

Climate-friendly and low-emission authority boats for the Danube

This is a translation – for the original challenge description, contacts and submission got to: <https://www.ioeb-innovationsplattform.at/challenges/detail/klimafreundliche-und-emissionsarme-behoerdenboote-fuer-die-donau/>



An initiative of

 Federal Ministry
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Digital and
Economic Affairs

 Federal Ministry
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Climate Action, Environment,
Energy, Mobility,
Innovation and Technology

In cooperation with

BBG BUNDES
BESCHAFFUNG

Challenge Sponsor

Austrian Federal Ministry for Climate Action, Environment, Energy Mobility, Innovation and Technology (BMK)



Background / Point of departure

The future belongs to alternative drive systems. In urban traffic as well as in rural regions, it is becoming increasingly important to travel in an environmentally friendly manner. This applies to vehicles that get people from A to B, such as cars and buses. But it also applies to commercial vehicles, from the fire department's tanker to the flatbed vehicle used by the municipal winter road clearance service to garbage trucks. The BMK with its navigation supervisors (SFA) along the Danube wants to bring traffic on waterways into the focus of climate-neutral mobility.

The nautically trained police secures and regulates the traffic of ships on the Danube. In particular, this includes monitoring navigation, issuing orders to users of the international waterway, but also provides assistance to damaged vehicles. Employees of the navigation supervision are on the Danube daily to fulfill their supervision.

The 14m long service boats currently used for this purpose run - as it is common for boats - on diesel. The SFA wants to contribute to environmental protection and rely on low-emission vehicles or components in the future.

Initial market research, mainly in German-speaking countries, has shown that no low-emission boats on the market meet the requirements.

Main Question

How can 10-14 meter service boats become climate-friendly and low-emission for operation on the Danube?

Desired situation

The BMK's goal is to provide low-emission boats to meet the needs of the marine supervisors, whether by retrofitting or replacing existing boats.

Along the way, the BMK wants to test prototypes as quickly as possible. Authority service boats are exempt from the certification guidelines. This may be a key advantage for the risk and time required to develop or test new components. Companies can therefore move more quickly than usual to actual implementation with the marine regulator.

The immediate goal of this market exploration is to learn about

- companies that offer or will offer low-emission workboats.
- companies that can make such boats possible by contributing certain components (e.g. partial solution for propulsion or energy supply). In addition to already conclusive concepts, relevant partial contributions are therefore possible and expressly desired.

The *medium-term goal* is, if the result of the Challenge shows technical and economic feasibility, to go on to the realization of a corresponding prototype.

The most important features of the boats:

The SFA operates seven diesel-powered service boats, approximately 14 meters in length, for ship and plant inspections, assistance in the event of damage, event inspections and for escorting special transports.

The SFA is looking for: agile and fast boats with a minimum speed of 30 km/h for a minimum operation of 8 hours with at least 2 persons on board. In addition, it is important to have:

- Drive train redundancy
- Suitability for creep speed (lapping)
- Applicability from -30°C to 40°C
- Robust design that allows berthing to large vessels or the shore
- Consideration of on-site conditions for refueling and loading
- Good accessibility of the machine for service work
- The guideline for a new emission-free service boat or the conversion of existing workboats to emission-free propulsion are the work safety requirements of the ES-TRIN.

Details for your submission (Call for proposals)

The online submission (top right button of the challenge page) consists of:

A description

Outline your contribution to a climate-friendly and low-emission service boat (key concept or possible partial performance).

State whether you are also interested in a stakeholder dialogue with other companies. Name aspects and questions they would like to discuss and contribute there.

The most essential aspects in a nutshell: ***Summarize the added value*** of your contribution to a climate-friendly and low-emission boat in a few bullet points. Bring your unique selling proposition and decisive aspects to the point. Short, concise!

Confidential info for the jury. In this text field you can enter information that you would like to share exclusively with the project managers. Among other things, enter a rough price indication here. The jury members involved agree to maintain confidentiality. As

an alternative to this form field, it is possible to send a confidential pdf file by e-mail to the moderator of the Challenge. He/she will provide it to the jury only.

In addition, you need a *cover image* for the overview page of all submissions. This image is your visual flagship for the overview of submissions to this Challenge. It is of limited use for small-scale content presentations.

Note: Please provide us with the necessary information, but do not design a formal proposal like for a tender and do not yet perform any (paid) planning services!

Important: A joint submission of several companies is possible. Submissions of individual aspects are also permitted (companies can thus find each other and later form a consortium).

The submission **deadline** is: **February 27th, 2022**.

Benefits of the Challenge and further course of the project

The BMK receives an overview of solution paths and potential partners with the online submissions to this Challenge. The jury of internal experts then invites those companies to individual market discussions whose solutions stand out particularly positively in terms of the evaluation criteria, who already have coherent concepts and offer an immediate implementation perspective. You exchange directly with those responsible for the project. **Please keep April 21, 2022 free for your possible Innovation Dialogue market meeting.**

Also planned is a stakeholder meeting to bring different companies and the BMK to the same table. The goal is to further sharpen understanding of potentially relevant components, forge alliances for overall concepts, and build momentum for the implementation of fit-for-purpose boats. **Please keep May 3, 2022 free for your possible participation in the Innovation Dialogue Stakeholder Meeting.**

Note on this IÖB Challenge: Your submission will remain viewable as your business card for other interested parties even after the Challenge has been completed. You are putting yourself in position for further public sector purchasing projects.

Depending on the results, the subsequent project plan includes the following:

Subsequent steps by the shipping authority following the innovation dialog are primarily dependent on the jury's final assessment of the maturity of the proposed solutions, the complexity of implementation, and expected costs and benefits.

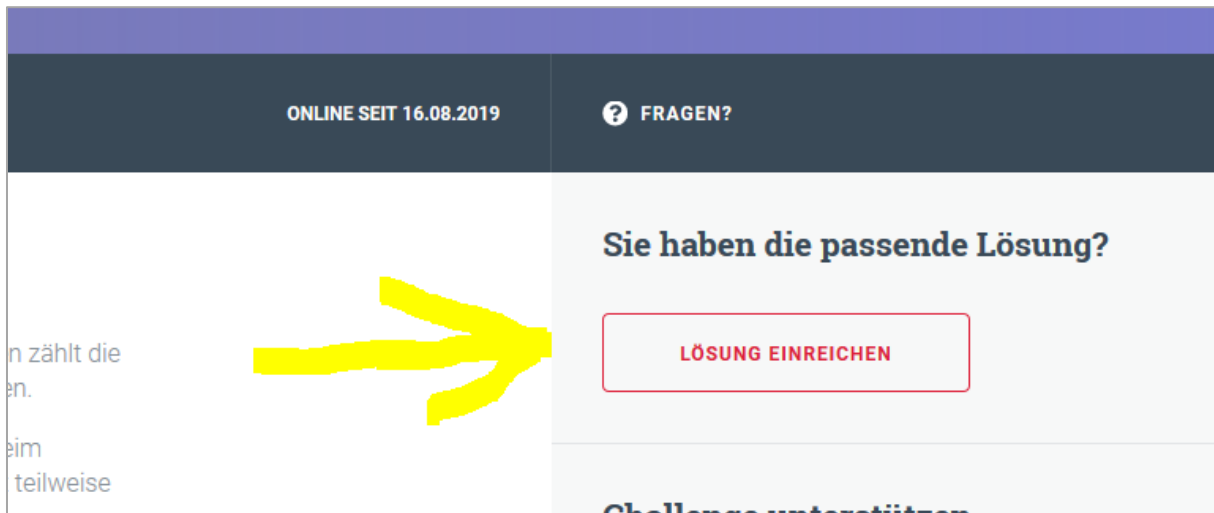
If necessary, the aim is to award the contract in accordance with BVerG 2018; the use of the "innovation partnership" award instrument is being considered. Companies that did not take part in the market sounding challenge are also eligible for this.

Your Questions

Contact the moderator or [post your question about the Challenge](#). Our moderators will check, research and publish your question together with the answer. This way, all potential participants are certain to receive relevant information.

How to submit a solution/idea

Go to the challenge page. Click on the button "Lösung einreichen" on the top right side of the page.



- **Beschreibung**
Post a meaningful description (make references to the description of the challenge and evaluation criteria on the right side of the challenge page)
- **Mehrwert**
Highlight the benefits of your solution.
- **Titelbild**
Upload a picture to be displayed on the landing page of the challenge.
- **Kooperationspartner**
If you are handing in a joint contribution with other companies, this is where you make sure they are represented with logos and names.
- **Dateien & Infos**
If necessary in addition to the descriptions above: add pdf-files (e.g. existing product brochures). But: Keep your contribution manageable for the jury.
- **Vertrauliche Infos**
If necessary, place a confidential information for the jury, the sponsor and moderator (e.g. indication of approximate price range). All other parts of the contribution will be public.

Please be aware of the fact, that a challenge is market research / market engagement prior to a possible procurement. The challenge will not decide upon a contract award nor will it lead to any unfair advantage in a tender. Please balance your time and effort.

Contact Information

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