



Federal Ministry
of Economics
and Technology

The German National Aeronautics Research Programme

Integration of Aeronautics RTD on European national and regional level

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Federal Ministry
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and Technology

Motivation for Complementary Research

Federal Programme LUFO

Regional Programmes



Rationale for Complementary Research

EU

enhancement of international competitiveness

projects with socio-economic benefits for Europe

projects with work-shares in different Member states

National

Projects that focus on national core Competencies in industry and academia

projects with socio-economic benefits for Germany

joint projects with industry, SMEs and academia from different Länder


Regional


enhancement of regional locations for industry and academia





projects focused on the regional supplier base

concentrating on SMEs and academia

Status of Complementary Research

EU	6. FWP, final call 3 7. FWP, call 1	closed 2007	
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Federal	LuFo III (2003–2007) LuFo IV (2007–2012), Call 1 Call 2	closed ongoing 2008	
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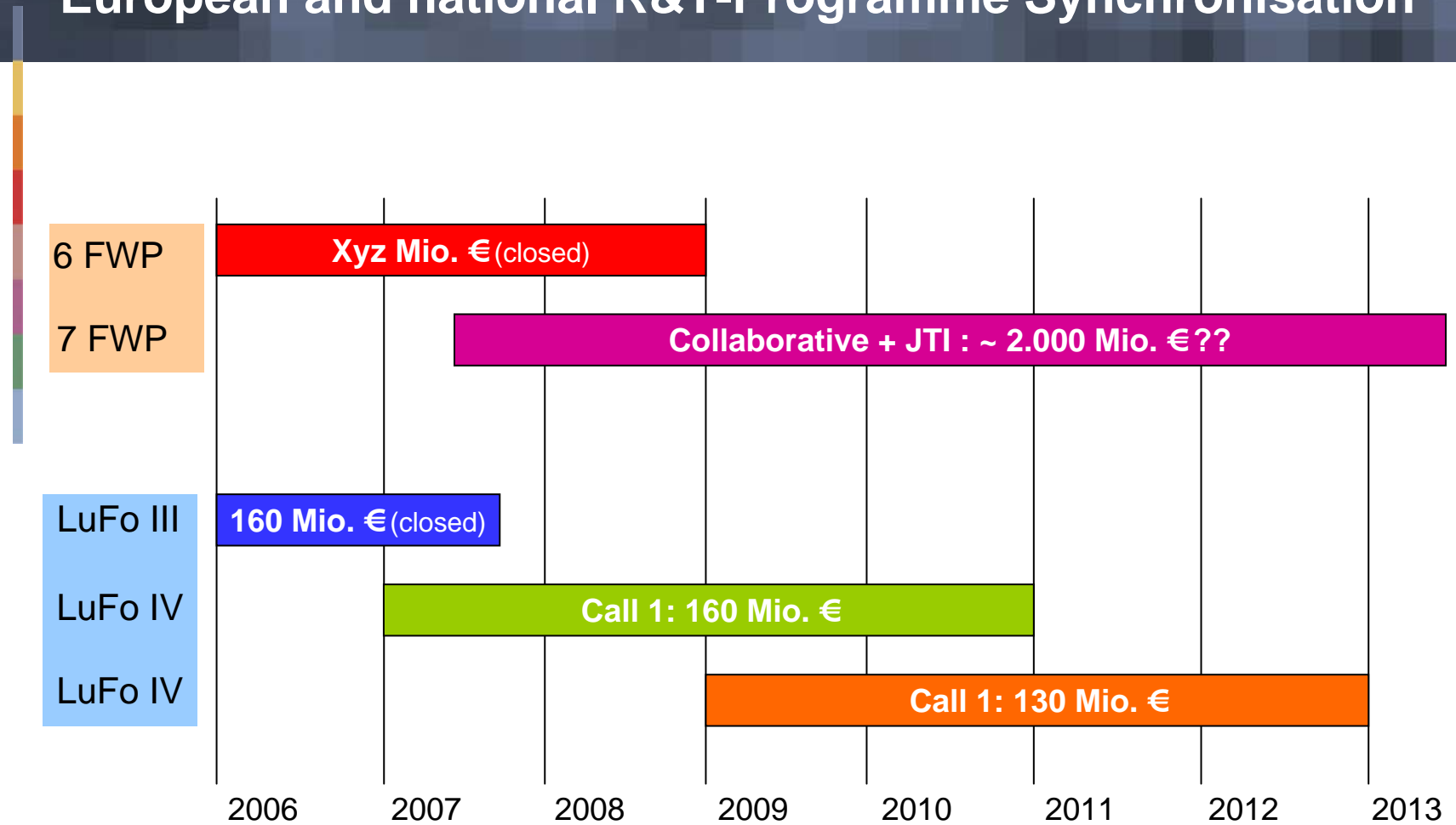
Länder			
Bayern	dedicated Projects (no specific programme)	n/a	
Hamburg	Programme Aeronautics Technologies	ongoing	
Brandenburg	dedicated Projects	n/a	
Rheinland-Pfalz	(no specific programme)		
u. a.			



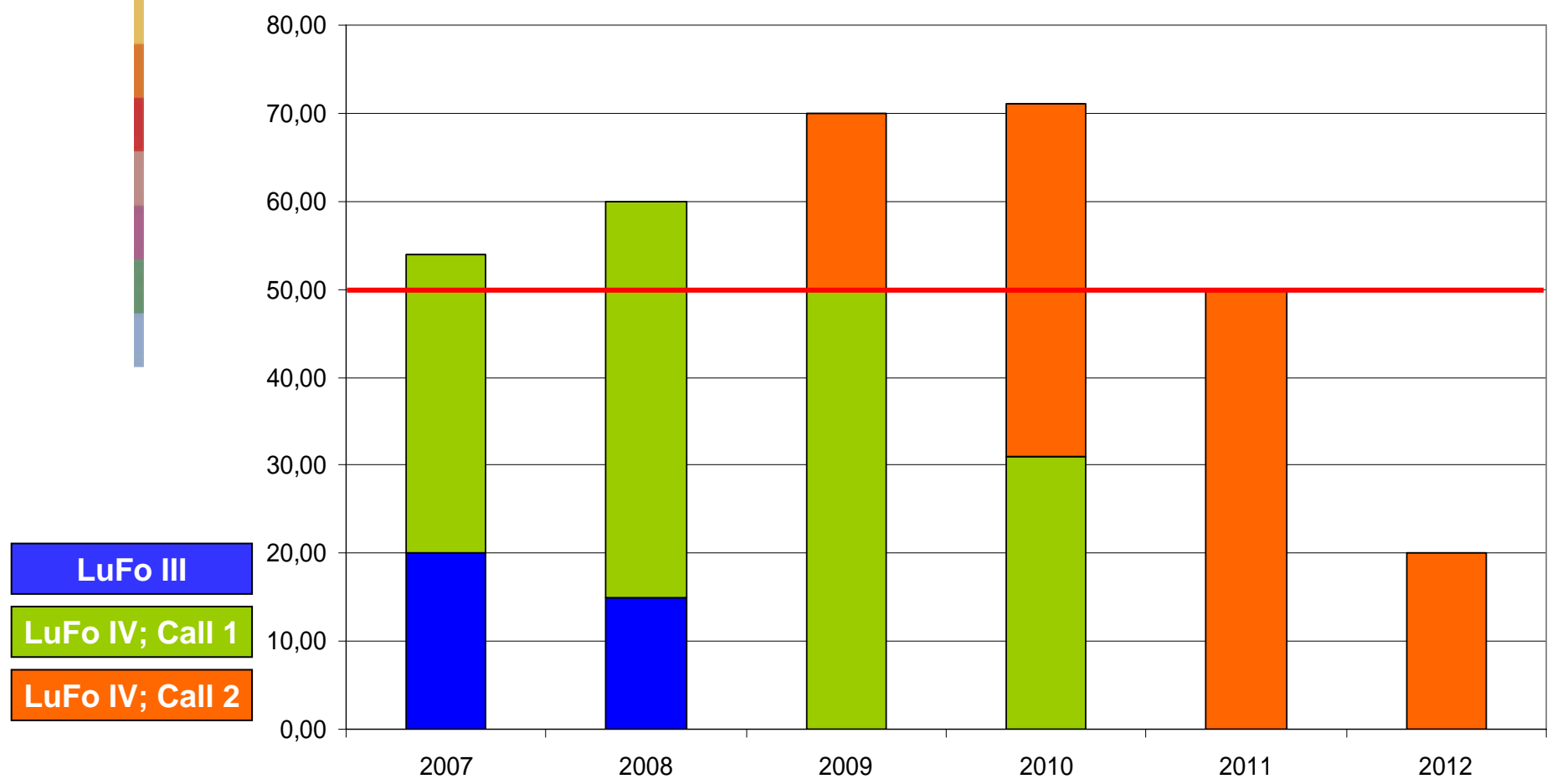
Why national R&T for the small aeronautical industry sector in Germany (less than 1% of GNP) ?

- **Strategic sector with technological multiplier effects on other industry sectors**
- **Fully privatized industry with primarily SME structure**
- **High R&T expenditures (18% of turnover compared with 5-6 % e.g. in automotive sector)**
- **Level Playing field in relation to global competitors**
- **Societal Needs/Environment**

European and national R&T-Programme Synchronisation



National R&T-Programme Spending Profile



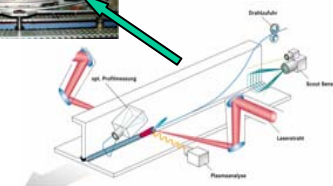
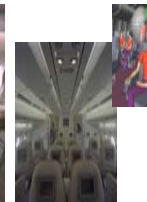
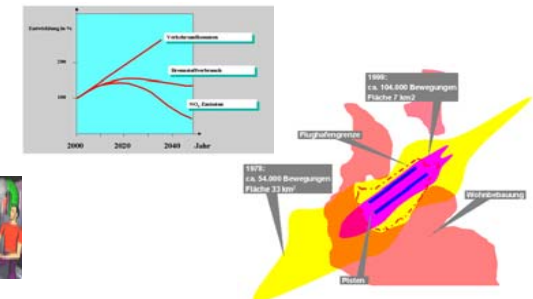
Federal Government Civil Aeronautics Research

Lufo I	1994-1998	300 Mio €
Lufo II	1999-2002	120 Mio € + Länder Funding
Lufo III	2003-2007	160 Mio € + Länder Funding
Lufo IV	2007-2010	160 Mio € (1st Call)
Lufo IV	2009-2012	130 Mio € (2nd Call)

dedicated to deliver answers to the challenges
as defined in SRA II.

- Traffic Growth and Environmental Protection
- Safety and Passenger Friendliness
- Economic Efficiency and Market share

via cooperative and integrated projects carried
out by industry, universities and research institutions

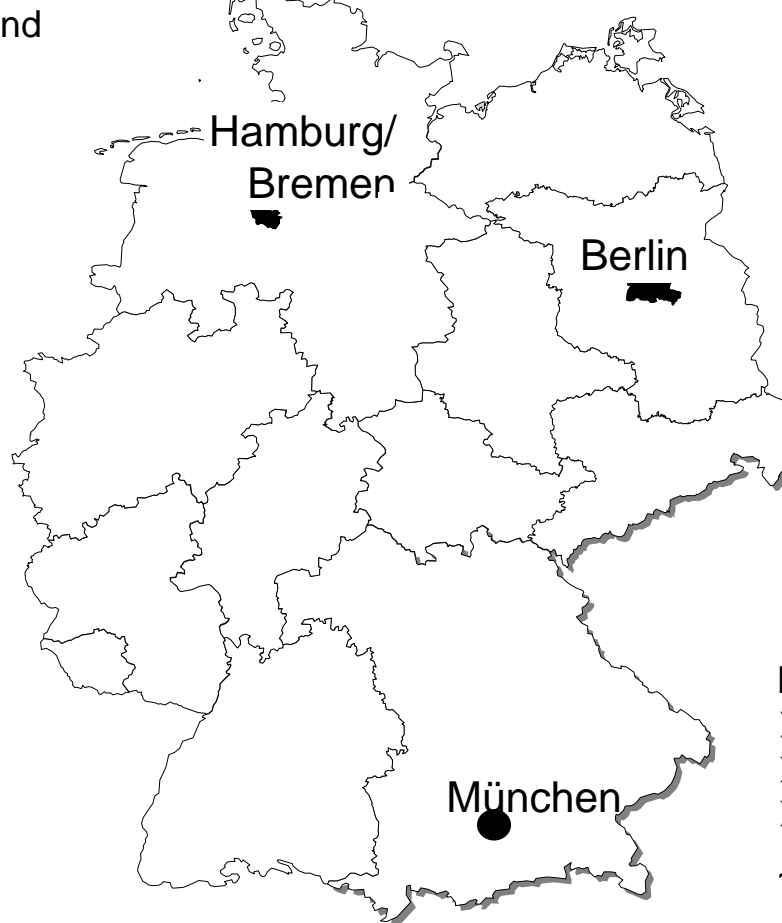




Regions with major aeronautical capabilities in Germany

Region Hamburg /Bremen/Niedersachsen

- Airbus Deutschland
 - LH Technik
 - Suppliers
- ~ 30.000 workforce



Region Berlin / Brandenburg

- MTU-BB, RR-D
 - Lufthansa/Bombardier
 - Suppliers
- ~ 3.000 workforce

**total aeronautics
in Germany:**
~ 70 000 workforce
~ 16 B € turnover

Region München/Bayern

- EADS, Eurocopter
 - MTU Aero Engines
 - Suppliers
- ~ 27.000 workforce



Complementary Research on Federal and Regional Level

Federal Research Programmes (LuFo):

- LuFo III (2003 – 2007):
194 Research Projects
160 Mio. € Funding
- LuFo IV
1st call closed
1st Call (2007 – 2010):
160 Mio. € Funding
2nd Call (2009 – 2012):
130 Mio. € Funding



Regional Programmes:

- Bavaria (since 1997):
60 Research Projects



- Hamburg (since 2001):
40 Research Projects



- Brandenburg (since 1999):
few Larger Research Projects



Complementary Research on Federal and Regional Level

- **Common Management of Federal Programmes and larger Regional Programmes** by Programme Management Office to assure **harmonised Research Efforts**
- **Programmatic Coordination** with Industry and Science via:
 - ACARE on **EU-Level**
 - National Research Council on **National Level**
 - Bund-Länder-Forum between **Federal and Regional Level**
- **Common EU-Notification Framework of Regional and Federal Programmes**



R&T - Funding Intensity

EU:	10^9 € per Programme
	10^3 potential Participants
National:	10^8 € per Programme
	10^2 potential Participants
Regional:	10^7 € per Programme
	10^1 potential Participants



Orchestrated Use of Aeronautics R&T Programmes

