Emissions Reduction Scheme for International Aviation (CORSIA) implementation process as per ICAO Standards and Recommended Practices (SARPs), is Cambodia's joining the voluntary phase in May 2022. Additionally, all ten States have submitted their Emissions Report (ER) to ICAO. The quality of the ERs is guaranteed by the supporting activities of the project, which have been implemented after the application of the internal project management and administrative processes.

The Action has facilitated achieving the technical readiness of the ASEAN MS to implement the Monitoring Reporting and Verification (MRV) scheme which is the foundation of the CORSIA implementation and mandatory for all States, regardless their will to join the voluntary phase of CORSIA.

Feedback received from beneficiaries in terms of the support provided is detailed in table below.

During the interview and desk phases the evaluation exercise perceived that the all the activities had been carried out with a satisfactory quality level, including project management and organization, but with room for improvement. From the questionnaires elaborated by the evaluation team, the average of the perceived quality of the Action by the beneficiaries about three different kinds of outputs and project management are¹⁸ (from 1 to 5, 5 being the highest):

Type of activity	Contents	Feedback received from beneficiaries (% and average/5)
Training activities	virtual coffees, workshops, either regional, multinational or local	4,1 out of 5 (82%)
Technical support provided	elaboration of SAP, CORSIA regulation, AeDMS	4,4 out of 5 (88,8%)
Documentation elaborated with the aid of the Action	reports, SAPs	4,4 out of 5 (88,8%)
Project management and organization		4,2 out of 5 (84,6%)

¹⁶ Due to internal political problems, the EU has discontinued indefinitely its support to Myanmar.

¹⁷ SAPs are not published on the ICAO website and the project did not provide these reports as they are considered confidential until they are published by ICAO.

¹⁸ Although from the questionnaires an average high quality on the previous areas of cooperation is resulting, one of the interviewees scored 2 out of 5 in training activities they participated and 3 out of 5 in project management and organization of activities.

 Table 5.- Feedback received from beneficiaries in terms of the support provided

Apart from the quality of the outputs produced, other reasons why this high appreciation rate has been achieved can be attributed to the CCCA Action unique in nature/type of Action, in the sense that no other similar cooperation initiative exists in the region. Only some training activities to MS' NAAs are provided by other donors (i.e. ICAO through their Action CORSIA programme, and Buddy Partnership activities) but no support is provided to develop SAPs, or to establish the MS' NABs, which is an essential part of the their capacity to reduce CO₂ emissions in the aviation sector. ASEAN MS' NAAs and NABs voiced their appreciation of the support provided by CCCA CORSIA Action to build their capacity in these areas.

The evaluation team detected a quality control process albeit implemented irregularly, which is linked to the processes followed for the development of the Action's outputs.

The good quality of the outputs is partly based on the selection of the appropriate experts, which follows the existing EASA internal process, amongst candidates from previously vetted consortia, launching several Requests for Services (RfS) that are decided according to the Action working programme. The RfSs have the required parameters to select the appropriate experts and the methodology as it describes the relevant objectives, necessary tasks to be performed, institutional requirements such as communications and EU visibility, as well as the minimum requirements that the experts' profiles shall fulfil for the execution of tasks.

Such experts' profiles include the indication of which technical domain and the minimum experience required, detailing expertise areas in which such experience has been gained. During the evaluation exercise and in the interviews with the Action experts, it was concluded that their expertise matched the requirements indicated in the RfS.

The quality assurance of the Action is further strengthened once the experts are selected, as continuous coordination with the leading environmental expert was confirmed. Furthermore, all materials and information to be presented to the beneficiaries are discussed and reviewed by the leading expert prior to the workshops and other transfer of knowledge sessions.

The technical material used by the subject matter experts during workshops and webinars follows quality criteria to harmonise presentations and provide guidance on the relevant aspects explained to the participants. Such quality criteria are standardised forms to fill with the relevant information, good quality of graphics and contents that have been elaborated by the selected subject matter experts.

It should be considered that the contents of the presentations elaborated and used during the activity delivery (such as the length and contents of texts and graphics) and that have been used during remote training sessions, do not facilitate in some cases the understanding of the explanations, especially considering the English language proficiency demonstrated by the participants, which the evaluation team deemed unsatisfactory in many instances.

Supporting the quality of the delivery of the technical material the evaluation exercise could confirm that the selection of experts has been decided according to the needs of the updated WP. As shown in the different WP versions, the evaluation team validates that it takes into account the progress of each AMS, the results achieved so far, and their current needs. These include specificities for AMS and the current situation of the delivery of the delayed activities due to COVID. These specificities also consider the recruitment of adequate experts to cover specific regulatory requests for aviation (i.e. last 2022-23 WP focus on SAF) as the RfS facilitated to the evaluation team could confirm.

The activity implementation sheets, used by the Action for the adequate definition of all the Action activities, which contribute to their quality, are a necessary and useful tool. These describe the main activity parameters such as the activities' themes, activities' objectives, main topics to be covered, stakeholders, workload, duration and the method for delivery and deadlines. The evaluation team can confirm that this tool complements and is utilised for developing the work plan and to further track their results.

For the completion of the internal cycle of quality assurance, and once the activities have been completed, the experts involved elaborate the Activity Summary, including details on relevance and

results (termed as impact by the Project) for specific Action partners, "[results] and conclusions for follow up activities and cooperation"¹⁹.

Almost all interviewees from NAAs and NABs confirmed that the training and assistance provided has been beneficial to them to understand the complex set of requirements of aviation regulations, to implement the CORSIA programme and to develop/improve their regulations. The evaluation team agrees with this, with the feedback obtained from the interviews. However, the guarantee of NAAs and NABs staff competency is a role that falls under the NAAs and NABs human resources departments as the Action cannot guarantee the achievement of the required competency of their staff. This situation was observed during a visit by the project's leading environmental expert to unnamed state authorities 2022. The expert observed that the NAAs' staff were not entirely familiar with the ICAO SARPs prescriptions²⁰, a topic already covered by the project.

The quality criteria of the SAPs could not be verified by the evaluation team as guidelines to produce them were not made available. This quality control rests on the assumption of the experts' level of expertise, as they were not made available.

A direct result of the Action assistance and training provided to NABs and VBs is that some of them have been already accredited. The attachment programmes between peer countries, Thailand – The Philippines and Indonesia – Malaysia, for the establishment of the national accreditation system has been demonstrated as a successful tool as some VBs' will have completed their accreditation in 2022 by the less experienced NABs.

Additionally, CO_2 Emissions Reports (ER) 2019, 2020 and 2021 have been reported by all AMS. Given the verified difficulty observed by the evaluation team for the AOs in the completion of the CO_2 Estimation and Reporting Tool (CERT) to generate their ER, it can be determined that the quality of the training provided by the Action was resulted in achieving its goals, allowing the participants to complete the CERT information.

EQ6. - To what extent is the Action progressing towards the completion of their expected outcomes and first signs of impact, especially considering relevant policy dialogues on aviation matters.

The EU sectoral dialogue on civil aviation²¹ relevant to the EU-SEA CCCA CORSIA is focussing on actions following the Commission's Aviation Strategy for Europe²² (ASE) ²³.

The Action contributes in the areas identified within the ASE of embracing a new era of innovation [...] and contributing to a resilient Energy Union and a forward-looking Climate Change Policy.

The Action also contributes to the key priority of EU external aviation policy targeting growth markets and to boosting the efficiency of airport services, by contributing to the efficiency of their environmental management.

First signs of impact considering passenger and air freight air transport and air traffic management have been appreciated by the ET on the adoption of the mitigation measures proposed by AMS in their SAPs, with the support of the Action. Additional signs of potential impact relevant to the EU Energy Agenda is the commitment by AMS for the use of SAF for civil aviation, also with the support of the Action.

The ASEAN market is one of the fastest growing markets worldwide and the results of the Action that are being achieved for outputs 1, 2, 3 and 4 are the basis for the implementation and increase of the AMS capacity for their aviation environmental management.

Innovation is a key area for the reduction of CO_2 emissions and the EU is leading the development of next-generation technologies and the promotion of the use of state-of-the-art technologies. The

¹⁹ In accordance with the Activity Summary form.

²⁰ Activity report ALL June 2022; Leading environmental expert

²¹ https://ec.europa.eu/social/main.jsp?catId=480&langId=en&intPageId=1829

²² COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS: An Aviation Strategy for Europe

²³ https://transport.ec.europa.eu/index_en

mitigations measures that have been introduced in AMS' SAPs with the support of the Action include the adoption of more environmental projected technologies for aircraft. (i.e., Mitigation measure proposed at SAPs: Technology and Standards, Aircraft Fleet Renewal / Engine improvement, and Airspace System Management improvement, Performance Based Navigation (PBN) implementation.

In line with the Energy Union agenda, an important contribution to the reduction of aviation's environmental impacts will come from the development and market deployment of advanced biofuels, in which the production of SAF has been targeted as one of the main mitigation measures for AMS. The evaluation team has confirmed that activities related to installing the capacity of certification of SAF at AMS levels are being implemented and planned for the rest of the project.

EASA has elaborated and published a "European Aviation Environment Report" (in a joined effort with European and the European Environment Agency) from which "the EU, Member States and industry will better track the environmental performance of the air transport sector and monitor the effectiveness of different measures and policies", and the Action has used gained experiences to be transferred to the Action beneficiaries. (i.e., SAF certification by Sustainability Certification Schemes against criteria based on the CORSIA framework)

7 Processes for the definition of mitigation measures for the reduction of CO_2 emissions, have been influenced by the project. (For those SAP that have been published by the AMS during the Action implementation with support provided by the project)

Output 1.- Established conditions for SEA States to submit their State Action Plans to ICAO to reduce CO_2 emissions from international aviation.

The evaluation team could verify during its interaction with different stakeholders and beneficiaries, that each had demonstrated progress in terms of their capacities to develop their own State Action Plans. Indeed, each country has an increased level of knowledge an awareness of the task at hand, that alongside the help of the Action's experts, have enable them to progress, to different degree, towards this important milestone. Notwithstanding that each country has achieved a different level of competency, which is in accordance to the size of their international civil aviation industry. The advances made can also be a confirmation that the materials used for the capacity development are adequate and that the experts contracted by the Action are not only the right choice but have been able to communicate their knowledge to the targets in each of the countries which have benefited from this output. Moreover, given the different degrees of capacity in each of the AMS, the Action has been able to adapt and modify its approach to suit this different level of capacities and help towards some countries' first attempt to develop their own SAP as well as to assist those that had already present their first and even their second SAPs. However, it needs to be mentioned that also within this spectrum of capacity levels within the different AMS, there are different levels of the qualities that distinguish the SAPs. In spite of following an official format to fill them in, gaps in the different reports exist which could be narrowed in the coming months, particularly in the area of mitigation efforts by each of the AMS.

In the following link, the ET could access the available SAPs from ASEAN MS:

https://www.icao.int/environmental-protection/pages/climatechange_actionplan.aspx

Brunei: Brunei was able to complete its SAP report with the assistance of the Action, initiated in 2019, and it is still awaiting submission to ICAO. Nevertheless, the evaluation team was not able to confirm this information with the available stakeholders from Brunei. Despite of the relatively small scale of the international civil aviation of Brunei, the NAA was able to elaborate the SAP according to the international requirements, within the first four months of the project. The SAP was not made available to the ET.

Cambodia: The evaluation team has observed that there are not appropriate conditions for the establishment of the CO_2 emissions baseline, to be included in the SAP report, related to the Cambodian NAA staff and their relations with the Cambodian aviation sector. The format used by the Action to support Cambodia during the COVID pandemic (online sessions) was not deemed appropriate and useful for their competency acquisition on SAP elaboration, as the participants were not able to fully understand the set of topics covered during the working sessions. However,

according to the PM, the project team still will continue to aim to support Cambodia to submit their first edition of the SAP before the end of the project. The current version of the SAP was not made available to the ET.

Indonesia: The SAP document available at ICAO official website, edition Dec. 2021, demonstrates that conditions are established at Indonesian NAA to elaborate and update further versions of the SAP. In spite of Indonesia's relative advanced knowledge on topics related to the submission of the SAP, the beneficiaries expressed the usefulness of the additional knowledge received through the project, like the approach to updating on the ICAO Doc 9988 requirements.

Laos: The evaluation team confirmed the finalization of 1st edition SAP document, which is ready for submission to ICAO since June 2022. In spite of this, in the interviews with the stakeholders, the assessment concluded that there is a knowledge and resource gap that still needs to be capacitated / increased in order for the next SAP report editions to be presented with limited assistance from the project.

The strategy used to involve NAA officials and stakeholders working with the aviation / climate sector has been beneficial for the achievement of appropriate results.

Malaysia: Due to relatively high-capacity level within the Malaysian civil aviation, the project's approach to focus on the third issue of the SAP report proved useful and effective. The new SAP edition rightfully incorporates the updated regulatory reference framework and an updated CO₂ emissions baseline. This 3rd version includes other aviation sector's stakeholders (airports and ANSP) as well as an updated design of mitigation measures.

Although Malaysia has a considerable level of competency to elaborate and issue their two previous versions of SAP, they still could benefit from the Action know how. EU-SEA CCCA CORSIA Action has demonstrated that it can provide added value of the highest level, by providing training on the new SAP requirements resulting from ICAO 41st Assembly and on the update of the mitigation measures and their implementation process, with the aim of elaborating further versions of SAP.

Myanmar: The evaluation team appreciated a relevant level of knowledge relevant to the processes needed to implement the SAP, in spite of the decision to decrease their participation on the project. In 2020 Myanmar DCA was "quickly progressing" in the development of their first SAP, completing a first draft. However, individual cooperation with Myanmar has been indefinitely suspended as from 2020 as result of the coup d'état and change to a military regime.

The Philippines: The Action served as a catalyser for internal communication of all necessary national stakeholders to build the 2nd SAP, and, in addition to capacitating the relevant stakeholders, the Action facilitated the signature of the Memorandum of Understanding between the NAA and the airports' operator of the Philippines for environmental aspects of civil aviation as this results contributed to the achievement of output 1. Engagement with the Action brought The Philippines to a level that would enable them to develop their next edition of SAP, according to the information gathered from interviews. The second edition of the SAP was not made available to the ET.

Vietnam: The Action served as a key facilitator for internal communication of all necessary national stakeholders for the creating of the working group to build the 2nd SAP. Training and technical assistance provided by the Action established conditions for the finalization and the submission of 2nd SAP document. Although it is visible that improvements should be made particularly in the definition of the mitigation measures (i.e., technology and operational improvements, SAF) included in the report.

Singapore and Thailand: have elaborated their SAPs without the assistance from EU-SEA CCCA CORSIA project. Based on interviews by the evaluation team and the analysis of the SAP report from Thailand, it can be confirmed that they have an adequate capacity to develop their plans with their own resources. It is to be noted that Thailand has been supported in this field by previous EU

actions (e.g. EU-SEA APP; PDSF²⁴), which also shows the value and sustainability of the EU projects Both countries have declined the assistance of the Action on this matter²⁵.

Output 2.- Established conditions for the SEA States to implement CORSIA processes as per ICAO SARPs.

The evaluation team can state that AMS made progress on establishing the right conditions to fulfil their ICAO obligations (SARPs) that would allow them to implement a harmonized framework to reduce emissions from international civil aviation. Such conditions have been implemented at the levels of the relevant States' Institutions regulations and processes. For instance, these regulations include the necessary CORSIA requirements and, in terms of processes, the development of MRV and annual environment reports (ER). The evaluation team can observe in the documents reviewed and, in the interviews, conducted with different stakeholders, that eight of the ten ERs from 2019, 2020 and 2021 have been submitted²⁶. Furthermore, reports issued by the AMS are using the ICAO forms and the Action has been providing the required assistance to complete the information needed under such harmonized form (CO₂ Estimation Reporting Tool, CERT). The evaluation team could assess positively how the application of CERT was contextualized according to the individual needs of the stakeholders. (i.e., when the airline operators do not use CERT as a fuel monitoring method). Up until the time of the evaluation exercise, the country that that has joined the voluntary phase of CORSIA during the Action implementation is Cambodia. The close cooperation and assistance provided by the Action to the SSCA has led to this result according to the beneficiaries and the PM. (Previously Singapore, Indonesia, Thailand, Malaysia and The Philippines)

The development of ERs and CERTs has followed harmonised forms and methods, obtaining valid results in the form of ERs submitted and the use of complex CERTs forms. This best practice has been replicated through the project with necessary adjustments according to the AMS in question.

In the case of Brunei, it has been observed that the technical readiness could be appreciated, with the support provided by the project since February 2020, as it is perceived by the active participation of their institutional stakeholders. However, CORSIA implementation is still a challenge, partly due to the size of their aviation sector and to the limited capacity of their institutions. In the case of Cambodia, the necessary regulatory development, which was carried out with the assistance of the Action since February 2020, has advanced to finalize its CORSIA national regulation and the decision of Cambodia to join the voluntary phase of CORSIA. Cambodia acknowledged the support provided by the Action for the decision to join the CORSIA programme. They have achieved a level that enable them to report emissions to ICAO as early as 2019. In the case of Indonesia, their level of competence allowed them to dispense with the project's offer for capacity development on this area, except for the Order of Magnitude Check, assessing the completeness of emissions data reported by the operator²⁷. In the case of **Laos**, the Action rightfully focussed on the consolidation of the MRV knowledge, which was successfully applied in the development and submissions of the ER in 2021. From the interviews to the stakeholders, it cannot be confirmed that Laos will join the voluntary phase of CORSIA. In the case of Malaysia, they are sufficiently advanced on MRV and ERs, but support was requested and successfully assimilated by CAAM that enable them to make the data transition from the AeDMS their own IT infrastructure. The Action approach for Myanmar also focussed on the of the MRV knowledge transfer, which was successfully applied in the development and submissions of the ER in 2019²⁸, and the deployment of their AeDMS. In the case of CAAP of **The Philippines**, adequate conditions were established so they were able to submit ER 2019 and 2021, and to upgrade the AeDMS. The capacity of the Singapore NAA allowed them to opt out of any bilateral support since their competency and capacity is not only the highest in the region but also exceeds most of the international aviation authorities. Henceforth, the Action

²⁴ Policy Dialogue Support Facility

²⁵ SAP from Singapore is not accessible from ICAO CORSIA website

²⁶ For The Philippines, only one ER from 2021 was submitted with the assistance of the project

²⁷ ICAO Annex 16, Volume IV, Part II, Chapter 2, 2.4.1

²⁸ The Project has ceased to engage with Myanmar until further notice.

successfully contributed to the SAA staff competency through the delivery of the CORSIA Order of Magnitude Check regional activity. It can be concluded that satisfactory conditions to implement CORSIA are present. In the case of **Thailand**, even though the capacity of CAAT is relatively high, the activities related to output 2 have concentrated in an exhaustive support to the CAAT and Thai air operators. The submission of the 2021 ER is evidence of the right conditions to implement CORSIA process as per ICAO SARPs. For **Vietnam**, in spite of initial adverse circumstances, the Vietnamese institutions, through the cooperation with the Action sin 2019, acquired the necessary capacity to develop their CORSIA regulation²⁹ and programme, including the elaboration of the ERs 2019, 2020, 2021. The elaboration of the last ER 2021 received the support by the Action and it was concluded with its presentation to ICAO in 2022.

Output 3.- Increased knowledge of climate change and environmental tools and mechanisms.

At the time of the evaluation exercise, there were five countries that had not opted, yet, to participate in the voluntary phase of CORSIA (Brunei, Cambodia³⁰, Laos, Myanmar and Vietnam). As part of a strategy to guide them and encourage them to join CORSIA, the Action is supporting these ASEAN MS in developing a better understanding of its own climate change challenges. For this, it has centred its focus on this output by targeting these countries through the commissioning of five State Reports. The logic behind this decision has been to present local intelligence, whilst analysing and identifying relevant opportunities for each country. These reports would form part of 5 high level meetings with senior officials, where their contents will be presented to try to persuade them to join CORSIA.

A revision of these State Reports concluded that they contain relevant and practical information which has led to country-specific set of recommendations. This is useful information as it provides to the target countries punctual data that can enhance their knowledge about climate change tools and mechanisms, associated with the aviation sector. The reports contain, among other useful data, an analysis of the national context on Climate Change, and an overview of the aviation sector and its expected growth over the next few years, the readiness of the carbon market, SWOT analysis, and other useful and punctual conclusions that will be of interest to the parties targeted by this output. Once the documents are shared and assimilated, the Action can then begin to support the design and implementation of tailor-made activities to fit the current context of each of the selected AMS. This approach seems a valid attempt to reach the intended objective. However, the limited exposure of the information contained in the reports confined to one high level meeting per country, is not considered as effective as attempting to increase the added value of the reports by increasing the number of high-level meetings and increasing their dissemination through other channels.

At the time of the evaluation exercise, the reports had not been presented to the target countries and their effect cannot be commented upon. However, given the above quality description, should the reports have the desired effect, or even a partial one, this methodology/best practice could then be replicated in other regions on a bilateral basis.

Output 4.- Established conditions for the SEA States to define and create the National framework for verification system.

The evaluation exercise could confirm that the beneficiaries have made visible advances towards the establishment of the CORSIA Accreditation Process in countries like Vietnam, Indonesia, and Thailand. This result has led to the accreditation of the first Verification Bodies (VBs) (beyond the ones accredited by Singapore) accredited in the AMS. The direct support of the project, complemented by the Attachment Programme, also facilitated by the project, is supporting Malaysia and Philippines to finalise their CORSIA Accreditation Process and delivering the first accreditations

²⁹ Vietnamese NAA launched the CORSIA regulation through is Aeronautical Circular AC 22

³⁰ Cambodia joined the voluntary phase of CORSIA in May 2022.

to local VBs before the end of 2022. This is an essential aspect of the project, as it allows for the VBs to emerge and engage as part of the CORSIA enabling process.

Indeed, regarding Indonesia, this AMS already counted with proven experience before the Action started in 2019 and have a well-established GHG scheme and NAB (KAN) that elaborated the full CORSIA scheme for accreditation. Their first accreditation already took place in 2019 when their NAB was set up and ready to accredit its first VB. It must be mentioned that even though Indonesia has already participated in some Action activities and have attended Action's webinars, no additional support has been requested. Additionally, it can be said that NABs in Thailand and Indonesia are among the most experienced in the region, having the full accreditation process for CORSIA since the first year of the Action, and having already accredited 2 and 3 VBs, respectively, in 2020. This was a direct result of the prompt regional and bilateral support afforded by the Action.

For other ASEAN MS's NABs, to be able to establish and implement the full accreditation and verification programme by themselves remains a challenge and requires the support of more experienced NABs from other AMS. The Action has been able to exploit this knowledge gap through the Attachment Programmes, which are coordinated with the support of the project, where one state provides know how to another state. For instance, the participation of the most experienced NABs from Indonesia and Thailand in the Action has been successfully achieved thanks to their facilitation role of the project enabling two bilateral Attachment Programmes, one of them led by KAN and the other by TISI, to support Malaysia NAB (DSM) and The Philippines NAB (PAB) to the accreditation of their own VBs. In the Philippines, the Action expected that its first VBs will be accredited by the end of 2022.

The project has also initiated the support to facilitate the establishment of the GHG schemes, necessary for CORSIA at a later stage, but also in support to the wider GHG programmes under the Paris Agreement. This is especially the case for Cambodia and Brunei, where the project is targeting bilateral support to develop GHG schemes capabilities.

However, in spite of these early and ongoing successes, there are four countries, Brunei, Cambodia, Laos PDR and Myanmar, where their small national aviation markets increase the difficult level for the emergence of national VBs interested in being part of the CORSIA scheme. However, staff from their NABs, or Ministries, where a NAB could be established (in the case of Brunei), have benefitted from the Action's training sessions receiving the necessary background of the accreditation and verification framework, allowing them to develop the required scheme associated to the accreditation processes. None of their NABs started the accreditation process for CORSIA but in the case of Brunei, their knowledge acquired with the support of the Action allows them to plan to have their NAB and accreditation scheme ready by the end of 2022.

The Attachment programme, an ongoing best practice, has yielded positive returns opening the possibility of being used or implemented more frequently and in other aspects (i.e. SAF certification of production) where there is a comparative advantage in one state from where other less capacitated AMS can continue to benefit.

EQ7.- To what extent is the Action progressing towards the completion of their expected outcomes and first signs of impact, especially considering awareness about relevant EU sectoral expertise, and considering the EU business/market access interests.

First signs of impact thanks to the Action implementation have been observed by the ET on the awareness that the ASEAN MS institutions now have about the existing EU civil aviation regulatory framework and CORSIA as well as for specific mitigations measures implementation programmes from EU MS, led by EASA and from experts' presentations and technical assistance. SAF related activities may have a potential impact in AMS, so as considering EU business interests to certify, develop and distribute SAF.

The project's impacts have been especially beneficial when meetings were held face to face. Even though most beneficiaries appreciated the effort of continued support during the COVID pandemic the use of online tools and methods has affected the impact in terms of quality and its volume. The long-distance communication tools and the difficulties for an adequate understanding of the English language used by both, participants and the experts, might have affected the expected impact.

Alternatively, during the in-person events language barriers, which have been recurrent for several AMS, are greatly mitigated.

The activities organized by the Action consolidated awareness about EASA and the European Union's aviation sector expertise, particularly when the knowledge transfer activities are based on best practices from the EU. This is relevant for the EU aviation regulatory framework, existing CORSIA regulations and SAPs reports editions already existing at EU MS levels.

The evaluation exercise received comments during the interviews with the beneficiaries on their need to receive more practical cases related to the EU best practices. This would guide them to implement the newly acquired knowledge to their own country-specific aviation sector.

During the interviews it could also be appreciated that EASA has become an important player in the field of aviation cooperation particularly in the environmental domain. AMS are aware of the main policies, initiatives and programmes related to CO2 emissions and climate change, implemented in the EU civil aviation framework.

It has to be considered that this Action was conceived as a part of a larger FPI strategy with the objective to have a positive effect in the Comprehensive Air Transport Agreement (CATA), which has been finally signed in October 2022. The evaluation exercise cannot determine that the Action have affected positively those stakeholders who were also involved in the CATA negotiations.

At this stage of the implementation of the Action there are no visible impact towards improved business / market access, other that the opportunities for EU-Accredited Verification Bodies (AVBs). This is considered by the ET to be a sufficient outcome given the design of the project. However, the project's impact, so far, as observed by this evaluation has been the increased institutional capacity at ASEAN MS institutions related to the CORSIA implementation. For instance, the capacity of the newly established and current NABs to be able to manage the VBs accreditation aviation environmental-related systems.

Airbus, being the main actor of the EU aviation industry, participates with the role of technical advising the PSC and contributing to the awareness to, for instance, the implementation of new technologies and fleet renewals, according to the new mitigations measures for CO₂ emissions reduction. Airbus offers its support and collaboration in this regard to the Action.

In relation to the EU business/market access interests, only incipient initiatives based on offsetting mechanisms are emerging until now. Additionally, although it is also premature to observe a clear impact effect, in terms of mitigation measures, these could pose an opportunity for the EU industry, like aircraft fleet renewal, new air navigation procedures, and sustainable aviation fuels (SAF). On this last point, the Action has designed a group of activities related to the growth of the production, certification, and use of SAF in the region. Project-sponsored events like the SAF Regional Conference31 held in 2022 has raised awareness on the EU's sectoral industry expertise.

Through the document revision and information exchange with relevant stakeholders, the evaluation team could appreciate that most AMS' National Aviation Authorities (NAAs) identify EASA and the EU aviation regulatory framework as one of the main references under this theme. It was also communicated by several different stakeholders that they will appreciate a continuation on EASA's support on aviation environmental related topics; this may be a contributing factor in the future to facilitate the EU industry sector access to the ASEAN market.

EQ8.- To what extent is the Action progressing towards getting support to EU positions at ICAO level from ASEAN States?

During the ICAO General Assembly in 2022, important decisions related to Climate Change Action such as the review of CORSIA and the agreement on Long-Term Aspirational Goals (LTAGs) should

³¹ During this event some European companies were represented like NESTE (Finnish) which is already active in the region on the SAF industry.

have been taken³²³³. Both decisions are relevant to the scope of the project, and therefore these have been areas where the Action could provide support to the AMS. Working Plan 2022 included the activities of regional / multilateral workshops on LTAG, but these activities have been postponed after the celebration of the 41st ICAO Assembly to avoid being perceived as trying to influencing the States about the EU position at the ICAO event.

Furthermore, IATA is pushing for maintaining 2019 emissions level as the baseline³⁴, and this can be a factor influencing the position of the AMS, due to their local industries' interest to use 2019 emissions as the reference point for future calculations³⁵.

According to the questions that were raised during interviews to the beneficiaries AMS' NAAs and PM staff, the answers provided to the ET did not reveal a clear intention of the ASEAN MS about the EU position of the ICAO 41st Assembly on the LTAG and the decision of the baseline for the comparison of the future CO2 emissions. The evaluation team cannot infer that the ASEAN MS would have supported the EU position at ICAO 41st Assembly.

EQ9.- To what extent is the Action progressing towards the completion of their expected outcomes and first signs of impact, especially considering improved environmental performance in the aviation sector.

The evaluation exercise concluded that it was too early to find any concrete signs of impact that, according to the OECD, would signify the ultimate significance and potentially transformative effects of the intervention on the direct beneficiaries or indirect ones. However, in seeking any social, economic, or in this case, environmental effects of the Action that can be considered long term or on a wider scope than those intended by the Action, the Evaluation Team could identify a wider awareness to environmental issues related to civil aviation by stakeholders not necessarily directly linked to this topic, like officials at the NABs. In terms of beneficiaries closer to the civil aviation industry, who are not necessarily expected to be aware of environmental issues, the Action had managed to instil knowledge that can help the Action realize its specific objectives and to contribute towards its overall objective of enhancing, among political and economic issues, the environmental aspects of the partnership it seeks to widen with the ASEAN nations. Nevertheless, as mentioned above, it is still too early to identify an improved environmental performance in the aviation sector.

On a narrower scale, the evaluation team also found evidence of the first signs of the effectiveness of the Action that will lead to an improved environmental performance in the aviation sector due to its implementation. Concretely, the development of their 1st SAP edition (which has been achieved by Brunei, Laos and Myanmar) as well as 2nd and 3rd editions (by Malaysia, The Philippines and Vietnam), in which the basis for the improvement of international aviation environmental performance is established for each country, in the form of mitigation measures, and the tools to monitor the environmental performance.

Output 1.- Established conditions for SEA States to submit their State Action Plans to ICAO to reduce CO_2 emissions from international aviation.

The evaluation team has found evidence of the first signs of impact for an improved environmental performance in the aviation sector due to the Action implementation. The impact achieved is the development of their 1st edition of SAP (which has been achieved by Brunei, Laos and Myanmar) as well as 2nd and 3rd editions (by Malaysia, The Philippines and Vietnam), in which the basis for the

³² Assembly 41st session, Agenda item 18: Environmental protection - CORSIA

³³ A41-WP/371, Consolidated statement of continuing ICAO policies and practices related to environmental protection – Carbon Offsetting and Reductions Scheme for International Aviation (CORSIA)

³⁴ see IATA WP for the 41st Assembly of ICAO "Environmental protection – CORSIA": ".../...IATA urges that the baseline for CORSIA for the remainder of the program (through 2035) should be 2019 emissions".

³⁵ According to the information received by the evaluation team, Indonesia and Singapore are developing their own position on the emissions baseline and LTAG.

improvement of international aviation environmental performance is established for each country, in the form of mitigation measures, and the tools to monitor the environmental performance.

For example, in the case of Vietnam, the Action has contributed to the selection of specific mitigation measures could be immediately implemented, that are directly affecting the emissions reduction during the airport operations, such as single engine taxiing, taxi time reduction and reduction onstand APU usage. In the case of Brunei and Laos, their 1st SAPs have been elaborated and also include a set of new mitigation measures to improve performance of the aviation sector. For The Philippines and Malaysia, the project has contributed to the more accurate definition of the mitigation measures in the 2nd and 3rd editions of their SAPs, which should progressively raise their national aviation environmental performance.

Output 2.- Established conditions for the SEA States to implement CORSIA processes as per ICAO SARPs.

The main achievement with the support of the Action has been Cambodia joining the voluntary phase of the CORSIA programme, and the progressive alignment of individual States national CORSIA regulations that will facilitate the management of aviation emissions and offsetting mechanism at ASEAN level. The previous support received by The Philippines from APP and current situation of Vietnam upon joining CORSIA are additional achievements from EU cooperation. All ASEAN MS duly took into account the EASA guidance and/or EU best practices in formulating their new or revised CORSIA related regulations or in establishing or adapting the environmental department organizations of the NAAs and NABs. The Action is assisting to such new or adapted departments to gain or improve awareness of their important role for the purpose of monitoring, reviewing and validating the environmental performance of the aviation sector.

Output 3.- Increased knowledge of climate change and environmental tools and mechanisms.

The purpose of the four AMS State's Portfolios of Brunei, Laos, Myanmar and Vietnam, that have been elaborated by the Action is to identify climate change challenges and opportunities within the aviation sector of the States that have not joined CORSIA yet and will be used to recommend key Actions.

The four AMS State's Portfolios (Brunei, Laos, Myanmar, and Vietnam) that have been elaborated by the Action are strategic tools that should impact their State internal decision-making process towards the implementation of the CORSIA. There is also a fifth State Portfolio dedicated to Cambodia. However, Cambodia has already joined CORSIA as a result of the action of the project.

Output 4.- Established conditions for the SEA States to define and create the National framework for verification system.

In the case of **Brunei**, it has been observed that the technical readiness could be appreciated even though CORSIA implementation is still a challenge. In the case of **Cambodia**, regulatory development has advanced to finalize its CORSIA national regulation. However, the project has initiated the support to both countries to implement the GHG schemes, necessary for later CORSIA accreditation process, but also to support programmes and projects contributing to the Paris Agreement. National aviation performance should improve thanks to the implementation of the accreditation systems for certification of CO2 emissions by airlines, according to the CORSIA regulation. The first signs of the Action's potential impact towards such improvement have already been observed in the preliminary establishment of the accreditation bodies in Brunei and Cambodia, and in the Attachment Programmes between Indonesia - Malaysia and the Philippines – Thailand, which will facilitate the implementation of the accreditation scheme.

EQ10. - Does the Action receive/provide sufficient policy and technical guidance from/to the relevant EU services.

The EU services that are relevant to the Action are the Service for Foreign Policy Instruments (FPI) – RT (Bangkok Office), the Directorate General for Mobility and Transport (DG MOVE) and the Directorate General for Climate Action (DG CLIMA).

ASEAN represents one of the EU's core partners, and the strengthening of relations at the technical level is to be further ensured through the recently signed ASEAN-EU Comprehensive Air Transport Agreement (CATA) and through continued funding of the sector-specific technical cooperation. EU-SEA CCCA CORSIA project is being funded by the FPI.

DG CLIMA leads the EC's efforts to fight climate change at EU and international level and maintains an ambitious global leadership in climate Action, enhancing the international and domestic carbon market; DG MOVE manages and oversees the handling of all matters relating to the international dimension of transport policies.

DG MOVE is chairing the Project Steering Committee (PSC) and is providing clear indications to the Action on what are the expectations from the implementation, such as of as many countries as possible joining the voluntary phase of CORSIA.

DG MOVE presents, during the PSC meetings, the context where the Action is being deployed and the alignment with the relevant EU policies and objectives is highlighted (i.e. related to the EU position at the 41st ICAO Assembly). DG MOVE recently launched the establishment of the new The Renewable and Low-Carbon Fuels Value Chain Industrial Alliance³⁶, and according to information gathered from the interviews, is providing updated relevant information to the Action on aspects related to the SAF, which represents a present area of interest for the EU industry.

There is a continuous communication between the Action and the EU services. The main forum established is the PSC, where the Action management provides the update on the Action implementation, achievement of results and present and future working plans' implementation and forecast. As a consequence of the PSC discussions, actions affecting the project are defined and should be further implemented. The PSC is also approving the Action progress reports for every reporting period. In order to shorten the period of formal communication between the Action and the EU services, it was requested to the Action the elaboration of additional weekly progress reports. The ET considers that the technical advice provided to DG CLIMA and DG MOVE covers the main areas to maintain them sufficiently informed to participate in the PSC and to have an integral view of the Action's development.

Additionally, the role of the EU Delegations in the AMS was not evident in providing policy and technical guidance to the Action. EU Delegations participation could have been more significant facilitating the communication with local actors and connecting with wider EU/local initiatives related to climate change. On the project side, a more targeted communication with the EUDs would have also helped establishing this cooperation between EUDs and project team.

EQ11.- If relevant, to what extent are experiences in one target country being used by the implementer in the other countries? To what extent is the possibly evolving political context in the targeted countries taken into account?

Throughout the different outputs, there are examples on how the Action has been capitalising on the experienced gained in one country and then applying it on another one. Given that the tasks on the different AMS are very similar and only vary according to their different capacity levels and respective civil aviation's infrastructure, the Action has been able to accumulate experiences and knowledge during its implementation that has facilitated, to a degree, the execution of its activities to reach the Action's objectives. For instance, the similarities on the knowledge gaps to develop the SAPs or the ERs, have served to maintain or keep on improving and increasing the efficiency and effectiveness of the capacity transfer sessions. While each country is a very different actor within the ASEAN, some of the difficulties and opportunities shared among them have been exploited by the Action to facilitate its implementation, as described in the below paragraphs.

In terms of considering the evolving political context, there is no better example than that of Myanmar's situation and the only one with enough gravity to affect the Action directly. The specificities and origins of the situation in Myanmar are beyond the breadth of this evaluation, but its

³⁶ Under the Commission's Sustainable and Smart Mobility Strategy and the European Green Deal (kicked off on 6 April 2022 with an open call for membership applications)

consequences have been noted by the ET. As of the start of 2021 support on a bilateral basis to Myanmar institutions has been suspended, not only for this Action but on a larger scale by most EU institutions at large. However, staff from Myanmar's NAA and NAB have continued to participate in the Action's activities only when they are celebrated at Regional or Multinational level. With regard to other countries, despite internal changes in a dynamic political context in all of them, none has affected the Action's implementation to the point that it had to be cancelled or significantly altered.

Specifically, in the case of output 1, "Established conditions for SEA States to submit their State Action Plans to ICAO to reduce CO2 emissions from international aviation", in the case of Cambodia and Laos, experiences gained from the assistance to Brunei and The Philippines were used to increase NAAs readiness for SAP preparations, to ensure an adequate understanding of SAP and associated MRV process.

Regarding output 2, "Established conditions for the SEA States to implement CORSIA process as per ICAO SARPs", activity R1 aimed to secure the MRV for 2019 emissions, was replicated several times, resulting in 3 dedicated sessions with Thailand State Authority and the Thai Aeroplane Operators; 1 session with Cambodia State Authority and the Cambodian Aeroplane Operators, 1 session with Myanmar State Authority and Myanmar State Authority and 1 session with Laos PDR State Authority and their State Operator.

Activity R3 was organised with mixed approaches, resulting in 1 session held with all ASEAN MS and 3 multilateral sessions addressing the ASEAN MS in groups by the level of complexity of their software tools to generate the Emission Report (self-developed tools: Singapore, Indonesia, and Malaysia, AeDMS: Thailand, Philippines, Brunei and Myanmar; No tools: Cambodia, Laos PDR and Vietnam)

In the case of the support provided for the implementation of MRV processes, experience gained in Laos PDR was considered for the implementation in Myanmar in 2020.

In the case of output 4 "Established conditions for the SEA States to define and create the National framework for verification system", the success of the two attachment programmes between ASEAN MS's NABs confirms the use of experiences gained for the establishment of the accreditation systems in one country is being transferred to other country. The Thai NAB is one of the strongest among the ASEAN MS, with a well-established and mature CORSIA accreditation process since 2019 (achieved with Action support in 2019). The Action promoted the Thai NAB as the host of the attachment programme included in the work plan 2021 for a developing NAB (Philippines). The Philippines PAB benefited from the experience acquired by the Action using the Attachment Programme with Thailand TISI to accredit 1st VB(s) in 2022.

Malaysia benefited from NAB Attachment Programme DSM with Indonesia to finalise their 1st VB accreditation process by the end of 2022. Success of the attachment programme between The Philippines PAB and Thailand TISI was replicated between Malaysia and Indonesia. In the last stages of the current implementation (September 2022) NAB of Brunei is considering the opportunity to become observers in the attachment programme between Indonesia and Malaysia37 (During last ACCSW WG session, the Action has explored other areas of cooperation with ASEAN, such as the possibility to extend TISI-PAB attachment programme with other interested NAB.

The implementation of a CORSIA Regulation that will be applied to each States' international aviation operations shall be achieved in 2027, (for such States not exempted during the second phase of the CORSIA programme). All States that are participating in the Action can join CORSIA in the voluntary phase or can delay the compliance of the related SARPs of ICAO Annex 16 until the second phase, but all of them should design similar roadmaps.

The degree of implementation of such roadmaps depends on each country, and the Action made several classifications with the purpose of use synergies and to replicate activities that would require the same type of objectives in different countries, but with an individual application. According to the gradual assistance provided to the AMS, it can be confirmed that the implementing agency, EASA,

³⁷ According to the PM, only to work on GHG scheme, not at the moment for CORSIA accreditation process

is applying experiences that were already acquired in one country when implementing activities in other countries and when such experiences are applicable.

Efficiency

EQ12.- How efficient are the implementation mechanisms proving to be appropriate to achieve planned outputs and contribute to outcomes?

The COVID 19 pandemic affected most if not all Actions throughout the world, eroding their advances and affecting their efficiency. For this reason, it is fair to assess this Action under that angle. After taking that adverse factor into consideration the ET can conclude that the Action has been efficient in managing its finances and human resources. The results highlighted in the previous chapter are an indicator that in spite of the effects of the global pandemic, the Action reacted promptly and efficiently to the new situation by adapting its methodology to long distance learning. As most Actions soon found out, the adjustment was more than just a technical change and quickly got up to speed to attempt to provide the best possible long distance information exchange technology could sustain. As it is to be largely expected the budget is currently underspent and some activities have been carried over and adjusted to fit into the no cost extension that has been granted by the FPI Bangkok.

In terms of budget consumption, the non-EASA technical (independent consultants) budget, has allocated 1.950.000 € or nearly 50% of the total Action budget. In accordance to all activities carried out by all non-EASA technical experts the evaluation team considers that this is an adequate amount taking into consideration that such experts are employed by a third-party firm under a call for services contract. Non-EASA technical experts need to comply with a predefined professional profile to be selected by the Action since the tasks of the Action demands are highly technical. Given the feedback by the final beneficiaries these requirements have been largely fulfilled.

Project's Implementation mode is an indirect management mode where the European Commission entrusts budget implementation tasks to EASA. EASA has a management team that reports to the FPI on a day-to-day basis and to the PSC during their annual Committee meetings. This is also supported by the weekly briefs sent by the Action management to the EU stakeholders. Internally, within EASA, the project management reports to their International Cooperation Unit. The Action is overseen by the operational manager on a day-to-day basis who is overseen by the project manager.

Based on the hours stated in the Action budget, this project management set up is efficient because it dedicates approximately one third of their working time to the project.

The Action was originally designed to employ a local project office manager, based in the CAA of Thailand, who in the end did not consume any resources from the Action due COVID changes. The Action reacted swiftly thereby increasing the efficiency by cancelling that position and reallocated those resources back into the project.

Even though the original budget for travelling is 735,750 € after Addendum 2 and only around 10% has been consumed up until June 2022, this is primarily a consequence of the travelling limitations from the COVID19 pandemic. The original budget was decided taking into consideration the travel intensity of the Action and the COVID19 pandemic situation created since March 2020 was understandably never considered.

The PSC is composed by members of DG-MOVE, EEAS, DG-CLIMA, FPI-Asia Pacific, EASA, Representatives from EU member states who are also active in this region, Representatives from EU aviation industry who are also active in this region, as decided by the EU Services. The interests of the EU are well represented by the public and private sectors entities.

4 PSC meetings have been held within reasonable intervals and sufficient recorded minutes have been produced. The fourth meeting (August 2022) centered on the no-cost extension that the Action has negotiated to mitigate the delays incurred by the global pandemic. The work plan for this no-cost extension was approved.

The Action budget consumption has amounted to 40,9% of the total budget (1.638.000 € out of 4,0 M €) until June 2022, which represents 73,9% elapsed time from a total of 46 months, which includes the original 36 months plus no-cost extension of 10 months.

The Action has received two installments, the first of 1.777.778 € and the second 840.478 €. From the two installments, Action consumption would represent 63%.

From the effective consumption, the remaining unspent budget until reaching 4.0 M€ is 59.1%, while the remaining time for Action implementation until June 2023 is 26.1%. Therefore, the Action is 33% below expenditure.

In the last PSC a new workplan was proposed for the ten months no-cost extension, where, according to project management, the Action will attempt to expend between 1 to 1,5 M€ in the remaining months of Action execution. The characteristics of the workplan take into consideration that this underspending has taken place and therefore there is an ambitious agenda for the no-cost extension period. The highlights of the workplan are the bilateral support to individual countries and studies on developing SAF. These studies have the potential to consume a considerable percentage of the remaining resources. The evaluation team did not have access to a detailed account of the workplan. However, the balance of the two payments made to the Action (as of 21 September 2022) needs to reach the 70% in order to be eligible to receive the next installment in full, although a reduced payment is possible, based on the difference to reach 70% consumption.

EQ13.- Are the inputs / resources provided by the various stakeholders (still) adequate for achieving the planned results?

Overall, the participation and resources made available from the AMS to the Action have been largely as expected in the original design of the Action. The intervention has focused of the training, capacity building of different staff from different organizations from the public and private sector of the 10 AMS. Their participation can be classified as enthusiastic and appreciative of the benefits the Action has offered them. The assigned staff from some countries have had to engage more with the project's experts as their baseline is considered to be lower than others. Therefore, it is commendable that the least endowed nations with the least number of resources at their disposal are the ones which have had to contribute proportionally more in-kind assets.

In the case of Brunei, the resources have come from the NAA and the NAB. It has been appreciated that the NAB has a high level of motivation and the will to establish an accreditation system in a country with such a reduced civil aviation sector. The same could be said of Cambodia which, with few resources, has participated positively in the Action activities. The result of their contribution translates into the accession of Cambodia into CORSIA's voluntary phase. In spite of their high level of development in the implementation of CORSIA, Indonesia's contribution has been exemplary given that they do not require much technical assistance from EASA. Laos' development level could be an obstacle for their planned participation as they count with few spare resources that could prevent them from attending the Action activities. However, their contribution, in terms of human resources, has been positive. The effort and time dedicated for the Action have resulted in the development of their first SAP. As in the case of Indonesia, Malaysia has previous experience in the CORSIA framework, and, in spite of this it has dedicated an adequate number of resources to the project's activities. This contribution has allowed them to achieve an improvement in the elaboration of their 2nd SAP. The expected contribution from Myanmar was manifested in the short time that it was active in the Action for the development of their first SAP. This result was achieved thanks to the attendance to all the activities scheduled by the Action related to SAP and the CORSIA framework. After internal political changes its staff was reduced by 50%. However, the level of involvement can still be appreciated, since the remaining staff continued to participate in regional activities, until January 2022. Despite the fact that The Philippines already had elaborated their first SAP, allocation of its resources to Action activities has been identified, resulting in the improvement of their 2nd SAP. In addition, thanks to their ongoing participation in the project, an MOU between the NAA and NAB, has been signed, allowing both institutions to further contribute resources to the project. Although the Singapore NAA has a very advanced level in the implementation of CORSIA, they still have devoted the required resources to allow them to participate in some of the project's activities. This participation has resulted in gaining the required know how which has been

considered in the establishment of the new NAA's civil aviation environment section. A positive indicator of Vietnam's contribution has been its participation in several workshops, including some that have started at 10:00 p.m. This indicator shows the interest and willingness of the resources dedicated for the project.

During the 2020 – 2021 period the COVID19 pandemic, as was the case with all the other EU interventions, affected the implementation of the Action.

Fortunately, the type and format of Action based on transfer of knowledge, through workshops and other meetings, allowed project management to postpone its implementation without greatly affecting the expected results. However, the format of the delivery of this transfer of knowledge had to be adapted to purely online delivery. The quality of this delivery has been discussed already in the effectiveness section and it has to be born in mind that the delivery of the online capacity building sessions is not as efficient as the presential format. The use of the format on-line cannot fully replace the conventional presential format. The limit of time beneficiaries can stand in front of their remote communication devices is much less than the time that people can spend in presential sessions.

The delayed activities were rescheduled without affecting the design of the assistance and allowing to maintain the expectations of the states in the face of cooperation. However, the period affected by the COVID is larger than the extension that has been awarded to offset the delays. Nevertheless, besides aiming for the completion of an ambitious agenda for the remainder of the project, the format of the delivery of the sessions has been reverted to the original plan, which is of a presential nature. The 2022 – 2023 workplan takes into consideration most of these delays.

EQ14.- Does the intervention have an adequate monitoring system?

The evaluation could observe that while the steps taken to ensure the activities and the outputs are done in a professional manner, this process is not entirely documented as a quality control process and thus as part of an internal monitoring system that works to measure these qualitative sub-indicators, particularly the measurement of the transfer of knowledge. As a part of the EASA's internal quality control system, for instance, some experts, but not all, carry out some end-of-sessions' evaluations whilst some do not. They all provide an oral account to the lead expert, but these accounts are not formalised in writing and are not used for reporting purposes. This system has been found adequate but not sufficient to guarantee an integral internal quality control.

Furthermore, the reports provided to the EU alongside the Partnership Instrument Monitoring System (PIMS), are limited to these indicators and other narrative that provides a limited insight on the qualitative advances the Action has achieved. The Action does have important milestones and results that have been accomplished but are not part of the indicators of achievement. However, the Action complies with the internal PI funded Actions PIMS that has allowed the Action to gather certain data and monitor its progress.

The Action has been receiving intermittently feedback from the AMS related to the results of the activities and their needs to be covered in future activities. While there have been no reported changes in the course of the Action due to information received from the AMS, the Action has evolved and adjusted its approach and the content of its materials to suit the needs of each of the beneficiaries. While this feedback process has been categorised by the evaluation team as intermittent, it has provided valuable information for the Action to react to each of the AMS requirements.

RACER (Relevant, Acceptable, Credible, Easy and Robust) indicators as per the instructions provided in the Description of the Action document, are incongruent to a certain extent with the "List of Core Indicators for Partnership Instrument" to which the Action ultimately needs to adhere to and work with. These are also the indicators that are valid for reporting purposes and the ones the Action is measured against. It is understood that the foremost importance is to comply with the Instrument's indicators' regulations, however, it is not common for an Action of this nature, with no less than ten countries as beneficiaries, and with technical data that needs to be transferred successfully among its many individual beneficiaries and, additionally, in a language which is not a mother tongue for the vast majority of those receiving and providing the information, to use only such kind of indicators.

While there is some flexibility in the PIMS format Report (e.g., Annex 5.2 of the Project Annual Report) for the project management to be able to provide further explanations to the ones offered in the annual reports, these are limited and do not provide a full picture of the positive work the Action is achieving in objective qualitative terms.

The progress reports are of a mixed quality but also somewhat inconsistent in its reporting contents. As an example, the first report offered a different version of the Action as it adopted a new output (output 5 "Synergies at Regional level") as well as a series of indicators that in essence, some of them, would have been better catalogued as extra components/outputs. These indicators, the reporting format, and the numbering order were not used again in subsequent reports. The reports to the EU are provided a few months after the reporting period thus their usefulness as a management tool is diminished³⁸.

For example, there are a number of important achievements or processes that have reached or been met that can be used to give the quantitative indicators in the LFM more substance, demonstrating the good quality of outputs and outcomes archived so far. For instance, the development of the SAPs follows a qualitative process, one that is not documented as sub-indicators, that guarantees to a degree the quality of this output. **For example** a) the process to contract experts which guarantees a minimum level of expertise; b) the materials developed by the experts go through a quality control process which also is not used as a qualitative sub-indicator. C) In some instances, after the capacity building sessions are concluded there are qualitative evaluations on the absorption rates of the participants which is also an indicator on the eventual SAP output.

Sustainability

EQ15 - Are adequate measures in place to ensure the project's sustainability and lasting results beyond the Action?

The measures assisted or the support provided hinge on two facts. One is the previous consultation EASA has had with aviation authorities and governmental bodies and national stakeholders from AMS and from EU institutions, and the second one is due to the cumulative knowledge and experience itself, the chosen lead expert, and other experts. These two factors serve as the platform that equates the needs analysis the Action has made, and the requirements different countries wish to adopt in terms of the knowledge gaps they might have.

Additionally, the Action and the delivery of its benefits is characterised by the appropriateness in the view of its beneficiaries. Throughout the interviews with them and upon revising the details of the numerous it was apparent that the people that had received the capacity or information, was the right target and that the Action made its best effort to make sure that most of the relevant people in each country would be either be receiving information directly from it or that other relevant beneficiaries would be "near" those that attended the trainings and other information sessions. The combination of the quality and relevance of the technical material transferred to beneficiaries, together with the time dedicated to each country or group of countries, has increased their capacities and also the sustainability levels of the objectives of the Action. In short, sustainability in terms of relevance and appropriateness is satisfactory.

All different aspects of sustainability are interlinked and depend on each other to a certain extent. However, they can also vary to a higher degree. The financial sustainability of this Actions is not entirely subject to the priorities of each of the national entities participating in the project. In most cases as it is mentioned above the suitability of the goods received is deemed very adequate and is a priority that has been identified as essential to attain the intended objectives of each national body. However, in spite, as expressed during the interviews with different NABs and / or Civil Aviation Authorities, their financial capabilities prevent most of them to continue or finance a similar level of capacity building like the one provided by EASA, and in most cases, none. A common denominator among most national entities interviewed was that they lack a budget for this or simply the resources in the first place to do so. In most cases, their respective offices were already stretched or

³⁸ The evaluation team did not receive the latest draft of the third report.

overstretched in term of personnel and/ or workload. Ironically, the very acquisition of the knowledge provided, which they accept as required or necessary to comply with their work requirements, extends their work portfolio and find themselves with a heavier workload. This was one of the reasons provided to justify their plight to get more training for them and for other colleagues who had not been trained. Additionally, this was also put forward as a reason to be able to carry out internal replication.

As mentioned in the effectiveness criteria and asserted in the above paragraphs, the quality of the training was deemed very high. This was in reference to the materials provided, the facilitators (experts hired by EASA) and the adequacy to the existing needs and requirements of the target audiences in each country. However, a factor that will affect sustainability in a negative way is the real absorption levels by different stakeholders. There are two aspects to this area. One is the technical level of the material vs their individual capabilities and experience, and the other is the English level of the recipients of the information. For the first aspect it can be assumed that even in the least developed countries (Laos, Myanmar, Cambodia) there was a minimum level of capacities that allowed the beneficiaries to process the information received. During the interviews it could be appreciated that there was an acceptable capacity level that was congruent with the contents of the material provided by the project. However, the same could not be said in terms of their English skills. This topic was rather elusive as most beneficiaries, for cultural reasons and by holding the interviews mostly in groups, would not accept the fact that their English level was medium or low, even though during the interviews their level of understanding was evidently low. There is no certain way to quantify how much this negatively affects the transfer of knowledge, but it can be assumed that it does. The Action at times evaluates at the end of the sessions how much information has been understood but this is not applied thoroughly.

Despite the language barrier, Cambodia has managed to report every year emissions under CORSIA. Similarly, Vietnam progressed with its SAP and was submitted to ICAO, while Lao has been able to submit their ERs to ICAO for 2019, 2020 and 2021.

The private sector from the European Union will play a role in terms of the sustainability of the Action in terms of benefiting from it in the medium or long run. The Action does not make overt efforts to include the private sector's interests, nor does it help directly regarding its interests during project's activities within the AMS. This is the right approach to take as the Action's objective is to support existing policy dialogues with AMS. However, the overall objective does call to focus on enhancing the [political] economic [and environmental] partnership between the EU and AMS. To this effect the project's design is engineered to strengthen the technical platform of the AMS in order for them to, eventually, be able to purchase or acquire European Union-based technologies, goods and services which will, not only help towards the project's long-term sustainability, but also to benefit European economic interests.³⁹ However, the plan or necessity to shutting down of the Action website very soon after the Action ends, can mean lost opportunities for the private sector in terms of those seeking to do business within AMS. Many companies will not have heard from the Action until after it closes and the website, with all its valuable information, including leads, economic areas of interest, the website could be the only means for them to initiate any Actions in the region.

EQ16.- What level of commitment and interest exists at the ASEAN States institutions and industry to ensure sustainability beyond de Action?

The suitability and hence the interest on the information provided that is progressively enabling them to accomplish the tasks related to meeting CORSIA related requirements, is very high. There is also an increased consciousness of what can be done with the project's tools/knowledge and how they can positively affect their respective civil aviation industries. However, it is also known that much work still needs to be done in terms of knowledge gaps and for the need for other stakeholders to get capacitated in order to compliment what has been achieved by the Action so far. This extra work

³⁹ The indicator "*Rio markers (2) compliance levels (Climate change mitigation and Adaptation)*" was discarded as, while the project will contribute positively towards measure to reduce CC effects, it was not designed to take steps towards mitigation and adaptation as a consequence of experiencing climate change effects.

that needs to be done, in the case of most of the beneficiaries' institutions, requires resources that most beneficiaries' governments do not have at their disposal.

Part of the assumption, that the Action benefits are in their best interest, is the fact that many of the countries involved were already part of the CORSIA's voluntary phase, with Cambodia joining after the start of the implementation of the Action. The resource predicament does not lie in a fundamental ideology that runs against the aims and objectives of the project, but of their own internal limitations as part of a bureaucratic governmental machine. Indeed, there are countries that do count with resources and can overcome this obstacle much easier than others. However, the ones with the most arduous barriers, the less developed ones, are even, in some cases, dependent from external donors (organisations or third countries) to meet some of their basic governmental budgetary needs.

Even though the countries appropriation is considered high in most instances, there are repeated requests, many not made official to the project management, on the need to provide more practical examples, best practices and lessons learnt, further adapted to the local context, on the one hand. On the other, there are calls to receive further training, as it is common in this technically oriented transfer on knowledge projects, on repeating certain aspects of the already received training / capacity building. This common request not only speaks about the relevance and sustainability already discussed under question 15, but of the continuous interest demonstrated by the AMS to implement the CORSIA programme and to maintain support received from the Action

Furthermore, AMS varied economic development degrees not only set them apart from ideologies in terms of how they run their internal social and economic affairs but also represent the wide gaps that exist between their airline industries. However, what they all do have in common, according to the feedback from interviews and documentation provided during the evaluation exercise, is their willingness to participate and benefit from the Action and their understanding on how much the institutions they represent are benefiting from it.

A recurring issue, personnel turnover, whilst real and taking place in most government agencies in most countries, has not affected the Action or its objectives on any of the ASEAN countries. In general terms, the only country where sustainability is compromised is Myanmar since the current EU policy of not engagement has set it aside from most Action activities. Additionally, since there is no visible change in the status quo of that country that would permit the evaluation team to make an assessment as to when their participation will resume.

EU-added value

EQ17.- What is the strategic significance of this Action in the targeted countries?

The ASEAN region represents an important economic strategic significance to the European Union. In terms of general commercial links manufactured goods dominated EU trade with ASEAN partners in 2021, with 82 % of total exports and 86 % of total imports⁴⁰. In terms of country specific importance, in 2021 Germany was the largest EU exporter of goods to the region, with €26 billion. In term of imports, The Netherlands was the largest importer from ASEAN countries with a value of €33 billion. Among the ten ASEAN nations, Singapore was the largest ASEAN destination for EU exports of goods in 2021, while Vietnam was the largest exporter of goods from ASEAN for EU goods.

In fact, in spite of the recent pandemic, there has been a steady increase of exports and imports between the EU and ASEAN between 2011 and 2021, with imports from ASEAN between the two blocs almost doubling during this period. On the other hand, exports to the ASEAN region, whilst increasing by 30% during this period, trade in goods with ASEAN countries continues to be in deficit. Vietnam, Singapore, Malaysia, Thailand, Indonesia, and the Philippines are the EU's largest importers of EU goods in the ASEAN region.

⁴⁰Source:https://ec.europa.eu/eurostat/statistics-explained/index.php?title=ASEAN-EU_-

_international_trade_in_goods_statistics#EU_trade_in_goods_with_ASEAN_countries_continues_to_be_in_deficit

The ASEAN MS based airlines are largely using aircraft that are manufactured in the EU (i.e Airbus) and new requirements from CORSIA programmes ask to introduce mitigation measures in their SAP. Such measures, aiming to reduce CO_2 emissions, are focussing on the new technology (more efficient engines, aerodynamically optimized structures) that manufacturers are implementing in their aircrafts.

EU industry and institutions have already developed a significant expertise in the development, production, certification and distribution of sustainable fuels, and SAF has become one of the most strategic mitigation measures to be implemented in the aviation sector to reduce CO₂ emissions.

The EU – SEA CCCA CORSIA has a unique format, providing benefits on training, technical assistance, to the NAAs, NABs and local industry, in comparison to other parties' existing cooperation activities in the region (i.e. ICAO Buddy Partnership). This unique format consists of providing tailor-made assistance to fill the gaps on States compliance with international requirements of the international civil aviation environmental SARPs. This format also covers a set of subject matters, like SAF, that no other cooperation institutions are providing. According to most beneficiaries, currently there is still a need for continuing with EASA's assistance on civil aviation environmental matters.

Under the recent signature of the EU/ASEAN CATA, airlines of ASEAN and the EU will have greater opportunities to operate passenger and cargo services between both regions. ASEAN and the EU airlines will be able to fly any number of services between both regions. Due to the positive visibility of this Action with stakeholders within the civil aviation institutions, it could be assumed that the Action engagement with in some countries (i.e. the smaller / less developed ones) has contributed to the successful conclusion of the negotiations.

EQ18.- Has the Action contributed to an improved image/visibility of the EU in the targeted countries

The Action follows a standard Communication and Visibility manual, not unlike other EU- financed interventions. Simultaneously, the visibility requirements are not deemed complex as the target audiences are relatively narrow. Additionally, most of the identified target audience are also participants of capacity building sessions, conferences, workshops, and other events where the application of the visibility and communication guidelines is not a complex task, such as presenting the Action as supported and financed by the EU, setting up an EU Flag in a prominent place, alongside logos and other visuals that indicate its links with the EU.

Taking the above into consideration the Action has taken the necessary steps during all these events to follow the Communication and Visibility Plan guidelines consistently. After a review of different minutes, videos and other documents, the evaluation team can confirm that the Action has been consistent with its efforts to make sure all participants are aware that the Action is financed by the European Union and what the Action aims to achieve. During the interviews with various stakeholders, all could identify the Action with the European Union. The European Union was signalled as the source of the funding for the project, even though with some stakeholders the doubt remains whether EASA and the EU were both financing the Action. EASA's strong visibility and being the most appropriate body to execute this Action might have confused a few stakeholders about their financial contribution. Even in these few instances, the EU was thought to be a financial source that supported the activities that the beneficiaries had been participating in. Most importantly, in spite of having identified themselves as independent from the European Union/Commission, the evaluation team received from the majority of the participants appreciation messages, directed to the EU for the help received so far. This indicator weighs heavily in considering the positive regard beneficiaries can have about the EU. An important factor is that this positive regard is also shared with colleagues and other indirect stakeholders, replicating, and reinforcing a positive image for the EU.

The Action Website (2020) contains useful information and provides a visibility platform for the EU. However, it is not very visible as its name is long and difficult to remember on the one hand, and on the other, when the words CORSIA and EU are used as the keywords for a web search, it usually comes either at the bottom of the screens or in the second half. Nonetheless, to those seeking this specific website, the search is not complicated.

While many first-time users do not usually return to any given Action website, the Action's website does not attempt to anticipate this typical behaviour and does not have on its front page civil aviation-related information that could draw people for a second time.

However, many of the project Actions on visibility are not indicated in the visibility manual. In fact, the Action carries out a more sophisticated strategy in practice than the one set in the manual. For example, it utilises mostly European experts that are associated with Europe. The policies or aviation practices that are being advocated are European (Union) just as the examples or best practices from European countries provided. The Action also promotes, raises awareness, but not in a direct or commercial fashion, about European companies or service providers that later on will have an opportunity to engage in the region. This implicit methodology has been applied from the start of the Action during the kick off meeting where an effort was made to enhance visibility during the launch of the Action. This visibility can also be confirmed.

The Action has also, successfully, made a point to be visible at high level events and civil aviation related conferences. Some key stakeholders made references to "remembering" seeing the EU at UN FCCC awareness meeting, the ASEAN Air Transport Working Group meeting, as well as the ACCSQ Working Group meeting in 2020. As reported, the attendance to these meetings brought a satisfactory level of positive visibility. However, in budgetary terms, the allocated amount of 7,200 euros is a modest amount but, nevertheless, in line with the requirements of the visibility plan. Due to the restrictions imposed by the global pandemic, planned expenditure has been reduced although the Action continued to find ways to widen the EU's visibility in the field of aviation.

Coherence

EQ19.- To what extent is the Action coherent and complementary in relation to relevant EU /EU MS programmes/ strategies/policies? Is this Action capitalising on related –if any- work of other EU services?

The evaluation team has found that the Action is coherent with the ASEAN – EU Plan of Action (2018 – 2022) to strengthen the cooperation for the conclusion of the CATA and in the cooperation to promote the energy efficiency and conservation measures and technology, promoting the development of alternative energy (SAF) as well as to promoting awareness and capacity building in the sector.

It has been also found that coherence exists with the EU Strategy Cooperation in the Indo-Pacific and the ASEAN in accordance with to the priority areas for EU Action identified in the strategy, including sustainable and inclusive prosperity and green transition⁴¹

The ARISE Plus Civil Aviation Project is a project that is being implemented in SEA and funded by INTPA. Since ARISE Plus Civil Aviation project falls under the framework of the ASEAN Regional Integration Support, it supports the development of the ASEAN Single Aviation Market. This is relevant to CCCA CORSIA since it covers the enhancement of air traffic management, which is a key priority outlined under the Kuala Lumpur Transport Strategic Plan 2016-2025 adopted by the ASEAN Transport Ministers in November 2015.

This project started in January 2018 and is being implemented by EASA in the ASEAN region over the 2018-2022 period. The timing of this project and the EU-SEA CCCA Action is coherent and relevant, as both have been assisting the beneficiaries of the ASEAN countries at the start phase of CORSIA in 2021. Just like CORSIA, one of the results from ARISE Plus is directly related to the EU-SEA CATA, which is to Strengthen ASEAN-EU cooperation in air transport, including discussions on a possible comprehensive ASEAN-EU Agreement on Air Transport⁴².

While the overall objective of the ARISE Plus Civil Aviation project is focused on enhancing connectivity in the ASEAN Single Aviation Market, the EU-SEA CCCA Action has been focussing on increasing the readiness of the partner countries in adopting a higher standard of environmental

⁴¹ https://www.eeas.europa.eu/eeas/european-union-and-indonesia-hold-6th-political-dialogue-joint-press-release_en?s=47

⁴² https://www.ariseplusaviation.org/about-eu-assp-ii-z

protection and climate change. More specifically is the effective coordination with the ARISE Plus Civil Aviation project's activities under result 3, which calls for the strengthening of national capabilities of each ASEAN MS and for its alignment with ICAO's SARPs. Moreover, both projects have been implemented by EASA and shared the project manager and management methodologies.

The Aviation Partnership Projects (APPs) in East and South Asia, Latin America and the Caribbean, are a set of projects implemented by EASA. These projects support the national aviation institutions from beneficiaries States, aiming to strengthen their regulatory and oversight roles, according to international standards and using EU best practices and civil aviation regulatory framework as the main reference. Of particular relevance to this CORSIA Action is APP's original result 3, which aims to raise standards of environmental protection and climate change Action. This expected result has been transferred to the CORSIA projects (ASEAN and Africa and the Caribbean). The EU-SEA APP has served as initiator of the EU action in climate change in international aviation and this preparatory work has helped focusing the EU-SEA CCCA Action and created economies of scale in order to maximise the benefits of the project, which needs to be implemented within an ambitious timescale.

This agreement has brought significant economic benefits to both regions in terms of additional direct traffic, but also improved regulatory cooperation in the areas of aviation safety, security, air traffic management, aviation infrastructure, environmental standards, competition, investment in air carriers, consumer protection, computer reservation systems and social aspects. This project, in addition to the ongoing civil aviation projects with ASEAN Member countries, is positively contributing to these discussions.

EQ20.- Is there coherence with Actions of other international donors?

With regard to complementarities and synergies, ICAO through its Technical Cooperation Bureau (TCB) and Global Aviation Training Unit (GAT), in cooperation with its regional office of Asia – Pacific, launched in 2018 the Capacity-building and Training on CORSIA (ACT-CORSIA) programme. The ACT CORSIA aims to support ICAO's Member States in dealing with implementation of the first edition of Annex 16, on CORSIA, and to give assistance under the ACT-CORSIA Buddy Partnership⁴³. This programme delivers mainly training courses to the beneficiaries and are sponsored by donors' countries. In the case of the Asia Pacific region for the period 2020 – 2022, these are Singapore, Japan and Republic of Korea. Japan is sponsoring Cambodia, Malaysia and Myanmar, while the Republic of Korea is sponsoring Lao PDR, The Philippines and Vietnam.

The evaluation team appreciated that the Action is aware of the activities by other international donors that are currently taking place under the ICAO ACT CORSIA programme, and assessed if possible overlaps could have happened, although no evident links have been appreciated between the ICAO ACT CORSIA programme and the project.⁴⁴ This situation, in the case that the scope of the support that is provided by ICAO overlaps the project's activities, may affect the availability and the interests of the beneficiaries' staff to participate in the Action activities, due to the overload of cooperation-related activities they may have to face, in addition to their daily workload.

The International Air Transport Association (IATA) promotes a series of programmes that are announced to be tailored to assist commercial airlines in improving their environmental performance including the promotion of SAF, carbon offsets, fuel and emissions reporting and environmental audits. In particular, the IATA activities and training on CORSIA and the aviation environment and fuel related courses.

No other donors from EU MS have been identified in ASEAN MS for the purpose of supporting aviation emissions reduction programmes.

⁴³ https://www.icao.int/environmental-protection/CORSIA/Pages/CORSIA-Buddy-Partnerships.aspx

⁴⁴ The project team communicates the work plan to ICAO APAC Regional Office (RO) after approval and invites the RO to seek collaboration or to possible interference. PM team indicated that ICAO RO has never replied to these invitations. The project also invites the AMS to highlight the possible interference or overlap of support provided by other organisations. On the other hand, during the interview with ICAO officials from its headquarters in Montreal, they stated that they were not aware of the project activities.

Cross-cutting elements

The evaluation assessed if and how these cross-cutting elements were integrated in policy recommendations or mainstreamed in the pilot projects.

As per the inception report, the evaluation team assessed if the relevant SDGs and their interlinkages were identified. The EU-SEA CCCA Action has been supporting the Agenda 2030 as it has been contributing to the achievement of the Sustainable Development Goal 13 (Climate Action), whilst simultaneously promoting progress towards SDG 7 (Affordable and Clean Energy) and SDG 9 (Industry, Innovation and Infrastructure)

In relation to **SGD 13**, Climate Action, the project is based on the reduction on emissions of GHG, to lessen climate change. Almost all activities and knowledge transfer are based on adopting practices that would reduce the above mentioned emissions which leads to searching for alternative fuels, affordable and environmentally cleaner.

In relation to **SDG 7**, Affordable and Clean Energy, the project through the development of SAPs supports mitigation actions like SAFs, more efficient aviation engines, advanced technologies and practices to reduce CO₂ emissions. However increased efficiency and environmentally friendly practices are not only confined to cleaner fuels but to other technologically oriented innovations that can help reduce emission and/or enable current technologies to be more environmentally friendly.

In relation to **SDG 9**, Industry, Innovation and Infrastructure, just like SDG 7, the aim is to reduce the emissions with a new sustainable fuel industry applicable to aviation, and new aircraft technology that would allow a relevant reduction of CO2 emissions. The Action, by promoting these changes, is also fostering innovation in a predefined short and ambitious timeframe. It is ambitious as the consequences on the ground for ordinary citizens living in remote areas, often are the most vulnerable, like the elderly, women and young women, have become increasingly more evident and action is urgently required.

In relation to **SDG 5**, gender equality, the Action did not design and implement a gender strategy. It did, however, consider the number of men and women participating in each of its activities and annotated their respective participation. Also, the project was the co-organiser together with the ARISE+ project and the EUD to ASEAN of the ASEAN Youth Talk Show: Women in Aviation.

The evaluation team was informed that a gender strategy had been discussed during the design stages of the Action but that it was decided that it would only focus on gender participation i.e. disaggregate the gender of the project's participants. While this approach seems reasonable for an Action which is cantered on civil aviation GHG, and other technical issues where gender does not play a visible role, the Action has not used yet the opportunity while engaging hundreds of stakeholders to raise awareness on one of the main reasons why averting climate change is important according to a gender perspective.

It is worth noting that the people mostly affected by climate change in Southeast Asia (and the rest of the world) are women⁴⁵ and particularly young and elderly women. The evaluation team agrees that the Action should not focus its workshops and other transfer of knowledge sessions on gender issues. It also acknowledges that the List of Core Indicators for PI is not entirely conducive for a gender approach. However, there are gender areas linked to civil aviation and climate change where the Action could have raised awareness on gender issues. Not only is gender and gender equality an important cross-cutting issue but the Strategic Engagement for Gender Equality 2016-2019 established the Commission's work programme in terms of gender equality for the 2016-2019 period. It is a comprehensive framework outlining the Commission's commitments to promote gender equality in all its policies as well as into EU funding programmes. More specifically, under its Air Transport Gender Equality initiative, ICAO calls for transport gender indicators through the collection

⁴⁵<u>https://www.undp.org/publications/gender-and-climate-</u>

change?utm_source=EN&utm_medium=GSR&utm_content=US_UNDP_PaidSearch_Brand_English&utm_campaign=CENTRAL&c_src =CENTRAL&c_src2=GSR&gclid=CjwKCAjwhNWZBhB_EiwAPzlhNgQ9PK7J_pYtjhbjH0N0aUrpD6KD3EYEh0jodUL9A9aql7j3W5vJdxo ClpwQAvD_BwE

of workforce statistics as gender inequalities remain persistent in the international air transport industry⁴⁶.

Findings by Countries

Brunei

Brunei published in December 2018 the Brunei Aviation Regulations (BAR) 16 – Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), drawn upon ICAO Annex 16, covering CORSIA's administrative requirements, as well as CORSIA monitoring, reporting and verification (MRV) requirements including: Emissions Monitoring Plan and CO₂ emissions monitoring requirements; reporting of CO₂ emissions and Emissions Report, as well as verification requirements. CORSIA regulation adoption falls under the Brunei Darussalam National Climate Change Policy (BNCCP, 2020), Brunei Climate Change Secretariat of 2020.

Negara Brunei Darussalam was able to commence development of its 2019 1st State Action Plan report, with the assistance of the Action. The SAP is still awaiting submission to ICAO. Nevertheless, the evaluation team was not able to fully corroborate this information with the available stakeholders from this AMS. Despite of the relatively small scale of the international civil aviation of the country, the NAA was able to elaborate the SAP according to the international requirements, within the first four months of the project.

It has been observed that in Brunei the technical readiness to implement CORSIA as per ICAO SARPS has been enhanced, with the support provided by the Action since February 2020. However, CORSIA implementation will remain a challenge, partly due to the size of their aviation sector and to the limited capacity of their institutions.

At the time of the evaluation exercise, there were five countries that had not opted yet to participate in the voluntary phase of CORSIA, one of them being Brunei. As part of a strategy to guide them and encourage them to join CORSIA, the Action is supporting it in developing a better understanding of its own climate change challenges. For this, it has centred its focus on this output through the commissioning of the Brunei State Report. The logic behind this decision has been to present local intelligence, whilst analysing and identifying relevant opportunities within the country.

The project has also initiated the support to facilitate the establishment of the GHG schemes, necessary for CORSIA at a later stage, but also in support to the wider GHG programmes under the Paris Agreement. This is especially the case for Brunei, where the project is targeting bilateral support to develop GHG schemes capabilities.

However, in spite of these early and ongoing successes Brunei has a small national aviation market, which increases the difficulty level for the emergence of national VBs interested in being part of the CORSIA scheme. However, staff from its Ministries, where a NAB could be established, have benefitted from the Action's training sessions receiving the necessary background of the accreditation and verification framework, allowing them to develop the required scheme associated to the accreditation processes. Brunei's NAB has not started the accreditation process for CORSIA but the knowledge acquired with the support of the Action allows it to plan to have its NAB and accreditation scheme ready by the end of 2022.

In the last stages of current implementation (September 2022) the NAB in Brunei is considering the opportunity to become observers in the attachment programme between Indonesia and Malaysia.

Cambodia

Cambodia developed its National Environment Strategy and Action Plan 2016 – 2023 providing the country with a road map for its commitment to the achievement of the Sustainable Development Goals including those in line with this Action. The Cambodia Climate Change Strategic Plan (2014-

⁴⁶<u>https://www.icao.int/Newsroom/Pages/Aviation-gender-equality-explored-at-joint-ICAO-IATA-ACI-IWD-2021-Women-in-Leadership-High-level-Dialogue.aspx</u>

2023) outlines the need to reduce GHG emissions from the transport sector by adopting low carbon emission technologies and to raise awareness about the effects of GHG on climate change.

The Action has supported Cambodia to elaborate its 1st SAP allowing it to include updated and upgraded mitigation measures. This will result in the submission of their 1st SAP scheduled for December 2022. The necessary regulatory development, which was carried out with the assistance of the Action since February 2020, has advanced to finalize its CORSIA national regulation and the decision of Cambodia to join the voluntary phase of CORSIA in May 2022, as a direct result from the Action. Indeed, Cambodia acknowledged that the support provided by the Action influenced and was a factor in its the decision to join the CORSIA programme. Additionally, Cambodia has submitted its ERs 2019 to 2021 to ICAO. In the case of the CO₂ emissions baseline it has been observed that there are not appropriate conditions for its establishment and further being included in the SAP report.

As a result of the COVID 19 pandemic, according to its beneficiaries, the format (online sessions) used by the Action to support Cambodia during the pandemic was not deemed entirely appropriate and useful for their competency acquisition on SAP elaboration, as the participants were not able to fully understand the set of topics covered during the working sessions. However, according to the the Action's PM, the project team still will continue to aim to support Cambodia to submit their first edition of the SAP before the end of the project. The current version of the SAP was not made available to the ET.

As part of a strategy to guide and encourage Cambodia to join CORSIA, the Action is supporting them in developing a better understanding of its own climate change challenges. For this, it has centred its focus on the Cambodia State Report. The justification for this country-specific output has been to present Cambodia with local intelligence, with an analysis and identification of relevant opportunities that could help drive it to join CORSIA (which it has already done).

However, in spite of these early success, Cambodia's small national aviation markets raises the difficulty level for the emergence of national VBs interested in being part of the CORSIA scheme. However, staff from their NABs, have benefitted from the Action's training sessions receiving the necessary background of the accreditation and verification framework, allowing them to develop the required scheme associated to the accreditation processes. The NAB has not started the accreditation process for CORSIA yet. However, the national aviation performance should improve thanks to the implementation of the accreditation systems for certification of CO_2 emissions by airlines, according to the CORSIA regulation. The first signs of the Action's potential impact towards such improvement have already been observed in the preliminary steps for the establishment of the accreditation body in Cambodia.

Indonesia

Projected by the International Air Transport Association (IATA) to become the world's fourth-largest air transportation market by 2036, is a factor that enhances the relevance and appropriateness of this Action for Indonesia.⁴⁷ Furthermore, Indonesia published its Action Plan on Aviation and Climate Change in 2010. In 2014 the Indonesian Aviation Biofuels and Renewable Energy Task Force (working closely with ICAO) was created, composed of four sub-task forces to work on formulation of policy, regulation and a capacity-building program, research and development, testing and certification, commercial, risk analysis and sustainability (ICAO working paper Assembly 40th Session). Additionally, Indonesia has established a Task Force for Mitigation of Climate Change and Green House Gas Emissions for Air Transportation Sector demonstrating its commitment to reducing GHG emissions. Further cementing Indonesia's commitment to curve its civil aviation emissions, it has been a member of the Committee on Aviation Environmental Protection (CAEP) since 2016 and has been an active member of the Sustainability Certification Schemes Evaluation Group (SCSEG).

A direct result of the Action assistance and training provided to Indonesian NABs and VBs is that some of them have been already accredited. The Attachment Programme between peer countries, Indonesia – Malaysia, for the establishment of the national accreditation system has been

⁴⁷ <u>https://www.iata.org/en/pressroom/pr/2018-10-24-02/</u>

demonstrated as a successful tool as some VBs will have completed their accreditation in 2022 by the less experienced NABs. The direct support of the project, complemented by the Attachment Programme, also facilitated by the project, is supporting Malaysia to finalise its CORSIA Accreditation Process and delivering the first accreditations to local VBs before the end of 2022. Indonesia's level of competence allowed them to dispense with the project's offer for capacity development on this area, except for the Order of Magnitude Check, assessing the completeness of emissions data reported by the operator⁴⁸. Indeed, this AMS already counted with proven experience before the Action started in 2019 and have a well-established GHG scheme and the NAB (KAN) that elaborated the full CORSIA scheme for accreditation. Their first accreditation already took place in 2019 when their NAB was set up and ready to accredit its first VB. It must be mentioned that even though Indonesia has already participated in some Action activities and have attended Action's webinars, no additional support has been requested. Additionally, it can be said that the NAB in Indonesia is among the most experienced in the region, having the full accreditation process for CORSIA since the first year of the Action, and having already accredited three VBs in 2020. This was a direct result of the prompt regional and bilateral support afforded by the Action.

The SAP document available at ICAO official website, edition Dec. 2021, demonstrates that conditions have been established at Indonesian NAA to elaborate and update further versions of the SAP. In spite of Indonesia's relative advanced knowledge on topics related to the submission of the SAP, the beneficiaries expressed the usefulness of the additional knowledge received through the project, like the approach to updating on the ICAO Doc 9988 requirements.

Additionally, the CO_2 Emissions Reports (ER) 2019, 2020 and 2021 have been developed and presented by Indonesia. Given the verified difficulty observed by the evaluation team for the AOs in the completion of the CO_2 Estimation and Reporting Tool (CERT) to generate their ER, it can be determined that the quality of the training provided by the Action resulted in achieving its goals, allowing the participants to complete the CERT information.

Laos

In spite of Laos having few commercial flights and few international routes there is a commitment to tackle GHG emissions from all its sources reflected in the Country Programme Document for the Lao People's Democratic Republic (2022-2026) and the Strategy on Climate Change from 2010. Furthermore, the Natural Resources and Environment Strategy (2016-2025) from the Ministry of Natural Resources and Environment⁴⁹, based on the National Social and Economic Development Plan, the National Strategies for Economic Development and Poverty Reduction, highlights climate change as a significant threat and calls for preventive measures.

The ET confirmed the finalization of 1st edition State Action Paper, which has been developed and is ready for submission to ICAO since June 2022. Notwithstanding this, in the interviews with the national stakeholders, the assessment concluded that there are knowledge and resource gaps that still needs to be addressed for the next SAP report editions to be presented with less assistance from the Action.

For the establishment of conditions for CORSIA, the Action rightfully focussed on the consolidation of the MRV knowledge, which was successfully applied in the development and submissions of the ER in 2021. From the interviews to the stakeholders, it cannot be confirmed that Laos will join the voluntary phase of CORSIA. At the time of the evaluation exercise, Laos had not opted yet to participate in the voluntary phase. As part of a strategy to guide them and encourage them to join CORSIA, the Action is supporting Laos in developing a better understanding of its own climate change challenges. For this, it has focused on output 4 by targeting Laos through the commissioning of its State Report. Just like with other states that have not joined CORSIA, the logic behind this decision has been to present a tailored made report with local intelligence, an elaborated analysis and identifying relevant opportunities for the country. The purpose of the State Portfolio document that has already been elaborated by the Action is to identify climate change challenges and

⁴⁸ ICAO Annex 16, Volume IV, Part II, Chapter 2, 2.4.1

⁴⁹ <u>http://extwprlegs1.fao.org/docs/pdf/lao170969.pdf</u>

opportunities in Laos, within the aviation sector, that will be used in high level meetings to recommend key Actions to key stakeholders. Just like other small states within ASEAN or those with limited civil aviation industries, its small national aviation market has a higher difficulty level to encourage the emergence of national VBs interested in being part of the CORSIA scheme. In spite of this factor, staff from its NABs have benefitted from the Action's training sessions by receiving a considerable amount of the necessary background of the accreditation and verification framework.

Laos' development level could have been an obstacle for their participation in the Action's activities as they count with few spare (human) resources that could prevent them from joining in the training sessions and other workshops. However, their contribution, in terms of staff being made available, has been positive. The effort and time dedicated for the Action have resulted in the development of their first SAP.

Taking into consideration the technical level of the material elaborated by the Action vs their individual capabilities and experience, together with the English proficiency level of the recipients of the information, the evaluation team can confirm that there was an acceptable minimum level of capacities that allowed the beneficiaries to process the information received.

Malaysia

Malaysia's Strategic Green Initiatives calls for the adoption of green management strategies for its fleet of commercial planes and the introduction of the carbon-offsetting scheme in response to local and international carbon emissions reduction performance targets. Similarly, Malaysia's Technology Master Plan Malaysia 2017-2030 calls for the utilisation of green technologies in the field of aviation to reduce carbon emissions, a commitment backed up by the establishment of the Malaysian Aviation Commission (2015).

The Action has assisted Malaysia to elaborate their 2^{nd} and 3^{rd} versions of the State Action Plans, including sets of important mitigation measures adapted to the classification defined by ICAO and to the needs identified by the States' stakeholders in line with the quality criteria of ICAO's guidelines. The support provided by the Action for the elaboration of the 2^{nd} and 3^{rd} versions of the SAPs indicates an additional effort and increased quality for the necessary comparison to be made with previous versions, which should had been already evaluated by ICAO. While the assessment of the quality of its SAP was carried out by the ET, beneficiaries expressed their satisfaction with the overall quality of the processes to develop them taught, a factor attributed to the Action by them. Due to relatively high-capacity level within the Malaysian civil aviation, the project's approach to focus on the third issue of the SAP report proved useful and effective. The new SAP edition rightfully incorporates the updated regulatory reference framework and an updated CO₂ emissions baseline. This 3^{rd} version includes other aviation sector's stakeholders (airports and ANSP) as well as an updated design of mitigation measures.

A direct result of the Action assistance and training provided to the NABs and the VBs is that some of them have been already accredited. The Attachment Programmes between peer countries Indonesia - Malaysia, for the establishment of the national accreditation system has been demonstrated as a successful tool as more VBs' will have completed their accreditation in 2022 by the less experienced NABs. Indeed, the direct support of the project, complemented by the aforementioned Attachment Programme, is supporting Malaysia to finalise its CORSIA Accreditation Process by delivering the accreditations to local VBs before the end of 2022. This is an essential aspect of the project, as it allows for the VBs to emerge and engage as part of the CORSIA enabling process

Furthermore, Malaysia's Emission Reports from 2019, 2020 and 2021 have already been submitted⁵⁰. Reports issued by Malaysia are using the ICAO forms and the Action has been providing the required assistance to complete the information needed (CO₂ Estimation Reporting Tool, CERT). Even though Malaysia is sufficiently advanced on the development of the MRV and ERs, support

⁵⁰ For The Philippines, only one ER from 2021 was submitted with the assistance of the project

was still requested and successfully assimilated by CAAM which enable them to make the data transition from the AeDMS to their own IT infrastructure.

Myanmar

Myanmar's Climate Change Master Plan (2018-2030) calls for low carbon transport and development solutions for inclusive and sustainable development. Additionally, Myanmar's National Environmental Policy (2019) supports environmental governance, monitoring and enforcement of environmental laws and regulations, as well as monitoring and an increased governance in environmental matters. This is of particular importance as Myanmar is considered one of the most vulnerable countries in the world⁵¹ to the impacts of climate change. Its renowned biodiversity and natural resources are under increasing pressure as the country and its neighbours continue to develop. More frequent floods, cyclones and droughts have caused immense damage to its population, infrastructure, and economy.

Considering the evolving political context, there is no better example than that of Myanmar's situation and the only one with enough gravity to affect the Action directly. The specificities and origins of the situation in Myanmar are beyond the breadth of this evaluation, but its consequences have been noted by the ET. Individual cooperation with Myanmar has been indefinitely suspended as from 2020 as result of the military coup d'état and the upheaval that ensued. Nevertheless, before those events unfolded, the ET could confirm an active participation from Myanmar institutions and, after completing the interviews, staff from Myanmar's institutions were eager to restart their participation in the Action at a bilateral level. However, staff from Myanmar's NAA and NAB have continued to participate in the Action's activities but only when they are celebrated at a Regional or Multinational level.

In the case of Myanmar's State Action Plan, supported by the Action, the ET appreciated a relevant level of knowledge related to the processes needed to implement the SAP, in spite of the decision to decrease their participation on the project. In 2020 Myanmar DCA was "quickly progressing" in the development of their first SAP, completing a first draft. Up to date Myanmar has developed it but has not presented it as support to this country remains on hold. The Action approach for Myanmar also focussed on the of the MRV knowledge transfer, which was successfully applied in the development and submissions of the ER in 2019.

At the time of the evaluation exercise, there were five countries that had not opted, yet, to participate in the voluntary phase of CORSIA, being Myanmar one of them. As part of a strategy to guide them and encourage them to join CORSIA, as states in the paragraphs above, the Action is supporting these ASEAN MS in developing a better understanding of its own climate change challenges. In the case of Myanmar, it has developed a State Report with local punctual information, whilst providing an analysis and identifying relevant opportunities with the aim to encourage and speed up joining CORSIA. A revision of these State Reports by the ET concluded that they contain relevant and practical information on Myanmar which has led to country-specific set of recommendations. This is useful information as it provides to the target countries added value data that can enhance their knowledge about climate change tools and mechanisms, associated with the aviation sector that, given Myanmar's resources, it would be more difficult to fund such a study. The report contains an analysis of the national context on Climate Change, and an overview of the aviation sector and its expected growth over the next few years, the readiness of the carbon market, a SWOT analysis, and useful conclusions that will be of interest to the parties and institutions targeted by this output.

Just like other similar countries in the ASEAN region, Myanmar has a small national aviation market, and this increases the difficult level for the emergence of national VBs interested in being part of the CORSIA scheme. The technical level of the material vs their individual capabilities and experience, and the English level of the recipients of the information for Myanmar showed that there was a minimum level of capacities that allowed the beneficiaries to process the information received. During the interviews it could be appreciated that there was an acceptable capacity level that was congruent with the contents of the material provided by the Action.

⁵¹ https://www.unep.org/news-and-stories/press-release/myanmar-announces-national-environment-and-climate-change-policies

The Philippines

The National Framework Strategy (2010-2022) on Strategy on Climate Change from the Philippines calls for a reduction in GHG and to enact the Renewable Energy Act and the Biofuels Law which would see a greater adoption of the production of biofuels. More specifically, the Philippines' Action Plan on CO2 Emission Reduction Action Plan⁵² developed by the Ministry of Transport and the Civil Aviation Authority, recognises the effects of global warming, and calls for a reduction in GHG emissions, both in domestic and international aviation operations. It also highlights the need for cleaner fuel production and for a higher efficiency in fuel consumption. The Civil Aviation Authority Philippines (CCAP) has published the Aeronautical Circular (AC) 2018 for the Carbon Offsetting and Reduction Scheme for International Aviation⁵³.

The Action has assisted The Philippines to elaborate their 2nd version of the SAP, including sets of mitigation measures adapted to the classification defined by ICAO and to the needs identified by the States' stakeholders in line with the quality criteria of ICAO's guidelines. The Philippines has submitted their 2nd SAP to ICAO.

The Action served as a catalyser for internal communication of all necessary national stakeholders to build the 2nd SAP, and, in addition to capacitating the relevant stakeholders, the Action facilitated the signature of the Memorandum of Understanding between the NAA and the airports' operator of the Philippines for environmental aspects of civil aviation. Engagement with the Action brought The Philippines to a level that would enable them to develop their next edition of SAP, according to the information gathered from interviews.

A direct result of the Action assistance and training provided to the NABs and the VBs, is that some of them have been already accredited. The attachment programmes between peer countries, Thailand – The Philippines, for the establishment of the national accreditation system has been demonstrated as a successful tool as some VBs' will have completed their accreditation in 2022 by the less experienced NABs. In the case of CAAP of The Philippines, adequate conditions were established so they were able to submit the ER 2019 and 2021, and to assimilate and upgrade the AeDMS. The accreditation process and delivering the first accreditations to local VBs before the end of 2022 is an essential aspect of the project, as it allows for the VBs to emerge and engage as part of the CORSIA enabling process.

Singapore

The Civil Aviation Authority from Singapore states that in spite that civil aviation contributes to only 2% of total CO₂ emissions, its aviation industry is willing to reduce emissions. Since 2008 the Asia and Pacific Initiative to Reduce Emissions (ASPIRE) initiative has worked with the authorities and air navigation service providers (ANSP) and airlines to reduce the fuel consumption through best practices and air traffic management. Indeed, Singapore has already produced carbon emission cuts not only in airplane management but also in airport terminals' management. Singapore Airlines ranks amongst the top 15 carriers worldwide in terms of revenue passenger-kilometres and it is ranked tenth in the world for international passengers carried. The airline that it aims at achieving to grow carbon neutral as from 2020 and achieve 50% absolute reduction in carbon emissions by 2050. Being the most advanced among all ASEAN MS, since 2011 Singapore Airlines⁵⁴ has become part of the Sustainable Aviation Users Group (SAUFUG).

Singapore has elaborated its SAPs without the assistance from EU-SEA CCCA CORSIA project even though this service has been offered by the Action. The capacity of the Singapore NAA allowed them to opt out of any bilateral support since their competency and capacity is not only the highest in the region but it also exceeds most of the international aviation authorities in the world. Henceforth, the Action successfully contributed to the SAA staff competency through the delivery of the CORSIA Order of Magnitude Check regional activity.

⁵² https://caap.gov.ph/wp-content/uploads/2022/03/PHILIPPINES-ACTION-PLAN-ON-CO2-REDUCTION-1.pdf

⁵³ <u>https://caap.gov.ph/download/2447/</u>

⁵⁴ https://www.singaporeair.com/en_UK/gb/flying-withus/our-story/giving-back/environmental-efforts/

Although the Singapore NAA has a very advanced level in the implementation of CORSIA, they still have devoted the required resources to allow them to participate in some of the project's activities. This participation has resulted in gaining the required know how which has been considered in the establishment of the new NAA's civil aviation environment section.

With regard to complementarities and synergies, ICAO CORSIA (ACT-CORSIA) programme delivers mainly training courses to the beneficiaries and are sponsored by donors' countries. In the case of the Asia Pacific region for the period 2020 – 2022, these are Singapore, Japan and Republic of Korea.

Thailand

Thailand's Civil Aviation Authority's Action Plan to Reduce Aviation Emissions (2018) pinpoints climate change as its central challenge. The plan calls for increased efficiency and greener and sustainable transport modal systems as well as to explore mitigation measures which date back to its previous Action plan of 2013, including the adoption of biofuels and other actions linked to the reduction of GHG. Additionally, the implementation of introducing new technologies and improved air traffic management is aligned to the project's specific objectives and is also part of its overall strategy.

Thailand has elaborated its State Action Plans without requiring the assistance from EU-SEA CCCA CORSIA project. Based on interviews by the evaluation team and the analysis of the SAP report from Thailand, it can be confirmed that they have an adequate capacity to develop their plans with their own resources as it contains the qualitative and quantitative items normally associated with countries with well-established civil aviation institutions. However, it is to be noted that Thailand has been supported in this field by previous EU actions (e.g., EU-SEA APP; PDSF⁵⁵), which demonstrates the long-lasting value and positive sustainability level of the EU projects.

A direct result of the Action's assistance, and training provided to NABs and VBs, is that some of them have gone through the accrediting processes successfully and gained its accredited status. Moreover, the attachment programmes between peer countries, Thailand - The Philippines, for the establishment of the national accreditation system has been demonstrated as a successful tool as some VBs' will have completed their accreditation by the end of 2022 by the less experienced NABs. Additionally, it can be said that NABs in Thailand are among the most experienced in the region, having the full accreditation process for CORSIA since the first year of the Action, and having already accredited 2 VBs in 2020. This was a direct result of the prompt regional and bilateral support afforded by the Action

It can be concluded that satisfactory conditions to implement CORSIA are present. In the case of Thailand, even though the capacity of CAAT is relatively high, the activities related to output 2 have concentrated in supporting the CAAT and Thai air operators. The timely submission of the 2021 ER is evidence of the right conditions to implement CORSIA process as per ICAO SARPs.

Vietnam

Vietnam's Power Development Plan commits the country to be carbon neutral by 2050. It also calls for the country to diversify its energy sources but acknowledges that if faces many challenges in this respect. On the other hand, pursuant to the Law on Environmental Protection from 2014, and in line with the requirements of ICAO, the Ministry of Transport issued a Circular on the Management of Fuel Use and CO2 Emissions of Aircrafts in Civil Aviation. This Circular and guideline regulates collection and reporting on fuel use and CO2 emissions from aircraft in the civil aviation sector⁵⁶, including guidelines on the optimisation of fuel use.

The Action has assisted all AMS, including Vietnam, to elaborate their latest or first versions of the SAP, including the sets of mitigation measures adapted to the classification defined by ICAO and to the needs identified by Vietnam's stakeholders and in line with the minimum quality criteria of ICAO's

⁵⁵ Policy Dialogue Support Facility

⁵⁶ http://ikinews.climatechange.vn/vietnams-civil-aviation-sector-prepares-towards-corsia/

guidelines. Under the Action's guidance, Vietnam submitted its 2nd SAP to ICAO. While the assessment of the quality of SAP is derived from this evaluation exercise, Vietnam's beneficiaries expressed their satisfaction with the overall quality of the processes to develop them and how the Action interacted with them for its development. The evaluation team assessed these reports and could appreciate an increase in their quality, taking into considerations their respective local contextual circumstances and capacity baselines. The Action served as a key facilitator for internal communication of all necessary national stakeholders for the creating of the working group to build the 2nd SAP. Training and technical assistance provided by the Action established conditions for the finalization and the submission of 2nd SAP document. Notwithstanding this, it is visible that improvements can be made, particularly in the definition of the mitigation measures, (i.e., technology and operational improvements, SAF) included in the report.

The Vietnamese institutions, through the cooperation with the Action sin 2019, acquired the necessary capacity to develop their CORSIA regulation⁵⁷ and programme, including the elaboration of the ERs 2019, 2020, 2021. The elaboration of the last ER 2021 received the support of the Action and it was concluded with its presentation to ICAO in 2022.

At the time of the evaluation exercise, there were four countries that had not opted, yet, to participate in the voluntary phase of CORSIA, one of them being Vietnam. As part of a strategy to guide them and encourage them to join CORSIA, the Action is supporting these ASEAN MS in developing a better understanding of its own climate change challenges. For this, it has targeted Vietnam through the commissioning of its own State Report. The justification for this approach is to present local intelligence, whilst analysing and identifying relevant opportunities in Vietnam and present them to the highest possible level officials with the expected result of getting them closer to join in CORSIA. Vietnam's State Report is comprehensive as it provides a sound analysis and a series of opportunities and challenges as well as weaknesses and strengths which are expected to catalyse the decision to join CORSIA in due time.

3. Conclusions and Recommendations

Lessons learnt – Project Management

1 Long distance learning takes more than only having the right hardware. Very proficient experts can also face difficulties when transmitting technical messages to an audience that it is not only far away and might have difficulties hearing properly, but it is also important to count with an adequate textual and graphic platform that can be a supplemental source of information when there are connectivity issues. Similarly, experts need to be conscious of the other party's English level limitations and also how the experts' accent can be a factor in the rate of information successfully transferred to the other party.

2 During the COVID pandemic the Action turnt its activities into digital formats to the extent possible. Digital formats, such as long distance learning, demonstrated their limitations, but they also demonstrated their advantages. Taking into consideration the first lesson learnt above, the Action needs to distinguish more clearly which activities can indeed be carried on a long-distance basis and help increase the efficiency of the Action by saving primarily on long distance travel, even in the post-COVID period, and which ones cannot.

3 The project attachment programs, supported by the Action, has proven to be an effective tool for widening the scope of benefits by the current strategy. However, this approach has been used in only two instances (two countries supporting one country each) signalling that there is much more potential for this approach to be used. The benefits are evident and the cost to the project has been marginal. This arrangement can also contribute towards the Action's sustainability by leaving the

 $^{^{\}rm 57}$ Vietnamese NAA launched the CORSIA regulation through is Aeronautical Circular AC 22

necessary capacity building tools in certain AMS for them to continue training other AMS after the end of the project.

4 When working in this sub region it is important to note that for cultural reasons and others unknown to the evaluation team, that their declared level of understanding will, in many cases, be lower than their real level of understanding. Be this for their own technical competencies or their English fluency levels. Additionally, the lack of spontaneously querying the experts made available to them in capacity building sessions, further enhances the above predicament. These factors need to be taken into consideration when assessing their level of understanding and increase the project's effectiveness.

5 When developing or commissioning the information that needs to be passed on to the target audiences, this can a valuable opportunity for experts (and for project management) to not only develop their own instructor's material to prompt them to guide their ideas during their exchange sessions, but also to develop at the same time, proper standalone teaching material that could be used by students without the aid of the project's experts. This exercise becomes a more difficult task after the material has been developed, but if at the time of the conception/development it can be made with this factor in mind, the Action would not have to pay much more to either have an enhanced version or a parallel version that can be made available to beneficiaries after attending a capacity building session.

Lessons learnt – FPI

6 Institutional logframe have been devised for a very good reason. In short, they provide a tool to harmonise content, uniform reporting, aggregation of data, ease for reporting and facilitate accountability. However, while the rules for a project under FPI needs to follow above all the institutional rules, these indicators are not always conducive to effective project management. They do not base progress in qualitative terms and results-based performance is greatly compromised notwithstanding their advantages at the institutional level. A project with all the complexities such as this one, covering ten countries and dealing with technical issues, based on the successful transfer of knowledge, does not benefit from working exclusively on these institutional indicators. Provisions need to be made to meet institutional rules but also to comply with objective indicators of achievement. The main lesson learnt is that a good project, doing the right things cannot fully demonstrate what it is doing in spite of complying with all its reporting rules and regulations.

7 The lack of uniformity throughout the reports, by PM, in terms of the denomination of activities, numbering or coding for activities, does not enable them, or outside stakeholders, to follow up on the project with more ease.

Lessons learnt – All countries

8 Since the Action does not make a thorough assessment of the NAAs' staff competency or the verification of the transfer of knowledge, this responsibility would be on the part of the NAAs according to the applicable ICAO international requirements. The Action cannot confirm that the NAAs have civil aviation environmental departments with the adequate dimension and cannot confirm that NAAs have internal processes and procedures to guarantee the competency of the staff of such departments.

All National Aviation Authorities (NAA) are required to have an established internal programme for guaranteeing the competency of their staff in any of the domains of civil aviation, in addition to the appropriate size of its departments in proportion to the dimension of their civil aviation industry. The traditional scopes where the NAAs exercise their competence are airworthiness, aircraft operations, licensing of aviation professionals, air traffic management, and, more recently, aviation environmental issues related to GHG emissions. The ET could not confirm through the interviews with most of the beneficiaries that they have an ongoing programme to guarantee the necessary competency of their staff for CORSIA, SAP, and other relevant subjects to the Action. This programme should include the definition of the competencies for their staff, including taxonomies to be used, gaps analysis against existing competencies, the plan for the acquisition of such

competencies, the programmes (annual) to implement them progressively, and a plan for new recruits.

The size of the air transport sector is going to affect the dimension of the department dedicated to the environmental certification and oversight (i.e. CORSIA, SAPs, AO, VBs, etc.). The ET has observed that most of the NAAs have currently under-dimensioned departments to deal with all the new obligations that are requested according to the ICAO requirements.

Conclusions

Relevance

1. The Action is highly relevant and aligned with two of the European Union's strategic agenda for 2019-2024's four priorities. By addressing global environmental issues, it is aiding to building a climate-neutral, green, fair, and social Europe. Also, during the Action's design negotiations with ASEAN on the ASEAN-EU Comprehensive Air Transport Agreement (AE CATA) were taken into consideration. The Action operates by promoting EU policy, standards, and technology in order to provide a more compatible and open market for the EU aviation industry across the region and across the world.

2. For the purpose of project management and internal reporting, there are no sub-indicators used that can aid in the objective monitoring of the Action's progress and attainment of its outputs and outcomes for project management purposes (short term use), for reporting purposes (medium term use) or to facilitate external evaluation or results oriented monitoring exercises.

3. The Action has gained importance in the global fight against GHG emissions. At the country level, the objectives of the Action can be considered a national priority in all the ASEAN MS as all of them have adopted, to different degrees, rules, regulations or laws supporting the necessary means to reduces GHG emissions e.g., aviation environmental policies and strategies linked to environmental policies and to reduction programmes of aviation emissions, as well as other indirect policies aimed at cutting emissions in all fronts.

4. Indirectly the Action has laid the ground for the EU economic interest to continue growing in the Region particularly those related to aircraft manufacturing, carbon offsetting and SAF, or areas where the EU has comparative advantages.

Effectiveness

5. The outputs achieved are classified by the ET of being of high quality. The average score according to the questionnaires poised to the beneficiaries during the interviews and focus group discussions, regarding the perceived quality of the Action ranges from 4,1 to 4,4 out of 5, which represents a high standard of quality considering the complexity of this multi-country regional project. The good quality of the outputs is partly based on existing EASA's internal process, including the selection of experts' candidates. It was concluded that the expertise of those who were selected matched the technical requirements of the Action and the needs of the beneficiaries.

6. The Action provides relevant information at different stages of the activities' implementation due to the fact that the Action uses predefined forms and methods for the adequate definition and follow up of individual activities, such as activity implementation sheets and the activity summary. The technical material used by the subject matter experts during workshops and webinars follows appropriate quality criteria, according to predefined standardized forms. However, by themselves, the highly technical materials do not always facilitate the understanding of the concepts, specifically considering the use of the English language as the vehicle for the information transfer.

7. Some NAAs' environmental departments have not achieved their competency to fulfil their obligations in aviation environmental related aspects. Namely, in terms of general knowledge, the development of SAP, and, specifically, mitigation measures which are an essential item in this document, staff from NAAs are not entirely familiar with the ICAO SARPs prescriptions, even after having participated in training activities covering this topic. Nevertheless, the Action has been able to instil the necessary aviation background knowledge within some NABs and VBs. This has been further reinforced in two countries thanks to the attachment programmes from Indonesia and Thailand, promoted and facilitated by the project.

8. While AMS increasingly more capable of developing their own SAPs, it has not been specified by EASA what constitutes a good quality SAP. While the Action experts can oversee this process

and "approve" when the document is ready for its submission, the exact guidelines are not passed on to the AMS, nor are they set out in any documents or guidelines. This process is still, therefore, incomplete and has the potential to affect the sustainability regarding this important area of the project.

The Action aimed to support the five non - CORSIA participating MS by having developed five 9. thorough reports on relevant issues which can be an important tool to support and promote opportunities for these states to join CORSIA. Cambodia already joined CORSIA, however, it is not known yet what effects these reports and the high-level meetings will have. In the case of Laos there is a knowledge and resource gap that still needs to be further reduced in order for the next SAP report editions to be presented with a limited assistance from the project. Support for Laos is said to be, by the stakeholders, necessary for them to feel competent to join CORSIA on a voluntary basis. 10. While it is still too early to assess any visible impacts, most beneficiaries have a high level of appreciation about EASA's sectoral expertise as it has become one of the most important and prominent actors in the civil aviation environmental domain. Most AMS' National Aviation Authorities (NAAs) identify EASA and the EU aviation regulatory framework as one of the main references under this theme. EU best practices were considered an important element by the beneficiaries during the training activities. However, according to their feedback communicated to the evaluation team and to the revision of the material provided, details of EU best practices and their application are not being provided in sufficient volume by EASA according to some country specific beneficiaries.

11. The measures taken to continue with the Action i.e., remote meetings, sessions, etc. enabled the Action to proceed rather satisfactorily, with its knowledge transfer delivery during the COVID pandemic. However, even though this was the only viable alternative, this format has not been as efficient as a replacement of the originally planned presential format. Therefore, a lesser impact on awareness can be expected.

12. The Action is successfully assisting the AMS to implement CORSIA framework and first signs of impact are the submission of the ERs during years 2019 to 2021 and the consolidation of NABs through internal processes (such as Cambodia and Brunei) or through attachment programmes (The Philippines and Malaysia) supported by the project. All AMS need to achieve the adequate conditions for the establishment of the National framework for their verification system that would enable them to measure and quantify the environmental performance of the aviation sector.

13. Taking previous conclusion into consideration, EASA is applying experiences and expertise that were already acquired in one country when implementing activities in other countries (i.e., support to elaborate SAP, focusing on previously selected methods, mitigation measures and their implementation strategies). Third countries within ASEAN are benefitting from the successful Action attachment programs, whereas the initial recipients of the knowledge transfer become knowledge providers.

14. Sufficient technical guidance from the Action has been provided to the EU services, covering the detailed areas and description of activities, as appreciated by the evaluation team. DG MOVE and DG CLIMA active participation in the project, including in attending to some project's workshops, supports the continuous reception and provision of policy and technical guidance. Most importantly, FPI (Bangkok) support for the Action can be classified as very satisfactory since all questions and any guidance sought by PM are usually immediately followed up.

Efficiency

15. The agenda/work plan 2022-23 is very ambitious and the resources could potentially run out before receiving the next instalment from FPI. The budget consumption has amounted to almost 41% of the total budget as of June 2022. As a reference point, from 2022 to June 2023, the Action would have to consume 60% of the budget to meet the 100% of the expenditure based on the total 4 m € budget. Since project management has voiced a target to consume between 1 to 1.5 m € until June 2023, its expenditure would have to be between 24% to 37% of the total budget to achieve its target in less than 21% of the remaining time, or in just under 9 months.

16. The Action has benefited from a largely positive support from the beneficiaries manifested in their in-kind / human resources time contributions. This has contributed to the attainment of some results, but also to offset to a certain extend the negative effects from the COVID pandemic. During the WP 2022 – 23, the percentage workload allocated to the activities of Thailand, Malaysia, The

Philippines, and Vietnam is significant. Therefore, their participation is crucial for both the performance of activities and to achieve budgetary spending goals.

17. Even though the format of the Action was adapted to an on-line delivery, the expected results were not greatly affected, although the capacity building sessions were not as efficient as the presential format. A return back to the presential format during the no-cost extension of the Action is expected.

18. The 2022 – 2023 work plan seems ambitious to the next 10 months. However, this approach is needed, in spite of the risks mentioned above, in order to inject a strong dynamic to the project, which has the potential to achieve these goals within that period.

19. The reports' formats have been changed from year to year and as such they are not entirely useful for external evaluation or monitoring purposes. In spite of the largely positive work the Action has been producing, the reports, until now, do not reflect all this effort due to inconsistencies in the reporting formats used in different annual reports, including the use of different numbering, references, without any explanations to clarify these changes or omissions, etc. The basic indicators used in accordance to Partnership Instrument guidelines, are not supplemented with strong qualitative sub-indicators that could enable the Action to take real time corrective Actions and to enhance its results-oriented reporting.

Sustainability

20. While the knowledge provided is sustainable due to its quality and relevance to the needs of the beneficiaries, the Action does not enjoy the same level of sustainability in terms of taking measures to ensure continuing of benefits after the Action ends. As described even as early as when the Description of the Action was drafted, there will be a need for further training and therefore a continuing engagement and financial input from the EU. It was voiced by the direct beneficiaries that the teaching material was very useful but that it might not be used for replicability purposes or that they had been able to train other people with the existing resources even though they made it clear that more people in their respective countries needed to be trained.

21. The project's sustainability is also affected by the beneficiaries' English levels, but it has not been able to measure this factor. The project's internal monitoring system has not taken up this challenge yet. It can be assumed that if this format continues without attempting to modify the delivery of the information to be transferred, the Action will continue to lose effectiveness and in turn a degree of sustainability.

22. The Action is not entirely benefiting from its ad hoc monitoring system and the feedback it produces from beneficiaries. This information could have been used, not only for internal monitoring purposes, but also for measuring other factors, like the likelihood of sustainability of the Action and the effect the use of English as a transfer language tool has on its beneficiaries.

23. After four years of loading up the project website with a considerable amount of information, shutting it down as soon after the Action ends is not standard practice as the website can still yield results even when the Action has reached its end. Many projects include in their budgets a temporary solution that allows them to keep worthwhile websites alive in order to explore solutions, at least for a few months. Shutting it down affects the project's sustainability prospects (and its efficiency and effectiveness)

24. Even though there is a high level of appropriation of the Action and, implicitly, of its objectives, this does not necessarily translate by some of the beneficiaries into the necessary financial means to ensure sustainability beyond the Action. However, it can be concluded that, in spite of this financial limitation, a satisfactory level of sustainability will remain with most of the beneficiaries and the institutions they represent.

Added value

25. The ASEAN as an economic region is of strategic importance to the EU commercial and economic development. Ties between the two blocks continue to grow and the aviation industry's environmental domain, mostly related to new technologies and production of SAF, can play an important role in narrowing this commercial gap.

26. The communication strategy is a simple one and one that has brought results in terms of an extended exposure of the EU as a positive force in the field of civil aviation in the region. The website is not very visible, particularly since there is no front-page link with EASA's home webpage. The

webpage contains relevant information and some that can be of interest for some stakeholders, but it is not fully exploited from the visibility point of view and the amount of (updated) information that can be hosted there.

Coherence

27. Coherence and complementarity exist between CORSIA, ARISE Plus and ASEAN APP, as all of them are designed and aimed to strengthening the civil aviation institutions of the beneficiaries in their respective areas. All of them are being implemented by EASA International Cooperation Unit and are sharing project management resources and methods. The CORSIA Action has been able to absorb and apply from this coherence and complementarity as a consequence of lessons learnt by other projects implemented in the ASEAN and other regions. Lessons learnt are related to regulatory development, training elaboration and implementation, support to national aviation authorities, amongst others.

28. A valid effort has been made to seek synergies or to extend the projects' resources by exploring cooperation or dialogue opportunities with other Actions. However, no synergies or links have been established between the ICAO programmes and the Action and this may affect the availability and the interest of the staff from beneficiaries.

Cross – cutting elements: gender

29. The Action's design and implementation have not sufficiently explored ways to mainstream gender. It is understandable that not all interventions have a direct or obvious gender aspect. However, there are other angles where gender plays a role or even the very logic of the long-term effects of the project.

Recommendations		
Recommendation (Conclusion 2)	Even though it is known that the Action should work mostly with the list of core indicators for the Partnership Instrument, for enhanced management, reporting and accountability purposes, it is strongly advised to work with customized qualitative sub-indicators for internal management purposes and for reporting purposes at a higher level. If a results-oriented information gathering is adopted on a day-to-day basis, the reporting task at the end of X period, should enable the Action to produce a qualitative report on time. Some indicators are presented in its logframe but the Action does not reported against them.	
Addressed to	Implementing Partner(s) / FPI Bangkok	
Importance	High	
Recommendation (Conclusion 4):	The evaluation team recommends continuing efforts in promoting the EU industry's relevant stakeholder's visibility. During the no cost extension period there would be resources and ample opportunities to invite key speakers and other prominent actors from the aviation industry that can help, not only address the topic at hand, but also increase the visibility of the EU private sector.	
Addressed to	Implementing Partner(s)	
Importance	Low	
Recommendation (Conclusion 5):	Although the quality of the services received by the partners is high, improvements to increase quality should continue. Increasing presential activities, which represents a relevant expectation according to the interviewed partners. The parameters to measure this quality should also be devised.	
Addressed to	Implementing Partner(s)	
Importance	High	
Recommendation	Develop a specific training session that enables experts to fine-tune or	
(Conclusion 6):	acquire the necessary competencies for using tools for online training activities, according to the Action methodology. The Action should elaborate official criteria to develop the training material to be used online, with the aim of bridging the gap between the contents shown online and the explanations provided by the instructors. On a case-by-case basis, assess if translation / interpretation services need to be provided during training activities. Agree with the partners such service provision.	
Addressed to	Implementing Partner(s)	
Importance	Low	
Recommendation (Conclusion 7):	Despite the commendable advances made, some AMS still need assistance from EASA for the compliance of their international obligations on CORSIA. Carry out an objective analysis to single out those that still require this help. The Action should consider the establishment of a methodology for training activities, aimed at guaranteeing the acquisition of key knowledge in each activity. Consider including, after completion of related training activities, a test or any kind of assessment and issue some type of a "certificate" (not only an attendance certificate) to motivate the participants to obtain it by fulfilling the course requirements. An "EASA Certificate" should be awarded for this purpose.	

Framework contract PSF 2019 Lot 2 – Specific Contract Number: 300016566		
	Consider implementing a pre-training test and post training evaluation, in all/most capacity building sessions, to check participants' adequacy for participation and the achievement of the training objectives.	
Addressed to	Implementing Partner(s)	
Importance	High	
Recommendation (Conclusion 8):	EASA should develop an accompanying guide on SAP development. It should be devised not only to aid the Action experts helping AMS drafting their own SAPs, but with sustainability in mind. This could mean making the guidelines an aid in the internal quality control for the AMS when developing this SAPs on their own, after the project's execution period. It should help those beneficiaries who have benefited directly from the project's capacity building sessions to train other peers in developing SAPs. The guide would serve as a guide but also as an objective tool for internal quality control.	
Addressed to	Implementing Partner(s), DG-MOVE	
Importance	Medium	
Recommendation (Conclusion 9):	While the 5 State Reports elaborated by the Action for output 3 can serve the intended purpose, it is highly advisable that the reports are also presented to a wider yet relevant audience. Further explore other visibility venues or aviation events to disseminate their contents.	
	Consider translating each report to the local language to increase the probabilities of being 100% understood.	
Addressed to	Implementing Partner(s)	
Importance	High	
Importance	High	
Importance Recommendation (Conclusion 9):	High Continue to support Laos for achieving their voluntary accession to CORSIA, in a first phase for the development of the CORSIA regulatory framework, and a second phase for the elaboration of the processes associated to the definition and implementation of the mitigations to reduce CO_2 emissions.	
Recommendation	Continue to support Laos for achieving their voluntary accession to CORSIA, in a first phase for the development of the CORSIA regulatory framework, and a second phase for the elaboration of the processes associated to the definition and implementation of the mitigations to	
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	Action should start working on their progress report as soon as possible to present it on time and be able to request the installment of 500,000 Euros that they intend to request in January 2023. Data collection should start as soon as possible to make this task possible and avoid delays meeting the report's deadline. (See recommendation for conclusion 2 above)	
Addressed to	Implementing Partner(s) and FPI Bangkok	
Importance	High	
Recommendation (Conclusion 16)	Given the delicate balance between the short remaining time, expenditure requirements and activities in the WP 2022-23 enhance the monitoring of the bilateral activities, particularly with Thailand, The Philippines Malaysia and Vietnam in order to confirm the beneficiaries'	

	participation in the implementation, to avoid accruing any spending delays.
Addressed to	Implementing Partner(s)
Importance	High

Recommendation (Conclusion 20):	In the months to come EASA can include in its training sessions a chapter on replicability and also adapt some of its materials with the aim of making them more replicable-friendly. Up until now the material provided, while very apt and relevant, it is provided as a presentation aid to be used by the experts as reference during their capacity building sessions; rather than as a standalone teaching material, which would allow any beneficiary to use the material without necessarily the assistance of an expert. This would imply an additional cost for the Action since this would imply a more detailed teaching material. Its benefits vs its disadvantages should be properly assessed by the project.
Addressed to	Implementing Partner(s)
Importance	Medium
Recommendation (Conclusion 21):	A more explicit written material used for capacity building sessions could be used to mitigate to some degree the "leak" in the level of the information flow due to the not proficient English language competency of some of the beneficiaries. While the Action is already taking some measures, like providing some follow up sessions (as per the Work plan 2022-2023), this might not change this factor unless a different approach is used.
Addressed to	Implementing Partner(s)
Importance	High
Recommendation (Conclusion 22):	The remaining period could be used to increase or enhance the project's monitoring system and compile information on absorption levels after the capacity building sessions. Once analysed, this information can be used to taking mitigation measures.
Addressed to	Implementing Partner(s)
Importance	High
Recommendation (Conclusion 23):	Consider proposing to EASA on keeping a (visible) hyperlink on their web portal, just as many smaller institutions manage to do, in order to find a temporary solution to keeping the project's online information available for at least a few months and/or until another EU backed project or EASA

	project, with similar aims, can source the few financial funds that are required to avoid shutting it down and with it, all the project's information. Consult with FPI Bangkok to find the required resources.	
Addressed to	Implementing Partner(s)/ FPI	
Importance	High	
Recommendation (Conclusion 23):	In order to have a more orderly "exit strategy" or end of project, it would be beneficial for each of the MS institutions, both NAAs and NABs, to continue having access to the material that has been made available in the project's website.	
Addressed to	Implementing Partner(s)/FPI	
Importance	Low	
Recommendation (Conclusion 25):	Continue supporting the implementation of civil aviation cooperation activities, using the same kind of format, as this could contribute to the commercial relations between EU and ASEAN. There is an important momentum that has been achieved together with a recognition from many stakeholders. To benefit from these synergies the support needs to continue without leaving any or any large gaps.	
Addressed to	EU	
Importance	High	
Recommendation (Conclusion 26):	Within the no cost extension extra time and the remaining unspent budget for visibility, the Action can attempt to turn the webpage into a civil aviation information hub as well as multiplying the visibility of the EU. This requires frequent and easy to load information/news/video feeds/social media links, etc. that have the potential to draw people in the civil aviation and CORSIA related fields, regularly to the website. Furthermore, it is recommended that an alternative is sought (budgetary) to keep the website open after the end of the Action as an information repository site (with the EU banners and all the visibility required).	
Addressed to	Implementing Partner(s)	
Importance	High	
	· ····	
Recommendation (Conclusion 28):	In spite of the previous attempts made, continue to explore the approach to ICAO, and guarantee that the activities implemented by the Action are complementary to the support that is being provided by ICAO through, as an example, the Buddy Partnership programme.	
Addressed to	Implementing Partner(s), FPI, DG MOVE, EASA ICAO Office	
Importance	Low	
Recommendation (Conclusion 29):	In accordance ⁵⁸ to the Programme Statements in Partnership Instrument for cooperation with third countries (PI), led by DG FPI, a suitable and proportionally adequate gender sub-indicator or sub-indicators can be used to mainstream gender issues. These could have been used to raise awareness on why climate change is being tackled from a gender perspective, for example. While the evaluation team is aware that there are cultural hurdles on this area, the remaining months could be used to	

⁵⁸https://ec.europa.eu/info/sites/default/files/about the european commission/eu budget/db 2021 programme statement partnership instrument for cooperation with third countries pi.pdf

	approach this topic during its interaction with the final beneficiaries even if it is in a modest and culturally sensitive level. Consider hiring the services of a short-term expert on gender (EU policy) to either confirm that the current approach towards gender is the right one and justify it (limited to disaggregating gender lists), or to explore other areas where the Action can influence positively towards this crosscutting issue, for example in view of conducting a gender audit to explore all potential ways in mainstreaming gender across the activities of the Action.
Addressed to	Implementing Partner(s)/ FPI Bangkok
Importance	High

4. Annexes

Annex 1: Mid-term Evaluation Terms of Reference

SPECIFIC TERMS OF REFERENCE

'Mid-term evaluation of PI/2019/408-604 EU-South East Asia Cooperation on Mitigating

Climate Change impact from Civil Aviation (EU-CCCA)'

FWC PSF 2019 - LOT 2 ~ Technical Assistance

EuropeAid/139974/DH/SER/multi

OPSYS reference number: PSF-2019-10528

Contracting Authority: the European Union Delegation to Thailand

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1. BACKGROUND

1.1 Relevant country / region / sector background

The 2021 EU strategy for cooperation in the Indo-Pacific recognises the strategic Importance of the region due to its economic and demographic growth and its growing profile to address global challenges. In the field of transport, it seeks to work on implementation of the EU Sustainable and Smart Mobility Strategy² by addressing the issues of decarbonisation and digitalisation with Indo-Pacific partners and International Civil Aviation Organisation level. The role of ASEAN is highlighted as multifaceted partnership that covers political, security, economic, environmental, climate and isocio-cultural issues as well as connectivity. In terms of the latter, the EU aims to promote all dimensions of connectivity with Indo-Pacific partners. The principles of EU's approach (sustainable, comprehensive, rules-based) are key part of this strategy. ASEAN represents in this regard the EU's core partner, as showcased through the joint Ministerial Declaration on Connectivity in December 2020. Strengthening of relations at the highest technical level is to be further ensured through Transport Dialogues with partners in the region, and through continued funding of the sector-specific technical cooperation.

The European Green Deal includes a target to reduce transport-related greenhouse gas emissions by 90% by 2050. In order to meet this target and ensure that the EU transport sector is fit for a clean, digital and modern economy, objectives include increasing the uptake of zero-emission vehicles, making sustainable alternative solutions available to the public and businesses, supporting digitalisation and automation, and improving connectivity and access. The associated roadmap to implement the strategy addresses areas relating to aviation, mainly on tackling de-carbonisation of the sector and facilitating interoperability and connectivity with other means of transport.

The EU and ASEAN opened a new chapter in their relationship in 2020 by declaring Strategic Partnership. This elevated the partnership with commitment to the regular summits at leaders' level and to facilitating cooperation in several areas, including in the field of economic cooperation (covering circular economy, creating jobs in an interconnected world, etc.), on sustainable connectivity (covering diversification and simplification of transport linkages, research, innovation, etc.), and on sustainable development (covering climate change and biodiversity, clean energy transition, environmental protection, etc.).

ASEAN and the European Union with its Member States concluded in 2021 negotiations on the ASEAN-EU Comprehensive Air Transport Agreement (CATA) that is foreseen for signature in 2022. The AE CATA is the world's first bloc-to-bloc air transport agreement and is expected to bolster connectivity and economic development among the 37 member states of ASEAN and the EU. The AE CATA provides a foundation for closer cooperation between ASEAN and the EU in areas such as aviation safety, air traffic management, consumer protection, and environmental and social matters. This deeper cooperation builds upon the existing EU-supported initiatives in the region, such as the 'Enhanced ASEAN Regional Integration Support from the EU (ARISE Plus) programme on technical assistance and capacity building: 'EU-South East Asia Aviation Partnership Project' (EU-SEA APP); and the 'EU-South East Asia on Cooperation on Mitigating Climate Change impact from Civit Aviation' (EU-SEA CCCA). The latter project (<u>https://www.eu-sea-ccca-</u> torsia.org/) is subject to this evaluation.

The overall objective of the Action to be evaluated is to enhance political, economic and environmental partnership between the EU and partner countries in South East Asia in the areas of civil aviation environmental protection and climate change.

The specific objectives of the Action to be evaluated are to develop or support existing policy dialogues with the partner countries in South East Asia on mitigating GHG emissions from civil aviation; and to

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⁺ https://transport.ec.europa.eu/transport.therees/mobility.itrategic.ec

contribute to the "CORSIA readiness" process of partner countries in South East Asia to Implement CORSIA in line with the agreed international schedule and to join the voluntary phase.

The expected results under the Action to be evaluated are: (a) established conditions for State Action Plans submitted to ICAO to reduce CO2 emissions from international aviation / State Action Plan updated, upgraded in terms of mitigation measures; (b) established conditions for CORSIA implementation process as per ICAO SARPs; (c) increased knowledge of climate change and environmental protection tools and mechanisms; and (d) established conditions for the National framework for accreditation and verification system designed and used.

The Action to be evaluated has been funded by the **Partnership Instrument** (Annual Action Programme 2018). Designed to advance and promote the EU and mutual interests abroad, PI-funded actions have promoted a more joined up Union by supporting the external projection of EU internal policies, ranging from competiveness and migration to research and innovation. They have been addressing major global challenges such as energy security, climate change, environmental protection, as well as specific aspects of the EU's economic diplomacy, at bilateral, regional and multilateral level. It has also covered public and cultural diplomacy, and outreach activities to promote EU values and interests. PI actions are managed by the European Commission's Service for Foreign Policy Instruments (FPI) in close collaboration with the European External Action Service (EEAS) and relevant European Commission services. PI works on a non-development logic and the supported Actions pursue primarily the EU or mutual interest.

Title of the Action to be	EU-South East Asia Cooperation on Mitigating Climate Change Impact	
evaluated	from Civil Aviation (EU-CCCA)	
Budget of the Action to be evaluated	64 million (100% EU contribution)	
CRIS number of the Action to be evaluated	91/2019/408-604	
Dates of the Action to be	Start: 29/08/2019	
evaluated	End: 31/03/2022	

1.2 The Action to be evaluated

Logframe for the Action to be evaluated is attached to these Specific Terms of Reference as Annex VI.

1.3 Stakeholders of the Action

EU services: DG MOVE and DG CLIMA (policy lead), FPI (financial support and overall project monitoring). EU Delegations in the targeted countries (Cambodia, Indonesia and Brunei, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Vietnam)

Implementing partner: EASA (European Aviation Safety Agency)

Other stakeholders in targeted partner countries: civil aviation authorities in ASEAN Member States (DCA Brunei, SSCA Cambodia, DGCA Indonesia, DCA Laos, CAA Malaysia, DCA Myanmar, CAA Philippines, CAA Singapore, CAA Thailand, CAA Vietnam); aeroplane operators, air navigation service providers, national accreditation bodies in the ASEAN Member States (National Standards Centre Energy and Industry Department Brunei, General Department of Industry Cambodia, Department of Standards and Metrology

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[?] The term 'Action' is used throughout the report as a synanym of 'project and programme'.

Institute Quality Center of Lao PDR, National Accreditation Body of Indonesia, Accreditation Standards Malaysia, National Standards and Quality Department Myanmar, Philippine Accreditation Bureau, Singapore Accreditation Council Enterprise, National Standardization Council of Thailand, Bureau of Accreditation Vietnam), verification bodies, airport operators; Ministries in ASEAN Member States in charge of environment, energy and/or transport; ASEAN Secretariat, ICAO Asia Pacific office.

Other EU stakeholders: civil aviation authorities (e.g. DGCA France, AESA, ENAC), manufacturing industry (e.g. Airbus), airports (e.g. ACI Europe), airline operators (e.g. A4E), environmental protection groups (e.g. ICSA), etc.

1.4 Other available information

Relevant documentation will be provided to the evaluation team at the beginning of the assignment.

2. DESCRIPTION OF THE EVALUATION ASSIGNMENT

Type of evaluation	mid-term	
Coverage	the Action in its entirety	
Geographic scope	Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam	
Period to be evaluated	29/08/2019 - 31/03/2022	

2.1 Objectives of the evaluation

Systematic and timely evaluation of its programmes and activities is an established priority¹ of the European Commission⁴. The focus of evaluations is on the assessment of achievements, the quality and the results⁴ of Actions in the context of an evolving cooperation policy with an increasing emphasis on result-oriented approaches and the contribution towards EU foreign policy objectives and the implementation of the SDGs.⁴

From this perspective, evaluations should look for evidence of why, whether or how these results are linked to the EU intervention and seek to identify the factors driving or hindering progress.

Evaluations should provide an understanding of the cause and effect links between: inputs and activities, and outputs, outcomes and impacts. Evaluations should serve accountability, decision making, learning, and management purposes.

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¹ COM(2013) d86 final "Strengthening the Joundations of Smart Regulation – Improving evoluation" - <u>http://cc.cueuw.eu/coart.org/anim/docu/com.2013_066_en.adf</u> CU Financial regulation (art 27); Regulation (IC) No 1905/200; Regulation (IC) No 1836/2008; Regulation (IC) No

^{*3}ec (2007)213 "Responding to Strategic Reeds, Reinforcing the use of evaluation", <u>http://ec.astrop.eu/met.strategic/ec.astrop.sc/?ec.2017.213 "Responding to Strategic Reeds. Reinforcing the use of evaluation", http://ec.astrop.eu/met.sc/?ec.2017.213 "Responding to Strategic Reeds. Reinforcing the Repulsion Guidelines", http://ec.astrop.eu/met.scrategic.ec.2017.213 enable. <u>Br. problem.ec.2017</u> (2018) 2017 031 fead "Completing the Better Repulsion Agends. Retter solutions for better resolt. <u>Integration euclide/integic/astrop/of/Plackompleting the Better</u> repulsion Agends. Retter solutions for better resolt. <u>Integration euclide/integic/astrop/of/Plackompleting the Better</u> repulsion agends better solutions for better resolt. <u>astrop</u></u>

I Reference is made to the entire results chain, covering outputs, indicinnes and impacts. (Jr. Regulation 11:0) No 236/2014 "Laying down common rules and procedures for the implementation of the Union's instruments for financing external action". https://icc.auropa.eu/neighbourhood-enlargement/http://ico/Mex/adf/financial_assistance/tpa/2014/236-2014_cir.pdf.

¹ The New European Constraint on Development: 'Our Workd, Our Dignity, Our Futury', Official Journal JOth of June 2017. http://curilex.europa.eu/legal.content/IDI/TXT/Turi-Or C 2017 210:TDC

The main objectives of this evaluation are to provide the relevant services of the European Union and the interested stakeholders with:

- an overall independent assessment of the past performance of 'EU-South East Asia Cooperation
 on Mitigating Oimate Change impact from Civil Aviation (EU-CCCA)', paying particular attention
 to its results measured against its expected objectives; and the reasons underpinning such
 results;
- key lessons learned, conclusions and related recommendations in order to improve current and future Actions.

In particular, this evaluation will serve as an external view as to whether performance of this Action can be considered satisfactory/lacking expected progress, identify its enabling factors and those hampering proper delivery of results. The evaluation is to provide recommendations, taking into account the possibly identified problems and opportunities. As the findings may serve to inform the planning of the possible future EU interventions and Actions in the same sector, the exercise should encompass both forward and backward looking perspectives.

The main users of this evaluation will be the relevant EU Services at the HQ level and in EU Delegations (FPI, DG CLIMA, DG MOVE), the implementer (EASA), and other relevant stakeholders (e.g. EU Member States representations, etc.).

1.5 Requested services

1.5.1 Scope of the evoluation

The evaluation will assess the Action using the five standard DAC evaluation criteria, namely: relevance, effectiveness, efficiency, sustainability and perspectives of impact. In addition, the evaluation will assess two EU specific evaluation criteria:

- the EU added value;
- the coherence of the Action itself, with the EU strategy in the countries/sector and with other EU
 policies and Member State Actions.

The evaluation team shall furthermore consider whether gender³, environment and climate change were mainstreamed; the relevant SDGs and their interlinkages were identified; the principle of Leave No-One Behind and the rights-based approach methodology was followed in the identification/formulation documents and the extent to which they have been reflected in the implementation of the Action, its governance and monitoring.

1.5.2 Indicative Evaluation Questions

The specific Evaluation Questions as formulated below are indicative. Based on the latter and following initial consultations and document analysis, the evaluation team will discuss them with the Evaluation Manager^a and propose in their Inception Report a complete and finalised set of Evaluation Questions with indication of specific Judgement Enteria and Indicators, as well as the relevant data collection sources and bools.

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⁷ Please see for guidance on how to integrate gender supects into evaluations. https://icc.europa.su/ruropeoid/guidanceevaluation-gender-cross-sutting-dimension, en

^{*} The Evaluation Manager is the idaff of the Contracting Authority managing the evaluation contract, in must cases this person will be the Operational manager of the Actional under evaluation.

Once agreed through the approval of the inception Report, the Evaluation Questions will become contractually binding.

I. Relevance

To what extent do the Specific and Overall Objectives, as well as the design of the Action, respond to:

- The EU foreign policy and relevant sectoral strategies and priorities.

- Strategic priorities of the Partnership Instrument as defined in the programming documents.

- The global, regional and country contexts in the sectors in which the Action is being implemented.

 The specificities and needs of each country covered by the Action, and the relevant policy dialogues/ policy alignment with the countries targeted by this Action.

- The EU and EU Member States' strategic interests in South East Asia.

- The EU private sector's interests in South East Asia.

II. Effectiveness:

 To what extent is the Action progressing towards the completion of their expected outcomes and first signs of impact, especially considering (i) relevant sectoral policy dialogues, (ii) awareness about relevant sectoral EU expertise, (iii) EU business/market access interests, (iv) support to EU positions at ICAO level, (v) improved environmental performance in the aviation sector.

- To what extent are the outcomes and -consequently- objectives likely to be achieved?

 Does the Action receive/provide sufficient policy and technical guidance from/to the relevant EU services, and adequate response from/to relevant interlocutors in the targeted partner countries?

- If relevant, to what extent are experiences in one target country being used by the implementer in the other countries? To what extent is the possibly evolving political context in the targeted countries taken into account?

- Has there been any noticeable progress on the side of the targeted country stakeholders regarding their knowledge and receptivity towards the relevant EU policies, positions, and expertise?

III. Efficiency:

- Do the outputs delivered and the outcomes achieved justify the costs?

 Are modalities in place for project management and implementation sufficient (especially considering the multi-country focus of the Action)?

Are arrangements in terms of monitoring of implemented activities and of the programme satisfactory?

- How efficiently are the available resources used (human resources, time, expertise, etc.)? Is the pace of implementation of the project satisfactory given the budget and timeframe per disposal?

IV. Sustainability:

- What are the key factors influencing sustainability of the Action?

- Are adequate measures in place to ensure the project's sustainability and lasting results beyond the Action?

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V. EU added value:

- What is the strategic significance of this Action in the targeted countries, including vis-a-vis the possible engagement in these sectors of the EU Member States and other donors?

- Has the Action contributed to an improved image/visibility of the EU in the targeted countries?

- To what extent do the Action's interventions add benefits to what would have resulted from other donors' interventions in the absence of this Action?

VI. Coherence:

- To what extent is the action coherent and complementary in relation to relevant EU programmes/ strategies/policies? Is this Action capitalising on related –if any- work of other EU services?

- Is this Action coherent with possible similar work of the EU Member States in this sector?

- is there coherence with actions of other international donors?

1.6 Phases of the evaluation and required outputs

The evaluation process will be carried out in four phases:

- Inception
- Desk
- Interview
- Synthesis

The outputs of each phase are to be submitted at the end of the corresponding phases as specified in the synoptic table in section 2.3.1.

Due to the COVID-19 pandemic, all phases will be carried out remotely. All meetings and interviews are to be carried out remotely using appropriate IT tools.

1.6.1 Synoptic table

The following table presents an overview of the key activities to be conducted within each phase and lists the outputs to be produced by the team as well as key meetings with the Contracting Authority and the Reference Group. The main content of each output is described in Chapter 0.

Phases of the evaluation	Key activities	Outputs and meetings
Inception Phase	Initial document/data collection Background analysis Stakeholder analysis Reconstruction (or as necessary, construction) of the Intervention Logic, and / or description of the Theory of Change (based upon available documentation and interviews) Methodological design of the evaluation (Evaluation Questions with	Kick off meeting with the Contracting Authority and the Reference Group via remote conference Minutes of the Reference Group kick- off meeting Draft inception report Slide presentation of the Inception Report Minutes of the Reference Group presentation of the Inception report Final Inception Report

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"Mid-term evaluation of PI/2019/405-400 "reducing plastic waste and marine litter in East and South-East Asia: Supporting a transition to a circular economy in the region" project Framework contract PSF 2019 Lot 2 – Specific Contract Number: 300016566

Phases of the evaluation	Key activities	Outputs and meetings
	judgement criteria, indicators and methods of data collection and analysis) and evaluation matrix	
Desk Phase	 In-depth document analysis (focused on the Evaluation Questions) Identification of information gaps and of hypotheses to be tested in the Interview Phase Methodological design of the Interview Phase 	Slide presentation of key findings of the desk phase Meeting with Reference Group via remote conference Minutes of the Reference Group meeting
Interview Phase	 Gathering of primary evidence with the use of interviews Data collection and analysis 	Online meetings/interviews at country level with relevant stakeholders Slide Presentation of key findings of the interview phase Meeting with the Reference Group via remote conference Minutes of the Reference Group meeting
Synthesis phase	 Final analysis of findings (with focus on the Evaluation Questions) Formulation of the overall assessment, conclusions and recommendations Reporting 	Draft Final Report (with country- specific chapters included) Executive Summary according to the standard template published in the EVAL module Slide presentation of the Draft Final Report Meeting with Reference Group via remote conference Minutes of the Reference Group meeting Final Report (with country-specific chapters included)

1.6.2 Inception Phase

This phase aims at structuring the evaluation and clarifying the key issues to be addressed.

The phase will start with an online kick-off session among the Reference Group and the evaluators. Presence of evaluators is required. The meeting aims at arriving at a clear and shared understanding of the scope of the evaluation, its limitations and feasibility. It also serves to clarify expectations regarding evaluation outputs, the methodology to be used and, where necessary, to pass on additional or latest relevant information.

In the Inception phase, the relevant documents will be reviewed (see annex II).

Further to a first desk review of the political, institutional and/or technical/cooperation framework of EU support to the implementation of the action, the evaluation team, in consultation with the Evaluation Manager, will reconstruct or as necessary construct, the Intervention Logic of the Action to be evaluated.

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Furthermore, based on the Intervention Logic, the evaluators will develop a narrative explanation of the logic of the Action that describes how change is expected to happen within the Action, all along its results chain, i.e. Theory of Change. This explanation includes an assessment of the evidence underpinning this logic (especially between outputs and outcomes, and between outcomes and impact), and articulates the assumptions that must hold for the Action to work, as well as identification of the factors most likely to inhibit the change from happening.

Based on the Intervention Logic and the Theory of Change the evaluators will finalise i) the Evaluation Questions with the definition of judgement criteria and indicators, the selection of data collection tools and sources, ii) the evaluation methodology, and iii) the planning of the following phases.

The methodological approach will be represented in an Evaluation Design Matrix⁹, which will be included in the Inception Report. The methodology of the evaluation should be gender sensitive, contemplate the use of sex- and age-disaggregated data and demonstrate how actions have contributed to progress on gender equality.

The limitations faced or to be faced during the evaluation exercise will be discussed and mitigation measures described in the Inception Report. Finally, the work plan for the overall evaluation process will be presented and agreed in this phase; this work plan shall be in line with that proposed in the present ToR. Any modifications shall be justified and agreed with the Evaluation Manager.

On the basis of the information collected, the evaluation team should prepare an **Inception Report**; its content is described in Chapter 0.

The Team Leader of the evaluation team will then present via remote conference the Draft Inception Report to the Reference Group, and have it finalised after the meeting.

1.6.3 Desk Phase

This phase is when the document analysis takes place. The analysis should include a brief synthesis of the existing literature relevant to the Action.

The analysis of the relevant documents shall be systematic and reflect the methodology developed and approved during the inception Phase.

Selected phone interviews with the project management, the relevant EU services, and key partners may be conducted during this phase to support the analysis of secondary sources.

The activities to be conducted during this phase should allow for the provision of preliminary responses to each evaluation question, stating the information already gathered and its limitations. They will also identify the issues still to be covered and the preliminary hypotheses to be tested.

During this phase the evaluation team shall fine-tune the evaluation tools to be used during the interview. Phase and describe the preparatory steps already taken and those to be taken for its organisation, including the list of people to be interviewed, dates and itinerary of visits, and attribution of tasks within the team.

At the end of the desk phase a Slide Presentation will be prepared; its content is described in Chapter 0.

A presentation by the evaluation team to the Reference Group will take place online. Presence of the evaluators is required.

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² The Evaluation Matrix is a roal to structure the evaluation analysis (by defining subgement criteria and indicators for each evaluation question). It belas also to consider the most appropriate and frashlie data collection method for each of the questions.

1.6.4 Interview Phase

The Interview Phase starts after approval of the Side Presentation by the Evaluation Manager.

The Interview Phase aims at validating / changing the preliminary answers formulated during the Desk phase and further completing information through primary research.

If any significant deviation from the agreed work plan or schedule is perceived as creating a risk for the quality of the evaluation or not respecting the end of the validity of the specific contract, these elements are to be immediately discussed with the Evaluation Manager and, regarding the validity of the contract, corrective measures undertaken.

During the interview phase, the evaluation team shall ensure adequate contact and consultation with, and involvement of the different stakeholders; with the relevant government authorities and agencies. Throughout the mission the evaluation team will use the most reliable and appropriate sources of information, respect the rights of individuals to provide information in confidence, and be sensitive to the beliefs and customs of local social and cultural environments.

At the end of the interview phase, the evaluation team will summarise its work, analyse the reliability and coverage of data collection, and present preliminary findings in a meeting with the Reference Group. A Slide Presentation will be prepared; its content is described in Chapter 0.

1.6.5 Synthesis Phase

This phase is devoted to the preparation by the contractor of two distinct documents: the Executive Summary and the Final Report, whose structures are described in the Annex III; it entails the analysis of the data collected during the desk and interview phases to answer the Evaluation Questions and preparation of the overall assessment, conclusions and recommendations of the evaluation.

The evaluation team will present, in a single Report with Annexes, their findings, conclusions and recommendations in accordance with the structure in Annex III; a separate Executive Summary will be produced as well, following the compulsory format given in the EVAL module (see Annex III).

The evaluation team will make sure that:

- · Their assessments are objective and balanced, statements are accurate and evidence-based, and recommendations realistic and clearly targeted.
- · When drafting the report, they will acknowledge clearly where changes in the desired direction are known to be already taking place.
- The wording, inclusive of the abbreviations used, takes into account the audience as identified in art 2.1 above.

The evaluation team will deliver and then present via remote conference the Draft Final Report to the Reference Group to discuss the draft findings, conclusions and recommendations. Presence of all evaluators is required.

The Evaluation Manager consolidates the comments expressed by the Reference Group members and sends them to the evaluation team for the report revision, together with a first version of the Quality Assessment Grid (QAG) assessing the quality of the Draft Final Report. The content of the QAG will be discussed with the evaluation team to verify if further improvements are required, and the evaluation team will be invited to comment on the conclusions formulated in the QAG (through the EVAL Module).

The evaluation team will then finalise the Final Report and the Executive Summary by addressing the relevant comments. While potential quality issues, factual errors or methodological problems should be corrected, comments linked to diverging judgements may be either accepted or rejected. In the latter Page 10 of 21

instance, the evaluation team must explain the reasons in writing. After approval of the final report, the QAG will be updated and sent to the evaluators via EVAL Module.

1.7 Specific Contract Organisation and Methodology (Technical offer)

The invited Framework Contractors will submit their specific Contract Organisation and Methodology by using the standard PSF 2019 template B-VII-III and its annexes B-VII-IVa and B-VII-B-B-V.

The evaluation methodology proposed to undertake the assignment will be described in the Chapter 3 (Strategy and timetable of work) of the template B-VII-III. Contractors will describe how their proposed methodology will address the cross-cutting issues mentioned in these Terms of Reference and notably gender equality and the empowerment of women. This will include (if applicable) the communication action messages, materials and management structures.

By derogation of what is specified in the standard PSF 2019 template 8-VII-III, the maximum length of the specific Contract Organisation and Methodology is <u>7 pages</u>, written in Times New Roman 12 or Arial size 11, single interline, excluding the framework contractor's own annexes (maximum length of such annexes: 3 pages), additional to the Annexes foreseen as part of the present Specific ToRs. <u>Pages</u> exceeding the 7 page limit will not be taken into consideration. The timetable is not accounted and may be presented on an A3 page. <u>Maximum length of CVs is 4 pages; pages exceeding this limit will not be taken into consideration</u>.

1.8 Management and Steering of the evaluation

1.8.1 At the EU level

The evaluation is managed by the Evaluation Manager of FPI Regional Team Asia-Pacific at the EUD to Thailand; the progress of the evaluation will be followed closely with the assistance of a Reference Group consisting of members of EU Services (DG CLIMA: DG MOVE; FPI Regional Team Asia-Pacific) and EU Delegations to Cambodia, Indonesia and Brunei, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. Other representatives may be invited as observers as considered relevant by the members of the Reference Group.

The main functions of the Reference Group are:

- To define and validate the Evaluation Questions.
- To facilitate contacts between the evaluation team and the EU services and external stakeholders.
- To ensure that the evaluation team has access to and has consulted all relevant information sources and documents related to the Action.
- To discuss and comment on notes and reports delivered by the evaluation team. Comments by individual group members are compiled into a single document by the Evaluation Manager and subsequently transmitted to the evaluation team.
- To assist in feedback on the findings, conclusions, lessons and recommendations from the evaluation.
- To support the development of a proper follow-up action plan after completion of the evaluation.

1.8.2 At the Contractor level

Further to the Requirements set in the art. 6 of the Global Terms of Reference and in the Global Organisation and Methodology, respectively annexes II and III of the Framework contract PSF 2019, the contractor is responsible for the quality of: the process, the evaluation design; the inputs and the outputs of the evaluation. In particular, it wilt:

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- Support the Team Leader in its role, mainly from a team management perspective. In this regard, the contractor should make sure that, for each evaluation phase, specific tasks and outputs for each team member are clearly defined and understood.
- Provide backstopping and quality control of the evaluation team's work throughout the assignment.
- Ensure that the evaluators are adequately resourced to perform all required tasks within the time framework of the contract.

1.9 Language of the Specific contract

The language of the specific contract is English.

EXPERTISE REQUIRED

1.10 Number of experts and of working days per category

The table below indicates the minimum number of evaluators and the minimum number of working days, per category of experts to be foreseen by the Contractor.

Category of experts	Minimum number of evaluators	Total minimum number of working days (total)	(Out of which) minimum number of working days on mission	
Cat I - Team Leader	1	35	N/A	
Cat II – Evaluator 2	1	30	N/A	

In particular, the Team Leader (to be identified in the Organisation and Methodology and in the Financial Offer) is expected to be a Cat I expert, possess a demonstrable senior evaluation expertise coherent with the requirements of this assignment and not provide less than 35 working days.

1.11 Expertise required

The team should have a cumulative experience of:

Qualifications and Skills:

 At least Master's degree in a discipline relevant to the scope of the assignment (e.g. environment, aviation, political science, international studies, economics, etc.) or, in its absence, additional 5 years of equivalent relevant professional experience additional to the requested General Professional Experience (Please note that this criterion is to be fulfilled by each team member).

General Professional Experience:

 At least 10 years in evaluation methods and techniques in general and, in evaluation of programmes in the field of international relations. Experience in the evaluation of EU programmes (internal or external) is considered a strong asset.

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Special Professional Experience:

 At least 10 prior working experience in the fields of aviation, climate change or environment (e.g. evaluations, policies, legislation, etc.). Working experiences specifically on the EU policies in the fields of aviation, climate change or environment would be considered a strong asset.

 At least 5 prior working experiences on evaluations of programmes in the field of international relations in South-East Asia (i.e. ASEAN Member States). Prior experience with evaluations of programmes in the field of aviation and/or climate change in the targeted countries would be considered a strong asset.

 Prior work assignments working specifically on CORSIA-related issues would be considered a strong asset.

The Team Leader should be a senior evaluator with a proven experience in having carried out as Team Leader at least 3 evaluations of programmes in the field of international relations; with good knowledge of evaluation methodologies, research and analytical skills; with good practical knowledge and understanding of the European Union Foreign Policy and External Actions; and with good writing skills.

Language skills of the team:

English: all members shall possess a level C2 expertise;

Languages levels are defined for understanding, speaking and writing skills by the Common European Framework of Reference for Languages: <u>https://europass.cedefop.europa.eu/en/resources/europeanlanguage-levels-cefr</u> and shall be demonstrated by certificates or by past relevant experience.

The European Union pursues an equal opportunities policy. Gender balance in the proposed team, at all levels, is highly recommended.

1.12 Presence of management team for briefing and/or debriefing

The presence of member(s) of the management team is not required for briefing or debriefing purposes.

LOCATION AND DURATION

1.13 Starting period

Provisional start of the assignment is mid-May 2022.

1.14 Foreseen duration of the assignment in calendar days

Maximum duration of the assignment: 150 calendar days.

This overall duration includes working days, week-ends, periods foreseen for comments, for review of draft versions, debriefing sessions, and distribution of outputs.

1.15 Planning, including the period for notification for placement of the staff"

As part of the technical offer, the framework contractor must fill in the timetable in the Annex IV. The 'indicative dates' are not to be formulated as fixed dates but rather as days (or weeks, or months) from the beginning of the assignment (to be referenced as '0').

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¹¹ As per art 18.4 al of the General Conditions of the Framework Contract SEA

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Sufficient forward planning is to be taken into account in order to ensure the active participation and consultation with government representatives, national / local or other stakeholders.

1.16 Location(s) of assignment

The assignment will be remotely conducted.

REPORTING

1.17 Content, timing and submission

The outputs must match quality standards. The text of the reports should be illustrated, as appropriate, with maps, graphs and tables; a map of the area(s) of Action is required (to be attached as Annes).

List of outputs:

	Number of Pages (excluding annexes)	Main Content	Timing for submission
Inception Report	Up to 10 pages	 Intervention logic Stakeholder map Methodology for the evaluation, incl.: Evaluation Matrix: Evaluation Questions, with judgement criteria and indicators, and data analysis and collection methods Interview phase approach Analysis of risks related to the evaluation methodology and mitigation measures Work plan 	End of Inception Phase
Slide presentation of key findings of the desk phase	Up to 10 slides	 Preliminary answers to each Evaluation Question, with indication of the limitations of the available information Data gaps to be addressed, issues still to be covered and hypotheses to be tested Update of the interview phase approach if relevant Update of the work plan of the following phases if relevant 	End of the Desk Phase
Slide presentation of key findings of the interview phase	s of and mitigation measures adopted		End of the Interview Phase
Draft Final Report	Up to 30 pages	<u>Cf. detailed structure in Annex III</u>	End of Synthesis Phase
Draft Executive Summary – by using the EVAL	N/A	<u>Cf. detailed structure in Annex III</u>	End of Synthesis Phase

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	Number of Pages (excluding onnexes)	Main Content	Timing for submission
online template			
Final report	Up to 30 pages	 Same specifications as of the Draft Final Report, incorporating any comments received from the concerned parties on the draft report that have been accepted 	2 weeks after having received comments to the Draft Final Report.
Executive Summary – by using the EVAL online template	N/A	 Same specifications as for the Draft Executive Summary, incorporating any comments received from the concerned parties on the draft report that have been accepted 	Together with the final version of the Final Report

1.18 Use of the EVAL module by the evaluators

It is strongly recommended that the submission of deliverables by the selected contractor be performed through their uploading in the EVAL Module, an evaluation process management tool and repository of the European Commission. The selected contractor will receive access to online and offline guidance in order to operate with the module during the related Specific contract validity.

1.19 Comments on the outputs

For each report, the Evaluation Manager will send to the Contractor consolidated comments received from the Reference Group or the approval of the report within 10 calendar days. The revised reports addressing the comments shall be submitted within 10 calendar days from the date of receipt of the comments. The evaluation team should provide a separate document explaining how and where comments have been integrated or the reason for not integrating certain comments. If this is the case.

1.20 Assessment of the quality of the Final Report and of the Executive Summary

The quality of the draft versions of the Final Report and of the Executive Summary will be assessed by the Evaluation Manager using the online Quality Assessment Grid (QAG) in the EVAL Module (text provided in Annex V). The Contractor is given – through the EVAL module - the possibility to comment on the assessments formulated by the Evaluation Manager. The QAG will then be reviewed following the submission of the final version of the Final Report and of the Executive Summary.

The compilation of the QAG will support/inform the compilation by the Evaluation Manager of the FWC. SIEA's Specific Contract Performance Evaluation.

1.21 Language

All reports shall be submitted in English.

1.22 Number of report copies

Apart from their submission --in OPSYS and via EVAL Module-, the approved version of the Final Report will be also provided will be also provided in electronic version (in Word and PDF formats) at no extra costs.

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1.23 Formatting of reports

All reports will be produced using Font Arial or Times New Roman minimum letter size 11 and 12 respectively, single spacing. They will be sent electronically in Word and PDF formats.

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ANNEXES

ANNEX I: SPECIFIC TECHNICAL EVALUATION CRITERIA

SPECIFIC TECHNICAL EVALUATION CRITERIA

Request for Services n.: PSF-2019-10528

FWC PSF 2019 - LOT 2 - Technical Assistance

EuropeAld/139974/DH/SER/multi

1. TECHNICAL EVALUATION CRITERIA

The Contracting Authority selects the offer with the best value for money using an 80/20 weighting between technical quality and price³¹.

Technical quality is evaluated on the basis of the following grid:

	Maximum		
Total s	core for Organisation and Methodology	40	
•	Rationale (understanding of ToR and the aim of the services to be provided)	10	
	Methodology (overall methodological approach, quality control approach, appropriate mix of tools and estimate of difficulties and challenges)	20	
•	Organisation of tasks including timetable	10	
Score (60		
•	Qualifications and Skifts	10	
•	General Professional Experience	20	
•	Specific Professional Experience	30	
OVERA	ALL TOTAL SCORE	100	

2. TECHNICAL THRESHOLD

Any offer falling short of the technical threshold of 75 out of 100 points, is automatically rejected.

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¹¹ For more details about the 80/20 rule, please see the PRAG, chapter 3.3.10.3 - <u>http://cs.curues.ru/ruleseesid/Justing/about, hending and environmentary/geocratics and acutital guide area, co.</u>

ANNEX II: INFORMATION THAT WILL BE PROVIDED TO THE EVALUATION TEAM

- Relevant EU sector policies and strategy papers;
- Relevant policy/sectoral documents from national partners, and other stakeholders;
- · Financing decision for the action;
- Action's progress reports and technical reports;
- Minutes of the meetings of the Steering Committee under the action.

Note: The evaluation team has to identify and obtain any other document worth analysing, through independent research and during interviews with relevant informed parties and stakeholders of the Action.

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ANNEX III: STRUCTURE OF THE FINAL REPORT AND OF THE EXECUTIVE SUMMARY

The contractor will deliver – preferably through their uploading in the EVAL Module - two distinct documents: the Final Report and the Executive Summary. They must be consistent, concise and clear and free of linguistic errors both in the original version and in their translation – if foreseen.

The Final Report should not be longer than the number of pages indicated in Chapter 6. Additional information on the overall context of the Action, description of methodology and analysis of findings should be reported in an Annex to the main text.

The presentation must be properly spaced and the use of clear graphs, tables and short paragraphs is strongly recommended.

The cover page of the Final Report shall carry the following text:

"This evaluation is supported and guided by the European Commission and presented by [name of consulting firm]. The report does not necessarily reflect the views and opinions of the European Commission".

Executive Summary	A short, tightly-drafted, to-the-point and free-standing
	Executive Summary. It should focus on the key purpose or
	issues of the evaluation, outline the main analytical points,
	and clearly indicate the main conclusions, lessons to be
	learned and specific recommendations. It is to be prepared
	by using the specific format foreseen in the EVAL Module.

The main sections of the evaluation report shall be as follows:

1. Introduction	A description of the Action, of the relevant country/region/sector background and of the evaluation, providing the reader with sufficient methodological explanations to gauge the credibility of the conclusions and to acknowledge limitations or weaknesses, where relevant.
2. Answered questions / Findings	A chapter presenting the answers to the Evaluation Questions, supported by evidence and reasoning.
3. Overall assessment (optionol)	A chapter synthesising all answers to Evaluation Questions into an overall assessment of the Action. The detailed structure of the overall assessment should be refined during the evaluation process. The relevant chapter has to articulate all the findings, conclusions and lessons in a way that reflects their importance and facilitates the reading. The structure should not follow the Evaluation Questions, the logical framework or the evaluation criteria.

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4.3 Lessons learnt	Lessons learnt generalise findings and translate past experience into relevant knowledge that should support decision making, improve performance and promote the achievement of better results. Ideally, they should support the work of both the relevant European and partner institutions.
4.1 Conclusions	This chapter contains the conclusions of the evaluation, organised per evaluation criterion.
	In order to allow better communication of the evaluation messages that are addressed to the Commission, a table organising the conclusions by order of importance can be presented, or a paragraph or sub-chapter emphasizing the 3 or 4 major conclusions organised by order of importance, while avoiding being repetitive.
4.2 Recommendations	They are intended to improve or reform the Action in the framework of the cycle under way, or to prepare the design of a new Action for the next cycle.
	Recommendations must be clustered and prioritised, and carefully targeted to the appropriate audiences at all levels, especially within the Commission structure.
5. Annexes to the report	The report should include the following annexes:
	The Terms of Reference of the evaluation
	 The names of the evaluators (CVs can be shown, but summarised and limited to one page per person)
	 Detailed evaluation methodology including: options taken, difficulties encountered and limitations; detail of tools and analyses.
	Evaluation Matrix
	 Intervention logic / Logical Framework matrices (planned/real and improved/updated)
	 Relevant geographic map(s) where the Action took place
	 Ust of persons/organisations consulted
	Uterature and documentation consulted
	 Other technical annexes (e.g. statistical analyses, tables of contents and figures, matrix of evidence, databases) as relevant
	 Detailed answer to the Evaluation Questions, judgement criteria and indicators

4. Conclusions and Recommendations

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ANNEX IV: PLANNING SCHEDULE

This annex must be included by Framework Contractors in their Specific Contract Organisation and Methodology and forms an integral part of it. Framework Contractors can add as many rows and columns as needed.

The phases of the evaluation shall reflect those indicated in the present Terms of Reference.

		Indicative Duration	in working days ¹²	
Activity	Location	Team Leader	Evaluator	Indicative Dates
Inception phase:	total days			
•		12.000000000000000000000000000000000000		
Desk phase: total	days			
•				×
•			*******	******
Interview phase:	total days			
•			÷	
•		*******************		
Synthesis phase:	total days	ă ante a cara cara cara cara cara cara cara c	()	8
•				
Dissemination ph	ase: total days			
•				
•				
TOTAL working	days (maximum)		

17 Add one column per each evaluator

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ANNEX V: QUALITY ASSESSMENT GRID

The quality of the Final Report will be assessed by the Evaluation Manager (since the submission of the draft Report and Esecutive Summary) using the following quality assessment grid, which is included in the EVAL Module: the grid will be shared with the evaluation team, which will have the possibility to include their comments.

Evaluation data			
Evaluation title			
Evaluation managed by		Type of evaluation	
CRill ref, of the production contract		EVAL ort.	
Evaluation budget			
EUDIONE In charge		Endination Manager	
Evaluation dates	Abert:	End	
Date of doubt final report		Data of Response of the Services	
Comments			
Project data			
Main propert evaluated			
CHUS & of availabled project(s)			
DAS Berter			
Souther to be detailed	10h	10	1/
Evaluation Team Leader		Evaluation Contractor	
Evaluation experite)			

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	coults Chain	indicators	Receives (Including reference year)	Targets (including reference year)	Source of verification	Assumptions
Overall objectives		Number of collective approaches and/or practices to challenges of global concern which have been developed/implemented	0	I loollective approach adapted or practices in use to harmonise and integrate pattner countries in ALEAN region guidtion sector on GHG emostars in 2022 in line with EU policien (i.e. Mate Action Plan, aCAO) initiatives on Long Term Augurational Goob, Sustainable Aviation Fuels, etc.)	ICAO website for the State action glans	
Specific objectives - sutcomes	SOL: To develop or support existing policy dialogues with partner countries in South East Ada on interting GHG embolom from civil selation	A DOMESTIC STRUCTURE OF THE STRUCTURE OF T	0	1 (process) influenced in 8 jartner countries. Brunet, Cambodia, Laos, Myanmar, Millippines, Thalland, Vietnam, indosesia, or 1 at regional level, with a policy dialogue on CC and aviation with EU, materialsing in farmal Dealt Final Re.g. submusion of first/neviewed SAP, alignment with EU policy an Santamble Asterios Fuels) by 2022)	CAAs/DGCAs annual report iCAO website	 The existence of partner countries authormed commitment to work with EU institutions Partner countries have sufficient haran resources with the support of international and European institutions Protect and economic stability of ASLAN Member States
Specific objectives - outcomes	to the 'CORSIA	Number of processes related to partner country practices on challenges of global concern which have been influenced	having the Level of technical capacity;	additional	CAAL/DGCAe annual reports ICAO CORSUA website	- The existence al partner countries authorities' construent construent to work with EU institutors

ANNEX VI: LOGICAL FRAMEWORK MATRIX (LOGFRAME) OF THE EVALUATED ACTION(S)

	CORSA in line with the agreed international schedule and to just the voluntary phase in 2021 or at the earthest turne possible.		expertise and confudence to implement CORDA in 2018)	legislation, local expertise and confidence to implement CORSIA in 2021, including Verification Services in the regian)		and to apply CORSA -Partner countries have sufficient financial and human resources with the support of international and
		Number of processes related to statelevel and sub-state level (bilateral, regional, multi-lateral) partnership strategies, and policy dialogues which have been influenced	joined	2 (additional partner countries joining the withertery phase of CORSIA by 2022)	CAAs/DGCAs armust reserts - ICAO CORSIA, wettsite	European Institution to implement CORSIA Political and economic stability of ASEAN Member Status -stability of CORSIA overall implementation
Gutputs	Entablished conditions for SEA States to submit their State Action	Number of events organised	0 (2018)	10 (2022) (workshops on State Action Plans)	-Event reports	 The partner States are open to the project support in the field of SAP.
		Number of participants in the events organised	Q (2018)	200 (2022) (disaggregated by gender)	Event reports	
		Number of knowledge- based products	0(2018)	3 (2022) (druft State Action Plans to which the project has decouvely contributed, including the use of ROM (Clenate Change indicators)	-Draft State Action Plans	
	Output 2: Established conditions for the SEA States to implement CRESA process as per ICAO SARPs.	humber of events organized	0 (2018)	20 (2022) (technical workshops on CORSA implementation)	Event reports	 The partner States are apen to the project support in the field of CORSIA.

Outputs	Number of perticipants in the events organised	0 (2018)	200 (2022) idisess/easted by gender)	-Event reports	
	Number of knowledge- based products	0 (2014)	9 (2022) (Miniswledge based products supporting States to develop their Crisicsion Data Management System,	- Papers/guidelines	

			(ing. if system analyses, if softwate specs, encoding of algorithms for emission data shecks, etc.3		
Output 3: Increased knowledge of clenate change and environmental tools and mechaniums		o (2018)	3 (2022) (Country Profiles detailing Climate Change challenges and opportunities]		 Governments from the involved countries are ready to cooperate including chirate topics into daily avlation business
	Number of events organised	0 (2018)	A (2022) (high-level meetings between EU and ASEAN affunals)		
Output 4: Established conditions for the SEA States to define and create the National framework for verification system	Number of events organised	0 (2018)	15 (2022) (workshops or training sessions on verification process at regional level and in some selected countries)	-EASA project progress report	 The partner status concur that there are market opportunities for new Verification Biodex in the country/region.
	tassist of partuports in the protection	* (2018)	(10 (202) (Anogengend by gender)	-Examingania	
	Naishio of East-cludge hand products	0.02010	F(2821)	-Training material	

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TERMS OF REFERENCE – PART B

BACKGROUND INFORMATION

1. Benefitting Zone

All Countries

2. Contracting authority

The European Union, represented by the European Commission, B-1049 Brussels, Belgium,

3. Contract language

English

LOCATION AND DURATION

4. Location

- · Normal place of posting of the specific assignment: Online
- · Mission(s) outside the normal place of posting and duration(s): N/A

5. Start date and period of implementation

The indicative start date is 15/05/2022 and the period of implementation of the contract will be 150 days from this date (indicative end date: 12/10/2022).

REQUIREMENTS

6. Expertise

The minimum requirements covered by the team of experts as a whole are detailed below:

- Qualifications and skills required for the team: At least Master's degree in a discipline relevant to the scope of the assignment (e.g. environment, aviation, political science, international studies, economics, etc.) or, in its absence, additional 5 years of equivalent relevant professional experience additional to the requested General Professional Experience (Please note that this criterion is to be fulfilled by each team member).
- General professional experience of the team: At least 10 years in evaluation methods and techniques in general and, in evaluation of programmes in the field of international relations. Experience in the evaluation of EU programmes (internal or external) is considered a strong asset.
- Specific professional experience of the team:

 At least 10 prior working experience in the fields of aviation, climate change or environment (e.g. evaluations, policies, legislation, etc.).
 Working experiences specifically on the EU policies in the fields of aviation, climate change or environment would be considered a strong asset.
 At least 5 prior working experiences on evaluations of programmes in the field of international relations in South-East Asia (i.e.

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ASEAN Member States). Prior experience with evaluations of programmes in the field of aviation and/or climate change in the targeted countries would be considered a strong asset. • Prior work assignments working specifically on CORSIA-related issues would be considered a strong asset. The Team Leader should be a senior evaluator with a proven experience in having carried out as Team Leader at least 3 evaluations of programmes in the field of international relations; with good knowledge of evaluation methodologies, research and analytical skills; with good practical knowledge and understanding of the European Union Foreign Policy and External Actions; and with good writing skills.

· Language skills of the team: English: all members shall possess a level C2 expertise

Additional expertise requirements for the team composition:

Position	Expert category	Minimum requirements	Minimum number of working days	Additional information
Expert	Category I (at least 10 years' post graduate experience)		35	
Expert	Category II (at least 5 years' post graduate experience)		30	

7. Incidental expenditure

No incidental expenditure provided for in this contract.

8. Lump sums

No lump sums provided for in this contract.

9. Expenditure verification

No expenditure verification report is required.

10. Other details

No other details provided for in this contract.

REPORTS AND DELIVERABLES

11. Reports and deliverables requirements

Title	Content	Language	Submission timing or deadline
Draft inception report		English	Within 25 Day(s) After the project start
Inception report		English	Within 35 Day(s) After the project start
Slide Presentation of Desk Phase		English	Within 50 Day(s) After the project start

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Title	Content	Language	Submission timing or deadline
Slide Presentation of Interview Phase		English	Within 80 Day(s) After the project start
Draft final report		English	Within 120 Day(s) After the project start
Final report		English	Within 140 Day(s) After the project start

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Annex 2: Evaluation Timeline

Task	Start	End
Phase 1. Inception phase		
Preliminary tasks	01.06.2022	01.06.2022
Preparation of KOM	01.06.2022	02.06.2022
КОМ	02.06.2022	02.06.2022
KOM Minutes	03.06.2022	06.06.2022
KOM minutes approval	07.06.2022	08.06.2022
Analysis of documentation	07.06.2022	21.06.2022
Interviews Inception	01.06.2022	23.06.2022
Prepare draft inception report and presentation	09.06.2022	24.06.2022
Present draft inception report to Reference Group	24.06.2022	24.06.2022
Submit Inception Report Draft	26.06.2022	28.06.2022
Finalise inception report and submit	26.06.2022	06.07.2022
Approval of Inception Report by Reference Group	06.07.2022	07.07.2022
Phase 2. Data collection (Desk and Interview phases)		
Detailed desk review – phase 1	28.06.2022	21.07.2022
Organising of appointments	27.06.2022	15.07.2022
Interviews phase 1 (EC, EUDs, EU MS)	01.07.2022	19.07.2022
Elaborate findings interviews phase 1	01.07.2022	19.07.2022
Draft Desk / Interview Presentation - phase 1	20.07.2022	20.07.2022
Present Desk / Interview findings - phase 1 to Reference Group	21.07.2022	21.07.2022
Desk review – phase 2	26.07.2022	30.07.2022
Interviews phase 2	20.07.2022	21.09.2022
Formatting of data	18.08.2022	20.08.2022
Draft Desk / Interview Presentation – phase 2	18.08.2022	20.08.2022
Present Desk / interview findings - phase 2 to Reference Group	20.08.2022	20.08.2022
Phase 3. Sythesis phase		
Analysis	21.08.2022	21.09.2022
Prepare Draft Final Report	03.09.2022	14.10.2022
Present Draft Final Report to Reference Group	21.10.2022	21.10.2022

Prepare Final Report	21.10.2022	04.11.2022
Submit Final Report	07.11.2022	07.11.2022

Annex 5: Evaluation Matrix

The evaluation matrix is the tool used as a map and reference in planning and conducting the evaluation. It summarizes and visually presents the evaluation design and methodology for discussions with stakeholders. It details evaluation questions that the evaluation will answer, data sources, data collection, analysis tools or methods appropriate for each data source.

	Evaluation questions	Data collection method	Data sources	Judgement Criteria	Indicators				
Releva	Relevance: Assessing the relationship between the needs and problems in society and the objectives of the intervention								
EQ1	- To what extent do the Specific and Overall Objectives, as well as the design of the Action, respond to the EU foreign policy and relevant sectoral strategies and priorities.	Document review Identification of EU strategies and priorities in aviation in its relations to partners at the time the Action was adopted	Background documents Policy framework documents Key informant interviews (FPI; DG MOVE; DG CLIMA; EUDs (Cambodia, Indonesia and Brunei, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam), EASA and ASEAN MS CAAs, ASEAN Secretariat)	 The Action constitutes an appropriate response to the needs of the target groups. The intervention developed SMART indicators (Specific, Measurable (either quantitatively or qualitatively), Available at an acceptable cost, Relevant to the addressed needs, Timebound (when to expect their achievement). 	- Alignment with bilateral treaties, accords, individual multi-annual indicative programmes. Extent to which the intervention has been designed on the basis of identified needs.				
EQ2	- To what extent do the Specific and Overall Objectives, as well as the design of the Action, respond to: the strategies and priorities of the Partnership Instrument as defined in the programming documents.	Identification of evolving EU aviation strategies and priorities in the ASEAN context Target Group and Stakeholder considerations	Identification of EU PI strategic priorities in aviation in its relations to partners at the time the Action was adopted Project documents, declarations, Multiannual Indicative Programmes (MIP), EU Strategy for cooperation in the Indo- Pacific, international	- The intervention strategy is the correct response to the beneficiaries' needs.	Extent of responding to current EU strategies and priorities in the ASEAN context. Extent at which the national and regional authorities consider the objectives of the project a priority.				
EQ3	- To what extent do the Specific and Overall Objectives, as well as the design of the Action, respond to: the global, regional and country contexts in the aviation sector.		treaties and accords, (ASEAN-EU, CATA, IATA, ICAO, UNEP, EU Climate Action, etc.)	- The intervention is adapted to the present institutional, human and financial capacities of the partner stakeholders with a role in implementation	 Adequacy of the Action in terms of taking into consideration local capacities and limitations at the stakeholders' level.(<i>from Q1</i>) The extent to which the specificities and needs of each country covered by the Action, and the relevant policy dialogues/policy alignment with 				

Table 9: Evaluation Matrix

	Evaluation questions	Data collect	tion method	Data sources	Judgement Criteria	Indicators
						the countries are targeted by this Action.
EQ4	To what extent do the Specific and Overall Objectives, as well as the design of the Action, respond to: the EU and EU MS' strategic interests in Southeast Asia.				 There is evidence that the design and methodology support also the individual requirements of each ASEAN member state. There is evidence that political and economic aspects of each ASEAN member state were taken into consideration. 	 The extent to which the EU private sector's interests in SEA are covered. Extend of alignment with regional and national policies, treaties, MIPs, accords
the Acti	/eness :Measure the progress of each on	•		-	-	
EQ5	-Are the outputs being achieved with	Individual Inte	erviews	Project Management Team	- The Action's monitoring provides for satisfactory identification and monitoring	- Preliminary results of the quality
	the expected quality?	Individual que	stionnaires	State Action Plans		and usability of State Action Plans.
		Analysis of do	ocumentation	State Action Plans development	of impact	
		Document rev	view	documentation		
		Individual and group	Activities reports	- Plausible correlation		
		interviews		Progress reports	between inputs and outputs.	
		Group questic		Internal reports,		
		Focus Group		Financial data	- Satisfactory quality of quantitative indicators	
		Assessment data	of Document	Interviews with national authorities	4	
		uala		Direct stakeholders in ASEAN and EU institutions		
				Direct beneficiaries		
				Key informants' interviews		
				EASA Management team		
				Internal documents		
		1		1		
				PSC		

	Evaluation questions	Data collection method	Data sources	Judgement Criteria	Indicators
			EU Delegations		
EQ6	- To what extent is the Action progressing towards the completion of their expected outcomes and first signs of impact on relevant policy dialogues on aviation matters?	Individual Interviews Individual questionnaires Group questionnaires Document review Focus Group Interviews Assessment of Document data Identification of Action outcomes and plan for implementation	Key informants (contracted Key experts) Partner Countries' Key Stakeholders MS Key Stakeholders: (FPI; DG MOVE; DG CLIMA; EUDs, EASA) State Action Plans Project progress reports Key Performance Indicators (KPIs) vs progress reports. Baseline data vs Targets. Target Group and Stakeholder considerations	- The Action has broadly achieved the planned impact/overall objectives	 Number of processes related to state level and sub state level; (bilateral, regional, multilateral) partnership strategies and policy dialogues which have been influenced. Development of State Action Plans Individual Country progress and development towards their respective data analysis and level of participation towards their first State Action Plan
EQ7	To what extent is the Action progressing towards the completion of their expected outcomes and first signs of impact, especially considering awareness about relevant EU sectoral expertise, EU business/market access interests	Document review Individual and group interviews Individual Interviews Individual questionnaires Group questionnaires Focus Group Interviews Assessment of Document data	Partner Countries' Key Stakeholders Key informants (contracted Key experts) MS Key Stakeholders: (FPI; DG MOVE; DG CLIMA; EUDs, EASA) State Action Plans Project progress reports Key Performance Indicators (KPIs) vs progress reports. Baseline data vs Targets. Target Group and Stakeholder considerations	- Outputs and outcomes are already evident or with strong sings to be accomplished.	 Number of relevant regulations adapted / adopted from EU framework in ASEAN MS; Number of ASEAN MS processes and / or procedures adopted from existing EU best practices; Number of EU companies providing services at ASEAN MS as a consequence of the project implementation
EQ8	-To what extent is the Action progressing towards getting support to EU positions at ICAO level from ASEAN States?	Document review Individual and group interviews Individual Interviews Individual questionnaires Group questionnaires Focus Group Interviews	Progress reports Internal reports Financial data Interviews with national authorities Direct stakeholders in ASEAN and EU institutions Direct beneficiaries	-Concrete evidence of alignment with EU positions. - Empathic understanding of the issues	- Degree to which there has been any noticeable progress on the side of the targeted countries' stakeholders regarding their knowledge and receptivity towards the relevant EU policies and positions,

	Evaluation questions	Data collection method	Data sources	Judgement Criteria	Indicators
EQ9	- To what extent is the Action progressing towards the completion of their expected outcomes and first signs of impact, especially considering improved environmental performance in the aviation sector.	Assessment of Document data Document review Individual and group interviews Individual Interviews Individual questionnaires Group questionnaires Focus Group Interviews	Key informants' interviews EASA Management team Internal documents PSC interviews EU institutions EU Delegations Progress reports Internal reports Financial data Interviews with national authorities Direct stakeholders in ASEAN and EU institutions Direct beneficiaries	 -National or institutional level adoption of certain positions aligned to EU - The Action has generated some unforeseen (both/either positive or negative) impacts. - Outputs and outcomes are already evident or with strong sings to be accomplished. 	 Degree to which there has been any noticeable progress on the side of the targeted countries' stakeholders regarding their knowledge and receptivity towards the relevant EU expertise. Degree to which stakeholders have a deeper and sustainable understanding of the factors that affect the environment and how these can be mitigated. Level of knowledge acquired during the interAction with the intervention that is practical and
		Assessment of Document data	Key informants' interviews EASA Management team Internal documents PSC interviews EU institutions EU Delegations		applicable to environmental issues/policies.
EQ10	- Does the Action receive/provide sufficient policy and technical guidance from/to the relevant EU services,	Individual Interviews Individual questionnaires Analysis of documentation Document review Individual and group interviews Group questionnaires Focus Group Interviews Assessment of Document data	EU institutions EU Delegations State Action Plans development documentation Activities reports/development Progress reports Interviews with national authorities Direct stakeholders in ASEAN and EU institutions Direct beneficiaries	 An adequate response from/to relevant interlocutors in the targeted partner countries The intervention has an adequate record on transfer of knowledge levels 	 Level of bilateral support and outputs derived from it. Post workshops' evaluation data Perception of direct or indirect stakeholders benefits from the Action or its outputs or outcomes.

	Evaluation questions	Data collection method	Data sources	Judgement Criteria	Indicators
EQ11	- If relevant, to what extent are experiences in one target country being used by the implementer in the other countries? To what extent is the possibly evolving political context in the targeted countries taken into account?	Individual and group interviews Individual Interviews Individual questionnaires Group questionnaires Focus Group Interviews Assessment of Document data Document review	Key informants' interviews EASA Management team Internal documents PSC interviews Internal reports Progress reports Financial data Interviews with national authorities Direct stakeholders in ASEAN and EU institutions Direct beneficiaries Key informants' interviews EASA Management team EU institutions EU Delegations	 The intervention has used any positive or negative experiences in a given country and applied them in a third country. Process for recollection of steps to avoid or replicate certain experiences. 	 Extent to which the evolving political context in the targeted countries taken into account. Degree of adequate responses from/to relevant interlocutors in the targeted partner countries. Degree to which positive or negative experiences lessons have been applied in other countries. Number of instances where a certain recorded experience has been used to further the int4ervention's objectives
Efficien	cy: Output and inputs positive correla	tion.			
EQ 12	- How efficient are the implementation mechanisms proving to be appropriate to achieve planned outputs and contribute to outcomes?	Interviews with project management team Direct Stakeholders interviews Analysis of documentation Individual questionnaires Group interviews Group questionnaires Assessment of Document data	Project progress reports Logframe's quantitative indicators' progress (target vs current values) EASA Project management team UNFCCC.	 The project's implementation has been broadly efficient. The Project's institutional arrangements have been effective and ensured appropriate involvement of various EU and non-EU stakeholders 	 Focus on multi-country project to be considered. Degree of modalities that are in place for project management and implementation (especially considering the multi-country focus of the Action)

	Evaluation questions	Data collection method	Data sources	Judgement Criteria	Indicators
EQ 13 EQ14	 Are the inputs / resources provided by the various stakeholders (still) adequate for achieving the planned results? Does the intervention have an adequate monitoring system? 	Interviews with project management team Analysis of documentation Individual and group interviews Group questionnaires Focus Group Interviews Assessment of Document data Interviews with project management team Analysis of documentation Individual and group interviews Focus Group Interviews Assessment of Document data	Project progress reports Budget reports EASA Project management team Direct stakeholders in ASEAN and EU institutions Project progress reports Budget reports EASA Project management team Direct stakeholders in ASEAN and EU institutions	 The intervention has taken steps to address any delays and preventive measures to mitigate potential ones. The relationship between cost effectiveness and timeliness with resources used and the changes they generate. Intervention's spending in line with the budget Data and indicators are up to date. 	 The evaluation will consider if the intervention has encountered any deviations from the plan (delays), and if the planning was revised accordingly Assessment of alignment between spending project's budget. Level of efficiently on use of available resources used (human resources, time, expertise, etc.) Level of pace of implementation of the project given the remaining budget and timeframe, including the no-cost extension period's plans. Level in which changes have been made due to feedback from different sources Logframe has latest information Progress reports are thorough and compile qualitative and quantitative data. Assessments of transfer of information takes place and it is processed and analysed.
Sustaina	bility: The continuation of benefits	from an intervention afte	r major support has been comple	eted.	
EQ15	- Are adequate measures in place to ensure the project's sustainability and lasting results beyond the Action?	Individual Interviews Individual questionnaires	EU institutions EU Delegations documentation Progress reports Quality of individual State Action Plans	 The Action shows potential for sustained impact The intervention has left a self-sustained benefit among the beneficiaries. 	 Level of access to the benefits generated by the intervention which are affordable for target groups over the long term. Absorption levels by key stakeholders acquiring the necessary capacities (incl. institutional, human and financial)

	Evaluation questions	Data collection method	Data sources	Judgement Criteria	Indicators
EQ 16	- What level of commitment and interest exists at the ASEAN States institutions and industry to ensure sustainability beyond de Action?	Analysis of documentation Document review Individual and group interviews Group questionnaires Focus Group Interviews Assessment of Document data	Interviews with national authorities Direct stakeholders in ASEAN and EU institutions Direct beneficiaries Key informants' interviews EASA Management team Internal documents	 The intervention beneficiaries are in a financial position to afford the continuation of benefits The beneficiaries understand the benefits from the intervention and want to continue supporting the benefits from their own financial means. The intervention has 	to ensure the continued flow of benefits/services. - Level of involvement by the private sector with a view to contributing to the sustainability of the intervention. - Rio markers (2) compliance levels (Climate change mitigation and Adaptation) - The degree to which ASEAN MS stakeholders see that it is in their interest that project benefits continue to flow -Extent to which the project and its benefits are appreciated by the MS. -Appropriation levels among each
EU Adde	d value: consideration of the value an	d improvements, which are o	caused by the EU rather than anothe	identified private sector entities that can help sustainability levels	-Appropriation levels among each MS.
EQ 17	- What is the strategic significance for the EU of this Action in the targeted countries?	Individual Interviews Individual questionnaires Analysis of documentation Document review Individual and group interviews Group questionnaires Focus Group Interviews Assessment of Document data	EU institutions EU Delegations State Action Plans development documentation Activities reports/development Progress reports Interviews with national authorities Direct stakeholders in ASEAN and EU institutions Direct beneficiaries Key informants' interviews EASA Management team Internal documents	 The intervention has been designed and is being implemented within a broader framework of interventions supporting sector policies or institutional development of the targeted countries. The intervention has taken advantage of the transfer of information that can be passed from one block of countries to another 	 Consideration level of the possible engagement between these sectors of the EU Member States and other donors. The extent to which the Action's interventions add benefits compared to what would have resulted from other donors' interventions in the absence of this intervention.

	Evaluation questions	Evaluation questions Data collection method		Judgement Criteria	Indicators
			Data sources		
EQ18	- Has the Action contributed to an improved image/visibility of the EU in the targeted countries?	Individual Interviews Analysis of documentation Individual and group	EASA Management team Internal documents EUD Thailand	- The communication strategy has been largely followed	- Assessment on whether a communication and visibility strategy has been developed and a plan has been established by the
		Individual and group interviews	EU Delegations Progress reports Interviews with national authorities	- The resources to apply the strategy match the sought results	intervention, to effectively promote the objectives of the intervention and of the EU support and supported with an adequate budget.
			Direct stakeholders in ASEAN and EU institutions	- There is a largely positive image of the EU with all stakeholders, and they are aware of the source of funds behind the intervention	- Extent to which the application of the EU requirements and published guidelines on communication and visibility benefit the EU image in the country/region.
Coheren	ice: ensure that EU development policy	is complementary to the po	plicies pursued by the Member State	s and maximise resources	
EQ 19	- To what extent is the Action coherent and complementary in relation to relevant EU / EU MS programmes / strategies/ policies?	Individual Interviews Analysis of documentation	International and regional organisations EU MS Development agencies EU Delegations	 The intervention was designed to profit from other similar, EU and non-EU, interventions The intervention has benefited from synergies from complementary interventions from the EU. 	 The evaluation will consider if the Action is capitalising on related –if any- work of other EU services. Coherence level of the Action with possible similar work of individual EU Member States in this sector.
EQ20	- Is there coherence with Actions of other EU member states and other international donors?	Individual Interviews Analysis of documentation	International development agencies International and regional organisations	- The intervention project management has exhausted all feasible possibilities of cooperation with other interventions from international agencies.	 Level of cooperation and coordination between the Action and similar interventions from non-EU international actors and foreign governments. Level of cooperation and coherence with possible similar

Evaluation questions	Data collection method	Data sources	Judgement Criteria	Indicators
			- The intervention has set up or is a member of coordination mechanisms.	work from EU Member States in this sector.

Annex 6: Logical Framework Matrix (planned/real and improved/updated)

8	Results Chain	Indicators	Baselines (including reference year)	Targets (including reference year)	Source of verification	Assumptions
Overall objectives – impacts	To enhance political, economic and environmental partnership between the EU and partner countries in South East Asia in the areas of civil aviation environment and climate change.	Number of collective approaches and/or practices to challenges of global concern which have been developed/implemented	0	I (collective approach adopted or practices in use to harmonise and integrate partner countries in ASEAN region aviation sector on GHG emissions in 2022 in line with EU policies (e.g. State Action Plan, ICAO initiatives on Long-Term Aspirational Goals, Sustainable Aviation Fuels, etc.)	ICAO website for the State action plans	
Specific objectives – outcomes	SO1: To develop or support existing policy dialogues with partner countries in South East Asia on mitigating GHG emissions from civil aviation	Number of processes related to state- level and sub-state level (bilateral, regional, multi-lateral) partnership strategies and policy dialogues which have been influenced	0	1 (process influenced in 8 partner countries; Brunei, Cambodia, Laos, Myanmar, Philippines, Thailand, Vietnam, Indonesia, or 1 at regional level, with a policy dialogue on CC and aviation with EU, materialising in formal commitments (e.g. submission of first/reviewed SAP, alignment with EU policy on Sustainable Aviation Fuels) by 2022)	- CAAs/DGCAs annual report - ICAO website	The existence of partner countries authorities' continued commitment to work with EU institutions Partner countries have sufficient financial and human resources with the support of international and European institutions Political and economic stability of ASEAN Member States

	Results Chein	Indicators	Baselines (including reference year)	Targets (including reference year)	Source of verification	Assumptions
	'CORSIA readiness' process of partner countries in South East Asia to implement CORSIA in line with the agreed international schedule and to join the voluntary phase in 2021 or at the earliest time possible. country global of influence infl	Number of processes related to partner country practices on challenges of global concern which have been influenced	0 (only 1 country having the Level of technical capacity, legislation, local expertise and confidence to implement CORSIA in 2018)	9 (number of additional countries having the level of technical capacity, legislation, local expertise and confidence to implement CORSIA in 2021, including Verification Services in the region)	- CAAs/DGCAs annual reports - ICAO CORSIA website	The existence of partner countries authorities' continued commitment to work with EU institutions and to apply CORSIA Partner countries have sufficient financial and human resources with the support of international and European institutions to
		Number of processes related to state- level and sub-state level (bilateral, regional, multi-lateral) partnership strategies and policy dialogues which have been influenced	0 (5 countries joined CORSIA in 2019)	2 (additional partner countries joining the voluntary phase of CORSIA by 2022)	CAAs/DGCAs annual reports - ICAO CORSIA website	Implement CORSIA - Political and economic stability of ASEAN Member States - Stability of CORSIA overall Implementation
Outputs	Output 1: Established conditions for SEA States to submit their State Action Plans to ICAO to reduce CO2 emissions from International aviation.	Number of events organised	0 (2018)	10 (2022) (workshops on State Action Plans)	-Event reports	The partner States are open to the project support in the field of SAP.
		Number of participants in the events organised	0 (2018)	200 (2022) (disaggregated by gender)	-Event reports	
		Number of knowledge-based products	0 (2018)	5 (2022) (draft State Action Plans to which the project has decisively contributed, including the use of ROM Climate Change indicators)	-Draft State Action Plans	
	Output 2: Established conditions for the SEA States to Implement	Number of events organised	0 (2018)	20 (2022) (technical workshops on CORSIA implementation)	-Event reports	- The partner States are open to the project support in the field of CORSIA.

Results Chain	Indicators	Baselines (including reference year)	Targets (including reference year)	Source of verification	Assumptions
CORSIA process as per ICAO SARPs.	Number of participants in the events organised	0 (2018)	280 (2022) (disaggregated by gender)	-Event reports	
	Number of knowledge-based products	0 (2018)	9 (2022) (Knowledge based products supporting States to develop their Emission Data Management System, (e.g. IT system analyses, IT software specs, encoding of algorithms for emission data checks, etc.)	-Papers/guidelines	
Output 3: Increased knowledge of climate change and environmental tools and mechanisms	Number of knowledge-based products	0 (2018)	5 (2022) (Country Profiles detailing Climate Change challenges and opportunities)		- Governments from the involved countries are ready to cooperate including climate topics into daily aviation business
	Number of events organised	0 (2018)	4 (2022) (high-level meetings between EU and ASEAN officials)		
Output 4: Established conditions for the SEA States to define and create the National framework for verification system	Number of events organised	0 (2018)	15 (2022) (workshops or training sessions on verification process at regional level and in some selected countries)	-EASA project progress report	The partner States concur that there are market opportunities for new Verification Bodies in the country/region.
	Number of participants in the events organised	0 (2018)	150 (2022) (disaggregated by gender)	-Event reports	

Re	esults Chain	Indicators	Baselines (including reference year)	Targets (including reference year)	Source of verification	Assumptions
		Number of knowledge-based products	0 (2018)	5 (2022)	-Training material	
				(training material)		

Annex 8: Literature and documentation consulted

Action Fiche for EU-South East Asia Cooperation on Mitigating Climate Change impact from Civil Aviation

Annex I. Description of the Action plan [Ref. Ares (2019)5467245 - 29/08/2019)]

Annex I. Description of the Action plan [Ref. Ares (2022) 4404736 – 15/06/2022)]

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3. Annex I Description of the Action

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workplan 2022 2023 EU-SEA-CCCA-CORSIA_PMB_Description

Approved Narative Report

Second Progress Report EU-SEA CCCA CORSIA V1.1_final_CLEAN.pdf

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Annex 1_Attendance lists

Annex 1a Attendance list_Working Group

Terms of Reference

Annex 2_ Minutes of the workshop NABsVBs 3009-1110

KAN K-10.1 Persyaratan Tambahan Akreditasi LVV Sektor Informasi Lingkungan

Master presentation PSC Aug22_v1.2

14.12_Activity Report_ALL_Dec

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Framework contract PSF 2019 Lot 2 - Specific Contract Number: 300016566 10.10 Activity Report SAP Oct 10.06.22 Activity Report SAP Jun 22 Request letter Addendum EU-SEA CCCA CORSIA 09042021 Ares 6a All ASEAN Report - 3007 5a STATE PORTFOLIO Vietnam May2022 final 5a_STATE PORTFOLIO_Lao PDR - final 26072022 4a_STATE PORTFOLIO_Myanmar - rev 2907 3a STATE PORTFOLIO Brunei rev 2907 03.22 B.My.CORSIA.3 AttPrg SM-KAN AIS Q3-4 03.22 B.My.CORSIA.3 AttPrg_SM-KAN_AIS 03.22 B.My.CORSIA.3 AttPrg 2nd training ActSumm 2a_Cambodia STATE PORTFOLIO rev 15072022 02 B Id SAP Annex 3 Aggregated activity statistics 02 B Id SAP Activity Summary 02_B Ca SAP_AIS.pdf 02_B Id SAP_AIS.pdf 02_B L SAP_AIS.pdf 02_B My SAP_AIS.pdf 02_B Ph SAP_AIS.pdf 02_B Vn SAP_AIS.pdf 04_B My AEDMS Malaysia_AIS.pdf 04 B Ph AEDMS AlS.pdf 04 B Vn AEDMS AIS.pdf Day 3 Block 2_6.2 Airbus_Safran.pdf Day 3_Block 3_7.1_DG MOVE.pdf Day 3_Block 3_7.2_CAAS.pdf EU-SEA CCCA CORSIA PMB04 v1 22.06.10. PM Questionnaire (003)_SHL MBO.docx 22.06.10. PM Questionnaire (003)_SHL.docx Annex 5.1 Work Plan 2021.pdf Annex 5.2 2020 PIMS Indicator Report_V1.1_final_CLEAN.pdf Annex 5.3 Supporting Information for 2020 Activities_V1_final_CLEAN.. Annex 5.4 Budget during reporting period_EU SEA CCCA CORSIA_V0.3. Annex 5.6 Financial audit report and MD_EU SEA CCCA CORSIA.pdf Annex 5.7 External and Internal Risks_V1_final_CLEAN.pdf Annex 5.8 - Website Traffic Overview_V1_final_CLEAN.pdf

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- 2. Bio of Speakers and Pesenters.pdf
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- Day 1_Block 1_1.2_EASA.pdf
- Day 1_Block 1_1.3_IRENA.pdf
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- Day 1_Block 2_2.1_EASA.pdf
- Day 1_Block 2_2.2_World Energy.pdf
- Day 1_Block 2_2.3_Neste.pdf
- Day 2_Panel 1_3.1_EASA.pdf
- Day 2_Panel 1_3.2 IRENA.pdf
- Day 2_Panel 1_3.3_Neste.pdf
- Day 2_Panel 1_3.4_World Energy.pdf
- Day 2_Panel 2_4.1_Seattle Intl Airport.pdf
- Day 2_Panel 2_4.2_Malaysia Airlines.pdf
- Day 2_Panel 2_4.3_EU-SEA CCCA CORSIA.pdf
- Day 2_Panel 2_4.4_RSB.pdf
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- Day 3_Block 1_5.2_EU-SEA CCCA CORSIA.pdf
- Day 3_Block 1_5.3_WEF.pdf
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- FINTI. CCCA CORSIA CAA Thailand INTI.xlsx
- F INT3. CCCA CORSIA Question CAA Camb INT3.xlsx
- F INT5. CCCA CORSIA Question CAA Malaysia INT5.xlsx
- F INT6. CCCA CORSIA CAA_DSM Malaysia NAB.xlsx
- F INT9. CCCA CORSIA Question CAA Ind INT9.xlsx
- F INTIO. CCCA CORSIA NAB INDONESIA INTIO.xlsx
- FINTIL CCCA CORSIA Question CAA Phil INT 11.xlsx
- INT12. CCCA CORSIA Question NAB Phi INT 12.xlsx
- F INT16. CCCA CORSIA NAB BRUNEI INT16.xlsx
- INT17. CCCA CORSIA CAA Myanm INT17.xlsx
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Annex 9. Project workplan 2022 – 2023





EU-SEA CCCA CORSIA Project

Work Plan 2022-2023

Approved by PSC

Version 2.0 – 11.09.2022

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Acronyms

ACCSQASEAN Consultative Committee on Standards and QualityAeDMSAviation Emissions Data Management SystemAE CATAASEAN-EU Comprehensive Air Transport AgreementAMSASEAN Member State(s)AOAeroplane OperatorASEANAssociation of South East Asian NationsASECASEAN SecretariatATWGASEAN Air Transport Working GroupCAACivil Aviation AuthorityCAPCommittee on Aviation Environmental ProtectionCOPConference of the PartiesCORSIACarbon Offsetting and Reduction Scheme for International AviationDCADepartment of Civil AviationDCADepartment of Civil AviationDCADirectorate General for Civil AviationDCADepartment of Civil AviationDSMNational Accreditation Body of MalaysiaEASAEuropean Union Aviation Safety AgencyEMPEmissions Monitoring PlanEREmissions ReportEUEU DelegationEUJEU DelegationEUACCCAEUJ SEACCCACAAAviationFPIForeign Policy InstrumentsGHGGreenhouse GasesICAOInternational Civil Aviation Body of IndonesiaLTAGLong Term Aspirational GoalsNABNational Accreditation BodyPABPhilippines Accreditation BodyPABProject Management BoardPSCProject Steering CommitteeSAState AuthoritySAFSustainable Aviation Fuels </th <th>vil</th>	vil
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1 Introduction

The EU-South East Asia Cooperation on Mitigating Climate Change impact from Civil Aviation (EU-SEA CCCA CORSIA) project was initiated in August 2019 and is now set for a duration of 46 months (from 29.08.2019 to 28.06.2023) with the intention to support the ASEAN Member States¹ (AMS) in reducing carbon emissions from civil aviation.

The action is implemented by the European Union Aviation Safety Agency (EASA) and managed by the EU Delegation to Thailand (FPI – Asia Pacific) as Contracting Authority.

Although the Action was initially launched for a 36-month duration, due to the impact of COVID-19 and its associated travel restrictions, it was agreed to amend² it to prolong the implementation period until the end of June 2023. The additional implementation period would give the necessary time to finalise achieving the established objectives and to act upon the expected resolutions of the 41st ICAO Assembly and COP27, as relevant.

2 Objectives and Outputs

The Overall Objective of the project is to enhance political, economic and environmental partnership between the EU and partner countries in South East Asia in the areas of civil aviation environmental protection and climate change. More concretely

- To develop or support existing policy dialogues with partner countries in South East Asia on mitigating GHG emissions from civil aviation.
- To contribute to the 'CORSIA readiness' process of partner countries in South East Asia to implement CORSIA in line with the agreed international schedule and to join the voluntary phase in 2021 or at the earliest time possible.

In order for the partner countries and the EU to achieve the above-mentioned objectives, the project identified the following **outputs/expected results** to be delivered through the implementation of the activities agreed in the annual work plans:

- Established conditions for SEA States to submit their State Action Plans to ICAO to reduce CO2 emissions from international aviation.
- Established conditions for the SEA States to implement CORSIA as per ICAO SARPs.
- Increased knowledge of climate change and environmental tools and mechanisms.
- Established conditions for the SEA States to define and create the National framework for verification systems.

3 Implementation of Work Plan 2022

The Work Plan 2022 was endorsed by the EUD to Thailand after the approval of the PSC on December 9, 2021, and the PMB on January 24, 2022, without any major modification from the initial work plan proposed.



¹ ASEAN stands for Association of South East Asian Nations and it is the political framework established by Brunei, Cambodia, Indonesia, Laos PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam, to seek common policies in trade, commerce, transport.

² Addendum 2 to the Action, signed on May 20, 2021, Ref. Ares(2021)3021292 - 06/05/2021

3.1 Implementation Overview

The following chart provides the overview of the 2022 Work Plan implementation as approved by the PSC and PMB meetings. The work plan contained 59 activities, out of which 23 activities have been fully or partially implemented, another 28 have been retained for the Work Plan 2022-2023 and the 8 activities remaining have been put on hold or cancelled. The majority of the activities were delivered online, but during June it was possible to resume the organisation of bilateral support on site i.e., Malaysia, Vietnam and Philippines.

In summary, the delays to the implementation of the activities have been mainly due changing priorities in the AMS (i.e., SAP for Cambodia and Brunei, AeDMS for Cambodia) and the technical difficulties experienced in the final deployment of the AeDMS in the local infrastructure (i.e., Philippines, Vietnam and Malaysia). The activities to facilitate the partnership between State Authorities and organisations, mainly aiming to scale up the use of SAF, have been postponed due to the early state of the developments at national level and the expected relevance of the 41st ICAO Assembly.

It is worth highlighting the cancellation of the workshop on Long-Term Aspirational Goals (LTAG), which initially was conceived to support the AMS to follow and digest the technical discussions of the CAEP working group on LTAG, but it was finally cancelled to avoid interference with the discussions for preparation of the 41st ICAO Assembly and due to the good understanding of the technical content of the report by the AMS.

	X
current available sites opening	EASA



Activity #	riority		Definition of Activity	Indicative Date	Implement. Date	uary	ruany		arch	pril	pril 2022	arch pril 1ay 20 Ine	arch pril 1ay 202 ine uly
Activity #	Prior		Definition of Activity	Date	Date	Januar	Februa	March	April	April May		May	May June
PM.0.1.14	н	Cont	Contribution to ATWG meeting	May-22	Apr-22								
PM.0.1.13	т	Clos	Closing Event	Aug-22	Rescheduled								
PM.0.1.12	н	ACC	meeting	Jun-22	May-22								
PM.0.1.11	т	Project N 2021/22	Project Management Board meeting 2021/22	Jan-22	Jan-22								
PM.0.1.10	т	Proj	Project Steering Committee meeting 22 Dec-21	Dec-21	Dec-21								
ALL.PROJECT.1	т	Virtu	Virtual Coffee with SME	Jan-Aug 22	Jan-Aug 22								
R.POLICY.1	н	Wor impl Envi	Workshops to support the implementation of AE CATA in Environmental Protection	Apr-Aug 2022	On hold								
R.SAP.4	н	Wor Actio	Workshop on Next CO2 Reduction Actions SAP	May-22	Rescheduled								
R.SAP.3	L	Wor Aspi chall	Workshops to exchange on Long Term Aspirational Goals (expectations and challenges)	Mar - Jun 22 Cancelled	Cancelled								
R.SAP.2	т	Confe Fuels	rence on Sustainable Aviation	Jan-22	Jan-22								
R.SAP.1	т	Wor redu	Workshop on monitoring of CO2 reduction measures in SAP	Mar-22	Rescheduled								
B.Z.SAP.b	т	Cons (b) ii	Consultancy support to State Authority (b) in developing SAF	Feb-Jul 2022 Rescheduled	Rescheduled								Ongoing discussions with CAAM
B.Z.SAP.a	т	Cons (a) ir	Consultancy support to State Authority (a) in developing SAF	Feb-Jul 2022 Rescheduled	Rescheduled								
B.Y.SAP.d	т	Supp Part	Support to State Authority (d) Partnership with Industry	Mar-22	Rescheduled								
B.Y.SAP.c	т	Supp Part	Support to State Authority (c) Partnership with Industry	Feb-21	Rescheduled								

								2	2022				
Activity #	Priority	Definition of Activity	Indicative Date	Implement. Date	January	February	March	April	May	June	July	August	Comments
B.X.SAP.d	L	Support to State Authority (d) Partnership with Academia/Research II Institutions	Mar-22	Rescheduled									Initial discussions only, further exploration pending
B.X.SAP.c	L	Support to State Authority (c) Partnership with Academia/Research II Institutions	May-22	Rescheduled									Initial discussions only, further exploration pending
B.X.SAP.b	-	Support to State Authority (b) Partnership with Academia/Research Institutions	Apr-22	Rescheduled									Initial discussions only, further exploration pending
B.X.SAP.a	٦	Support to State Authority (a) Partnership with Academia/Research II Institutions	Feb-22	Rescheduled									Initial discussions only, further exploration pending
B.Vn.SAP.2	т	Support SAP Vietnam II (Finalisation of SAP)	Feb-21	Mar - Jun 22									Consultancy support to finalise SAP
B.Vn.SAP.3	н	Support SAP Vietnam III (Monitoring)		Jun 22									Onsite support taking advantage of mission onsite
B.Ph.SAP.3	т	Support SAP Philippines III (Finalisation Feb-21 of SAP)	⁻ eb-21	Jan - Jun 22									Consultancy support to finalise SAP
B.Mn.SAP.5	L	Support SAP Myanmar V (placeholder) On-hold	On-hold	On-hold									
B.Mn.SAP.4	-	Support SAP Myanmar IV (placeholder) On-hold	On-hold	On-hold									
B.Mn.SAP.3	-	Support SAP Myanmar III (placeholder) On-hold	On-hold	On-hold									
B.Mn.SAP.2 B.Mn.SAP.1		Support SAP Myanmar I (placeholder)	On-hold	On-hold On-hold									
B.La.SAP.4	т	÷	Feb-22	Nov21 - Mar22									Draft SAP agreed with the stakeholder and DCA Laos
B.La.SAP.5	I	Support SAP Laos PDR V (Monitoring)	Feb-22	TBD									Rescheduled once the SAP is submitted to ICAO
B.Ca.SAP.4	н	Support SAP Cambodia IV (final draft)	Apr-22	Rescheduled									Priority on CORSIA
B.Ca.SAP.3	н	Support SAP Cambodia III (measures)	Mar-22	Rescheduled									Priority on CORSIA
B.Ca.SAP.2	т	Support SAP Cambodia II (baseline)	Jan-22	Rescheduled									Priority on CORSIA
B.Ca.SAP.1	т	Support SAP Cambodia I	Jan-22	Feb-22									Meeting on 23 rd February with SSCA and Stakeholders on SAP – decision to prioritise CORSIA
B.Bn.SAP.1	н	Support SAP Brunei I (placeholder)	Feb-21	Rescheduled					_				

"Mid-term evaluation of PI/2019/405-400 "reducing plastic waste and mo	arine litter in East and South-East Asia:
Supporting a transition to a c	circular economy in the region" project
Framework contract PSF 2019 Lot 2 –	Specific Contract Number: 300016566

									2022				
Activity #	Priority	Definition of Activity	Indicative Date	Implement. Date	January	February	March	April	May	June	July	August	Comments
B.Ph.CORSIA.3	т	Bilateral support to NAB (Philippines).	Feb-21	Nov21 - Jul 22									Support to draft MoU between CAAP and PAB Final draft achieved.
B.Ph.CORSIA.2	т	Bilateral support to NAB (Peer support to GHG Assessor from NAB Philippines by NAB Thailand)	Jan-Apr 2022	Nov21 - Jul 22									Facilitation of Attachment Programme TISI-PAB
B.My.CORSIA.3	н	Bilateral support to NAB (Peer support to GHG Assessor from NAB Malaysia by Apr-Jul 2022 Feb - Aug 22 other AMS NAB)	Apr-Jul 2022	Feb - Aug 22									Facilitation of Attachment Programme KAN-DSM
B.My.CORSIA.2	н	Workshop on CORSIA Eligibility Criteria for Malaysia GHG Programmes (emission cancellation)	May-22	Rescheduled									Lowered priority
B.My.CORSIA.1	н	.B (Malaysia) on	Feb-June 2022	Jun-Jul 22									Consultancy support to develop CORSIA Accreditation Process
B.Mn.CORSIA.1	-	Bilateral support to NAB (Myanmar)	On-hold	On-hold									Political instability
B.Ph.AEDMS.2	т	Bilateral support to Philippines to upgrade AeDMS (Session 2)	Feb-22	Feb - Aug 22									post-implementation adaptions and bug fixing ongoing
B.Ph.AEDMS.1	т	Bilateral support to Philippines to upgrade AeDMS (Session 1)	Jan-22	Feb - Aug 22									Initial implementation of AeDMS complete, administrator and end-user trainings
B.My.AEDMS.4	т	Bilateral support to Malaysia to setup AeDMS (Session 4)	Jan-22	Feb - Aug 22									Initial implementation of AeDMS completed administrator and end-user trainings. Post- implementation adaptions and bug fixing ongoing
B.Vn.AEDMS.4	т	Bilateral support to Vietnam to setup AeDMS (Session 4)	Jan-22	Feb - Aug 22									post-implementation adaptions and bug fixing ongoing until app. Nov. 2022
B.Mn.AEDMS.2	-	Bilateral support to Myanmar to upgrade AeDMS (Session 2)	On-hold	On-hold									Political instability
B.Mn.AEDMS.1	L	Bilateral support to Myanmar to upgrade AeDMS (Session 1)	On-hold	On-hold									Political instability
B.L.AEDMS.2	т	Bilateral support to Laos PDR to upgrade AeDMS (Session 2)	Jan-22	Rescheduled									Priority on SAP
B.Ca.AEDMS.4	т	Bilateral support to Cambodia to setup AeDMS (Session 4)	Feb-22	Rescheduled									Priority on CORSIA
B.Ca.AEDMS.3	т) Cambodia to setup	Jan-22	Rescheduled									Priority on CORSIA

B.Bn.AEDMS.1 H	B.Bn.AEDMS.2 H	Activity #	
т	I	Priority	
Bilateral support to Brunei to upgrade	Bilateral support to Brunei to upgrade Feb-22 Rescheduled	Definition of Activity	
an-22	⁻ eb-22	Indicative Date	
Jan-22 Rescheduled	Rescheduled	Indicative Implement. Date Date	
		January	
		February	
		March	
		April	2
		May	2022
		June	
		July	
		August	
	Availability DCA	Comments	





3.2 Achievements

In summary, the implementation of the 23 activities have contributed to the following achievements during 2022:

- 1. Support to State Authorities in progressing the drafting of the next edition of their SAP:
 - a. Final draft of the 1st edition of the State Action Plan for Laos PDR.
 - b. Submission to ICAO of the subsequent State Action Plan for Philippines, Malaysia and Vietnam.
- 2. Support to State Authorities and National Accreditation Bodies on CORSIA implementation:
 - All supported AMS have consolidated their technical capabilities to report to ICAO the Emission Report 2021, achieving reporting by 8³ AMS out of the 10.
 - b. Cambodia joined CORSIA in its voluntary phase.
 - c. The NAB Philippines and Malaysia have initiated their Attachment Programmes supported by the NAB Thailand and the NAB Indonesia, respectively. They are expected to be ready to accredit their candidate Verification Bodies before the end of 2022.
 - d. The NABs at earlier stages of the accreditation process have successfully attended the capacity building activities to establish the GHG scheme, providing the necessary foundation to develop the CORSIA Accreditation Process and for any validation process for projects and programmes under the Paris Agreement.
- 3. Support to scale up Sustainable Aviation Fuels (SAF):
 - a. Launch of the regional workshops on Sustainable Aviation Fuels (SAF), followed by a series of thematic webinars covering not only SAF related topics (e.g., fuel certification, SAF benefits), but wider environmental initiatives (e.g., Eco Label).

In addition to achievements strictly linked to the areas of action of the work plan, as in previous years the role of the project should be highlighted in increasing communication and coordination among all the CORSIA and SAP Stakeholders in each AMS, the positive signs of trust in the Project and Project Team from the AMS, and the good momentum within the regional dynamics (e.g., launch of a second attachment programme for GHG assessors), which will ensure the sustainability of the action beyond the project's lifetime.

3.3 Challenges

During the implementation of the work plan, the project team has encountered a number of challenges, among which the following ones are to highlight:

- 1. Avoiding interference with preparation of the 41st ICAO Assembly.
- 2. Agreeing on the pace for implementation of the bilateral activities with the supported AMS.
- 3. Connecting and coordinating with ongoing initiatives on SAF.
- 4. Balancing availability of resources with the priority of initiatives.
- 5. Resuming on-site support.
- 6. Consolidating environmental protection items in the ASEAN agenda.

The work plan proposed below considers the best approach to overcome these challenges, for instance, increasing the presence in the ASEAN fora, liaising with ongoing initiatives (e.g. Skies For Tomorrow from the WEF) and promoting face-to-face interactions.

³ As of 23rd August, by the end of August it is expected to reach 9 out of 10 AMS.

4 Proposed Work Plan 2022-2023

In line with the project objectives and log frame, the proposed work plan for 2022-2023 has been developed considering the following priorities by area of action:

- 1. State Action Plans
 - 1. Achieve all AMS with at least the 1st SAP submitted to ICAO.
 - 2. Establish a monitoring mechanism for the reduction measures of the SAPs supported.
 - 3. Facilitate deepening the knowledge of AMS in forward-looking CO2 reduction measures to consider in later editions of their SAP.
- 2. CORSIA
 - 1. Increase the number of AMS joining the voluntary phase of CORSIA.
 - 2. Promote good understanding of CORSIA Offsetting and eligible fuels to all CORSIA stakeholders, and the adjustments of the CORSIA Docs agreed during the 41st ICAO Assembly.
 - Increase of accredited verification services in ASEAN MS's (both for ISO 14065 and/or CORSIA), offering competitive options for Aeroplane Operators in the region and local business opportunities.
 - 4. Support the update of accreditation process to accredit extended scope of verification over offsetting and the use of CORSIA Eligible Fuels.
 - 5. Increase awareness of CORSIA Eligibility Criteria for emission cancellation programmes.
 - 6. Promote regional synergies in CORSIA accreditation.
- 3. Aviation emissions Data Management Systems (AeDMS)
 - 1. Achieve all supported AMS having the IT capabilities to collect, handle and check emission data, to produce their CORSIA Emissions Report.
 - 2. Deliver IT capabilities to supported AMS with scaled up AeDMS to support Offsetting and the use of CORSIA Eligible Fuels.
 - 3. Enlarge the IT capabilities of the supported AMS to facilitate a sustainable tool.
- 4. Climate Change Policies
 - 1. Assist in developing Sustainable Aviation Fuels policies and roadmaps, both at national level with selected countries and at ASEAN level.
 - 2. Explore support to the environmental pillar of the AE-CATA, facilitating the policy dialogue between the two blocs and the implementation of the agreed measures.
 - 3. Support increasing the profile of the Climate Change Action in the ASEAN Transport Working Group (ATWG).
 - 4. Facilitate good understanding of the complementarity of the ICAO and UNFCCC frameworks, enabling a consistent approach to international and domestic aviation in the AMS.

The table below provides the initial indicative list of activities in the work plan, sorted by area of action. Each entry also provides an indicative month of implementation for the activity as well.

				202	2			202	8				
Activity #	Priority	Definition of Activity	Indicative Date	September	October	November	December	lanuary	February	March	April	May	June
PM.0.1.15	н	Contribution to ATWG meeting and ASEAN Sustainability Framework	Sep-22, Apr-23										
PM.0.1.13	н	Closing Event	May-23										
PM.0.1.12	Н	ACCSQ WG2 meeting	Oct-22, Apr-23										



				202	2			202	3		_		
Activity #	Priority	Definition of Activity	Indicative Date	eptember	ctober	ovember	ecember	lanuary	February	/arch	ii.	ý	ē
				Sep	Oct	Ñ	Dec	Jan	Feb	Ma	April	May	
PM.0.1.11	н	Project Management Board meeting 2022/23	Sep-22										
PM.0.1.10	H	Project Steering Committee meeting 2022/23	Aug-22										
ALL.PROJECT.1	н	Virtual Coffee with SME	Sep-22 – Jun-23										
R.POLICY.1	н	Workshops to support the implementation of AE CATA in Environmental Protection	Nov-22 – Jun-23										
R.SAP.5	н	Webinars on Sustainable Aviation Fuels and other sustainability topics in aviation	Sep 22 – May 23										
R.SAP.4	H H	Workshop on Next CO2 Reduction Actions SAP	Mar-23										⊢
R.SAP.1	н	Workshop on monitoring of CO2 reduction measures in SAP	Dec-22										⊢
B.My.SAP.x	н	Consultancy support to State Authority (b) in developing SAF (Malaysia)	Sep-22 – Feb-23										
B.Ph.SAP.x	н	Consultancy support to State Authority (a) in developing SAF (Philippines)	Oct-22 – Mar-23										_
B.Id.SAP.x	н	Consultancy support to State Authority (a) in developing SAF (Indonesia)	Oct-22 – Mar-23										
B.Vn.SAP.x	н	Consultancy support to State Authority (a) in developing SAF (Vietnam)	Oct-22 – Mar-23										
B.My.SAP.y	Н	Support to State Authority (d) Partnership with Industry (Malaysia)											_
B.Ph.SAP.y	н	Support to State Authority (c) Partnership with Industry (Philippines)											
B.x.SAP.x	L	Support to State Authority (d) Partnership with Academia/Research Institutions											
B.x.SAP.x	L	Support to State Authority (c) Partnership with Academia/Research Institutions	Nov-22 – Apr-23										
B.Ph.SAP.3	н	Support SAP Philippines III (monitoring)	Oct-22										L
B.Mn.SAP.5	L	Support SAP Myanmar V (placeholder)	On-hold										
B.Mn.SAP.4	L	Support SAP Myanmar IV (placeholder)	On-hold										
B.Mn.SAP.3	L	Support SAP Myanmar III (placeholder)	On-hold										
B.Mn.SAP.2	L	Support SAP Myanmar II (placeholder)	On-hold										1
B.Mn.SAP.1	L	Support SAP Myanmar I (placeholder)	On-hold										L
B.La.SAP.5	н	Support SAP Laos PDR V (monitoring)	Jan-23										L
B.Kh.SAP.4	н	Support SAP Cambodia IV (monitoring)	Dec-22										-
B.Kh.SAP.3	н	Support SAP Cambodia III (measures)	Oct/Nov-22										-
B.Kh.SAP.2	н	Support SAP Cambodia II (baseline)	Sep/Oct-22										-
B.Bn.SAP.1	н	Support SAP Brunei I (final draft)	Oct-22										-
R.CORSIA.3	L	Meeting to update on CORSIA related resolutions from the 41st ICAO Assembly	Nov-22										
R.CORSIA.4	L	Workshop to discuss emission schemes for Domestic Aviation taking advantage of established CORSIA processes	Mar-23										
M.CORSIA.9	L	Workshop to update CORSIA practices for NAB (Brunei, Cambodia, Laos PDR and Myanmar)	Jan-23										
M.CORSIA.10	L	Workshop to update CORSIA practices for NAB (Indonesia, Malaysia, Philippines, Singapore, Thailand, Vietnam)	Feb-23										
M.CORSIA.5	L	Information session for validators of climate change projects & programmes	Nov-22										
M.CORSIA.2	L	Workshop on Offsetting and Eligible Fuels for SA&OA WS2	Jan-23				<u> </u>						1
M.CORSIA.1	L	Workshop on Offsetting and Eligible Fuels for SA&OA WS1	Jan-23		<u> </u>		-						⊢
B.Vn.CORSIA.1	н	High level meeting on CORSIA (Vietnam)	Sep-22			<u> </u>	<u> </u>	-					<u> </u>
B.Th.CORSIA.1	н	Workshop on CORSIA Eligibility Criteria for Thailand GHG Programmes (emission cancellation)	Feb-23										
B.Ph.CORSIA.4	н	Workshop on CORSIA Eligibility Criteria for Philippines GHG Programmes (emission cancellation) – Awareness of stakeholders	Jan-23										
B.Ph.CORSIA.2	н	Bilateral support to the NAB (Attachment Programme for GHG Assessor from NAB Philippines by NAB Thailand)	Sep-Oct 2022										
B.My.CORSIA.3	н	Bilateral support to the NAB (Attachment Programme for GHG Assessor from NAB Malaysia by other AMS NAB)	Sep-Dec 2022										
B.My.CORSIA.2	н	Workshop on CORSIA Eligibility Criteria for Malaysia GHG Programmes (emission cancellation)	Dec-22										
B.My.CORSIA.1		Bilateral support to the NAB (Malaysia) on Accreditation Process	Feb-Dec 22										L
B.Mn.CORSIA.1		Bilateral support to the NAB (Myanmar)	On-hold										L
3.Kh.CORSIA.1	н	Bilateral support to the NAB (Cambodia) on GHG Scheme	Oct-Dec 2022							1			İ.

				202	2			202	3				
Activity #	Priority	Definition of Activity	Indicative Date	September	October	November	December	lanuary	February	March	April	May	lune
B.Bn.CORSIA.1	Н	Bilateral support to the NAB (Brunei) on GHG Scheme	Jan-Apr 2023										
B.Bn.CORSIA.2	н	Bilateral support to the NAB (Attachment Programme for GHG Assessor from NAB Brunei by other AMS NAB)	Jan-May 2023										
B.Ph.CORSIA.5	н	Bilateral support to explore emission scheme for Domestic Aviation taking advantage of established CORSIA process)	Jan-23										
B.Vn.CORSIA.2	н	Bilateral support to explore emission scheme for Domestic Aviation taking advantage of established CORSIA process)	Jan-23										
B.My.CORSIA.4	н	Bilateral support to explore emission scheme for Domestic Aviation taking advantage of established CORSIA process)	Jan-23										
M.AEDMS.1	н	Assessment of AeDMS tool and reprogramming to ensure sustainability at AMS level	Dec-22 / Jan-23										
B.Ph.AEDMS.3	н	Bilateral support to Philippines AeDMS to achieve a sustainable tool (Session 2)	Nov-22 Mar-23										
B.Ph.AEDMS.2	н	Bilateral support to Philippines to upgrade AeDMS (Session 2)	Sep-22										
B.My.AEDMS.5	н	Bilateral support to Malaysia to achieve a sustainable tool (Session 5)	Dec-22 Mar-23										
B.My.AEDMS.4	н	Bilateral support to Malaysia to setup AeDMS (Session 4)	Jan-22										
B.Mn.AEDMS.2	L	Bilateral support to Myanmar to upgrade AeDMS (Session 2)	On-hold										
B.Mn.AEDMS.1	L	Bilateral support to Myanmar to upgrade AeDMS (Session 1)	On-hold										
B.La.AEDMS.3	н	Bilateral support to Laos PDR to upgrade AeDMS (Session 2)	Sep-22										
B.La.AEDMS.4	н	Bilateral support to Laos PDR to achieve a sustainable tool (Session 4)	Dec-22 Mar-23										
B.Vn.AEDMS.4	н	Bilateral support to Vietnam to achieve a sustainable tool (Session 4)	Dec-22 Mar-23										
B.Kh.AEDMS.5	н	Bilateral support to Cambodia to achieve a sustainable tool (Session 5)	Dec-22 Mar-23										
B.Kh.AEDMS.4	Н	Bilateral support to Cambodia to setup AeDMS (Session 4)	Nov-22										-
B.Kh.AEDMS.3	Н	Bilateral support to Cambodia to setup AeDMS (Session 3)	Oct-22										_
B.Bn.AEDMS.3	н	Bilateral support to Brunei to achieve a sustainable tool (Session 4)	Dec-22 Mar-23										
B.Bn.AEDMS.2	Н	Bilateral support to Brunei to upgrade AeDMS (Session 2)	Nov-22									Π	
B.Bn.AEDMS.1	н	Bilateral support to Brunei to upgrade AeDMS (Session 1)	Oct-22										

4.1 Project Management and cross-area activities

This section covers the project management related activities that supports the governance and steering of the project, both towards the European and the ASEAN stakeholders. It also includes the activities that are meant to support more than one area of actions (e.g., the so-called "virtual coffee with the SME").

PM.0.1.15 - **Contribution to the ATWG meeting and ASEAN Sustainability Framework:** Participation in the ATWG meeting to update the group on the progress of the implementation of the work plan of the project and to explore support to the ASEAN Air Transport Working Group. Following the intention of CAAS to establish an ASEAN Sustainability Framework, the project will explore the possibilities to support such a framework in areas of common interest (e.g. environmental reporting, scaling up of SAF, joining CORSIA, forward looking CO2 reduction measures).

PM.0.1.13 - Closing Event: The project will organise a closing event, likely back-to-back to another relevant ASEAN meeting, to present the achievements made and to reflect on the areas of common interest between the EU and ASEAN for further collaboration.

PM.0.1.12 - **ACCSQ WG2 meeting**: Similar to the ATWG, the ASEAN Consultative Committee for Standards and Quality is the ASEAN wide body to harmonise the application of standards across the AMS. Working Group 2 takes care of CORSIA Accreditation and is therefore relevant for the project. The participation in the ACCSQ WG2 allows the project to present the progress of the work plan implementation and the identification of needs of the AMS NABs.

PM.0.1.11 - Project Management Board meeting 2022/23: Self-explanatory.

PM.0.1.10 - Project Steering Committee meeting 2022/23: Self-explanatory.

ALL.PROJECT.1 - Virtual Coffee with SME: The concept was consolidated during 2021 and 2022 where a number of sessions were held between a group of stakeholders and a dedicated project expert (Subject Matter Experts). The project proposes continuing with the practice, as it has been proven an efficient way of communicating with a targeted group of stakeholders. For the 2022-2023 work plan, the SAF and Sustainability Webinars have been detached from this activity.

R.POLICY.1 - Workshops to support the implementation of AE CATA in Environmental Protection: Upon request from DG MOVE, the project will facilitate the discussions and initiatives on Environmental Protection associated with the ASEAN-EU Comprehensive Air Transport Agreement, once signed.

4.2 Activities in support of the State Action Plan

The activities listed in this section intend to provide continuity to the support provided in previous work plans to the development of a robust State Action Plan by the supported AMS, to increase the interest on the SAF uptake and to cater for the exploration of new CO2 reduction measures in partnership with industry and/or research institutions.

R.SAP.1- Workshop on monitoring of CO2 reduction measures in SAP: Regional workshop to showcase several mitigation measures implemented by relevant EU or ASEAN stakeholders and the methodology established to monitor its actual reduction. The workshop will also present the process to facilitate the information flow between the State Authority and the stakeholders (i.e., Aeroplane Operators, Air Navigation Service Providers and Aerodrome Operators).

R.SAP.4- Workshop on Next CO2 Reduction Measures suitable for the SAP: Regional workshop to present the state-of-the-art of research or innovation on CO2 reduction measures. These measures, while not being suitable for the SAP now, would provide an insight to the stakeholders and to the State in terms of the investment needed to get them operational at later years.

R.SAP.5- Webinars on Sustainable Aviation Fuels and other sustainability topics in aviation: Following the initial webinars performed in the first half of 2022, the project will propose exploring further details on SAF and sustainable aviation in this flexible format. Topics such as Development of SAF Policies, SAF Experience from an ASEAN Airline, Book&Claim or Sustainability Certification, Financing Mechanisms for SAF Scale-up, will be presented by key speakers. The main objective of the webinars is to provide "shots" of information on a given topic to a wide audience in the AMS, facilitating keeping SAF and Sustainable Aviation as a theme of discussion between State Authorities and AMS. They are expected to raise the awareness and interest of individual organisations and authorities on specific topics that can be explored further on bilateral basis.

B.My.SAP.6 - Consultancy support to State Authority (b) in developing SAF (Malaysia): Consultancy and logistical support to the Malaysian SAF Task Force, led by CAAM and the MoT, to facilitate accessing technical expertise, contacting key organisations, understanding the state of play, and any other needs that may arise in scaling up use of SAF in the country. This support will be delivered mindful of the EU's position on specific environmental subjects.

B.Ph.SAP.6 - **Consultancy support to State Authority (a) in developing SAF (Philippines):** Consultancy and logistical support to the Climate Change Committee in Philippines, through the support to CAAP and the DoT, to facilitate accessing technical expertise, contacting key organisations, understanding the state of play, and any other needs that may arise in scaling up use of SAF in the country. This support will be delivered mindful of the EU's position on specific environmental subjects.

B.Id.SAP.6 - Consultancy support to State Authority (a) in developing SAF (Indonesia): Consultancy and logistical support to the DGCA Indonesia and the MoT, to facilitate accessing technical expertise, contacting key organisations, understanding the state of play, and any other needs that may arise in scaling up use of SAF in the country. This support will be delivered mindful of the EU's position on specific environmental subjects.

B.Vn.SAP.6 - Consultancy support to State Authority (a) in developing SAF (Vietnam): Consultancy and logistical support to CAAV and the MoT, to facilitate accessing technical expertise, contacting key organisations, understanding the state of play, and any other needs that may arise in scaling up use of SAF in the country. This support will be delivered mindful of the EU's position on specific environmental subjects.

B.My.SAP.7 - Support to State Authority (d) Partnership with Industry (Malaysia): Technical and logistical support to CAAM to facilitate their partnership with industry or other institutions in the development or implementation of CO2 reduction measures.

B.Ph.SAP.7 - **Support to State Authority (c) Partnership with Industry (Philippines):** Technical and logistical support to CAAP to facilitate their partnership with industry or other institutions in the development or implementation of CO2 reduction measures.

B.x.SAP.a - **Support to State Authority (a) Partnership with Academia/Research Institutions:** Technical and logistical support to an AMS State Authority to facilitate their partnership with research and academia or other institutions in the research or operationalisation of CO2 reduction measures.

B.x.SAP.b - **Support to State Authority (b) Partnership with Academia/Research Institutions:** Technical and logistical support to an AMS State Authority to facilitate their partnership with research and academia or other institutions in the research or operationalisation of CO2 reduction measures.

B.Ph.SAP.3 - Support SAP Philippines III (monitoring): Bilateral technical support to CAAP to assist in the definition and implementation of the monitoring mechanisms of the measures declared in the updated State Action Plan. This support implies coordination and technical assistance to the concerned stakeholders.

B.Mn.SAP.4 - Support SAP Myanmar IV (placeholder): Initially foreseen to support Myanmar in finalising their first SAP, now on hold due to political instability.

B.Mn.SAP.5 - Support SAP Myanmar V (placeholder): Initially foreseen to support Myanmar in developing the monitoring mechanism of the measures included in their first SAP, now on hold due to political instability.

B.La.SAP.5 - Support SAP Laos PDR V (monitoring): Bilateral technical support to DCA Laos to assist in the definition and implementation of the monitoring mechanisms of the measures declared in the first State Action Plan. This support implies coordination and technical assistance to the concerned stakeholders.

B.Kh.SAP.2 - **Support SAP Cambodia II (baseline):** Bilateral technical support to SSCA to assist in the definition of the baseline of emissions for the SAP. This task includes the coordination with the Cambodian stakeholders, the support to establishing the emission data capture and the assumptions to construct a solid baseline to later monitor the reduction of emissions achieved by the measures implemented.

B.Kh.SAP.3 - Support SAP Cambodia III (measures): Bilateral technical support to SSCA to assist in the definition and implementation of the monitoring mechanisms of the measures declared in the first State Action Plan. This support implies coordination and technical assistance to the concerned stakeholders.

B.Kh.SAP.4 - Support SAP Cambodia IV (monitoring): Bilateral technical support to SSCA to assist in the definition of the measures to declare in their first SAP. This support implies coordination and technical assistance to the concerned stakeholders.

B.Bn.SAP.1 - **Support SAP Brunei I (final draft):** Bilateral technical support to DCA Brunei to update the SAP drafted as final document in December 2019.

4.3 Activities in support of CORSIA Implementation

The activities listed in this section are meant to consolidate the implementation of CORSIA by the AMS, to advocate for a greater number of AMS joining its voluntary phase, and to increase the local opportunities in verification services and in local GHG programmes. The project will also explore the interest of the AMS to take advantage of the established mechanism to receive emission data for international aviation, as the basis to extend similar practice for domestic aviation. Some of the activities are constructed as a combination of a regional activity followed by a multilateral or bilateral activity that would allow to tailor better the content to the targeted participants.

R.CORSIA.3 - Meeting to update on CORSIA related resolutions from the 41st ICAO Assembly: Regional workshop to explain the changes of CORSIA technical documents agreed during the 41st ICAO Assembly. The workshop would present an overview relevant for all CORSIA stakeholders, followed by multilateral workshops for dedicated group of stakeholders.

M.CORSIA.1 - Workshop on Offsetting and Eligible Fuels for SA&OA WS1: first multilateral workshop to deepen understanding of the changes to the CORSIA processes affecting the State Authority and the Aeroplane Operators, with special focus on the implementation of the offsetting and the use of CORSIA Eligible Fuels. The clustering of participants will be done based on the main topics covered by the workshop and in consideration of the changes agreed during the 41st ICAO Assembly.

M.CORSIA.2 - Workshop on Offsetting and Eligible Fuels for SA&OA WS2: second multilateral workshop to deepen understanding of the changes to the CORSIA processes affecting the State Authority and the Aeroplane Operators, with special focus on the implementation of the offsetting and the use of CORSIA Eligible Fuels.

M.CORSIA.9 - Workshop to update CORSIA practices for the NAB (Brunei, Cambodia, Laos PDR and Myanmar): multilateral workshop to deepen understanding of the changes to the CORSIA processes affecting the CORSIA Accreditation for those NABs not having yet establish the CORSIA Accreditation Process.

M.CORSIA.10 - Workshop to update CORSIA practices for the NAB (Indonesia, Malaysia, Philippines, Singapore, Thailand, Vietnam): multilateral workshop to deepen understanding of the changes to the CORSIA processes affecting the National Accreditation and Verification Bodies, with special focus on the agreement regarding the version of the ISO14065 and tailored for the AMS with the CORSIA Accreditation Process already established.

R.CORSIA.4 - Workshop to discuss emission schemes for Domestic Aviation: Regional workshop to explore the possibility for AMS to take advantage of the established process to implement CORSIA to cover domestic aviation as well. Countries like Vietnam have initiated the ruling of domestic emissions, which should be consistent and seamless for the operators to comply with, and simple for the Authority to process and report at State level.

B.Ph.CORSIA.5 - Bilateral support to explore emission scheme for Domestic Aviation taking advantage of established CORSIA process): Bilateral support to CAAP to explore the possibilities to capture emissions from domestic aviation.

B.Vn.CORSIA.2 - Bilateral support to explore emission scheme for Domestic Aviation taking advantage of established CORSIA process): Bilateral support to CAAV to explore the possibilities to capture emissions from domestic aviation.

B.My.CORSIA.4 - Bilateral support to explore emission scheme for Domestic Aviation taking advantage of established CORSIA process): Bilateral support to CAAM to explore the possibilities to capture emissions from domestic aviation.

M.CORSIA.5 - Information session for validators of climate change projects & programmes: Multilateral information session for organisations validating or verifying climate change projects or programmes to explain the eligibility criteria for CORSIA.

B.Th.CORSIA.1 - Workshop on CORSIA Eligibility Criteria for Thailand GHG Programmes (emission cancellation): Technical support to TGO (Thai Greenhouse gases Organisation) to understand the eligibility criteria to become a CORSIA eligible programme member.

B.Ph.CORSIA.4 - Workshop on CORSIA Eligibility Criteria for Philippines GHG Programmes (emission cancellation): Technical support to Philippines to understand the eligibility criteria to become a CORSIA eligible programme member.

B.My.CORSIA.2 - Workshop on CORSIA Eligibility Criteria for Malaysia GHG Programmes (emission cancellation): Technical support to Malaysia to understand the eligibility criteria to become CORSIA eligible programme.

B.Vn.CORSIA.1 - High level meeting on CORSIA (Vietnam): facilitation of discussions with CAAV and MoT officials to support Vietnam's decision to join CORSIA during the voluntary phase.

B.Ph.CORSIA.2 - **Bilateral support to the NAB (Attachment Programme for GHG Assessor from NAB Philippines by NAB Thailand):** continuation of the technical and logistical support to the Attachment programme between TISI and PAB, achieving the establishment of the CORSIA Accreditation Process in Philippines.

B.My.CORSIA.3 - Bilateral support to the NAB (Attachment Programme for GHG Assessor from NAB Malaysia by other AMS NAB): continuation of the technical and logistical support to the Attachment programme between DSM and KAN, achieving the establishment of the CORSIA Accreditation Process in Malaysia.

B.My.CORSIA.1 - Bilateral support to the NAB (Malaysia) on Accreditation Process: Complementary technical support to DSM to finalise the CORSIA Accreditation Process (e.g. checklists, procedures, processes).

B.Mn.CORSIA.1 - Bilateral support to the NAB (Myanmar) on GHG Scheme: bilateral technical support to the NAB Myanmar to establish the GHG scheme as foundation for the later development of the CORSIA Accreditation process.

B.Kh.CORSIA.1 - Bilateral support to the NAB (Cambodia) on GHG Scheme: bilateral technical support to the NAB Cambodia to establish the GHG scheme as foundation for the later development of the CORSIA Accreditation process and to assist Cambodia to establish the intra-State communication and coordination mechanisms with other governmental entities working under the Paris Agreement.

B.Bn.CORSIA.1 - **Bilateral support to the NAB (Brunei) on GHG Scheme:** bilateral technical support to the NAB Brunei to establish the GHG scheme as foundation for the later development of the CORSIA Accreditation process.

B.Bn.CORSIA.2 - **Bilateral support to the NAB (Attachment Programme for GHG Assessor from NAB Brunei by other AMS NAB):** Technical and logistical support to the Attachment Programme between NAB Brunei and an AMS NAB. Consolidation of the Attachment Programme as support

4.4 Activities in support to the Aviation Emission Data Management Systems

This section details the activities to support the AMS in developing the IT tools to handle emissions data from aeroplane operators. This software solution provides a web-based front-end for the Aeroplane Operators to upload their Emission Monitoring Plan (EMP) and their CORSIA Emission Report, and for Verification Bodies to upload the statement of verification of the Emission Reports verified. The software also provides the necessary features for the State Authority to analyse the emission data, carry out order of magnitude checks and to generate the Emission Report for the State to ICAO. The objective for all the activities is to achieve a fully functional AeDMS deployed in the local infrastructure and a self-sufficient State Authority by the end of the project.

M.AEDMS.1 - Assessment of AeDMS tool and reprogramming to facilitate sustainability at AMS level: Consultancy support to evaluate the development and deployment of the AeDMS in the supported AMS and its reprogramming to facilitate long-term sustainability of the tool in the authority infrastructure and IT systems.

B.Ph.AEDMS.3 - **Bilateral support to Philippines AeDMS to achieve a sustainable tool:** Consultancy support to deploy a sustainable version of the AeDMS tool in the authority infrastructure and IT systems.

B.Ph.AEDMS.2 - **Bilateral support to Philippines to upgrade AeDMS (Session 2):** Consultancy support to finalise the AeDMS tool with the agreed features and deployment of authority infrastructure and IT systems.

B.My.AEDMS.5 - **Bilateral support to Malaysia AeDMS to achieve a sustainable tool (Session 5):** Consultancy support to deploy a sustainable version of the AeDMS tool in the authority infrastructure and IT systems.

B.My.AEDMS.4 - **Bilateral support to Malaysia to setup AeDMS (Session 4):** Consultancy support to finalise the AeDMS tool with the agreed features and deployment of authority infrastructure and IT systems.

B.Vn.AEDMS.4 - Bilateral support to Vietnam to setup AeDMS (Session 4): Consultancy support to finalise the AeDMS tool with the agreed features and deployment of authority infrastructure and IT systems.

B.Mn.AEDMS.1/2 - Bilateral support to Myanmar to upgrade AeDMS (Session 2): bilateral support on hold.

B.La.AEDMS.3 - **Bilateral support to Lao PDR to upgrade AeDMS (Session 3):** Consultancy support to finalise the AeDMS tool with the agreed features and deployment of authority infrastructure and IT systems.

B.La.AEDMS.4 - **Bilateral support to Lao PDR AeDMS to achieve a sustainable tool (Session 4):** Consultancy support to deploy a sustainable version of the AeDMS tool in the authority infrastructure and IT systems.

B.Kh.AEDMS.5 - Bilateral support to Cambodia to achieve a sustainable tool (Session 5): Consultancy support to deploy a sustainable version of the AeDMS tool in the authority infrastructure and IT systems.

B.Kh.AEDMS.4 - Bilateral support to Cambodia to setup AeDMS (Session 4): Consultancy support to finalise the AeDMS tool with the agreed features and deployment of authority infrastructure and IT systems.

B.Kh.AEDMS.3 - Bilateral support to Cambodia to setup AeDMS (Session 3): Consultancy support to finalise the AeDMS tool with the agreed features and deployment of authority infrastructure and IT systems.

B.Bn.AEDMS.3 - **Bilateral support to Brunei AeDMS to achieve a sustainable tool (Session 4):** Consultancy support to deploy a sustainable version of the AeDMS tool in the authority infrastructure and IT systems.

B.Bn.AEDMS.2 - **Bilateral support to Brunei to upgrade AeDMS (Session 2):** Consultancy support to finalise the AeDMS tool with the agreed features and deployment of authority infrastructure and IT systems.

B.B.n.AEDMS.1 - **Bilateral support to Brunei to upgrade AeDMS (Session 1):** Consultancy support to finalise the AeDMS tool with the agreed features and deployment of authority infrastructure and IT systems.

5 Approval and update of the Work Plan 2022-2023

The work plan is presented to the Project Steering Committee meeting and Project Management Board seeking their approval. Once these are achieved, the work plan will be formally endorsed by the Contracting Authority (EU Delegation to Thailand - FPI). Later modifications leading to significant changes in budget, in objectives or in scope, need to be approved by the contracting authority and be communicated to the PSC and PMB.