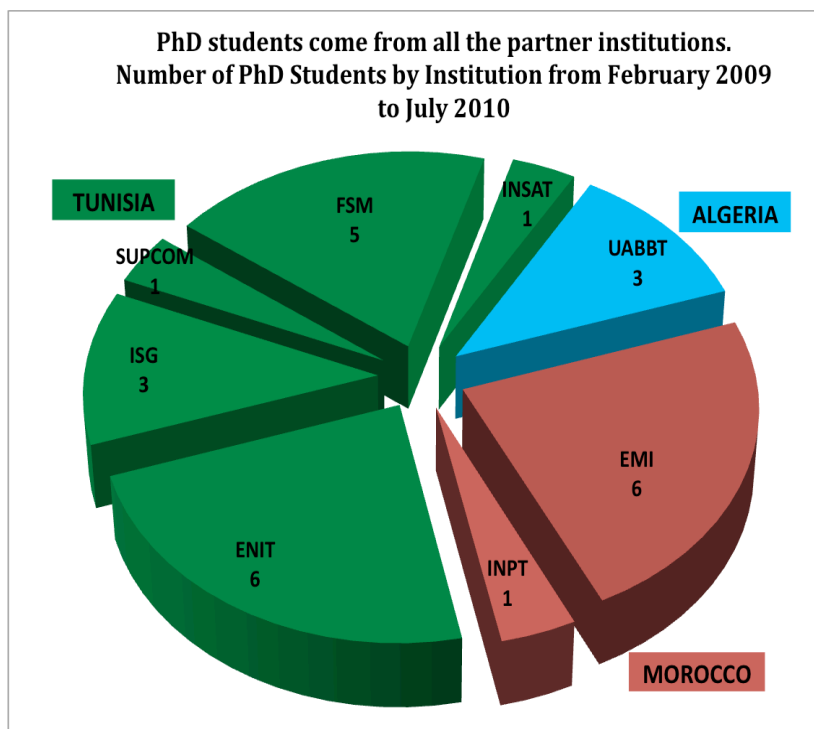


CoAdvise strengthens research networks in Information and Communication Technologies by supporting MPC's PhD students working both in their lab of origin and in a European lab thus creating long-lasting collaboration among the research laboratories between the two sides of the Mediterranean Sea.

CoAdvise aims to support and strengthen pre-existing collaborative research networks between Europe and Mediterranean Partner Countries (MPC) in the field of Information and Communication Technologies. Within the networks, the CoAdvise IRSES program consists in having PhD students travelling from MPC's to European countries in order to work in two different research and advising environments. The impact of the action is increased by a networking organisation that links several teams on a common topic of research.

Although the networks are sponsored by other financial sources (INRIA Euromediterranean 3+3 program), the IRSES program has an important leverage effect. The program supports the secondments of the PhD students three months a year to the northern lab during their PhD thesis. It also enables their Northern CoAdvisors to travel to the southern lab one month a year.

The students travel towards the European labs in France at Institut National de Recherche en Informatique et Automatique (INRIA) or Institut National de la Recherche Agronomique (INRA), in Italy at Conzilio Nazionale delle Ricerche (CNR-ICAR) or Politecnico di Milano (POLIMI) and in Spain at University of Malaga (UMA) and come from all MPC's partner institutions.



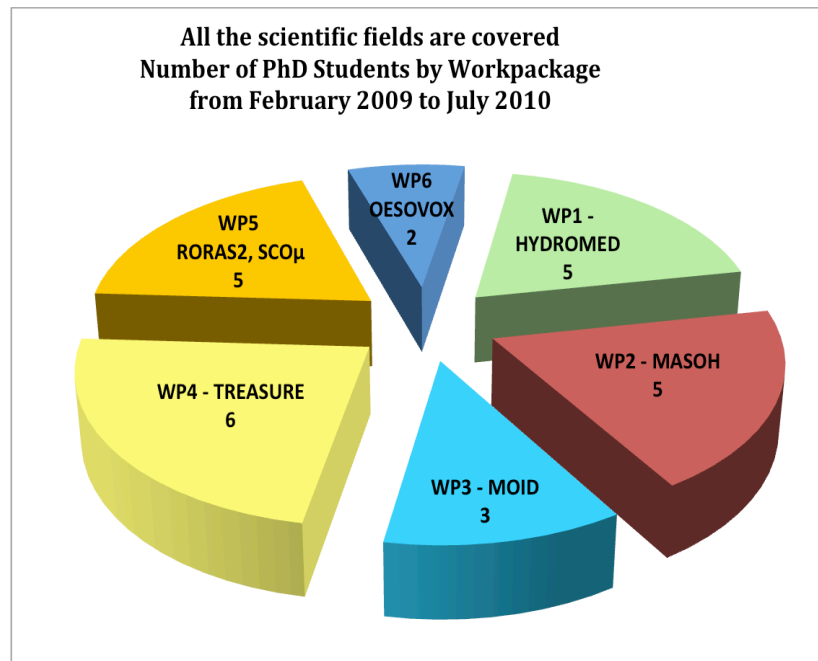
In Tunisia from Ecole Nationale des Ingénieurs de Tunis (ENIT), Institut Supérieur de Gestion de Tunis (ISG), Institut National des Sciences Appliquées et de Technologie (INSAT), Faculté des Sciences de Monastir (FSM) or Ecole Supérieure de Communication de Tunis (SUP'COM); in Morocco from Ecole Mohammadia d'Ingénieurs (EMI) or Institut National des Postes et Télécommunications de Rabat (INPT) and in Algeria from Université Aboubekr Belkaid de Tlemcen (UABBT).

We managed to realize 108 months of secondments for 26 students out of the 201 planned for the whole project. They come from all partner institutions. Ten out of twenty six students were double registered in two universities. Moreover there is a co-advising agreement between the University of Tunis El Manar (ENIT Home institution) and the University of Rennes 1. Eleven of them are going to defend their thesis in the course of the project.

Eleven Northern CoAdvisors from all Work Packages travelled to a southern partner lab. This enabled them to travel more and for longer periods than they usually do. These exchanges represent an important increase of the traffic of scientific visits between the partners and contribute to the networking activity on common research themes and for long lasting

collaborations. These stays had four main purposes: supervising the work of their PhD students, co-writing papers, teaching in the partner's universities and working together with local research partners. Most of the Southern CoAdvisors moved to the northern labs for either discussing the choice of students or supervising the PhD with the northern CoAdvisor as a team around the student, but also for other purposes. They take advantage of their stays in the northern labs to meet other professors or teachers and also other students; thus creating a favourable starting point for discussions and identification of new partners.

Many scientific subjects in the field of Information and Communication Technologies are covered such as: Inverse problems in hydrogeology (HYDROMED); Modelling Hydrodynamics Wave Propagation and Simulation (MASOH); Metaheuristics for dynamic and uncertain multiobjective optimization problems (MOID); Treatment and sustainable Reuse of Effluents in semiarid climates (TREASURE); Robots for Rehabilitation, human joint Simulation and Assistance (RORAS2); Game Strategies and Scientific Computing for Multidisciplinary Optimization (SCO μ); Realtime improvement of the voice of persons without larynx (OESOVOX).



On each of these subjects, the PhD students wrote a report at the end of each of their stays. Moreover PhD students and CoAdvisors of both sides of the Mediterranean have submitted common papers either in scientific journals (10 papers accepted and 4 submitted for publication) or to conferences (12 papers). This total of 26 co-published papers for 18 months and 26 students is a good indicator of the activity carried out during the stays and of the premises of the long-term scientific impact of CoAdvise. As they will progress closer to the end of their thesis they will benefit from new opportunities to enrich their work and produce more publications. Thesis and common publications are the key indicators of the success of this program.

The PhD students are building networks of colleagues and supervisors in Europe and in the MPC's during their PhD's; they integrate high level scientific exchanges, exchange best practices and cooperate with higher education establishments. Strengthening the scientific excellence and creating long-lasting collaboration among the research laboratories between the two sides of the Mediterranean Sea are therefore the expected impacts of the program. This action will give consistency and stability to the Mediterranean cooperation as close ties are elaborated through individual relationships.

For more information on the program please contact: coadvise@sophia.inria.fr