

# SEA-EU DOC – PRELIMINARY SURVEY

## Highlights of the survey

- ▶ Academia is the main source of employment opportunities for doctorate holders. Nevertheless, the share of doctorate holders working in the non-academic sector is not negligible.
- ▶ Most of the doctorate holders are satisfied with their current professional situation. However, information given to them about employment opportunities outside academia needs to be improved.
- ▶ Even though doctorate holders value inter-sectoral experiences, working with another sector of activity during the doctorate is not widely spread.
- ▶ Training involving transversal skills and social and relational skills are less common than fundamental knowledge training.
- ▶ Doctorate holders consider that alumni networks are useful. The majority is willing to participate in such a network. They show a clear preference towards thematic and European networks.

## Analysis

During the preparation phase of the project, the partners of the SEA-EU DOC consortium prepared a survey in order to assess the needs and level of satisfaction of their graduates regarding their career and their entry into the labour market. Therefore, an online career tracking survey was published on EU Survey (the European Commission's official survey management tool) and addressed to the former doctoral students (of the six institutions), who obtained their degree between 2008 and 2018. It was conducted in November and December 2019. The survey was available in English and in four other national languages (French, Spanish, Polish and Croatian) in order to maximize the survey response rate.

It consisted of 30 questions about their professional situation, career development, experiences and training during the doctorate and their opinion about possible improvements. The questionnaire was filled by 621 former students.

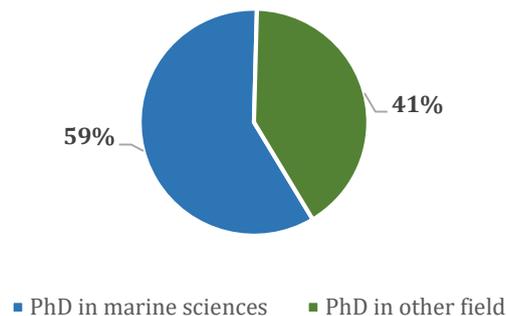
Name of the institution	Number of responses	Percentage of responses
University of Brest – France	229	37%
University of Split – Croatia	103	17%
University of Gdansk – Poland	91	15%
University of Cadiz – Spain	89	14%
University of Kiel – Germany	63	10%
University of Malta – Malta	46	7%

**Table 1. Number and percentage of responses to the survey by institution**

The proportion of responses is not homogenous among the six institutions (see table 1), since a third part of the respondents (37%) studied in the University of Brest. This unequal distribution can be explained by the fact that the doctoral school of marine sciences in Brest is well established: it has been in existence for nearly thirty years, with close and regular contacts with former students, which translated into a good response rate.

The remaining 63% is divided among the other five universities, with a percentage of responses comprised between 17% to 7%.

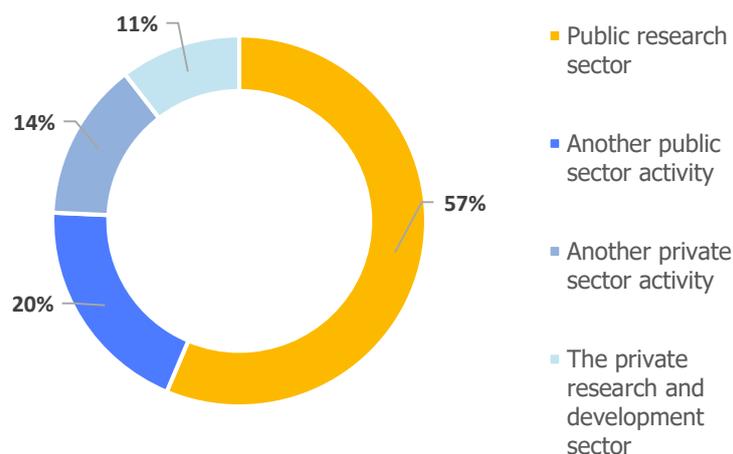
For the purpose of this project, we refer to marine sciences as the wide variety of fields and disciplines, such as natural, social, human and technical sciences applied to the coastal, marine and maritime environment. Even though marine sciences are studied in the six universities of the consortium, these institutions differ in the structuring of doctoral education. While there is a doctoral school dedicated to marine sciences in Kiel, Cadiz and Brest, the universities of Split, Gdansk and Malta do not operate within such a framework. Therefore, specific data for marine sciences doctorate holders are not always available and we decided to address this survey to all the former students (of the past ten years) who are now doctorate holders, in order to obtain a large number of responses.



**Figure 1. Marine sciences doctorate holders** (n=615)  
 “Was your PhD research related to marine areas/issues? Yes; No.”

The majority (58%) of the respondents are marine sciences doctorate holders (figure 1). The statistical analysis shows that their answers follow the same trend as the rest of the doctorate holders. Therefore, we will highlight the most interesting results of the whole sample without focusing on marine sciences doctorate holders.

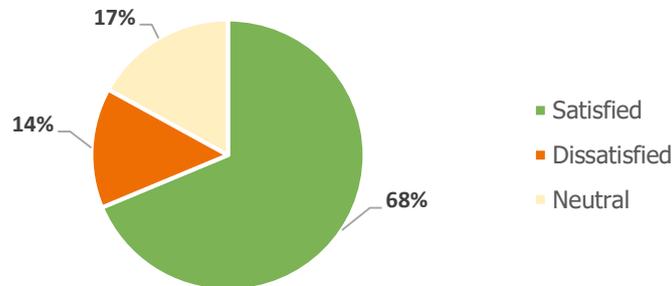
### Current professional situation



**Figure 2. Current sector of activity** (n=578)  
 “You are practising in: the public research sector; the private research and development sector; another public sector activity; another private sector activity?”

The survey showed that the main sector of employment opportunities for doctorate holders is the academic sector, since 57% of the respondents are currently employed in the public research

sector. Consequently, 43% of the employed respondents are working in the non-academic sector, either in a research position (11% are working in the private research and development sector) or in another employment situation not related to research (20% in another public sector, 14% in another private sector). The results exceeds 100% because a few respondents (4%) stated that they work in several sectors (figure 2).

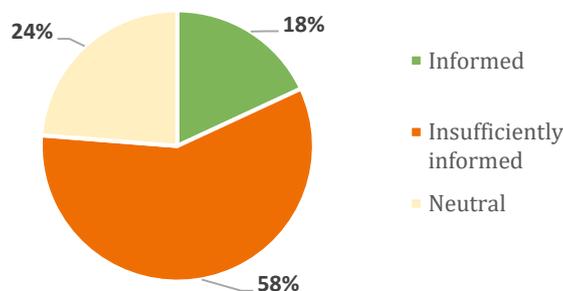


**Figure 3. Satisfaction with professional situation** (n=613)

“Overall, in view of your personal aspirations, do you consider your current professional situation satisfactory? Not at all; not really; moderately; yes, rather; yes, absolutely”.

Most of the respondents (68%) are satisfied (rather or absolutely satisfied) with their current professional situation (figure 3).

## Career development

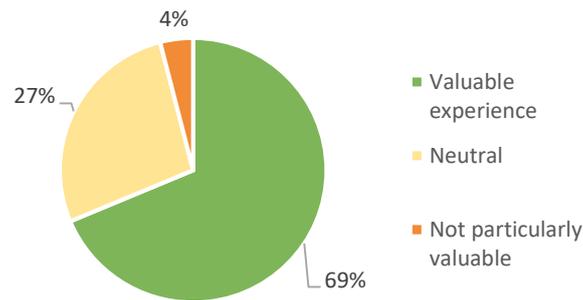


**Figure 4. Diversity of non-academic careers** (n=615)

“When you graduated, were you informed of the diversity of non-academic careers? Not at all; not really; moderately; yes, rather; yes, absolutely.”

The majority (58%) consider that they did not receive adequate information (not really or not at all informed) about employment opportunities outside of the academic world, while only 18% think that the information received was sufficient. The remaining quarter (24%) was neither satisfied nor dissatisfied with the level of information as they consider they were “moderately informed” (figure 4).

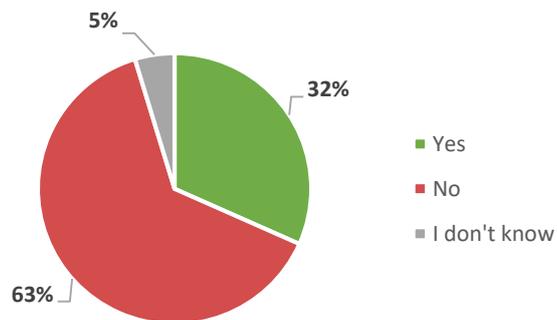
## Experiences and training during the doctorate



**Figure 5. Interest for inter-sectoral experiences (n=527)**

“What do you think of the interest brought by this type of cooperation during the doctoral research for the development of a career? No interest, No real added value, Moderately, Essential added-value, Important”.

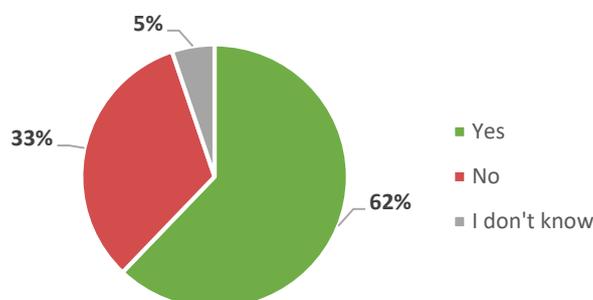
Inter-sectoral work experiences refers to the activities carried out by the doctoral student in cooperation with professionals working outside academia. They are considered as a valuable experience by a significant number (69%) of respondents (see figure 5).



**Figure 6. Inter-sectoral experiences (n=527)**

“During your thesis, have you had the opportunity to have one (or more) inter-sectoral work experience(s)? Yes; No; I don't know”.

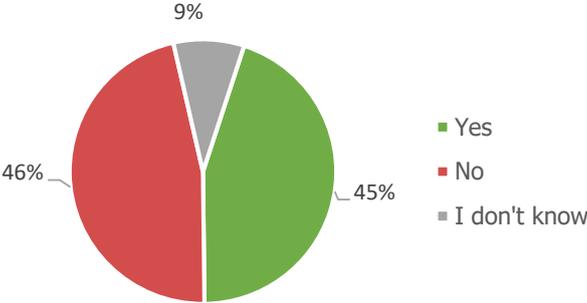
However, doctorate students do not usually get a chance to experience inter-sectoral work, since only one third of the respondents (32%) reported having worked with another sector of activity during their doctorate (figure 6).



**Figure 7. Fundamental knowledge (n=618)**

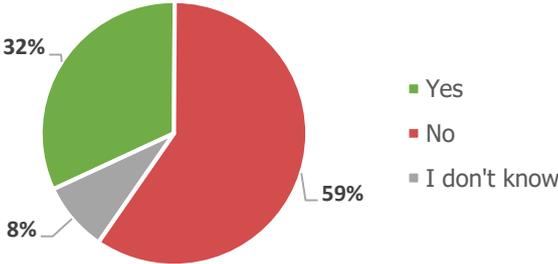
During your doctoral studies, did you follow useful training to develop these different types of skills: fundamental knowledge? Yes; No; I don't know”.

Doctorates generally comprise training and skills development. We considered three types of skills: fundamental knowledge, transversal skills and social and relational skills. Among them, fundamental knowledge is the set of skills most widely developed during that period of study, with 62% of the respondents reporting having benefited from that type of training (figure 7).



**Figure 8. Transversal skills (n=618)**  
“During your doctoral studies, did you follow useful training to develop these different types of skills transversal skills? Yes; No; I don't know”.

Training on transversal skills was delivered to 45% of the respondents. Therefore, it is a set of skills also developed during the doctoral studies, but less than fundamental knowledge (figure 8).

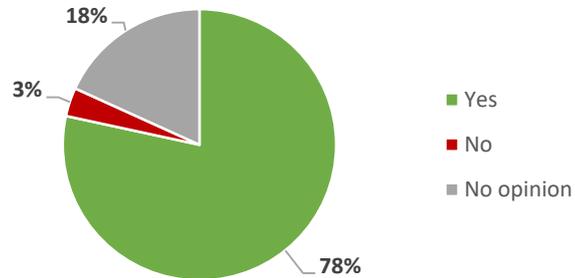


**Figure 9. Social and relational skills (n=615)**  
“During your doctoral studies, did you follow useful training to develop these different types of skills: social and relational skills? Yes; No; I don't know”.

Social and relational skills are the abilities less commonly developed during the doctorate, with 32% of respondents stating to have taken this type of course (figure 9).

## Alumni network

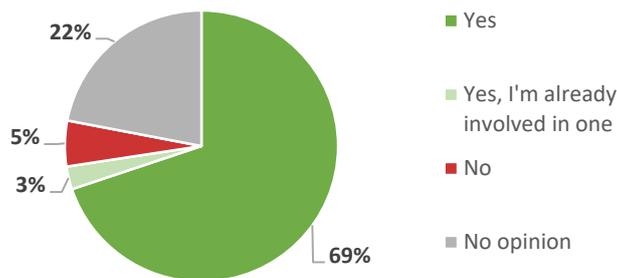
The last part of the survey was dedicated to the exchange of experiences (among former students, with current doctoral students, and with doctoral school/programme managers).



**Figure 10. Usefulness of alumni network** (n=616)

"Do you think it is useful to develop an alumni network between PhD researchers? Yes; No; No opinion".

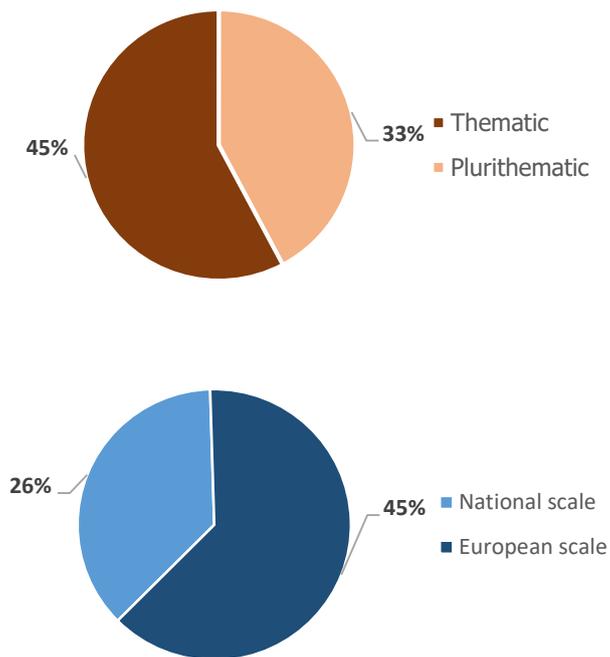
The vast majority of the sample (78%) considers that alumni networks are useful (figure 10).



**Figure 11. Willingness to take part in an alumni network** (n=587)

"Would you participate in this network? Yes; No; I'm already involved in one; No opinion".

The interest towards alumni network is confirmed by the willingness of respondents to participate in such a platform: 69% would be interested and 3% are already involved in this type of network (figure 11).



**Fig. 12. Scale of alumni network**

“Do you think this alumni network would make more sense if it were to be:

- a) Thematic (same doctoral school or program); Plurithematic (at the scale of the university); n=488
- b) At a national scale; At the European scale?” n=443

Another important matter regarding the alumni network is its scale: it can either be created at the level of a doctoral school—i.e. a thematic network such as a marine studies alumni network—or at the level of the university, with a same network covering several themes. On the other side, the network could either be launched at national or European level.

The respondents expressed a clear preference towards thematic networks (45%) and European scales (45%) (figure 12).