

## ERA-Net CIRCLE

Climate Impact Research Coordination for a Larger Europe

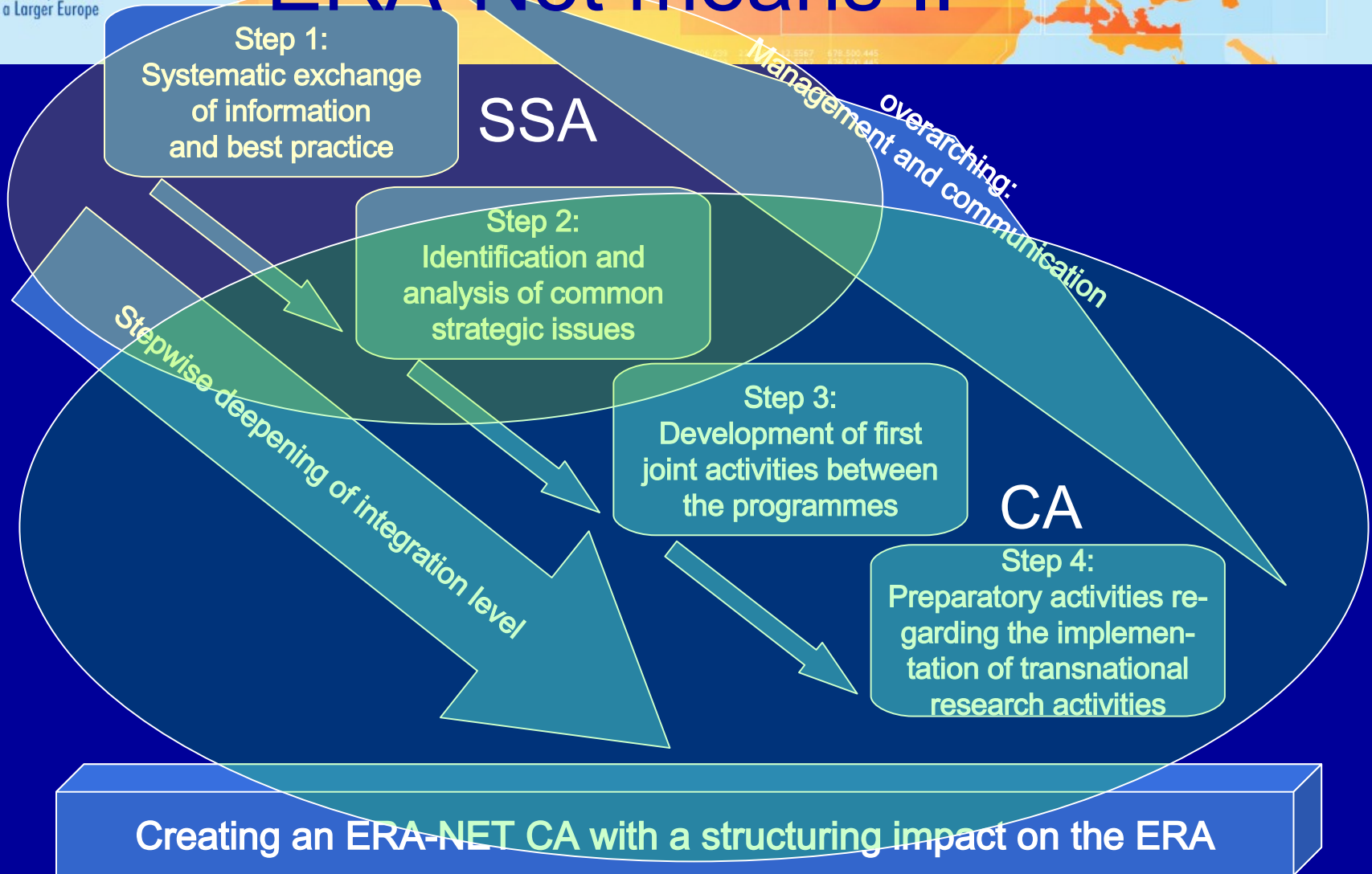
Martin König

Umweltbundesamt  
(UBA-A, Austrian Federal Environment Agency)

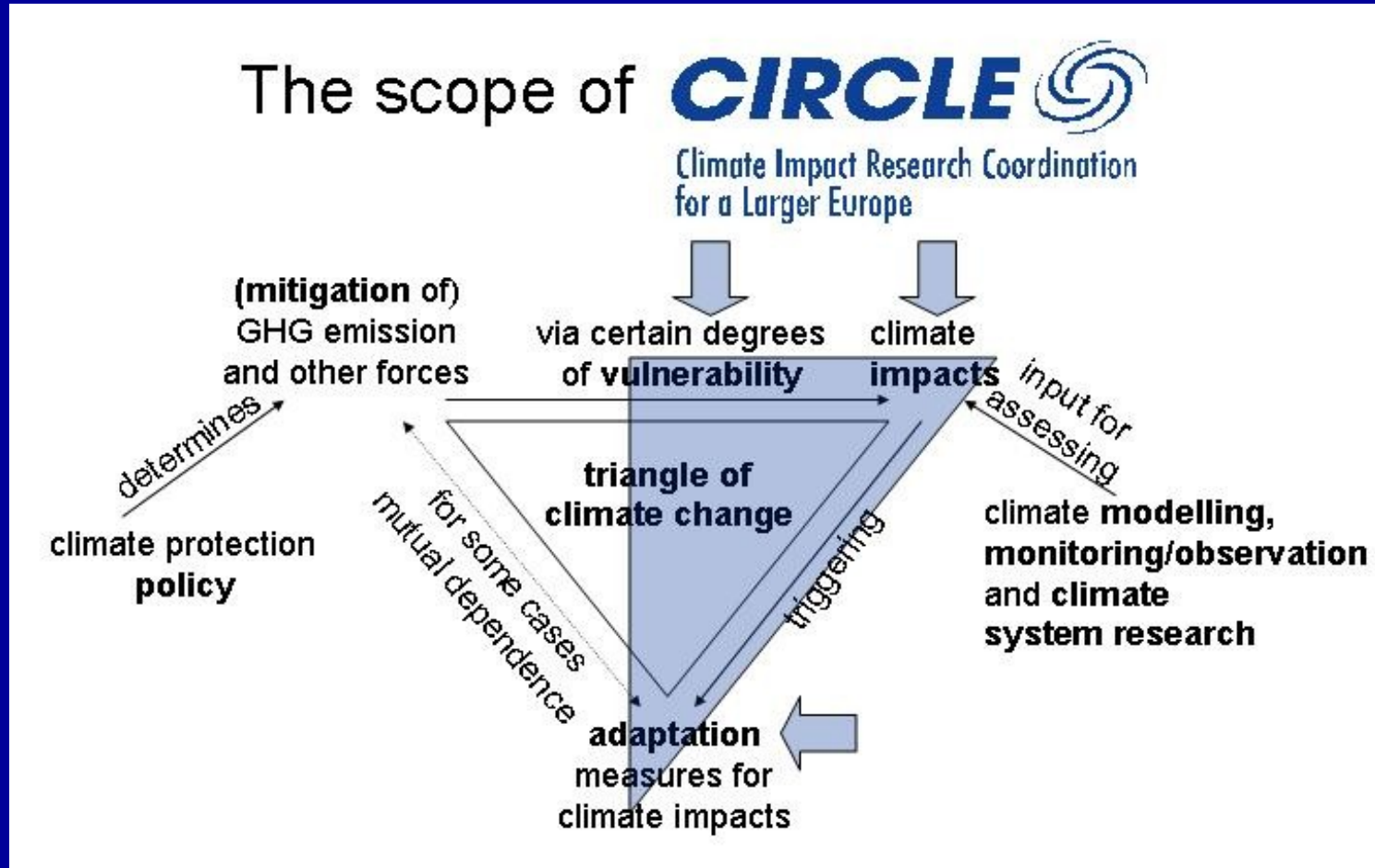
# ERA-Net means I

- ▶ ERA-Net stands for **Networking the European Research Area** and is financed by the European Commission's 6th EU research framework programme
- ▶ The ERA-Net scheme is/was thematically opened
- ▶ ERA-Nets are networking national (and regional) research programmes, prepare and execute transnational activities among the partaking programmes/countries
- ▶ ERA-Nets is becoming an important research infrastructure complementary to the EU research framework programmes (7th EU-FP is now on the way with even stronger emphasis on ERA-Net) and national research programmes
- ▶ UBA-A successfully submitted CIRCLE SSA in 2004 and CIRCLE CA in 2005 as Coordinator

# ERA-Net means II



# Thematic scope of CIRCLE



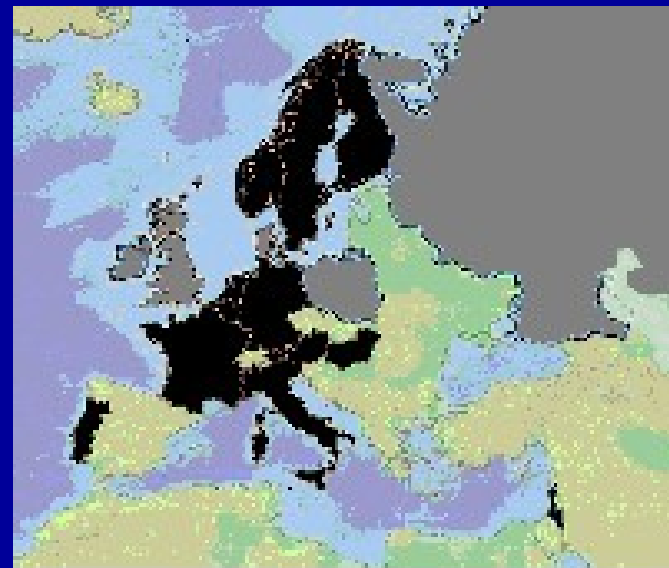
- ▶ CIRCLE's partnership:
  - From seven partner countries in CIRCLE SSA to now
  - 25 partner institutions from 17 partner countries (including observers) for CIRCLE CA
    - more countries might join as observers until 2009



<July 2006, ENVIROMIS>

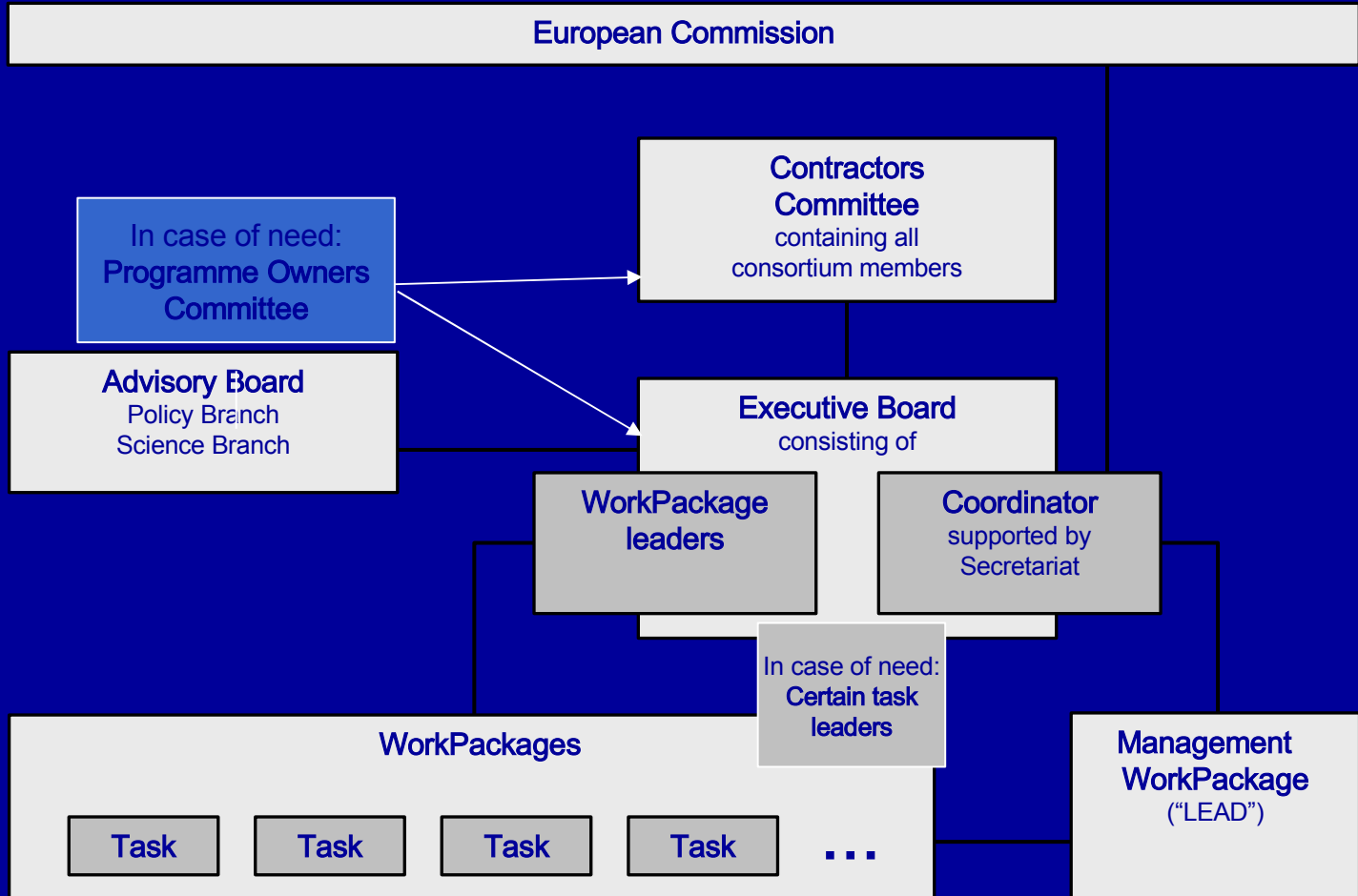
<Martin König, Austrian Federal Environment Agency>

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# CIRCLE bodies



## Country Report

- ▶ One main base for our work
- ▶ available for all over Europe

## In-depth information on:

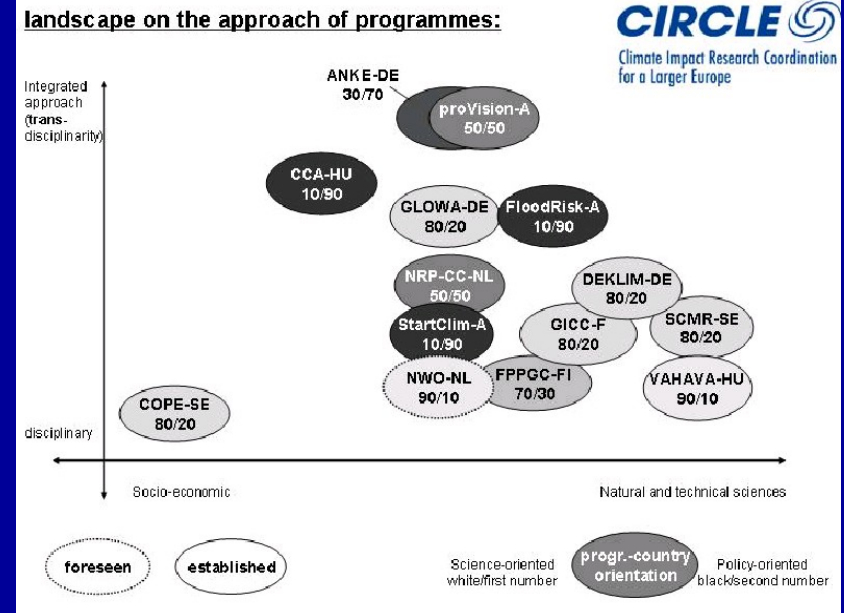
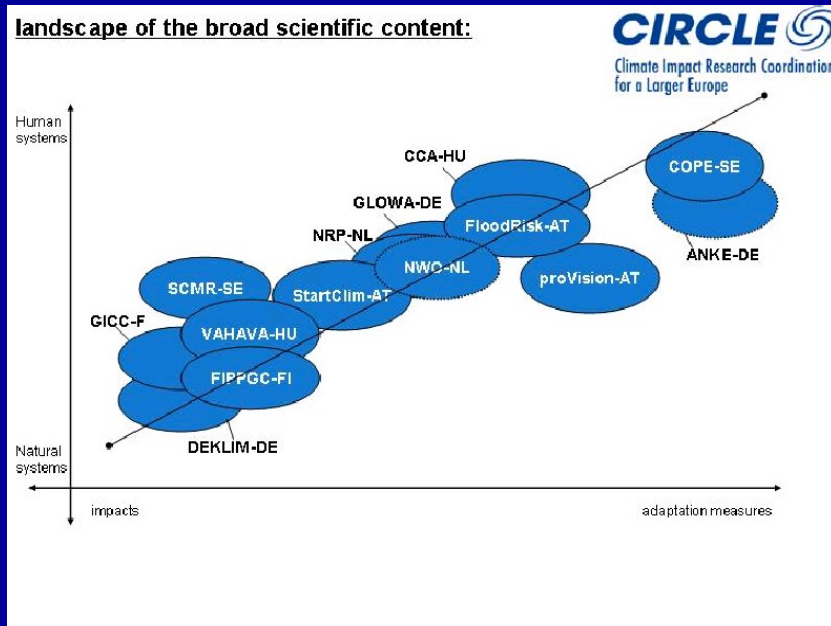
- ▶ National research programmes, landscapes & contacts
- ▶ Vulnerabilities and driving forces
- ▶ Impact assessments
- ▶ Adaptation measures

National Programmes on Climate Change Impacts and Adaptation							
Country	N.	Name	Focus of research				Duration and Budget
			Climate	Impacts	Adaptation	Other	
<b>CIRCLE CONTRACTORS</b>							
AUSTRIA	1	proVision	X	X	X	X	(2004-2006) 7 M €
	2	StartClim	X	X	X	X	(2003-2006) 790.000 €
	3	FloodRisk	X	X	X	X	(2003-2007) 1,4 M €
BELGIUM	1	SSD	X	X	X		(2005-2010) 66,4 M €
FINLAND	1	Finnish Project Programme for Global Change	X	X	X		(2004-2006) 8 M €
FRANCE	1	GICC	X	X	X		(1999-2010) ~20 M €/year
GERMANY	1	Research for Climate Protection and Protection from Climate Impacts	X	X	X		(2006-2009) ~30 M €
	2	DEKLIM	X	X			(2001-2006) ~39 M €
	3	GLOWA		X	X		(2000-2009) ~76 M €
HUNGARY	1	NKP II	X				(2003-2008) 2100 billion HUF
	2	JAP	X	X		X	(2004-2008) 1,1 billion HUF
ISRAEL	1	Name not available yet	X		X		(2006-2008) for 2008 ~200.000 €
ITALY	1	Strategic Programme for Sustainable Development and Climate Change	X	X			(2006-onward) (2006-2009) ~64 M €
NORWAY	1	NORKLIMA	X	X	X		(2004-2013) ~11 M €
PORTUGAL	1	Climate Change	X	X			(2006-2007) 1.030.000 € CIRCLE related
	1	Name not available yet	X	X		X	(2006-2010/12) ~0,5 M €/year
	2	Rosby Centre	X	X			(2006-onward) 7 €
	3	Climate 2004	X	X	X		(2004-2007) 10 M SEK/year
THE NETHERLANDS	1	CCSP NRP-CC including: - Scientific assessments and policy analyses	X	X	X		(2004-2011) 80 M €
	2	Vulnerability Programme - Adaptation and Mitigation (VAM) programme - NWO Global change programme	X	X	X		(2002-2006) 7 €
	3	Other Research Programmes	X	X	X		( ? ) 7 €
<b>CIRCLE OBSERVERS</b>							
DENMARK	1	DKC, Danish Climate Centre	X				(1998-onward) 5,6 M DKK/year
ICELAND	1	VQ, Climate and Energy	X			X	(2004-2007) 780.000 €
IRELAND	1	ERTDI, Environmental Research Technologies and Innovation	X	X	X		(2000-2006) ~ 7M €/year
POLAND	7						
RUSSIA	7						
UK	1	UKCIP, UK Climate Impacts Programme	X	X	X		(1997-2005); (2006-onward) 800.000-900.000 €/year from DEFRA

National Impact Scenarios		
Country	Sources used in this report	Content
<b>CIRCLE CONTRACTORS</b>		
AUSTRIA	Partners' contribution + 3rd NC	Some projections (for Alpine and mountain areas)
BELGIUM	4th NC	Few Scenarios based on IPCC Scenarios for Belgium area and RCM for Europe
FINLAND	Partners' contribution + Finland's Adapt. Strategy	Full assessment (RCM)
FRANCE	4th NC	Some Scenarios (RCM for France, Western Europe and the Mediterranean)
GERMANY	Info not available yet	Waiting for 4th NC
HUNGARY	3rd NC	Only general global projections for agriculture
ISRAEL	Partners' contribution + 1st NC	Some Scenarios (RCM) but need further research
ITALY	3rd NC	IPCC Scenarios for the Mediterranean area
NORWAY	Partners' contribution + 3rd NC	Some Scenarios (RCM for Northern Europe, downscaling to Norway)
PORTUGAL	Partners' contribution + 4th NC	Integrated comprehensive assessment (RCM for Southern Europe)
SWEDEN	4th NC	Full assessment (RCM for Europe and the Baltic Sea)
THE NETHERLANDS	Partners' contribution	Integrated assessment of 7 Scenarios (RCM for Western Europe)
<b>CIRCLE OBSERVERS</b>		
ICELAND	3rd NC	Some (direct impacts) Scenarios (GCM, RCM)
IRELAND	3rd NC	Some Scenarios (GCM, RCM for the North Atlantic Region)
DENMARK	4th NC	Full assessment (GCM, IPCC TAR)
POLAND	3rd NC	Few Scenarios (GCM)
RUSSIA	3rd NC	Some Scenarios (GCM)
UK	UKCIP Report 2005	Full assessment (GCM, RCM for Europe and UK)

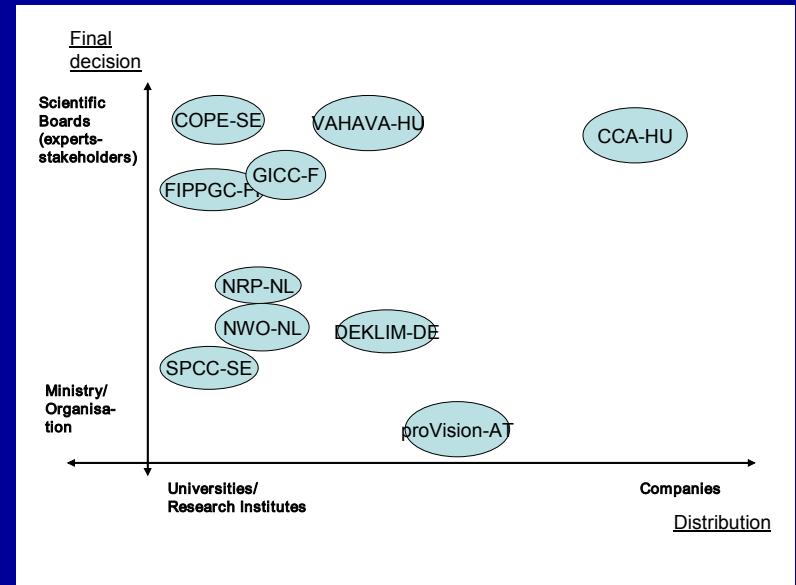
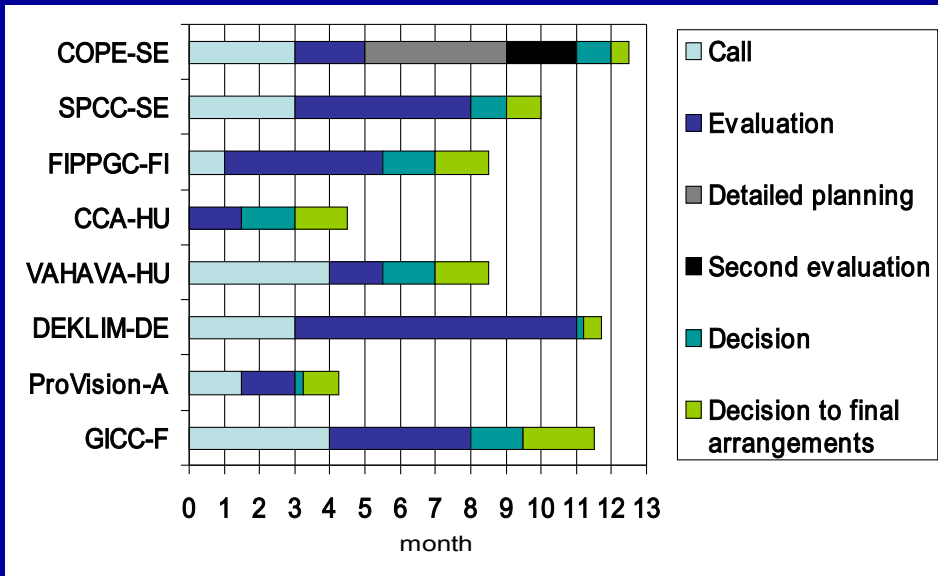
Adaptation measures		
Country	Sources used in the present report	Content
<b>CIRCLE CONTRACTORS</b>		
AUSTRIA	Partners' contribution + 3rd NC	Environmental and natural hazards risks management (for forest ecosystems, avalanches, erosion, torrents control)
BELGIUM	Partners' contribution + 4th NC	floods and water resources risk management, forestry
FINLAND	Partners' contr. + Finland's Adaptation Strategy	forestry, infrastructure (transport, buildings) and hydropower generation
FRANCE	Partners' contribution + 4th NC	natural hazards prevention, integrated natural and environmental resources management
GERMANY	Info not available yet	Waiting for 4th NC
HUNGARY	Partners' contribution + 3rd NC	adaptation measures against droughts damages
ISRAEL	Partners' contribution + 1st NC	fight against desertification, forestry protection
ITALY	Partners' contribution + 3rd NC	environmental and water resources protection, coastal zone management
NORWAY	Partners' contribution + 3rd NC	forestry and infrastructure (buildings and roads)
PORTUGAL	Partners' contribution + 4th NC	National Contingency Plan for Heat waves
SWEDEN	Partners' contribution + 4th NC	physical planning and the built environment, forestry, management of ski resorts
THE NETHERLANDS	Partners' contribution + 4th NC	coastal and riverine zones management, ecosystem management (nature, biodiversity), agriculture, spatial planning
<b>CIRCLE OBSERVERS</b>		
ICELAND	3rd NC	infrastructure (e.g. harbour) design
IRELAND	Partners' contribution + 3rd NC	forestry, integrated Coastal zone management (ICZM)
DENMARK	Partners' contribution + 4th NC	forestry, coastal protection
POLAND	Partners' contribution + 3rd NC	coastal protection
RUSSIA	3rd NC	flooding hazards
UK	3rd NC UKCIP Report 2005	river flood risk management, coastal zone flood defence, building regulations, health, agriculture

- ▶ Further analysis of the scientific content of the CIRCLE partner programmes





► Analysis of national programmes/projects and their management/administration



# Conclusion I

- ▶ 24 programmes detected and described (which means that CIRCLE covers almost  $\frac{3}{4}$  of national funded CLIMA\* programmes)
- ▶ all relevant contacts incorporated
- ▶ some regional gaps of national programmes are still existing (e.g. SE Europe)
- ▶ no information on regional programmes yet
- ▶ getting information was not always easy
- ▶ programmes average lifetimes are 3-5 years (regular updates are necessary!)

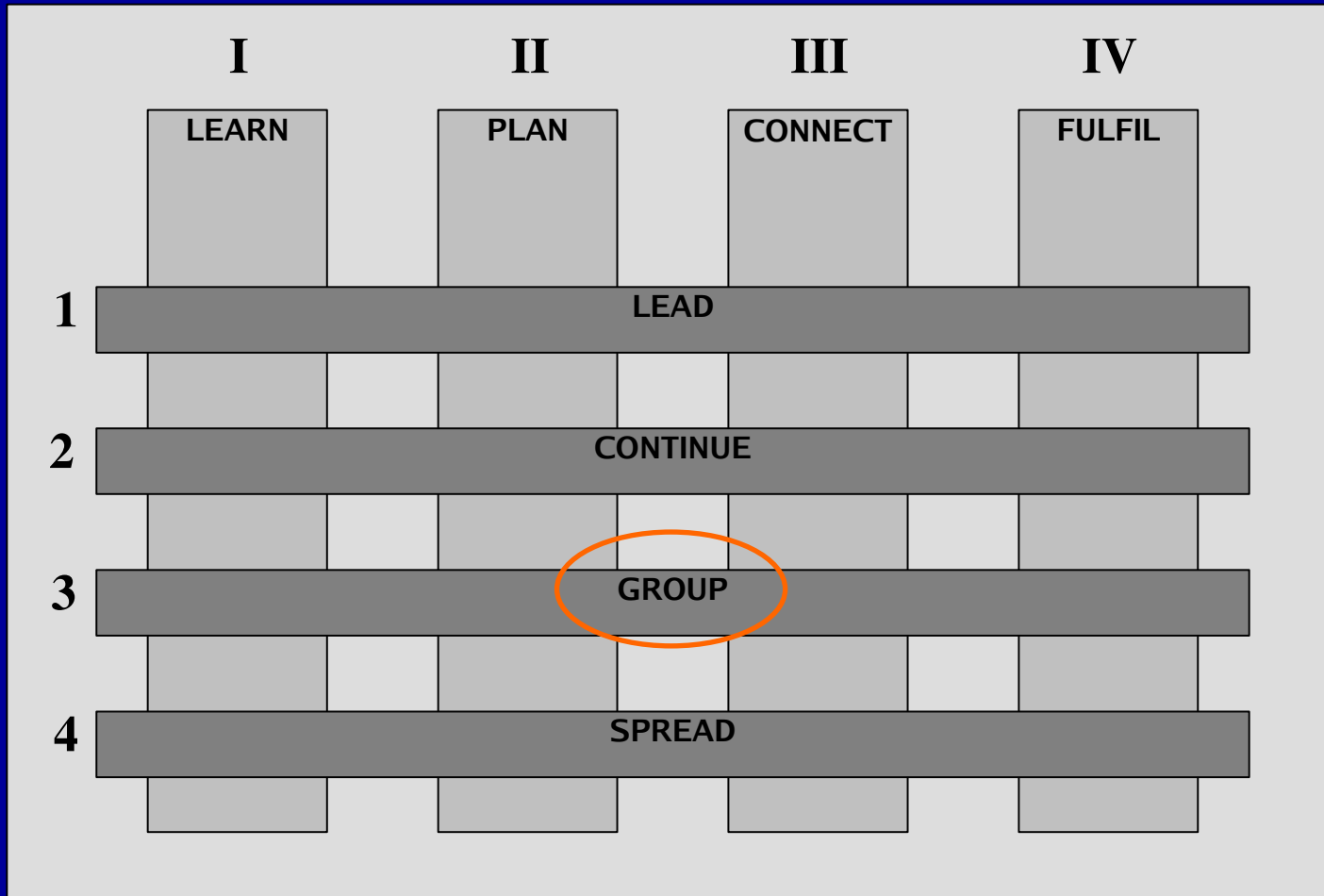
\*stands for **CL**imate **IM**pacts and **Ad**aptation

- ▶ different national research landscapes and geographical settings determine different scientific foci
- ▶ still the majority of programmes puts emphasis on natural sciences, BUT shift is visible, most new programmes embrace socio-economic sciences
- ▶ integration of adaptation measures gets more and more important
- ▶ builds base for “complementarity search” leading towards joint/transnational activities

- ▶ for most cases: administrative settings allow transnational cooperation
- ▶ some administrative problems to be solved for joint/transnational activities:
  - ▶ schedules of the programme (frequency of calls)
  - ▶ common evaluation procedure
  - ▶ mechanism on final decisions for funding
  - ▶ handling of common budgets,...
- ▶ BUT for most of the programmes an internationalisation via ERA-Net is most welcome, so that “hurdles” will be overcome



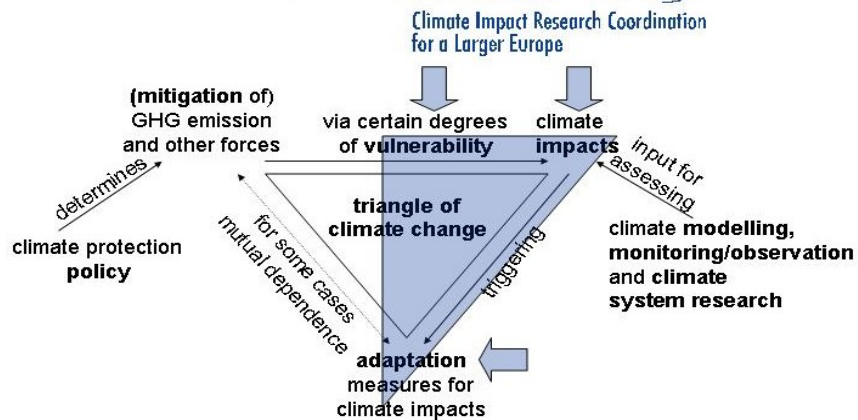
# Matrix of work planning



# WP GROUP and possible integration of RUS

- ▶ Within WP GROUP, CIRCLE implements the possibility to develop work programmes dedicated to specific sets of impacts and/or similar socioeconomic conditions
- ▶ Foreseen are: MED GROUP (cp. ppt Gérard BEGNI, Filipe Duarte SANTOS et al.), Nordic countries, Atlantic/coastal countries and Central and Eastern European States (CEES)
  - Note: concerning research cooperation, Europe extends from the shores of the Atlantic all the way to Wladiwostok!
- ▶ Within CIRCLE CEES close cooperation among central and eastern European countries should be envisaged (strong input from RUS is very much welcome!) and an “Eastern”/continental climate emphasis should be integrated into the CIRCLE work programme
- ▶ CIRCLE might be a very useful tool to stronger couple Russian research in the field of CLIMA to the “rest of Europe”

## The scope of **CIRCLE**



## REPUTATION

- ▶ maintain CIRCLE as one of the "best-practice ERA-Nets"
- ▶ Co-operating with neighbouring ERA-Nets to the degree possible

## HARD FACTS

- ◀ Having had staff exchange among CIRCLE partners
- ◀ Avoided some duplication in CLIMA research by aligning our research agendas
- ◀ Made use of some infrastructural synergies

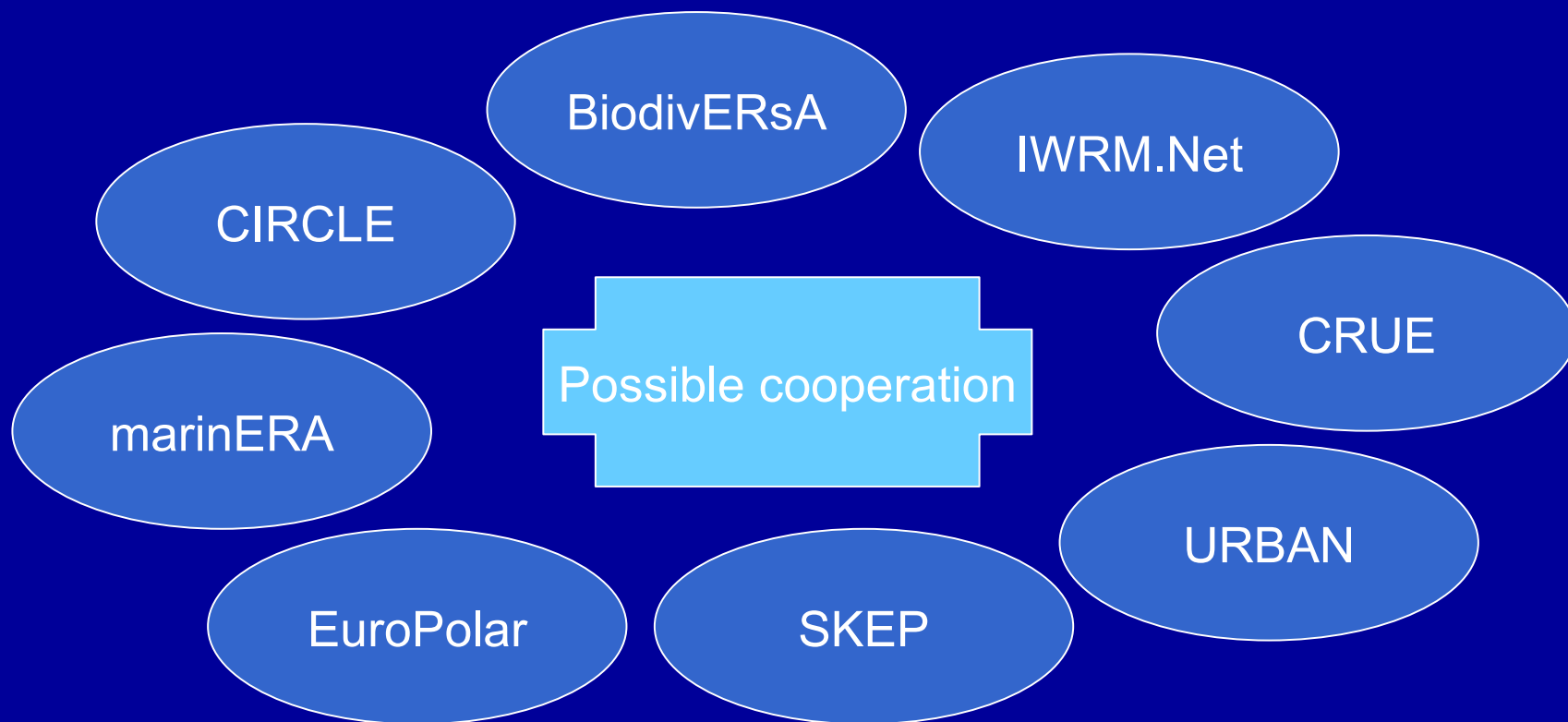
## SOFT FACTS

<July 2006, ENVIROMIS>

<Martin König, Austrian Federal Environment Agency>

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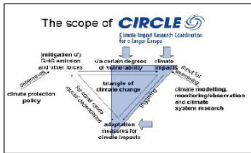




**CIRCLE**  
Climate Impact Research Coordination  
for a Larger Europe

**CIRCLE's scope**

Climate change is increasingly seen as one of the greatest issues facing the world in the 21st century, and Europe is taking a leading role in responding to its challenges. Whatever the success of mitigating climate change may be, certain impacts are unavoidable and European countries will need to adapt to those impacts driven by certain vulnerabilities and exposures in the regions of Europe. Their adaptation response must be informed by a coherent body of research and it is CIRCLE's prime objective to contribute to such efforts by aligning national research programmes. This process will be a strong support for the overall goal: Implementing a European Research Area (ERA) for the field of climate change.



CIRCLE started in summer 2004 and will extend its activities within the ERA-Net frame for 2005-2009.

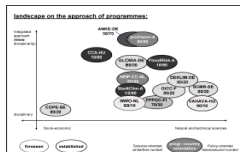
**Choosing the way to go**

The research programmes taking part in CIRCLE have different scientific scope, background and administrative structure. To elaborate differences and similarities by analysing various national research programmes in the field of climate impacts and adaptation measures is one major goal of CIRCLE SSA. First results are now available.

These are the main basis for transnational cooperation within Europe in the field of climate change. CIRCLE SSA provided carefully derived suggestions for and examples on cooperation among the partaking programmes and thus paves the way towards CIRCLE CA which incorporates research programmes in 17 European countries (including Israel).

Joint activities will only lead us to success, if we keep the tools as flexible as possible. In this regard, CIRCLE CA will implement the possibilities to focus on regional groups and on designing different tool packages for multinational/transnational joint calls including options like the geographical return principle, parity and fully opened joint calls and precursor activities.

**First results**



CIRCLE SSA has collected material about all important national research programmes on climate impacts and adaptation measures.

This country report is available since late 2004 and is being updated on a regular basis. Furthermore CIRCLE SSA analysed programmes with respect to their scientific content and their programme administration procedures. These two reports are available as well. Another concern of CIRCLE SSA is the integration of new member states and associated countries in Europe. A special report on activities in eastern Europe has been produced, too.

EU Funding: ~ 3 Mio. EURO (2004-2009)  
from EU-FP6 ERA-Net scheme (SSA+CA)



**Countries taking part in CIRCLE SSA:**

- Austria
- Finland
- France
- Germany
- Hungary
- Netherlands
- Sweden

**CA partners:**

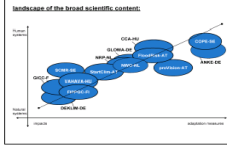
- Belgium
- Israel
- Italy
- Norway
- Portugal

**associated:**

- Denmark
- Ireland
- Poland
- Russia
- UK

**Adapting towards Europe's changing climate**

Most national research programmes in Europe cover both impacts and adaptation to a certain degree. Whereas many of the impact focused programmes are anchored more in the natural sciences/systems, some adaptation focused programmes integrate socioeconomic sciences/systems to a major degree. By exchanging experiences and information, the programmes integrated in CIRCLE already benefit a lot from their cooperation. Programme managers and financiers from each programme are represented in CIRCLE and transport CIRCLE results directly to their national programmes.



Adapting towards Europe's changing climate will be a major challenge for the European institutions, the national institutions as well as for Europe's regions and cities. Scientific evidence is given and communicated by various sources (e.g. IPCC 2001, EEA 2004, project results of FP5/FP6 projects like ACACIA, ATEAM and PRUDENCE).

CIRCLE will support Europe's adaptation process by establishing a well functioning subsidiary level under the EU framework programme.

**CIRCLE partner institutions**

- USA-A: Umweltbundesamt (Federal Environment Agency), Austria (Co-ordinator: Martin König, T +43 1 31304-5961, F +43 1 31304-3700)
- BMBWK: Federal Ministry for Education, Science and Culture, Austria
- AN: Academy of Finland, Finland
- SEPA: Swedish Environmental Protection Agency, Sweden
- Umweltbundesamt: Federal Environment Agency, Austria
- DLR-PT-UF: Deutsches Zentrum für Luft- und Raumfahrt, Projektträger Umweltaufklärung und -technik, Germany
- BMBWF: Federal Ministry of Education and Research, Germany
- KvR: Stichting Klimaat voor Ruimte, The Netherlands
- subcontracting KvR: Rijksinstituut voor Volksgezondheid en Milieu, The Netherlands
- MINROW: Ministry of Planning, Spatial Planning and Environment, The Netherlands
- HEW: Ministry for Environment and Water management, Hungary
- ADENE: Agence de l'Environnement et de la Maîtrise de l'Energie, France
- MEDD: Ministère de l'Écologie et du Développement Durable, France
- subcontracting MEDD: Support Office for Regional Research on Global Environmental Change in the Mediterranean Basin and Subtropical Africa, France
- FP6: Federal Public Planning Service Science Policy (BELSPO), Belgium
- FCT: Foundation for Science and Technology, Portugal
- RCS: The Research Council of Norway, Norway
- FORMAS: The Swedish Council for Environment, Agricultural Science and Spatial Planning, Sweden
- MATT: Italian Ministry for Environment and Territory, Italy
- subcontracting INGV: Istituto Nazionale di Geofisica e Vulcanologia, Italy
- IME: Ministry of the Environment, Israel
- SWE: Finnish Environment Institute (FEE)
- UKCEP: UKCEP Coordination Office, United Kingdom
- IEPA: Environment Protection Agency, Ireland
- ITPA: Institute for Ecology of Industrial Areas/ARCLIM-NET Coordination Office, Poland (with support of Ministry of Science and Information Society Technology)
- INCCS: Center for Environmental Research and Training, Institute for Monitoring of Climatic and Ecological Systems, Siberian Branch of the Russian Academy of Science
- DHI: Danish Meteorological Institute, Denmark



Martin König (CIRCLE coordinator)

T +43 1 31304-5961

F +43 1 31304-3700

[circle@circle-era.net](mailto:circle@circle-era.net)

Most important deliverables/reports from CIRCLE SSA under:

[www.umweltbundesamt.at/circle](http://www.umweltbundesamt.at/circle)

CIRCLE CA portal at:  
[www.circle-era.net](http://www.circle-era.net)