



Future-proof skills for the  
maritime transport sector

### Work Package 1 :

Norwegian University of Science and Technology

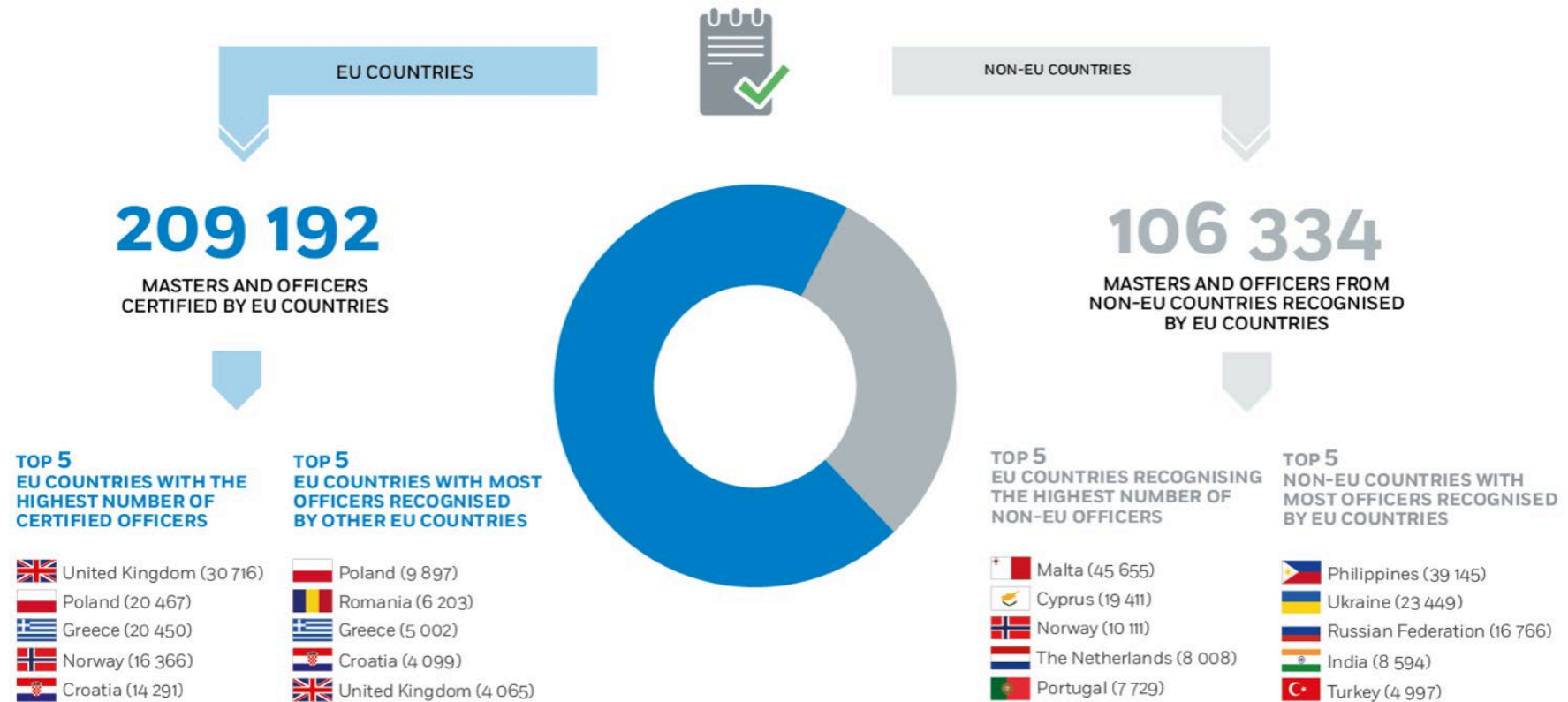
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Team: Prof. Hans Petter Hildre, Yushan Pan (PHd)



# SEAFARER STATISTICS IN THE EU

A SNAPSHOT OF THE NUMBER OF SEAFARERS HOLDING CERTIFICATES OF COMPETENCY & ENDORSEMENTS ATTESTING RECOGNITION BY EU COUNTRIES VALID IN 2018, AS REPORTED IN EMSA'S STCW INFORMATION SYSTEM



Source: EMSA







## Work Package 1:

# Skills Needs Identification

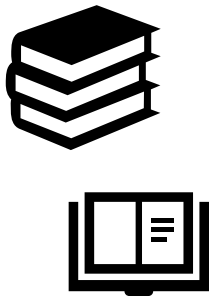
- Task 1.1.2 Current skills needs
- Task 1.1.3 Future skills and competence needs
- Task 1.2.1 Skills and Competence GAP current and future
- Task 1.2.2 Identification of mismatches on a structural basis
- Task 1.2.3 Impact on occupational profiles



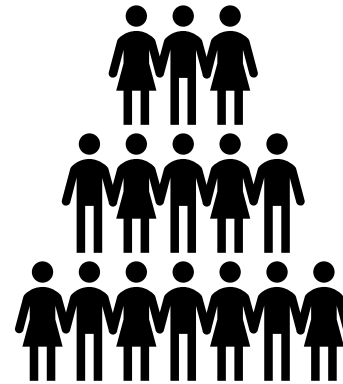


# Research Method

## Current skills needs



Literature review



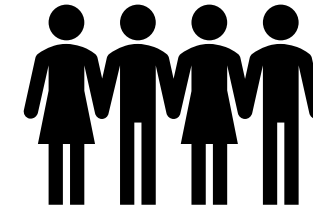
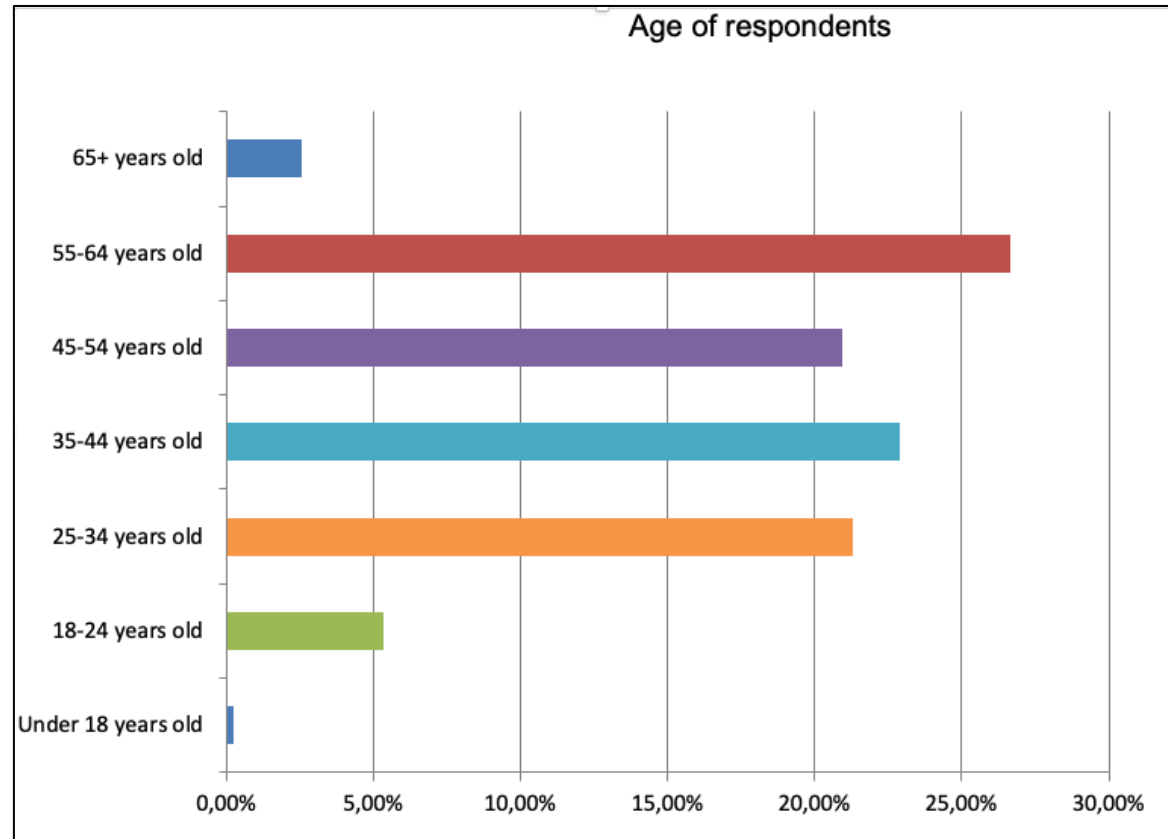
Seagoing  
1100 respondents



Shore based  
450 respondents



# Age of respondents





# Research Method

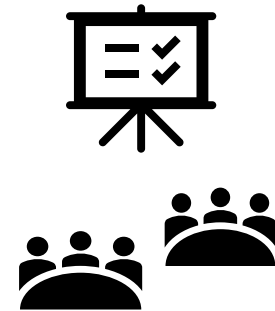
## Future skills needs



Interview Key Visionaries/  
Maritime Experts



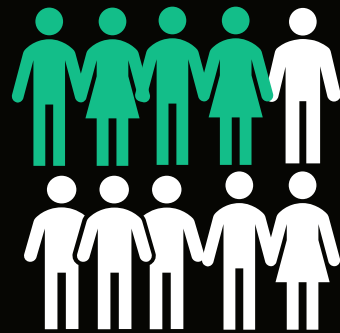
Analyse reports on future development  
DNV-GL, Lloyds, Gartner group etc



Mapping of METs and METs  
competence programs

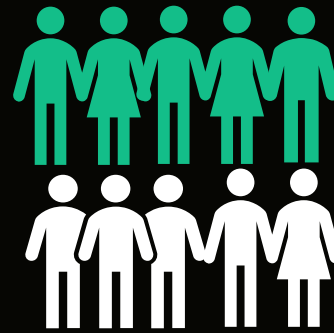
# Survey shipboard personnel

Overburdened with  
obsolete knowledge?



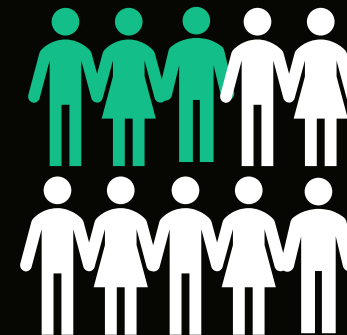
Yes: 40%

Important topics  
are missing?



Yes: 50%

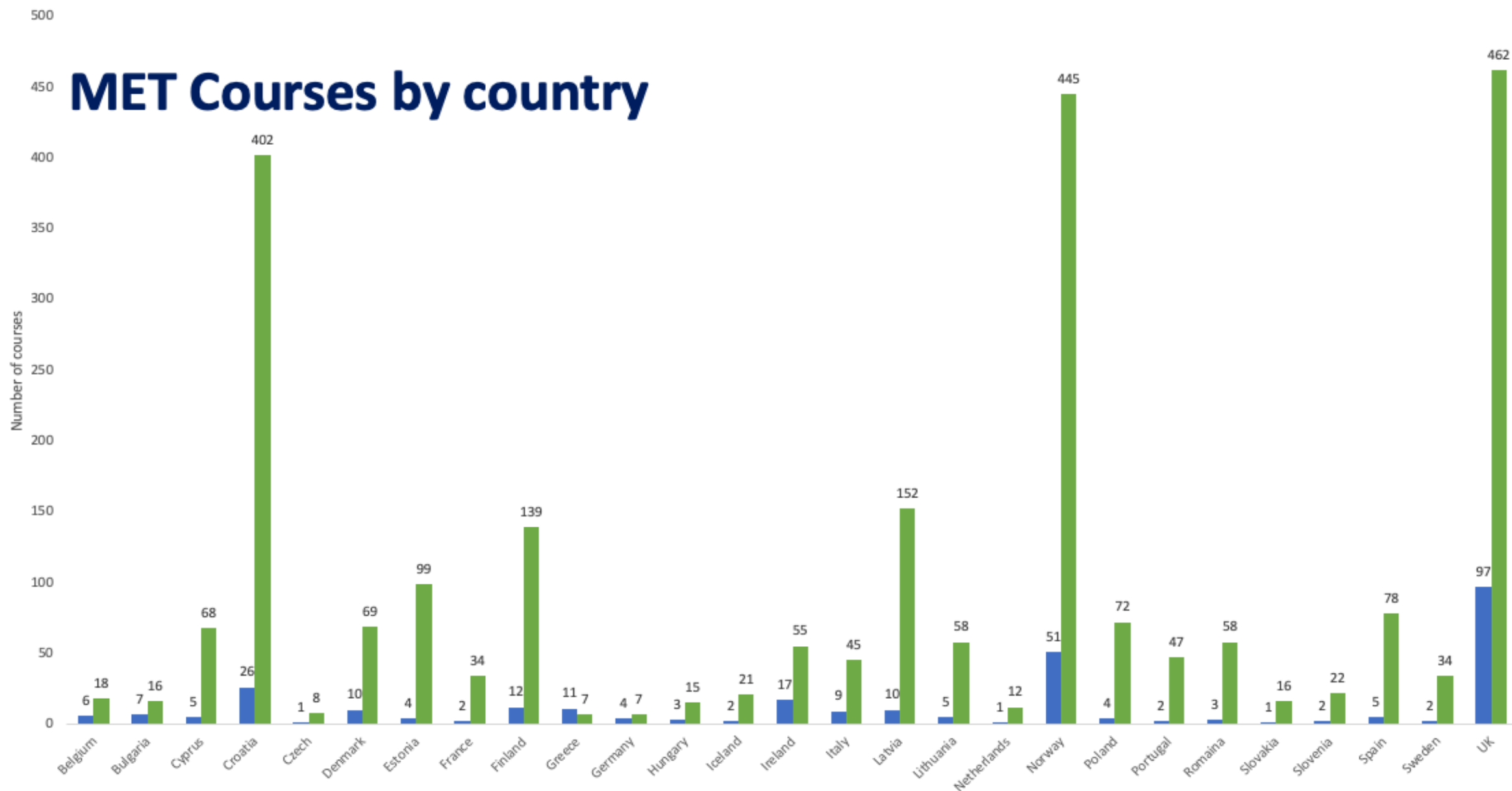
Satisfactory in  
all respects?



Yes: 30%



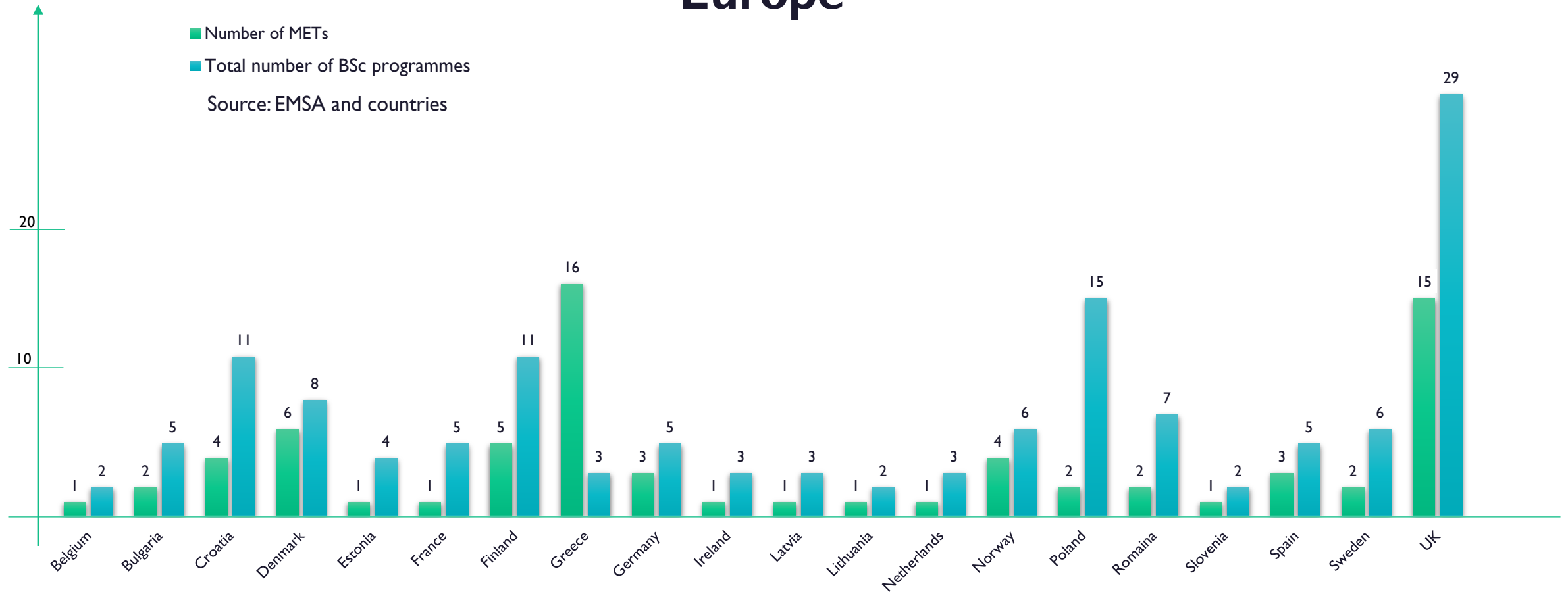
# MET Courses by country







# METs with BSc programmes and Certificates in Europe





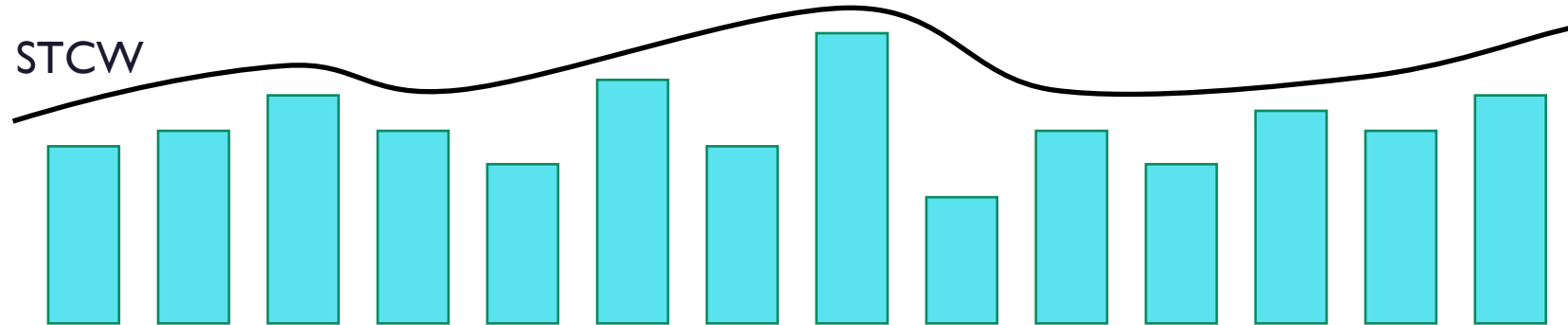
Highest competence



Baseline



STCW



European countries

Future skills needs:

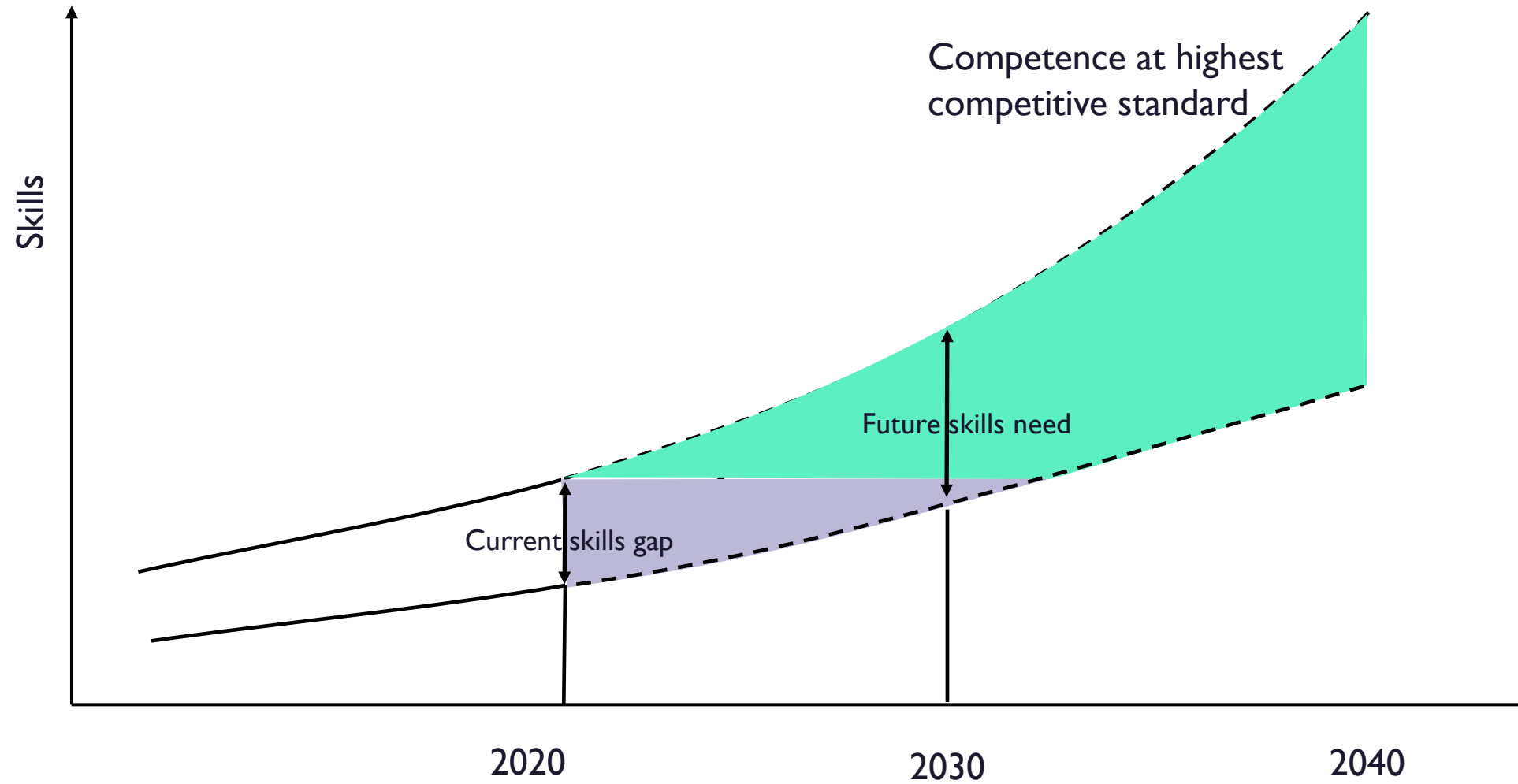
- Digital
- Sustainable
- Transversal
- Leadership

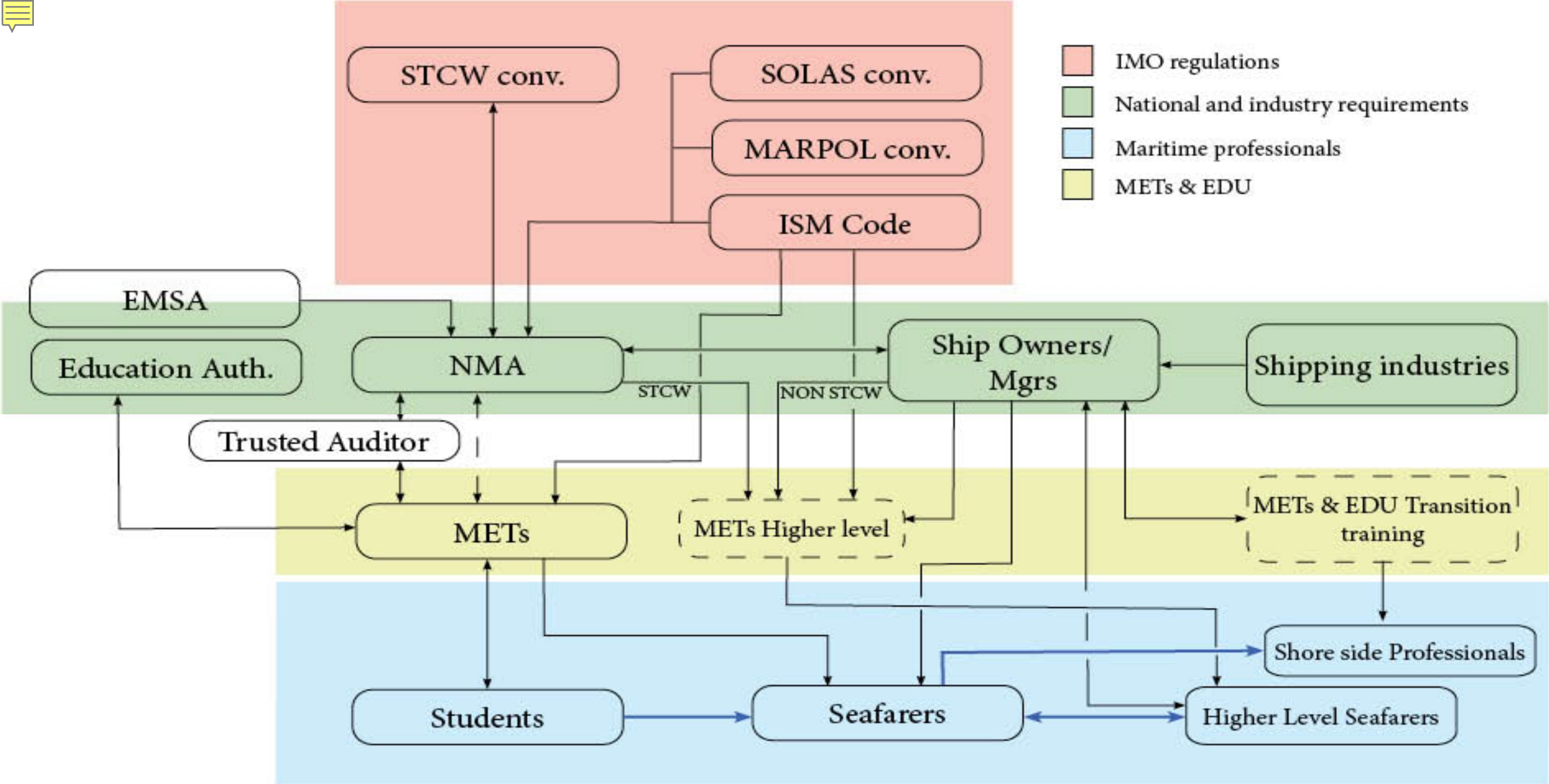
Current skills GAP:

- Computer literacy
- Leadership
- Maritime law
- Teamwork
- English proficiency
- Maritime economy
- Maritime technology



# Closing the skills GAP







# WPI Skills need identification

## Current skills needs

- Maritime economy
- Maritime law
- Ships technologies
- Green skills
- Digital skills
- Transversal skills

## Future skills needs:

- Digital
- Sustainable
- Transversal & Transitional
- Leadership