



Sea & Sun
Technology

Antifouling technology for maritime measuring probes

THE COMPANY

SEA & SUN TECHNOLOGY

- location: Trappenkamp
- established: 1998
- CEO/president:
Prof. Heinz Schelwat
- Products & Services:
Development, production, and
customer service for measuring
systems in the field of ocean-
ography, groundwater & lim-
nology

STARTING SITUATION

Sea & Sun Technology GmbH develops and produces high-precision underwater probes, which are distributed worldwide. The headquarters of the company is located in Trappenkamp, Schleswig-Holstein.

Furthermore, the company conducts intensive research in the fields of oceanography and hydrography. Within these activities they set up the project on the antifouling technique for maritime measuring probes.

The underwater probes are permanently exposed to the environmental influences of the sea. As a result, a biofilm is deposited on the sensitive sensors. This coating distorts the measurement results that have to be particularly precise in the field of oceanography.

In addition, small organisms can settle on this biofilm. If the pollution gets worse, the probes are unusable and must be disposed. To prevent this scenario, the probes must be cleaned on a regular basis. Both methods, cleaning and disposal, are costly to the user. The new antifouling technology is designed to slow down or completely prevent the process of contamination. Currently Sea & Sun's research includes different experiments, for example, with ultraviolet light.

The company decided to apply for a funding of the program in "Betriebliche Forschung, Entwicklung und Innovation", short BFEI, to secure the financing of the extensive project.

THE GUIDELINE

BFEI

Object of funding:

- Innovative Research and development projects

Time limits:

- Proposal of project must be handed in at least three months before the project begins

Responsible agency:

- wt.sh

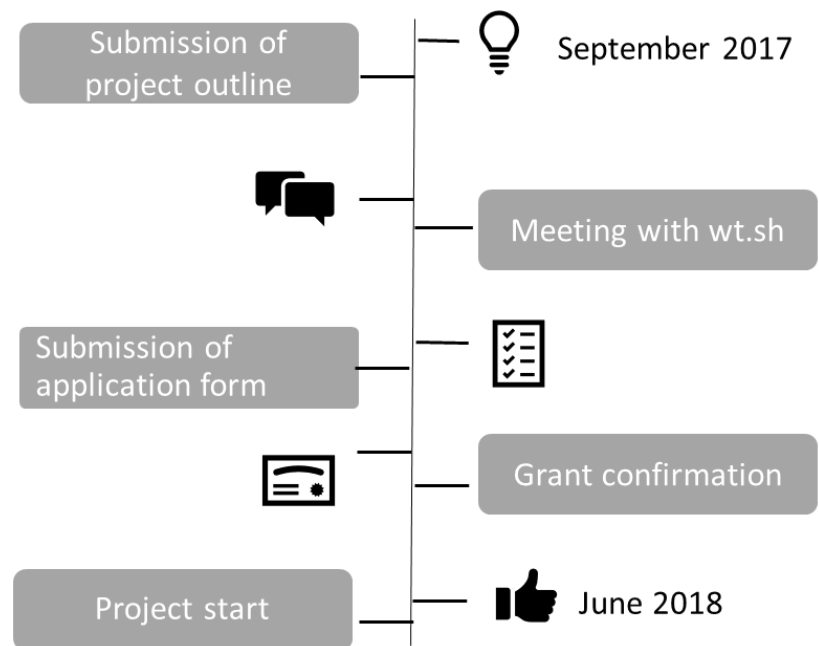
Amount of funding:

- 45 % of the eligible costs for small companies
- 35 % of the eligible costs for medium sized companies
- 25 % of the eligible costs for large companies

Projects are treated preferential that focus on the:

- Application of particularly promising technologies and the implementation of technology leadership
- Implementation of technical solutions in internationally competitive products, processes, or services

APPLICATION PROCESS



Based on the **project outline**, wt.sh checked the general eligibility of the project. It contained information about the applicant company, the project, an expenditure plan, and a detailed technical description of the innovation project. In addition, the company had to provide specifications about their current situation on the market including a description of the growth potential of the company and information about existing competitors. Furthermore, the applicant had to draw up a financing plan for the entire project.

Sea & Sun submitted the project outline to the wt.sh. Moreover, the two parties arranged an appointment to discuss the details of the innovation project.

After the meeting, the company was able to begin processing the **application form**. It required information about the applicant company, its size and growth potential. The focus was directed to the development of revenue and to jobs related to the project. In addition, the form demanded data about the planned project.

Sea & Sun dealt with various **challenges** while processing the documents:

Use appropriate wording

On the one hand, the extensive description of the project had to be made clear for external readers, and on the other hand, the technically correct terms for an application of this kind had to be used.

THE PROJECT

ANTIFOULING-TECHNOLOGY

June 1, 2018 – November 30, 2020

Objective:

Development of a method for the antifouling technique for maritime measuring probes

- to reduce disturbances of time series measurements in the sea
- without the production of toxic waste

Total subsidies:

- 666,000 €

Integrate the bureaucracy into the daily business

The employees leading the research project worked on several tasks at the same time. It was impossible for them to fill in the applications with the necessary information while coping with the daily business. To manage the increased bureaucratic effort, Sea & Sun primarily entrusted an employee with the administration of the funding applications.

Dynamic of an innovation project

Many factors can change over the course of research work. The overall development costs and turnover rates resulting from the project are therefore hard to predict. However, the application forms required precise information about the project.

The company consulted the wt.sh to be able to properly process the project outline and the application form.

After the documents were submitted, it was on the application body to evaluate all giving information. In the case of Sea & Sun, a grant confirmation for the funding of the antifouling project was issued.

IMPLEMENTATION

To receive the awarded funding, Sea & Sun had to document its expenses that were part of the project.

After completing the project, the application agency requests proof of the correct usage of the paid funding. These documents must be submitted within three months of the end of the project. In addition, so-called **utilization reports** of the project and its impact on the company must be written and transmitted for a period of five full calendar years.

FURTHER INFORMATION

REGARDING THE COMPANY

<https://www.sea-sun-tech.com/>

REGARDING THE FUNDING

https://www.schleswig-holstein.de/DE/Fachinhalte/F/foerderprogramme/MWAVT/EFRE/efre_in_SH_2014_2020.html

DOCUMENTS & CONTACT

<https://wtsh.de/foerderberatung/foerderprogramme/foerderprogramm-bfei/>

RECOMMENDATION

Weight the upcoming effort

Before an institution decides to apply for any funding, costs and benefits should be weighed individually for each project. The bureaucratic effort as well as the possible amount of funding should be considered.

Seek conversation with contact person

Incorrect application forms can lead to delays in the application process. To avoid this scenario, it is recommended to arrange a meeting with the responsible agency. In this meeting, the company can present the project and explain its details. In addition, detailed information about the funding program can be obtained.

EVALUATION FROM THE COMPANY'S PERSPECTIVE

Above all, the Sea & Sun sees a problem in the complex reporting system. They suggest a digital form with an online survey regarding the project status. If possible, this survey should include standardized questions with prescribed answering options. Furthermore, questions that require a full text answer should be restricted by a word limitation.

From the company's perspective, it is important to lower the barrier of the application process for smaller companies. The bureaucracy and the general chance of funding play a role here. Overall, the company has the impression that research and development projects that involve a higher risk are often not sustained. But small and medium-sized companies in particular are in need for subsidies for uncertain projects to develop market-ready innovations.

A Clipper Case Study



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