

German-Greek Workshop on Knowledge and Technology Transfer¹

11 June – 13 June 2019

Venue: National Centre for Scientific Research DEMOKRITOS, Athens, Greece

Dear Participants,

We would like to thank you for your active contributions to the »German-Greek Workshop on Knowledge and Technology Transfer« and your innovative ideas and valuable insights to foster collaboration between Germany and Greece. The openness and willingness to engage in constructive discussions as well as the active contributions made by all participants were crucial to secure the success and tangible outcomes of this workshop.

The aim of the first workshop held from June 11-13, 2019 at the National Centre for Scientific Research DEMOKRITOS, Athens, Greece was to exchange operational experiences in knowledge and technology transfer as well as to define tangible next steps among the ongoing Greek-German research and innovation projects. The workshop approach was designed and implemented by the Fraunhofer Center for International Management and Knowledge Economy IMW and facilitated by the DLR Project Management Agency as well as its Greek counterpart, the GSRT. The workshop design was developed within the IntTransNet research project, which is funded by the BMBF and aims to develop novel instruments and approaches to intensify cross-border collaboration between Germany and partner countries in research and innovation. This document summarizes the workshop design and the key results.

Background

Germany and Greece are connected through an intensive scientific and technological exchange, institutionalized by the German-Greek Research and Innovation Program. In 2016, the German Federal Ministry of Education and Research (BMBF) and General Secretariat for Research and Technology (GSRT) of the Ministry of Education, Research and Religious Affairs of the Hellenic Republic agreed to continue their research and innovation dialogue in order to intensify their support for bilateral R&D projects in areas of mutual interest. In doing so, the German-Greek Research and Innovation Program aims to intensify cross-border collaboration between research and industry. In this program, the BMBF and GSRT have committed more than 18 million Euro for 24 application-oriented R&D projects in six research fields. The transfer of R&D results (knowledge and technologies) in practical applications (products, processes and services) as well as the involvement of young researchers on both sides are of particular importance in this program.

These efforts notwithstanding, innovation activities both in Germany and Greece have yet to reach their full potential. Therefore, the BMBF and GSRT jointly agreed to implement a workshop approach for awareness-raising and empowerment of the ongoing German-Greek research and innovation collaborations in knowledge and technology transfer. The "German-Greek Workshop on Knowledge and Technology Transfer" is realized in two stages and aims to enable scientists and representatives of private companies and public sector organizations to collaborate across

¹ manuel.molina.vogelsang@imw.fraunhofer.de | +49 341 231039-114

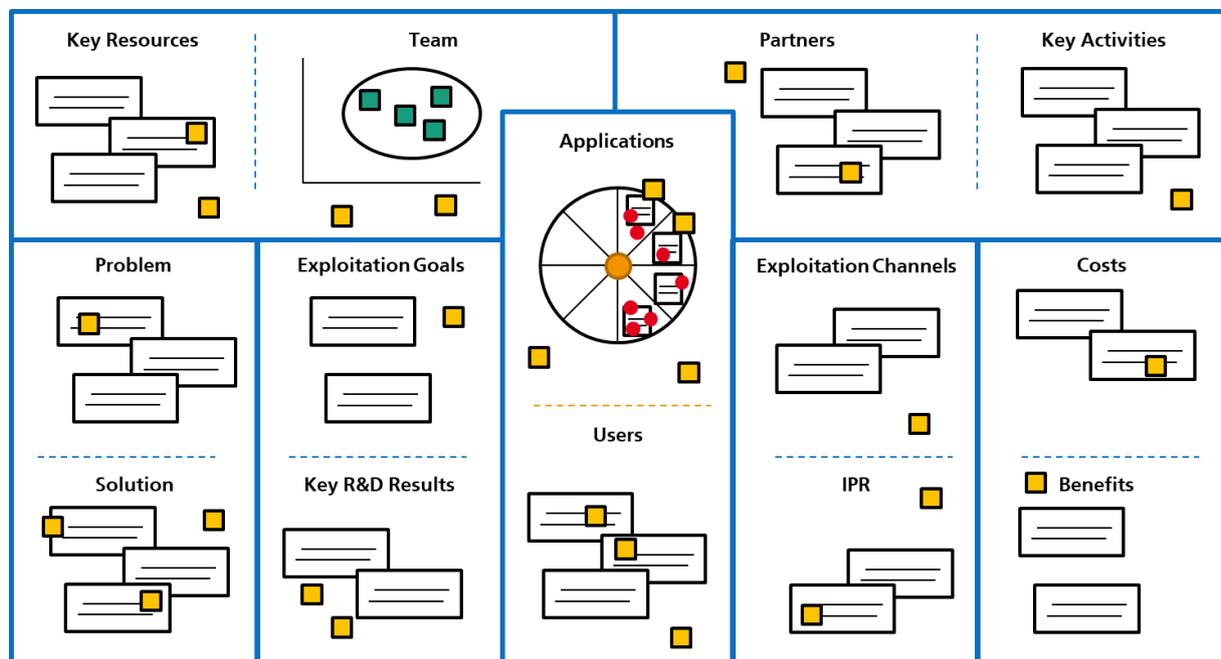
organizational and geographical borders, both from Germany and Greece. As a kick-off, a two-day workshop on exploration and ideation took place in June 2019. The first results will be further developed in a second workshop on integration and validation in the first quarter of 2020.

Workshop Design and Goals

The workshop design comprised short key notes by the Fraunhofer IMW in the plenum and discussions within the projects teams as well as the exchange among the 24 project teams. The 24 projects were clustered according to their field of research, their stage of exploitation planning and split in three working groups (blue, green and red working group). The stage of exploitation planning was measured by a self-assessment, carried out prior to the workshop. The (online) survey contained 16 questions with respect to transfer and exploitation of R&D results structured in three dimensions: (1) R&D outcomes, markets and team. Finally, each working group consisted of approx. 20 persons from eight projects.

In a first step, the participants were encouraged to think on specific questions raised by the three moderators. In a second step, the participants were encouraged to share and discuss the results within the project teams. Finally, the projects teams were encouraged to present and discuss the results within the working group. The results of the three working groups were presented and reflected by three rapporteurs in the plenum.

Figure 1: *The Transfer Canvas - A Practical Tool to Develop Innovation Strategies*



Source: Fraunhofer IMW

Each project team was kindly asked to document the results on its own *transfer canvas* depicted in figure 1, a practical tool developed by Fraunhofer IMW that helps to structure and summarize the discussion within each project team. Whereas the first workshop on exploration and ideation focused on the left side of the transfer canvas, the second workshop on integration and validation in the first quarter of 2020 will focus on the right side of the transfer canvas.

In sum, the first workshop on exploration and ideation met the following objectives:

- Facilitate mutual learning and foster community building among stakeholders;
- Deepen discussions on transfer and exploitation of R&D results;
- Exchange good practices on knowledge and technology transfer;
- Identify areas with large potential or being a gap at the moment for future project steps;
- Provide and develop an individual, guiding “transfer canvas” for each of the projects;
- Decide on next steps towards the successful commercialization of R&D results within each individual project;
- Draw recommendations for innovation policy in both countries addressing the demand to deepen cooperation in applied research, technology transfer and innovation.

Workshop Summary

The workshop was carried out by the immense attention that both German and Greek participants award to joint knowledge and technology transfer. It was officially opened by Professor Costas Fotakis, Alternate Minister of Education, Research and Religious Affairs, Greece; Mr. Thomas Rachel, Parliamentary State Secretary to the Federal Ministry of Education and Research BMBF, Germany; Dr. Patricia Kyprianidou, Secretary General for Research and Technology, Greece; as well as Dr. Steffen Preissler, Head of Knowledge and Technology Transfer Division at the Fraunhofer IMW, Germany.

Figure 2: Official Opening of the Workshop



Source: Fraunhofer IMW

A short presentation of Professor Dr. Alexander Kritikos followed to outline the context of the bilateral cooperation and the framework conditions in both countries. Afterwards, Dr. Maria Christoula, GSRT, and Gisela Cramer von Clausbruch, BMBF, gave an overview of the Greek-German Research and Innovation Programme as well as outlined the program owners’ expectations and goals of the collaboration. The first day concluded with a reception upon the invitation of the BMBF at the residence of the German Ambassador in Athens.

The second day started with a short presentation by Mr. Manuel Molina Vogelsang from the Fraunhofer IMW introducing the contents of the workshop and outlining the preliminary results

of the self-assessment. The following two days have been structured in three sessions: (1) Reflecting the willingness and capabilities to transfer of the individuals involved in the collaborative projects, (2) aligning the individual perspectives by creating a shared vision of the project context and potential market applications as well as (3) critically reflecting on the commercial context and to derive practical next steps to be taken by the project teams. In a friendly and vibrant atmosphere, the project teams were given the opportunity to reflect on transfer aspects of their respective projects in an innovative and very interactive way.

Figure 3: *Setting the Scene – Introduction to the Workshop Approach*



Source: Fraunhofer IMW

The first working session was dedicated to the reflection on motives, incentives and experiences of the participants in commercializing R&D results. The second working session addressed the alignment amongst the project members in terms of the envisioned project results, project context (problem and proposed solution) and prioritizing potential market applications. The fruitful and vibrant discussions in the project teams indicate that the alignment among the project partners supports the potential commercialization of R&D results. It became clear that a shared understanding and alignment among team members is an important enabler for the development of a common transfer vision.

Figure 4: *Fruitful and Vibrant Discussions among Project Teams*



Source: Fraunhofer IMW

Furthermore, knowledge and technology transfer as well as exploitation of R&D results is a complex process. Due to the underlying context dependency, “one-size fits all solutions” are not applicable. To this end, the third working session focused on the necessary next steps to transfer publicly funded R&D results in useful applications in economy, politics and society. The project teams were encouraged to discuss and define the exploitation goals, specific user groups and key resources needed to reach their goals. The discussions among projects members helped formulate or to get closer to a shared vision with regard to the future practical application of the jointly generated R&D results.

Figure 5: Reflection of the Workshop Results in the Plenum



Source: Fraunhofer IMW

The last part of the workshop was designed to summarize the results of the working groups and to draw recommendations for the enhancement of the German-Greek collaboration in research and innovation. After a discussion and reflection of the workshop results, the concluding remarks were given by Dr. Maria Christoula, GSRT, and Gisela Cramer von Clausbruch, BMBF. The feedback given by the participants was very positive, expressing the hope that this workshop serves as starting point for concrete actions addressing value enhancement in cross-border and cross-organizational transfer projects.

Workshop Conclusions and Lessons Learned

The openness and willingness of the participants to engage in constructive discussions as well as the active contributions made by all participants were crucial to secure the success and tangible outcomes of this workshop. The discussion and reflection of the workshop results at the end of the second day resulted in recommendations for developing and extending the promising collaboration on a bi-national level.

A key outcome of the workshop on the projects' side is that there is ample scope for value enhancement by facilitating the attendance of all project partner to workshops on knowledge and technology transfer. Especially the presence of private company representatives adds important contributions when it comes to the practical utilization of the project results. The introduction of the transfer canvas as well as the approach to start filling it as a project team has been named as a good way to complement the research with a commercial perspective on the projects.

Furthermore, the work in groups of five to six projects, and the presentation of the key results within this setting, served as a good way to combine discussions on a project-level with networking efforts.

On the programme owners' side, key outcomes of the workshop confirm the importance given to this kind of collaboration by both countries. The discussion in many project teams on synchronizing the collaboration by further harmonising the administrative approach to the programme implementation would be highly appreciated. The facilitation of learning formats and guidance in knowledge and technology transfer for this type of cooperation also add measurable value and help focussing the projects towards successful transfer. However, during the discussions in many project teams it became clear how important is the presence of all project partners in these workshops.

Outlook

Within three working sessions, each project team started working on its own transfer canvas. The second part of the workshop will take place in the first quarter of 2020, most probably in Bonn or Berlin, Germany. It will provide the project teams the opportunity to finalize the transfer canvas and to translate the first ideas and assumptions in a transfer strategy. To build on their already existing results and in order to allow the projects to develop the transfer canvas further, the following next steps have been agreed:

- Provide a short workshop documentation, including a photo documentation of the transfer canvas. The documentation will be send by the team from the Fraunhofer IMW to each project team individually prior to the workshop;
- Invite the project teams to actively use and rework their individual transfer canvas as a structured and systematic method to define and to focus, strength and gaps of the project-level transfer strategy;
- Engage the project teams to validate their first ideas of the project-level transfer strategy with potential users. In preparation of the next workshop in the first quarter of 2020, the team from the Fraunhofer IMW will prepare a short guideline to gather four to five external feedbacks from potential users of the R&D results.

Workshop Agenda

June 11, 2019

16:00 – 17:00 **Registration**

17:00 - 17:45 **Welcome Addresses & Introduction**

Prof. Costas Fotakis, Alternate Minister for Research and Innovation

Thomas Rachel, Parliamentary State Secretary to the Federal Minister of Education and Research

Dr. Patricia Kyprianidou, Secretary General for Research and Technology

Dr. Steffen Preissler, Fraunhofer IMW

Moderator: Dr. Sotiris Pavleas, Special Advisor to the Secretary General for Research & Technology, GSRT

17:45 - 18:15 **Keynote Speech: From Basic Research to Innovate Products: Cooperation between Greek and German Innovators**

Prof. Alexander Kritikos, DIW

18:15 - 18:45 **Overview, Expectations and Goals of the Greek-German Research and Innovation Programme**

The Greek perspective: Dr. Maria Christoula, GSRT

The German perspective: Gisela Cramer von Clausbruch, BMBF

20:00 **Reception**

upon invitation of the BMBF at the residence of the German Ambassador in Athens

June 12, 2019

- 09:00 - 09:30 Registration / Welcome coffee
- 09:30 - 09:55 **Welcome and Introduction to the 2nd Day**
 Moderator: Dr. Karen Böhme
- 09:55 - 10:15 **Strategic networking to enhance knowledge and technology transfer in international cooperation**
 Manuel Molina Vogelsang, Fraunhofer IMW
- 10:15 – 10:45 **Coffee Break**
- 10:45 - 12:45 **Transfer Co-Creator: Who is involved in the transfer?**
 (Presentation in plenary and then parallel working groups)
 Henrik Beermann, Fraunhofer IMW
- | <i>Blue Working Group</i> | <i>Red Working Group</i> | <i>Green Working Group</i> |
|---|--|--|
| Moderator: Jördis Winkler & Henrik Beermann, Fraunhofer IMW | Moderator: Dr. Friedrich Dornbusch, Fraunhofer IMW | Moderator: Dr. Steffen Preissler, Fraunhofer IMW |
| Rapporteur: Dr. Monika Wächter, PT-DLR | Rapporteur: Kerstin Annassi PTJ | Rapporteur: Daniel Geyer, PT-DLR |
- 12.45 – 14:00 Lunch
- 14:00 - 16:00 **Create a Common Transfer Vision: What shall be transferred?**
 (Presentation in plenary and then parallel working groups)
 Jördis Winkler, Fraunhofer IMW
- | <i>Blue Working Group</i> | <i>Red Working Group</i> | <i>Green Working Group</i> |
|---|--|--|
| Moderator: Jördis Winkler & Henrik Beermann, Fraunhofer IMW | Moderator: Dr. Friedrich Dornbusch, Fraunhofer IMW | Moderator: Dr. Steffen Preissler, Fraunhofer IMW |
| Rapporteur: Dr. Monika Wächter, PT-DLR | Rapporteur: Kerstin Annassi PTJ | Rapporteur: Daniel Geyer, PT-DLR |
- 16:00 - 16:30 **Coffee Break**

16:30 - 17:30 **Wrap-Up**

(Report from the 3 parallel working groups)

Kerstin Annassi (PTJ), Daniel Geyer (PT-DLR), Manuel Molina Vogelsang (IMW), Monika Wächer (PT-DLR)

Moderator: Dr. Karen Böhme

June 13, 2019

09:00 - 09:30 **Start of Workshop**

09:30 – 09:45 **Summary of 2nd Day, Outlook on 3rd Day**

Moderator: Dr. Karen Böhme

09:45 - 11:45

From Research to Market: How the results can be transferred?

(Presentation in plenary and then parallel working groups)

Dr. Friedrich Dornbusch, Fraunhofer IMW

Blue Working Group

Moderator: Jödis Winkler & Henrik Beermann, Fraunhofer IMW

Rapporteur: Dr. Monika Wächter, PT-DLR

Red Working Group

Moderator: Dr. Friedrich Dornbusch, Fraunhofer IMW

Rapporteur: Kerstin Annassi PTJ

Green Working Group

Moderator: Dr. Steffen Preissler, Fraunhofer IMW

Rapporteur: Daniel Geyer, PT-DLR

11:45 - 12:30 **Wrap-up and Panel discussion**

Kerstin Annassi (PTJ), Dr. Maria Christoula, GSRT, Daniel Geyer (PT-DLR), Manuel Molina Vogelsang (IMW), Dr. Steffen Preissler, Monika Wächer (PT-DLR)

12:30 - 12:45 **Outlook**

Manuel Molina Vogelsang, Fraunhofer IMW

12:45 – 13:00 **Farewell Greetings**

Gisela Cramer von Clausbruch, BMBF

Dr. Maria Christoula, GSRT

13:00 – 14:00 **Farewell Lunch / Snack**