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EU project applications: Experiences and lessons learned from SEDNA and MIRROR

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Example of a successful application: *SEDNA*

SEDNA overview

SEDNA - Safe maritime operations under extreme conditions: the Arctic case

- Goal: *An innovative and integrated risk-based approach to safe Arctic navigation, ship design and operation*
- 13 partners
  - *From 6 different countries including China*
- Duration: 3 years (06/ 2017 – 06/2020)
- Budget: 6.7 M€ (EU contribution: 6.5 M€)
- Coordination: BMT Group (UK)

SEDNA – Application process

H2020-EU.3.4. - SOCIETAL CHALLENGES - Smart, Green And Integrated Transport

- Topic: MG-3.3-2016 - Safer waterborne transport and maritime operations
  - *SEDNA was the only project funded under this programme/topic*
    - At least 5 competing applications in the second round
    - Aalto was invited to the consortium
      - Aalto is known as an expert on Arctic ship design and safety → Relatively effortless application process for Aalto

SEDNA – Application process

Project call

- Waterborne transport operations, in complex traffic fairways and in extreme environments, simulation modelling and real time information management including big data
- New and improved vessel and equipment design concepts that offer a clear risk reduction and intrinsic risk mitigation (including human machine interfaces), resilience, integrity, fire resistance and improved survivability in extreme conditions, cargo control including numerical simulations, and cost efficiency considerations, and better salvage and evacuation options
- A comprehensive safety assessment for low flash point and volatile fuels, covering on-board use and installations as well as the shore side supply interfaces

Proposal contents

- Arctic conditions / Arctic shipping routes
- Simulation-based design
- Arctic voyage optimization tool using Big Data
- Risk-based design framework for Arctic ships
- Safe Arctic bride using Augmented Reality (AR) technology
- Anti-icing coating
- Procedures for safe use of flash point fuels (Methanol)

Most topics covered!

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Example of an unsuccessful application: *MIRROR*

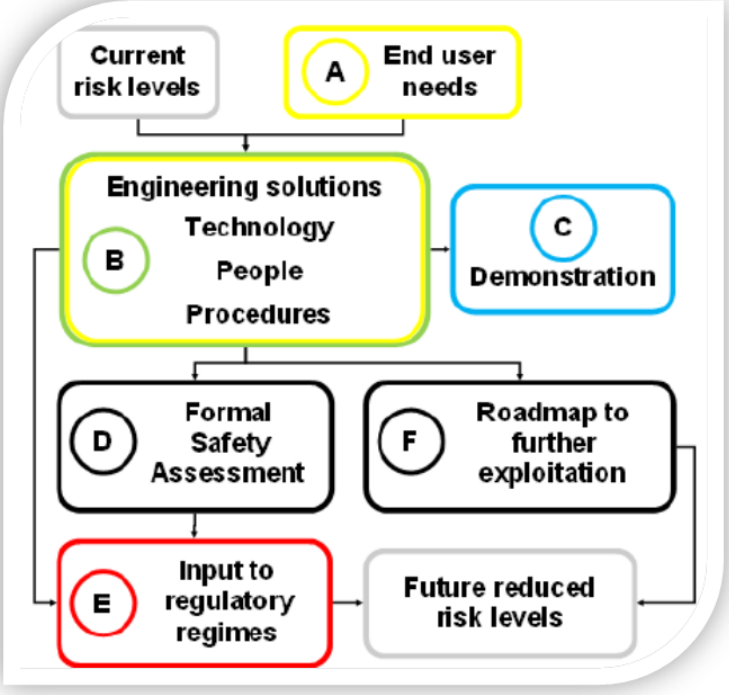
MIRROR - Overview

MIRROR - Engineering solutions for increased resilience and reduced risk in maritime emergencies

The application focused on

- New and improved vessel and equipment designs by using risk-based approaches
- Post-accidental and emergency situations
- Integrity
- Improved survivability
- Better salvage and evacuation options
- …

Aimed to give a specific attention to the feasibility of the design and technology concepts in complex waterways and extreme environments, in particular the Arctic



MIRROR – Application process

Submitted in response to the same call for proposals as SEDNA

- H2020-EU.3.4. - SOCIETAL CHALLENGES - Smart, Green And Integrated Transport
  - *Topic: MG-3.3-2016 - Safer waterborne transport and maritime operations*
- Good application (lot's of work was invested into it) but the project was not funded (SEDNA won)
- Lesson learned
  - *Tough competition, also very good applications might be rejected*
  - *Proposals need to be very well linked to the project call/topic, as well as to overall EU research policies*

Follow up

- The proposal has been updated and resubmission under a new name

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A few words about WATERBORNE

WATERBORNE

WATERBORNE - The European research and innovation platform for waterborne industries

- A platform to establish a continuous dialogue between all waterborne stakeholders
- The waterborne family is divided into working groups referred to as Industrial Research Advisory Groups (IRAG)
  - *These are platforms that gives you the opportunity to influence future calls*
- Most resent activity
  - *November 6-7, 2018: Meeting held in Brussels to collect ideas for future project calls*

Concluding remarks

Motivated to carefully assess your real chances of submitting a successful project application

- Also a very good application into which lot's of time has been investigated might fail
  - *Keep in mind that it is possible that some organizations have had prior knowledge about the contents of a project call*
- Easy entry into a project by invitation
  - *Good reputation and contacts helps*

In comparison with Business Finland (Tekes) research project EU research projects require more administration

- Upsides: you get access to valuable input and resources through large and diverse consortiums, you can do research that is close to application,…