# Audience expectations

Source: Lewis 1999

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<th>USA</th>
<th>UK</th>
<th>Germany</th>
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<th>France</th>
<th>Finland</th>
<th>Arab and Latin cultures</th>
<th>China</th>
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Source: Lewis 1999
Different Languages
Global organisations challenge aviation
Current Situation and Motivation

- Increasing need for international mobility in a globalized economy.
- World-wide growth in air traffic.
- Impact on climate change and environment.
- Limited resources.
- Demands in reduction of CO₂.
- Need for economical and environmental friendly air transport.

Worldwide Aerospace Research Organisations
- are not focused in their “option forming”, developing of joint objectives and strategies and
- have no representation that can react to the global questions and demands
Motivation

- Merge of the available resources and interests of all continents.
- Involvement of concerned stakeholders in the process, i.e. also active integration of the aerospace research and their institutions worldwide.
- Challenge of simultaneously developing new solutions
  - e.g. to balance *reduction* of the climate effects by aviation with worldwide *reconciled* research, new strategies and projects.

Need for a global research forum which fills the gap between global “politics”, society and industry!
Need for a global research forum which fills the gap between global “politics”, society and industry!
IFAR – International Forum for Aviation Research

DLR proposed to establish IFAR
Invitation to Berlin in May 2008 and May 2010
IFAR – History

Berlin Summit 2008
- 12 leaders of international aeronautical research organisations
- Topic: Climate change

Berlin Summit 2010
- 16 leaders of int. aeronautical research organisations
- Topic: Climate change
- Set-up of IFAR
- Outcome: Declaration and decision on Road Map
- Creation of website [www.ifar.aero](http://www.ifar.aero)

Berlin Summit 2010 participants:
CAE, VTT, ONERA, DLR, BME, JAXA, NLR, ILOT, INCAS, TsAGI, INTA, METU, NASA, NIA, MITRE
The International Forum for Aviation Research (IFAR) connects and represents leading worldwide aerospace research organisations and reacts to global “political”, economic and public demands as an independent advisor.

IFAR aims on focusing on global research topics such as climate change, noise and local emissions, efficient operations, security, safety, and engages in education, exchange of scientists, quality, networking, capacity, by the development of an IFAR Road Map based on the global common scientific and engineering competence.
IFAR Road Map - Objectives

- Finding scientific and technological solutions for ecologically and economically efficient air traffic
- IFAR as research representative focuses on the identification of new technologies.
- Berlin Summit 2010:
  - 2010/2011: focus on topics related to climate change.
  - Next years: extension by other topics noise, safety, security and efficient operations.
- Timeframe: Vision 2050 with Milestones according to TRL’s
IFAR Road Map

Step 1: Vision

Step 2: New Technologies

Step 3: Improved ATS

Stakeholders

Transfer

Regulation
IFAR - Plan for the next years

International Aviation Road Map

- Declaration 1
  - Summit
  - 2010
  - Topic: Climate change

- Declaration 2
  - Expert meetings
  - 2011
  - Topic: Noise

- Declaration 3
  - Expert meetings
  - 2012
  - Topic: Security

- Declaration 4
  - Expert meetings
  - 2013
  - Topic: Safety
IFAR - Next steps in 2011

IFAR Summit 2011 in Paris organised by ONERA
- 18-19 June 2011
- Topics: Climate change and noise
- Participants: Heads of the aerospace research institutions worldwide

Finish and publication of the first version of the IFAR Road Map related to climate change.

The progress will be published regularly at www.ifar.aero
Internet website

**IFAR Global Challenges**

The International Forum for Aviation Research (IFAR) connects and represents leading worldwide aerospace research organisations and allows communication to all global research topics such as:

- climate change,
- noise,
- efficient operations,
- security,
- safety.

IFAR aims at an International Aviation Road Map specifically addressing the most important questions for a global air transport system.

Therefore, IFAR interacts with the public, politics and industry, takes up the challenges identified by them and acts as independent and politically neutral advisor. The idea of IFAR was born at the Berlin Summit 2008 where key leaders of 12 international aeronautical research organisations met to address the question of the Air Transport of the Future in the context of climate change. In this regard, the participants agreed that any research and strategy contributing to new solutions will have to reconcile the increasing need for international mobility in a globalised work-sharing economy with the challenge of simultaneously developing new solutions to balance the climate effects of the accompanying worldwide air traffic growth.

The next IFAR summit will be held on June 6-7, 2010 in Berlin in connection with the International Berlin Air Show (ILA).
Thank you for listening

www.ifar.aero