

## 4.1 Final publishable summary report

### 4.1.1 An Executive Summary

The KORRIDOR project started with the basic idea of maintaining a balance between the opportunities for Korean researchers to participate in European Research and Technology Development (RTD) programmes and those of European researchers in Korean RTD programmes. Therefore, the objectives of the project are firmly based on the understanding that the balance is an important prerequisite for stimulating mutually beneficial RTD cooperation between Korea and the EU. Thus, the project's final objective is to widen and strengthen the RTD cooperation between both sides within the research areas that have common interests. To attain the final objective, the project has the following operational objectives: 1) to map and document existing access opportunities for Europeans in Korean RTD programmes, to study and harmonize existing best practices of European participation, and to identify the major barriers hindering participation on both sides; 2) to facilitate the participation of European researchers in Korean RTD programmes by setting up a Helpdesk service and training potential multipliers; and 3) to raise awareness of the access opportunities for European organizations/researchers in Korean RTD programmes among European research communities and to stimulate interests from the European side.

The KORRIDOR consortium created a work plan structure that consists of four work packages: 1) WP1: Mapping and Policy Recommendations; 2) WP2: Dissemination and Liaison Building; 3) WP3: Capacity Building; and 4) WP4: Management and Coordination. For the past 28 months, the consortium produced five public reports, seven restricted reports, one public project website, and a number of training and promotion materials that are open to the public. The consortium also published three useful reports, *Policy paper, Participation Guidelines, and Monitoring report*, which provided us with a deeper understanding of the quantitative and qualitative status of European participation in Korean RTD programmes, and gave us political and practical recommendations and tips that can be used to increase European participation in Korean RTD programmes.

In terms of dissemination activities, KORRIDOR partners performed 101 activities aimed at both European and Korean S&T officers, multipliers, researchers, funding agents, and managers of R&D international cooperation centres during the project periods. The types of dissemination activity varied considerably and included workshops (7), events (4), conferences (1), flyer production (1), newsletter publication (2), Info day brochure production (1), website establishment (3), publication of information through website (3), presentations at other events (36), circulation of information by hosting small or one-to-one meetings (32), and others (11). We believe that such a large number of dissemination activities have raised awareness of Korean RTD programmes by the European research community.

Finally, the consortium would like to suggest the following recommendations and top tips.

#### **For both of Korea and EU policy makers:**

- Raise awareness among European researchers.
- Set up clear information systems for Europeans on Korean RTD programmes.
- Publish calls in English.
- Increase the Korean RTD budget allocated to international cooperation.
- Address the need for a centralized data system to monitor European participation in Korean RTD programmes, and provide in-depth statistics and analysis.
- Strengthen the role of European organizations that have outsourced to Korea in building awareness.
- Keep European scientific attachés informed of opportunities.

- For better reciprocity between Korea and EU, both sides need to reach mutual agreement at a higher political level to remove difficulties and ease restrictions in fund sourcing from counterpart countries.

***For individual European researchers:***

- Conduct your partner search in the months leading up to Korean RTD programme calls.
- For the application and negotiation phases, having a Korean colleague act as a cultural and linguistic intermediary would be very helpful.
- Check the eligibility of your Korean counterparts.
- Before beginning the cooperation, an assessment of the leadership ability of your Korean counterpart should be conducted, particularly if he/she is to be the project coordinator.
- Establish good personal relations with your partners, as this factor is vital for a successful cooperation. A face-to-face meeting at the beginning of the project is recommended.
- Factor in a possible visit to Korea at either the evaluation or signing stage.
- Establish a solid agreement and ensure that aspects concerning IPR and accessibility to data and results are clear from the beginning.
- Familiarize yourself with the Korean work culture and behaviour before embarking on the cooperation.
- If you intend to stay in Korea for some time, learn the alphabet and some basic vocabulary.

#### 4.1.2 Summary Description of Project Context and Objectives

##### Project Context

According to *IMF's Global Economic Forecast*, the Korean economy will be ranked on 12<sup>th</sup> out of 184 countries in terms of purchasing power parity (PPP) in 2012. Korea is recognized as a market leader in electronics, mobile communications, and automotive sectors, as well as the strongest country in IT. Moreover, Korean RTD expenditures are above 4% of the country's GDP, well above the European and OECD average. For these reasons, Korea takes the centre stage as one of the most attractive partners of the European Union (EU) in the global economy.

The first contact between European and Korean researchers and science and technology (S&T) authorities was established in the 1990s. With the growing importance of S&T cooperation between both parties, the *EU-Korean Framework Agreement on Trade and Cooperation* came into effect in April 2001, and *The Agreement on S&T Cooperation* between the Korean Government and the European Community was signed in November 2006. This agreement emphasized '*the principle of reciprocity*' in providing access to RTD programmes of both parties. The principle is a new commitment that is crucial to building a fair and mutually beneficial S&T cooperation.

Taking into account the remarkable growth of Korean economy and long-term relationship of EU-Korean S&T cooperation, the project started from the following conceptual pillars:

- **Reciprocity of EU-Korea S&T agreement**

Although the recently signed *S&T Agreement* provides a solid legal ground for fostering further cooperative networks, the participation of European researchers in Korean RTD programmes still remains '*terra incognita*'. The participation of Korean researchers in European RTD programmes is more developed than that of European researchers, but participation is still limited. Therefore, there is a clear need to convert political statements, such as the *S&T Agreement*, into concrete opportunities for joint research projects.

- **Direct involvement of Korean RTD agencies**

To succeed in opening up Korean RTD programmes to the European research community, direct access to information on Korean R&D system, funding opportunities, practicalities, legal frameworks, IPR protection rules, procedures, and market access rules is a prerequisite. Thus, the direct involvement of Korean RTD agencies that produce the information as well as plan, implement, and support Korean RTD programmes in the project activities is necessary to guarantee that these initiatives have real impact.

- **Identification of barriers hindering reciprocity**

In considering the short history of international cooperation of Korea with EU in the S&T field, the KORRIDOR consortium recognized that the project needs to focus on the identification of potential legal, organizational, financial, and cultural barriers that could hinder reciprocity. In such circumstances, the project should initiate necessary changes by notifying the national authorities and the Joint Committee of the S&T Agreement, and suggesting optimal solutions.

- **Coordination of KESTCAP and KORANET for the project**

To deliver a synergistic impact, all activities stimulating EU-Korea S&T cooperation plans should be built upon and coordinated with flagship initiatives in this field. These initiatives include KESTCAP 'Korea-EU S&T Cooperation Advanced Programme', of which NRF is the coordinator and KIST Europe is a core participant, and KORANET, of which DLR is the coordinator and CNRS is a principal participant.

- **Enhancement of sustainability of project results though existing networks**

A viable and durable facilitation system that is capable of fast and effective support to European and Korean researchers is a prerequisite for sustainability of the project results. The project builds on a multi-level and multi-faceted support network made available by the EU (NCPs, IRCs, networks of EU liaison officers, consultancies) to facilitate bilateral partnerships that seek funding from Korean resources.

- **Application of significant dissemination strategies**

A targeted and effective dissemination strategy is a key to delivering an impact in disseminating strategies. The project dissemination activities are intended to fulfil several objectives, namely: (i) to radically increase the visibility of Korean RTD potential in Europe, particularly in thematic domains wherein the participation of Europeans can help attain Korean S&T objectives; (ii) to produce accessible, ‘easy-to-use’, and well-promoted information materials on Korean funding opportunities through various channels; and (iii) to engage with all major players, such as funding agencies, other relevant projects, services, and multipliers, as well as with wider research communities, to optimize the long-lasting positive effects of the project.

### **Project Objectives**

The project’s basic idea is maintain the balance between the opportunities for participation of Korean researchers in European RTD programmes and that of the opportunities for participation of European researchers in Korean RTD programmes. Therefore, the objectives of the project are firmly based on the understanding that the balance is an important prerequisite in stimulating a mutually beneficial RTD cooperation between Korea and the EU. Thus, the project’s final objective is to widen and strengthen the RTD cooperation between both sides within research areas that cover their common interests.

To attain the final objective, the project has the following operational objectives:

- **To map and document**

The project intends to map and document existing access opportunities for Europeans in Korean RTD programmes, to study and harmonize existing best practices of European participation, and to identify the major barriers hindering participation on both sides.

- **To facilitate participation**

The project contributes in facilitating the participation of European researchers in Korean RTD programmes by setting up a Helpdesk service and training potential multipliers. The Helpdesk provides fast and free consulting and advice services on access opportunities, as well as legal, organizational, financial, and cultural issues. The Helpdesk also monitors the participation of European researchers in Korean RTD programmes, and distributes this information to all stakeholders. Additionally, the project employs the ‘*training-of-trainers*’ measures focused on existing multipliers: European INCO NCPs and all Korean FP7 NCPs. The measures enable multipliers to help potential Korean and European participants in RTD programmes to search for partners, build consortia and provide consulting and advice services.

- **To raise awareness**

The project aims to raise awareness of the access opportunities for European organizations/researchers in Korean RTD programmes among European research communities, and stimulate interest from the European side.

#### 4.1.3. Description of the main S&T results/foreground

The project created a work plan structure that consists of four work packages. Each work package pursued the corresponding three objectives: to map and document, to facilitate participation, and to raise awareness, plus management. The interconnections between each work package and objectives, and the outcomes delivered by KORRIDOR consortium are shown in the following table.

Objective	WP Title	Del. No.	Deliverable Title	Leader	Nature <sup>1</sup>	Dissemination Level <sup>2</sup>
To map and document	WP1: Mapping and Policy Recommendations	D1.1	Policy Paper, 'Access opportunities for European researchers in Korean RTD programmes: Status and recommendations'	KIST Europe	R	RE Summary is in PU
		D1.2	Korean RTD programmes: 'Participation Guidelines for Europeans'	CNRS	R	PU
		D1.3	FAQ 'Access opportunities for European researchers in Korean RTD programmes'	CNRS	R	PU
To facilitate participation	WP2: Dissemination and Liaison Building	D2.1	Plan for the Use and Dissemination of Foreground	KIST Europe	R	RE
		D2.2	Web page 'Korean Science System and cooperative opportunities for Europe' in the common web portal for the ACCESS4EU projects	KIST Europe	O	PU
		D2.3	Project dissemination events report	DLR	R	RE
		D2.4	Set of promotional materials 'Opening up Korean RTD potential'	DLR/ CNRS/ KIST Europe	O	PU
		D2.5	Liaison-building analytical report	DLR	R	RE
To raise awareness	WP3: Capacity Building	D3.1	Helpdesk for Europeans: Description and service report	KIST Europe	R	RE
		D3.2	Monitoring Report on the participation of European organizations in Korean RTD programmes	CNRS	R	PU
		D3.3	Set of Training Materials for European and Korean multipliers (presentations, hand-outs, and so on)	CNRS/ DLR/ KIST Europe	P	PU
		D3.4	Training activities report	KIST Europe	R	RE
		Extra	List of principal Korean	KIST	R	PU

<sup>1</sup> Please indicate the nature of the deliverable using one of the following codes:

R = Report, P = Prototype, D = Demonstrator, O = Other

<sup>2</sup> Please indicate the dissemination level using one of the following codes:

PU = Public

PP = Restricted to other programme participants (including the Commission Services)

RE = Restricted to a group specified by the consortium (including the Commission Services)

CO = Confidential, only for members of the consortium (including the Commission Services)

Objective	WP Title	Del. No.	Deliverable Title	Leader	Nature <sup>1</sup>	Dissemination Level <sup>2</sup>
			research institutions for European researchers	Europe		
Management	WP4: Management and Coordination	D4.1	Periodic progress report	KIST Europe	R	RE
		D4.2	Final project reports	KIST Europe	R	PU

The KORRIDOR consortium produced five public reports, seven restricted reports, one public project website, and several training and promotion materials, which have been opened to the public. Most of reports related to '*WP2: Dissemination and Liaison Building*' and '*WP3: Capacity building*', and are described at full length in sections *4.1.4: Potential impact and main dissemination activities*, *4.1.5: Project public website and others*, and *4.2: Use and dissemination of foreground*. Therefore, in this section, we focused on explaining all three reports related to '*WP1: Mapping and Policy Recommendations*' and two reports associated with WP3, that of *Monitoring Report and List of Principal Korean Research Institutions*. We need to look in particular at three reports of *Policy paper*, *Participation Guidelines and Monitoring Report* because they can provide us with a deeper understanding of the quantitative and qualitative status of European participation in Korean RTD programmes, as well as give political and practical recommendations or tips for increasing European participation in Korean RTD programmes. Therefore, this section is devoted mostly to the three reports, compared to other reports.

### **Policy Paper, 'Access opportunities for European researchers in Korean RTD programmes: Status and recommendations'**

- **Brief information of 'Policy Paper'**

**Deliverable title:** D.1.1 – Policy Paper, ‘Access opportunities for European researchers in Korean RTD programmes: Status and recommendations’

**Related work package:** WP1: Mapping and Policy Recommendations

**Deliverable leader:** KIST Europe

**Author(s):** Dr. Taeyoung Park, Moon Jung Kang, and Jihyoun Park

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**Dissemination level:** Restricted except for summary

**Final submission date:** November 2011

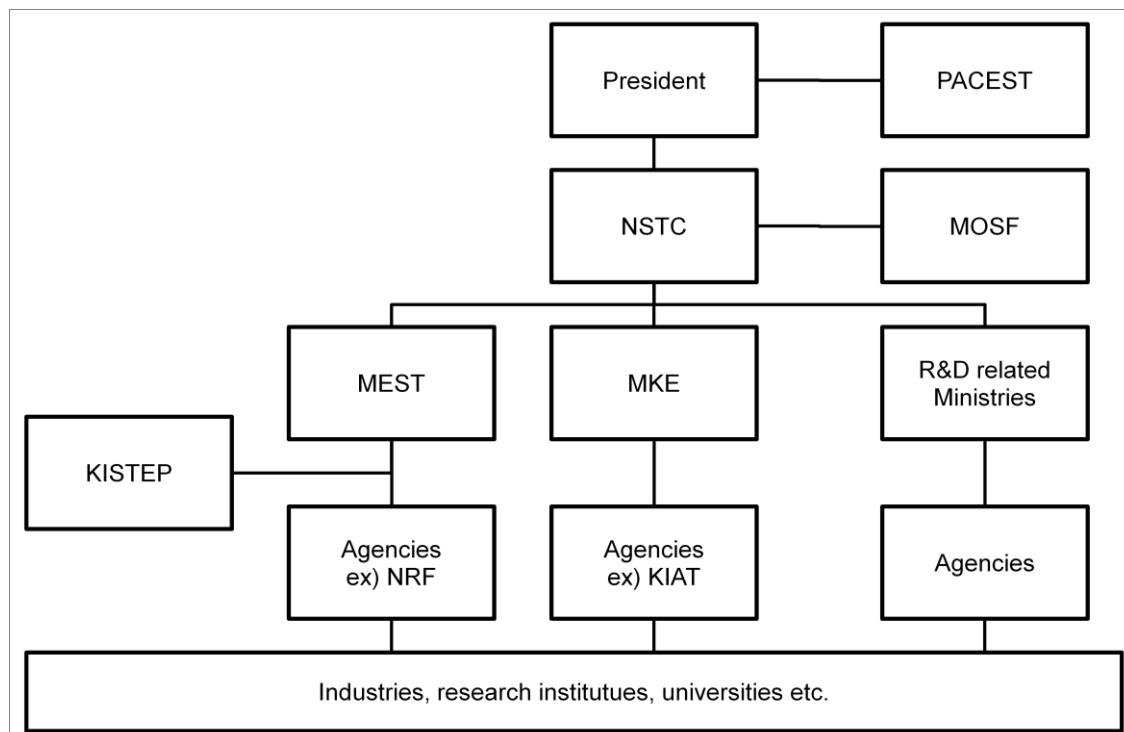
**Summary:** The report gives an overview of Korean R&D programmes supporting global research collaboration. In addition, it shows the present status of international cooperation and participation of European scientists in Korean R&D programmes. Key issues in facilitating the participation of EU scientists in Korean R&D programmes are discussed

- **Construction of the 'Policy Paper'**

The report is composed of four parts. Following the introductory chapter, Chapter 2 gives an overview of Korean R&D and capacity building programmes, which includes the main Korean R&D programmes that actively support global research collaboration. Chapter 3 shows the current status of international cooperation in Korean R&D programmes and the participation of European researchers. The final chapter discusses the key issues in facilitating the participation of European researchers in Korean R&D programmes. We will describe the main findings by chapter in the following section.

- **Current access opportunities in Korean R&D programmes**

The Korean R&D system is highly centralized and coordinated by the National Science and Technology Council (NSTC). Established in 1999, the NSTC is the highest decision-making institution in Korean S&T innovation policies. The NSTC is responsible for planning and coordinating major policies to promote S&T. On the other hand, the Ministry of Education, Science, and Technology (MEST), Ministry of Knowledge and Economy (MKE), and other R&D-related ministries are responsible for supporting the activities of the NSTC. The Presidential Advisory Council on Education, Science, and Technology (PACEST) creates mid- and long-term education and S&T policies, identifies major challenges that may arise in the future, presents ways to overcome these challenges, and thrives from a forward-looking perspective. The Ministry of Strategy and Finance (MOSF) is in charge of distributing resources efficiently and assessing the effectiveness of budget execution. The Korea Institute of Science and Technology Evaluation and Planning (KISTEP) helps the MEST work efficiently by serving as secretariat to the NSTC, carries out policy planning in S&T, predicts future technology, draws up a complete road map, carries out surveys and analysis, and establishes guidelines for future R&D investment. Each Ministry has one more funding agency that manages the Korean national R&D programme, controls their qualities, and supports innovative organizations, such as industries, public research institutions, and universities (see Figure 1).



**Figure 1. Structure of the Korean research system**

Source: ERAWATCH website (2010), National profiles of Republic of Korea<sup>3</sup>

The R&D expenditure as a percentage of GDP in Korea is approximately 3.47%, and is one of the highest in the world, along with Sweden. However, the total R&D amount is not as much as that of the United States, Japan, Germany, and France (the 2006 average rate of OECD countries was 2.26%). The main goal of the plan of the Lee Myung Bak administration is to amplify the national growth potential by increasing the gross expenditure in R&D from 5.57 billion Euros in 2009 to 6.12 billion Euros in 2010. The plan aims for an annual growth rate of 10.7% (see Table 1).

Table 1. Annual R&D budget of the Korean government (2008–2012)

<sup>3</sup> <http://cordis.europa.eu/erawatch/index.cfm?fuseaction=ri.content&topicID=4&countryCode=KR>

Year	2008	2009	2010	2011	2012	(Unit: billion Euros)
						Annual Growth Rate
Annual budget	5.03	5.57	6.12	6.76	7.53	10.7%

Source: NSTC (2008), Basic Plan of Science and Technology 2008–2012

Among over 18 Korean Ministries, MEST and MKE most actively invest in R&D and lead the activities of international cooperation in S&T. The sum of the 2010 annual R&D budget of both ministries was over 65% (MEST at 32.1% and MKE at 32.2% of total R&D budget in 2010). In terms of international cooperation RTD programmes, MEST has operated two representative programmes, *Global Research Laboratory (GRL)* and *Global Research Network (GRN)*, whereas MKE has operated five representative programmes, namely, *Strategic Technology Development*, *Need-driven Technology Development*, *Global Market-oriented Technology Development*, *EUREKA*, and *Funding of Participation in EU FP*. The first three programmes belong to the *Bilateral international collaborative R&D* category, whereas the last two programmes belong to *Multilateral European collaborative R&D* category.

- **Status of cooperation with European researchers in Korean R&D and capacity building/mobility programmes**

Korean international cooperation performance within national R&D projects in 2009 was as follows:

- Total Korean national R&D projects: 38,210 projects
- Total international cooperation projects out of Korean national R&D projects: 1,020 projects
- Total Korean international cooperation projects over total national R&D projects: 2.6%
- Total Korean international cooperation cases: 2,242 cases
- Total European participation cases in Korean international cooperation cases: 590 cases
- Total European participation cases over total Korean international cooperation cases: 26.3%

Table 2 shows that among European countries, Germany was the most active (121 cases, 5.4%) in 2009. Similarly, France (97 cases, 4.3%) and the UK (96 cases, 4.3%) also had a significant participation rate. Among the associated countries, Israel reached 2.0% with 45 cases in 2009.

Table 2. Participation status of European countries in Korean international cooperation projects (2009)

Country	Cooperation		Country	Cooperation	
	Cases	Portion (%)		Cases	Portion (%)
Germany	121	20.5	Belarus	5	0.85
France	97	16.4	EU	5	0.85
UK	96	16.3	Turkey	5	0.85
Inter. <sup>4</sup>	45	7.63	Finland	5	0.85
Israel	45	7.63	Norway	4	0.68

<sup>4</sup> Inter. simplifies multilateral funding programs, in which institutions from more than three countries participate.

Country	Cooperation		Country	Cooperation	
	Cases	Portion (%)		Cases	Portion (%)
Italy	37	6.27	Portugal	4	0.68
Sweden	24	4.07	Austria	2	0.34
Switzerland	20	3.39	Hungary	2	0.34
Romania	19	3.22	Latvia	1	0.17
Spain	16	2.71	Lithuania	1	0.17
Netherlands	11	1.86	Bulgaria	1	0.17
Czech Republic	9	1.53	Slovenia	1	0.17
Belgium	8	1.36	Croatia	1	0.17
Denmark	5	0.85	Total	590	100.00

Source: NSTC and MEST (2010), 2010 National R&D Investigation and Analysis Report

The following tables show the statistics for European participation cases within Korean government-funded international R&D programmes in terms of research stage, organization type, research area, cooperation type, and project funded by the MEST and MKE.

Table 3. Top 10 European countries participating in Korean international R&D programmes in 2009: By research stage

Country	Basic		Applied		Development		Others		Total
	Cases	%	Cases	%	Cases	%	Cases	%	
Germany	59	4.7	32	7.0	17	4.4	13	9.3	121
France	60	4.8	19	4.2	13	3.4	5	3.6	97
UK	66	5.2	13	2.9	13	3.4	4	2.9	96
Russia	30	2.4	10	2.2	22	5.7	5	3.6	67
Israel	5	0.4	8	1.8	30	7.8	2	1.4	45
Italy	21	1.7	7	1.5	5	1.3	4	2.9	37
Sweden	19	1.0	7	1.5	4	1.0	0	0	24
Switzerland	10	0.8	4	0.9	6	1.6	0	0	20
Rumania	12	1.0	5	1.1	2	0.5	0	0	19
Spain	7	0.6	5	1.1	4	1.0	0	0	16
<b>Sub-total</b>	<b>289</b>	<b>22.9</b>	<b>110</b>	<b>24.1</b>	<b>116</b>	<b>30.5</b>	<b>33</b>	<b>23.6</b>	<b>542(24.2)</b>
<b>Total</b>	<b>1,260</b>	<b>100</b>	<b>456</b>	<b>100</b>	<b>386</b>	<b>100</b>	<b>140</b>	<b>100</b>	<b>2,242</b>

Source: KISTEP (2011), Analysis of investment and performance of government-funded international R&D collaboration

Table 3 shows that Germany had the highest rate of participation in Korean international R&D programmes and was the most active at the applied stage (32 cases, 7.0%). Germany also had the highest participation number (59 cases, 4.7%) at the basic research stage. The subtotal number also shows that top 10 European countries participated in R&D programmes more at the basic stage (289 cases, 22.9%) than at the other stages. However, the ratio of the participation of the top 10 European countries over total participation shows a completely different result, and indicates that the highest participation rate was at the development stage (116 cases, 30.5%) rather than at the basic stage.

Table 4. Most active European countries participating in Korean international R&D programmes in 2009: By organization type

Country	University		Country	Research Institute	
	Cases	Ratio (%)		Cases	Ratio (%)
Germany	72	6.0	Germany	32	5.2
France	62	5.2	France	29	4.8
UK	61	5.1	UK	25	4.1
Russia	28	2.3	Russia	23	3.8
Italy	22	1.8	Israel	18	3.0
Sweden	18	1.5	Czech	8	1.3
Switzerland	15	1.3	-	-	-
Rumania	14	1.2	-	-	-
<b>Subtotal</b>	<b>292</b>	<b>24.4</b>	<b>Subtotal</b>	<b>135</b>	<b>22.1</b>
<b>Total</b>	<b>1,193</b>	<b>100</b>	<b>Total</b>	<b>610</b>	<b>100</b>

Source: KISTEP (2011), Analysis of investment and performance of the government-funded international R&D collaboration

Table 4 shows the most active European countries, with Germany at the top of the list. The table also shows that most European countries participated in Korean international R&D programmes in the form of university rather than research institute.

Table 5. Most active European countries participating in Korean international R&amp;D programmes in 2009: By research area

	Ger.	Fr.	UK	Isr.	Ita.	Swe.	Swi.	Rum.	Spa.	Ukr.	Sub Total	Total
Physics	22	18	13	0	9	14	3	1	2	3	85(22%)	379
Atom Energy	15	28	10	1	2	2	7	2	2	2	71(28%)	258
Life Insurance	9	6	19	2	1	2	0	3	1	0	43(17%)	256
Health/Medicine	13	1	5	3	0	1	2	4	1	0	30(19%)	158
Mechanics	15	3	2	2	1	1	0	0	0	5	29(19%)	152
Electricity/Electronics	8	9	6	12	4	1	2	0	5	0	47(31%)	151
Material Engineering	7	1	3	6	2	2	0	2	2	1	26(18%)	143
Chemistry	8	6	1	0	3	0	0	0	2	0	20(19%)	105
Other Areas	23	24	37	19	14	1	5	7	1	3	134(21%)	627
Subtotal	120	96	96	45	36	24	19	19	16	14	485(22%)	2,229
	5.4%	4.3%	4.3%	2.0%	1.6%	1.1%	0.9%	0.9%	0.7%	0.6%		

Source: KISTEP (2011), Analysis of investment and performance of the government-funded international R&D collaboration

The subtotal of Table 5 shows that when participating in Korean international R&D programmes, most active European countries mainly preferred the physics area (85 cases, 22%) except for 'other areas'. However, according to the percentage of European participation over total participation, European countries most actively participated in the electricity and electronics areas (47 cases, 31%).

Table 6. Most active European countries participating in Korean international R&amp;D programmes in 2009: By cooperation type

	Inter. Agreement	Training	Dispatching Researchers	Inviting Foreign Researchers	Research Outsourcing via Sub-contracting	Information Exchange
Germany	16	1	35	42	13	14
UK	19	1	21	39	8	8
France	11	2	27	41	0	16
Israel	25	15	1	3	1	0
Italy	11	0	12	9	1	4
Sweden	2	6	4	10	0	2
Switzerland	3	2	6	3	2	4
Rumania	2	0	8	5	0	4
Spain	6	0	1	6	0	3
Ukraine	1	0	0	5	8	0
<b>Sub Total</b>	<b>96(26%)</b>	<b>27(43%)</b>	<b>115(29%)</b>	<b>163(18%)</b>	<b>33(12%)</b>	<b>55(22%)</b>
<b>Total</b>	<b>368</b>	<b>63</b>	<b>392</b>	<b>896</b>	<b>276</b>	<b>247</b>

Source: KISTEP (2011), Analysis of investment and performance of government-funded international R&D collaboration

When we look at the European participation by cooperation type in terms of subtotal number, Table 6 shows that the most active European countries mainly preferred inviting foreign researchers (163 cases, 18%). However, according to the percentage of European participation over total participation, European countries participated most largely in training (27 cases, 43%).

Table 7. Top 5 European countries participating in MEST projects (2008)

Country	Number of participation cases	Ratio (%)
France	39	29.8
Germany	28	21.4
Italy	21	16.0
UK	12	9.2
Romania	10	7.6
<b>Total</b>	<b>131</b>	<b>100.0</b>

Source: NRF (2008), Internal data

Table 8. Top 5 European countries participating in MKE projects (2010)

Country	Cases	Ratio
Germany	14	14.4%
Spain	14	14.4%
Netherland	10	10.3%
UK	7	7.2%
Czech	5	5.2%
France	5	5.2%
Italy	5	5.2%
Total	97	100

Source: KIAT (2010), Internal data

In terms of MEST international collaboration R&D projects in 2008, France was the highest and Germany was the second place in the participation of the MEST projects. Fourteen European countries in addition to the top five European countries mentioned in Table 7 participated in the MEST projects, and the total number of their participation was 131 cases. On the other hand, for the MKE projects in 2010, Germany and Spain were jointly in first place and the Netherlands was in second place in terms of participation in MKE projects. Moreover, 21 European countries in addition to the top five European countries mentioned in Table 8 participated in MKE projects, and the total number participation was 97 cases.

- **Recommendations for policy improvement**

We first presented five major obstacles from both sides that need to be addressed to promote the participation of European researchers in Korean RTD programmes. We then provided several recommendations for both sides.

*Obstacles for the Korea side:*

- Small amount of budget for international cooperation R&D (The budget accounts for merely 1.69% of the total R&D budget);
- Insufficient publicity to European researchers on opportunities in Korean RTD programmes (Korean government still rarely provides opportunities for foreign scientists to take the lead in submitting programme proposals and executing programmes);
- Lack of effective information infrastructure<sup>5</sup> for foreign participants to access information independently and to apply for international cooperation programmes;
- Lack of experts who can manage and evaluate English proposals and supervise projects led by European researchers; and
- Lack of statistics on the current status of foreign participation in Korean RTD programmes to accurately and effectively determine possible methods for improving the existing schemes.

*Obstacles from the EU side:*

- Low level of awareness of Korean RTD programmes and building partnerships (Most European researchers learn of Korean RTD programmes through their personal working relationship with

<sup>5</sup> In 2010, the MKE launched E-PSS (Electronic Proposal Submission System, <http://epss.gtonline.or.kr>), which enables foreign scientist to create and submit their proposals by themselves.

a particular Korean institution rather than through public routes. Additionally, the consortium was built through easily established contacts or through their existing Korean partners);

- For European researchers, the application process of Korean RTD programmes is too quick, and what should be reported on progress is unclear;
- Lack of basic data on the status of European participation, which would be used for in-depth analysis to facilitate better international R&D cooperation between Korea and the EU; and
- Lack of integrated application and evaluation process in the case of FP and Korean government co-funded R&D programmes.

*Recommendations for both sides:*

- Raise awareness among European researchers.
- Set up clear information systems for Europeans on Korean RTD programmes.
- Publish calls in English.
- Increase the Korean RTD budget allocated to international cooperation.
- Address the need for a centralized data system to monitor European participation in Korean RTD programmes and provide in-depth statistics and analysis.
- Strengthen the role of European organizations that have outsourced to Korea in building awareness.
- Keep European scientific attachés informed of opportunities.
- For better reciprocity between Korea and the EU, both sides need to create a mutual agreement at a higher political level to remove the difficulties or restrictions in seeking funding from counterpart countries.

**Korean RTD programmes: 'Participation Guidelines for Europeans'**

• **Brief information on 'Participation Guidelines for Europeans'**

<b>Deliverable title:</b> D.1.2 – Korean RTD programmes: ‘Participation Guidelines for Europeans’
<b>Related work package:</b> WP1: Mapping and Policy Recommendations
<b>Deliverable leader:</b> CNRS
<b>Author(s):</b> Victoria Wong and Sinead Quigley
<b>Authors' contact information:</b> Victoria Wong ( <a href="mailto:victoria.wong@asie-pacifique.cnrs.fr">victoria.wong@asie-pacifique.cnrs.fr</a> )
<b>Dissemination level:</b> Public
<b>Final submission date:</b> November 2011
<b>Summary:</b> The report describes information on how to apply to Korean RTD programmes, how to live and work in Korea, as well as key tips and recommendations for participating in Korean RTD programmes.

• **Construction of 'Participation Guidelines'**

The report is composed of four parts:

- Information on how to apply to six Korean RTD programmes that are open to European researchers and case studies of the experiences of European researchers;
- Information on living and working in Korea;
- Key tips and recommendations for participating in Korean RTD programmes; and

- Useful links and lists of Korean research organisations and universities in the fields covered by the programmes to facilitate matchmaking for the partner search.

- **Six Korean RTD programmes offered to European researchers in 2011<sup>6</sup>**

Six Korean RTD programmes have been identified as suitable for European participation, and are summarized below.

Programme	Programme Owner	Objective	Approximate Funding Range	Research Fields	Calls for Proposals
Strategic technology development (ST)	KIAT	R&D for technology development in areas requiring high innovativeness, spillover effect, and urgency	Max. €470,000 per year 5 years maximum	Display components; cognition software; new materials; robotics (For 2011)	Call publication date: 8 July 2011 Deadline: 7 October 2011 *Prefers domestically led consortia
Needs-driven technology development (ND)	KIAT	Improve the level of domestic technology through collaborations with excellent foreign R&D organizations	Max. €200,000 per year 3 years maximum	Biotechnology; industrial materials; clean manufacturing; shipping systems; robotics; bio/medical devices; electronic and information devices; electronic and information communications media; next-generation mobile communication network; software/computing; knowledge service/USN (Ubiquitous Sensing Networks) and industrial convergence.	Call publication date: 1 February 2011 1 <sup>st</sup> Deadline: 27 May 2011 2 <sup>nd</sup> Deadline: 7 September 2011
Global market-oriented technology development (GM)	KIAT	Supports and helps domestic companies designated as developers of on-demand technologies used by foreign companies	Max. €380,000 per year 3 years maximum	Research themes are very broad. The GRL call includes a broad list of fields. The GRN programme is open to all fields of research.	Call publication date: 1 February 2011 1 <sup>st</sup> Deadline: 27 May 2011 2 <sup>nd</sup> Deadline: 7 September 2011
Global Research Laboratory (GRL)	NRF	Develop new research links between higher education institutions and research laboratories in Korea and other countries	€300,000 per year 3 years (renewable)	Research themes are very broad. The GRL call includes a broad list of fields. The GRN programme is open to all fields of research.	Calls are open during the first trimester of each year for a period of around 6 weeks. 2011: 25 February–mid-April
Global Research Network	NRF	Foster joint international research and networking	€65,000 per year 3 years maximum		The same as the GRL *Coordinator should be an affiliate researcher

<sup>6</sup> This table was documented based on information of 2011 calls published by KIAT, NRF, and KETEP. Detailed information on 2012 calls can be accessed through the KORRIDOR website. For KIAT 2012 calls, ND did not participate in the call, GM has been renamed as 'Global Industry-Academia Cooperation Programme', and KIAT has already designated University of Strathclyde as a European university. Therefore, there is no choice for other European universities to apply to the new GM programme. For NRF 2012 calls, GRN no longer participated in the call. Therefore, NRF has offered only one programme, GRL, for European researchers. In the case of KETEP, any information on 2012 calls has not been opened yet.

Programme	Programme Owner	Objective	Approximate Funding Range	Research Fields	Calls for Proposals
(GRN)		activities between researchers at the top universities of the world and research institutes			of a university or research institute in Korea
International collaborative R&D programme	KETEP	Encourage participation in joint R&D tasks of international partnership programme and support eligible joint R&D programme on electricity, energy efficiency and renewable energy technologies	€100,000–€250,000 per year	Energy	<p>Calls open in summer. In 2011, the call opened on 1 September; Deadline 28 September.</p> <p>*Publication of calls and detailed enforcement guidelines are in Korean.</p>

\* Both KIAT (Korea Institute for Advancement of Technology) and KETEP (Korea Institute of Energy Technology Evaluation and Planning) are agencies under the umbrella of the Ministry of Knowledge and Economy (MKE).

\*\*NRF (National Research Foundation of Korea) is an agency under the umbrella of the Ministry of Education, Science, and Technology (MEST).

- **How to participate in Programmes funded by the Korea Institute for the Advancement of Technology (KIAT) in 2011**

- *What is the application procedure?*

- 1) Call for proposals
- 2) In 2011, KIAT held an information session after the call announcement. Ask your Korean partners to check KIAT's website for similar future events.
- 3) Writing the proposal: relevance of project, economic impact, description of consortium members and roles in the project, and technological overview of the project to be developed. A detailed schedule, budget per year, IPR agreement, and commercialization strategy are also required.
- 4) Prepare budget: for further information see 'The Regulations on Calculation, Management, Use, and Settlement of Project Budget'.
- 5) Prepare necessary documents, such as LOI and MOU, among partners.
- 6) All proposals must be written in English and submitted using the Electronic Proposal Submission System (<http://epss.gtonline.or.kr>) during the specified submission period.

- *How are projects evaluated?*

There is a two-step evaluation process that lasts about two months in total.

- 1) A preliminary review to check documents and ensure that all partners are eligible (2–3 weeks)
- 2) Evaluation committee (4–6 weeks): if necessary, the lead participant (*coordinator*) may be asked to give a presentation.

- **How to Participate in Programmes Funded by the National Research Foundation of Korea (NRF) in 2011**

- *What are the steps involved in applying?*

GRL	GRN
Form partnership with Korean organisations in the months leading up to the call	
Complete guidelines can be found on NRF's website: <a href="http://www.nrf.re.kr">www.nrf.re.kr</a>	
Call publication: end February	Call publication: early March
Proposals are written in English by the Korean coordinator with contributions from other partners	
A preliminary proposal not exceeding 5 pages is required. The proposal must be signed by both Korean and foreign partners and by the authorised representative of the host institution.	N/A
Submission date: end of March	Submission date: Mid-April
Evaluation of preliminary proposal: April	N/A
Public call for full proposal: May	N/A
A full proposal not exceeding 20 pages is required.	N/A
Full proposal submission: May-June. Online submission at <a href="http://maru.nrf.re.kr">http://maru.nrf.re.kr</a>	N/A
Evaluation of full proposal: Mid-June	Evaluation process: May-August
Evaluation results: End of June	Evaluation results: End of August
Finalising budget and signing the contract: July	Finalising budget and signing the contract: 1 week after the results
Project execution: from July	Project execution: from September

- *How are proposals evaluated?*

For the *GRL programme*, the evaluation procedure is composed of two stages.

- 1) First stage: a written evaluation conducted by a panel of experts
- 2) Second stage: an oral presentation in which proposals are evaluated in accordance with the joint presentations given by both the Korean Principal Investigator and the Foreign Principal Investigator

For the *GRN programme*, the evaluation procedure is composed of three stages. (No interview)

- 1) First stage: Eligibility check of documents and information submitted online
- 2) Second stage: Korean expert panel review
- 3) Third stage: Review by international peers

- **How to Participate in KETEP's R&D international cooperation programme in 2011**

- *What is the process for applying?*

- 1) Form a consortium with Korean partners in advance
- 2) Call for proposals: end of June
- 3) Writing the proposal: *The full proposal is written in Korean with a summary in English; an MOU or LOI between lead and participating organizations must be submitted.*
- 4) Deadline for submission: *mid-September*
- 5) Preliminary review by KETEP: *late September*
- 6) Preliminary result announcement: *late September*
- 7) Review panel presentations. The foreign partner is not obliged to attend: *early October*
- 8) Result announcement: *mid-October*.
- 9) Appeals and KETEP budget committee meeting: *late October; refused applications may appeal in some cases; the budget committee decides on the amount that each selected project will receive*
- 10) Final result announcement: *early November*
- 11) Signature of agreement and distribution of funding: *from mid-November; lead and participating organizations must provide a detailed agreement, including budget and IPR issues*

- *What are the criteria that KETEP considers in the evaluation?*

The evaluation is a two-step process divided into two main categories: technological merits (*innovativeness, appropriateness of development plan, research team capacities, technological impact, and clarity of planning*) and objectives, which account for 60% of the evaluation, and economic and commercial feasibility (*possibility for commercialization and impact on market*), which represents 40% of the evaluation points.

- **Case studies of European researchers' experiences**

We introduced four case studies on European researchers' participation in Korean RTD programmes in the report of *Participation Guideline*. This section shows two representative cases of European researchers' experiences in the KIAT and NRF programmes. The findings of the case studies came from interviews with a project leader of a European partner. The rest of cases can be found in the report of *Participation Guideline* at the KORRIDOR website.

- *KIAT's Needs-driven Technology Development Programme Case*

Project title	Development of Security Threats Response Technologies for Trust-Enhanced u-Devices
Project partners	ETRI (Korean partner and project coordinator), Queens University (European partner), and LG CNS (Korean partner)
Project aim	Develop a secure payment system for charging electric vehicles, for example, ensuring that the card used to make a payment is 'unclonable', and then commercializing the product in Korea and/or the UK
Interviewee	Dr. Godfrey Gaston, Queens University, Belfast
Success factors	Description
Clear technology and strategy alignment	<ul style="list-style-type: none"> <li>• Clear technology alignment in the field of data and network security</li> <li>• Technology alignment yet complementary in nature</li> </ul>

	<ul style="list-style-type: none"> <li>• Strategy alignment important to facilitate budget allocation</li> </ul>
Personal relationships/ friendships	<ul style="list-style-type: none"> <li>• Critical to have face-to-face meetings to develop trust and friendships</li> <li>• Staff exchange</li> <li>• Narrow the cultural gap</li> <li>• Learn attitudes of hard work and commitment from Korean partners</li> <li>• Ethics and relationships</li> <li>• Working together harmoniously</li> <li>• Multiple visits to Korea and Belfast</li> <li>• High-level visits</li> <li>• Detailed technical meetings</li> </ul>
Flexible approach to IP	<ul style="list-style-type: none"> <li>• Background IP owned by each institution, royalty-free use for research purposes</li> <li>• Foreground IP ownership in the ratio of effort expended</li> <li>• Licensing income agreed on fair and commercial terms</li> <li>• Neutral country used for any legal requirements</li> <li>• Strong emphasis on commercialization of R&amp;D</li> </ul>
Representatives in Korea	<ul style="list-style-type: none"> <li>• Critical to help with cultural and language communications</li> <li>• Visit support and pre-visit preparation</li> <li>• Ensures very efficient meetings</li> <li>• Support of UK Science and Innovation Korea</li> <li>• CSIT* contracted representative in Korea established the original introduction</li> </ul>

- *NRF's Global Research Network (GRN) Case*

Project title	Zinc deficiency in vascular health and disease
Project partners	Andong National University (Korean partner and project coordinator), (Korean partner and project coordinator), four different labs at the University of Aberdeen (European partner)
Project aim	Demonstrate whether zinc deficiency can influence the development of cardiovascular disease
Interviewee	Professor Graeme Nixon, Institute of Medical Sciences, University of Aberdeen, Scotland.
Recommendation for successful project	Before applying, establish contact well ahead of submission time and, if possible, conduct preliminary research to establish a good working relationship

• **Recommendations and Top Tips from Researchers**

- Conduct your partner search in the months leading up to the Korean RTD programme calls.
- Keep an eye out for KIAT and NRF calls at the beginning of February/March and for KETEP and KIAT's second call in June/July.
- For the application and negotiation phases, having a Korean colleague act as a cultural and linguistic intermediary would be to your advantage.

- Be sure to check that your Korean counterparts are eligible to apply. Recent changes in regulations have meant that Korean researchers can only coordinate or be involved in a certain number of projects.
- Before beginning cooperation, assess the leadership ability of your Korean counterpart, especially if he/she will be the project coordinator.
- Establishing good personal relations with your partners is fundamental for successful cooperation; thus, a face-to-face meeting at the beginning of the project is recommended.
- Factor in a possible visit to Korea at either the evaluation or signing stage.
- Establish a solid agreement that clarifies the aspects concerning IPR and accessibility to data and results.
- Familiarity with the Korean work culture and behaviour before the cooperation is vital. Moreover, be prepared for differences, such as in hierarchical relations and work pace.
- It is also advisable to learn the alphabet and some basic vocabulary if the participant intends to stay in Korea for some time.

- **Useful links for the KIAT, NRF, and KETEP programmes**

We introduced useful links to facilitate the partner search of European researchers who intend to apply to Korean RTD programmes. The useful links include over 90 websites of Korean public research institutions, universities, and funding agencies that could be a partner for European researchers planning to participate in the KIAT, NRF, and KETEP programmes, as well as websites of CORDIS and KORANET.

***FAQ ‘Access opportunities for European researchers in Korean RTD programmes’***

- **Brief information of ‘FAQ’**

**Deliverable title:** D.1.3 – FAQ ‘Access opportunities for European researchers in Korean RTD programmes’

**Related work package:** WP1: Mapping and Policy Recommendations

**Deliverable leader:** CNRS

**Author(s):** Victoria Wong and Sinead Quigley

**Authors’ contact information:** Victoria Wong ([victoria.wong@asie-pacifique.cnrs.fr](mailto:victoria.wong@asie-pacifique.cnrs.fr))

**Dissemination level:** Public

**Final submission date:** November 2011

**Summary:** The report includes answers to frequently asked questions from European researchers who are interested in participating in Korean RTD programmes, as well as the contact details of KIAT, NRF, and KETEP, which are the main funding agencies in Korea.

- **Questions constructing ‘FAQ’**

Q. Which Korean programmes are open to European participation?

Q. When do the calls for participation open?

Q. Is there a template for proposals, or is the proposal written by Korean partners?

Q. Can European researchers act as coordinator (Lead Participant)?

Q. How can I find Korean partners?

Q. How many partners are required for a consortium in a Korean RTD programme?

Q. Why are records of correspondence needed to apply to NRF’s programmes?

Q. What is the agreement in terms of intellectual property rights in each project?

Q. How long does it take for the evaluation of the submitted proposal?

Q. How are European participants funded in each programme?  
 Q. What is the range of funding available?  
 Q. Are there any case studies on European participation in Korean RTD programmes?  
 Q. Are administrative details carried out in English throughout the course of the programme?

### **Monitoring Report on the participation of European organizations in Korean RTD programmes**

- **Brief information on ‘Monitoring Report’**

**Deliverable title:** D.3.2 – Monitoring Report on the participation of European organizations in Korean RTD programmes

**Related Work Package:** WP3- Capacity Building

**Deliverable leader:** CNRS

**Author(s):** Victoria Wong and Sinead Quigley

**Authors' contact information:** Victoria Wong ([victoria.wong@asie-pacifique.cnrs.fr](mailto:victoria.wong@asie-pacifique.cnrs.fr))

**Dissemination level:** Public

**Final submission date:** November 2011

**Summary:** The report quantitatively and qualitatively describes and analyses the participation of European researchers in the Korean RTD programmes identified by the project. The contents of the report are based on statistics and information provided by Korean funding agencies and telephone interviews with European researchers.

- **Construction of the ‘Monitoring Report’**

The report is composed of the following parts:

- Aim and methodology
- Quantitative analysis of European participation in Korean RTD programmes
- Qualitative analysis of European participation in Korean RTD programmes

- **Aim and methodology**

The aim of the report is to present data on the current level of European participation in the Korean programmes identified by the consortium and the different aspects relative to European researchers' experience of the programmes.

Data were collected by sending out official requests to three Korean RTD agencies, KIAT, NRF, and KETEP. A series of telephone interviews was conducted with a select number of European researchers who have participated in such programmes to complement the data collected from Korean RTD agencies.

- **Quantitative analysis of European participation in Korean RTD programmes**

Programme	Programme Owner	No. of Proposals Submitted by the EU and No. of Proposals Selected	No. of Projects Led by EU Participants
Strategic technology programme	KIAT	(2010) 9 proposals (26%) <sup>7</sup> were submitted by EU participants 3 proposals (40%) <sup>8</sup> were selected 33.3% success rate	(2010) None
Needs-driven	KIAT	(2009)	(2009)

<sup>7</sup> The percentage is the rate of EU proposals over total proposals submitted

<sup>8</sup> The percentage is the rate of EU proposals over total proposals selected. The percentage is different from the EU proposal success rate.

Programme	Programme Owner	No. of Proposals Submitted by the EU and No. of Proposals Selected	No. of Projects Led by EU Participants
technology development programme		21 proposals (55%) were submitted by EU participants 14 proposals (41%) were selected 66% success rate  (2010) 14 proposals (29%) were submitted by EU participants 5 proposals (31%) were selected 35.7% success rate	None  (2010) 1 project was coordinated by a German organization
Global market-oriented technology development programme	KIAT	(2010) 1 proposal (5%) was submitted by EU participants 1 proposal (13%) was selected 100% success rate	(2010) None
Global Research Laboratory (GRL)	NRF	(2008) 7 proposals (12.7%) were submitted by EU participants 1 proposal (20%) was selected 14.3% success rate  (2009) 10 proposals (16.4%) were submitted by EU participants 4 proposals (80%) were selected 2.5% success rate  (2010) No projects with EU participants were funded	(2008) None  (2009) None  (2010) None
Global Research Network (GRN)	NRF	(2008) 90 proposals (30.6%) were submitted by EU participants 8 proposals (23.5%) were selected 8.9% success rate  (2009) 2 European proposals (13.3%) were selected  (2010) 3 European proposals (18.75%) were selected	(2008) None  (2009) None  (2010) None
International collaborative R&D programme	KETEP	(2010) 6 European proposals (20%) were selected  (2011) 2 European proposals (11.1%) were selected	(2010) None  (2011) None

- **Qualitative analysis of European participation in Korean RTD programmes**

This qualitative analysis is based on a series of interviews with European researchers who have participated in Korean RTD programmes. Our findings from the analysis are as follows:

- *Awareness of Korean RTD programmes and building partnerships*

Many institutions found out about the project through professional recommendations and working relations with a particular institution. Other participants, however, consulted various institutions' call for tenders or public announcements. In most cases, the consortium was built through the readily established contacts or through their Korean partners.

- *Application process*

The application process for a majority of projects was straightforward. In some cases, the project coordinator handled the application. The procedure was described as 'quick', and notification of whether the project had been successful was promptly given. The administration was reported as being satisfactory and not overly bureaucratic. Some experiences, however, proved that the administration was tedious, and too much paperwork had to be completed. In a particular case, unknown guidelines and the exclusion of both the Korean and European partner from each other, intensified the difficulties.

- *Funding conditions*

The funding of projects came from Korean institutions, under whose programmes projects were able to conduct their research. The overall budget allocated to programmes ranged from €37,000 to €2 million over an average period of 3 to 4 years. In some cases, this budget was granted annually and was received by Korean partner institutes, which administered the budget. Depending on the project, the budget often funded travel to Korea, research equipment, full- and part-time staff, technical development, manufacturing, and meetings.

- *Most positive aspects of participation*

The collaboration with Korean partners as well as the project's development were described as the most positive aspects of participation, and a real sense of cooperation and motivation between partners was evident. Korean researchers were praised not only for their approach, but also for their attitudes towards work, and were found to be 'very responsive and dedicated'. Many programmes had registered a smooth running of their projects, and the overall experience had been very positive.

- *Most negative aspects of participation*

One of the main difficulties reiterated in projects was the deadlines that partners faced. The deadlines often immensely pressured those who had to submit progress reports. In a particular project, the requirements were not very clear and affected several deadlines. Moreover, the language barrier sometimes posed a communication problem between Koreans and their European partners, making certain processes difficult to follow. In one case, a lack interaction from the Korean side was noted.

- *Recommendations for other European researchers*

An important piece of advice given to European researchers embarking on a similar experience was to make contact well ahead of submission time and if possible, to start obtaining preliminary research to establish a good working relationship before applying. Patience was also recommended as the key to building a lasting relationship and appreciating the challenges brought on by the difference in languages. Furthermore, detailing and being able to communicate visually were prescribed to avoid misunderstandings. Other suggestions included technology alignment, matching funding (hence, the importance of technology alignment), a flexible approach to IP, and having a representative in Korea.

*- Recommendations to make Korean programmes more accessible*

Unfortunately, European awareness of Korean RTD programmes is low, and having a contact point that would facilitate and promote projects would be very helpful. Improving guidelines must also be considered to make Korean programmes more accessible. Such guidelines will help avoid confusion for Europeans, and increase transparency in sharing information.

**List of principal Korean research institutions for European researchers**

- **Brief information of ‘List of principal Korean research institutions for European researchers’**

**Deliverable title:** Extra – List of principal Korean research institutions for European researchers  
**Related Work Package:** WP3: Capacity Building  
**Deliverable leader:** KIST Europe  
**Author(s):** Dr. Taeyoung Park and Moonjung Kang  
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**Dissemination level:** Public  
**Distribution date:** March 2012  
**Summary:** The ‘List’ provides information about Korean research institutions in three categories: *27 public research institutions*, *15 private research institutions*, and *30 university research institutions*.

- **Overview of the ‘List of principal Korean research institutions’**

The report is composed of the following parts:

- Part I: 27 public research institutions
- Part II: 15 private research institutions
- Part III: 30 university research institutions

The most important task in facilitating R&D collaboration between Korean and EU researchers is looking for the right partner. Therefore, KORRIDOR members decided to make the ‘List’ that will allow searching of excellent Korean research institutions that European researchers might want to contact for R&D collaboration. Brief information about individual institution is mainly focused on that institution’s research areas and the contact details. For Korean public research institutions, all institutions that operate under various Korean Ministries were included, because the number of such institutions is small. However, there are too many private and university research organizations to include all in this List. Therefore, a criterion for selecting certain research institutions is needed.

The criterion for selecting 15 Korean private research institutions is their inclusion in the list in the article ‘1000 Global Companies’ that appeared in the ‘2010 UK R&D Scoreboard’<sup>9</sup>, reported by UK BIS (Department of Business, Innovation & Skills). Another criterion for selecting university

<sup>9</sup> Analysis variables for ‘2010 UK R&D Scoreboard’ are as follows:

- 1) R&D investment
- 2) Employees
- 3) Sales
- 4) Operating profit
- 5) Capital expenditure

research institutions is their ranking in the top 30 institutions according to University RANK 2011 by the Joong-Ang Daily. The evaluation indicator is the research capability of professors<sup>10</sup>.

#### 4.1.4. Potential impact and the main dissemination activities

The main objective of the project is to increase S&T cooperation between Europe and Korea by identifying access opportunities to European researchers in Korean RTD programmes. We cannot determine the direct effect of the project on the EU's participation in or the EU's awareness of Korean RTD programme increase because effect analysis is beyond the project's scope. However, we can conjecture the impact through quantitative performance data related to S&T cooperation between Europe and Korea. The following tables show recent performances in terms of European researchers' participation in Korean RTD programmes and dissemination activities performed by KORRIDOR partners.

- **Participation status of European countries in Korean international cooperation cases (2009)**

In 2009, the total number of Korean international cooperation cases was 2,242, and European countries were involved in 590 of the cases. European participation in Korean national R&D programmes accounted for 26% of the total cases.

Country	Cooperation		Country	Cooperation	
	Cases	Portion (%)		Cases	Portion (%)
Germany	121	20.5	Belarus	5	0.85
France	97	16.4	EU	5	0.85
UK	96	16.3	Turkey	5	0.85
Inter.	45	7.63	Finland	5	0.85
Israel	45	7.63	Norway	4	0.68
Italy	37	6.27	Portugal	4	0.68
Sweden	24	4.07	Austria	2	0.34
Switzerland	20	3.39	Hungary	2	0.34
Romania	19	3.22	Latvia	1	0.17
Spain	16	2.71	Lithuania	1	0.17
Netherlands	11	1.86	Bulgaria	1	0.17
Czech Republic	9	1.53	Slovenia	1	0.17
Belgium	8	1.36	Croatia	1	0.17
Denmark	5	0.85	Total	590	100.00

Source: NSTC and MEST (2010), 2010 National R&D Investigation and Analysis Report

<sup>10</sup> Indicators for evaluating the research capability of professors are as follows:

- 1) Department –average amount of external subsidies per professor (15 points)
- 2) Department –average amount of R&D subsidies per professor (15 points)
- 3) The number of papers listed in domestic journals per professor, in the fields of Humanities, Sociology, and Athletics (20 points)
- 4) The number of papers listed in international journals per professor, in the fields of Humanities, Sociology, and Athletics (20 points)
- 5) The number of papers listed in international journals per professor, in the field of Science and Technology (20 points)
- 6) The number of citations by other papers in international journals per professor in 2009–2010 (10 points)
- 7) The number of intellectual properties listed per professor, in the field of Science and Technology (10 points)
- 8) Amount of technology transfer income per professor, in the field of Science and Technology (10 points)

- **Participation status of European countries in Korean RTD programmes funded by KIAT, NRF, and KETEP (2008–2010)**

The number of selected European proposals increased from 2008 to 2009. However, the growth slowed in 2010. The slow growth could be attributed to the decrease in the Korean budget for international cooperation R&D programmes.

Programme Owner	Title of Programme	No. of Proposals Selected/No. of Proposals Submitted by the EU		
		2008	2009	2010
KIAT	Strategic technology programme	-	-	3/9
	Needs-driven technology development programme	-	14/21	5/14
	Global market-oriented technology development programme	-	-	1/1
NRF	Global Research Laboratory (GRL)	1/7	4/10	-
	Global Research Network (GRN)	8/90	2/3	-
KETEP	International collaborative R&D programmes	-	-	6 selected <sup>11</sup>
Total		9/97	20/34	14/over 29

Source: Modified based on the 'Monitoring Report on participation of European organizations in Korean RTD programmes', which is one of the deliverables of the KORRIDOR project.

- **Dissemination activities of KORRIDOR partners**

KORRIDOR partners performed over 100 dissemination activities for European and Korean S&T officers, multipliers, researchers, funding agents, and managers of R&D international cooperation centres over the last two years. Dissemination was achieved through various means, such as directly holding events, participating in relevant events, establishing websites, and utilizing the websites of other institutions, among others. The large number of dissemination activities increased the European research community's awareness of Korean RTD programmes.

Type of Dissemination Activity	Number of Times	Cities Addressed
Workshops (Methodology and training workshops)	7	Seoul (3), Bonn (1), Brussels (2), Den Hague (1)
Events (Info days)	4	Bonn (1), Paris (1), Barcelona (1), Aachen (1)
Conference (Final conference)	1	Brussels (1)
Fyler production	1	KORRIDOR website
Info day brochure production	1	KORRIDOR website
Newsletter publication	2	ACCESS4eu and KORANET

<sup>11</sup> For KETEP programmes, we were able to obtain information on the number of proposal selected. However, we were unable to obtain information on the number of proposals submitted by European researchers.

Type of Dissemination Activity	Number of Times	Cities Addressed
		newsletter
Website establishments	3	KORRIDOR website establishment KORRIDOR website linked with BMBF and KORANET websites
Publication of information through websites	3	Twice through the KORRIDOR website Once through CNRS website
Presentation at public conferences/events/institutions	36 <sup>12</sup>	Athens (1), Brussels (1), Bonn (4), Paris (7), Budapest (2), Berlin (1), Vienna (1), Duisburg (1), Venice (1), Munich (1), Madrid (1), Saarbrücken (1), Glasgow (1), Zurich (1), Eindhoven (1), Aachen (1), Prague(1), Warsaw (1), Seoul (3), Busan (2), Daejeon (2), Gwangju (1)
Circulation of information by hosting small or one-on-one meetings	32 <sup>13</sup>	Seoul (5), Brussels (2), Rheine (1), Kaiserslautern (1), Saarbrücken (2), Bermen (2), Golm (1), Würyburg (1), Calusthal (1), Paderborn (1), Bonn (2), Paris (9), Frankfurt (1), Lyon (1), Tallin (1)
Others	11 <sup>14</sup>	Athens (1), Gdansk (1), Bonn (2), Paris(1), Aachen (1), Bucharest (1), Poznan (1), Seoul (1), Daejeon (1), Gumi (1)
Total	101	

Source: Modified based on the “Project dissemination events report” and “Training activities report,” which are KORRIDOR project deliverables.

We would like to present other indirect impacts that the project might have had on the existing RTD programmes and networks of both parties.

- **Impact on Korean RTD programmes**

With a greater number of capable European research teams working within Korean RTD programmes, better quality complementary research expertise would be produced to attain the economic and societal development goals of Korea. At the same time, access to new RTD expertise, capacities, and research traditions would be gained. All these would enrich the Korean science system, make it more competitive in the global RTD market, increase the efficiency of the Korean RTD community, and attract new investments in the RTD sector.

- **Impact on European research community and ERA**

<sup>12</sup> This number was counted per city. Therefore, this number is different from the one in the list of dissemination activities in Section 4.2 (*Use and dissemination of foreground*), because the latter is counted once per event, even if the event was held in multiple cities.

<sup>13</sup> Refer to footnote 4.

<sup>14</sup> Refer to footnote 4.

The reciprocal access to Korean RTD and innovation programmes widened the access of the European research community to one of the most dynamically developing science systems with unique knowledge and capabilities. Access to new niches of research excellence might increase the European research capabilities, enable and stimulate the transfer of European technologies to the Korean economy, and vice versa.

- **Impact on bilateral cooperation**

As wider participation of European researchers in Korean RTD and innovation programmes would complement the existing and growing participation of Korean research teams in FP7 and other European and national RTD programmes, the financial basis of cooperation could be extended, new thematic areas could be opened, and the number of partnerships could be increased. Success in RTD cooperation would inevitably stimulate and enable success in economic cooperation and trade and other areas of bilateral relations. Moreover, as the project's objectives were highly complementary to those of others, such as KESTCAP and KORANET, the project liaison building strategy delivered a synergetic impact on bilateral S&T cooperation.

#### 4.1.5. Address of the project public website and others

##### Project public website

The KORRIDOR website was officially launched on February 18, 2010 under the direction and guidance of the Central Information Office of the ACCESS4.eu Common Web portal (<http://www.access4.eu/southkorea/index.php>). Since the website was first established, KORRIDOR partners continuously revised the menu bars and their contents to reduce search time and improve readability. The recently revised KORRIDOR website consists of 14 categories. The detailed descriptions of the categories are presented in the following table:

Category	Content
KORRIDOR	Front page, including the overall aim and brief objectives of the project
2012 Open calls	Information on six types of calls in 2012 1) Industry Strategy-Associated Programme (funded by KIAT) 2) Global Industry-Academia Cooperation Programme (funded by KIAT) 3) Global Research Laboratory (GRL) Programme (funded by NRF) 4) EUREKA (funded by KIAT) 5) EU FP (funded by KIAT) 6) KORANET joint calls
About South Korea	General overview of the R&D policy scheme and the distribution of the R&D budget
EU-Korea S&T collaboration	Information on the status of R&D collaboration between Korea and the EU, main international R&D cooperation programmes funded by Korean government, and main bilateral programmes between Korea and the EU
Project overview	The objectives, strategies, tasks, applied methodologies, potential impacts, and use of the KORRIDOR project results
Project partners	Information on each partner of the KORRIDOR consortium
2011 Open calls	Information on five types of calls in 2011 1) International Collaborative Research and Development Programme for Needs-driven Technology Development International (funded by KIAT)

Category	Content
	2) Collaborative Research and Development Programme for Global Market-oriented Technology Development Programme (funded by KIAT) 3) Global Research Network Programme (funded by NRF) 4) Global Research Laboratory (funded by NRF) 5) International Joint Research Project (funded by KETEP)
Events	Information on upcoming and past events 1) KORRIDOR events 2) General Korea-related events
Publications	Introduction to four types of major publications 1) Participation guidelines 2) List of principal Korean research institutions 3) Summary of Policy paper 4) Dissemination materials
FAQ	The contents of the FAQ section are provided in HTML format
Partner search	A comprehensive list of Korean research institutions is presented by the website
Useful links	Links of major RTD agencies and principal research organizations 1) S&T research institutes in Korea 2) R&D promotion and evaluation institutes in Korea 3) S&T government agencies in Korea 4) S&T cooperation between Korea and the EU 5) Other useful links
Helpdesk and contact points	Information on services offered by the Helpdesk and contact points
Living and working in Korea	Detailed information on living and working in Korea



Figure 2. KORRIDOR website under the ACCESS4.eu Common Web portal

### Project logo

The Korean flag was used as the teeth of the key in the KORRIDOR logo. The name KORRIDOR was added below the key, and the yin-yang symbol of the Korean flag and the 12 stars of the European flag were incorporated.



*Figure 3. KORRIDOR logo*

**List of beneficiaries**

No.	Beneficiary Name	Beneficiary Short Name	Country	Corresponding Contact Names
1	Korea Institute of Science and Technology Europe Forschungsgesellschaft mbH	KIST Europe (Coordinator)	Germany	Sangwon Kim <a href="mailto:sangwon.kim@kist-europe.de">sangwon.kim@kist-europe.de</a>
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