Agència
per a la Qualitat
del Sistema Universitari
de **Catalunya**

Final report assessing the design of the internal quality assurance system

Barcelona School of Computer Science
Technical University of Catalonia

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Contents

I. DETAILS CONCERNING THE INTERNAL QUALITY ASSURANCE SYSTEM (IQAS) UNDER ASSESSMENT

University	Technical University of Catalonia
Centre	Barcelona School of Computer Science
IQAS scope	Degrees taught at the Barcelona School of Computer Science
Call	2007 – 2nd stage

II. ASSESSMENT OF THE DESIGN OF THE IQAS

Having examined the report drawn up by the Assessment Committee, the AQU Catalunya Specific Committee for the Quality Assessment of University Centres and Activities issued an overall POSITIVE assessment relating to the design of the IQAS for the Barcelona School of Computer Science at the Technical University of Catalonia.

1.0 Quality goals and policy	Satisfactory
1.1 Quality assurance of training programmes	Satisfactory
1.2 Extent to which teaching is student-oriented	Satisfactory
1.3 Quality improvement and assurance of academic and teaching support staff	Satisfactory
1.4a Management and improvement of services and material resources	Satisfactory
1.4b Management and improvement of the quality of services and administration staff	Satisfactory
1.5 Analysis and use of results	Satisfactory
1.6 Publication of information on degrees	Satisfactory

The overall **POSITIVE** assessment given to the IQAS is based on the **satisfactory** assessment given to the guidelines set out in the AUDIT programme, and it is likewise founded on the identification of specific, cross-disciplinary positive aspects that lend the design of the IQAS its robust nature.

With respect to the design of the IQAS and the assessment prior to its implementation, **positive aspects** refer to elements described in sufficient detail making it possible to assume they will be successfully implemented with a certain degree of assurance. Even so, the Barcelona School of Computer Science is advised to take these aspects into consideration within an ongoing improvement process.

The Assessment Committee highly values the approach developed for the university as a whole: an internal quality assurance system (or SAIQ: the abbreviation according to UPC's nomenclature) for the UPC, since it allows the university to uphold coherence and a common working framework. Similarly, the design and definition of processes in a structured, homogenous, standard format is also noteworthy and it lends the processes much clarity making them easier to execute in future.

As far as other **cross-disciplinary aspects** are concerned, a positive assessment is made of a uniform summary file in each guideline, as well as the scheme followed for classifying evidence which includes details of the file format type, the individual in charge of its possession and the time it will be preserved, the documents available and the extent to which processes and pending tasks have been developed.

Additionally, and **specifically for each guideline**, different aspects are identified which ensure successful implementation of the IQAS.

With regard to the **quality goals and policy** (guideline 1.0), a positive assessment is made of the procedure for defining and approving the quality policy and goals. The Barcelona School of Computer Science has defined its quality policy linking it to the goals set by the Technical University of Catalonia which are set out in the strategic planning for both the university and the specific centre.

As far as the **quality assurance of training programmes** is concerned (guideline 1.1), a positive valuation is given to mechanisms regulating the decision-making process regarding the range of educational courses and programmes on offer, the design of degrees and their goals.

With regard to the extent to which **teaching is student-oriented** (guideline 1.2), elements lending strength to the IQAS include mechanisms for assuring the quality of external training placements and student mobility (decision-making process, systems for compiling and analysing information and monitoring, review and improvement mechanisms). Particularly prominent is the system for reviewing and improving external training placements, which constitutes a model to be followed in the remaining processes set out in the manual (reports, individuals in charge, frequency, etc.).

In the case of the **quality improvement and assurance of academic and teaching support staff** (guideline 1.3), this guideline is deemed as suitably developed in this design stage since a general, cross-disciplinary proposal has been taken on for the UPC as a whole. Furthermore, the process for assuring the quality of the training of teaching and research staff bears the hallmark of being successful, since actions are carried out on a regular basis; the three spheres set out in the training plan - integration, initial and ongoing training; the mechanisms for reviewing, monitoring and assessing the plan; the involvement of teaching and research staff in

analysis by means of satisfaction surveys, as well as the definition of indicators, are some of the remaining aspects worth highlighting. Lastly, the staff information systems and the existence of channels for staff participation are also positive elements.

With regard to the **management and improvement of services and material resources** (guideline 1.4a), as a tool for monitoring, reviewing and improving services particularly noteworthy is the compiling of information on the operation and satisfaction of stakeholders regarding the quality of services, as well as the "Report on satisfaction with services" based on the indicators stated.

As regards the **management and improvement of the quality of services and administration staff** (guideline 1.4b), although not called for in the AUDIT programme guidelines, aspects relating to the admission, training, assessment, promotion and acknowledgment of services and administration staff have been defined and developed in tandem with those relating to teaching and research staff since it is a cross-disciplinary aspect for the UPC as a whole.

In relation to the **analysis and use of results** (guideline 1.5), particular note is made of the gauging of IQAS outcomes by means of a scorecard that carries out ratings on the learning processes, access to labour market and stakeholder satisfaction. Also prominent is the clarity and specification of the mechanisms and those in charge of monitoring, reviewing and improving all procedures associated with this guideline, as well as the inclusion in the procedure of an annual report prepared in order to publish information on the results achieved.

III. SUGGESTIONS FOR IMPROVING THE DESIGN OF THE IQAS PRIOR TO IMPLEMENTATION

The assessment conducted on the design of the IQAS has led to the identification of a number of opportunities for improvement in certain areas. As a result, the Barcelona School of Computer Science is advised to carry out an overhaul on these aspects in the short- or medium-term to ensure that the IQAS is smoothly implemented.

The assessment of the IQAS project submitted is satisfactory in all areas and, although the Assessment Committee deems that this means the basic criteria have been met in order to receive a positive assessment and proceed to implementation, it is pointed out that the level of development of the project calls for major endeavours to be made on implementation tasks for it to be effective.

Firstly, various suggestions of a **cross-disciplinary** nature are put forward.

- Flowcharts. It is advisable to review certain flowcharts in order to ensure suitable correspondence with the text descriptions making it easier to interpret how said charts unfold. The review should consider the following areas:

    - The development of the text process must constitute a means for supporting and clarifying the implementation of the process in the form of a flowchart (which shall comprise the main benchmark for avoiding redundant information).

    - The flowcharts relating to sub-processes must be identified with various names (provided that the processes are formed by various sub-processes).

    - In order to give greater clarity to the interpretation, the names of outputs must be reviewed to specify their content and avoid generalised names such as "record". For instance, one major output is the plan of actions for improvement, which may or may not be compiled in the form of a "record".

- Centre process map. It is advisable to include a map linking the various IQAS processes. This would provide a system overview and interdependence between processes that would be highly useful for achieving coordinated improvements to the IQAS.

- Documentation. It is advisable to review or include, if applicable, the documentation review check system (review background, clarity of current validated review, the person approving reviews, the place where documentation may be accessed and a check on authorisation for amending documentation, etc.).

- Distribution of competences and responsibilities. In order to ensure smooth implementation of the IQAS it is necessary to distribute competences and responsibilities for the various processes in the system. According to the IQAS model designed, the Dean's Team is the only body in charge of all processes set by the centre. It is recommendable to distinguish the body in charge of executing specific processes from the body in charge of management; otherwise, there is a major risk of the centre's management team becoming overwhelmed, thereby risking the effectiveness of the IQAS.

- Information. Lastly, the centre is advised to reflect on what information must be public and to ensure that the various stakeholders have access to this information.

Specifically for each guideline the following aspects are recommended for improvement in order to ensure smooth implementation of the IQAS.

The extent to which **teaching is student-oriented** (guideline 1.2) should include participation of departments as a stakeholder when it comes to designing and developing student support and guidance systems, the teaching methodology and the assessment of learning.

In the case of the **quality improvement and assurance of academic and teaching support staff** (guideline 1.3.), although the staff policy is regulated for the university as a whole, it is advisable for the centre to include in its IQAS those specific aspects which are incumbent on it, seeking to contribute to improving the quality of academic staff and teaching activities. Indeed, there is scope for strengthening mechanisms for monitoring, reviewing and improving the admission of academic and teaching support staff as well as the mechanisms relating to the monitoring, review and improvement of models for assessment, promotion and acknowledgment. A mix of responsibilities has been identified in the monitoring and improvement mechanisms. Lastly, it would be pertinent to define the responsibilities and the methods of action of the Teaching Staff Development Service which, according to the flowchart, monitors and assesses work positions.

Even on the basis of the positive assessment of the training process for academic staff, it is advisable for a proactive intervention to be given when it comes to defining the programme of training actions addressed to academic staff of the Barcelona School of Computer Science by means of a customised proposal founded on a systematic identification of specific needs in line with the quality policy and goals defined.

As far as the **management and improvement of services and material resources** is concerned (guideline 1.4a), it is advisable for specification to be given of the goals and indicators in order to monitor and improve material resources.

As regards the **management and improvement of the quality of services and administration staff** (guideline 1.4b), although the services and administration staff policy is regulated for the university as a whole, it is advisable for the centre to include in its IQAS those specific aspects which are incumbent on it, seeking to improve the quality of staff in this category. It would be pertinent to incorporate participation of departments and their directors (service and unit directors, or the management) when it comes to defining, reviewing and improving the services and administration staff policy (for instance, when specifying how contract renewal is conducted).

With regard to the **analysis and use of results** (guideline 1.5), it is advisable to clarify the apparent confusion noted in procedure 270.1.5.1, since it deals with four-monthly monitoring in chapter 5, while chapter 6 refers to annual monitoring. Similarly, the review, monitoring and improvement includes a four-monthly monitoring of indicators and the adoption of remedial measures if these indicators do not fit in line with the goals. In this respect, it is advisable to

specify the management of these improvements and reflect on how these improvements will provide feedback for the improvement of results in flowcharts. Lastly, it is recommendable to reflect on the stakeholders taken into account when gauging satisfaction, since what is described merely deals with students.

With respect to the **publication of information on degrees** (guideline 1.6), it is advisable to strengthen the mechanisms for monitoring, reviewing and improving public information provided to stakeholders, particularly in order to assess the impact of this information.

IV. ANNEX: MEMBERS OF THE ASSESSMENT COMMITTEE

Chair	Ms Flor Sánchez Fernández Vice-rector for Planning and Quality at the Autonomous University of Madrid
Academic member	Mr Alfonso Carlos Davalillo Head professor at the University of the Basque Country and member of the Chair on Quality
Academic member	Ms Carmen Martínez del Valle Director of the Accreditation and Assessment Division at the University of Alcalá
Professional member	Mr Roberto Corral González Quality director for Hewlett-Packard, SA
Clerk	Ms Caterina Cazalla Lorite AQU Catalunya project manager