

## **Proposals for goal fulfilment descriptions in eISP, “10. Degree objectives- Degree of Doctor”**

*Under each of the goals listed in the eISP form, you should fill in “Activities planned” and “Activities realized”. Obviously, there will be more of the former at an early stage and more of the latter at a late stage in the PhD studies. In the last year, it is to be expected that the phrase “This goal has now been realized” will be used under several of the goals.*

*Obviously, the text has to be individual, based on what is planned for the individual student and on the progress already made. The following text serves to remind you of types of activities that can be mentioned under the various headings in the eISP. Underlining means “specify” or “choose”, and three dots mean “fill in”.*

### **A. Knowledge and understanding – for the Degree of Doctor the third-cycle student shall**

***A1. Demonstrate broad knowledge and systematic understanding of the research field as well as advanced and up-to-date specialised knowledge in a limited area of this field.***

#### **Activities realized in order to fulfil the objective**

*Broad knowledge:*

The student has completed the courses . . . that provide overview knowledge about . . .

The student has written a literature review on . . .

The student has made a literature search on . . .

The student follows the research literature, and has for instance read . . .

The student has written an overview of the research area in the introduction (“kappa”) of the licentiate thesis.

The student has written an overview of . . . that is part of the article/manuscript . . .

The student has attended the conference . . . that provided an overview over a broad area of . . .

The student has taken part regularly in the seminar on . . . that provides a broad overview over the study area.

*Specialized knowledge:*

The student has attended the specialized workshop . . .

The manuscripts/articles produced by the student show that she/he has acquired the specialized skills and knowledge needed to do research in this area.

**Activities planned in order to fulfil the objective**

The student will take the courses . . .

The student will write a literature review on . . .

The student will make a literature search on . . .

The student will write an overview of the research area in the introduction (“kappa”) of the PhD thesis.

The student has written an overview of . . . that will be part of the article/manuscript . . .

The student will continue to take part in the research seminar/conference. . .

***A2. Demonstrate familiarity with research methodology in general and the methods of the specific field of research in particular.***

**Activities realized in order to fulfil the objective**

The student has taken the research methodology course F1N5113 Theory of Science and Research Method, Technological and Natural Sciences 7.5 credits and in the methodological course . . .

The student has regularly attended the research seminar . . . where methodological issues are regularly discussed.

The student has written a methodological chapter in her licentiate’s thesis.

The student has written/published a paper on . . ., which contains methodological discussions.

In her/his research papers the student has demonstrated her ability to use relevant research methods. For instance she made the statistical analysis/laboratory experiments reported in . . .

**Activities planned in order to fulfil the objective**

The student will take the course . . .

The student will take active part in the research seminar . . .

The student will write a methodological paper on . . .

The student will write a methodological section in the introduction (“kappa”) of the thesis.

## **B. Competence and skills – for the Degree of Doctor the third-cycle student shall**

***B1. Demonstrate the capacity for scholarly analysis and synthesis as well as to review and assess new and complex phenomena, issues and situations autonomously and critically.***

### **Activities realized in order to fulfil the objective**

The student has made the analysis of our empirical data, which are presented in a publication.

In her/his research, the student has observed and identified new phenomena such as . . . and proposed ways to deal with them.

When studying previous literature on . . ., the student identified problems/gaps and proposed how we can attack them in our own research.

In the article/manuscript “. . .”, the student summarized major deficiencies in the previous literature on . . .

The student has worked independently with our response to the referee comments to the article . . .

The student has acted as a reviewer for an international journal.

### **Activities planned in order to fulfil the objective**

Our plan is that the student will independently analyze our new empirical data.

Supervision meetings will have an emphasis on supporting the student’s development of analytical and synthetical abilities, such as her/his ability to independently assess our empirical findings.

***B2. Demonstrate the ability to identify and formulate issues with scholarly precision critically, autonomously and creatively, and to plan and use appropriate methods to undertake research and other qualified tasks within predetermined time frames and to review and evaluate such work.***

**Activities realized in order to fulfil the objective**

The student has made several proposals for coming research, for instance . . .

The student has proposed several hypotheses/modifications of experiments such as . . .

The student has been an active participant at the seminar in . . ., and has provided constructive criticism of the papers by others that we have discussed at the seminar.

The student has acted as a discussant/opponent in the seminar discussion on . . .

The student has taken active part in seminars where master's theses have been presented and discussed.

The student took active part in the discussions on the research workshop . . .

**Activities planned in order to fulfil the objective**

The student will actively participate in the seminar in . . .

The student will act as a discussant/opponent in seminar discussions in the research group.

The student will be the opponent of at least one masters' thesis next year.

***B3. Demonstrate through a dissertation the ability to make a significant contribution to the formation of knowledge through his or her own research.***

**Activities realized in order to fulfil the objective**

The student has written how many? of the articles that will be included in the thesis.

**Activities planned in order to fulfil the objective**

The student will write how many? additional articles for the thesis, and in addition an introduction ("kappa").

***B4. Demonstrate the ability in both national and international contexts to present and discuss research and research findings authoritatively in speech and writing and in dialogue with the academic community and society in general.***

**Activities realized in order to fulfil the objective**

The student has submitted how many? of the articles that are planned to be parts of the thesis, and how many? of these has/have been accepted for publication. She/he made how many? presentations at our own seminar. She/he has also made presentations at the following workshops and conferences: . . .

When participating in international workshops and conferences, the student has been very active in establishing useful contacts with researchers at other universities.

The student has presented her own research at seminars in the research methodology course Theory and Methodology of Science (COURSE CODE) .

**Activities planned in order to fulfil the objective**

The student will take the courses . . .

The student will make presentations at the conferences . . .

***B5. Demonstrate the ability to identify the need for further knowledge.***

**Activities realized in order to fulfil the objective**

The student has proposed and found literature that is useful for her/his research. She has identified conferences and workshops that are useful for her project, and has contributed actively our co-operation with . . . .

The student has made a seminar presentation of his/her ideas for future research.

She has proposed ideas that we have incorporated in applications in research funding, and contributed to an application to . . . about . . .

The student has engaged actively in discussions with industry/government authorities aiming at identifying important needs for new knowledge

In discussions with our partners in industry/organization, the student has proposed useful ideas for future research and development.

Proposals for future research will be made in the introduction (“kappa”) of the PhD thesis.

### **Activities planned in order to fulfil the objective**

The student will write a section on the need for future knowledge in the introduction (“kappa”) of the PhD thesis.

The student will make a seminar presentation of his/her ideas for future research.

We plan to focus two coming supervision meetings on the student’s proposals for future research.

The student will take part in writing a research proposals for Vetenskapsrådet.

The student will participate in coming meetings with our partners in industry/organization, where needs for future research will be identified.

### ***B6. Demonstrate the capacity to contribute to social development and support the learning of others both through research and education and in some other qualified professional capacity.***

#### **Activities realized in order to fulfil the objective**

The student has been a teacher’s assistant/seminar leader on the course . . .

She has contributed to a blog that presents research in her area (www. . .).

She has published an article for a broad audience, . . .

The student has presented her research at meetings with practitioners in company/authority.

She has helped supervising the master’s thesis by . . . on . . .

The student has taken a course on Research Communication (EO3110).

The student has introduced new PhD/master students to our research methodologies.

#### **Activities planned in order to fulfil the objective**

The student will present her/his research in . . .

The student will take the course Research Communication (EO3110).

## **C. Judgement and approach – for the Degree of Doctor the third-cycle student shall**

***C1. Demonstrate intellectual autonomy and disciplinary rectitude as well as the ability to make assessments of research ethics.***

### **Activities realized in order to fulfil the objective**

The student has taken the course Theory and Methodology of Science (COURSE CODE) which contains an introduction to research ethics.

She has taken active part in the seminar on . . . , in which ethical and societal aspects of research in . . . is regularly discussed.

Ethical issues have been regularly discussion in supervision meetings with the main supervisor.

The social impact of the student's own research has been regularly discussed with the main supervisor as well as other senior researchers at the department.

### **Activities planned in order to fulfil the objective**

The student will take the course . . .

We plan to devote two coming supervision meetings primarily to ethical issues/sustainability/social impact of research in our research area.

The student will make a seminar presentation on ethical issues/sustainability/social impact of her/his own research.

***C2. Demonstrate specialised insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used.***

### **Activities realized in order to fulfil the objective**

The student has taken the course Theory and Methodology of Science (AK 2030) in which the limitations and possibilities of research are discussed on a general level.

The more specific issues concerning her own research area are regularly discussed in the seminar on . . . and in supervision meetings. They are also important topics in the courses . . . and . . .

The student has initiated many discussions at the department on the social impact of our research and on how we can contribute to a more sustainable society.

**Activities planned in order to fulfil the objective**

The student will take the courses . . .

The student will write a section on the possibilities and limitations of our research methodologies in the introduction (“kappa”) of her/his thesis.