Luxembourg, 15th July 2020

Environmental and Social Data Sheet

Overview

Project Name:	PLYSA FOREST FIRE EXTINCTION FLEET
Project Number:	20170689
Country:	Spain
Project Description:	Financing the purchase and deployment during the 2019-2024 period of up to 30 light land-based water carrying aircraft for forest fire extinction, and associated equipment and training. The aircraft will be based in small airfields across Spain and other EU countries and will be deployed to the Southern hemisphere during winter months.
EIA required:	no
Project included in Carbon Footprint Exercise[1]:	no

Environmental and Social Assessment

Environmental Assessment

The project aims at expanding PLYSA's fleet of fire-fighting equipment. No Environmental Impact Assessment is required for the project, as it does not fall under Annex I or Annex II of the Environmental Impact Assessment (EIA) Directive 2014/52/EU amending Directive 2011/92/EU.

PLYSA was created in 2016. In April 2018, the European Aviation Safety Agency (EASA, an agency of the European Union) and the national regulator, AESA (Agencia Estatal de Seguridad Aérea), certified PLYSA as an aerial works operator and the first operations took place in August 2018.

PLYSA is majority owned and operates under the aegis of Air Nostrum, a large regional airline, which provides PLYSA with managerial expertise, operational, technical and safety compliance support as well as maintenance. Air Nostrum holds an ISO 14001 environmental management system certificate. It can be expected that the competence and professionalism provided by Air Nostrum will allow PLYSA to become a "best in class company" in the sector.

The fire-fighting aircraft to be purchased is the Thrush 710 P, a single engine fire-fighting aircraft with short take-off and landing capabilities. It is the most recent model of a long-lived line of aircraft mainly used in agriculture for irrigation, with the first prototype launched over 60 years ago. It is a single-seat monoplane of conventional taildragger configuration. The aircraft is manufactured by the Thrush Aircraft company in Albany, Georgia, United States and will be assembled at the Air Nostrum aircraft maintenance facility in Valencia, Spain. The key aircraft characteristics are as follows:

[1] Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO2e/year absolute (gross) or 20,000 tons CO2e/year relative (net) – both increases and savings.

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- Short Take Off and Landing (STOL), able to operate in unprepared, non-asphalted runways.
- Three-and-a-half-hours autonomy; range of 828 km at 5% power and an altitude of 7,500 feet (approx. 2,500m).
- Large water carrying capability, typically 2,500 litres.
- The aircraft is powered by Pratt & Whitney Canada PT6 turboprop engine that is certified by the US authorities and complies with current EU noise and particulate emission standards.

Land based fire-fighting light aircraft are proven to be the most cost and environmentally efficient way of providing air support for early-stage forest fire extinguishing operations. The Spanish Ministry of the Environment and the Air Force have tested other aerial firefighting aircraft with larger water storage capacity. Results have shown that larger, less manoeuvrable aircraft, which can only operate from large runways, are less effective in combating forest fires at the initial stage and in challenging terrain conditions. Moreover, the coordination with ground-based equipment and staff is more difficult as often land-based assets must be removed to allow heavier aircraft to drop their load, thus reducing the effectiveness of the intervention.

The project will have a positive net effect on environment in the sense that it will contribute to fight against the adverse effects of Climate Change.

Due to global warming and other man-induced impacts, forest fires have been increasing in number and intensity, affecting in particular warmer and dryer climate zones such as those prevalent in Southern Europe and Northern Africa. There is a number of academic articles on the impact of higher temperatures on the increase of the number of fires in Mediterranean Europe, including Spain, Portugal, Southern France, Italy and Greece.

Other variables that influence the increased number of fire events are the deforestation and the replacement of forest cover with bushes and other vegetation that is more adapted to warmer climates and the increased desertification, especially in some Spanish regions. Whilst the impact of these latter effects is difficult to quantify, it is the general understanding amongst the experts that the number and size of forest fires will increase with the increase in average and extreme temperatures in the Mediterranean region.

In this context, the project is considered to contribute 100% to adaptation to Climate Action.

Other Environmental and Social Aspects

PLYSA is a Special Operations Aviation Company, with commitment aimed at the application and improvement of its Quality, Environmental and Work Risk Prevention Policy. The Environmental Management System implemented by the company is based on ISO standard 14001, which provides a working framework for the effective environmental management.

PLYSA has a health and safety risk prevention policy that provides a wide range of protection measures adapted to the different risk levels to which its employees are exposed.

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Conclusions and Recommendations

Based on the due diligence of the promoter, the assets to be purchased and the intended type of operations, the project is considered acceptable for the Bank from and environmental and social point of view.