

What is COPAL ?

European Community Airborne Laboratory

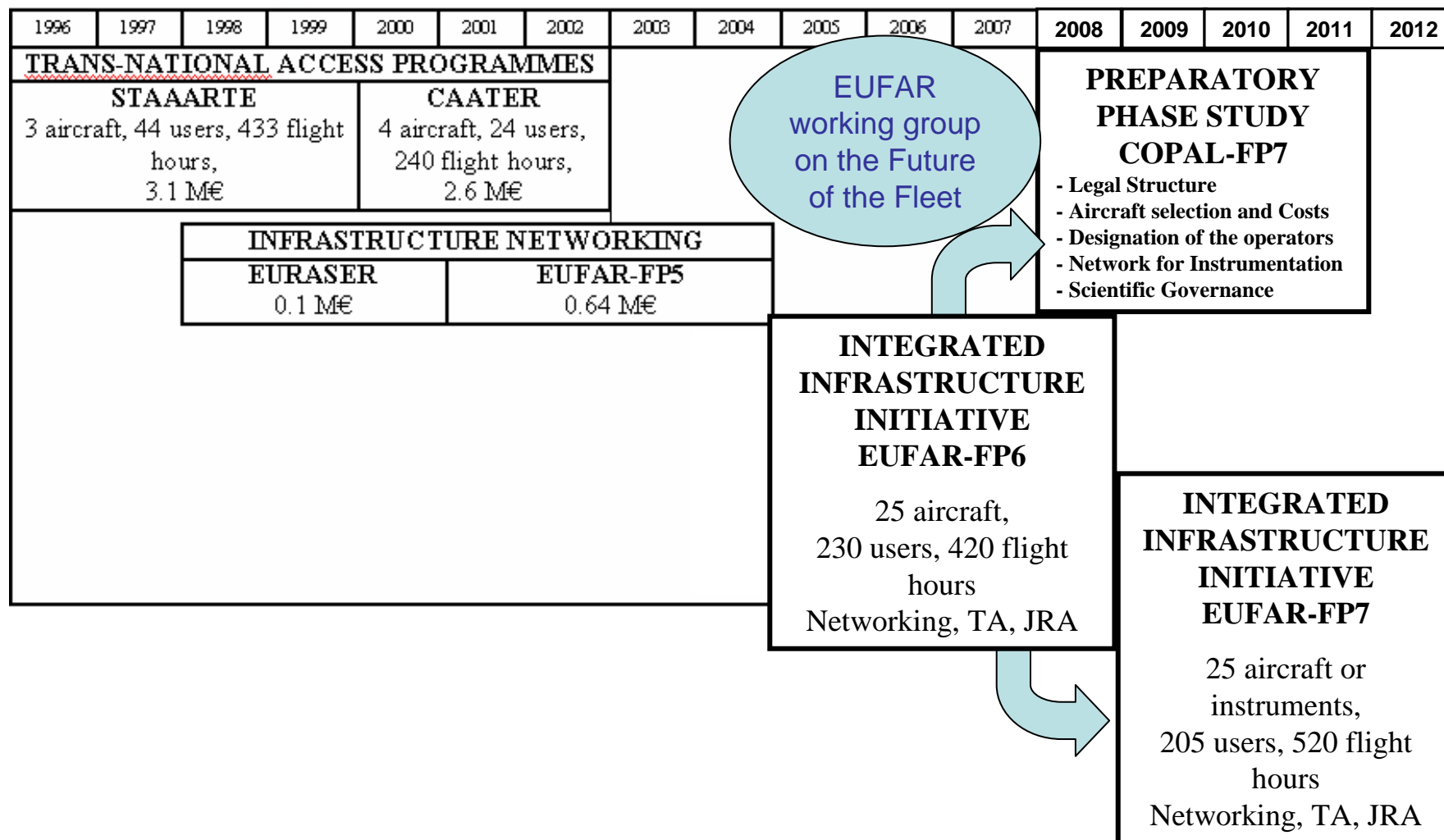


A long endurance (10 hours) and heavy-payload (10 tons) instrumented aircraft for research in the troposphere



Beneficiary Number *	Beneficiary name	Beneficiary short name	Country
1	Météo-France, Centre National de Recherches Météorologiques	CNRM	FR
2	Instituto Nacional de Técnica Aeroespacial	INTA	ES
3	Finish Meteorological Institute	FMI	FI
4	Natural Environment Research Council	NERC	UK
5	Fundação para a Ciência e a Tecnologia	FCT	PT
6	Consiglio Nazionale delle Ricerche	CNR	IT
7	General Secretariat for Research and Technology	GSRT	EL
8	University of Warsaw, Institute of Geophysics	UW	PL
9	Enviscope GmbH	Enviscope	DE
10	The Meteorological Office	Met.Office	UK
11	Centre National de la Recherche Scientifique	CNRS	FR
12	SJ Berwin LLP	SJ BERWIN	UK/BE
13	Deutsches Zentrum Fuer Luft-und Raumfahrt E.V.	DLR	DE

COPAL is an EUFAR Initiative



The existing European Fleet



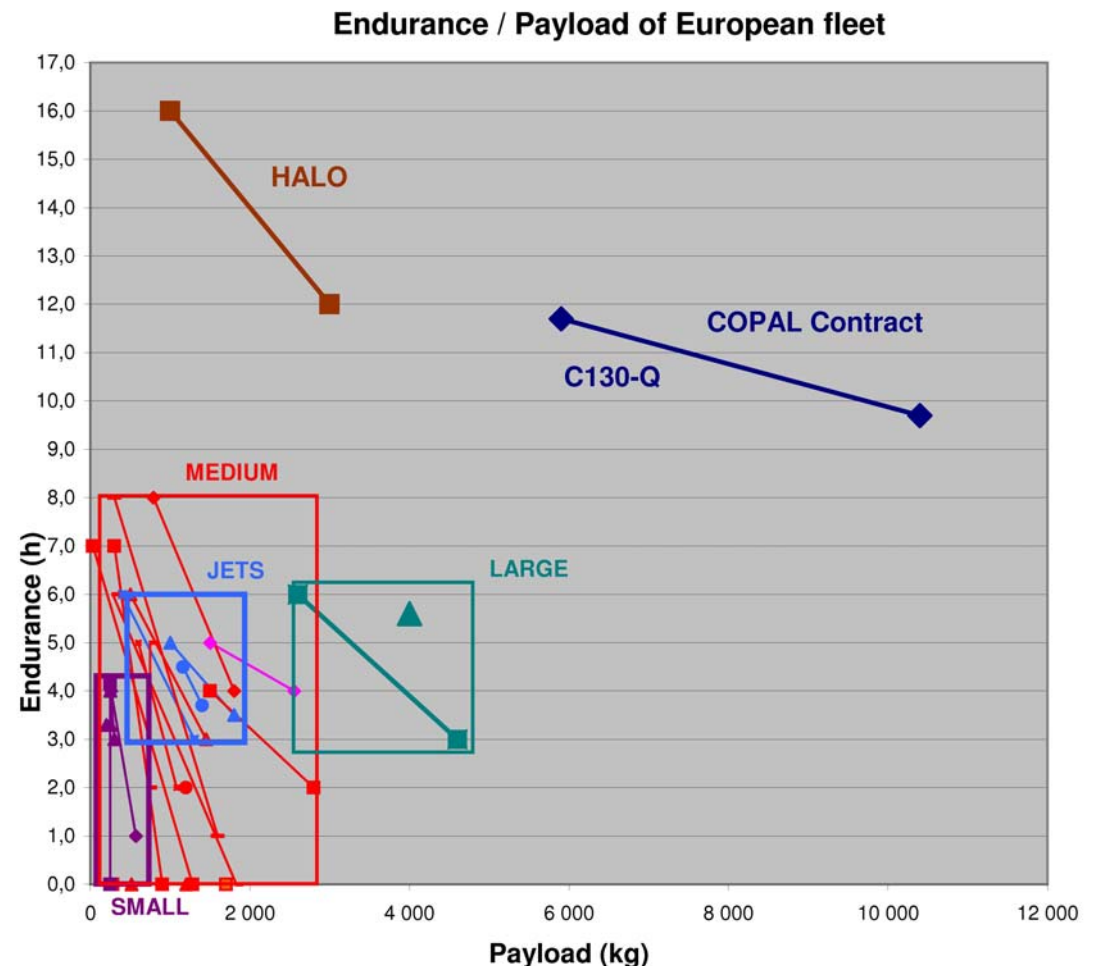
The existing European Fleet

More than 30 instrumented aircraft available in Europe for research in environmental and Geo-science



All existing aircraft are limited to an **endurance of 5 hours**

Germany has instrumented a G-IV jet (endurance > 12 hours) for research in the UTLS (up to 15 km), available in 2009.



The COPAL RI



COPAL aims at providing similar endurance and a much larger payload for research in the troposphere (turboprop)

Community Airborne Laboratory for Multidisciplinary Research on the Earth-System





Very few contacts with NCPs from the beginning of the initiative (2005)

Possible explanations! (to be discussed)

COPAL is a bottom-up initiative from an European I3 Consortium of RI operators and scientific users; no leader country !

COPAL is a small project (40 M€)

The pace of the ESFRI roadmap was sustained, too fast to explore all possible connections



What is expected !

To get the opportunity, via NCPs to present the project in each country

This was possible in only two countries (Portugal and Poland)

Meetings where organized by the research funding institutions, with potential users (from 15 to 20 in Geo-science).

Both were very successful.

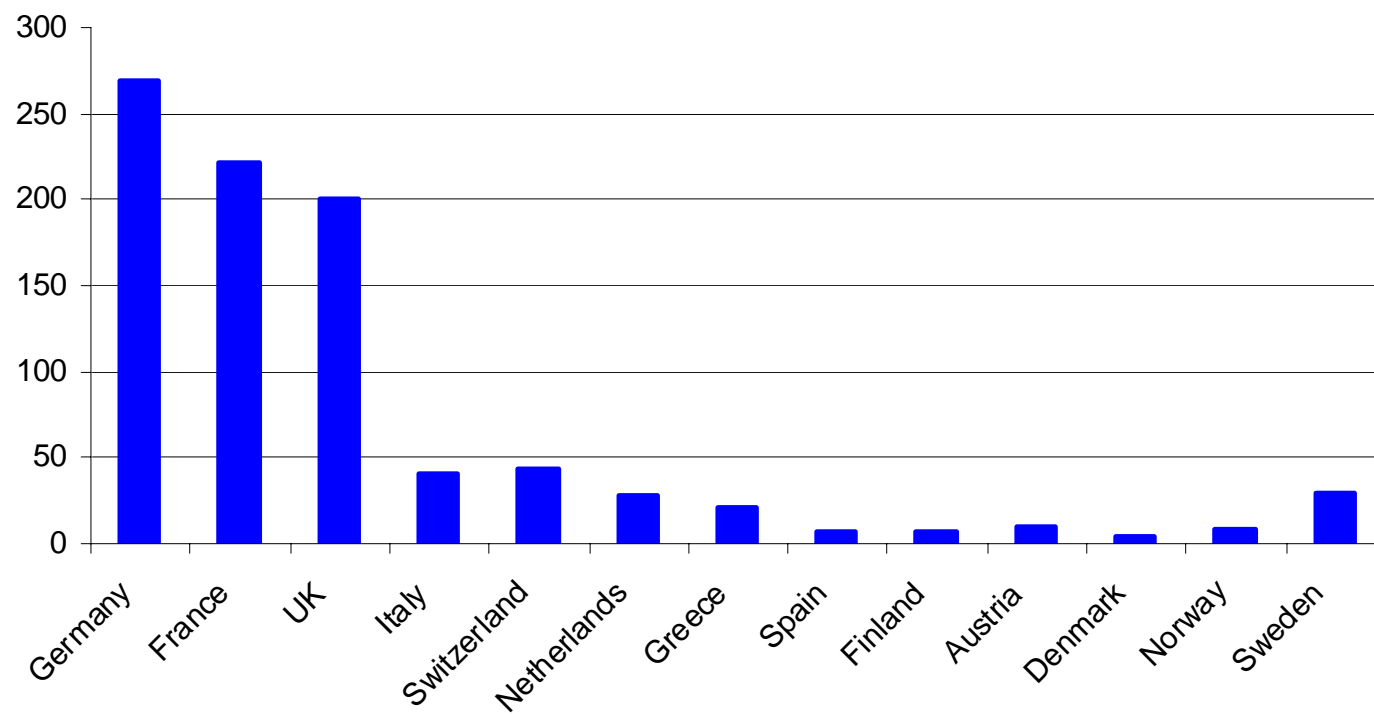
The main obstacle is that scientific users who have never accessed, and funding institutions which have never invested in such a research infrastructure, hardly anticipate what the benefit might be in their field.

Larger Ris are thus developed in countries where the scientific community already exists (e.g. DE, UK and FR), hence increasing the differential with countries where such RI have rarely been used.



Scientific Impact of Airborne Research in Geo-science

of peer reviewed publications 1993 to 2007





*Thank you for your interest in
EUFAR - COPAL*

The existing European Fleet

Which aircraft model ? Cost
(flight hour, excluding depreciation, EU cost model)

