

D06.2 Project Dissemination Plan

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Abstract:	The following document gives an overview of the dissemination activities planned for the COPPER project. It describes the dissemination strategy as well as the actual events and activities carried out by the partners.
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1 Introduction

The purpose of the dissemination is to **raise the awareness and publicity of the CopPeR project** as well as its outcome in order to make CopPeR a successful and sustainable project. In this context the target groups for external dissemination activities are on the one hand the general public and on the other hand potential business partners as well as specific scientific experts. A further target audience are public institutions like governmental and European audiences.

In order to reach the particular awareness level intended, the **partners have to work continuously in the field of dissemination and public relation**. For their support as well as for the graphical identity within the consortium the partners have to be provided with templates (for presentations and reporting) and various communication materials (web site, fact sheet, press release etc.).

The purpose of this plan is to collect information on the dissemination activities already done or concrete planned during the 30 month run time of the COPPER project. It contains a plan for already carried out and prospectively upcoming activities based on a form collected from each partner; it describes the dissemination channels to be used and the dissemination material to be produced and it indicates their schedule. So the dissemination plan gives an overview via the various activities and enables their coordination. At this point it is important to note, that the focus of the mentioned dissemination activities of the copper partners is in the first half of the project. The reason for this is in the impreciseness of planning of activities that are lying ahead. So this dissemination plan can be regarded as a guideline and will be supplemented in the course of the project duration.

The dissemination plan of the CopPeR project has been arranged into a logical sequence of various activities, which will be described in the following "Dissemination strategy" section, whereas the real planned activities will follow later in the second section "Planned dissemination of knowledge". Additional activities have to be expected when the partners have prepared more detailed plans for their work. Invitations to contribute to both publications and conferences are expected as the project receives more attention throughout Europe and the rest of the world. These activities will be reported during the periodic reporting after the end of each project period.

However, as the first step the dissemination strategy will be described. This information dissemination plan consists of a collection of planned and already done activities to disseminate the knowledge and results generated during the project. Additionally a list of approaches is given as basis for planning future activities.

2 Dissemination strategy

The dissemination strategy of CopPeR is made up of three consecutive phases:

- The goal of the first, **awareness-oriented phase** is to raise awareness within a qualified community about the project and its objectives.
- The second, **result-oriented phase** aims to promote the results of the project, in order to allow potential interested parties to get to know the achievements and the related benefits of the CopPeR project.
- And finally, in the third **exploitation-oriented phase** specific activities will be undertaken to start the actual exploitation.

All of these phases require different methods and activities to be initiated in order to be able to achieve the goals. The details of each of these phases will be outlined now.

Raising awareness involve the setting up of the basic marketing materials and awareness-raising presentations at different related events. Therefore, the main activities of this phase are the following:

- Setting up a common project design, such as the CopPeR logo, templates for documents and presentations.
- Creating the project website, which will describe the challenges and the goals of the project and will introduce the project members.
- Designing the project information materials (such as a leaflet and an introductory off-the-shelf presentation), which can be distributed later on without investing greater efforts.
- Giving introductory presentations at conferences and workshops about the challenges and goals of CopPeR in order to raise awareness among the scientific and industry stakeholders and to establish the basic brand name of CopPeR.

For **promoting the results** CopPeR will address stakeholders in IC manufacturing.

- Update of the project website with public deliverables and news in order to encourage active communication, to keep interested parties informed and to demonstrate project liveliness and progression.
- Presentations of the research-oriented theoretical results of the CopPeR project at international conferences and workshops
- Submission of high-level scientific articles to scientific conferences, (such as ECS, IES, UCPSS, ISSCC, IEEE).
- Publishing and dissemination of press releases following the finalisation of important project milestones. The press releases are intended to be circulated among representatives of the international press focusing on IC manufacturing

The **exploitation** is specifically targeted at potential clients of CopPeR. The activities of this phase include:

- Exploitation-oriented upgrade of the project website, including optimisation for search engines and optional registration for specific keywords.
- Participation at IC-oriented exhibitions, fairs and workshops, where the results of the project are presented to business stakeholders and contacts with potential commercial projects are established.
- Individualized demonstrations at interested stakeholders during the negotiation of business projects.
- Publishing of the CopPeR methodology and definition in order to lay the foundation of potential commercial projects.

3 Planned dissemination of knowledge

The Dissemination plan is part of Work Package 06, 'Project Management, Dissemination and Standardisation'. This work package foresees the following tasks:

- **Project Management**, which means the coordination between the research efforts as well as the monitoring of the overall progress.
- **Dissemination and Standardisation**; this task involves the supply of structures and processes as well as templates for presentations and publications and other dissemination activities. The purpose is to coordinate and plan the dissemination activities on consortium and partner level because one of the goals of the CopPeR

project is to widely disseminate the results at different levels and to different communities in order to spread the culture and technologies in the field of design. One target for such dissemination is a set of standardisation working groups whose activities are or can be put in relation with the knowledge developed in CopPeR.

The activities in the field of standardisation will be performed at different levels. Mainly the CopPeR consortium will address the “Semi Standards” organisation on the task force “Liquid Chemicals” to identify and develop international standards fulfilling the technical needs. Secondly this project will address the ITRS Technology Roadmap for direct exploitation and dissemination activities.

- **IPR** (Intellectual Property Rights) and Exploitation Framework by the establishment of rules for the use of knowledge and its distribution:

During the CopPeR project life-time, the project partners will promote and encourage research on the CopPeR topic, targeting European and international companies and research centres, as well as create interest in the general public. The dissemination activities will be ongoing during the entire project duration. Accordingly, the dissemination plan will have to be adapted and updated several times.

An overview table presented later in the report summarises all planned dissemination activities, that have been carried out or which are currently planned to take place in the future.

3.1 Contribution of each partner

Within the project, dissemination activities will be divided under two categories, which reflect the difference between activities based on possible benefits. The first classification are public exploitation and activities respectively, which are not interested in commercial revenue, but rather focusing on the society. The second classification are business activities, which are with clear commercial motives.

Public exploitation

The main target group of the public activities are the universities and research institutes of the CopPeR project. The aim of these activities is to bring the research results of the project back to the scientific world and to channel them to other research and development projects in the nanoelectronic domain allowing for cross-fertilisation.

By updating the educational materials based on the new results, the young generations of European engineers and developers will be kept close to the state-of-the-art. In this context CopPeR will contribute to the European IC-manufacturing education.

A further important aspect of public exploitation is the usage and contribution to standardisation and specifications of the ITRS Roadmap.

Business exploitation

The second and not less important aspects with regard to the dissemination are the business activities, which aim at the commercialisation of the results of the project. The results of the CopPeR project will be extensions for already existing tools and processes and additional proof-of-concept prototypes for processes in IC manufacturing. All partners have specified the direct impact in knowledge and exploitable results. The planned exploitation activities of each consortium member as well as the special impact are described in the following paragraphs in more detail:

TEC

Business	Being an SME, the reputation gained from being included in the project will positively influence the future acquisition activities of TEC.
Knowledge	The experience gained will increase our capability to run and manage national and international RTD projects.
Technology	TEC industrial services on requirement engineering will profit from the expertise gained in the collaboration with our scientific and industrial partners on development of use cases and technology Roadmap. This will also positively influence our activities in supporting and establishing start up companies.

The experience gained will increase our capability to run and manage national and international RTD projects. The project results will be exploited by using TECs "Trusted knowledge suite" to run the IT infrastructure and to improve the features and the handling of the tools. This will also positively influence our activities in supporting and establishing start up companies.

SEZ

Substantial market share in interconnect deposition segment	The copper deposition process within CopPeR will allow SEZ to enter the interconnect deposition segment at the right market window where copper interconnect schemes need to fundamentally change.
Global leadership in single wafer wet surface preparation	CopPeR enables SEZ to continue its growth in wet surface preparation, and thus securing SEZ and its Europe wide sub-contractors global market leadership.
Wafer processing at high pressures	The usage of liquid ammonia at high pressure will open promising opportunities to be used for other applications which necessity will arise during the next technology nodes (e.g. porous low-k repair, surface passivation).

Copper deposition from non-aqueous solvents will allow ongoing scaling of interconnects beyond 32 nm. The new CopPeR-schemes of seedless and electroless deposition will improve the electrical characteristics and lower power consumptions compared to the standard aqueous approach. The most important technical achievement of this project will be, based on the fundamental understanding of the requirements and limitations, the proof-of-concept of an innovative new approach to enable highly selective nano-particle removal. SEZ will provide novel process capabilities beyond the 32 nm node to semiconductor device manufacturers enabling them to significantly reduce manufacturing related defectivity leading to higher reliability, higher yield and with this to significantly lower cost for manufacturing. For the 450mm technology being a serious topic by the time the project is finished, SEZ sees also the opportunity to be again one of the leading semiconductor tool providers to have a ready solution to go (SEZ delivered worldwide the first i300i compliant tool in 1999/2000). Wafer processing in non-oxidizing, non-hydrolyzing solvents at high pressure will clear a path for other critical applications both in FEOL and BEOL beyond 32 nm, arising especially at the dawn of "Beyond CMOS".

ELS

Experience with simulation of electroplating in small scale features	During the project Elsyca will perform simulation for very small scale structures (i.e. 32 nm or less). This knowledge can be reused in many other domains in which Elsyca is active or wants to become active like simulation of oxide layers and corrosion
Design of wafer plating cell	The experience gained during the project will Elsyca to reuse for the design wafer plating machines for many different specialized applications, e.g. MEMS.
Introduction in Electronics market	The project will give Elsyca a very good change to enter into high-end electronics market, as part of a very strong team.

When the project is finished a new way for mass production of high-end semiconductor devices will become available. As Elsyca is part of the consortium that developed this new process, we will have a significant impact on the electronics market for the next 10 to 20 years, allowing the progress of technology and esp. semiconductors to continue. During and upon a successful completion of this project, Elsyca will gain fundamental insight in the local phenomena on the micro-level (nano scale structures) in such a way that simulations will be possible. This knowledge is very valuable for Elsyca's product development plan for the Electronics and other markets, where such small scale structures are relevant, Elsyca will be enabled to keep its leading position as supplier of advanced numerical models in electrochemistry. The use of flow and MITReM will allow Elsyca to broaden the range of industrial applications that can be accurately modelled. Typical examples include alloy plating, high speed ECM processes, and electrograining.

KUL

Electrodeposition technology	Development of a new electrodeposition technology from non-aqueous electrolytes
Superfilling surfactants	Development of new superfilling chemistry from non-aqueous solutions
Ionic-liquids	Electroplating of metals in a high vacuum

The ECD of copper for interconnects will allow the scaling of devices beyond the 32 nm node. The deposition of copper in vias from non-aqueous solutions will directly be applicable to current semi-conductor processes. The technology developed in CopPeR will allow the deposition of a whole range of metals that currently cannot be electrodeposited, such as e.g. rare earth metals (deposition of rare-earth permanent magnets) and Al, which would result in superior corrosion protection. The number of metals, alloys and intermetallic compounds that is in use or under investigation in semi-conductor industry has grown significantly over the last years and now includes. Ru, Ta, BiTe.... . The know-how from the CopPeR project will be used by KUL to deposit these compounds from non-aqueous solutions, which will increase efficiency as electrodeposition is a selective deposition technique. In this way, the CopPeR project will lead to a concentration of know-how on the electroless and electrodeposition from non-aqueous systems at the KUL. The close ties between MTM and the industry through the advisory service on surface technology (TAD) creates a low threshold to introduce this know-how in industry. Dissemination of the results will be done in articles (both peer reviewed and more technical publications) and a workshop that will be organized within the framework of the Ionic Liquid project. Also, the website on the ionic liquid research at KUL (<http://www.kuleuven.be/ionic-liquids/>) can be used to disseminate the results of the CopPeR project.

FELMI

New method development	Understanding the limits of existing nano-characterisation techniques, exploring new investigation methods and establishing novel characterisation approaches is the guiding principle of all FELMI activities. The CopPeR project ideally fits, as the structural sizes involved in this project push current techniques to their limits.
Students	The participation in a technologically outstanding project, as well as the results produced within, will help the FELMI attracting new students, training them on novel technology concepts and extending the knowledge in the investigation of advanced materials.
Publications	For FELMI, the number of high-impact publications and conference participations are key parameters. The requested dissemination level in CopPeR supports this aspect greatly.

One of the major strategic directions of the Graz University of Technology, to which the FELMI belongs- is the establishment of comprehensive excellence in the area of nano-technology, -analysis and -characterisation of new materials. This goal and a modern understanding of technology are the guiding principles of the teaching staff and researchers. The participation in a technologically outstanding project, as well as the results produced within, will help the FELMI attracting new students, training them on novel technology concepts and extending the knowledge in the investigation of advanced materials. All major results will be published during scientific conferences, papers and in scientific works.

IFX

Super aspect ratio fill (or contact)	Filling of deep contact holes (aspect up to 1:30). A complete fill is not necessary, but a 100% sidewall coverage is needed
Competitive Cost of Ownership to existing processes (aqueous solution)	Challenging entrance to electroplate community with a complete new concept to force European equipment manufacturer, which leads to CoO reduction in plating (electro- electro-less) process
Independent surface electro-less plating	Need to deposit also on polymers is seen in the near future (next wafer level packaging generation)

The electro-less copper deposition in Ammonia will be integrated in nearly every semiconductor factory, which is also using copper contacts. A huge step in packaging and in reducing power consumption will be done. Semiconductor controllers will have an additional advantage to substitute "old" fashioned technologies in electric motor control and will save more energy than today. The limits of copper integration in communication semiconductor devices are the increasing aspect ratio of contact structures and the contamination level of copper in silicon. As there is no technology to solve these problems now, the drive of less power consumption of semiconductor devices is limited due to non integrated copper. In the near future new assembly methods, which integrate the devices directly on the electronic board, will be needed. All these demands will be covered by the new deposition process handled in this project.

COR

Rotating disc electrode	Development of rotating electrode for high pressure ammonia environment
Reference electrode	Development of reference electrode for ammonia solution
Penetration in market	Penetration in the material research instrument market of electronics industry

Copper plating process in ammonia solution will allow the creation of narrow line connectors on wafers. The resulting increased packing density will lead to smaller and more effective electronic instruments. Cormet's knowledge of the instrumentation needed in the ammonia including environment will be improved. Creation of a rotating electrode for a 300 mm wafer will create new solutions for specimen holder constructions and rotating electrode design, which we can apply in our product range. Because there is no reference electrode available for the moment for high pressure ammonia environment, its development will have both scientific and economical value. CopPeR project will support Cormet's long-term plans in creating a new market with electronics material research along the conventional corrosion business where we are in.

VUB

Improved Electrochemical modelling	VUB is a university performing teaching and research. It would be an important result to progress considerably in the understanding and mathematical description of non-aqueous electrochemical systems. It is clear that these results are also integrated in courses
Improved knowledge	It is expected that the improved knowledge will bring VUB to the level of an "EU competence centre for electrochemical modelling". This will enable new applied and industrial research within European community.
Industrial collaboration	This project is for VUB important in order to assure theoretical developments that are nevertheless of high practical interest and application. It avoids "Ivory tower research".

Electrochemistry of non-aqueous systems is still a very unknown and unexplored field. In this project the partners work together in view of understanding, quantifying and realising an innovative working system for copper plating on wafers including superfilling. This will form a basis for other electrochemical processes in non-aqueous solutions. Being a university we are of course interested in developing theoretical models that can be used not only to this application but in general by the whole electrochemical world. This is as such generic work. Theoretical results are published and presented: conferences, journals, workshops, the consortium is of course a preferred knowledge receiver. We also intend to license eventual developed software. The cooperation in CopPeR will allow us to stay one of the major "computational electrochemistry" groups in EU and beyond.

3.2 Description of planned dissemination activities

The dissemination activities of the CopPeR consortium that are planned until this point are collected below. Each different activity includes the relevant description and participants from the CopPeR consortium.

3.2.1 Active participation in conferences and workshops

The participation in conferences and workshops is considered active if the COPPER project partner is in the role of a speaker, a presenter, a moderator or an organiser.

Full name of the conference (abbreviation if applicable), official web-site (no hyperlink, underlined)	Date (dd.mm.yyyy)	Location (city, country)	Type (international / national) and size of the audience	Topic and goal of the event	Role of the partner, relevance to COPPER, benefit gained by partners. (Partners involved)
OPEN SPACE for European Research (www.ffg.at/openspace/)	02.04.2008	Vienna - Austria	national; approx. 400	FP7 – Networking; Discussion of the topics in workshops; Distinction “Austrian Champions in European Research”	TEC participated the workshops with short presentations and got honoured for being coordinator of COPPER
Gordon Conference (http://grc.org/programs.aspx?year=2008&program=corraqu)	20-25/07/2008	New-London	International	Corrosion –Aqueous	VUB : Invited presentation: "Mechanistic modelling of corrosion processes- basics, applications, and limits" Relevance: contacts with people doing research on reaction mechanisms (here corrosion processes, in COPPER plating processes)

EUCHEM 2008: conference on molten salts and ionic liquids	24-29.08.2008	Copenhagen, Denmark	International	The meeting will consider molten salts and ionic liquids under the joint headline of Coulombic fluids with the main focus on applications.	KULeuven , oral presentation of copper deposition from ionic liquids on tantalum
Dreiländertagung ELMI	30/08/2009	Graz, Austria	International ~ 1000	Microscopy, nanocharacterization	FELMI , Talk or poster
EMC / European Microscopy Conference	01/09/2008	Aachen, Germany	International 1500+	Microscopy, nanocharacterization	FELMI , Invited talk

Table 1: Summary of actively participated conferences and workshops

3.2.2 Passive participation in conferences and workshops

Full name of the conference (abbreviation if applicable), official web-site (no hyperlink, underlined)	Date (dd.mm.yyyy)	Location (city, country)	Type (international/national) and size of the audience	Topic and goal of the event	Role of the partner, relevance to COPPER, benefit gained. (Partners involved)
Productronica	16.11.2007	Munich, Germany	International 40000 visitors	World's leading trade fair for electronics production	ELS: Market research
ECS 213 th meeting	May 18-23, 2008	Phoenix, AZ	international, >1500	electrochemical and solid-state science and technology	SEZ: electrochemical deposition of copper, development of plating prototype

Gordon conference on electrodeposition	July 27 to August 1, 2008	United States of America	International	Two-yearly Gordon conference devoted to various aspects of electrodeposition	KULeuven, oral presentation
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Table 2: Summary of workshops

3.2.3 Scientific articles and publications

Author(s) (eg E. Example), Date (year of publishing)	Title	Journal title, volume, issue, page numbers	Type (international/ national)	Topic of the article/ publication/ presentation, connection to COPPER. (Partners involved)
S. Schaltin, K. Binnemans and J. Fransaer	Electrodeposition of copper from ionic liquid on tantalum	Journal of the Electrochemical Society	International	KULeuven, Electrodeposition of copper from ionic liquids on tantalum barrier

Table 3: Summary of scientific articles, publications, presentations

3.2.4 Courses, talks organised

Partners involved	Date (dd.mm.yyyy), location (city, country)	Course title, content	Type (international/ national) and size of the audience
TEC	21.04. – 25.04.2008 Halmstad, Sweden	“International Project Management course”	University lecture

Table 4: Summary of courses organised

3.2.5 Websites

Website	Description of the main COPPER related information	Partners involved
www.copper-project.eu	The official website of the COPPER project.	TEC (in cooperation with all other COPPER partners)
www.felmi-zfe.at	Link to Copper project home page for improved visibility	FELMI TU Graz
http://ceg.vub.ac.be/	COPPER is mentioned as a project (http://ceg.vub.ac.be/content/projects/copper.htm).	VUB
http://www.kuleuven.be/ionic-liquids/	General website on properties and applications of ionic liquids	KULeuven
http://www.technikon.at/subsites/projects.html	Short description of the COPPER project and link to the official homepage	TEC

Table 5: Summary of relevant websites

The project website serves as the most versatile information and communication tool, because on the one side it provides the opportunity to provide information for a worldwide audience and enables on the other side a comprehensive provision of information as well as a platform for the project team. So the website's structure aims to provide both easily accessible basic information for external visitors and special information in more detail for registered users. Besides the website acts as a principal means of publication and frequent modifications, news and updates make the website informative and give interested people reasons for coming back. The official homepage of the Project: www.copper-project.eu



The screenshot shows the homepage of the CopPeR project website. The page has a dark red header with the CopPeR logo on the left and the European Union logo on the right. Below the header, the main content area is white with a dark red border. On the left side, there is a 'Main Menu' with links to Home, News, Publications, Downloads, Copper partners, Feedback, and Links. Below the menu is a 'Login' section with fields for Username and Password, a 'Remember me' checkbox, and 'Login' and 'Lost Password?' buttons. The main content area features a 'Home' section with a welcome message and a large CopPeR logo. Below this, there is a 'Project details' section with a table of project information:

Project details	
Start date: 2008-01-01	End date: 2010-06-30
Duration: 30 months	Project reference: 216474
Project cost: 4.692.488 EURO	Project funding: 3.150.000 EURO
Programme acronym: FP7-ICT	Programme Type: Seventh Framework Programme
Subprogramme area: Next-Generation Nanoelectronics Components and Electronics Integration	Contract type: Collaborative project (generic)

Below the table, there is an 'About CopPeR' section with a short paragraph about the project's funding and consortium.

Figure 6: Homepage of CopPeR

The webpage informs the users about general information about the COPPER project, its activities and its achievements as well as background information, contact details and events. It informs the visitor about the project partners and through clicking on the name/logo of a partner the user can reach the adequate homepage of the company. Furthermore publications can be downloaded and useful links are given.

Parallel to the general accessible area there is a special domain on the CopPeR website with password protected pages and thus made accessible to selected individuals and/or groups. So the website also serves as a platform of the project and may be used by the COPPER members for internal communication. Only registered COPPER partners with username and password can use this special user menu and can benefit from the options offered there: e.g.:

- Calendar for appointments and meetings,
- Forum for information exchange concerning special topics,
- Wiki function to post and to deal with some articles,
- Mailing lists for reaching special mailing groups

The present version of the CopPeR website must be seen as the basis for a continuous process because frequent modifications, news and updates on the part of all project partners will make the website more and more informative and give interested people reasons for coming back.

3.2.6 Press releases, newsletters

Title	Publication details (journal, newspaper, etc.)	Partners involved
Official Press release of COPPER	The official press release is a formal announcement to the national or specialised/technical press in order to present a short overview of the COPPER project to the public.	TEC
COPPER Leaflet	The official COPPER leaflet is a four-sided A4 flyer and includes important project related information. On the one hand it can be circulated in printed form, e.g. it can be handed out at conferences or other events; on the other hand also an electronic version (e.g. PDF file) can be circulated.	TEC
Nanometeraufgelöste Abbildungen optoelektronischer Materialeigenschaften auf Basis verbesserter Elektronenspektrometer und Energiefilter im Transmissionselektronenmikroskop	Forschungsjournal TU Graz WS 2007/08	FELMI TU-Graz
FELMI Project Copper	Press release TU Graz	FELMI TU-Graz
ACR Annual Review	ACR Annual Review	FELMI TU-Graz / ZFE Graz

Table 7: Summary of press releases, newsletters

3.2.7 Other

In order to immediately improve the visibility of the CopPeR project a logo was designed. This CopPeR logo combines the CopPeR word mark with a figurative mark which outlines the objective of the project: the seedless / direct-on-barrier copper plating. This logo meets the demands on comprehensibility, polarization, memorability and recognition value.



The Logo is used in all the dissemination tools, ranging from the internal communication and reporting templates to external communication tools like web site, fact sheet and folder. This graphical identity will help to consistently communicate and disseminate the project in the external project communication. On the other side the templates will also help to save time and effort for the members of the consortium, since no further design work will be necessary. Templates for documents and presentations have been produced and made downloadable for all project members. The templates are important to ensure a united impression and a consistent visual appearance of the project.

4 Cooperation with external organisations

In addition to the various dissemination activities reported above, the CopPeR consortium is in close cooperation with external organisations. The involved partners and their existing and planned activities are listed below.

Actual/ planned date	Type, content of the cooperation	Cooperation partners	Countries addressed (international/ national – which country)	COPPER partners involved
May/June, 2008	Material sourcing for plating prototype	Logitex	Germany	SEZ, Cormet

Table 8: Cooperation with external organisations

5 Participation in projects

5.1 Participation in international projects

In order to promote knowledge sharing and collecting among the Consortium partners and various organisations within similar research sphere, project partners participate also in several other complementary projects, which are listed below.

Project name	Topic and description of the project	Project partners
ICT FP7		
CACE Ref.No. 216499 (2008), http://www.cace-project.eu	Development of a toolbox that supports the production of a high quality cryptographic software	TEC is coordinator of these FP7 projects and so there is a great potential for mutual benefit in terms of project management
MULTIBASE Ref.No. 216541 (2008), http://www.multibase-project.eu	Development of a scalable multi-tasking baseband for mobile communication	
TECOM Ref.No. 216888 (2008), http://www.tecom-project.eu	Adoption of a systematic approach to the development of trusted embedded systems	

ICT FP6		
SICOM	Strep Simulation based corrosion management for aircraft	VUB , EMPA, EADS, Airbus, Beasy, Université de Bourgogne, ..
OpenTC IST-2005-027635, http://www.opentc.net	Design and development of trustworthy platforms and infrastructures	TEC is coordinator of this FP6 project and there is lively exchange of experiences in terms of project management

Other Program lines		
Opticomp	ERA-SME-project Optimisation Methodology and Process Technology for Realising Low-cost, High-precision Integrated Electronic Components by Electrochemical Pattern Replication	VUB , Replisaurus, Elsyca Acreo, TCD, SGA
Opticomp	Simulation ECPR process	ELS

Table 9: Participation in other EC projects

5.2 Participation in national projects

In addition to the projects that are run on the European level, the partners are also active in numerous national projects.

Project name	Topic and description of the project	Project partners
Austria		
CIFT (FIT-IT)	Basic electrochemical research on direct-on-barrier copper plating	SEZ , TU Graz, MU Leoben, Echem
NIL Austria	Nanoimprint Lithography	FELMI TU Graz
ISOTEC	Organis Sensors / OLEDs	FELMI TU Graz

Belgium		
MUTECH	Novel approach to Transport phenomena in electrochemical processes More information on (http://www.vki.ac.be/mutech/)	VUB , VKI, KULeuven, UGent, Agfa Gevaert, Bekaert
GOA50	Development and Evaluation of Numerical Models and Methods for the Identification of Reaction Kinetics of Electrochemical Processes	VUB
IWT 70760: SmartPlate	Development of software for the simulation of printed circuit boards	Mania, ACB, ELS
"Ionische vloeistoffen: designersolventen voor ontwikkeling van een duurzame chemie"	Electrodeposition from ionic liquids	K. Binnemans, C. Glorieux, D. De Vos, J. Fransaer (KUL)
MAPIL - "Materials Processing in Ionic Liquids"	Electrodeposition from ionic liquids	K. Binnemans, D. De Vos, W. Matthijs, W. Dehaen, C. Stevens (KUL)

Table 10: Participation in national projects

6 List of Abbreviations

CO	Coordinator
COPPER	Copper Interconnects for Advanced Performance and Reliability
COR	Cormet Oy
EC	European Commission
ELS	ELSYCA NV
FELMI	Austrian Centre for Electron Microscopy and Nanoanalysis - Institute for Electron Microscopy of the TU Graz
ICT	Information and Communication Technologies
IFX	Infineon Technologies AG
IPR	Intellectual Property Rights
KUL	Katholieke Universiteit Leuven
n/a	not applicable
SEZ	SEZ AG
STREP	Small or medium-scale focused research project
TEC	Technikon Forschungs- und Planungsgesellschaft mbH
TU	Technische Universität (University of Technology)
VUB	Vrije Universiteit Brussel
WP	work package