

SUCCESS Project: current activity in WP3

**INTERACTION BETWEEN EDUCATION, RESEARCH
AND INNOVATION FOSTERING**

**ENTREPRENEURSHIP: SUCCESS COLLABORATION
MODELS**

Lisbon, July 6th, 2009

Content

- Definition of WP3 experiments:
 - Tenerrdis meets SMEs
 - Summer School
 - CLUISTERI
 - Virtual vs physical
 - Connecting Energy and Climate
 - SUCCESS4SME
 - IPR, funding, policy
 - Managing international collaboration
- WP3 Observatory

WP3.3 Experiments

Objective

- Implementation of new models of governance and collaboration, based on the findings of:
 - WP1: benchmarking
 - WP2: creation of a new model of collaboration
 - WP3.1/3.2: first phases for the validation of the model

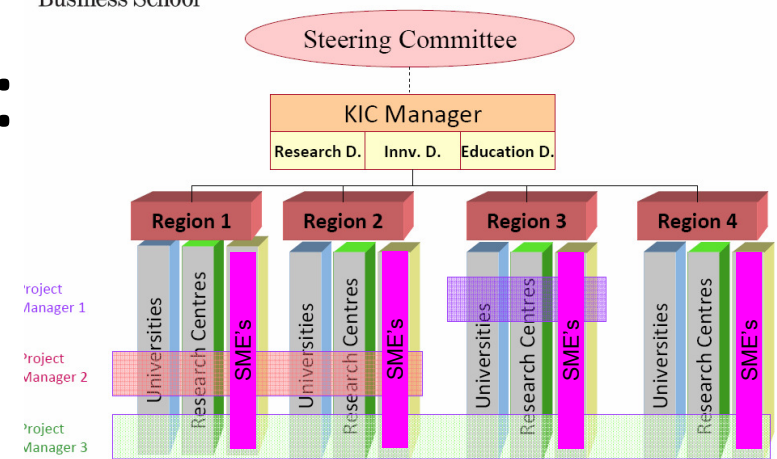
Method

- Definition of **experiments**

Design of the experiments in WP3.1/3.2

- Using the following criteria:
 1. support findings in WP2 (“prove of principle”);
 2. be linked to the (actual or possible) governance structure;
 3. connect to the findings on the projects analyzed in WP3.1;
 4. addresses important tasks of the network such as defined at the beginning of the paragraph;
 5. be acceptable for those that will undergo the experiment;
 6. have minimal influence on daily practice of those involved in the experiment;
 7. require limited input (corresponding to the time left to spend in work package 3.3);
 8. run over shortest possible period in order to be able to mobilize people that have to be involved in the experiment.

1. Tenerrdis meets SME's: Research goal



How can a network on sustainable energy involve SME's in a successful (for both sides) manner?

- Can a better reciprocal knowledge between network and SME's be created?
- Understand when it is advisable to adopt
 - a *bottom-up* approach to help SME's to exploit innovative ideas or solve specific problems (e.g., technological monitoring to evaluate the economic feasibility of their innovations), or
 - a *top-down* approach proposing to SME's R&D results and collaborations schemes

Methodology

- To focus on the typical SME's problems as stated in the Eurobarometer*
 - Problems in access to finance
 - Lack of market demand
 - Expensive human resources
 - Scarcity of skilled labour
 - Over-regulated environment

** Observatory of European SMEs, Eurobarometer Team of the European Commission*

Activities

- Propose to Tenerrdis different SME's collaboration schemes
- Preparation of questionnaire
- SME's dedicated day
 - Presentation of Tenerrdis activities
 - Distribution of questionnaire to SME's
 - Presentation of how to find appropriate funding for development of EU projects and market entry preparation
 - Description of “social network” (Enzima-P) approach
- Elaboration of questionnaire answers
- Development of new collaboration schemes for high-tech and low-tech SME's

2. Summer School



Exploring market value of sustainability research *SUCCESS business opportunity summer school*

Many academic research results remain unexploited, although they have commercial value. This SUCCESS start-up summer school aims at exploring the entrepreneurial opportunities of research results in sustainability and green energy.

Goal	This summer school improves the commercial exploration and exploitation of research.
Result	Identified opportunities in international markets: you know which idea you might develop and how and where you can proceed to commercially exploit that idea.
Technology	Green energy and environmental technology
Content	Market value of your research: entrepreneurial opportunity recognition Value exploration and competitive edge: value added and customer benefits How to Start: revenue generation and business model, market entry Resources and know-how: team, expertise and networks Entrepreneurial finance and sales: generating leads and market discovery
Process	Interactive lectures - team work - individual exploration - expert coaching - plenary presentations and discussion - excursion to business cases - discussions with entrepreneurs - pitches - individual assessment of entrepreneurial competences.
Participants	University research staff with research results PhD and Master students with research results (you can earn 3 ECTS). 15 students are accepted.
Locations & Organizers	Helsinki-Espoo, Finland - 1 – 5 June 2009 OR Eindhoven, The Netherlands - 8 – 12 June 2009 Eindhoven University of Technology (TU/e), Helsinki University of Technology (TKK) and Helsinki School of Economics (HSE). This is an European Commission SUCCESS pilot.
Costs	The summer school is paid by SUCCESS*, TKK, HSE and TU/e. No fee is charged from the students but all students shall pay for their traveling and housing costs. Contact for reimbursement of traveling and housing expenses your local Cluster contact person _____ or your local SUCCESS contact person _____.
Application	Send a curriculum vitae and a motivation letter to Elco van Burg, J.C.v.Burg@tue.nl (to apply for Eindhoven) or Professor Markku Virtanen, Markku.Virtanen@hse.fi (to apply for Helsinki-Espoo). The deadline for applications is the 20 th of April 2009.



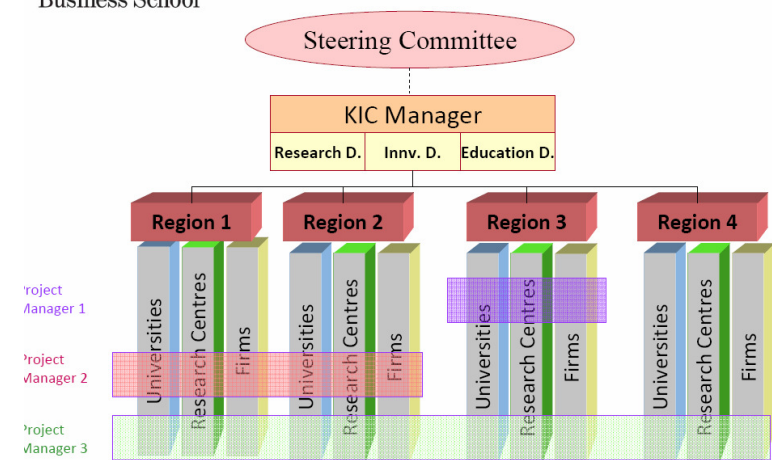
Advertorial brought us:

- In Helsinki 1-5 June: 12 participants, 11 countries
- In Eindhoven 8-12 June: 11 participants, 8 countries

Experiment leaders:

- Vuoko Lepistö-Kirsilä, TKK
- Gianni Guerra, Polito
- Lex Lemmens, TU/e

Research goal



To test:

- What advantages of spinoffs and start-ups on regional level could have compared to central organized activities;
- What advantages can mixing of participants from different European regions can have compared to having only participants from one region;
- Whether there are advantages depending on the special characteristics of a region and what these are;
- What the advantages of the different approaches can be.

Methodology

- Two joint summer schools
 - In two innovative regions
 - Using local cases giving regional flavor
 - Open innovation (Helsinki) versus Non-disclosure agreement (Eindhoven)
- Pre-designed evaluation
 - Participants
 - Coaches
 - Observers (TKK, TU/e, Polito)

Content of the workshops

- **Market value of your research:** entrepreneurial opportunity recognition
- **Value exploration and competitive edge:** value added and customer benefits
- **How to Start:** revenue generation and business model, market entry
- **Resources and know-how:** team, expertise and networks
- **Entrepreneurial finance and sales:** generating leads and market discovery

3. The "CLU|STER| Experiment"



CLUSTER

- **CLUSTER** is a network: **C**onsortium **L**inking **U**niversities in **E**ducation and **R**esearch
- 12 universities in Europe, a few outside Europe (USA, China, Russia)
- Collaboration since 15-20 years
- There has so far not been any industries involved and the industrial interest has been very low in the activities

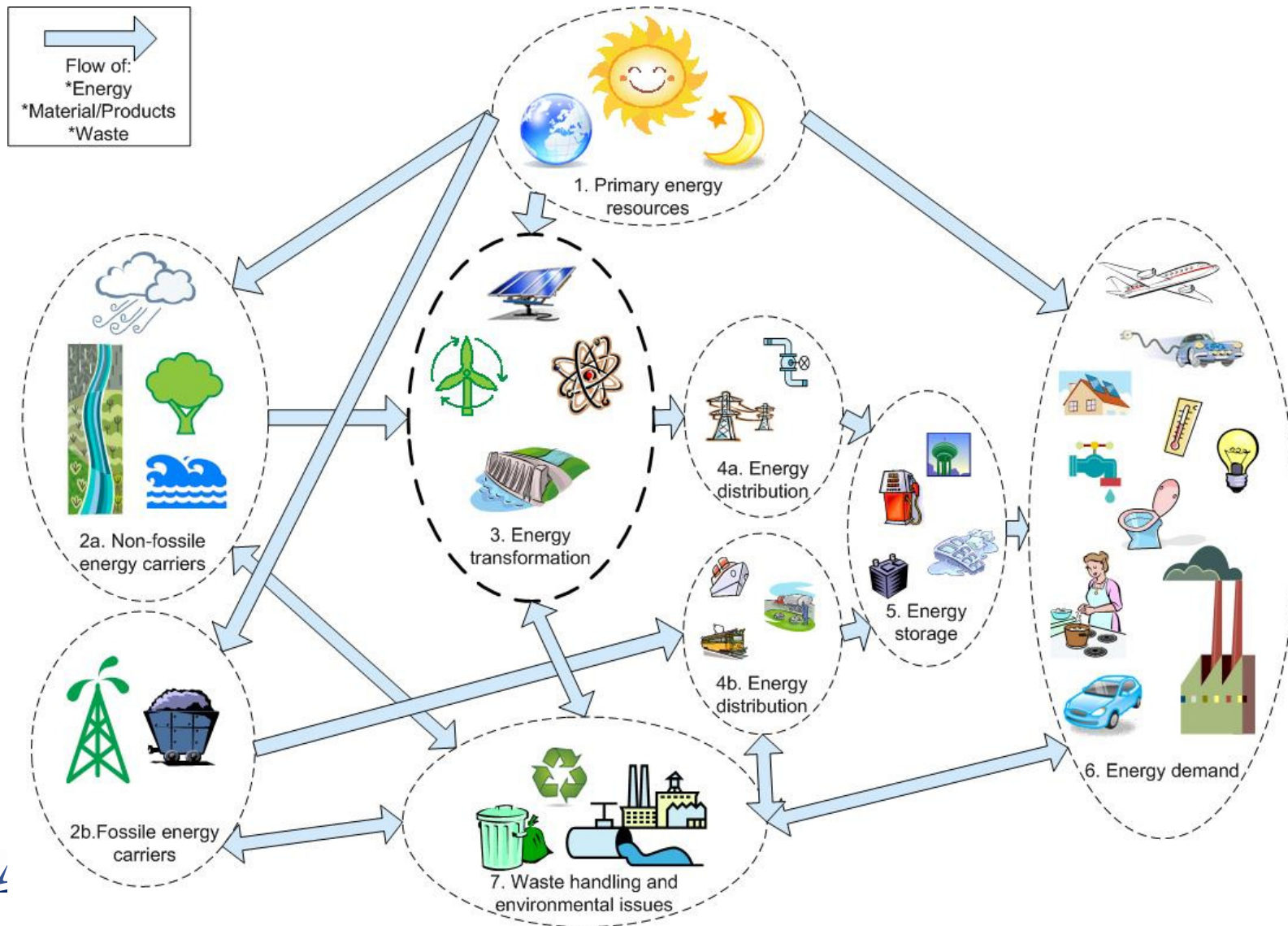
The "CLU|STER| Experiment"

- We identify a collaboration model which we call CLUISTERI (=Cluster Linking Universities *and Industry* in Education, Research *and Innovation*).
- Base this model on results in WP2, i. e. use the "Elena/Mette-model".
- Establish a "fictive Master program", as well as a "fictive Ph D program", in one of the energy areas.
- The ideas from the other parts of the "experiments" are "taken off the shelf":
 - "Elena model" for governance
 - IPR-issues
 - "start-ups"
 - SME's
 - Entrepreneur
 - Physical vs virtual "long-term working relations"and included into the CLUISTERI-experiment.
- Describe the experiment in a "pamphlet"
- Invite a reasonable (~10) companies to participate in a 2 day session to "hammer out" an educational MSc/Ph D program in the selected sector:
 - July 1-3, Stockholm
 - See if the results fit well into the "KIC Energy application"
- Report in October

The “fictive” MSc/Ph D entrepreneurial program

- The energy sector is too heterogeneous to fit into one Master program.
 - We need to take one special topic
 - Use the Erasmus Mundus “SELECT”-proposal as the starting point
- Concentrate on the “distributed **micro**-scale renewable poly generation”, i. e. delivering “energy services” of some kind from non-fossil fuels in small scale:
 - Remember: (1) It is a “fictive experiment” and (2) innovation in the energy sector is unlikely to appear on units of 100 MWe and larger within the short perspective.
- In such a case we would use “basic energy” like wind, hydro, bio, wave, tidal, geo, sun and use various conversion components to create the services (solar thermal, photo-voltaic, hydro-, steam-, gas, wind-turbines, heat exchangers,) we want.
- We could perhaps limit the “polygeneration services” to electricity, heat, cooling, but perhaps we might want to look also at hydrogen and 2nd generation biofuel?

Accepted Fuel Flexible Polygeneration for Future Energy



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KIT-TUM -Auto-Experiment on SUCCESS

4. EC- commandment: Virtual vs physical

**Governance of the model: The question of best virtual
and physical communication within a EU
collaboration/consortium**

**Shortcoming of the
autoexperiment in WP3.1:
Communication**

Arne Lorenz, Peter Bremer, Karlsruhe KIT-FZK

Experiment: virtual vs physical cluster

- **WP2 Barcelona centered and pre-existing communication (WP leader and main partner in the same city, strong physical and local aspect with strong pre-existing communication as partner in ESADE worked at CBS beforehand)**
- **WP3 distributed across Europe (WP leader, WP subtask leader and partners not in the same city, Importance of pre-existing communication rather small)**
- **Comparison of WP2 to WP3 through a questionnaire developed by TUM addressing virtual and physical communication including the dimension of native language and preexisting communication interviewing the subtaskleaders**
- **The resulting cooperation of WP2 and WP3 was analysed: efficiency of cooperation determined by WP subtaskleaders (partners, productivity) and partners (conflict, information, trust) with the help of an online questionnaire with closed questions developed by KIT-FZK**

Summary communication

WP2	WP3.1
Phone calls as high as emails sent	More emails than phone calls
Telcos and meetings/month lower at the full consortium level; centered on core level	Telcos and meetings/month high
More e-mails also sent locally (core level)	High local share in phone calls
Local (core) meetings	Skype locally
Low use of native language	Higher amount of native language in physical part of the work
Pre-existing communication high	Pre-existing communication low
Both physical and virtual, less physical on the European level	Both physical and virtual on the European level

Summary Cooperation

WP2	WP3.1/WP3.2
Rather satisfied with partner activity	Rather satisfied with partner activity
No comments to contribution of partners	Not all partners contributed
Desired configuration of the deliverables present	Desired configuration of the deliverables sometimes lacking
No conflicts	No conflicts
Access to, distribution and flow of information concentrated at the end of the period	Access to, distribution of and flow of information average
Sharing of confidential information higher	More concrete steps to continue collaborating

5. Connecting energy and climate

- **Governance issue addressed**

- How a KIC can improve connections between energy and climate change by proposing a strategic agenda and common activities, in order to generate new pathways for sustainability and innovation

- **EC-theme addressed**

- Managing interdisciplinary teams and foster international collaboration
- New skills, roles and professions in triangle related to research, education, and innovation

- **Target group**

- Climate and energy experts, from research, education and industry

Methodology for experiment

1. **Questionnaire** sent to 10 experts from energy and climate fields (res+educ+ind), in order to identify preliminary elements for drawing a common strategic agenda, for education, research and innovation.
2. Analysis of the questionnaire, as a base for a **one-day workshop**, organized in Paris, aiming at evaluating the capability to
 - set up a common strategic agenda, involving both energy and climate European actors, and based on common needs
 - design educational program and some innovation ways.
 - design first steps of a governance model for such activities

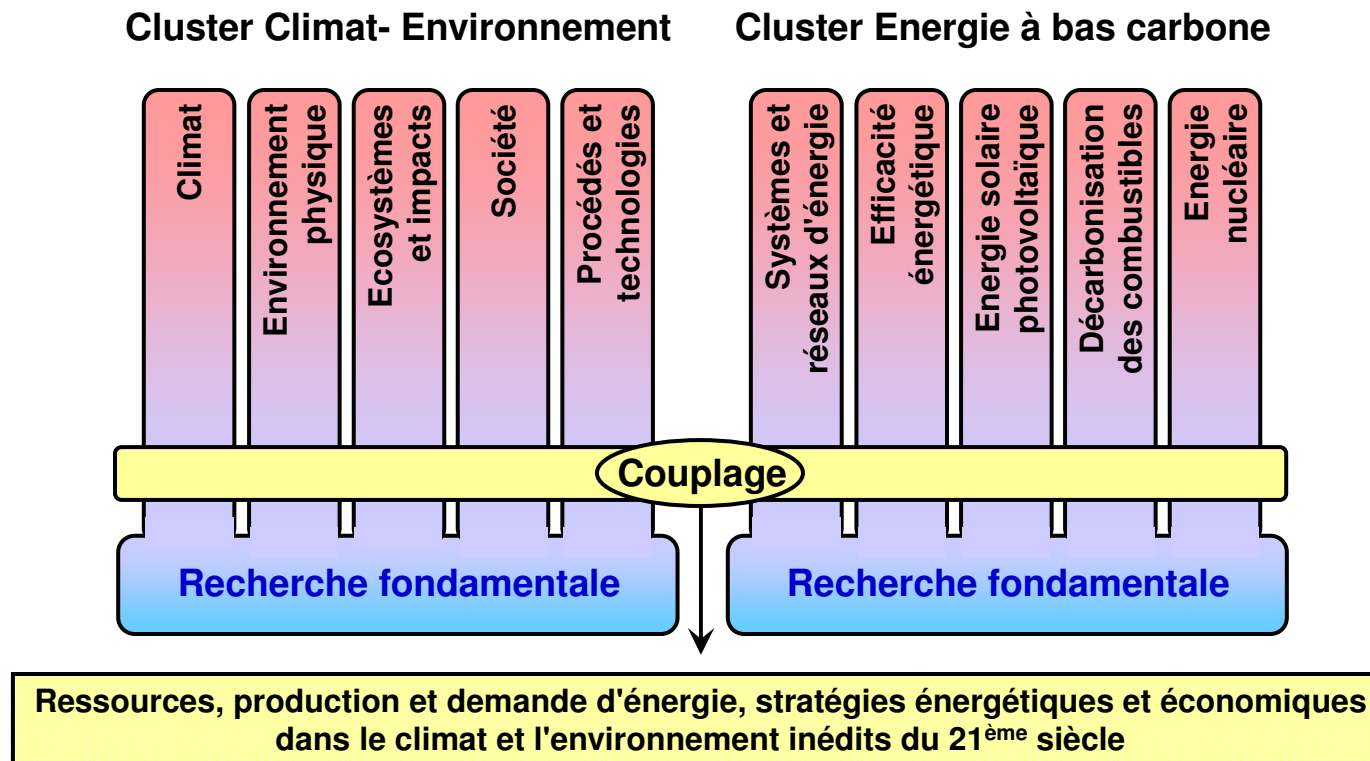
1. Write a **deliverable**.

One-day workshop : first approach

- Well balanced participation from academic and business , from climate and energy sectors
Your contribution is almost welcome
- Use as an example the climate-environnement-energy cluster of Paris for testing the management of interdisciplinary teams and the design of new skills, roles and professions in triangle related to research, education, and innovation

Climate-Environment-Energy cluster

Answer to climate change and sustainable energy,
by developing excellence in research and education and stimulating innovation in
technologies and services



6. Test bed SUCCESS4SME

Sustainable Energy

– new technologies, products and processes for SME –

Charlotte Schlicke

Steinbeis-Europa-Zentrum

General Topic of the experiment **SUCCESS4SME**

The high numbers of RTD organisations in SUCCESS have a rich portfolio on new technologies, products and processes, which can be exploited by SMEs, especially SME in the supplier industry in the Energy Sector.

Goal:

European cooperations of RTD organisations and SMEs in joint RTD actions (EU-funded programmes) or bilateral cooperations; Matchmaking event in Brussels.

Methodology/Description

- Identification of RTD performers with exploitation potential for SME
- Extracting technology offers (products, processes, technologies) from the RTD portfolio with market potential / exploitation potential
- Writing of the technology offers in a way, that SME as pilot users or further development partners understand the advantage of the offer (new markets, better performance, optimisation compared to state of the art)
- Marketing the offers in all over Europe to SME
- Inviting interested SME to Brussels to meet the RTD performers / offerers of technologies
- Matchmaking in Brussels (16.-17.July 2009)
- Support for possible collaborations, eg in the SME Research programme, EUROSTARS, ERA SME or CIP: Eco-Innovation

Collaboration / Exploitation Profile or RTD organisations

- **Contact details**
 - o Will be kept anonymous until expression of interest by SME
- **Description of the RTD Result / Project Idea**
 - o What is the offer/projet idea about,
 - o Some technical description to attract the interest of the SME,
 - o Innovative Aspects and Advantages of the idea / offer
 - o Which are the technology fields
- **Collaboration Details**
 - o What is the application field of the offer / idea
 - o What type of partner is sought / what type of cooperation / in case of EU projects - what is the role of the cooperation partner

7. IPR, funding, policy

Methodology

1. A draft about each issue is prepared (IPR, funding, policy)
2. The draft is sent to experts and a summary is done
3. Final integration will be done in a one-day workshop.
4. Reporting

First draft on IPR. Main issues:

1. Comissioned research by a company to one Uni/RC
2. Some companies in a network with some Unis/RCs
3. Comissioned research by a company to a subset of Unis/RCs in a network
4. Distinctions on authoring rights and IPR
5. Chairs (educational and/or research)

Answers from: EdF, Siemens, DTU, CEA, KIT, UPC

Summary

- EIT guidelines on IPR
 - Ownership and licensing will be crucial
 - IP plan and IP board must be set-up in KICs
- National laws make integration more difficult
- EERA vision on IPR is under development (and it is being analyzed)
- Common views:
 - Commissioned research by one company
 - Commissioned research by some companies, with exceptions
 - DESKA model
 - EEIG

8. KIT-SUCCESS-Experiment – Managing international collaboration

Peter Bremer, Arne Lorenz



General information

Positioning of the experiment

- **Model: Managing international collaboration**
- **Knowledge triangle: education, research, innovation**
- **Subject: SUCCESS**
- **Target group: managers of international collaboration**

Methodology

- **CENTRA as a means for virtual collaboration**
- **A natural experiment: Full-time coordinator (impact and characteristics)**

Results

CENTRA - results

- **Respect Murphy's law – keep things simple!**

Full-time coordinator – expected results

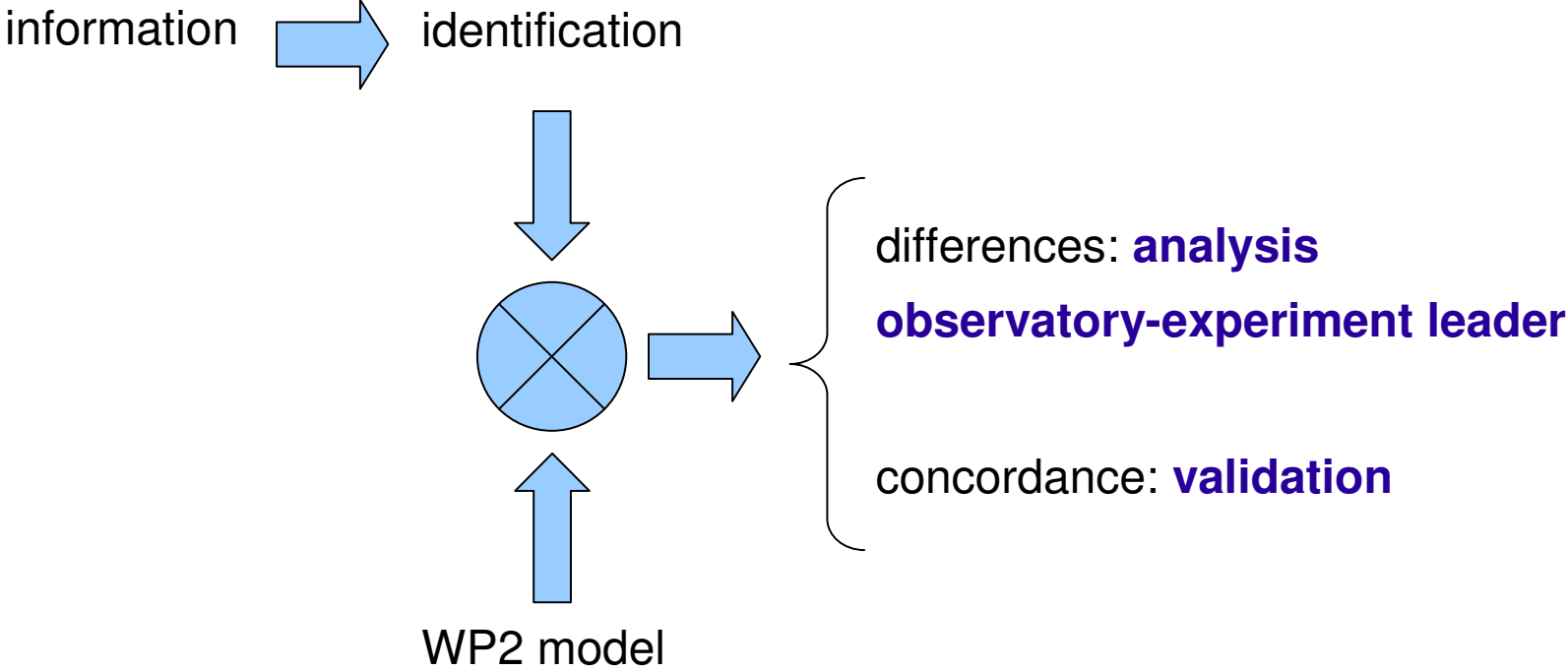
- **Positive impact**
- **Generalist vs specialist**
- **Comparison to results of WP2:**
 - **Integrative capabilities**
 - **Relational capabilities**
 - **Good reasoning skills**
 - **Brokering role (to bridge members)**
 - **Using humour**
 - **Providing examples of analogies/ use of metaphors (to connect different worlds and views)**

Observatory

- Objective of the observatory
 - Assuring a good linkage between WP2 results and WP3 work
- Tasks of the observatory:
 - High-level process supervision
 - Experiment steps identified within the model
 - Identification of governance and cooperation issues
 - Comparison with the model developed in WP2
 - Identification of outputs and outcomes

Actions

- Analysis of information traffic within WP3:
 - email
 - Reports
 - Telcos
- Identification of governance and cooperation issues
- Comparison with WP2 proposals



Feedback

- Differences:
 - Analysis of “**what happen if ...**”
 - Analysis of the reason of differences
 - Conclusions
- Concordance:
 - Validation of the model
- Generation of recommendations
 - Reporting on WP2 model
 - Reporting on WP3 experiments

Thanks for your attention!