

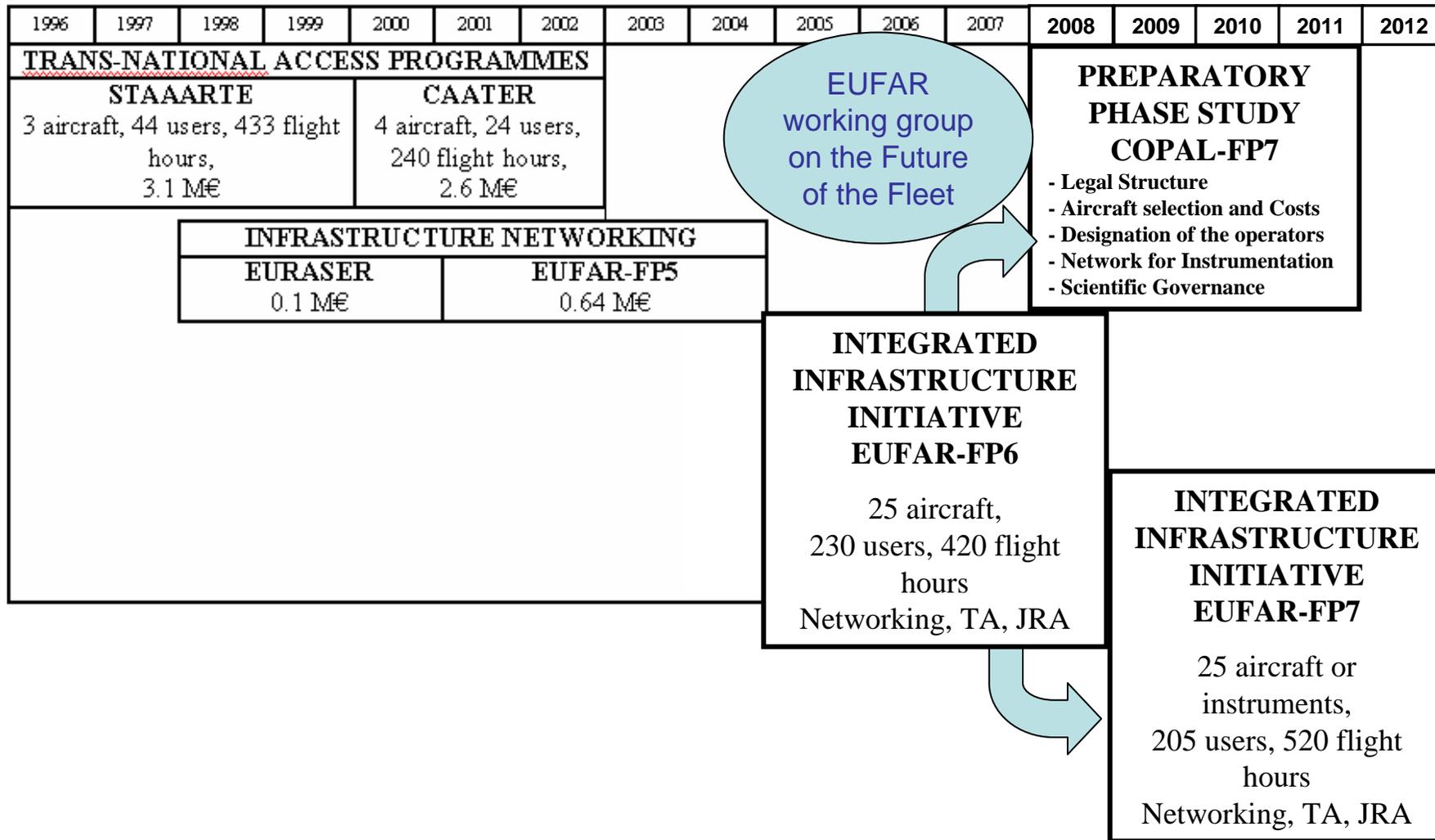
What is COPAL ? European Community Airborne Laboratory

**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



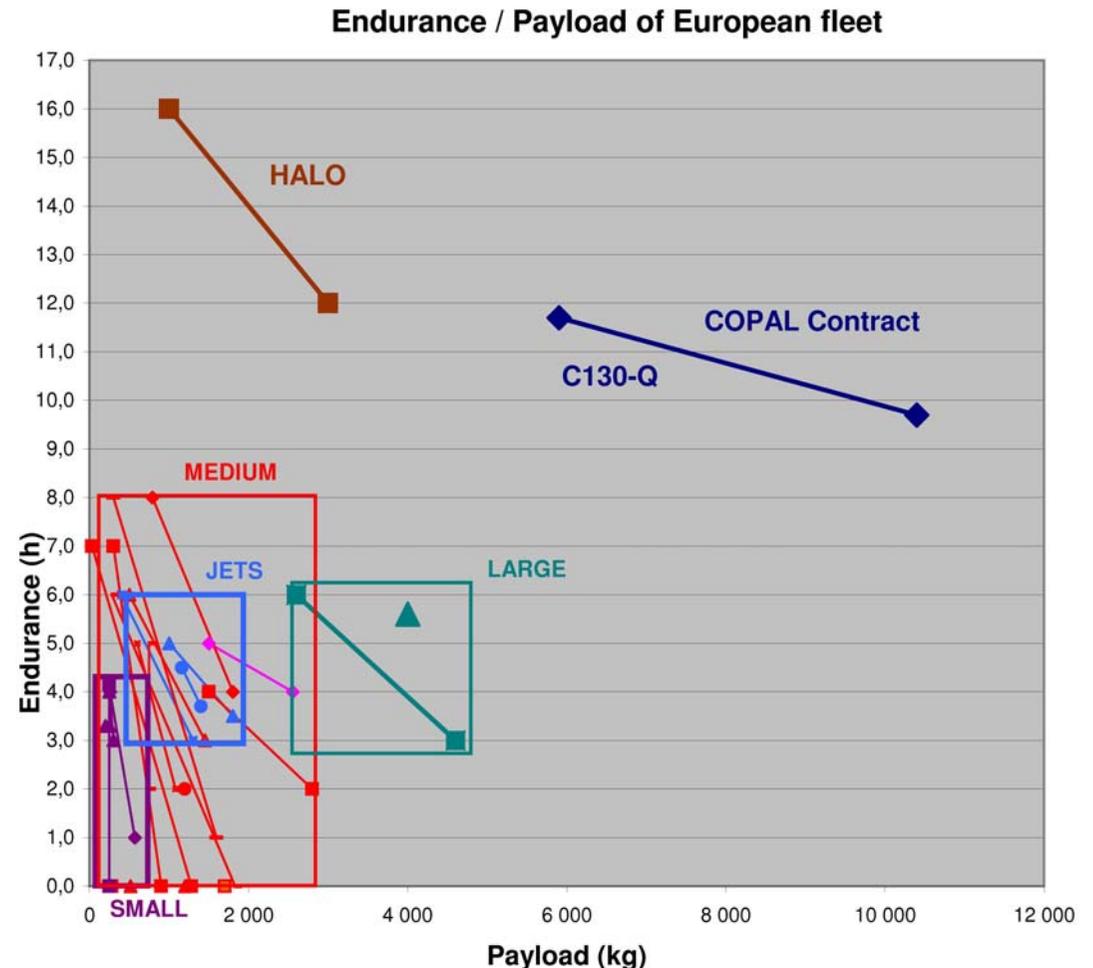
The existing European Fleet

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).

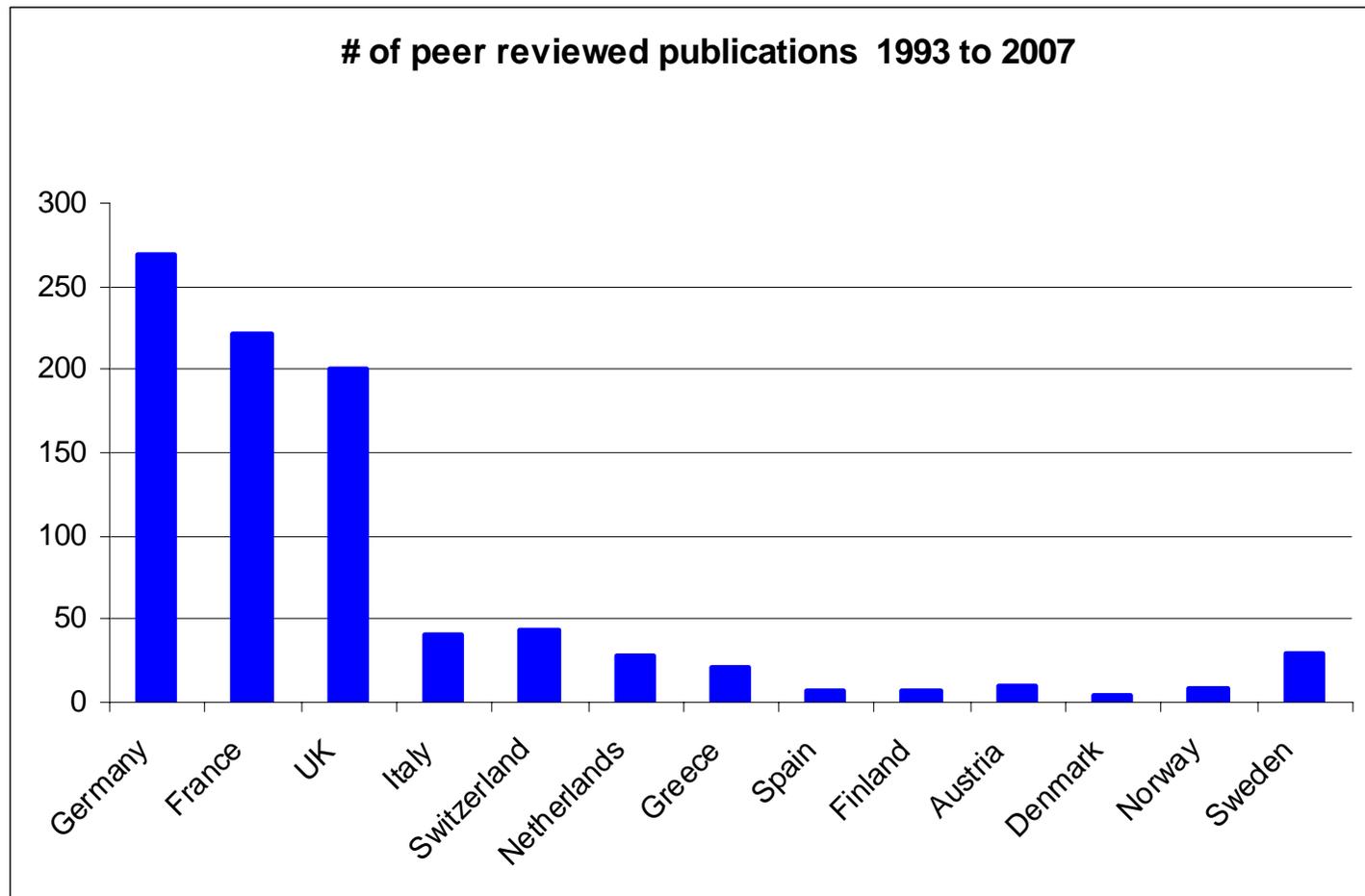
Both were very successful.

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





*Thank you for your interest in
EUFAR - COPAL*

The existing European Fleet

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

