Example of Guidelines for the *ExAnte* Evaluation of Doctoral Programs

Description

WP2 – Partner Country Guidelines for the ExAnte Evaluation of Doctoral Programs (C3QA Project)
THIS IS A TEMPLATE FOR EACH PARTNER COUNTRY
MODIFY IT ACCORDINGLY

C3QA

INDEX

INTRODUCTION

This document is directly related to the chapter 6 of the "*Framework-Model for External Quality Assurance (F-EQA-M)*". Therefore, the aspects to be evaluated, as well as the standards and criteria are in accordance with those described in the aforementioned document. The contents regarding "University strategic plan for cycle" and "Description of the doctoral program" have been described together in a single section.

The main objective of this model framework is to provide the PCs with a tool on which to base themselves in order to develop their procedure and criteria when assessing new proposals for Doctoral Programs named *ExAnte Accreditation*. On the other hand, Universities and Doctoral Schools can also use this framework when preparing proposals for DPs that they wish to submit to the *ExAnte Accreditation* procedure.

The standards and criteria have been divided in 8 chapters. The title of each chapter describes the name of the aspect to be evaluated. After the tittle there is a short introduction to the contents to be reviewed within the chapter and an explanation of the depth with which they should be reviewed. Next, it is shown a synthetic table with the different indicators (items) to be considered within each aspect that will be evaluated (sections to be evaluated). and after the table, a heading for each one of these items (table entries) with an explanation of what and how to consider, to evaluate each of these indicators.

Each indicator should be evaluated, in the light of the proposed DP (Doctoral Program), with the following suggested rating scale.

- Not applicable
- Insufficient information
- Inadequate / require review
- Adequate
- Very suitable

The following aspects should be evaluated to verify a new DP proposal:

1   Description of the doctoral program - University strategic plan for cycle 3.
2   Competences.
3   Access and admission of students.
4   Training activities.
5   Organization of the program.
6   Human resources.
7   Material resources and support services available to doctoral students.
8   Review, improvement and results of the program

1 DESCRIPTION OF THE DOCTORAL PROGRAM - UNIVERSITY STRATEGIC PLAN FOR CYCLE 3

The information in this chapter is both identifying and supporting the DP title. This basic information has important repercussions, since this information shall be publically available to doctoral students and society in general.

Consideration should also be given to whether the proposed DP is appropriate and fits within the strategic plan of the University and/or Doctoral School.

	Not applicable	Insufficient information	Inadequate / review	Adequate	Very suitable
1.1. The name of the title corresponds to its content and level.	■	■			■
1.2. The applicant university, the responsible centre and the collaborating entities are correctly identified.	■	■			■
1.3. The places offer for new students is adequate to the human and material resources.	■	■			■
1.4. The rules of permanence are in accordance with legal regulations.	■	■			■
1.5. The doctoral programme is adequately justified.	■				■
1.6. The proposed doctoral programme is in line with and fits within the University's strategic plan	■				

Evaluation:

1.1 **Title description**

The name of the DP must correspond to its content, must be consistent with its discipline and must not give rise to errors concerning its level or its academic effects, or to confusion concerning its content.

In any case, the name of the official DP must be consistent with the lines of research included in it and with the names that exist in the national and international context.

It is the responsibility of the Education Ministry or State University Council to determine the appropriateness of the name of the new DP. In any case, this name must be in accordance with the provisions of the national legislation.

The award of the doctoral degree must include information about the DP studied, in accordance with the provisions of each PC for the award of official university degrees. One important aspect is the possibility of inscribing the words "International doctor mention" on the front of the title, provided that the circumstances established for this purpose in the doctoral law regulations.

The applicant university must indicate the UNESCO classification, ISCED1 and ISCED2 (International Standard Classification of Education) considered as more appropriate.

1.2 **Identification of the applicant university and the collaborating entities**

The proposal must identify the applicant university and the establishment(s) responsible for the course(s) leading to the degree or, where appropriate, the department or institute.

One of the centres that may offer official doctoral programmes is the doctoral schools, regulated by xxxx (Doctoral schools may be created by a single university or jointly with other universities, bodies, centres, institutions or entities with activities in R&D&I, whether public or private, state or foreign).

The institution must indicate whether the programme is jointly developed together with other institutions. If this is the case, the agreement for the participation of the different institutions in the programme must be attached. This agreement must contain at least the university responsible for:

- the custody of student records;
- the issue and registration of the certificate, and
- the procedure for modifying or terminating the programme.

1.3 **Places offer for new students**

The places offered for new DP students must be adequate in relation to the human and material resources available to the institution.

The institution must make an estimate of the number of new openings offered for the first two

years of implementation of the programme. This information, which is of an orientative nature, is particularly interesting for future students who are considering studying the DP proposed.

The availability of places will also be taken into account in the assessment of human and material resources (teaching staff, infrastructures). This is particularly relevant information for new programmes being launched.

1.4 **Rules of permanence**

The rules of permanence must be in accordance with legal regulations. The application form for the ExAnte evaluation must include a link to the web page of the institution where the rules of permanence applicable to the new proposed DP are public.

Having a minimum regulatory framework related to enrolment and permanence processes is a good practice that shows the clear and transparent criteria and objective rules of engagement to address these processes in order to avoid arbitrariness. In accordance with the General Framework for dealing with student suggestions, complaints and claims, the minimums that should be included in these regulations are:

1.4.1   Application for enrollment and modifications

- Description of the procedure: registration periods, track(s), etc.
- Economic regime: regulation of prices, overcharges, payment methods, bonuses, instalments, conditions of scholarships, etc. The consequences of non-payment, as well as the obligatory or voluntary nature of other services or concepts and the procedure for cancellation of enrollment must be indicated explicitly.
- Academic system: registration requirements (minimum and maximum, incompatibilities, etc.).

1.4.2   Cancellation of enrollment

- Procedure for cancellation of enrollment.
- Economic system: it is necessary to indicate whether or not the tuition payment will be refunded and, if so, the assumptions and the part to be refunded.
- Academic regime: it is necessary to indicate whether there are academic consequences, especially in terms of permanence or not (as if the student had not enrolled).

1.4.3   Permanence

- Scope (when applicable).
- Performance criteria.
- Criteria for progression.
- Mechanisms for consideration of exceptions.

1.5 **DP justification**

The DP must be justified by the context, tradition, overall degree offerings and the potential of the institution(s) offering it. Its subject matter must be supported by similar foreign programmes. In addition, the DP must be coherent and integrated into the institution's R&D&I strategy.

First, the institution must indicate the training objective of the DP it intends to implement. It is important to reflect on the focus and objective of the programme in a few lines so that, in order to guide potential doctoral students on the training profile and the results to be achieved.

The justification for the programme should be made considering the following aspects:

a) The interest of the programme in relation to the programming needs within the framework of the university system of the country or region, as specified in the link between the proposal and the priority policies and strategic lines of research, and the need for highly qualified people in R&D&I for the industrial sector.

b) The internal potential of the institution to develop the programme. The institution must demonstrate that it has experienced research staff with proven quality results, stable and consolidated lines of research, competitive national and international research projects, participation in research networks and sufficient material resources to implement the programme. In this sense, the institution must specify its R&D&I strategy or policy and how the DP it proposes is included in it, so that its coherence can be assessed.

c) The endorsement of the program through external references. The institution must provide a comparison with other national and foreign doctoral programs of similar characteristics that can serve as a guarantee. Consultations with researchers and professors outside the programme, other research institutions, reference documents, etc. may also be indicated, if any.

d) The results. For existing DPs, the most outstanding results of the programme must be provided: enrolment/offer ratio, defended theses, scholarships obtained, graduation rate (defended theses/entrenched theses), average duration, etc.

If the centre responsible for the DP is a doctoral school, the report must contain a specific subsection dedicated to it, which must contain at least the following information:

a) Its R&D&I strategy, which must be linked to that of the university or institutions involved.

b) Its scope of knowledge and the university degrees it offers.

c) Administrative human resources and services that demonstrate adequate programme management capacity.

d) The academic and research human resources that will enable us to assess leadership and sufficient critical mass in the field of knowledge.

In addition, you must provide the link to the website where the following information is made public:

- The management committee, with its composition and functions.

- The internal regulations of the doctoral school, which must establish, among other aspects, the rights and duties of doctoral students, tutors and thesis supervisors, as well as the composition and functions of the academic commissions of their programmes.
- The code of good practices adopted by the doctoral school and signed by all its members.

1.6 **DP in line within the University's strategic plan**

The program proposal must be adequate and in accordance with the Strategic Plan for Cycle 3 established by the applicant University or Doctoral School.

2 COMPETENCES

The degree awarded by the university is a certificate of competences achievement. The list of competences - the training profile - must consider questions of form (language and structure) and also of content (relevance or academic entity and level of the proposal). It is, in fact, the point from which the proposal is developed, both with regard to academic planning and to the human and material resources necessary to achieve the doctoral degree.

It should be borne in mind that the doctoral degree should be awarded to those people who, once they have passed the DP and defended their thesis, have demonstrated that:

a) They have created and interpreted new knowledge through original research of sufficient quality to satisfy their peer review, which places them at the forefront of the discipline and deserves to be published.
b) Have acquired and understood a body of knowledge that is at the forefront of their academic discipline.
c) They are capable of conceptualizing, designing and implementing a project to generate new knowledge, applications or understanding of a discipline, adjusting its design according to unforeseen problems.
d) Have reached a detailed understanding of the applicable research techniques.

They will therefore be able to make informed judgements on complex issues in specialized fields, very often in the absence of complete data, and communicate their ideas and conclusions clearly and effectively to a specialized and non-specialized audience. They should also be able to continue to carry out pure and/or applied research at an advanced level, which contributes to the development of new techniques, ideas or approaches.

	Not applicable	Insufficient information	Inadequate / review	Adequate	Very suitable
2.1. The institution has clearly and adequately formulated the competences in terms of the language and structure used.					
2.2. The competencies are appropriate to the disciplinary content of the program and the level required in the Regulatory Framework of the Country.					
Evaluation					

2.1 **Formulation of competences**

The competencies proposed in the DP must be clearly and precisely written, assessable and be guaranteed to be acquired by all doctoral students.

The list of competencies to be achieved (competence profile) must be formulated in accordance with the following guidelines:

(a) An action that generates a visible and measurable outcome must be clearly identified. Thus, we must avoid the use of verbs such as know and understand and use others such as describe, identify, recognize, classify, compare, evaluate or value, formulate, argue, calculate, plan, etc.

(b) It must include a description of the purpose of the action and the context in which it is implemented. The competence must refer to the disciplinary field where it is fundamental.

The list of competences must have a coherent structure and long or unstructured lists must be avoided. In this regard, it may be useful to bear in mind that the list of competencies should serve to guide doctoral students on the competencies that will be developed throughout their studies and that they should have achieved once they have completed their studies.

2.2 **Adequacy and level of competences**

The skills to be acquired by doctoral students must be in line with those required to grant the doctoral degree and with the qualifications established in the country's regulatory framework. In addition, they must be consistent with the disciplinary scope of the DP.

The competence profile must be relevant within the disciplinary field. The proposed competencies should correspond to those of national or international networks or entities. On the other

hand, the profile of competencies has to be that corresponding to the training level of the proposal in accordance with <mark>the Regulatory Framework of the Country</mark>. These competitions are as follows:

a) Have acquired advanced knowledge at the frontier of knowledge and have demonstrated, in the context of internationally recognised scientific research, a thorough, detailed and well-founded understanding of theoretical and practical aspects and scientific methodology in one or more research fields.

b) Have made an original and significant contribution to scientific research in their field of knowledge and have been recognised as such by the international scientific community.

c) To have demonstrated the ability to design a research project with which to carry out a critical analysis and assessment of imprecise situations in which to apply their contributions and their knowledge and working methodology, in order to synthesise new and complex ideas that produce a deeper knowledge of the research context in which they are working.

d) Have developed sufficient autonomy to initiate, manage and lead innovative research teams and projects and national or international scientific collaborations, within their thematic area, in multidisciplinary contexts and, where appropriate, with a high knowledge transfer component.

e) Have demonstrated that they are capable of carrying out their research activity with social responsibility and scientific integrity.

f) To have justified being able to participate in the scientific discussions that are carried out at international level in their field of knowledge, and to disseminate the results of their research activity to all types of audiences.

g) have demonstrated, within their specific scientific context, that they are capable of making progress in cultural, social or technological fields and of promoting innovation in all fields in a knowledge-based society.

In addition, obtaining a doctoral degree should provide high professional training in various fields, especially those requiring creativity and innovation. Once the training period is over, doctors must have acquired at least the following personal skills and abilities:

a) Deal with contexts where there is little specific information.
b) Identify the key questions that need to be answered to solve a complex problem.
c) Design, create, carry out and undertake new and innovative projects in its field of knowledge.
d) Working, both as a team and independently, in an international or multidisciplinary context.
e) Integrate knowledge, deal with complexity and make judgements with limited information.
f) Criticizing and intellectually defending solutions

3 ACCESS AND ADMISSION OF STUDENTS

11

PhD programmes should develop successful student recruitment strategies that correspond to their objectives and training profile. Such recruitment strategies must be connected to explicit results, clearly identifying the profile of the desired candidates. This profile should be drawn up on the basis of equal opportunities and with a balanced consideration of the desired range of qualities. In this way, recruitment policies may take into account different criteria such as international recruitment, gender equality, social origin or age.
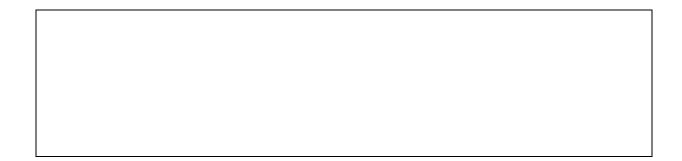
The recruitment process must adequately assess the research potential of the candidates according to their previous experience and training and, above all, the potential of these people to succeed in the DP to which they will be admitted.

Admission to a DP is an institutional responsibility that must include a strong involvement of research staff. Admission policies should be transparent, accountable and auditable, and should reflect the research, oversight and funding capacities of the institution. Admission policies should also provide for appropriate flexibility in the choice of director by the doctoral candidate. Transparency, accountability and the ability to audit these policies are enhanced by providing a single location and administrative process for applications for admission.

In this regard, admissions must be made on the basis of a well-defined and public set of criteria. Institutions should accept the risk in admitting candidates and allow them to demonstrate their potential through a process of appropriate mentoring, supervision and monitoring. This process should have the appropriate mechanisms in place to allow for the rapid identification of problems that may arise and the implementation of appropriate corrective actions.

PhD students should be recognized as early-stage researchers, with a range of reasonable rights and duties, and, regardless of their legal status, treated as professionals.

	Not applicable	Insufficient information	Inadequate / review	Adequate	Very suitable
3.1. The proposal provides appropriate and accessible pre-enrolment information mechanisms and reception and guidance procedures for doctoral candidates.					
3.2. The access and admission routes, requirements and criteria have been correctly defined.					
3.3. The number of PhD students enrolled in the programme is appropriate to the human and material resources available, ensuring an appropriate critical mass.					
3.4. Training complements are consistent and appropriate to the entry profile.					
Evaluation					

3.1 <u>**Pre-registration information, reception and guidance procedures**</u>

The DP must have accessible and adequate mechanisms for prior information on the different access and admission routes and requirements, on the characteristics and organisation of the programme and on the necessary administrative procedures. In addition, it must have adequate procedures for the orientation and reception of new doctoral students.

The new programme proposal should adequately describe the dissemination channels that will be used to inform future doctoral students about the programme and the admission and access processes.

The information should be sufficient for the student to be able to plan his or her access to the programme and training process.

The reception and orientation procedures for new doctoral students must also be indicated to facilitate their incorporation into the programme and, where appropriate, into the university. Reception procedures should include the minimum following items:

- Description of the main actions to be taken,
- an indicative timetable, and
- the bodies or units responsible for carrying them out.

3.2 <u>**Access and admission routes, requirements and criteria**</u>

The DP should clearly define the pathways, criteria and requirements for access and admission; they should not be confusing and should be consistent with the scientific scope of the programme.

The requirements for access to doctoral programs are established by the ==Regulatory Framework of the Country== which establishes that, in order to access them, it will be necessary to be in possession of the official titles of degree, or equivalent, and of university master's degree.

They may also be accessed if any of the other assumptions are met: ==Assumptions contemplated in the Country's Regulatory Framework==

Beyond the regulatory channels for access to DPs, institutions may establish additional requirements and criteria for the selection and admission of students to a particular DP. These requirements and criteria should be public, clear, in accordance with the rules, consistent and relevant, and sufficient to ensure that the training profile is achieved.

It is clear that appropriate admission criteria cannot be set without first establishing the student's entry profile. In addition, a careful definition of the admission profile will allow a better assessment of the relevance of training complements and will also facilitate the implementation of subsequent reception and orientation actions.

The entry profile consists of a brief description of the set of personal, academic and research characteristics that are generally considered appropriate or suitable for starting the DP, which provide reasonable evidence of satisfactory results.

In establishing and drafting the entry profile in the proposal, consideration should be given:

a) The characteristics of incoming students associated with achieving the training profile within the planned time frame should be identified.

b) According to the previous point, the heterogeneity of the entry (multiple access routes, or restrictions, etc.) must be clearly identified.

c) The characteristics of the entry profile must be clearly identifiable (type of qualifications, languages, specific knowledge, previous experience, etc.), in order to be able to make a rapid initial diagnosis of the difference between the entry profile and the "real" profile and to undertake the relevant actions (training complements, reception actions, etc.).

As for the procedures for access and admission of students, the admission body must be identified and its functions and composition specified (it cannot be uniper-sonal and at least one of its members must have a management position).

The admission systems and procedures established by universities must include, in the case of students with special educational needs resulting from a disability, appropriate support and counselling services, which must assess the need for possible curricular adaptations, pathways or alternative studies.

3.3 **Number of PhD students enrolled**

The DP must have a critical mass of doctoral candidates to ensure its continuity and also the satisfactory use of available resources.

For DPs that come from or are linked to a previous programme, the institution must indicate, for each of the last five years, the total number of doctoral candidates and the number of foreign students enrolled.

In the case of completely new DPs at the institution responsible, the total number of doctoral candidates and the number of foreign doctoral candidates to be enrolled in each academic year should be indicated.

3.4 **Complementary training**

Complementary training must be appropriate, tailored to the entry profile of doctoral candidates and consistent with the scientific scope of the DP. The inclusion of complementary training must be consistent with the admission criteria.

Complementary training must be linked to research credits. Their inclusion should be compulsory for those students who enter the programme by holding only a degree that does not include research credits in their curriculum. DPs should avoid including complementary training for other students, as the activities they would be entitled to fit in perfectly with the rest of the training activities of the programme.

In the event that the DP includes in its requirements and access criteria the completion of complementary training, the institution must provide its design and characteristics (students to whom it is addressed, credits or equivalence in working hours, training activities, operational planning, supervision, etc.). In any case, complementary training must be appropriate and consistent with the entry profile, scientific scope and objectives of the programme.

4   TRAINING ACTIVITIES

<mark>Check that the current legislation in each country establishes that DPs must necessarily include organised aspects of research training aimed at doctoral students.</mark>

Training activities should cover both transversal and specific training within the scope of each programme. Therefore, this chapter will assess the organisation of the training provided to doctoral students and its consistency with the training profile, in particular with regard to disciplinary and methodological knowledge (seminars, courses, workshops, etc.), the skills to be achieved, the training experiences (doctoral conferences, congresses, etc.) and their planning throughout the development of the programme.

It should describe the competencies that will be achieved through the training activities and the means by which these learning outcomes will be achieved and demonstrated.

The description and contents of the activities, their sequence and the evaluation activities must be included in the planning. In addition, the estimate of the human and material resources needed for their development should be indicated.

	Not applicable	Insufficient information	Inadequate / review	Adequate	Very suitable
4.1. The training activities that make up the doctoral programme are consistent with the training profile.					
4.2. The time planning is appropriate to the training activities and consistent with the expected dedication of the doctoral students.					
4.3. Evaluation procedures are adequate.					
4.4. Mobility actions are appropriate and consistent with the objectives of the proposal.					
Evaluation					

4.1 **Training activities**

The training activities included in the DP should constitute a coherent training proposal designed in a coordinated manner and should be coherent with the training and access profiles.

The institution must describe all the training activities included in the DP. First, the typology and content of the activity must be described:

- theoretical and scientific training,
- methodological training (scientific, experimental, statistical, qualitative analysis, etc.) and
- applied, practical, technological and procedural training.

Information on the mode of teaching and the duration of the activity should also be included.

The training activities must show that the disciplinary aspects involved in training and competence development are adequate, or in other words, that the design of these activities allows, together with the research activities of the doctor-torando, the acquisition of the competences described in the training profile. In addition, all activities must present updated disciplinary contents that respond to international references.

All the training activities followed by the doctoral candidate must be included in the doctoral candidate's activities document (DAD), which is an individualised record of the doctoral candidate's activities. The DAD is materialized in the corresponding support, which must be regularly reviewed by the tutor and the thesis supervisor and evaluated by the academic committee responsible for the doctoral program.

4.2 **Time planning**

In accordance with the above, the time organisation and sequence of training activities should enable the doctoral candidate to achieve the training objectives. The DP should include planning for both full-time and part-time students to ensure that they acquire the required skills.

4.3 **Evaluation procedures**

Procedures for monitoring and evaluating the development of competences must be adequate and consistent with the training profile and planning of activities.

A distinction must be made between training activities and training complements (section 2.3.4), which can be interpreted as a prerequisite and, therefore, it would seem logical that training complements should be independently defined in terms of both their curricular content and their form of evaluation, even though they are obligatorily part of the information to be included in the DAD.

In the training period there are two key executions by the doctoral candidate:

- the presentation and defence of its annual research plan, and
- the presentation and defence of the doctoral thesis.

The research plan should include at least the methodology to be used, the objectives to be achieved, the means and the time schedule. This plan can be updated throughout the training period and, in this regard, it would be advisable to include the degree of achievement of the objectives set. The research plan should be evaluated annually in a favourable manner by the academic commission, together with the DAD, taking into account the reports to be issued by the tutor and the thesis supervisor.

17

An operational way to formalize the evaluation may be to adopt a strategy such as the rubric, with an explicit reference to, for example, three levels of development (low, medium and high) and with the research plan and the thesis as reference documents.

In short, the scope of the evaluation of training activities should include

    a) The implementation of the training activities included in the DAD;
    b) Specific training supplements;
    c) The research plan;
    d) The annual stage of development of the competency profile established on the basis of the use of the DAD and the research plan
    e) The doctoral thesis.

4.4 __Mobility actions__

Mobility actions (research stays outside the institution) should have appropriate planning, monitoring and evaluation mechanisms, consistent with the objectives of the programme and its planning.

They must be planned for each programme and there should be a training activity called "Mobility", describing information on the actions, criteria and procedures for carrying it out.

5   ORGANIZATION OF THE DOCTORAL PROGRAM

In addition to the existing figure of the doctoral thesis supervisor, the figure of tutor should be introduced to the doctoral candidate. As the "Salzburg Principles" indicate, the supervision of doctoral students plays a crucial role. Supervision must be a collective effort involving not only the tutor, but also the thesis supervisor, the academic commission, the doctoral candidate, the research group and the institution (doctoral school, centre, university, etc.). The responsibilities of these bodies should be written down and clearly detailed.

Promoting the professional development of mentors is an institutional responsibility, either by providing formal training or through the exchange of experiences with other mentors. The development of a culture of shared supervision by tutors, thesis advisors and doctoral students should be one of the priorities of the institutions responsible for DPs.

Once the doctoral candidate has been admitted, the academic committee of the DP must assign a doctoral tutor to him/her, with accredited research experience, active and linked to the institution responsible for the programme. This person, in addition to supervising the correct training and professional development of the doctoral candidate, acts as a liaison between the latter and the academic committee.

Within a maximum of six months of the doctoral candidate's admission, the academic committee must assign a thesis supervisor to him/her. This person may or may not coincide with his or her tutor (in general, if the thesis supervisor is a doctor of the DP, both figures will coincide in the same person, but if the director is an external director, they will not necessarily coincide in the director and tutor). Any national or foreign doctor with accredited research experience may become a thesis supervisor, without necessarily having to be linked to the institution responsible for the programme. The director of the doctoral thesis will be responsible for the coherence and suitability of the training activities, for the impact and novelty in his/her field of the doctoral thesis theme and the guide in planning, as well as for its adaptation, if appropriate, to other projects and activities in which the doctoral candidate is registered.

The institution responsible for the programme must have the procedures for assigning a tutor and a thesis supervisor approved. It must also have approved the general administrative procedure that includes, among others, the doctoral candidate's activities document, the preparation and presentation of the research plan, the commitment to supervision, the resolution of conflicts and intellectual and industrial property.

	Not applicable	Insufficient information	Inadequate / review	Adequate	Very suitable
5.1. The planned actions to promote thesis supervision and the incorporation of international experts are appropriate.					
5.2. The doctoral candidate's follow-up procedures are adequate.					

5.3. The regulations for the presentation and reading of doctoral theses are public and in accordance with current legislation.					

Evaluation:

5.1 **Actions to promote the thesis supervision**

The DP should include appropriate actions to encourage the supervision of theses and the incorporation of international academics and doctors to the monitoring commissions and thesis tribunals.

In this section, the institution responsible for the DP must state the activities it has planned or is undertaking to promote the supervision of doctoral theses. In those cases that are academically justified, the institution should also list the actions planned or underway to promote the multiple direction of doctoral theses. This may be the case of theses with interdisciplinary themes or that are included in programmes developed in collaboration with other national and foreign institutions, but also the co-direction of theses by an experienced and a new director.

The DP should include a good practice guide for the direction and monitoring of the training activities of the doctoral candidate and his or her doctoral thesis. This guide should be made public and, if available, at least the web link should be provided.

In the case of DPs that are a continuation of other programmes implemented in accordance with the previous academic order, the institution must provide evidence of the presence of international experts in the thesis courts, who have issued reports prior to the presentation of their theses or who have been part of doctoral commissions. For the new programmes, the institution has to indicate how it will involve these experts in the above activities.

5.2 **Follow-up procedures**

The procedures for monitoring the doctoral candidate must be appropriate to the objectives of the programme, be in line with current legislation and ensure that the doctoral candidate acquires the competences defined in the DP.

The DP must have approved, updated and published all the procedures that have to do with the supervision of the doctoral candidate's activity. These procedures must be adequate and allow for proper supervision of the doctoral candidate so that he or she can achieve the competences defined in the programme. The institution must provide at least the web link on which they have

been made public.

The programme must have at least approved:

a) the procedure used by the academic commission for the assignment of the tutor and the doctoral thesis supervisor;
b) the procedure for registration and control of the DAD and certification of its data,
c) the procedure for the preparation of the DAD.

Universities must establish the supervisory functions of doctoral candidates by means of a documentary commitment signed by the university, the doctoral candidate, his or her tutor and director, in the form in which it is established. This commitment should be initialled as soon as possible after admission and should include, in addition to the reference to the above procedures, a dispute resolution procedure, as well as provisions on aspects relating to intellectual or industrial property rights that may arise in the context of DPs. The institution must provide the web link where the commitment model is made public.

The DP must also include in this section the provision for doctoral students to stay in other national or foreign training centres, co-guardianships and European mentions.

5.3 **Regulations for the presentation and reading of doctoral theses**

The regulations of the university for the presentation and reading of doctoral theses must be public, updated and in accordance with current legislation.

The institution responsible for the DP must provide information on these regulations.

6   HUMAN RESOURCES

The teaching staff must be sufficient and appropriate to the objectives of the DP, the competencies to be achieved and the number of doctoral candidates. Therefore, they must have the experience and training appropriate to the objectives of the degree, and be sufficient in number and dedication to cover the main tasks of the programme: tutoring and thesis supervision, teaching and evaluation of the different training activities, programme management, etc.

The following aspects will be taken into account in the evaluation of the human resources available for the programme:

- the accredited experience of teaching and research staff,
- the quality of scientific contributions,
- the number of active competitive research projects and
- the internationalisation of teaching staff.

The implementation of a DP requires the planning of the necessary human resources throughout the training process.

	Not applicable	Insufficient information	Inadequate / review	Adequate	Very suitable
6.1. The lines, research teams and faculty are sufficient in number and adequate to ensure the viability of the programme and the achievement of the planned competencies.					
6.2. There are mechanisms for calculating the task of tutoring and supervising doctoral theses, and they are clear and adequate.					
Evaluation					

6.1   **Research lines, research teams and supervisors**

The DP must be supported by a group of researchers who ensure the viability of the programme in terms of training new doctors.

In this section, the institution responsible for the DP must justify the adequacy of the human resources available to achieve the objectives. Basically, the research activity of the different research teams or, in their absence, of the people linked to the programme should be described. In the case of new DPs, which do not come from any existing programme, the information will be that of the research teams or people who will be part of them.

Information should be provided containing a detailed description of the research lines and teams

linked to the DP.

1. The identification of research groups linked to the DP. For each group, the name and surname of the teaching staff linked to the DP, their respective lines of research, quality of research, number of theses supervised and defended in the last XX years. It should be stated if the research team is consolidated or recognized by an external agency or recognized by the institution responsible for the program.
2. The complete reference of a competitive research project for each of the research teams. The project must be related to the scope of the DP and must indicate, as a minimum, the title and reference of the project, the funding entity, the type of call, and the institutions and research staff participating in it.
3. The complete reference of the 25 most relevant scientific contributions in the last five years (articles in scientific journals, books or book chapters, patents, artistic works, contributions to congresses, etc.) of the research staff participating in the programme, indicating their objective repercussion (impact index, position of the journal within its field, relevance of the book's publishing house, number of citations, etc.).
4. The complete reference of 10 doctoral theses defended within the program in the last five years and directed by the faculty of point 1. The title, the name and surname of the doctoral candidate, those of the thesis supervisor(s), the date of the defence, the qualification and the university must be stated. In the case of new doctoral programs, these 10 theses will correspond to the theses directed by the personnel who are linked to them when they are implanted. For each of the theses, the most relevant scientific contribution derived from it (only one) should be indicated, with information on its objective impact.

This section will assess that:

a) At least 60% of the doctoral research staff participating in the programme (point 1) have accredited experience (research activity recognised by an external body). Visiting professors are excluded from this staff.
b) Each research team has a competitive research project related to the scope of the DP.
c) The programme is supported by a number of relevant scientific contributions over the last five years of not less than 25.
d) The programme is supported by the proven experience of its research staff in the supervision of theses (a minimum of 10 theses in the last five years).
e) There is a balance between the different research teams and researchers in terms of scientific contributions, competitive research projects and doctoral theses.
f) There is a presence of relevant foreign teachers in the programme.

6.2 Recognition mechanisms for tutoring and supervising doctoral theses

The institution responsible for the programme should have clear and approved mechanisms for recognition of the task of mentoring and thesis direction.

This section should include the mechanisms that the institution has put in place for the calculation of the task of tutoring and supervising theses, as part of the teaching and research dedication of the teaching staff linked to the DP.

7 MATERIAL RESOURCES AND SUPPORT SERVICES AVAILABLE TO DOCTORAL STUDENTS

The material resources and support services available must be adapted to the training objectives and the type of research to be carried out by doctoral students. The infrastructures available in the institutions responsible must take into account the criteria of universal accessibility for people with disabilities.

Special emphasis will be placed on those cases in which, due to the nature of the doc-torado program, highly specialized and costly services, equipment and infrastructure are required.

	Not applicable	Insufficient information	Inadequate / review	Adequate	Very suitable
7.1. The material resources available at the university or institution are sufficient and appropriate to the number of doctoral students and the characteristics of the programme.					
7.2. The support services available at the university or institution are sufficient and appropriate to the number of doctoral students and the characteristics of the programme.					
Evaluation					

7.1 **Material resources**

The material resources necessary for the development of the activities envisaged in the DP and for the training of the doctoral candidate must be sufficient and appropriate to the number of doctoral candidates and the characteristics of the programme, so as to enable the achievement of the skills envisaged. They must guarantee the development of the research to be carried out by the doctoral candidate. In particular, the necessary resources must be guaranteed to enable doctoral students to attend congresses, to undertake stays abroad or to finance seminars, conferences and other training activities. In many cases, these resources may be conditioned by other institutions (mobility aids, travel grants, etc.). However, the institution responsible for the programme must indicate how it intends to obtain these resources.

The responsible institution must attach the following information to this section:

- The material resources available. Depending on the typology, these material resources can be very diverse. Basically, the institution must provide information on:
  - spaces for the location and work of doctoral students; or laboratories, specific equipment and large scientific-technical equipment;
  - infrastructure relating to documentation and access to information (library, databases, etc.), and
  - network connectivity infrastructure.
- The provision for obtaining travel grants and external resources dedicated to attending congresses and stays abroad to help doctoral students in their training.
- The provision of financing for seminars, conferences and other training activities.
- The forecast of the percentage of doctoral students out of the total that would receive the aforementioned grants.
- The percentage of doctoral students who have obtained post-doctoral grants or contracts during the last five years.

7.2 **<u>Support services</u>**

The services necessary for the orientation of the doctoral candidate must be sufficient and appropriate to the number of doctoral candidates and the characteristics of the programme, so as to enable the doctoral candidate to follow the programme correctly.

The institution should complete the information by separating information on infrastructure and material resources from information on services in the text.

The institution should indicate the services available to it with respect to:

- reception and other logistical services (housing, advice on legal matters concerning residence, etc.);
- information on mobility, grants, projects, etc., and
- vocational guidance and integration into the labour market.

8 PROGRAM REVIEW, IMPROVEMENT AND RESULTS

The purpose of this chapter is for the institutions that propose the degree to establish objectives related to the efficiency of the development of the training programme and the procedures to ensure the academic quality of the results.

The institution must have an internal quality assurance system (IQAS) including DPs. to guarantee, as a minimum, the processes required by current legal regulations regarding doctoral studies.

It is also necessary for the institutions to have procedures in place to verify and demonstrate that the competences described in the training profile have been developed throughout the programme and have been achieved at the time of obtaining the diploma.

Efficiency-related targets have to be specified, at a minimum, through the indicators set out below:

- success rate,
- number of theses produced,
- number of relevant scientific contributions and
- number of theses with the qualification cum laude.

The efficiency indicators aim to establish a benchmark against which the results obtained after the implementation of the DP can be assessed. In addition, the monitoring of the programme should take into account the development of these indicators and their proximity to the expected values.

	Not applicable	Insufficient information	Inadequate / review	Adequate	Very suitable
8.1. The internal quality assurance system is suitable for the doctoral programme.					
8.2. The procedure for the follow-up of qualified doctors is adequate.					
8.3. The results and their predictability are justified and appropriate.					
Evaluation					

8.1 **The internal quality assurance system (IQAS)**

The DP must have mechanisms that allow for the analysis of its development and results, and that ensure its continuous review and improvement.

The following aspects should be described in this section:

1. The academic committee, which is responsible for the organisation, design and coordination of the DP and is responsible for its training and research activities. The institution must have approved the rules of procedure of the academic commission, which must include, as a minimum, the composition and appointment of its members, its functioning and other aspects that are included in the legal framework.
2. The procedure by which the participation of the different agents involved in the DP is articulated: tutors, thesis supervisors, doctoral students, the rest of the teaching and research staff, support staff, etc.
3. The procedures for monitoring, evaluating and improving the quality of the development of the DP. These procedures have to establish who, how and when will carry out the activities related to the improvement of the programme. It would be desirable for these procedures to meet previously established quality objectives. It is also necessary to describe the general procedure of the institution for assessing the progress and learning outcomes of students.
4. It is essential to specify both the mechanisms for collecting information on academic results and those that will be used to review and improve them.
5. The procedure for the analysis of the satisfaction of the different groups involved in the programme, especially doctoral students, doctors with degrees in the programme and teaching staff. It is recommended that the planned collection method, the frequency with which it will be carried out and other relevant technical aspects be defined.
6. Complaints and suggestions are another source of information about satisfaction. A systematic approach must be established for the collection, treatment and analysis of suggestions and complaints that doctoral students may make regarding the quality of the programme, training activities, supervision, facilities, services, etc.
7. How the results obtained will be used to review and improve the DP.
8. The procedure to ensure the quality of the mobility programme and its results, specifying the planned procedures for evaluation, monitoring and improvement, as well as those responsible and the planning of the procedures. It is recommended to specify how the information generated will be used in the review and improvement of the DP.
9. In the case of programmes involving more than one institution, the procedure for ensuring appropriate coordination between the different institutions should be included.
10. The procedure by which the institution will periodically publish up-to-date, impartial and objective information, both quantitative and qualitative, on the DP.

The procedures described in this section correspond to the following European standards (ESG) for internal quality assurance (IQA) in higher education institutions: 1.1 (Quality assurance policy and procedures), 1.2 (Approval, monitoring and periodic evaluation of programmes and degrees), 1.4 (Quality assurance of teaching staff), 1.6 (Information systems) and 1.7 (Public information).

8.2 <u>**Monitoring of the graduates**</u>

The DP must have mechanisms for analysing the results of the employability of qualified doctors. This section should describe the procedure for measuring and analysing the employment placement of new doctors. The data and indicators resulting from the survey, as well as the subsequent reports and analyses generated, will be made publicly available.

Universities should define the method of collection envisaged, the frequency with which it is carried out and other technical aspects that are considered relevant. The survey can also obtain information on the satisfaction of new doctors with the training received.

All proposals for DPs must detail how the results obtained from the job placement and the satisfaction with the training received will be used to review and improve the programme. This point partly responds to the European standard for internal quality assurance in higher education institutions 1.6 (Information systems).

8.3 <u>**Results**</u>

The quantitative values of the indicators are adequate and the forecasting of these indicators, for newly created programmes, is adequately justified.

The proposal has to indicate, for each indicator, an estimated value and its justification. The following will be assessed.

9 EVALUATION RESULTS

9.1 **Final report**

The competent body draws up the Evaluation final report on the basis of the documentation provided by the university institutions and any allegations they may have made to the previous reports. The result of the verification shall be expressed in the report in terms favourable or unfavourable. The report shall contain at least the following information:

1. Description of the context of the DP.
2. Description of the procedure used, including the experts involved.
3. Result of the check.
4. Evaluation result for each of the standards.
5. Aspects that must be improved (actions to be implemented prior to accreditation).
6. Proposals for improvement (recommendations for follow-up actions).

The evaluation result report will be published online.

9.2 **Certificates and evaluation effects**

When the doctoral program under evaluation obtains a favourable evaluation report, a Favourable Accreditation certificate will be issued. This certificate shall be valid for a maximum of 6 years. These certificates shall be made public

The ExAnte accreditation of a successful DP implies that it is authorized to be taught. The responsible university may continue its implementation, under the terms set out in the verification report, for a maximum period of 6 years.

If a favourable evaluation is not obtained, the responsible institution will not be able to implement the doctoral studies.

10 ACRONYMS

DAD   Doctoral candidate's activities document

DP   Doctoral Program

PC   Partner country

SP   Salzburg Principles

ESGx European Standard Guidelines

IQA   Internal Quality Assurance

11 REFERENCES

http://www.aneca.es/

http://www.aqu.cat/