



NICOLE: Evolving Perspectives in Contaminated Site Management in Europe



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Chairperson Nicole industry subgroup

Outline



- Pre-Nicole
- Start and development of Nicole
- Members of Nicole
- Evolving goals
 - Mission and ambition
 - Projects
 - Communication and interfacing
- Projects and deliverables
- Future development and challenges



Pre-Nicole: triggers for cooperation

- Several major contaminated land issues
(eg Volgermeer polder in NL)
- National R&D programs started to tackle contaminated land issues
(NL: Nobis-SKB; UK: Clai;re; Germany: BMBF)
- New techniques and methods came in focus
(Risk assessment, Monitored natural attenuation),
- Knowledge and expertise scattered,
- Ad hoc communication between industry, consultants and regulators.



Nicole:

Network of industrially contaminated land

1996 Started as a EU funded 4th framework project
Since 2000 self-sustained by membership fee

Enable European industry to identify, assess and manage industrially contaminated land efficiently, cost effectively and within a framework of sustainability.

Nicole organisational set-up



Steering group
Divyesh Trivedi
Marjan Euser

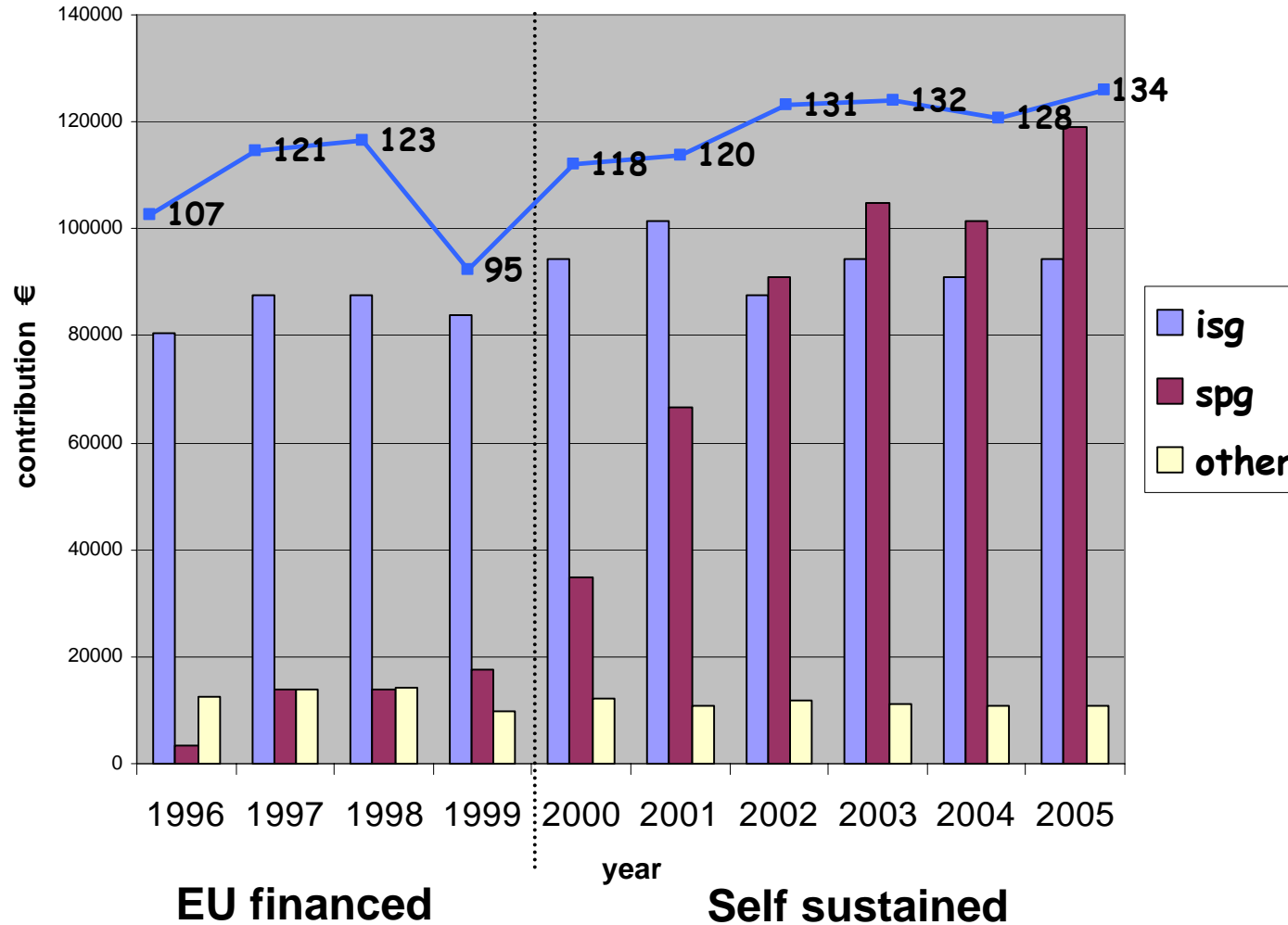
ISG
Anja Sinke
Marc van Gijzel
Lida Schelwald

SPG
Johan de Fraye
Bertil Grundfelt
Elze-Lia Visser

University representative
Hans-Peter Koschitsky

members

Development of membership



ISG members



BP
Chevron Texaco inc.
Cherokee
Corus group
DOW Benelux BV
DuPont
Dura Vermeer
Dynea ASA
ENI
ERG Petroli SpA
ExxonMobil
Fortum Oil Oy
Gaz de France
JM AB
MMG Montan
Grundstrucksgesellschaft

Nexia solutions
Philips Electronics Nederland BV
Port of Rotterdam
Repsol YPF
Rhodia
Royal Vopak
Sasol
Secondsite properties
Shell Global Solutions
Solvay S.A.
Syndial
Total
Taylor Woodrow
Umicore



Evolving goals ?

Mission and ambition

- Risk based land management
 - Sound scientific basis
 - Technology development
 - Best practises and evaluation tools
 - Communication
 - Sharing knowledge

Who formulates ambition and mission ?



members

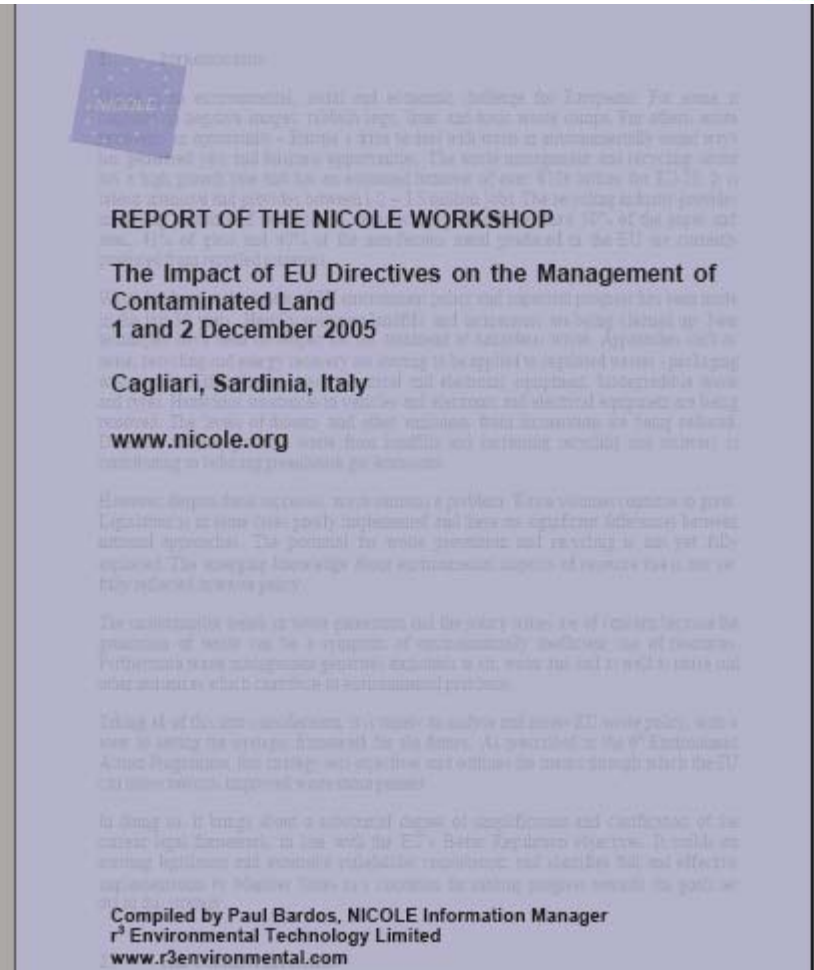


Nicole communication (internal)

- Nicole workshops (twice a year)
- ISG and SPG meetings (twice a year)
- Steering group meetings (three times a year)
- Nicole newsletter
- Nicole website (<http://www.nicole.org>)
- Regular email updates by secretary

Workshops and reports

www.nicole.org



Last Nicole workshop Carcassonne, 10-12 May 2006



NICOLE

A Network for Industrially Contaminated Land in Europe

Data-acquisition for a good conceptual site model

**Innovations and practical experiences with
in-situ measuring and monitoring**

**NICOLE network meeting 10-12 May 2006
Venue: City Hall of Carcassonne, France**

Preliminary program



Nicole communication (external)

- SG meetings with 'Brussels'
- Nicole website (<http://www.nicole.org>)
- Joint statements with other networks
- Participation in steering groups and review panels,
- Lectures for other networks and workshops
- Interfacing with other networks

Interfacing



- Common forum
- CARACAS (CLARINET)
- CEFIC
- CEN-ISO
- Common Forum
- PERF
- Projects in EU 5th & 6th framework:
 - PURE, CABERNET, Sednet
 - Welcome, Eurodemo, EUGRIS



Nicole projects on: research or best practise or communication or ..

- Members of Industry subgroup involved
- Members of Service providers subgroup involved
- Financed by consortium partners
- Often additional sources (national or EU funds)
- Nicole SG co-finances to maximum of 15 kEuro
- Reporting to Nicole

Examples of projects



- Risk communication (1997)
- Good practise survey (1999)
- MNA (overview guidelines 1999)
- PURE (protection of groundwater at industrially contaminated land, 2003)
- Risk communication (2004)
- Evaluation of risk assessment models (2004)
- MNA (demonstration project, 2005)

Examples of projects (1)

European risk model comparison study



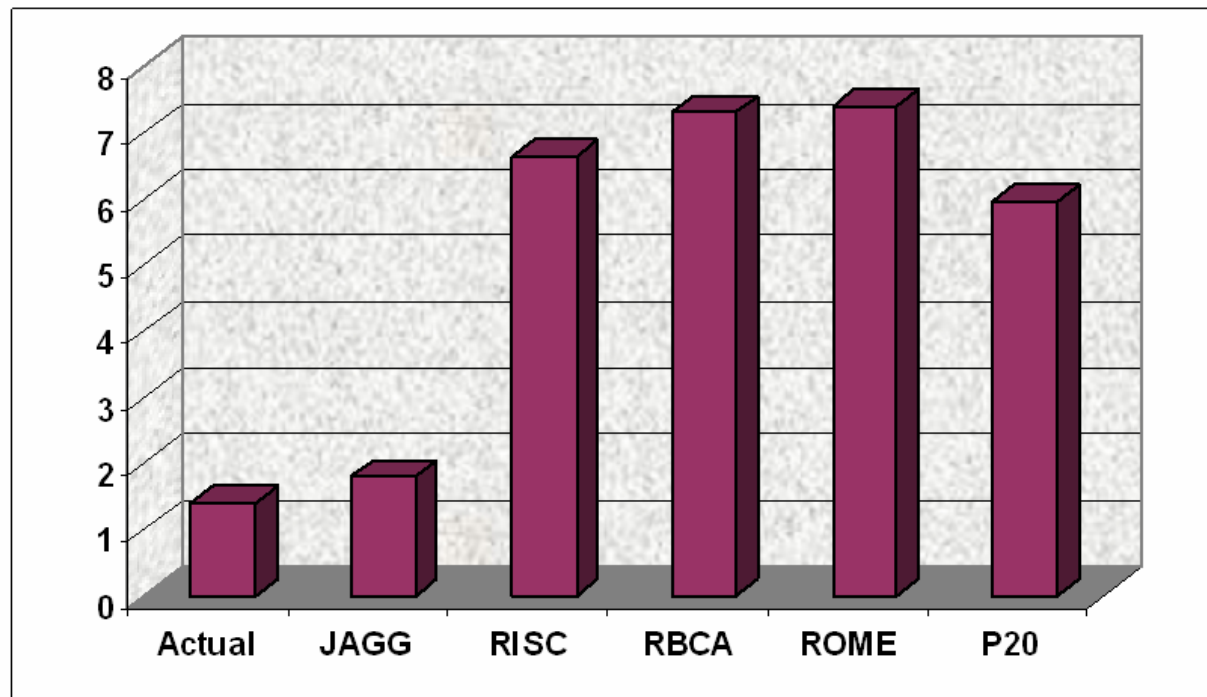
Selected Models

✦ Belgium	Vlier-Humaan
✦ Denmark	JAGG
✦ Germany	UMS
✦ Italy	ROME
✦ Netherlands	Risc-Human
✦ Norway	SFT 99:06
✦ UK	P20 and CLEA
✦ Commercial	RISC and RBCA Toolkit



Predicted vs. Actual GW Conc.

TCE concentrations (mg/l) at 57m with biodegradation



Note: Highest model default biodegradation rates used

Examples of projects (2) Risk communication (2004)



Communication on contaminated land



With thanks to
Lida Schelwald-vd Kley &
Christer Egelstig

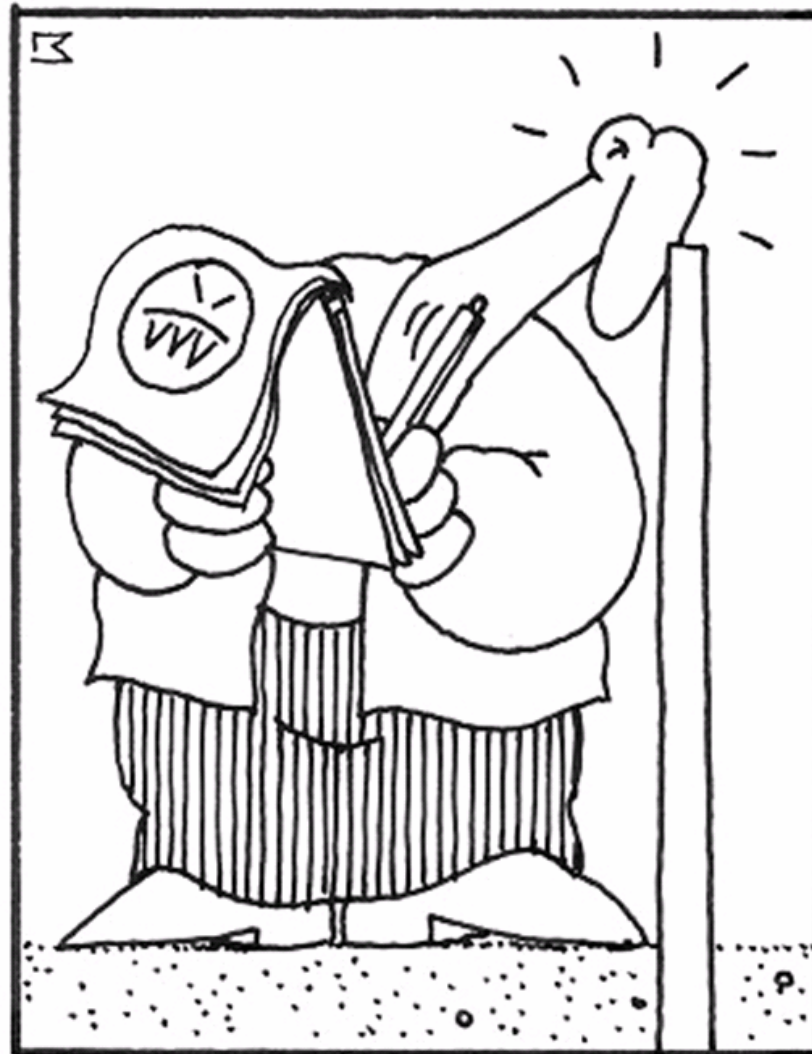
Examples of projects (3)

MNA demonstration project (2005)



Booklet on MNA:

French
German
Dutch
English
Italian



MNA demonstration project



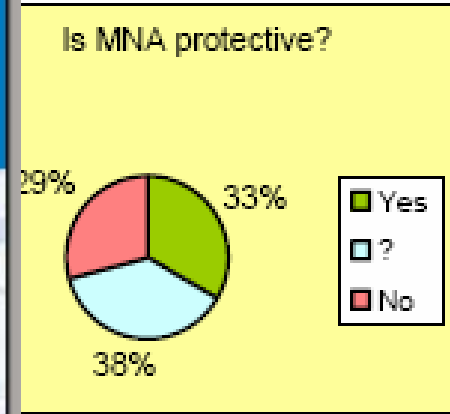
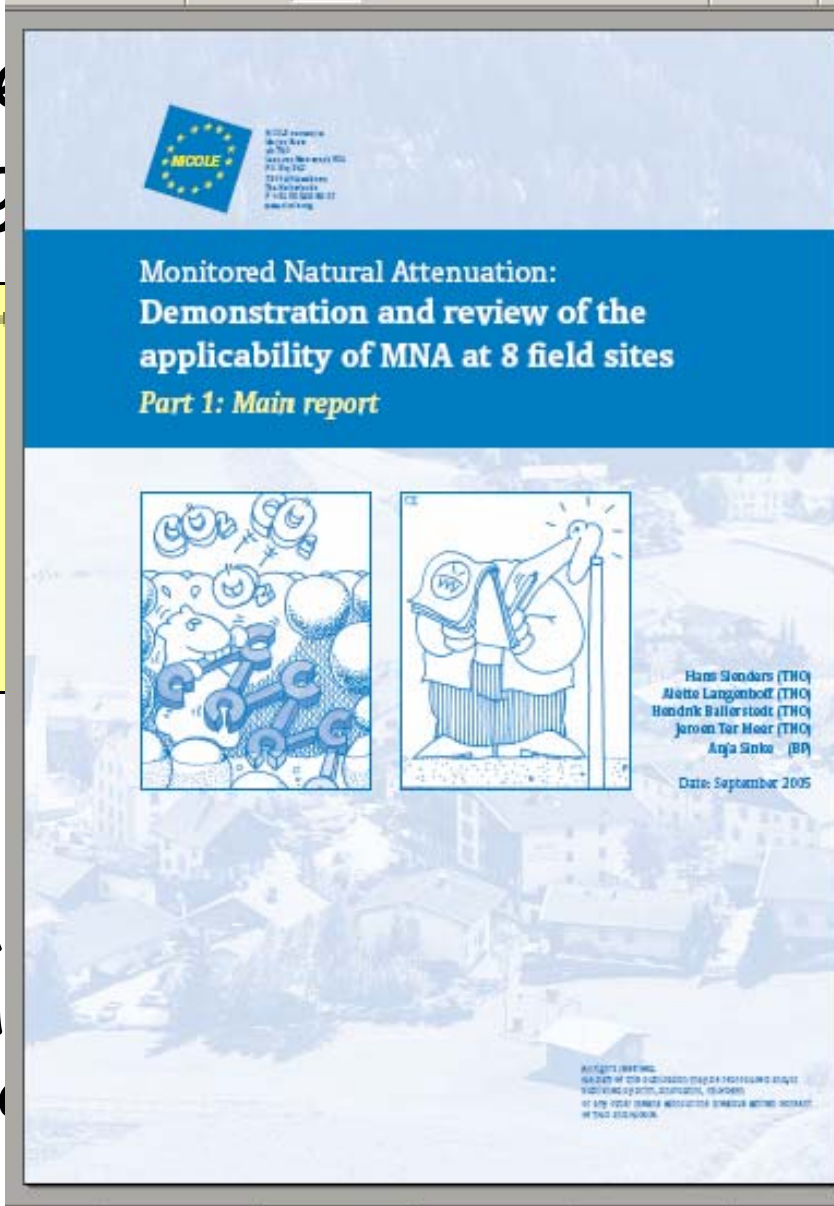
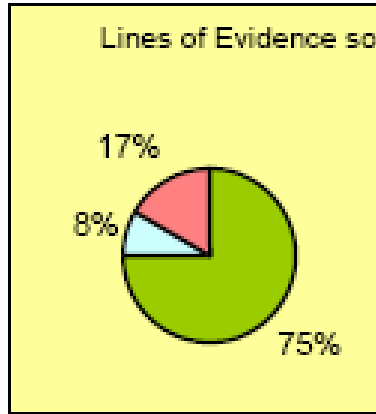
- 9 sites in 6 European countries
- All sites using common strategy
- Each participant invested minimum of 100 kEuro
- Work done by local consultants
- Sharing expertise and knowledge
- Common output format
- Review by independent parties
- Joint final report

MNA demonstration project



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s)



- Approach with
- No doubt that
- At 70% of the sites MNA was protective as stand alone

ceived,
f the sites
as stand alone

Future development and challenges (internal)



Further strengthening of network,
Improved knowledge sharing within Nicole,
Start of working groups by members,
..



Future development and challenges (external)

- EU directives and implementation
- Waste directive
- Water framework directive
- Groundwater daughter directive
- Soil strategy
- EU harmonisation

Goal: Risk based land management

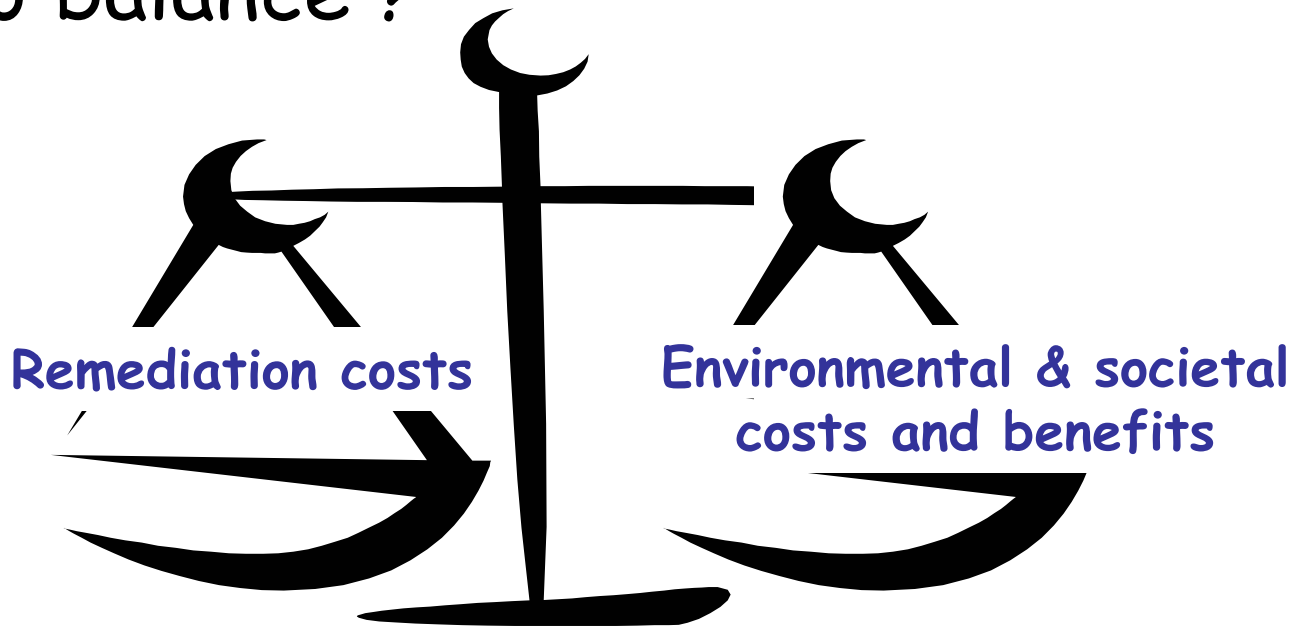
Some generic 'hot' topics:



Demonstration of 'innovative' techniques

Technical training and advocacy

How to balance ?





Conclusions

- Confusion on new European directives
- Nicole is well accepted discussion partner in Brussels
- Ad hoc start-up of projects by members
- Support to obtain EU or national research money
- Data and expertise sharing important focus