PROJECT FINAL REPORT

Grant Agreement number: 218286

Project acronym: TT-ERA-EIRO

Project title: Technology Transfer and the European Research Area: past, present and future contributions from the EIROforum Organisations

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Name of the scientific representative of the project's co-ordinator[1], Title and Organisation: Dr. Christian Boulin, Director Core Facilities and Scientific Services, European Molecular Biology Laboratory

Tel: +49 6221 3878350

Fax: +49 6221 3878242

E-mail: Boulin@embl.de

Project website address:

http://www.eiroforum.org/events/past_events/tt_conf2009.php

[1] Usually the contact person of the coordinator as specified in Art. 8.1. of the Grant Agreement.

4.1 Final publishable summary report

Executive summary

The seven intergovernmental organizations (CERN, EFDA, EMBL, ESA, ESO, ESRF, ILL) involved in EIROforum have extensive expertise in the areas of basic research and the management of large, international infrastructures, facilities and research programmes. They play an important role in the European Research Area. Technology and Knowledge Transfer are an integral part of the activities of the seven organizations though at different levels. EIROforum organized a two-days conference on Technology Transfer activities in November 2009 at the EMBL conference facilities in Heidelberg (Germany). The conference title was: "*Technology Transfer and the European Research Area: past, present and future contributions from the EIROforum organizations"*. The conference was supported by the European Commission through the Grant Agreement N^{o} 218286, "TT-ERA-EIRO".

The elaboration of the conference programme was the result of a sustained and coordinated effort from the members of the EIROforum Technology Transfer Task Force. The first part of the programme included a general presentation of the goals of EIROforum by its chair, an introduction to the European Research Area as well as individual presentations of the respective involvement in Technology and Knowledge Transfer by each EIROforum organization. This first part, helping to introduce the audience to the context, was followed by three working sessions dedicated to "Setting up effective collaborations and partnerships", "IP Management: from policy drafting to implementation" and "Technology Transfer Infrastructure and Tools". The second day started with a well attended and lively "Networking Breakfast". It was followed by sessions on "Financing Technology Transfer – Bridging the gap", the presentation of a practical case, "ELARA: of mice and men" – a young biotech start-up. The afternoon started with an extensive introduction to "The Commission Recommendation on the management of intellectual property in knowledge transfer activities and Code of Practice for universities and other public research organizations" (COM(2008)1329) followed by a panel discussion on the "European Knowledge based Economy". Before closing the conference a conclusion session in presence of the EIROforum DGs allowed to summarise on topics addressed during the conference and present the findings on four main topics: the European Commission's recommendations, a general view on Technology Transfer, technology transfer set up and the status of the EIROforum members building up Technology Transfer Structures.

The conference helped to provide a platform for the delegates to explore new approaches for managing a successful and more effective research marketing and technology transfer by exchange of good practices, new ideas and sharing of experience. The conference format clearly helped to generate a discussion forum allowing the audience to debate about new avenues for successful translation of research into economically viable benefits that should boost the economy for Europe and its citizens. The hundred participants to the meeting were all actors at the European level in science & engineering, technology transfer, venture capital, industry, Intellectual Property and policy development. Technology transfer, including IPR, the general topic of the meeting, is a highly strategic issue for the future success of the European Research Area. From a European perspective, Intellectual Property Rights and Technology Transfer still remains complex matters to deal with. The conference definitely showed that a stronger understanding and networking of the different communities involved is more than essential. The meeting on these issues was an excellent way to lower the thresholds and possibly remove some historical barriers between those communities who have not always had the level of communication and the relationship that is found for example in the USA. The most important message from this meeting was that although we come from different communities, we should all have a common goal that is Europe's competitiveness! The meeting served as a strong basis of reflection for more efficient ways to better exploit the high-level scientific and technological output in the context of the European Research Area.

Project context and objectives

Under the ERARESORG-2007-1-RTD call for proposals, EIROforum proposed to organize a two-days conference on Technology Transfer activities. The conference project acronym was "TT-ERA-EIRO" and the project full title: "*Technology Transfer and the European Research Area: past, present and future contributions from the EIROforum organizations"*.

Initial motivation to organize a conference on Technology Transfer

"The seven intergovernmental organizations (CERN, EFDA, EMBL, ESA, ESO, ESRF, ILL) involved in EIROforum have extensive expertise in the areas of basic research and the management of large, international infrastructures, facilities and research programmes.
It was agreed, with the support of the European Commission, that EIROforum would organise a two-day conference to present and discuss their approaches to Technology Transfer and show how these activities contribute to the development of the European Research Area. Intellectual property, technology and knowledge transfer are an integral part of the R&D activities and missions of the EIROforum organisations.
The programme of the conference should be tailored to provide a platform for the delegates to explore new approaches for managing a successful and more effective research marketing and technology transfer by exchange of good practices, new ideas and sharing of experience. The meeting should be organised as an open discussion forum that will hopefully indicate new avenues for successful translation of research into economically viable benefits that will boost the economy for Europe and benefit its citizens."

"The meeting should be a unique opportunity to bring together representatives of European advanced science and technology institutions and infrastructures, European politicians, representatives of the European industry, representatives of the national governments of the European Union, representatives of the European Investment Bank, the European Patent Office, representatives of the institutions of the European Community and other research communities."

"EIROforum was convinced that this conference bringing together the major European stakeholders would address issues that are essential for the progress of the European Research Area, as indicated in the 2007 Green Paper and in the Commission Communication on management of Intellectual Property in knowledge transfer activities (April 2008)".

Main S&T results/foregrounds

Short summary of the "Technology Transfer and the European Research Area" Conference

The conference was held at EMBL Heidelberg on the 18th and 19th November 2009. About 100 participants from all over Europe had registered and attended the conference. The final conference programme is added in annex I to the present document. The conference programme is the result of the collective work of the members of the EIROforum Technology Transfer Task Force. The composition of this Task Force is given in Annex II.

The conference opening address was made by **Iain Mattaj**, the EIROforum chair for 2009/2010. Iain Mattaj gave the participants a very informative introduction presenting them the **goals of EIROforum**, followed by a short overview of the seven member organizations in relation with their scientific and technological activities.

Silke Schumacher chaired the morning sessions: an **"introduction to the European Research Area"** (ERA) given by **Claus Madsen** followed by seven short **presentations by each of the EIROforum organizations** highlighting our respective involvements in Technology and Knowledge Transfer.

The topic for the first working session was **"Setting up effective collaborations and partnerships"** and was chaired by **Marc Cuzin** from CEA, Grenoble. The speakers for this session were **Peter Fletcher** (Head of Corporate Knowledge Exchange, STFC, UK), **Christian Stein** (CEO Ascenion, Germany), **Martti af Heurlin** (Senior Director TEKES, Finland) and **Jeanne Jordanov** (Président GRAIN-GRAVIT, France).

Developing effective partnerships between EIROforum organisations, other research performing organisations (RPOs) and industry is crucial for the full exploitation of intellectual property and technologies generated by publicly funded scientific organisations. It is also an important step towards Europe's goal of moving towards a knowledge-based society. Nevertheless, there are a number of hurdles that often need to be surmounted, including a mismatch between the interests of EIROs and national interests, the need to include technology transfer and knowledge transfer within the organisational strategy, the conflicting demands of scientific versus applied research, balancing long term industrial partnerships against the need to deal equitably with member states, etc. There are a number of ways through which the process can be enhanced, including better communications and networking among the EIROforum Organisation and other RPOs, exchange of experience, and the use of common procedures and strategies where possible. This session addressed the initial steps towards establishing effective partnerships to take full advantage of the large pool of knowledge existing in the EIROforum Organisations.

The second working session discussed **"IP Management: from policy drafting to implementation"** and was chaired by **Bernard Denis** from CERN. The speakers for this session were **Nigel Clarke** (European Patent Organisation, Vienna), **Marc Cuzin** (CEA, Grenoble), **Werner Frohling** (Volvo Technology Corp., Sweden) and **Maarten Truyens** (DLA Piper UK LLP Brussels, Belgium).

Intellectual Property (IP) reflects broadly to the creation of the human mind. It relates to items of information or knowledge. IP is usually divided into industrial property, covering inventions, trademarks, industrial designs, and protected designations of origin and copyrights, represented by literary, musical, artistic, photographic, and audio-visual works.

IP management is not limited to patents and to the dissemination of technologies through licences. It has an important role in research projects where proper IP management is considered by funding agencies as a pre-requisite for financing. Today, IP is considered as an important asset of a public research organisation. Depending on their experience, scientific and technical staff can have different perceptions of IP and this is often the source of misconceptions regarding innovation and scientific discovery on the one hand, and about publishing and patenting on the other. The value of IP as an asset strongly depends on a common understanding of its usage and on the way it is managed within organizations and therefore the need to raise awareness on the importance of IP was highlighted.

The third working session, chaired by **Laurent Miéville** – President of ASTP, addressed the very important topic of **"Technology Transfer Infrastructure and Tools"**. The following speakers, **Cecile Tharaud** (INSERM Transfert, France), **Jörn Erselius** (Max-Planck-Innovation, Munich, Germany), **Laurent Miéville** (Head of Unitec, TT Unit, University Geneva, Switzerland), and **Antonio Parada** (Director TT-Office at IMBC, Porto, Portugal) gave interesting presentations on the approaches to TT Infrastructures and Tools in their respective countries. The initial objectives of this session to identify the various challenges faced by TT-Offices and Industry to transfer technology in

the context of a knowledge based economy in the most successful way were clearly and openly addressed.
European basic research institutes are fuelling the pipeline of innovation. Many of them have implemented technology transfer policies to support their international competitiveness and to return value to society at large. Technology transfer organizations need to be globally active, and require both, critical mass in their intellectual property portfolios and access to financing tools and infrastructure to support spin-off companies.

In intensive dialogue with industry partners, knowledge transfer set-ups have been created addressing the needs of industry by supporting early interaction of basic research with applied industrial research. In addition to licensing of intellectual property, knowledge exchange tools such as early stage collaborations and consultancy services are key elements of technology transfer activities. Such early collaborative exchange between science and industry helps to build a viable network between basic researchers and the industry's scientists and provides industry early insight and access to cutting edge research. This kind of collaboration often results in joint intellectual property rights, tailored for the exploitation by industry. Ideally, the process spanning from early knowledge transfer to the licensing of intellectual property is managed by business development professionals on both sides. Only in this way, basic research findings are most effectively transferred to Europe.

Social part

The first day ended with a Cocktail reception on the conference premises followed by a Gala Dinner at Prinz Carl Palais in Heidelberg. During both social events the discussions between the participants continued actively and were the occasion for number of attendees to make new contacts that definitely will be helpful for them and for their organisations.

Second day: 19th November 2009

The second day started with a one hour **Networking Breakfast** that was extremely well attended. It allowed for lively discussions and exchanges of information between attendees and conference speakers.

The fourth working session, chaired by **Bernd Geiger** (Managing General Partner at Triangle Venture, Germany) was dedicated to **"Financing Technology Transfer – Bridging the gap",** a very difficult subject that cannot be ignored at the institutional level for organizations which want to seriously engage in Technology Transfer. **Jacques Darcy** (European Investment Fund, Luxembourg), **Stefan Herr** (EMBL-Ventures, Germany), **Massimo Introzzi** (President IBAN, Milano, Italy) and **Diego Di Biasio** (Public Research Centre, Luxembourg) introduced the conference participants to the different models that can be considered to move from ideas to start-ups. They helped to identify the challenges faced by those technology-based start-ups in finding financing and what the right tools to help them are. As representatives from the incubation, VC and BA business they tried to answer those questions and indicate, from their point of view if the publicly funded bodies' policies answer those needs and how such policies could be improved.

Moving from an initial idea to actually developing a successful and viable start-up company is quite a challenge. This difficult exercise is even harder in Europe where investors are more conservative and risk-adverse than in the United States when it comes to investing in technology-based start-ups. Like any new technological venture, there is a relatively large number of promising start-up and early-stage companies aiming to transfer a technology from one sector to another for various applications. However, many of them lack the necessary access to seed- and early-stage equity. It is hard to convince investors to back high-tech technology related products and services because such ventures are often seen as risky. Although this is often a false perception, it nevertheless

compounds the other perception that making early stage investments in technology companies is excessively risky. The legacy of the IT bubble of the early years of this decade persists in casting doubt over the perceived likelihood of good returns to investors.

The morning session was concluded with a presentation of a "practical case": **"ELARA: of mice and men**" by **Joe Lewis** (ELARA Pharmaceutical, Heidelberg, Germany). ELARA is an early stage drug discovery and development company, incorporated 2006 in Germany. Based on outstanding scientific research, which originates from the European Molecular Biology Laboratory (EMBL) in Heidelberg, ELARA's mission is to provide novel and efficacious medicines for the treatment of cancers with high unmet medical need. Seed capital was invested by EMBL Ventures and intellectual property licensed via EMBL Enterprise Management (EMBLEM). ELARA is located on the EMBL campus in close proximity to the founders' labs, with medicinal chemistry established at the Chem2Biz facility at the BASF. ELARA is supported by the German Federal Ministry of Education and Research (BMBF) under its GO-Bio initiative.

The afternoon session chaired by **Martin Raditsch** started with presentations of **"The Commission Recommendation on the management of intellectual property in knowledge transfer activities and Code of Practice for universities and other public research organizations" (COM(2008)1329)**. Two speakers from the European Commission, **Tiit Jürimäe** and **David Woolf**, gave clear explanations of the official document. This helped the conference attendees to understand the document that was prepared and published by the European Commission to provide guidance for Member States and for research organisations to improve knowledge transfer practices in Europe and encourage a more consistent approach. Until its adoption, mainly national initiatives existed. The Recommendation called for a European approach to knowledge transfer not only within Europe but also in the context of international knowledge transfer. Due to the added complexity in this area of knowledge transfer there is a need for further guidance, addressing issues of intellectual property management and the fair and equitable treatment of results in a manner that brings mutual benefits to all involved. As a follow-up to the Council Resolution, Member States, Associated countries and the Commission have recently begun to work on such guidelines in partnership via a CREST working group, which was established to promote the take up of the Commission Recommendation and Code of Practice and develop further guidelines where justified.

The Commission Recommendation and Code of Practice presentation was followed by a **panel discussion on the "European Knowledge based Economy"**. The panel was chaired by **Martin Raditsch** and included the following participants: **Tiit Jürimäe** (EC), **Nigel Clarke** (EPO), **Jacques Darcy** (VC), **Wieland Wolf** (Industry), **Frank Salzgeber** (TT ESA), **Gabor Lamm** (EMBLEM).

This session allowed to sum up the findings gathered in the previous working sessions and was followed by a lively panel discussion of experts representing the main categories of actors in the European Knowledge Based Economy. The panel consisted of five representatives from the EC, EPO, VC, EIROforum TT and Industry. The questions and answers part of that session was highly interactive proving once more the need for increased awareness and "education" on the various aspects of technology and knowledge transfer.

Conclusion of the conference in presence of the EIROforum DGs

In his presentation, **Martin Raditsch** addressed a number of issues that were discussed during the conference. The following four topics are summarised below:

1) **European Commission's Recommendations**
2) **General View on Technology Transfer**
3) **Technology Transfer Set up**
4) **Status of the EIROforum members building up TT structures**

1) European Commission's recommendation on the management of intellectual property and knowledge transfer

All European public research organizations (PROs), including universities, should better exploit and valorize publicly-funded R&D results through:

- stronger R& D collaborations with enterprises
- more active KT activities (licensing, spin-offs)

The intellectual property (IP) generated by PROs should be managed more effectively to contribute to Europe's future welfare, since (i) Europe's society and economy is knowledge based, (ii) the research performing organizations like the EIROforum members are belong to the drivers of knowledge creation, (iii) the publicly funded knowledge creators have an obligation to make available the knowledge for dissemination and exploitation, (iv) the dissemination and exploitation of knowledge follows some common rules and needs common structures to be handled effectively and (v) the PROs have obligations to their stakeholders.

2) General view on technology transfer

Why does it make sense and it is useful to have intellectual property management & knowledge transfer activities associated with public research organizations?

Technology transfer activities are key when it comes to converting knowledge into socio-economic benefits. Successful transfer activities are building up and strengthen the links between research performing organizations and industry. Furthermore they facilitate the circulation and the use of ideas in a dynamic knowledge based society, enhancing Europe's competitiveness and securing the welfare of the society.

3) Technology transfer set up

A successful technology transfer set up within a public research organization has to deal with various tasks to act as a perfect link between science, economy and society. The following activities are mandatory for a fully operative technology transfer set up:

- communication and interaction between public and private sector
- dissemination and effective exploitation of research results to translate them into new products and services
- proper management of intellectual property
- engage in academia-industry collaborations
- licensing research results to industry
- bridging the gap within the translational process
- development of an entrepreneurial culture
- creation of spin-offs

Directing such technology transfer activities need a proper set up, starting with drafting **guidelines** for the communication and interaction between the public research organization and the private sector.

Furthermore the proper internal and external management of the institute's intellectual property has to be defined within a **technology transfer policy**.

Once the guidelines and the policy have been established, an **organization**al **structure** for (i) the protection, dissemination and exploitation of the research results, (ii) the active handling of academia-industry collaborations, (iii) the licensing of research results to industry and (iv) the development of an entrepreneurial culture within the research organization has to be chosen.

The three main solutions are either to build up a technology transfer office within the research organization or to found a company, dealing with technology transfer on behalf of the institute or to out-source the operative tasks to a third party, specialized in such activities.

After dealing with the minimal requirements for a successful technology transfer set up, tools for bridging the gap within the translation process from science to industry have to be built up. This phase mainly deals with commercial tools to enable the institute to push research findings into a commercial relevant stage. Two very effective tools are (i) a **proof of concept** fund and (ii) an **incubator on campus**.

Especially for research institutes dealing with "early stage" technologies, which can not be taken over directly by the established industry, spin-offs are the solution of choice to bridge the development phase and make early research available to the commercial world. To have access to the investment needed for such activity, an associated **venture capital fund** can possibly ease this process.

4) Status of the EIROforum members building up TT structures

In summary there are six major achievements to be reached by public research organization setting up a fully operative technology transfer solution to support Europe's knowledge based economy.

The following table presents the status of the EIROforum members in building up such structures.

	Guidelines	Policy	TTO	POC fund	Incubator	VC-Seed Fund
EMBL	✓	✓	✓	✓	✓	✓
ESA	✓	✓	✓		✓	✓
ESRF	✓	✓	✓			
CERN	✓	✓	✓			
ILL	✓	✓				
EFTA-Jet	✓	✓				
ESO	✓					

Annex I: EIROforum TT Conference Programme

Wednesday, 18 November 2009

08:30 - 09:30	Registration
09:30 - 9:45	**Welcome and Opening by Iain Mattaj, EMBL DG**
9:45 – 10:20	**Introduction to the European Research Area by Claus Madsen [EIROforum]**
10:20 – 10:45	*Coffee Break*
10:45 - 12:15	**EIROforum Organisations presentations/TT activities (Silke Schumacher)** EMBL: Gabor Lamm ESRF: Edward Mitchell CERN: Claudio Parinello ESO: Claus Madsen ILL: Martin Walter EFDA: Francesco Romanelli ESA: Frank Salzgeber
12:15 - 13:30	*Lunch Break*
13.30 - 15:00	**Setting up effective collaborations and partnerships (Marc Cuzin)** Peter Fletcher: Overview of current situation – lessons learned from ERID Watch Christian Stein: Technology Transfer: creating spin-offs Martti af Heurlin: Establishing effective partnerships with industry Jeanne Jordanov: Moving from research to products
15:00 - 16:30	**IP Management - from policy drafting to implementation (Bernard Denis)** Nigel Clarke: IP awareness in PRO Marc Cuzin: Patent portfolio management Werner Frohling: IP management in collaborative R&D Maarten Truyens: Publishing vs patenting
16:30 - 17:00	*Coffee Break*
17:00 - 18:30	**Technology Transfer Infrastructure and Tools (Laurent Miéville)** Cecile Tharaud: A French Model for Technology Transfer in the Medical Sciences Jörn Erselius: A German Model for Technology Transfer Biology and Chemistry Laurent Miéville: A Swiss Model for Technology Transfer in Physics Antonio Parada: A Portuguese Model for Technology Transfer in Life Sciences
18:30 - 19:00	*Cocktail Reception*
19:30 - 22:00	*Gala Dinner at Prinz Carl Palais in Heidelberg*

Thursday, 19 November 2009

09:00 – 10:00	Networking Breakfast
10:00 - 11:30	**Financing Technology Transfer – bridging the gap (Bernd Geiger)** Jacques Darcy, Stefan Herr: Financing through VC Massimo Introzzi: Business Angels Diego De Biasio: Incubation
11:30 -12:00	**Joe Lewis: ELARA Pharmaceuticals: of mice and men**
12:00 - 13:30	*Lunch Break*
13.30 - 14:00	**The 2008 EC Recommendations and Code of Practice on IP (Martin Raditsch)** Tiit Jürimäe & David Woolf: The European Commission activities in IP and KT
14:00 – 15:15	**Panel discussion on the European Knowledge based Economy (Martin Raditsch)** **Expected Panelists:** Tiit Jürimäe (EC), Nigel Clarke (EPO), Jacques Darcy (VC), Wieland Wolf (Industry), Frank Salzgeber (TT ESA), Gabor Lamm (EMBLEM)
15:15 – 15:30	*Coffee Break*
15:30 - 16:00	**Conclusions of the Conference in presence of EIROforum DGs**

Annex II: Members of the EIROforum Technology Transfer Task Force

CERN	Jean-Marie Le Goff, Claudio Parrinello
EFDA	Michael Watkins (contact person)
EMBL	Christian Boulin (Project Coordinator)
ESA	Frank Salzgeber, Aude De Clerq
ESO	Martin Cullum, Patrick Geeraert
ESRF	Manuel Rodriguez
ILL	Martin Walter
EMBLEM	Martin Raditsch, Jürgen Bauer

Potential impact including the socio-economic impact – Conclusion

Has the Technology Transfer conference reached the goals that were defined in the EU grant application?

- The programme addressed most of the important questions related to TT in the context of our missions
- The meeting was used to disseminate information about the European Research Area
- The opportunity to present the EC Recommendations on management of IP in knowledge transfer activities was well received by the audience
- The meeting allowed to increase EIROforum's organisations visibility
- The meeting was an open discussion forum mainly because it allowed different actors involved in the TT process (from basic research to representatives of the financial and business world) to meet in an "informal" environment.
- Very positive feedback from attendees was received either before they returned or by e-mail after the conference. The experience of EIROforum in TT and KT is increasingly known and appreciated in the European Research Area and our experts will continue to help where the need will arise.

Would it make sense to have such Technology Transfer meetings every 2 or 3 years?

- One mild criticism (from some potential speakers) was encountered during the preparation of the conference because of the extremely wide palette of activities and scientific and technological fields covered by EIROforum. However, general management of Knowledge Transfer is definitely universal and should dissipate such fears.
- Surprisingly, there are very few TT/KT meetings organised by "academia". It will be interesting to watch how that will evolve in the future as there is now a Commission Recommendation and Code of Practice for the management of Intellectual Property…

As a concluding remark, there is no doubt that the TT Conference organized with the support of the European Commission was timely and was definitely well received by the attendees. The European society needs to increase its commitment to a Knowledge Based Society to maintain and improve its role and position in the global economy.

Address of the project public website

http://www.eiroforum.org/events/past_events/tt_conf2009.php

Note on the Conference financial aspects (not for publication)

Participants and speakers:

About hundred participants from all over Europe attended the conference. A pool of 30 speaker and participants to the panel discussions gave the presentations and contributed to the lively debates that took place during the conference. The sessions were chaired and introduced by EIROforum staff and some of the key speakers. One third of the speakers were experts from the EIROforum organisations and in order to minimise the global costs of the conference agreed to participate without asking for travel or hotel costs (they were paid by their home institutions). All other speakers arranged for minimal travel expenses and it is remarkable to note that none of them complained about our plea to maintain the costs as low as possible. A number of the external speakers did not even ask for travel expense reimbursements and they deserve special thanks. It has to be noted that this was achieved without compromising on the quality of the speakers.

Conference programme organisation:

This was the main task of the members of the EIROforum Technology Transfer Task Force. The Task Force met in person on five occasions at EIROforum institutions sites for one-day meetings with overnight stay for some of them. All costs incurred for the preparation meetings were supported by the EIROforum organisation's budgets (with the exception of EMBLEM, the EMBL Technology Transfer Company). About ten other shorter meetings took place in the form of tele- or video-conferences in particular during the last two months before the conference date, to finalise the session topics and presentations with the invited speakers. It is important to point out the outstanding work carried out by the representatives of EMBLEM to the EIROforum Technology Transfer Task Force: without their professional expertise and qualified advices it would probably not have been possible to organise such a high profile and successful event.

Conference site selection:

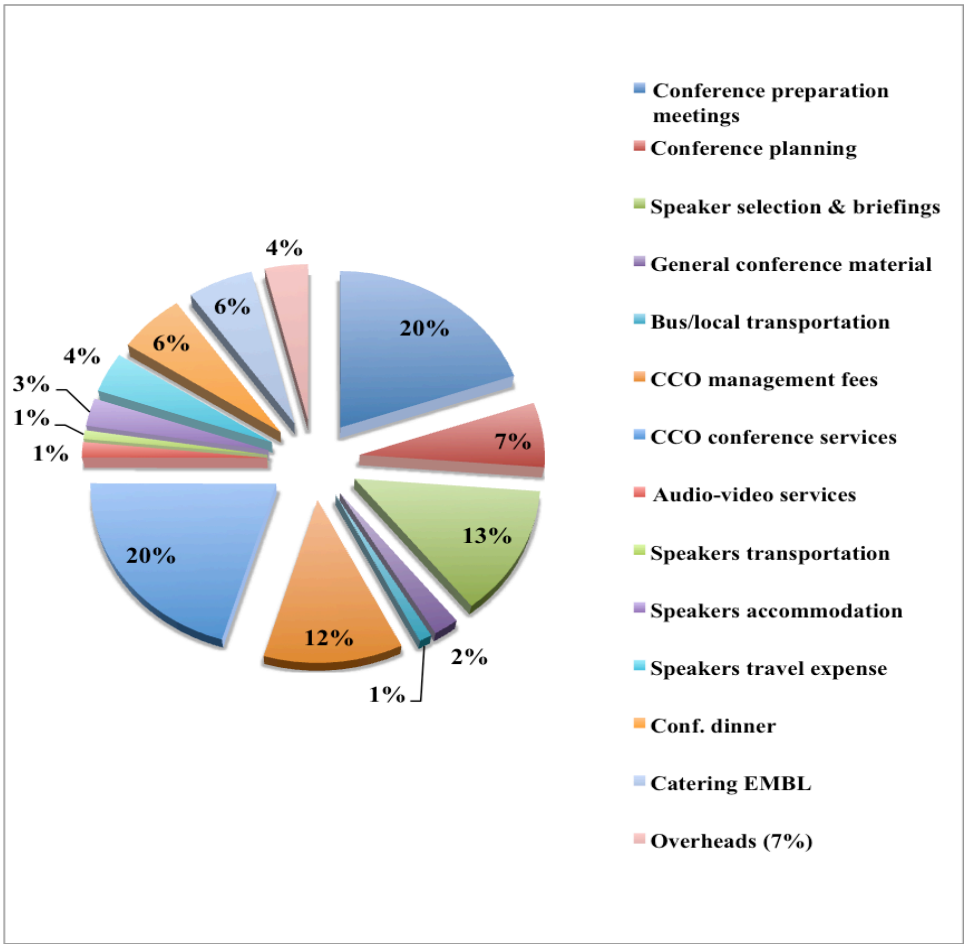
This was a difficult issue as the Task Force members wanted to have the Conference date overlapping with the EIROforum DGs Assembly meeting so that all DGs could attend at least the conference conclusion session. Finally EMBL Heidelberg was chosen, as the dates in November 2009 finally permitted us to have a common venue for both events.

Local logistics:

EMBL has a long history in courses and conferences organisation for the European scientific community and although the Technology Transfer Conference was for them on a slightly different topic and addressed some other communities, the local Courses and Conference Office (CCO) was extremely helpful in the conference mailing, in preparing for the event as well as during the two days of the conference. Considering the important contributions of the CCO to the local organisation of the event (conference secretariat, mailing, accommodation for speakers, web updates and so on), the charged fees show that EMBL's in-kind contribution to that part of the conference was substantial. On top of this, audio-visual services were run by an experienced team. Finally, catering (2 lunches, cocktail reception and 5 coffee breaks) provided by EMBL canteen was not only well appreciated but did not impinge significantly on the conference budget.

Summary breakdown of the Conference costs:

Cost type	Amount (K€)
Conference preparation meetings	18000
Conference planning	6000
Speaker selection & briefings	12000
General conference material	2000
Bus/local transportation	1010
CCO management fees	10930
CCO conference services	18680.77
Audio-video services	1417
Speakers transportation	806
Speakers accommodation	2565
Speakers travel expense	3691
Conf. dinner	5514.94
Catering EMBL	5331
Total conference costs	**87945.71**
Overheads (7%)	3496.20



Graphical representation of the distribution of costs funded through the grant

Comment on the financial information.

Considering the relatively limited financial contribution from the TT-ERA-EIRO grant to the organisation of a conference with a hundred participants and more than twenty conference speakers the EIROforum institutions were kind enough to provide internal staff support for the event instead of hiring new temporary staff. This allowed us to not charge the participants for registration fees for the conference. This explains why there is no mention of staff costs related to Coordination and Management Activities as there were none.

Concluding remarks:

Due to the clear commitment of the EIROforum organisations and their Directors it was possible to maintain the overall costs both for the preparation of the conference as well as for the execution of the event to an extraordinary low level. The in-kind contributions (both in staff costs and travel expense) from the EIROforum organisations to the overall costs were definitely higher than expected initially. This should be seen as a strong motivation of EIROforum's DGs and their organisations to make Technology Transfer a reality in the European Research Area.

4.2 Use and dissemination of foreground

A plan for use and dissemination of foreground (including socio-economic impact and target groups for the results of the research) shall be established at the end of the project. It should, where appropriate, be an update of the initial plan in Annex I for use and dissemination of foreground and be consistent with the report on societal implications on the use and dissemination of foreground (section 4.3 – H).

The plan should consist of:

- Section A

  This section should describe the dissemination measures, including any scientific publications relating to foreground. **Its content will be made available in the public domain** thus demonstrating the added-value and positive impact of the project on the European Union.

- Section B

  This section should specify the exploitable foreground and provide the plans for exploitation. All these data can be public or confidential; the report must clearly mark non-publishable (confidential) parts that will be treated as such by the Commission. Information under Section B that is not marked as confidential **will be made available in the public domain** thus demonstrating the added-value and positive impact of the project on the European Union.

Section A (public)

This section includes two templates

- Template A1: List of all scientific (peer reviewed) publications relating to the foreground of the project.
- Template A2: List of all dissemination activities (publications, conferences, workshops, web sites/applications, press releases, flyers, articles published in the popular press, videos, media briefings, presentations, exhibitions, thesis, interviews, films, TV clips, posters).

These tables are cumulative, which means that they should always show all publications and activities from the beginning until after the end of the project. Updates are possible at any time.

TEMPLATE A1: LIST OF SCIENTIFIC (PEER REVIEWED) PUBLICATIONS, STARTING WITH THE MOST IMPORTANT ONES										
NO.	Title	Main author	Title of the periodical or the series	Number, date or frequency	Publisher	Place of publication	Year of publication	Relevant pages	Permanent identifiers[2] (if available)	Is/Will open access[3] provided to this publication?
1	*Not applicable*									
2										
3										

TEMPLATE A2: LIST OF DISSEMINATION ACTIVITIES

[2] A permanent identifier should be a persistent link to the published version full text if open access or abstract if article is pay per view) or to the final manuscript accepted for publication (link to article in repository).

[3] Open Access is defined as free of charge access for anyone via Internet. Please answer "yes" if the open access to the publication is already established and also if the embargo period for open access is not yet over but you intend to establish open access afterwards.

NO.	Type of activities[4]	Main leader	Title	Date	Place	Type of audience[5]	Size of audience	Countries addressed
1	*Conference*	*Dr. Christian Boulin*	*TT-ERA-EIRO*	*18-19 November 2009*	*Heidelberg*	*Sc,ind,cs,pm*	*100*	Europe
2								
3								

[4] A drop down list allows choosing the dissemination activity: publications, conferences, workshops, web, press releases, flyers, articles published in the popular press, videos, media briefings, presentations, exhibitions, thesis, interviews, films, TV clips, posters, Other.

[5] A drop down list allows choosing the type of public: Scientific Community (higher education, Research), Industry, Civil Society, Policy makers, Medias ('multiple choices' is possible.

Section B (Confidential[6] or public: confidential information to be marked clearly)
Part B1

The applications for patents, trademarks, registered designs, etc. shall be listed according to the template B1 provided hereafter.

The list should, specify at least one unique identifier e.g. European Patent application reference. For patent applications, only if applicable, contributions to standards should be specified. This table is cumulative, which means that it should always show all applications from the beginning until after the end of the project.

TEMPLATE B1: LIST OF APPLICATIONS FOR PATENTS, TRADEMARKS, REGISTERED DESIGNS, ETC.					
Type of IP Rights[7]:	Confidential Click on YES/NO	Foreseen embargo date dd/mm/yyyy	Application reference(s) (e.g. EP123456)	Subject or title of application	Applicant (s) (as on the application)
Not applicable					

[6] Note to be confused with the "EU CONFIDENTIAL" classification for some security research projects.

[7] A drop down list allows choosing the type of IP rights: Patents, Trademarks, Registered designs, Utility models, Others.

Part B2
Please complete the table hereafter:

Type of Exploitable Foreground[8]	Description of exploitable foreground	Confidential Click on YES/NO	Foreseen embargo date dd/mm/yyyy	Exploitable product(s) or measure(s)	Sector(s) of application[9]	Timetable, commercial or any other use	Patents or other IPR exploitation (licences)	Owner & Other Beneficiary(s) involved
Not applicable								

In addition to the table, please provide a text to explain the exploitable foreground, in particular:

- Its purpose
- How the foreground might be exploited, when and by whom
- IPR exploitable measures taken or intended
- Further research necessary, if any
- Potential/expected impact (quantify where possible)

[19] A drop down list allows choosing the type of foreground: General advancement of knowledge, Commercial exploitation of R&D results, Exploitation of R&D results via standards, exploitation of results through EU policies, exploitation of results through (social) innovation.
[9] A drop down list allows choosing the type sector (NACE nomenclature) : http://ec.europa.eu/competition/mergers/cases/index/nace_all.html

4.3 Report on societal implications

Replies to the following questions will assist the Commission to obtain statistics and indicators on societal and socio-economic issues addressed by projects. The questions are arranged in a number of key themes. As well as producing certain statistics, the replies will also help identify those projects that have shown a real engagement with wider societal issues, and thereby identify interesting approaches to these issues and best practices. The replies for individual projects will not be made public.

A General Information *(completed automatically when **Grant Agreement number** is entered.*	
Grant Agreement Number:	
Title of Project:	
Name and Title of Coordinator:	

B Ethics	
1. Did your project undergo an Ethics Review (and/or Screening)? • If Yes: have you described the progress of compliance with the relevant Ethics Review/Screening Requirements in the frame of the periodic/final project reports? Special Reminder: the progress of compliance with the Ethics Review/Screening Requirements should be described in the Period/Final Project Reports under the Section 3.2.2 *'Work Progress and Achievements'*	***0Yes 0No***
2. Please indicate whether your project involved any of the following issues (tick box) :	***YES***
RESEARCH ON HUMANS	
• Did the project involve children?	
• Did the project involve patients?	
• Did the project involve persons not able to give consent?	
• Did the project involve adult healthy volunteers?	
• Did the project involve Human genetic material?	
• Did the project involve Human biological samples?	
• Did the project involve Human data collection?	
RESEARCH ON HUMAN EMBRYO/FOETUS	
• Did the project involve Human Embryos?	
• Did the project involve Human Foetal Tissue / Cells?	
• Did the project involve Human Embryonic Stem Cells (hESCs)?	
• Did the project on human Embryonic Stem Cells involve cells in culture?	
• Did the project on human Embryonic Stem Cells involve the derivation of cells from Embryos?	
PRIVACY	
• Did the project involve processing of genetic information or personal data (eg. health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction)?	
• Did the project involve tracking the location or observation of people?	
RESEARCH ON ANIMALS	
• Did the project involve research on animals?	
• Were those animals transgenic small laboratory animals?	
• Were those animals transgenic farm animals?	
• Were those animals cloned farm animals?	

• Were those animals non-human primates?	
RESEARCH INVOLVING DEVELOPING COUNTRIES	
• Did the project involve the use of local resources (genetic, animal, plant etc)?	
• Was the project of benefit to local community (capacity building, access to healthcare, education etc)?	
DUAL USE	
• Research having direct military use	0 Yes 0 No
• Research having the potential for terrorist abuse	

C Workforce Statistics

3. Workforce statistics for the project: Please indicate in the table below the number of people who worked on the project (on a headcount basis).

Type of Position	Number of Women	Number of Men
Scientific Coordinator		
Work package leaders		
Experienced researchers (i.e. PhD holders)		
PhD Students		
Other		

4. How many additional researchers (in companies and universities) were recruited specifically for this project?	
Of which, indicate the number of men:	

D Gender Aspects

5. Did you carry out specific Gender Equality Actions under the project?

○ Yes
○ No

6. Which of the following actions did you carry out and how effective were they?

	Not at all effective				Very effective
❑ Design and implement an equal opportunity policy	○	○	○	○	○
❑ Set targets to achieve a gender balance in the workforce	○	○	○	○	○
❑ Organise conferences and workshops on gender	○	○	○	○	○
❑ Actions to improve work-life balance	○	○	○	○	○

○ Other:

7. Was there a gender dimension associated with the research content – i.e. wherever people were the focus of the research as, for example, consumers, users, patients or in trials, was the issue of gender considered and addressed?

○ Yes- please specify

○ No

E Synergies with Science Education

8. Did your project involve working with students and/or school pupils (e.g. open days, participation in science festivals and events, prizes/competitions or joint projects)?

○ Yes- please specify

○ No

9. Did the project generate any science education material (e.g. kits, websites, explanatory booklets, DVDs)?

○ Yes- please specify

○ No

F Interdisciplinarity

10. Which disciplines (see list below) are involved in your project?

○ Main discipline[10]:
○ Associated discipline[10]:
○ Associated discipline[10]:

G Engaging with Civil society and policy makers

11a Did your project engage with societal actors beyond the research community? *(if 'No', go to Question 14)*

○ Yes
○ No

11b If yes, did you engage with citizens (citizens' panels / juries) or organised civil society (NGOs, patients' groups etc.)?

○ No
○ Yes- in determining what research should be performed
○ Yes - in implementing the research
○ Yes, in communicating /disseminating / using the results of the project

[10] Insert number from list below (Frascati Manual).

11c In doing so, did your project involve actors whose role is mainly to organise the dialogue with citizens and organised civil society (e.g. professional mediator; communication company, science museums)?	○ ○	Yes No

12. Did you engage with government / public bodies or policy makers (including international organisations)

- ○ No
- ○ Yes- in framing the research agenda
- ○ Yes - in implementing the research agenda
- ○ Yes, in communicating /disseminating / using the results of the project

13a Will the project generate outputs (expertise or scientific advice) which could be used by policy makers?

- ○ Yes – as a **primary** objective (please indicate areas below- multiple answers possible)
- ○ Yes – as a **secondary** objective (please indicate areas below - multiple answer possible)
- ○ No

13b If Yes, in which fields?

Agriculture		Energy		Human rights	
Audiovisual and Media		Enlargement		Information Society	
Budget		Enterprise		Institutional affairs	
Competition		Environment		Internal Market	
Consumers		External Relations		Justice, freedom and security	
Culture		External Trade		Public Health	
Customs		Fisheries and Maritime Affairs		Regional Policy	
Development Economic and Monetary Affairs		Food Safety		Research and Innovation	
		Foreign and Security Policy		Space	
Education, Training, Youth		Fraud		Taxation	
Employment and Social Affairs		Humanitarian aid		Transport	

13c If Yes, at which level?

- ○ Local / regional levels
- ○ National level
- ○ European level
- ○ International level

H Use and dissemination

14. How many Articles were published/accepted for publication in peer-reviewed journals?	
To how many of these is open access[11] provided?	
How many of these are published in open access journals?	
How many of these are published in open repositories?	
To how many of these is open access not provided?	
Please check all applicable reasons for not providing open access:	
❑ publisher's licensing agreement would not permit publishing in a repository ❑ no suitable repository available ❑ no suitable open access journal available ❑ no funds available to publish in an open access journal ❑ lack of time and resources ❑ lack of information on open access ❑ other[12]: ……	

15. How many new patent applications ('priority filings') have been made? *("Technologically unique": multiple applications for the same invention in different jurisdictions should be counted as just one application of grant).*		
16. Indicate how many of the following Intellectual Property Rights were applied for (give number in each box).	Trademark	
	Registered design	
	Other	
17. How many spin-off companies were created / are planned as a direct result of the project?		
Indicate the approximate number of additional jobs in these companies:		

18. Please indicate whether your project has a potential impact on employment, in comparison with the situation before your project:

❑ Increase in employment, or	❑ In small & medium-sized enterprises
❑ Safeguard employment, or	❑ In large companies
❑ Decrease in employment,	❑ None of the above / not relevant to the project
❑ Difficult to estimate / not possible to quantify	

19. For your project partnership please estimate the employment effect resulting directly from your participation in Full Time Equivalent (*FTE = one person working fulltime for a year*) jobs:	*Indicate figure:*

[11] Open Access is defined as free of charge access for anyone via Internet.
[12] For instance: classification for security project.

Difficult to estimate / not possible to quantify	❑

I Media and Communication to the general public

20. As part of the project, were any of the beneficiaries professionals in communication or media relations?

○ Yes ○ No

21. As part of the project, have any beneficiaries received professional media / communication training / advice to improve communication with the general public?

○ Yes ○ No

22 Which of the following have been used to communicate information about your project to the general public, or have resulted from your project?

❑	Press Release	❑	Coverage in specialist press
❑	Media briefing	❑	Coverage in general (non-specialist) press
❑	TV coverage / report	❑	Coverage in national press
❑	Radio coverage / report	❑	Coverage in international press
❑	Brochures /posters / flyers	❑	Website for the general public / internet
❑	DVD /Film /Multimedia	❑	Event targeting general public (festival, conference, exhibition, science café)

23 In which languages are the information products for the general public produced?

❑	Language of the coordinator	❑	English
❑	Other language(s)		

***Question F-10*:** Classification of Scientific Disciplines according to the Frascati Manual 2002 (Proposed Standard Practice for Surveys on Research and Experimental Development, OECD 2002):

FIELDS OF SCIENCE AND TECHNOLOGY

1. NATURAL SCIENCES

1.1 Mathematics and computer sciences [mathematics and other allied fields: computer sciences and other allied subjects (software development only; hardware development should be classified in the engineering fields)]

1.2 Physical sciences (astronomy and space sciences, physics and other allied subjects)

1.3 Chemical sciences (chemistry, other allied subjects)

1.4 Earth and related environmental sciences (geology, geophysics, mineralogy, physical geography and other geosciences, meteorology and other atmospheric sciences including climatic research, oceanography, vulcanology, palaeoecology, other allied sciences)

1.5 Biological sciences (biology, botany, bacteriology, microbiology, zoology, entomology, genetics, biochemistry, biophysics, other allied sciences, excluding clinical and veterinary sciences)

2 ENGINEERING AND TECHNOLOGY

2.1 Civil engineering (architecture engineering, building science and engineering, construction engineering, municipal and structural engineering and other allied subjects)

2.2 Electrical engineering, electronics [electrical engineering, electronics, communication engineering and systems, computer engineering (hardware only) and other allied subjects]

2.3. Other engineering sciences (such as chemical, aeronautical and space, mechanical, metallurgical and materials engineering, and their specialised subdivisions; forest products; applied sciences such as

geodesy, industrial chemistry, etc.; the science and technology of food production; specialised technologies of interdisciplinary fields, e.g. systems analysis, metallurgy, mining, textile technology and other applied subjects)

3. MEDICAL SCIENCES

3.1 Basic medicine (anatomy, cytology, physiology, genetics, pharmacy, pharmacology, toxicology, immunology and immunohaematology, clinical chemistry, clinical microbiology, pathology)

3.2 Clinical medicine (anaesthesiology, paediatrics, obstetrics and gynaecology, internal medicine, surgery, dentistry, neurology, psychiatry, radiology, therapeutics, otorhinolaryngology, ophthalmology)

3.3 Health sciences (public health services, social medicine, hygiene, nursing, epidemiology)

4. AGRICULTURAL SCIENCES

4.1 Agriculture, forestry, fisheries and allied sciences (agronomy, animal husbandry, fisheries, forestry, horticulture, other allied subjects)

4.2 Veterinary medicine

5. SOCIAL SCIENCES

5.1 Psychology

5.2 Economics

5.3 Educational sciences (education and training and other allied subjects)

5.4 Other social sciences [anthropology (social and cultural) and ethnology, demography, geography (human, economic and social), town and country planning, management, law, linguistics, political sciences, sociology, organisation and methods, miscellaneous social sciences and interdisciplinary , methodological and historical S1T activities relating to subjects in this group. Physical anthropology, physical geography and psychophysiology should normally be classified with the natural sciences].

6. HUMANITIES

6.1 History (history, prehistory and history, together with auxiliary historical disciplines such as archaeology, numismatics, palaeography, genealogy, etc.)

6.2 Languages and literature (ancient and modern)

6.3 Other humanities [philosophy (including the history of science and technology) arts, history of art, art criticism, painting, sculpture, musicology, dramatic art excluding artistic "research" of any kind, religion, theology, other fields and subjects pertaining to the humanities, methodological, historical and other S1T activities relating to the subjects in this group]