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Knowledge FOR Resilient soCiEty

Sustainability strategy

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DTU-BYG

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Key aspects:

-  *Stakeholders: involve industry and administrations*
-  *Students: advertisement, grants, mobility, and employment*
-  *Education: accreditation, certification, PhD exchange, LLL*





Key aspects:

 *Stakeholders: involve industry and administrations*



STAKEHOLDERS: INDUSTRY INVOLVMENT

Establish an industrial advisory board that can:

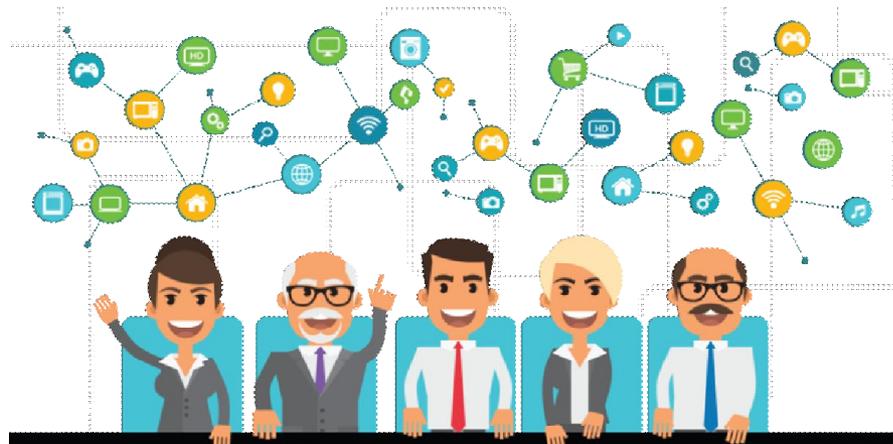
- *Inform on desired competences of professional profiles hired by the company*
- *Evaluate learning objectives of developed courses from an industry perspective*
- *Contribute to the courses by means of invited lectures and seminars*
- *Identify a list of interested/supported research topics for MSc thesis projects.*



STAKEHOLDERS: INDUSTRY INVOLVMENT

The advisory board should:

- *Be made of 8-12 representative of prominent Industries that are active in the field of fire safety or disaster management.*
- *Meet with the head of study and main teachers once or twice a year*
- *Promote MSc projects and post-graduation traineeship*
- *Commit to employ a number of students with a given curriculum /grade or co-fund a number of industrial PhDs per year (if feasible for the country).*



STAKEHOLDERS: INDUSTRY INVOLVMENT

Example of industries working in relevant fields:

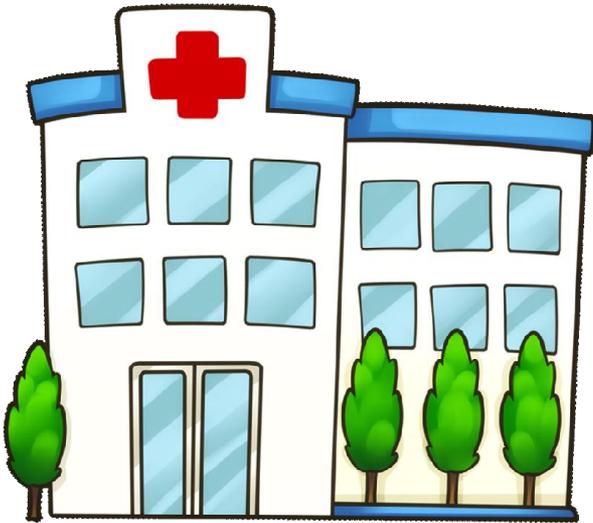
- *Insurance companies (structural fire safety, disaster resilience).*
- *Companies producing alarm systems (fire safety and evacuation)*
- *Company producing intumescent paint and other passive protections (structural fire safety)*
- *Building construction companies (structural fire safety)*



STAKEHOLDERS: INVOLVMENT OF ADMINISTRATIONS

Entities involved:

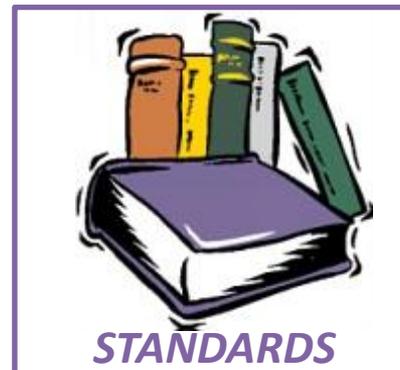
- *Communes (safety of pre-schools , schools and elderly care institutes)*
- *Regions (safety of hospitals)*
- *State/Ministries (Education, Internal affairs – Civil Service, Fire Brigades)*



STAKEHOLDERS: INVOLVEMENT OF ADMINISTRATIONS

Type of involvement

- **CONSULTANCY:** University staff's consultancy work for above mentioned entities
- **STANDARD:** Participation in technical committees for revision of existing standards or drafting of new regulations on fire safety and disaster resilience
- **RESEARCH:** Collaboration on MSc projects on topics of interests for the administrations
- **ACCREDITATION:** Accreditation/monitoring of the MSc education
- **SUPPORT:** Financial support of the education





Key aspects:

-  *Stakeholders: involve industry and administrations*
-  *Students: advertisement, grants, mobility, and employment*
- 



STUDENTS: RECRUITING STUDENTS

Selling point

- *WORK PERSPECTIVE:*

Collaboration with the industry and possibility for traineeship

Good employment rate in the field/well paid jobs perspective

- *ECONOMIC SUPPORT:*

1. Grant for tuition fees supported by the State/Administrations for eligible students

2. Possibility of paid industrial traineeship or financial support for MSc project in collaboration with the industry

- *INTERNATIONAL PERSPECTIVE*

Possibility of studying abroad for a semester within K-FORCE or other intern. partners



STUDENTS: MOBILITY OF TEACHERS (SMS)

Incoming staff mobility provides:

- **TEACHING QUALITY**
international perspective in the lectures
- **SUPPORT IN TEACHING EFFORT**
help in supporting the local staff with teaching duties

Outgoing staff mobility helps in

- **EXPAND COMPETENCES OF LOCAL TEACHING STAFF**
Update on research in the field and teaching methods
- **MAINTAINING RESEARCH NETWORK:**
Funding possibility for longer-term stays





STUDENTS: RECRUITING STUDENTS

Advertisement

- *HIGH SCHOOLS:*

advertising the education in high schools and organize open university days for high school students

- *SOCIAL MEDIA:*

advertisement on social media and on the university website

- *INTERNATIONAL NETWORK:*

1. advertisement within the K-FORCE network to recruit international students

2. maintain and advertise student mobility programs to recruit national students who would like to go abroad during their studies





Key aspects:

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-  *Students: advertisement, grants, mobility, and employment*
-  *Education: accreditation, certification, PhD exchange, LLL*





EDUCATION: ACCREDITATION

Accreditation system in Denmark ensures:

- *QUALITY OF THE EDUCATION:*

Courses should respect quality standard such as having a minimum number of written exams, exams with an external censors, and university teachers as course responsible

- *DURABILITY OF THE EDUCATION:*

The education cannot be shut down just because fewer students are enrolled on a given academic year

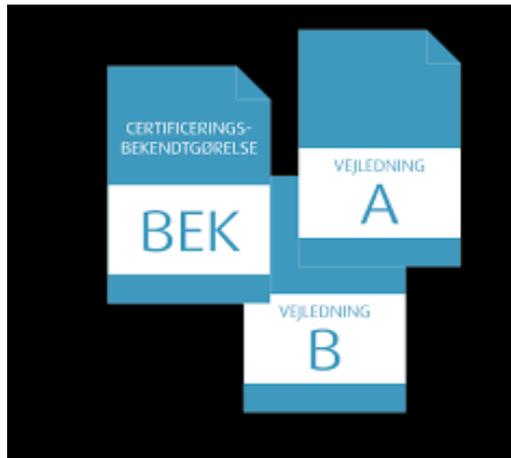
Is There Anything Similar In WBCs you can apply for or implement?



EDUCATION: PROFESSIONAL CERTIFICATION

Fire safety consultant title in Denmark (Building Regulation 2018):

- **REQUIRED NO. OF ECTS POINTS IN THE FIELD OF FIRE SAFETY**
 1. Provides a good basis of students for msc and LLL (MiB) courses on fire safety
 2. Ensures that the FS education is targeted to objectives of interests for the society
- **CAN APPROVE FIRE SAFETY DESIGN OF BUILDINGS**
 1. Ensure the interest of students in the education
 2. Ensures the interest of the industry and administration in the education



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Danish certification scheme

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EDUCATION: PROFESSIONAL CERTIFICATION

Other professional titles in Fire safety or other safety-related fields:

- *OTHER COUNTRIES HAVE SIMILAR CERTIFICATIONS for graduated engineers in the different fields (Structural safety, Fire Safety, etc.)*

Anything Similar In WBCs?

What about a K-FORCE certification?





EDUCATION: PHD Program and Exchange

PhD program sustains:

- *RESEARCH and thus*
- *RESEARCH-BASED EDUCATION in the field*

PhD program's sustainability is ensured by by:

- *INVOLVEMENT OF INDUSTRY AND ADMINISTRATION*
- *PhD MOBILITY:*
 1. *Guest PhDs from partner countries for 6 months – 1 year*
 2. *Exchange period of local PhD to partner universities abroad*



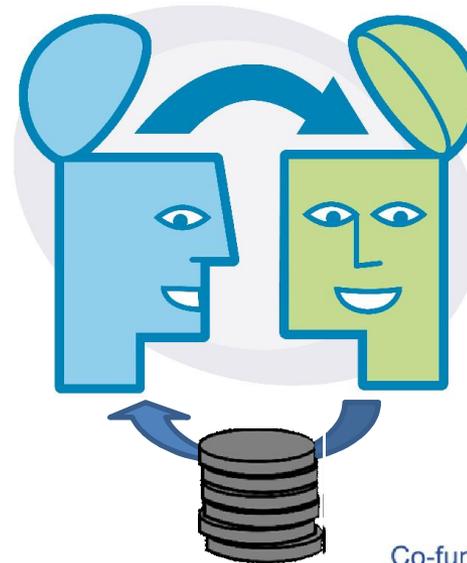
EDUCATION: Life Long Learning

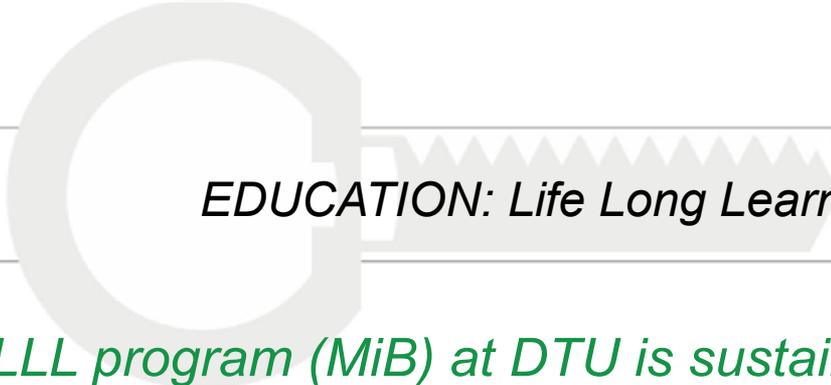
Benefit of LLL program on FS education:

- *MAINTAIN THE INTEREST OF THE INDUSTRY/PROFESSIONALS*
- *MAY CONTRIBUTE TO THE FINANCIAL RESILIENCE*

by requiring tuition fees for professionals enrolling in LLL courses/program

To which extent is possible to fund LLL courses with tuition fees in WBC?





EDUCATION: Life Long Learning

LLL program (MiB) at DTU is sustained by:

- *ENROLLMENT FEE (Paid education)*
- *CERTIFICATION OBTAINED BY PASSING COURSES*
- *NEWSLETTER (advertisement of research activity of the group, MiB projects, conferences, events for the education, etc.)*
- *NFSD CONFERENCE (with heavy involvement of the industry)*



DTU
Master i Brandsikkerhed





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Thank you
for your attention

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