

WP3 : Aircraft specifications and construction costs

This workpackage aims at evaluating the costs for procurement, modification, and maintenance of a tropospheric aircraft for COPAL. In order to select a few potential models, the expression of user needs will be collected on a questionnaire.

The EUFAR working group on the future of the fleet has already identified 3 aircraft models that might fulfill user needs. This activity shall therefore be limited to a short panel of 3 or 4 aircraft models. Following the selection by the SC of a few models, quotations will be requested to aeronautic companies for procurement, modification, and maintenance.

The cost analysis will be examined by the GB at the second annual meeting to select the COPAL aircraft, and finalize accurate quotations for the COPAL Agreement section on construction costs during the third and fourth years of the project.

Work package number	3	Start date or starting event:						M1						
Work package title	RTD : Aircraft specifications and construction costs													
Activity Type	RTD													
Participant id	1	2	3	4	5	6	7	8	9	10	11	12	Total	
Pmonths per beneficiary	0	6	0	0	0	0	0	0	0	2	1	0	9	

Objectives:

Precise evaluation of the costs for procurement, modification, and maintenance of the COPAL aircraft

Description of work :

Task 3.1 : Assessment of user needs.

A questionnaire will be prepared for European researchers to express their needs, in terms of aircraft performance (scientific payload, endurance, range, and cabin space), and aircraft modifications (external pods, openings, antennas, etc). The questionnaire will be distributed to the European researchers registered in the EUFAR website. Their contributions will be analyzed to establish criteria for evaluating the performance and potential for modification of available aircraft models. A summary report on user needs, criteria and evaluation of existing aircraft that might fulfill the demand will be completed for the COPAL SC.

Task 3.2 : Selection of the COPAL aircraft.

At the first annual meeting the SC will evaluate the report on users needs and select aircraft models for performance analysis and quotation. At the second annual meeting, the GB will evaluate the quotations and aircraft performance against user needs to select the aircraft model for COPAL

Task 3.3 : Procurement cost estimation.

Quotations will be requested to aviation traders for used aircraft of the types selected by the SC, with detailed information on performance and remaining potential for airborne activity. A summary report on procurement costs and aircraft performance will be completed for the second year COPAL GB

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meeting. After selection by the GB of a model for the COPAL aircraft, the quotation for procurement costs will be refined and finalized.

Task 3.4 : Modification cost estimation.

Quotations will be requested to aeronautic industries for refurbishing, certification for civil operation, and modifications for research of the aircraft models selected by the SC. A summary report on aircraft modification costs will be completed for the second year COPAL GB meeting. After selection by the GB of a model for the COPAL aircraft, the quotation for aircraft modification will be refined and finalized.

Task 3.5 : Maintenance cost estimation.

Quotations will be requested to aeronautic operators for maintenance of the aircraft. A summary report on aircraft maintenance costs will be completed for the second year COPAL GB meeting. After selection by the GB of a model for the COPAL aircraft, the quotation for maintenance will be refined and finalized.