



# From vision to User Requirements

# Capturing your future bridge concept in user requirements

In many large tender processes it is vital to have well-defined User Requirements which reflect the need for the customer unambiguously to get the best value for money. Capturing ship bridge functionality and design in requirements is an ultimate challenge since it covers a huge variation of factors such as bridge layout, system functionality, user interface, alerting schemes etc. Especially when new ways of operating in future concept of operations or simply new, non-existent functionality is concerned, it is not only about capturing the right User Requirements but also defining human – machine interaction requirements. MARIN can support you in defining the right requirements in your tender process.

### **Stakeholders**

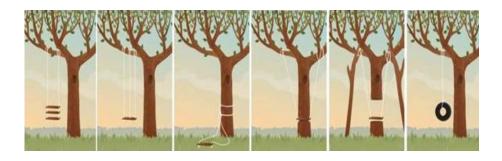
- Navies
- Harbour authorities
- VTS providers
- Vessel owners
- Coast guards



# **Background**

There are many examples in which the customer states User Requirements with a certain expectation about the final product to be delivered. Often the supplier has a different interpretation of the very same requirement. Especially for large and complex systems being tendered, like ship bridges where ship's information is coming together, a long list of separate requirements will be part of the purchase process. Interpreting these individually while keeping overview of the complete product and its goal is a challenging task with many pitfalls to misinterpret a set of requirements. If your needs as a customer are not being fulfilled, both you and the supplier will be left empty handed.

In todays and near future operational concepts, bridge operators are more and more supported by automated processes and support functions changing the human – machine interaction. MARIN can help you capturing that change in meaningful user requirements.



# **MARIN** experience

- Extensive experience in simulation developing maritime measurement systems.
- · Well informed about future concepts of operation
- · Wide range of maritime knowledge areas in house
- Human Performance evaluation
- Operational experience
- In house Virtual/Augmented Reality capabilities



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#### **Objectives**

We want to support your User Requirements capturing process concerning (future) complex systems for your operators. When future operations are at hand and no end user has experience in such a future operation MARIN can support you by materialising your vision and put end users in a scenario, evaluating future operations using rapid prototyping techniques and high-end bridge simulators. This allows validation of end user needs for future operations and can proof the feasibility for your organisation. Having harvested these insights provides a solid basis to define SMART User Requirements.





Prototype future operation

End user experimentation

Defining the right User Requirements starts with capturing the operational need for your organisation by setting the goals to be fulfilled with the system and involving end users in the process:



End user validation

**Capture User Requirements** 

**Start of Tender Process** 

## What MARIN can offer to your organisation

MARIN can support you in defining the operational needs as basis for well-defined SMART User Requirements. We can create future operation scenarios allowing to derive User Requirements based on rapid prototyping techniques, end user experimentation and validation in a simulated environment. MARIN has various simulators allowing a wide range of operational scenarios.