FCT Fundação para a Ciência e a Tecnologia

MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR

Programa de Financiamento Plurianual - 2007

[Lista de opções]

Relatório de avaliação

Avaliação de Unidade de I&D
Painel de avaliação, Apreciação global, Financiamentos, Relatórios

Apreciação global
Very Good

Painel de avaliação
(Engenharia Electrotécnica e Informática) Luigia Carlucci Aiello, Tariq Durrani, Franco Maloberti, Moira C. Norrie, David Padua, Janak H. Patel, Christopher Rose, José Manuel Fonseca de Moura (Coordinator)

Relatório do painel
Overall unit quality: 4, 3.5, 3.5, 3, 3, 3, 3, 2.
CITI, the Centre for Informatics and Information Technologies, is hosted by the Department of Informatics of the Faculty of Science and Technology of the New Univerity of Lisboa.

In 2003 it counts 52 researchers, of whom 25 hold a PhD. This is a large unit primarily devoted to aspects of Computer Science, comprising the areas of Programming Languages and Models in Software Engineering, Parallel and Distributed Computing, and Computer Graphics Multimedia and HCI.

The center is primarily funded by the Portuguese Ministry of Science, it has a good level of external funding, which can be improved. It has solid international connections, an internal program of visitors and seminars, a good activity at organizing and hosting high level international conferences.

The researchers of the group are involved in teaching and in some cases have produced popular textbooks in portuguese.

During the visit of the panel, the director gave a good presentation of the goals and activities of the unit, and a nice overview of work from which it is evident that the results are being placed in top conferences and journals and that researchers from CITI are known by and collaborate with institutions world wide.

In CITI there appears to be a strong activity and it was the only unit visited that had a feeling of community in terms of organising many unit activities such as seminars and visitor programmes.

The general management structure of the unit seems relatively well-defined with a clearly-defined system for the proposal and election of new members. Research groups have to define research plans which are presented to the scientific commission. The unit has made serious efforts to recruit members from elsewhere and seems to have been very successful in this. It seems that the average age of the unit members is pretty high: it is important that the Unit establishes approaches for the nurturing of younger staff.

Leadership seemed reluctant to perform internal evaluation of individual researchers and act upon the information. Management is encouraged to implement periodic reviews of researchers, groups and areas. Director could encourage youngsters and/or new and promising initiatives, for example by taxing FCT basic funding of each Ph.D. member (say 25%) and redistribute it to reward better performing groups or individuals.

The activity seems on academic topics with little or no link with the external productive world. Activity of technology transfer and contacts with external enterprises should be encouraged, in particular in areas that otherwise risk to become too academic and far from concrete problems. This can also help solve financial problems of the unit.

- Research Groups
Programming Language and Models; Software Engineering (4)
The area mainly covers theoretical research on the foundations of global computing, dealing with concurrency, distribution and mobility. It deals also with various aspects of Software Engineering, which go from Requirements Engineering to Reverse Engineering, to Aspect Oriented Software Development. The researchers of this group is high level with good connections with the leading schools in these topics around Europe and the rest of the world.
Some more attention to practical applications is strongly encouraged.

Parallel and Distributed Processing; Large-Scale Distributed Computing (5)

The area covers both theoretical and systems aspects of parallel and also distributed computing. Although the parallell computing group has a very strong background in theoretical aspects, they have deliberately chosen to

also extend their activities to systems aspects and have been successful in their research, producing a number of development tools. The distributed computing group is addressing various issues of mobile computing. Their research is well-positioned in terms of topic and they are publishing in main conferences.

Computer Graphics, Media Processing, Visualisation, Interaction (3-3.5)

The area includes a number of diverse groups in terms of subject and quality of research. Newly integrated areas such as the multimedia stream have stimulated new areas of research strengthened the level of research. Other streams such as GIS seem to lack critical mass. As GIS is an area that has several units working on different aspects of it within Portugal, they might want to consider forming close cooperations with other units. Alternatively, CITI might question whether this is an area that should be pursued within this unit.

Human Language Technologies (3.5)

The group is working on Web and Text mining, Adaptive Natural Language Processing systems, Language Transparent information Retrieval, and related areas. Though the group size is small, the results achieved are very good, and should be encouraged, even though its positioning within CITI could be questionable.

Overall CITI is a strong unit that includes elements of excellent theoretical and practical research. The management needs to carefully consider the future strategy in terms of directions of research, how to deal with less productive research streams, and how to attract, encourage and motivate young researchers.

Comentário da unidade
In the past few years CITI attracted a number of new researchers and strengthened its research areas. Leadership recognizes and is currently proposing mechanisms to maintain the high level of research activities, to motivate young researchers and to stimulate better performance, as suggested by the evaluation panel. These mechanisms include the redistribution of part of the FCT basic funding according to groups and individual performance.

In its future strategy CITI will continue to promote excellence in its research. Leadership sees as a priority keeping and enforcing international contacts, a regular program of seminars, and supporting scholarships for younger researchers, including stays abroad. These actions are fundamental to increase the level of external funding by involving CITI members in international cooperation activities and projects. In order to launch new initiatives according to the strategic guidelines above, an additional level of programmatic funding is crucial.

CITI would like to thank the Evaluation Panel and FCT for the visit, and the helpful recommendations.