
Accelerating sustainable innovations at sea

Highlights of the Innovation Seminar

In line with MARIN's focus on accelerating the innovative developments of our clients we decided to organise a special seminar dedicated to maritime innovation in October.

As David Kelly of Stanford University stated: 'Learn to fail fast if you want to succeed sooner'. With this in mind we wanted to explore whether we can create a learning environment in our facilities for new floating technology more productively. We invited clients from different maritime backgrounds to share their experiences regarding innovations and we discussed the present and future role of MARIN in driving innovation forward. We closed the day with an innovative workshop in our Shallow Water Basin.

As you know innovation is more important than ever because we live in an age of rapid transition. Sustainable energy and food production, but also nature preservation, climate change resilience, zero emission transport and defence technology, all require new solutions at sea. MARIN is aiming for a new approach to accelerating the development of your innovation by offering a unique combination of interactive workshops, explorative model tests and simulator studies.

Startups and SME companies

Besides large companies, startups and SME companies were also asked to share their experiences at the seminar. MARIN has been

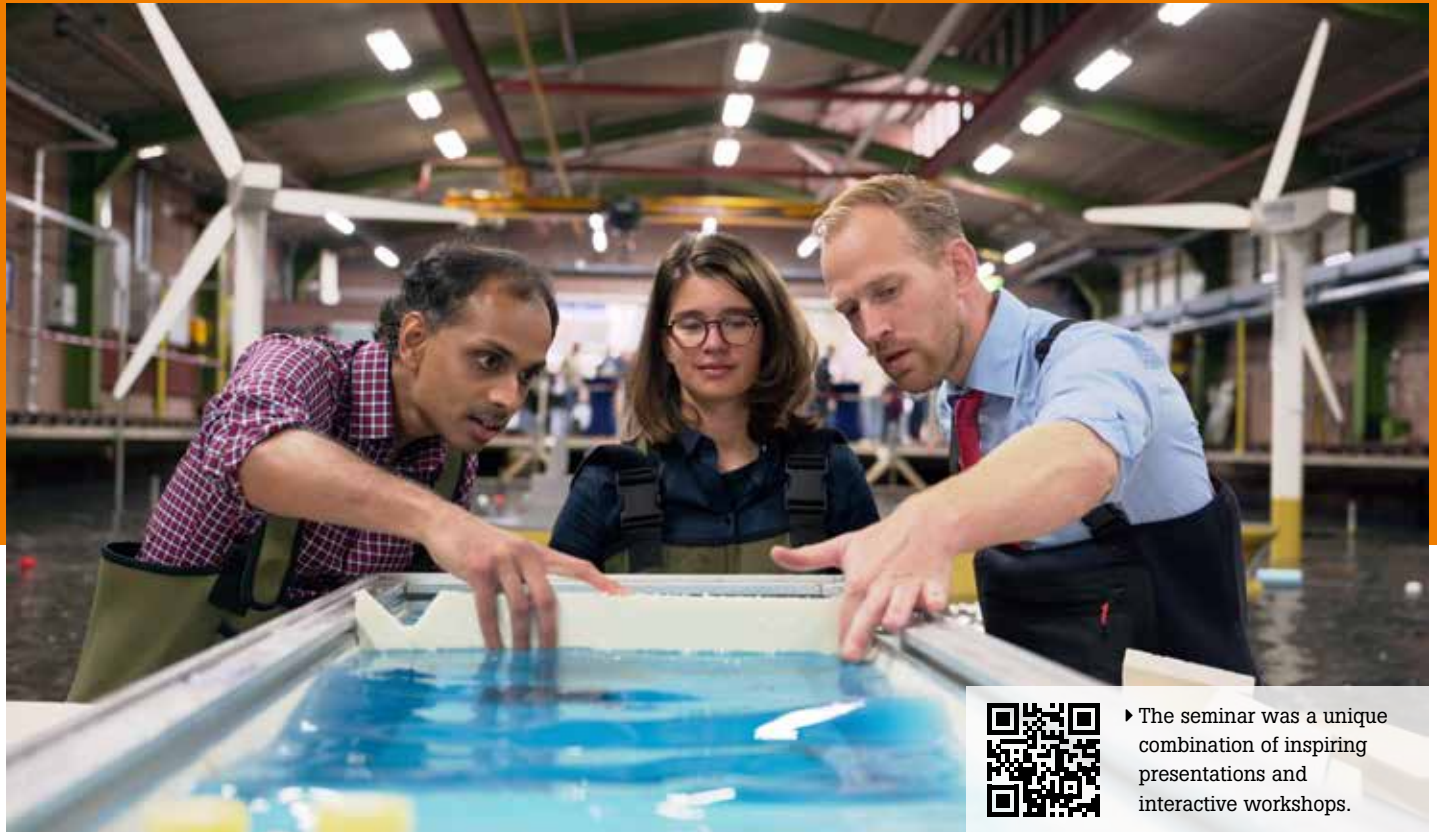
working with smaller companies for a decade, supporting them and conducting conceptual tests in free basin slots. We also had a presentation from NWO about the take-off subsidy programme. This gives Dutch startups a fantastic opportunity to work with MARIN and take the next step with their innovations.

Design sprints in open innovations

In recent years we have initiated a number of open innovations and during the seminar we have proposed to use a similar method for the innovations of our clients. Many of these innovations in the last few years have focused on a societal theme such as climate adaptive infrastructure or the safety of shipping. A recent example is the open innovation of 'crash barriers' (offshore guardrails) to prevent ships from colliding with wind turbines.

New Innovation Team We also announced the creation of a specialised Innovation Team at the seminar. We have extensive experience of performing detailed model tests and numerical research. Our methods and mindset are mostly directed to the verification of reliable results, and of course we will continue to do that. But at the same time, we have started a team within

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► The seminar was a unique combination of inspiring presentations and interactive workshops.



We invite you to challenge us on Innovation Fridays!

Are you working on an innovation and in need of an independent view, a sparring partner or an easily accessible conceptual test? Sign up for one of our free Innovation Fridays and speed up your innovation with the help of MARIN's experts.

Our Innovation Team is ready to explore your innovations and ideas. We share our experience and open our facilities for an indicative test, and you are welcome to bring your own model. So speed up your innovation for free and contact our innovation team.

www.marin.nl/innovation-fridays

MARIN that is also exploring new processes and methods.

The focus of this team is to learn how to accelerate the innovation process of our clients and at the seminar the team held discussions with our clients from the defence, yachting and offshore industry.

Although the boundary conditions can be really different in different markets, we can say that in every early-stage innovation it is all about managing uncertainties and getting a sense of direction of what works and what doesn't work. Overall, the delegates felt that MARIN could be the right organisation to maintain the maritime

innovation network and the fact we make our facilities and knowledge more accessible to explore new solutions is very much appreciated.

To give one example, we conducted an experimental workshop and conceptual test with Heerema Marine Contractors (HMC) to see if we could improve the motion behaviour of an installation template in the



Open innovation: in February 2022 a group of experts from MARIN and the wider maritime sector developed three innovative concepts for maritime crash barriers to avert collisions with wind turbines. See www.marin.nl/news/crash-barriers



'Learn to fail fast if you want to succeed sooner'

Design innovation researchers have developed a 'Design Thinking process' to first understand user needs, translate them into concepts and finally test user experiences in a short cycle time. The idea is that you have to 'Fail Fast' if you want to 'Succeed Sooner' (David Kelley, Stanford University). Our basins and simulators can be an excellent environment to realise short, iterative cycles to improve concepts and test new prototypes. At the same time, creating successful innovations is not just about applying a Design Thinking method or process: you have to develop a critical mindset and ask yourself at the end of the design sprint: 'Is it good enough?' (Jeroen van Erp, Fabrique). Jeroen opened the Innovation Seminar with a refreshing view and showed us the latest perspectives on system innovation.

splash zone. HMC presented its experiences and showed how the MARIN workshop and tests helped the company successfully install an offshore wind farm.

What did we learn from the Innovation Seminar? The aim of the Innovation Seminar was to share experiences about innovation in general and to discuss MARIN's current and future role. We created an inspiring event where our clients and innovation experts shared their ideas. We learned that innovation is about interactions and taking the time to truly understand the needs of the end user. This can be the case for one client specific product development, but it is also about the innovation of the maritime industry system as a whole. And for sure MARIN can play a role in connecting people, facilitating the learning process and adding expert knowledge.

With our basins and simulators we can create a controlled environment to swiftly learn what does and doesn't work in a relatively

short cycle. But for a successful innovation it is not just great technology that defines success. It is also about a cooperative process and a wider acceptance of the final result. As an independent organisation we can invite experts from other fields in design sprints to bring in the right knowledge at the right time. Additionally, with our Maritime eXperience Lab that is under construction, we will be able to let professionals experience different solutions in real-life situations.

At the end of the day, the seminar showed that there was a very positive response to this new role for MARIN. We know that we are not there yet, there are further steps to be taken. We are learning together with the industry to accelerate innovation for a sustainable use of the sea! ▢