



**STRENGTHENING COOPERATION ON ICT RESEARCH BETWEEN EUROPE AND SOUTHEAST ASIA**



**Cooperation between Europe and Southeast Asia  
on ICT research and research infrastructures**

# **Success stories of EU funded projects**

**March 2010**



**Supported by the European Commission and the ASEAN Secretariat**

## Introduction



SEACOO ([www.eurosoutheastasia-ict.org](http://www.eurosoutheastasia-ict.org)) is an initiative supported by the European Commission and the Association of Southeast Asian Nations (ASEAN), coordinated by Sigma Orionis, and including in its partnership organisations playing a key role in ICT policy and research in each of the ten ASEAN countries:

- Advanced Science and Technology Institute (ASTI), Philippines
- Agency for the Assessment and Application of Technology (BPPT), Indonesia
- Institute for Infocomm Research (A\*STAR/I<sup>2</sup>R), Singapore
- Multimedia Development Corporation (MDEC), Malaysia
- National Authority for Science and Technology (NAST), Laos
- National Council for Science and Technology Policy (NCSTP), Vietnam
- National Science and Technology Development Agency (NSTDA/NECTEC), Thailand
- National ICT Development Authority (NiDA), Cambodia
- University of Brunei Darussalam (UBD), Brunei Darussalam
- University of Computer Studies, Yangon (UCSY), Myanmar

SEACOO aims at supporting the development of Information Society policy dialogues and the strengthening of cooperation on ICT research between Europe and Southeast Asia. Planned activities over the period 2010-2011 include:

- The identification and analysis of ICT policy and research priorities, at bilateral and regional levels, and the provision of recommendations for future cooperation initiatives,
- The organization of cooperation events in Europe and in Southeast Asia synchronised whenever possible with policy dialogue meetings,
- The development of synergies with programmes and projects launched under EU-funded programmes, at the initiative of EU Member States, and at the ASEAN level,
- The development of promotion, dissemination and awareness-raising activities.

One of the main expected outputs of SEACOO activities is the quick development of cooperation projects in ICT research between the two regions, particularly under the European FP7 research funding programme (<http://cordis.europa.eu/fp7>). Such cooperation projects have already emerged in the past years (see tables on next page) and many of them have developed very successfully for the mutual interest of stakeholders from both regions. We are happy to provide through the present document a selection of these “success stories”.

If you have been involved in successful cooperation projects that would not be listed here, please contact us and we will be happy to take into consideration these projects in future releases of the document.

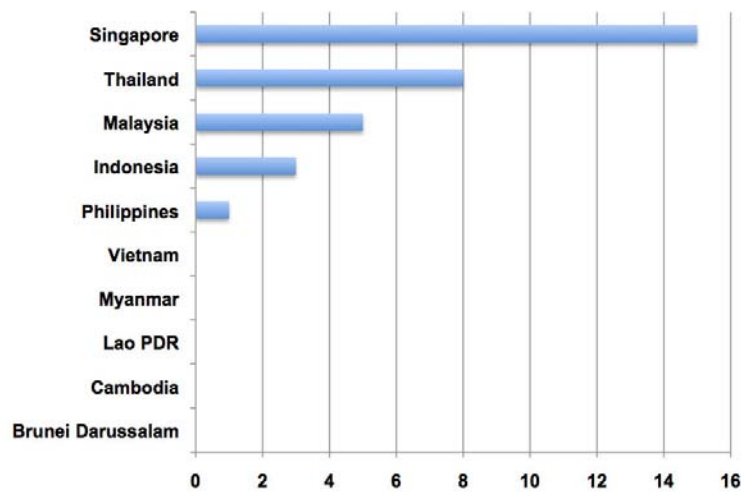
On behalf of the SEACOO Consortium

Camille Torrenti

Project Manager at Sigma Orionis - SEACOO project coordinator  
camille.torrenti@sigma-orionis.com

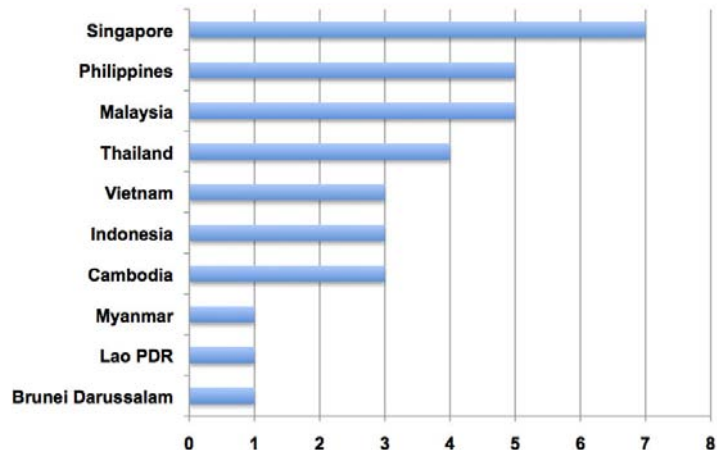
Southeast Asian organisations (from 5 ASEAN member States) have participated in 32 ICT research projects funded by the European Commission through its FP6 programme covering the period 2002-2007 (a total funding of around 3 million euro for Southeast Asian organisations).

**Number of FP6 IST projects with Southeast Asian participation**  
Source: European Commission (DG Information Society and Media)



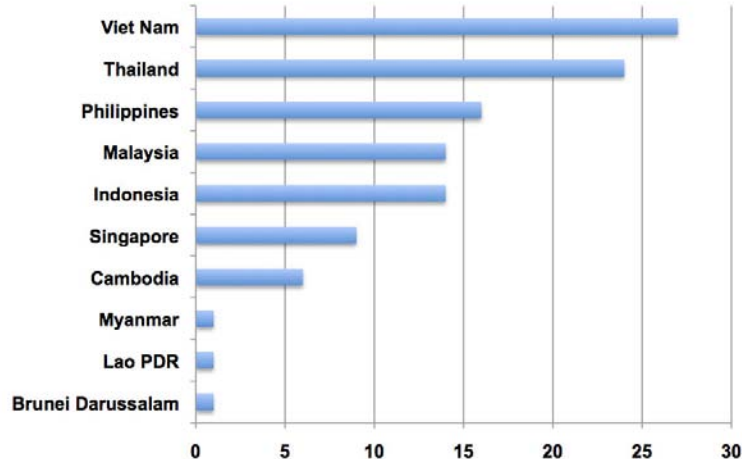
During the first three years of the FP7 programme (covering the period 2007-2013) a total of 33 research projects in ICT and research infrastructures, involving Southeast Asian organisations from all ASEAN member States, have already been funded.

**Number of FP7 projects in ICT and Research Infrastructures with Southeast Asian participation as of January 2010**  
Source: European Commission (DG Information Society and Media)



When considering all thematic areas of FP7 and not only ICT, a total of 113 research projects with the participation of Southeast Asian organisations have already been launched during the first three years of the FP7 programme (a total funding of around 14,3 million euro for Southeast Asian organisations).

**Number of FP7 projects with Southeast Asian participation as of December 2009 (Cooperation programme only)**  
Source: European Commission (DG Research)



Project name: **CATER**  
Project period: 2006-2009



Project scope:

CATER aimed at reaching an integrated system for mass customisation of vehicles through the use of dedicated and innovative ICT tools in the whole automotive industry process. CATER introduced systems and methodologies that went beyond the traditional approaches of automotive OEMs and in which design is driven by cross-cultural and emotional aspects of customer needs. This was enabled through integration of innovative ideas from diverse expertise of both Europe and Asia. In this way, CATER aimed to facilitate business in the automotive industry, by bridging well-known gaps in the automotive ICT world of today, as well as gaps between Europe and Asia by integrating workable approaches from both regions. CATER also advocated networked business in the automotive field, aiming at a better integration of stakeholders (from OEMs to customers) within the supply chain, to support product planners and designers, while the customers can design their own vehicle via a VR interface in a 3D Web environment.

Total funding: 3 349 600 €  
Project URL: [www.cater-ist.org](http://www.cater-ist.org)

Southeast Asian partners:

- Damai Sciences, Malaysia
- Universiti Malaysia Sarawak, Malaysia
- Nanyang Technological University, Singapore

Contacts and testimonies :

Dr Manfred Dangelmaier  
Fraunhofer Institute  
Project coordinator  
[manfred.dangelmaier@iao.fhg.de](mailto:manfred.dangelmaier@iao.fhg.de)

*“The cooperation with the SEA partners was inspiring and fruitful in the case of CATER. The project had a strong and well-managed group of partners from Southeast Asia. The complementary competencies and creativity from both Europe and SEA was a decisive factor for the success of the R&D efforts of the project.”*

Dr Halimahtun Khalid  
Damai Sciences, Malaysia  
[halimahtun@damai-sciences.com](mailto:halimahtun@damai-sciences.com)

*“The collaboration with European partners provided excellent opportunity for knowledge exchange and expertise enrichment in various areas of scientific deliberation and project management. Strategic leadership skills were developed in the collaborative process for future gain. The cultural mix of the consortium enabled learning of core values upheld by partners.”*

Project name: **DEWS**  
Project period: 2006-2010



Project scope:

The DEWS (Distant Early Warning System project) aims at strengthening the early warning capacities by building an innovative generation of interoperable tsunami early warning systems. Tsunami detection is based on an open sensor platform, integrating sensor systems for earthquake (seismic), sea level (tide gauge, buoys) and ground displacement (GPS land stations) monitoring. Based on this improved upstream information flow the downstream capacities are enhanced by improving information logistics and multi channel warning dissemination. Warning messages are disseminated to the public, authorities and emergency management forces.

Total funding: 4 016 865 €  
Project URL: [www.dews-online.org](http://www.dews-online.org)

Southeast Asian partners:

- Badan Meteorologi, Klimatologi dan Geofisika Meteorological and Geophysical Agency BANA, Indonesia
- Bandung Institute of Technology, Indonesia
- Chiang Mai University, Thailand
- Department of Disaster Prevention and Mitigation, Ministry of Interior, Thailand
- National Disaster Warning Center, Ministry of ICT, Thailand
- Prince of Songkla University, Thailand
- Thai Meteorological Dept., Seismological Bureau, Thailand

Contact:

José F. Esteban Lauzán  
Atos Origin  
Project coordinator  
[jfernando.esteban@atosorigin.com](mailto:jfernando.esteban@atosorigin.com)

Project name: **EUAsiaGrid**  
Project period: 2008-2010



Project scope:

The EUAsiaGrid project contributes to the aims of the EU Research Infrastructures FP7 Programme by "promoting international interoperability between similar infrastructures with the aim of reinforcing the global relevance and impact of European e-Infrastructures". The project's main goal is to pave the way towards an Asian e-Science Grid Infrastructure, in synergy with the other European Grid initiatives in Asia, namely EGEE-III via its Asia Federation, and both the EUChinaGRID and EU-IndiaGRID projects and their eventual follow on efforts. Taking advantage of the existing global Grid technologies, with the specific emphasis on the European experience with the gLite middleware and applications running on top of it, the project plans to encourage federating approaches across scientific disciplines and communities.

Total funding: 920 000 €  
Project URL: [www.euasiagrid.org](http://www.euasiagrid.org)

Southeast Asian partners:

- Advanced Science and Technology Institute (ASTI), Philippines
- Ateneo de Manila University, Philippines
- Ho Chi Minh City Institute of Information Technology, Vietnam
- Hydro and Agro Informatics Institute, Thailand
- Infocomm Development Authority (IDA), Singapore
- Institut Teknologi Bandung BMHN, Indonesia
- Mimos Berhad, Malaysia
- National Science and Technology Development Agency (NTSDA), Thailand
- Universiti Putra Malaysia, Malaysia

Contacts and testimonies:

Marco Paganoni  
National Institute of nuclear physics, Italy  
Project coordinator  
[marco.paganoni@cern.ch](mailto:marco.paganoni@cern.ch)

Dr Piyawut SRICHAIKUL  
NSTDA, Thailand  
[piyawut.srichaikul@nectec.or.th](mailto:piyawut.srichaikul@nectec.or.th)

*"Participating in the EUAsiaGrid project is beneficial to us for expanding our international collaborative research foot stand and experiencing cross-culture project management."*

Project name: **Flossinclude**  
Project period: 2008-2010

**FLOSS [include]**

Project scope:

FLOSS(Free/Libre/OpenSourceSoftware) is arguably one of the best examples of open, collaborative, internationally distributed production and development. FLOSS provides numerous benefits for developing countries, such as low cost, adaptability, and a free-of-charge high quality training environment, as shown by the FP6 FLOSSWORLD study. The FLOSSInclude project aims to strengthen Europe's participation in international research in FLOSS and open standards, by studying what is needed to increase the deployment, development and societal impact of FLOSS in Africa, Asia and Latin America. The project will result in a sound understanding of the FLOSS-related needs of the target regions. It will federate local and regional development initiatives with the support of cooperation with current EU research. It will also provide a roadmap for future EU research cooperation in this area.

Total funding: 703 465 €  
Project URL: [www.flossinclude.org](http://www.flossinclude.org)

Southeast Asian partner:  
▪ Open Institute, Cambodia

Contact :

Rishab Ghosh  
United Nations University Merit, Netherlands  
Project coordinator  
[ghosh@merit.unu.edu](mailto:ghosh@merit.unu.edu)

Project name: **PULSERS Phase II**  
Project period: January 2006 – June 2008



Project scope:

The key objective of the PULSERS project was to provide significant contributions in the area of R&D related to UWB-Radio Technology (UWB-RT) with the ultimate goal of providing benefits to human, inter-machine and mixed communication needs. Bringing together experts on the topic from various European countries and cooperating with important UWB players from Asia, the PULSERS R&D organisations coming from key industrial and academic communities had the necessary critical mass to strongly advance the state-of-the-art and further the deployment of UWB-RT in Europe and world-wide. The work will be continued in the frame of the EWUB project.

Total funding: 12 400 000 €  
Project URL: [www.euwb.eu](http://www.euwb.eu)

Southeast Asian partner:

- Institute for Infocomm Research (I<sup>2</sup>R), Singapore

Contacts and testimonies:

Hrjehor MARK  
GWT-TUD GmbH, Germany  
Project coordinator  
[euwb@gwtonline.de](mailto:euwb@gwtonline.de)

Prof. Lye Kin Mun  
I<sup>2</sup>R, Singapore  
[lyekm@i2r.a-star.edu.sg](mailto:lyekm@i2r.a-star.edu.sg)

*“Energy efficiency and cost are key challenges in deploying Ultra WideBand (UWB) wireless sensor networks. In this consortium, I2R developed an energy efficient multi-node cooperative ranging technique for automatic localization in a UWB wireless sensor network, and an algorithm to eliminate the ranging error caused by crystal clock timing drift at different sensor nodes.”*

Project name: **TEIN3**  
Project period: 2009-2011



Project scope:

The third generation of the Trans-Eurasia Information Network (TEIN3) provides a dedicated high-capacity Internet for research and education communities across Asia-Pacific. It currently connects 11 countries in the region and is now expanding its footprint to South Asia bringing the total number of partners to 18: Australia, China, Indonesia, Japan, Korea, Laos, Malaysia, the Philippines, Singapore, Thailand and Vietnam are being joined by Bangladesh, Bhutan, India, Nepal, Pakistan, Sri Lanka and Cambodia. With direct connectivity to Europe's GÉANT network, TEIN3 offers Asia-Pacific a gateway for global collaboration, enabling over 45 million users at more than 8000 research and academic centres to participate in joint projects with their peers in Europe and other parts of the world.

Total funding: 12 000 000 € (from the EU)  
Project URL: [www.tein3.net](http://www.tein3.net)

Southeast Asian partners:

- Advanced Science and Technology Institute (ASTI), Philippines
- CamREN, Cambodia
- Inherent and ITA, Indonesia
- LERNET and NUOL, Laos
- MYREN and MDEC, Malaysia
- PREGINET and ASTI, Philippines
- SingREN, Singapore
- ThaiREN, Thailand
- VinaREN, Vietnam

Contacts and testimonies :

David West  
Dante, United Kingdom  
Project coordinator  
[david.west@dante.org.uk](mailto:david.west@dante.org.uk)

Denis Villorente  
ASTI, Philippines  
[denis@asti.dost.gov.ph](mailto:denis@asti.dost.gov.ph)

*"We are very fortunate to be part of TEIN2, and now, TEIN3, because it has paved the way for the country to participate in pioneering research collaborations using advanced networks. The Philippines is one of the countries that has benefited from its connection to TEIN3. For instance, this connectivity has played a key role in the timely transmission of meteorological data from Germany's weather bureau to the local weather bureau, enabling up-to-date weather forecasts. Another field that has taken advantage of the network is crop research. TEIN3 facilitates data-intensive collaborative research among rice scientists in different parts of the world".*