



Nordic Water Network

*Annual Erasmus+
Beneficiaries and Stakeholders Conference
for the field of higher education*

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*Markus Fischer, Technische Universität Berlin
markus.fischer@tu-berlin.de*



Consortium



- Technical universities in **Aalborg** (AAU), **Berlin** (TUB), **Copenhagen** (DTU), **Cracow** (CUT), **Dublin** (DCU) and **Trondheim** (NTNU)



- Associated partners from **industry**, other **non-academic research facilities** and **local authorities**



Nordic Water Network-area

Network characteristics



- Theme: **Water**
- Territory: **Northern Europe**
- Research and education focus: **Urban Water Cycle**
 - Emerging pollutants
 - Storm and Waste Water Management
 - Fluid Flow Machines
 - Smart Water Networks (Digitalisation)
 - Governance
- Target group: **Scientists and students**
- Funding: **Internal and External**

Genesis



- **2012:** Strategic Partnership TUB-NTNU
 - Different core groups in this partnership (Entrepreneurship, Energy systems, Neurosciences, **Water**)
- **2014:** Joint proposal „Nordic Water Network“ (DAAD)
- **2015:** NWN started as a bilateral network
 - Different departments and faculties of NTNU and TUB involved
- **2016:** Aalborg University and Cracow University of Technology joined
- **2017:** Dublin City University and Technical University of Denmark joined
- **2019:** Start of second funding period (DAAD)

Governance structure



- **Star shaped network**
 - Project lead at TUB
 - Coordination office
 - Main budget
 - ECTS awarding
- **NWN Board**
 - Representatives of every NWN partner
 - Network conference / 1 p.a.
 - Board meetings / 2 p.a.
- **Partner Administration**
 - Rector's office
 - International office
 - Faculties - Departments

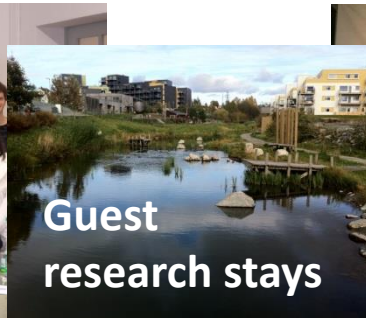


Star-shaped network organisation

Portfolio of actions



Summer Schools



Guest research stays



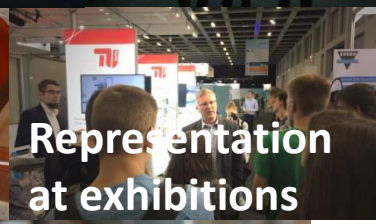
Conference participations



Scientific workshops



Joint supervision of master theses



Representation at exhibitions



Industry internships



Networking events



Joint supervision of PhD topics

Milestones

- Ten joint **dissertation projects** (7 ongoing)
- Regularly **publications** of joint research results in journals and on conferences
- 15 jointly supervised **Master theses**
- **Adjunct Professorship** of Prof. Thamsen (TUB) at NTNU, Faculty of Engineering
- **Sabbatical** of Prof. Sætran (NTNU) at TUB
- Four annually organised **Summer Schools**
- **PhD Conference** every second year
- Two already submitted **H2020 proposals**
- Four **NWN Conferences**



Lecture at the NWN Spring School 2018

Quo vadis?

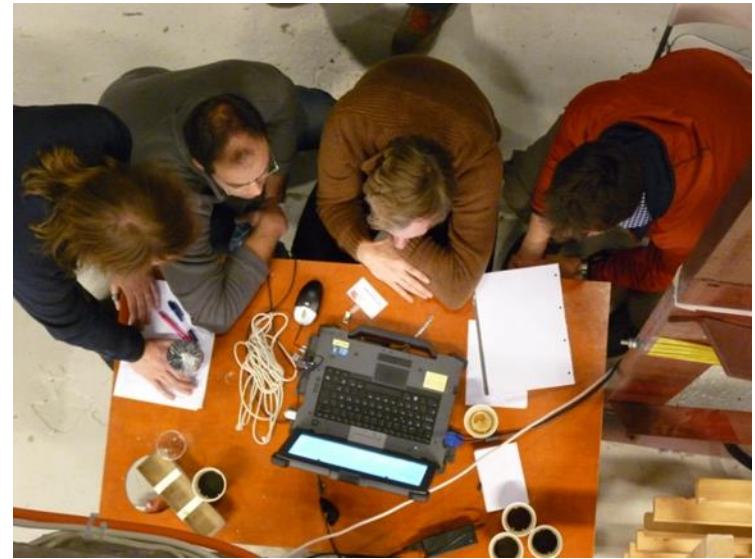


- **Sustainability** approach
 - Third-party funding
 - EU funding (Horizon2020, Interreg, ERASMUS+)
 - Bilateral funding programmes
 - National funding programmes (e.g. DAAD, NAWA)
 - Internal funding
 - Exclusive budgets from the universities
- Integration of NWN education activities in various **curricula**
- **Joint study track** „Water Technology“ (M.Sc.)
- From star-shaped to a **fully meshed network**
- Extension of the network

Challenges



- **Limited budgets:** mostly for bilateral actions only (Germany-partner country)
- Sustainability approach **vs.** limited funding periods
- **Coordination** at each partner university
- Different **academic terms**
- Different **grading systems**



NWN students looking for the best solutions

The development of a *European University Network* (ERASMUS+)



1. Support **interdisciplinarity** to reach as many departments as possible at each partner university
2. A full time **coordination team**: one main plus local coordinators
3. Close **top-down and bottom-up** relation at each partner university
4. Use **Summer Schools** to attract students for your partner universities



Thanks for your attention!

www.nordic-water-network.com

Markus Fischer, Technische Universität Berlin

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