

Analyses of barriers to cooperation and development of an initial proposal of cooperation procedures

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INTRODUCTION

ERA-NET TRANSPORT (ENT) is an attempt of a multi-level, multi-actor framework and a new governance mechanism for trans-national activities in transport research policy. The current focus of ENT is to encourage trans-national cooperation of transport research programme managers from national ministries, public funding bodies or research promotion agencies in charge of national programmes.

Work package one of the ERA-NET TRANSPORT is accountable for carrying out a survey on the current governance practices in national transport research policy and to give recommendations on guidelines and model procedures for trans-national transport research programming and funding. The survey started with a questionnaire on current national transport research programmes as well as governance practices in transport research policy in 13 European countries.

The first results of this survey, which were discussed at the first workshop (WS1), was an overview study on governance mechanisms and policy regimes in national transport research policies (Deliverable 1.1¹) The study illustrated, that there are structurally similar procedures of public financing/funding transport research in European countries. But with a deeper insight different governance practices and policy regimes behind these procedures were obvious.

In the questionnaire survey national representatives were asked for their personal views and estimations on current national barriers for multilateral cooperation in transport research policy (these are described in detail in Deliverable 1.1.) Based on the survey a list of catchphrases on barriers for cooperation was verbalised and further discussed at a workshop in November 2004 with national representatives. In conclusion of the workshop, the representatives were called to score the catchphrases from their national perspective.

One important result of this second step of the survey was that barriers for cooperation at the programme implementation stage (compare Figure 1 - the policy cycle²) are not really critical. Both from a legal standpoint as for the standpoint of the programme management there are several opportunities for trans-national research cooperation activities. The Barriers are more serious at the policy determination stage. For steering public research funding budgets there is presently a large pressure regarding political legitimisation. National research budgets are to be spent with regard to current national political interests.

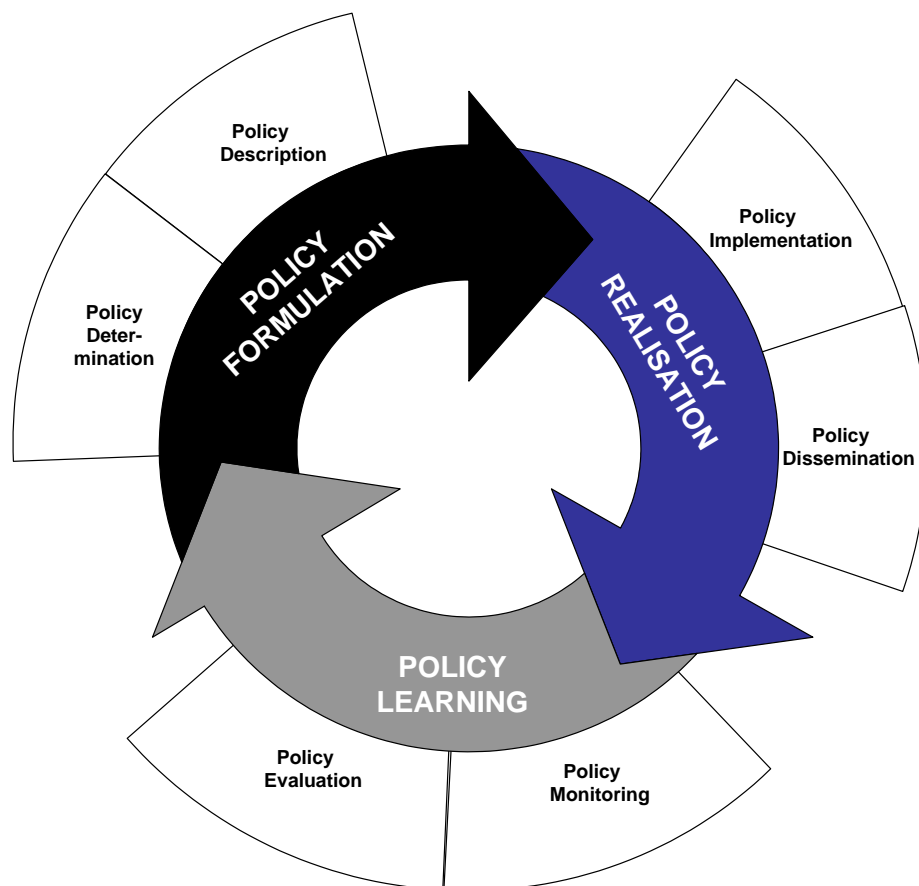
The third step of the survey is described in this paper. For that step a second workshop was organised in February 2005 to discuss and deepen the understanding of the barriers for cooperation. Participants at the workshop were

¹ The report is available on www.transport-era.net under Documents.

² The policy cycle consist of: *Policy formulation* (=Policy description and policy determination); *Policy realisation* (=Policy implementation and policy dissemination) and *Policy learning* (=Policy evaluation and policy monitoring).

national representatives as well as experts on trans-national research policy cooperation activities were recommended by the ENT partners. In the following chapters the workshop approach and the workshop results are described in detail. A conclusion referring to the results of the workshop is provided and outlines an initial proposal of cooperation procedures for the succeeding ERA-NET TRANSPORT process aiming towards trans-national cooperation activities.

Figure 1: The policy cycle model.



1. Barriers for cooperation

With questionnaires³ national representatives were asked for their personal views and estimations of barriers for trans-national cooperation in transport research policy. Based on the survey catchphrases on barriers for cooperation were verbalised and listed – pointing out the national source of the mentioned barriers. During WS2 we discussed and particularly reformulated some of these phrases and added as well some further arguments. At the end of the workshop the national representatives scored the consequence of the barriers from their national perspectives. Methodologically the first steps of a Delphi approach were carried out, but not the second and third phase of the Delphi method.

In the following list the catchphrases on barriers for cooperation are shown (further details can be found in Appendix 2).

Barriers due to:

- Complicated and time consuming calls for tender, proposals or severe co-financing conditions.
- Lack of administrative capacities, staff and financial resources.
- Diverse opinions on principal public access and the use of Intellectual Property Rights.
- Huge differences of available national funding budgets for transport research and research.
- Addressing applicable research recipients (e.g. fragmented research sector, critical size of research arenas).
- Different programming approaches (e.g. research topics, financial models, programme scale).
- Diverse programme management procedures (e.g. model contracts, evaluation, project financing).
- The absence of a consistent national transport research strategy and research programmes.
- Different timeframes in programme development and government budget decisions.
- Problems/ conflicts in inter- and intra-ministerial cooperation (diverse policy sector targets, strategies).
- Public funding directions and budget situations of different funding bodies (e.g. academic or applied research).
- Diverse research interest on the international and national level.
- A yet not existing legal- and regulatory framework (e.g. contracts with foreign partners).
- Diverse policy cultures and language (e.g. rules for the use of language for the proposal).
- A low level of cooperation between national and foreign industry partners.
- A missing shared contextual focus with stakeholders and important key players.
- The lacking interest of industry to join in the programmes (e.g. co-financing is a major barrier).

³ The survey was carried out in spring 2004.

- The fear of losing Influence, administrative sovereignty.
- Diverse institutional cultures clustering projects, esp. with researchers from different disciplines.
- The situation that transport research policy is not a strong focus in most national research policies (not sexy for policy makers).

Within the ERA-NET TRANSPORT workflow this discussion is located at the policy description stage.

2. Barriers and opportunities for cooperation – development of model procedures and guidelines

The aim of the second workshop was to broaden and deepen the discussion on barriers for cooperation and moreover discussing opportunities to overcome these barriers. For this workshop not only national representatives but as well experts for trans-national research policy cooperation activities recommended by the ENT partners were invited. Methodologically two focus groups were set up - a good method to achieve extended interviews in a group dynamic environment. One of the focus groups discussed the first three levels of cooperation: Information and knowledge exchange, joint projects and project clustering. The second focus group discussed the remaining two levels of cooperation: Joint programmes and joint programming. At the end of the workshop the experts formulated recommendations heading towards procedures for cooperation.

The focus group discussion was semi-structured using the Metaplan moderation technique, a very fruitful way to follow up on the qualitative survey on barriers for cooperation in transport research policy. The following guiding questions marked the starting point for the discussion. These guiding questions – including the above listed barriers for cooperation – were sent to the workshop participants before the workshop to give them the opportunity to prepare their observations and comments for the discussion.

- What experiences do you have with trans-national activities focusing on the exchange of information and knowledge on transport research projects? Are there still any communication barriers? Which barriers are most relevant? What procedures would you recommend to overcome these barriers?
- What experiences do you have with the development of trans-national research projects and project clusters (e.g. from euro-regional projects or cross-national projects funded by national funding schemes)? Which barriers are most relevant? What procedures would you recommend to overcome barriers?
- What experiences do you have with coordinated research programming, e.g. trans-national knowledge exchange on general research priorities, public funding models, coordination of time schedules etc.? Which barriers are in your opinion most relevant? What procedures would you recommend to overcome them?
- What experiences do you have with trans-national research programme design and programme implementation (bilateral and multilateral programmes and public funding schemes)? Which barriers would you mention? Which barriers are most relevant? What procedures would you recommend to overcome them?

The **plenary discussion** at the beginning of the workshop – following an introduction on the identified barriers for cooperation (see above) – gave an interesting and new perspective on the ERA-NET TRANSPORT initiative.

Some of the experts remarked that the arguments in the list of barriers clearly communicate that national research programme activities follow another political and strategic goal than super-national activities. With that the phrase barrier suggests a wrong picture, the expression criteria for trans-national cooperation would be much more reasonable. National authorities are first of all aiming at national policy goals and have to represent national sovereignty. This mirrors as well on the sub-research policy level (here at the transport research policy sector) the ongoing political debate on Europe as an intergovernmental system of nation states or as a federal system of the “United States of Europe”.

An important high spot in the plenary session was the discussion on the DEUFRAKO⁴ initiative and the experience with the current bilateral call of a first DEUFRAKO joint programme activity.

The DEUFRAKO initiative needed a long period till the first joint programme activity was set up. DEUFRAKO exists since the seventies and there is meanwhile a good organised and well connected network of research organisations interested in German – French transport research collaboration. The joint call was in fact a strong interest of DEUFRAKO industry partners and German Rail and SNCF. But moreover there was a clear political will on the strategic level (policy determination stage) to set up a bilateral French – German transport research funding programme. Within the programme implementation phase several problems occurred. The programme management of DEUFRAKO made e.g. the experience that for both Germany and France cross-border project financing and funding is administratively so difficult to handle, that only by deciding against a cross-border funding model the programme became operational. National research project partners are now financed/ funded by their respective national funding bodies. To draft and disseminate a detailed description of the bilateral research programme was not difficult. Much more difficult was the fact that the project proposals were evaluated at once from a German and a French team of experts: the project proposal evaluation results were differing due to the different political- and research cultures and the ongoing project selection process was slowed down. For further calls the programme management of DEUFRAKO will examine if it is legally and administratively practicable to evaluate the project proposals at a clear bilateral basis.

The experts examined that there are quite dissimilar views within ERA-NET TRANSPORT. There are for example considerably different views of transport ministries and research ministries. Transport ministries in general have the more direct influence on transport policy objectives and with that a better prospect to force the implementation of transport research results. Research ministries have a less direct influence on transport policy, but in principal they figure as well transport policy objectives by promoting transport research issues. Regarding the national transport research funding/ financing system, there are currently many similarities. In most European countries the direct financing practices stimulating transport research activities have changed towards open call activities to generate more competition with positive effects on cost-effectiveness and the quality of results. But as well the direct research financing practices are still prominent in the transport research sector within most European countries.

All experts were optimistic about the ERA-NET TRANSPORT initiative. Joint research promotion activities and later joint calls initiated by ENT will be a new

⁴ Deufrako is a transport research programme cooperation between France and Germany that identifies joint opportunities, supports bi-national networking activities, funds projects, and launches joint calls for proposals.

option in addition to national transport research activities and transport research activities within the European Framework programme (FP). ENT can promote European transport research activities in a variable geometry and with more appropriate procedures. The ERA-NET TRANSPORT initiative is comparable with other trans-national cooperation activities like the research promotion activities of the Nordic Council of Ministers or the Eureka or the European Science Foundation (ESF). The Nordic Council of Ministers proposes open multilateral calls for research topics of particular interests for the Nordic countries. The calls are organised in a non-bureaucratic way without the complicated procedures of the FP. Along with trans-national research programme activities national transport research programmes will remain. It stays an important national strategic goal to support national research arenas and innovation systems to compete with other research arenas and innovation systems in Europe.

The **Focus Group Discussion** referring to the five levels of cooperation was the second course of the workshop following the plenary discussion. For that the plenary discussion group parted into two workshop groups (focus groups). The aim of this course was to broaden and deepen the discussion on barriers/ criteria for cooperation as well as discussing recommendations to overcome these barriers. Focus Group one was discussing the first three levels of cooperation:

- Information and knowledge exchange,
- Joint projects and
- Joint project clustering.

Focus group two was discussing the remaining two cooperation levels:

- Joint programmes and
- Joint programming.

At the end of the day the results of the discussions were presented in a plenary session. In the following chapter the results of the focus group discussions are presented; firstly the identified and structured expert views and recommendations and secondly observations and comments of the experts within the discussions.

2.1. Knowledge and information Exchange

In the first focus group discussion on knowledge and information exchange the following expert views and recommendations were identified and structured:

- Make use of existing institutionalised networks for the exchange of knowledge and information and to establish new networks where necessary (e.g. virtual R&D networks, personal networks, virtual R&D&D (demonstration) networks).
- Ensure that knowledge and information exchange does not only concentrate on research results, but also focuses on the policy formulation and realisation stage. For instance knowledge exchange regarding long-term policy strategies or national legal conditions.
- Cooperation between researchers, consultants and experts from public administration has to be reinforced. Researchers need a more comprehensive view on public problem areas to communicate the relevance of their research results.
- The role of financial stimuli should not be underestimated as well for knowledge and information exchange.

The experts recommended to draw on the existing knowledge and information exchange networks and not blindly construct new networks – only were it is necessary and has a real added value. One of these added values is e. g. knowledge and information exchange concentrating on long term strategic and political issues and less on current research findings and thematic subjects. Knowledge and information exchange and cooperation connecting national transport research programme managers could generate a new informal governance practice.

2.2. Joint Project Implementation

The same focus group was discussing the next cooperation level – joint projects (project set-up). The following views and recommendations were mentioned:

- Win public funding bodies for the value of cross-border research cooperation (sharing costs, sharing results, apply research results into national context).
- Appoint cross-border cooperation as central criteria selecting research projects.
- Only some research topics (thematic focus) are suitable for trans-national project initiatives (mid- to long-term, pan-European relevance etc.).
- Identify a clear and shared problem and/or project target to be addressed.
- Exploit complementarities between national and supranational programmes:
 - use super- and national programmes/events as platforms/ strategic advice.
 - promise public funding for cross-border activities within national programmes in order to achieve trans-national projects.

Regarding the requests for an accurate programme management for joint project implementation (project set- up) experts provided the following recommendations:

- The project management needs a high qualification. Financial and personal resources have to be available (e.g. avoid underestimation of time).
- Ensure that the joint project implementation idea is a part of the research process plan as well as a part of the problem definition.
- Project result evaluation and the dissemination of results is as well an important core for the programme management.
- Make sure that the research addressees (research community, industry, public administration etc.) are involved in the whole process. Project coordinators are mainly responsible for the dissemination process.

There was a clear perception in the discussion that only particular thematical research topics are suitable for trans-national research project activities. Joint projects should clearly address either a shared mid- or long-term problem or a clear project target of further relevance for several European countries. Regarding the project management process for joint project implementation, the role of the main coordinator is very significant. Also important is a well balanced, truthful participatory and network oriented project management approach.

2.3. Project Clustering

The third level of cooperation was discussed in focus group one as well. The following principal expert views and recommendations were mentioned:

- Initiate a common assumption basis among several research problem owners in different countries in order to stimulate bottom-up clustering approach.
- Financial stimuli are important to force trans-national project clusters.
- Project cluster coordinators have to act independently. Partners need to have confidence in the coordinator. An added value has to be apparent.

- Learn from existing initiatives (see EUREKA, euro-regional projects etc.).
- Make sure that the work proceeds according to the actual plan (multi-country-mid-term evaluations) and improve the work process if necessary.

There are several similar research activities in different countries doing research on the same thematic areas with sometimes similar, sometimes diverse research perspectives on the same research topic. Project clustering works usually well, if the cluster emerges from a bottom-up initiative of research organisations based on a broad assumption basis. Project cluster coordinators hold a vital role. At one hand they have to initiate a good working atmosphere and constitute confidence and trust among the research partners, on the other hand they have to assure that the work proceeds according to the actual research plan and to improve the process if necessary.

2.4. Joint programming and joint programmes

In the second focus group a discussion on joint programmes and joint programming was performed. As it became difficult to differentiate between the two terms joint programming and joint programme activities, the focus group agreed on the following differentiation: When research programmes stay national (national programmes are coordinated) the joint activity is characterised as joint programming or coordinated programming. When the activity has a bi-, tri- or multilateral character (there is a joint approach to generate an integrated programme) this activity is specified as joint programme or integrated programming. In both cases the accounting of the public research funding budget can be organised at a national or multilateral basis depending on applicable national administrative rules.

The following expert views and recommendations were identified and structured:

- It is of major importance to structure relevant trans-national research networks and to offer attractive financing conditions for collaborative research projects.
- It would be beneficial to work together as well on strategic research agendas to overcome missing national strategies and the diverse communication cultures.
- Convince political decision makers at the highest level by providing information and by explaining the benefits of joint programming and joint programmes.
- It is significant to focus on particular research topics and partnerships and to coordinate time schedules and administrative rules of the national ministries.
- A good alternative could be to open national transport research programmes, regarding with that programme mechanisms due to different regional structures.
- Try to relate different national programme types, programme scales and types of public funding schemes; find out if notification for new programme types is required.
- Matching of national transport research programmes needs good arguments, for that a catalogue of arguments when cooperation is beneficial.
- Following a two step approach in research programming, but reduce massively the time consuming procedure, which is normally linked with that.
- Provide simple calls for expression of interest (well prepared forms for EoI); use simplified but familiar forms and a very short approach for proposal/ application.

- As important as simple calls for expressions of interests and proposals are improved public funding conditions as the severe funding conditions of the EC.
- Ask only for very simple application forms and very brief proposals, research programme officials can ask for further information on demand.
- Expressions of interest and proposals should be presented in national language, only the summary may be in English; give eventually financial support for final proposals.
- After a pre-selection via expression of interests, two or three consortia are to be chosen to propose a research project (call on invitation).

Simple procedures make joint programming (coordinated programming) and joint programme activities (integrated programming) possible. The language for the proposal can be a huge obstacle for national applicants in research programmes. This makes national programmes in particular more attractive for most SME. How should national and trans-national activities be co-ordinated? Researchers especially from small and medium sized industries prefer national research funding programmes, because they are on one hand familiar with the procedures and on the other hand they can use their mother-tongue, have better contacts and can better estimate the risk of spending time for drafting a proposal.

2.5. Conclusions

The most important conclusion is that national sovereignty has to be a clear attribute of ERA-NET TRANSPORT. That implies ENT as a question of trans-national (pan-European) and not super-national (EC) cooperation – even the ERA-NET scheme originated from the European Commission. ERA-NET TRANSPORT has to stay in the hands of the national ENT partners at the operational and as well at the strategic level. The EC “might wish cooperation at a higher level, but ENT partners representing national governments, are free to decide on the appropriate level of cooperation from their perspective”.

At the national policy side there are several concerns on **political legitimisation** of trans-national research funding practices due to the fear of national research financing budgets being spent on researchers abroad and not solely for the national research arena. Due to that fact an argumentation to legitimise why joint initiatives are beneficial at the national level has to be carefully formulated. On the other hand the survey showed that the opportunity to fund non-national research partners within national programmes is highly suggested by national research programme managers. Most transport research programmes are organised in a collaborative way and the interest of research organisations and industry to involve research partners abroad in cooperative research projects is very high.

Legal regulations concerning joint research funding and programming are well formulated. There are countries where public funding of non-national research partners is feasible and others where research funding budgets can only be spent on national researchers. Some countries have administrative rules for research proposal evaluations, e.g. the nomination of peer reviewers. Other countries have administrative rules concerning the language of the research proposals or regulations regarding research contracts and accounting conditions. Meanwhile joint research programming and funding at the national level is widespread. There are several national examples of joint inter-ministerial research programme activities, and with that the hope that the strong addiction of administrative sovereignty in

public administration is today an out-fading issue. It is important to communicate at the national administrative level a clear picture of the ERA-NET TRANSPORT initiative approach and as well a clear definition of joint activities, joint project implementation, joint programming etc. The DEUFRAKO initiative e.g. was slowed down due to administrative barriers blocking cross-border project financing.

Only some research topics (thematic foci) are suitable for trans-national transport research cooperation activities: The more generic research topics are better practicable for joint research programming and funding activities; and easier for political legitimisation, than research themes focusing on market near R&D or even transport research topics which stay competitive between different national transport research arenas and transport industries. For example research on transport applications of a high trans-national relevance, research on transport applications which are beneficial on a mid and long term time scale or knowledge creation about technical or organisational solutions for transport related problems (economic, environmental, social) – not only for scientific advice, but as well to broaden the public debate on the future of transport – are best practicable for joint cooperation activities within ENT.


For the ERA-NET TRANSPORT process it is important both to generate a broad assumption basis among potential research addressees and research programme managers tendering commonly for relevant research and programme issues, and to create a strong assumption basis on the policy side among relevant actors from ministries, funding bodies and public administration regarding e. g. strategic and political legitimisation aspects. It is important to build up not only robust trans-national research networks but as well proficient governance procedures, both based firstly on confidence and trust (remember the deliberative appeal of ENT) and secondly on a well organised negotiation process towards more general rules and more accountable process steps (model procedures). As an example the first bilateral call of DEUFRAKO was forced strongly by meanwhile longstanding and well organised research networks of German and French research organisations and industry partners. But in general addressees for bilateral and multilateral transport research cooperation activities are not so well organised in such longstanding networks.

3. Initial Proposal of cooperation procedures

In this chapter a first initial proposal of cooperation procedures within the ERA-NET TRANSPORT process is outlined. At this stage within the ENT workflow – the policy determination stage referring to the policy cycle – the cooperation procedures can be characterised as well as governance practice. The term governance is a modern expression for procedures of political decision making (governing and steering) involving more than the usual political and administrative actors: in this case programme managers, executives of public funding bodies and other key-players from public administration but as well representatives of transport research organisations and industry. Governance mechanisms and policy regimes in national transport research policies are meanwhile structurally quite similar due to the European integration process (for further details see Deliverable 1.1.), but they exceedingly differ at a more fine-tuned level due to diverse political and administrative cultures. There are no legal regulations to hamper trans-national research funding programmes significantly. But nevertheless there are several formal rules and informal positions at the national policy and administration level, deterring trans-national cooperation. In order to start up a process with each action

group⁵ towards a joint activity it is beneficial to open up from a basis of common understanding with a practice similar to well known procedures like e. g. the practices in the framework programme. As a first step a tendering process (expression of interests from the research side) to address the organisation of trans-national research networks and to come to research projects of common interest is recommended. The second step is a policy workshop (policy determination and decision making) to entrust policy networks. A memorandum of understanding and an outline for a first joint activity will be a clear outcome. The following picture outlines the recommended three-step governance approach as cooperation procedure at the policy determination stage in the course of the ERA-NET TRANSPORT workflow.

Figure 2: ERA-NET TRANSPORT - Cooperation procedure at the policy determination stage (three-step governance approach)

STEP 1	STEP 2	STEP 3
<p>→ Preparation of a meeting between: Research Addresses and Programme managers in order to decide on:</p> <ol style="list-style-type: none"> 1. <i>Particular research projects beneficial for a joint activity.</i> 2. <i>Trans-national research network building.</i> <p>on one specific AG-topic!</p> 	<p>→ Preparation of a meeting between: Policy sector executives, programme managers, and other important public administration representatives in order to decide on:</p> <ol style="list-style-type: none"> 1. <i>Negotiation on suggested project idea from step 1,</i> 2. <i>Budget (national budget ratios, legal aspects),</i> 3. <i>Participation criteria,</i> 4. <i>Timeframe,</i> 5. <i>Evaluation criteria,</i> 6. <i>National contact persons.</i> 7. → MoU 	<p>→ Announcing joint activity → e.g.: “Networking initiatives”, “call on invitation”; or “open calls”, etc.</p>

We recommend to start with a strong networking approach involving interested research organisations, industry partners and programme managers from different ENT partner countries. A broad assumption basis between research addressees and research programme managers, which research topics and in particular research projects are of common interest for trans-national cooperation creates the best platform for further cooperation. This will build on the targeted workshops (TWS) where the national research programme managers decided on transport research topics and thematic research areas suitable for trans-national cooperation. The networking workshop will provide a follow up of this agenda setting process focusing on expressions of interest (EoI) from the side of the researchers. This approach refers to the above-mentioned results that trans-national research networks for targeted research (specific transport research topics) do not inevitably exist and have firstly to be shaped out.

⁵ An “action group” is in ENT terms a group of programme managers committed to find and explore options for common trans-national research on specific topics.

The following design for the first action group workshop is recommended:

1. Draft an overview on national research and the national research arena regarding the research topic of the action group,
2. Discuss expressions of interest for certain research projects which could be beneficial for joint activities
3. Get a broad assumption basis among the involved actors on research activities that should be implemented. The main idea is to build trans-national research networks for single research themes and projects identified in the action groups.

It is as well important to build a strong policy network and a strong common assumption basis on the policy side. With that a strong focus on the policy and administrative side, which means to build a broad assumption basis among programme managers from ministries, executives from public funding bodies and other ministerial and public administration actors, is equally important.

As a design for the second action group workshop a policy decision-making procedure (policy determination) on what is feasible (strategic policy directions, administrative criteria) and which cooperation activities could be favourable from a policy perspective is recommended. It has to be proven that the selected research themes and project interests have an additional effect comparing to existing national research activities. At the end stands a Memorandum of understanding as a first formal result.

The third step in the workflow at the policy determination stage is the announcement of the selected joint activity and with that the transfer into the policy implementation period. Joint activities can be positioned at each level of cooperation. A joint activity can be for example a workshop series to specify pre-selected research topics or to work on a joint strategic research plan to strengthen the political position in a thematic research area at different policy levels (knowledge and information exchange). Another possible joint activity is the promotion and funding of cooperation and collaboration activities among existing national research activities, for example via networking workshops or funding of exchange of researchers (project clustering). For public research funding of joint project activities "calls on invitation" are firstly recommended, later on open calls may be an effective instrument, too. Joint activities at the level of national programmes suggest that programme managers can determine research priorities and budget shares for trans-national funding activities within the design of their current national research programmes (coordinated programming). Most national transport research programmes are part of larger umbrella programmes and these umbrella programmes can expectantly provide a budget share for trans-national activities. Bi-, tri- and multilateral transport research funding programmes are in our opinion the most complex way of joint activities. Huge endeavour and a longstanding negotiation process will be necessary to implement programmes like DEUFRAKO (integrated programming).

Passing from the policy determination stage to the policy implementation stage a further cycle of the ERA-NET TRANSPORT workflow will start. In this period ENT hands over the process to the national partners in the action groups. ENT will end moderating the process, but will provide further policy advice how to implement and manage the announced joint activities. The model procedures on how to implement and manage joint activities at the different levels of cooperation from a public administration perspective will be presented in Deliverable 1.3.

It will present not only model procedures for the management of trans-national research funding and financing but as well for joint activities at other levels of cooperation. Furthermore an agenda for the next cycle of the ENT workflow (the policy monitoring stage) will be drafted: a simple method to monitor and assess the ongoing activities. For the formulation of formal agreements which are directed in the political negotiation processes within the action groups, ENT has to provide a flexible arrangement for a memorandum of understanding (MoU). Succeeding with the monitoring and assessment of the activities of the single action groups a handbook on model procedures will be prepared during 2006.

APPENDIX 1 | BARRIERS FOR COOPERATION

Catchphrase	
Barriers due to complicated and time consuming calls for tender, proposals or severe co-financing conditions	1
Barriers due to lacking administrative capacities, staff and financial resources	2
Barriers due to diverse opinions on principal public access and the use of Intellectual Property Rights	3
Barriers due to huge differences of available national funding budgets for transport research and research	4
Barriers due to addressing applicable research recipients (e.g. fragmented research sector, critical size of arenas)	5
Barriers due to different programming approaches (e.g. research topics, financial models, programme scale)	6
Barriers due to diverse programme management procedures (e.g. model contracts, evaluation, project financing)	7
Barriers due to the absence of a consistent national transport research strategy and research programmes	7
Barriers due to different timeframes in programme development and government budget decisions	9
Barriers due to problems/ conflicts in inter- and intra-ministerial cooperation (diverse policy sector targets, strategies)	10
Barriers due to funding directions and budget situations of different public funding bodies (e.g. academic or applied research)	10
Barriers due to diverse research interest on the international and national level	12
Barriers due to a yet not existing legal- and regulatory framework (e.g. contracts with foreign partners)	12
Barriers due to diverse policy cultures and language (e.g. rules for the use of language for the proposal)	14
Barriers due to a low level of cooperation between national and foreign industry partners	14
Barriers due to a missing shared contextual focus with stakeholders and important key players	16

Barriers due to the lacking interest of industry to join in the programmes (e.g. co-financing is a major barrier)	16
Barriers due to the fear of losing Influence, administrative sovereignty	18
Barriers due to diverse institutional cultures clustering projects, esp. with researchers from different disciplines	19
Barriers due the situation that transport research policy is not a strong focus in most national research policies (not sexy for policy makers)	19

APPENDIX 2 | SCORED BARRIERS

The table below shows barriers for cross-national cooperation based on the answers in the questionnaires and the follow up discussion within workshop 2 (WS2) of WP1, which was held in Vienna on the 3rd and 4th of November 2004.

The identified barriers were ranked by each country from 0 to 5 (0=no barrier, 1=lowest barrier, 5= highest barrier).

	Austria	Belgium	Denmark	Estonia	Finland	France	Germany	Netherlands	Norway	Poland	Sweden	UK
Barriers due to the fear of losing Influence, administrative sovereignty		2			1	1		1	1		4	
Barriers due to addressing applicable research recipients (e.g. fragmented research sector, critical size of arenas)		4	4	4	3	4		3				4
Barriers due to diverse opinions on principal public access and the use of Intellectual Property Rights	4	4		1	2	4	5	3	1		5	
Barriers due to problems/conflicts in inter- and intra-ministerial cooperation (diverse policy sector targets, strategies)	3	4		1	2	2	5	2				
Barriers due to diverse policy cultures and language (e.g. rules for the use of language for the proposal)		1			2	3	5	1				
Barriers due to diverse programme management procedures (e.g. model contracts, evaluation, project financing)		4			2	1	5	3	3			5

Barriers due to different programming approaches (e.g. research topics, financial models, programme scale)	2	4			2	1	5	4	2			5
Barriers due to a missing shared contextual focus with stakeholders and important key players					3	5		2	1			
Barriers due to the absence of a consistent national transport research strategy and research programmes		5	5	4	1	5		3				
Barriers due to a low level of co-operation between national and foreign industry partners				2	1	3		2	1	3		
Barriers due to lacking administrative capacities, staff and financial resources	4	4		1	4	5	3	3	2			5
Barriers due to diverse research interest on the international and national level		1		1	3	4		2	3			
Barriers due to complicated and time consuming calls for tender, proposals or severe co-financing conditions		4		3	3	5	5	4	3			5
Barriers due to huge differences of available national funding budgets for transport research and research		4		2	3	5	5	2	2	4		
Barriers due to a yet not existing legal- and regulatory framework (e.g. contracts with foreign partners)	3				2	1	3	4	1			
Barriers due to different timeframes in programme development and government budget decisions		4	2		3	4	3	3	2			
Barriers due to the lacking interest of industry to join in the programmes (e.g. co-financing is a major barrier)				3	2	3		3				
Barriers due to diverse institutional cultures clustering projects, esp. with researchers from different disciplines					1	4		1	2			
Barriers due to funding directions and budget situations of different funding bodies (e.g. academic or applied research)		4		1	3	2	3	2				4
Barriers due the situation that transport research policy is not a strong focus in most national research policies (not sexy for policy makers)				2	1	1	2	2				



APPENDIX 3 | WORKSHOP RESULTS

This appendix shows the results from WS2 (3.+4. November 2004, Vienna) for discussed cooperation barriers/criteria regarding the levels of cooperation **“Information and knowledge Exchange“** as well as **“Joint Project Implementation“** and **“Joint Project Clustering“**.

Table A3-1: Information and Knowledge Exchange

	BARRIER	VOTING	EXAMPLES	POSSIBLE STEPS TOWARD PROCEDURES
Research Cooperation	NEW: Failed Opportunities due to the lack of knowledge about emerging significant areas of transport research	8	<ul style="list-style-type: none"> no well-organised processes to disseminate information and knowledge: Nordic Transport Forum seminar on Maritime Safety → identified 5-6 parallel projects for the Nordic countries. 	<ul style="list-style-type: none"> Both sides (Researcher and Administration are incredibly busy) → no time to get informed. power of financial support should not be underestimated Positive points for (international) cooperation! (Within proposals → as a selection criteria. [better chance to get research funding] → "Institutionalisation of cooperation" (Facilitating personal contacts) change evaluation criteria. Nordic Transport Forum website for partners/researchers (www.recap.org) → Organisation and Nomination done by ministries Managing directors: (lack of (time, resources regional overview what is going on → own projects for information collection and dissemination) It starts at the ministries to define the broader scope of cooperation → strong contracts lead to strong research networks and researchers who are willing to participate. Researchers and consultants have to cooperate to get new ideas. Wide openness for inter-ministerial cooperation. → it is a sensitive topic in the ministries to look at cross-boarder cooperation/funding added value by shared labour, , shared capacities offers results if cooperation reduces a quarter of the cost to get the same results Administrative barriers, <i>Interdisciplinarity</i>
Policy + Administration	K) Barriers due to lacking administrative capacities, staff and financial resources;	7	<ul style="list-style-type: none"> Public Administration has an active role No time/ missing travel budget in the Nordic Transport forum (NTF): 85 persons (cost-benefit analyses) to get researchers to a NTF seminar < 30 persons: cost of seminar = 200 Euro for two days, but researchers have to participate, not only research managers 	
Policy + Administration	F) Barriers due to diverse management procedures (e. g. contracts, accounting);	4		
Policy + Administration	NEW: Demand for accessible research funding systems	4		
	NEW: Difficult to transfer	4		

	international research results on a national level in a accountable way			
Easy Information Access	E) Barriers due to diverse policy cultures and language (e. g. rules for the use of language for the proposals)	3	<ul style="list-style-type: none"> Different key-drivers for researchers and policymakers (Science/ Administration) UK partners merely speak English 	
Easy Information Access	R) Barriers due to diverse institutional cultures clustering projects, esp. with researchers from different research disciplines	3		
Making Benefits Clear	NEW: What are the real benefits? NEW: Link between Research and practice NEW: The research results are presented in a much too academic way.	2		
Making Benefits Clear	Q) Barriers due to the lacking interest of industry to join in the programmes (e. g. severe co financing conditions as a major barrier);	2	<ul style="list-style-type: none"> Lack of interest of industry; primarily SME's are interested in national programmes. New products are often "top secret". 	
Policy + Administration	L) Barriers due to diverse research interests on the super-national and national level;	2		
Policy + Administration	C) Barriers due to diverse opinions on general public access and the use of Intellectual Property Rights (IPR)	1		
Policy + Administration	N) Barriers due to huge differences of available national funding budgets for transport research and research at all	1	<ul style="list-style-type: none"> minor funding/ financing budgets 	
Policy + Administration	G) Barriers due to different research programming approaches (e. g. research topics, financial models, programme scales)	1	<ul style="list-style-type: none"> Research organisations getting more "commercial" and with that less open to exchange information and data. research projects frequently fit into two or more different public funding programmes 	
Policy + Administration	I) Barriers due to the absence of a consistent national transport research strategy and missing research programmes	1		
Policy +	NEW: More	0		

Administration + Research Cooperation	international cooperation and personal contacts would be beneficial. NEW: Researcher interests for projects without administrative support			
Policy + Administration	A) Barriers due to the fear of loosing Influence and administrative sovereignty	0		
Policy + Administration	NEW: Barriers due to different information levels	0		

Table A3-2: Joint Project Implementation

	BARRIER	VOTING	EXAMPLES	POSSIBLE STEPS TOWARD PROCEDURES
				<ul style="list-style-type: none"> Nordic Road Administration (2-3 Mio. DKK) are pooling budgets for joint research EACH YEAR! → Advice for the administration how to get flexibility and knowledge out from joint projects! project implementation has to be describes in the call for proposals → implementation plan → Including relevant persons of the public administration before drafting the final report. a matrix for Translation of the analysis results would be great, so every country can easily find partners for cooperation. → overview on mechanisms
Policy + Administration	K) Barriers due to lacking administrative capacities, staff, financial resources	8	<ul style="list-style-type: none"> programme Implementations needs money and administrative staff The extra time + effort to join into projects has to be taken from research time Administrative barriers and financial investment cause major difficulties 	<ul style="list-style-type: none"> Financing bodies have to define what should be going on, or how... → political steering is relevant Domestic markets
Policy + Administration	P) Barriers due to different timeframes in programme development and budget decisions	5	<ul style="list-style-type: none"> Synchronisation of project funding in order to allow a joint start and final of projects Interested countries for research projects withdraw their proposals because the lack of personal resources in certain year. Time schedule problems between budget decisions and programme periods. projects have different time scales and are 	<ul style="list-style-type: none"> Yearly discussions on the "need of budget" is highly insufficient and unpredictable ("Financing by a daily mood of directors"). Allocate money on a yearly basis → you can just plan projects on a yearly basis, sometimes you can shift/move projects to another year, but it is a insecure practice. Capacities/capabilities/know-how of Project Management or Project leaders has to be sufficient. ("You can have the best partners, but if the PM is not a good leader and their are

			sometimes difficult to link.	not capacities, the project will fail") → Results must be practical for the industry [put this to joint projects]
Policy + Administration	H) Barriers due to a missing shared focus with stakeholders and key players	5	<ul style="list-style-type: none"> Lack of understanding of industry demands. Tendency have a national perspective 	<ul style="list-style-type: none"> Trans-disciplinary projects a small number of projects, but part of the funding should be hold for project implementation. Stakeholders in Research Boards are a benefit (Dissemination)
	NEW: Connectivity between research and real life	5		<ul style="list-style-type: none"> Lack of abilities to translate research results to the practice, and the other way around. PhD-Students could play and role t to "translate", not for the whole time, maybe only part-time: , few participation, just ask the right questions.
	NEW: Lack of having a precise view of the project objectives of partners	4		
Research Cooperation	M) Barriers due to complicated and time consuming calls for tender, proposals or severe co-financing conditions;	4	<ul style="list-style-type: none"> Intention of projects are complex Processes are complicated National research more tailor-made 	
Policy + Administration	O) Barriers due to a yet not existing legal- and regulatory framework (e. g. research contracts with foreign partners);	4	<ul style="list-style-type: none"> Lack of common regulative framework across borders (demonstration projects) 	
	NEW: Lack of experiences → it's uncertain	4	<ul style="list-style-type: none"> 	
Easy Information Access	E) Barriers due to diverse policy cultures and language (e. g. rules for the use of language for the proposals);	2	<ul style="list-style-type: none"> Cultures and languages are different around Europe Diverse policy cultures and languages (lack of a suitable common working language) 	
Policy + Administration	N) Barriers due to huge differences of available national funding budgets for transport research and research at all;	2		
Making Benefits Clear	J) Barriers due to a low level of co-operation between national and foreign industry partners;	2	<ul style="list-style-type: none"> Barriers due to conflicting objectives 	
Easy Information Access	R) Barriers due to diverse organisational cultures clustering projects, esp. with researchers from different research	2		

	disciplines			
Policy + Administration	L) Barriers due to diverse research interests on the super-national and national level;	1	<ul style="list-style-type: none"> • Loss of flexibility (to change the projects) • Also differences in research interest between countries. EX: cost benefit analyses in DK are used as main tool to support political decision making; in FIN it is only one instrument of several policy support tools 	
Policy + Administration	F) Barriers due to diverse programme management procedures (e. g. model contracts, accounting);	0	<ul style="list-style-type: none"> • Role of consultants, contractors etc. 	
Policy + Administration	D) Barriers due to problems/ conflicts in inter-/ intra-ministerial cooperation (policy sector targets, strategies);	0	<ul style="list-style-type: none"> • Lack of international orientation of ministries with parliamentary executives and stronger cooperation with them 	
Policy + Administration	S) Barriers due to funding directions and budget states of different funding bodies (acad. / applied research);	0	<ul style="list-style-type: none"> • Lack of funding/ financing budget 	

Table A3-3: Joint Project Clustering

	BARRIER	VOTING	EXAMPLES	
				<ul style="list-style-type: none"> • Should start up at the bottom, (...same topics in different countries ...). → The most important driving force is that people want to cooperate. → money can help to get people interested in cooperation. Examples of "Clustering approaches which are already working". • Many meetings !!! Flights are cheap now. → you can avoid double work (and avoid spending money for working hours on the wrong issues and save resources) → Safe time, increase the outcome by various meetings! • (Networking of key-players [e.g. EUREKA has such mechanisms], Midterm evaluations with external Evaluators: in order not to forget important research questions.)
	NEW: High Level priorities in different work packages	no voting		
Policy + Administration	K) Barriers due to lacking administrative capacities, staff and financial resources;	no voting	<ul style="list-style-type: none"> • Too many research funding programmes need too much resources 	<ul style="list-style-type: none"> • Autonomy of the cluster coordinator (Best person for the job → success of the project clustering)
Policy + Administration	A) Barriers due to the fear of loosing Influence, administrative sovereignty	no voting	<ul style="list-style-type: none"> • Lack of openness of programme managers Research related to industry demands /politics = national interest = less openness. 	
Policy + Administration	C) Barriers due to diverse opinions on general public access and the use of Intellectual Property Rights;	no voting	<ul style="list-style-type: none"> • Intellectual Property Rights 	
Making Benefits Clear	J) Barriers due to a low level of co-operation between national and foreign industry partners;	no voting	<ul style="list-style-type: none"> • short period benefits for industry partners 	
Research Cooperation	NEW: Making use of International research results in the national context (politically not always accepted)	no voting		
Making Benefits Clear	NEW: Minimize transaction costs /opportunities/benefits	no voting	<ul style="list-style-type: none"> • Lack of budget for overhead costs 	

Policy + Administration	NEW: Lack of budget for overhead management costs – process & content	no voting		
Policy + Administration	P) Barriers due to different timeframes in programme design and government budget decisions;	no voting	<ul style="list-style-type: none"> • Different time schedules 	
Research Cooperation + Easy Information Access	M) Barriers due to complicate and time consuming calls for tender and proposals or severe co-financing conditions; R) Barriers due to diverse organisational cultures to cluster projects, esp. with researchers from different research disciplines;	no voting	<ul style="list-style-type: none"> • Management efforts 	
Easy Information Access	E) Barriers due to diverse policy cultures and languages (e. g. formal rules for the use of the language for the proposal);	no voting	<ul style="list-style-type: none"> • Language criteria 	
Policy + Administration	T) Barriers due the situation that transport research policy is not a strong focus in most of national research policies (not sexy for policy maker).	no voting	<ul style="list-style-type: none"> • available direct research funds are used to finance research on urgent national transport problems (nearly-to-use-approach) 	
Policy + Administration	G) Barriers due to different programming approaches (e. g. research topics, financial models, programme scale);	no voting	<ul style="list-style-type: none"> • Incompatible project procedures (definition, authorisation, management procedures) 	
Policy + Administration	L) Barriers due to diverse research interests on the super-national and national level;	no voting	<ul style="list-style-type: none"> • Different countries – different problems (different approaches to/ and focus on research) 	
Policy + Administration	O) Barriers due to a yet not existing legal- and regulatory framework (e. g. research contracts with foreign partners);	no voting	<ul style="list-style-type: none"> • Lack of good examples and procedures – added value! 	

APPENDIX 4 | WORKSHOP PARTICIPANTS

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