

Minutes of the OECD FG Meeting Innovative Firms and Networks
Vienna, November 18-19 1999

1.) The meeting was attended by the following participants:

	<i>country</i>	<i>Organisation</i>	<i>E-mail</i>
Wolfgang Polt	AT	Joanneum Research	wolfgang.polt@joanneum.ac.at
Andreas Schibany	AT	Joanneum Research	andreas.schibany@joanneum.ac.at
Josef Mandl	AT	BMWA	josef.mandl@bmwa.gv.at
Birgit Blasch	AT	BMWV	birgit.blasch@bmwf.gv.at
Michaela Topolnik	AT	BMWV	michaela.topolnik@bmwf.gv.at
Alexander Kopcsa	AT	ARCS	alexander.kopcsa@arcs.ac.at
Edgar Schiebel	AT	ARCS	edgar.schiebel@arcs.ac.at
Oliver Fritz	AT	Joanneum Research	oliver.fritz@joanneum.ac.at
Wolfgang Pointner	AT	Joanneum Research	wolfgang.pointner@joanneum.ac.at
David Brown	ADL	ADL	brown.david.j@adlittle.com
Patrick Vock	SUI	SWR	patrick.vock@swr.admin.ch
Heinz Hollenstein	SUI	University of Zurich	hollenstein@kof.reok.ethz.ch
Vincent Wu	TAI	Chengchi University	fswu@nccu.edu.tw
Carolyn Jenkins	AUS	ISR	carolyn.jenkins@isr.gov.au
Michel Dumont	BEL	University of Antwerp	mdumont@ruca.ua.ac.be
Terttu Luukkonen	FIN	VTT	terttu.luukkonen@vtt.fi
Timo Hämäläinen	FIN	SITRA	timo.hamalainen@sitra.fi
Gerd Schienstock	FIN	University of Tampere	Ytgesc@uta.fi
Tuomo Pentikäinen	FIN	VTT	tuomo.pentikainen@vtt.fi
Regina Gusmao	FRA	OST	Gusmao@obs-ost.fr
Judit Vanyai	HUN	OMFB	judit.vanyai@omfb.gov.hu
Attila Havas	HUN	OMFB	attila.havas@omfb.gov.hu
Finn Orstavik	NOR	STEP	finn.orstavik@step.no
Svend Remoe	OECD	OECD	svend.remoe@oecd.org

Other countries which have indicated their willingness to participate were not able to come to Vienna (IRL, ESP, DEN).

Some other countries, their participation is still under consideration (GRE, ITA, USA).

2.) Countries were invited to present (a) current activities with relation to the work of the FG, (b) their willingness to participate in concrete tasks of the work plan. In the following, a brief summary of these presentations is given (in order of sequence):

Finland – Timo Hämäläinen (SITRA)

- Pointed to the existence of a large research programme in Finland, covering many of the topics of the OECD National Systems of Innovation and innovative firm network work. Although the final report will be published in two years, there are synergies with the work of the FG which can be exploited in the current work.

- Concerning Module 2.2, David will contact TEKES for their contribution.
- The focus of their input to the FG lies on Module 2.3 with comparative studies regarding network facilitating policies. In this context not only government policies but also technology transfer organisations should be analysed. Screening of different policies and evaluations.

Finland – Tuomo Pentikäinen (VTT)

- Presented two studies related to the work of the FG currently carried out at VTT:
 - (a) a study on public programmes in the promotion of collaborative R&D in companies: The primary aim is to study the impacts of the participation of Finnish companies in the EU framework programmes. The study is further designed to cover a broader set of issues related to the role and efficiency of public funding of collaborative R&D activities in companies (additionality, strategic importance, difference public/private funding, difference in activities, national vs. EU funding, differences among industries in their R&D collaboration patterns). Study data will be obtained through qualitative, well structured interviews (29 large firms and 15 SMEs). First results will be available in spring 2000.
 - (b) An econometric analysis of clusters/networks. By using I/O-statistics the analysis will be focused on the flows of money, goods and services between industries and firms, assuming these flows as a kind of minimum measure of interaction between them. Outcome at the firm level: growth, productivity, risk, investment. At the industry level: growth, changes in the value-added, changes in export
- VTT has already cleaned the Finnish CORDIS data and would like to co-operate in this activity of the FG (contact: Sasu Hälikkä, Terttu Luukkonen).

Switzerland – Heinz Hollenstein (University of Zurich)

- Heinz Hollenstein made some suggestions for further work based on the data collected during the second phase (module 2.1), e.g. to look into patterns of co-operation using cluster analysis.
- He presented current work on the Swiss Innovation Survey (SIS) 1990/93/96/99, in which the service sector is included since 1996 and information on various dimensions of co-operation is combined with firm-level data. The main orientation envisaged for analysis in the near future: cluster analysis with special reference to the service sector.
- Research questions to be addressed in further research will include: the 'Productivity' of co-operation, Factors determining the decision to co-operate, Relationship between co-operation and innovation performance, and longitudinal analysis of co-operation and its various dimensions.

Belgium – Michel Dumont (University of Antwerp)

- Presented the results of a graph-theoretical analysis of R&D collaboration for mapping of the R&D networks within the paradigm of social network analysis. In this analysis, various data sources were used, which allows analysis going beyond R&D co-operation: CORDIS, Eureka, MERIT
- Envisages as contribution to the FG: co-ordination and contribution to the analytical framework for the analysis of networks within the EU.

Norway – Finn Orstavik (STEP)

Their main interest lies on qualitative case studies, which are based on the results of the previous CATI-exercise. Actually, such studies are carried out within the Oslo region – especially for 'success stories in innovation'. In the course this work, the questions 'What is innovation?' and 'What is collaboration?' were often encountered. Foresees as main inputs both a contribution to the conceptual framework in clarifying these questions as well as on the methodologies of case studies.

Australia – Carolyn Jenkins (ISR)

Activities in AUS are currently focused on the preparation of the Innovation Summit in February 2000. Six working groups are currently elaborating on subjects of which some are highly relevant to the OECD NIS and the FG work (e.g. on the Industry – science linkages and the role of c/c/n within national innovation policy). AUS will synthesise the outcome of the Innovation summit as an input to the FG.

Regarding the completion of the survey carried out in the last phase, she pointed to current difficulties in data preparation and comparability, but will check the possibilities for joining the completion of module 1.

Hungary – Attila Havas (OMFB)

- Mentioned the role of transformation countries as a *living laboratory* for the development of an NIS. The building of networks as a main part of the new innovation strategies. Due to the transformation process most of the networks are international in HUN.
- OMFB is carrying out a number of activities relevant to the FG, e.g. a study on co-operative research Centres in Hungary: academia – industry relation (as case studies).
- The interest of Hungary to participate in the FP includes also a contribution to the CORDIS task.
- Regarding module 2.2., HUN is exploring the possibility of participating in the study on the basis of an input in labour-terms, i.e. the part of the study covering Hungary would be carried out by Hungarian researches instead of ADL.
- HUN will definitively participate in Module 2.3.

France – Regina Gusmao (OST)

Presented results of the analysis of the participation patterns of the participation in the Framework programme of the EU which is her main part of work in OST related to the FG work. She covered: General features of the Member States participation, The European R&D partnerships and their co-ordination, The pattern of the French involvement in the Framework Programmes. Impact of international collaboration on national collaboration and networking (→ continuation of the co-operation on national level without public subsidy?)

FRA will contribute to the CORDIS task, both as regards the methodology of analysis as well as in the pooling of the data.

Taiwan – Vincent Wu (Chengchi University)

Presented the outline of the APEC-STPRC project, which has many linkages to the OECD NIS and the FG work. An interim report of this work was produced last year and is available to the participants. Duration: 2 years, involving a substantial number of academic staff (15 professors in 4 research projects). Will synthesise the outputs of this work to provide inputs into the FG work.

Will definitively contribute to module 2.3 and module 2.2 (on a basis yet to be clarified).

Austria – Andreas Schibany (JR)

Outlined the main areas of AUSTRIAN activity in the FG, which will include:

- Contribution to the finalisation of phase II.
- Development of analytical methods for co-operation (BibTechMon)
- Acting as a clearing house for matching and cleaning the CORDIS data.
- Types of *c/c/n* between the science system and the industry: EU-level (CORDIS), national survey and studies, experience with policy intervention.
- Will draft the Policy synthesis.

3.) In a second part, presentations concerning

- The conceptual framework for the analysis of networking (FIN – Timo Hämäläinen),
- Methodologies to map networks (AUT – Michaela Topolnik, Alexander Kopcsa)
- Methodologies for the analysis of the determinants and effects of networks (BEL – Michel Dumont) and a
- Description of the next steps to arrive at an analysis of policies addressing the innovativeness of firms (AUS/ADL – David Brown)

were given. The presentations will be made available in electronic form.

Innovative Firms – David Brown (ADL)

David Brown presented the main findings of the previous phase of the FG. In the second phase the framework developed will be applied to policymaker in order to build adequate policy tools. The following objectives are issued for this phase:

- Analyse the policy instruments that will be effective in encouraging the development of the capacities that characterise innovative firms.
- Examine the implications for the role of government of the need to foster these capacities.
- Development of a process to assess the impact of proposed policy measures.
- Provide practical guidance for clarifying the capacity-building needs of firms within a target group, and designing new policy measures to address them.
- Enable publicly-funded innovation policy effort and resources to be deployed to maximum effect through appropriate, well-targeted measures.

4.) The discussion of both the presentations from the countries as well as the methodological/conceptual presentations brought to the fore that

- The participants would like to have a common conceptual framework to start with. Therefore this work should be given priority in the coming months. It should especially address the questions raised in Timos presentation, namely (a) to identify the types of market failures to which networking could be the appropriate response, (b) to assess where networking would arise as a spontaneous process of self-organisation and (c) where (and why) such self-organisation might be insufficient/too slow or non-existent so that policy intervention might be necessary.
- In the analysis of policy/policies, a 'policy case study' approach was advocated for. Such an approach would collect information about a wide range of 'network facilitating policies' and – on the basis of the discussions about potential market failures – would then choose some examples of either comparable policies between countries, or examples which are 'paradigmatic cases' to analyse whether market failure was addressed properly, the policy was implemented successfully etc. Both success and failure cases should be considered. Empirical basis should be ex-ante or ex-post assessments of existing programmes.

5.) On the basis of the existing work plan, as defined at the meeting in May in Paris, the participants discussed the concrete organisation of work and responsibilities, the schedule for the work, the agenda for the next meeting and miscellaneous aspects of the work. They agreed upon the following:

(a) Formation of research groups and distribution of responsibilities

Countries having volunteered to co-ordinate the work under the specific tasks, synthesise the inputs of the others and present the results to the whole FG are marked with (R).

Module 1 – Completion and further exploitation of the surveys of phase II

<i>Tasks</i>	<i>Countries</i>
Pooling and matching of the data	DEN (R) – J. Christensen, A. Vinding, C.S. Poulsen, B.A.Lundvall
Which kind of analysis should be perused?	AUT – A. Schibany, W. Polt
Publication	SWE – M.L. Eriksson (?) + (?)
	AUS – J. Marceau and/or research assistant/K. Bryant
	NOR – F. Orstavik (S.O. Naas)
	ESP – L. Sanz- Mendendez (?)

The following possible meeting dates were suggested by DEN (the location could be either Vienna or Aalborg):

Jan.27th – 30th

Feb. 10th – 13th

Feb. 24th – 27th

➔ Please communicate your preference to Jesper Christensen as soon as possible !

Module 2.1 - Dynamics of Networks

<i>Tasks</i>	<i>Countries</i>	<i>Remarks</i>
Conceptual framework for the analysis of the economic rationale for c/c/n	NOR (R), FIN	
Development of analytical methods -	BEL (R), AUT, FRA, FIN, HUN	Will be one STRATA proposal. Countries responsible will formulate the content of the respective parts as drafts within the next two weeks
Cleaning and matching the CORDIS data	AUT (R), all possible	
Forms of c/c/n on a macro/meso level: countries, sectors (clusters), types -- specific emphasis on science-industry links	AUT(R), CH, AUS, (*)	
Screening of existing innovation surveys and studies	CH, AUS, FIN, (*)	
Screening of existing case studies, design (micro level)	NOR (R), HUN, AUS, TAI	

(*) FRA will provide information about on-going TSER projects of OST on these tasks

Module 2.2 – Innovative Firms

<i>Tasks</i>	<i>Countries</i>
Link the capacity approach to the policy measures that help firms to develop progressively those capacities.	AUS (R) , AUT, NL, NOR, CH
Role for the government	BEL (?)
Assessment of the impact of proposed policy measures	DEN
	GER (?)

Module 2.3 – Policy implications

<i>Tasks</i>	<i>Countries</i>	<i>Remarks</i>
Rationale and scope for policy in promoting c/c/n - theoretical framework - different co-ordination mechanism etc.	FIN (R), AUT	Will be a second STRATA proposal.
Conclusion of the empirical work in module 2.1	BEL (R), AUT, FRA, FIN, HUN +	Countries responsible will formulate the content of the respective parts as drafts within the next two weeks
(„Policy case studies“) – Screening of existing evaluations of programmes trying to stimulate c/c/n	AUT (R), FIN, CH, AUS, TAI (*)	
Examples of new approaches and programmes		
Policy synthesis	AUT (R), FIN (Timo, Gerd) CH (Patrick)	→ Contact with Cluster FG will be sought for this task !

(*) FRA will provide information about on-going TSER projects of OST on these tasks

It was proposed that the policy synthesis should be drafted by a small group of 3-4 authors and discussed in the FG. Wolfgang Polt, Timo Hämäläinen, Gerd Schienstock and Patrick Vock volunteered for this team.

- ➔ Countries participating in the FG, but not present at the Vienna meeting are asked to indicate their willingness to participate (a) in the concrete work tasks and (b) in a STRATA proposal AS SOON AS POSSIBLE to the coordinators !

Further, the participants agreed to cooperate in the formulation of two different proposals for the STRATA programme of the EU's 5th Framework Programme on RTD:

- ➔ Both proposals will be sub-mitted under 'accompanying measures'
- ➔ One will be a proposal for a study ('matching and analysing CORDIS data'), the other will be funding for workshops/conferences ('screening and analysing network facilitating policies')
- ➔ Both will be handed in and administered by Austria. The exact form of the proposal (single/multi-participant proposal) will be clarified after talks with the Commission. In Austria, there will be a specific 'administrative project officer' who will aid and support the participants in the technicalities of the proposal

(b) Time schedule

The following time schedule was tentatively agreed upon:

- 27th-30th Jan/10th-13th Feb/24th-27th Feb (Vienna or Aalborg) – to be defined
- February 17-18 (Vienna)
- May 15-16 (Vienna or Budapest)
- and October/November 2000 (location to be defined)

(c) Agenda for the next meeting

The participants agreed on a tentative agenda for the next meeting, which will include:

1. An in-depth discussion of the conceptual framework(s) with presentations from
 - NOR** ('Conceptual framework for the analysis of network'),
 - FIN** (Theoretical framework for the analysis of the rational and scope for 'network facilitating policies') and
 - BEL** (Methodological approaches for network analysis chosen for the analysis of the CORDIS data).
2. A presentation of a pre-selection of the 'policy case studies' for further selection and elaboration by **AUT**
3. Presentations of the **responsibles (R)** of tasks on the state of work
4. An invited presentation from the FG on **Clusters**

(d) Miscellaneous

The participants agreed that – given the close inter-relatedness of the topics – constant interaction with the work of the FG on Clusters should be secured. For the purpose,

- the co-ordinator of the FG on Clusters will be regularly invited to the meetings of the FG
 - he/she will be invited to give presentations on specific topics and general up-dates on the work
 - the co-ordinator of this FG will – vice versa – ask to be invited to the meetings of the Cluster FG
- ➔ The web-site of the NIS project should be overhauled. In the meantime, the electronic versions of the presentations should be sent to the co-ordinators, to be further distributed to all participants within the next 10 days.

For clarifying questions on the minutes, the further work of the FG and possible participation you can contact:

Wolfgang.Polt@joanneum.ac.at or Andreas.Schibany@joanneum.ac.at