A study of the changing and future skill needs of the maritime and marine sectors









#### Arab Academy for Science, Technology & Maritime Transport (AASTMT)

Integrated Maritime Policy for the Mediterranean (IMP-MED)



The study was conducted between AASTMT & Integrated Maritime Policy for the Mediterranean (IMP-MED) Project within the Project Technical Assistance program.



#### EUROPEAN COMMISSION

Directorate-General for Development and Cooperation – EuropeAid Unit F4: Regional Programmes Neighbourhood South

IMP

The Directorate-General for Maritime Affairs & Fisheries Maritime Policy in the Mediterranean and the Black Sea

5° Regional Technical Workshop Athens, 16 - 17 April 2013

- 5<sup>th</sup> Technical Regional Workshop 'IMP-MED' Project
- 12<sup>th</sup> FEMIP Conference 'Mediterranean Blue Economy: Enhance Marine & Maritime Cooperation'

### FEMIP & Blue Economy: AASTMT Communication April 2013



#### BACKGROUND

On the occasion of the 12th Facility for Euro-Mediterranean Partnership and Investment (FEMIP) Conference (18-19 April 2013), AASTMT affirmed its commitment to work collectively and in partnership to support a blue and sustainable economy in the Mediterranean region and made a presentation on:

The Networking Across Training Institutes

#### THREE BASES<u>:</u>

<u>First Base:</u> Educating and Training Highly Qualified Personnel <u>Second Base:</u> Maintaining Relations with Maritime Institutions <u>Third Base:</u> Participating in Local, Regional and International Maritime Clusters and Networks 6th Regional Technical Workshop IMP-MED Brussels, 28-29 Oct. 2013



### Background:Session 1 of the WS Inclusive Growth and Jobs in the Maritime Sectors

Maritime Training and Jobs Developments

An overview of the Academy's activities, concerns and challenges for students and trainees from the region and beyond.





## Study of the changing and future skill needs for the maritime and marine sectors



Alexandria 25 June 2014 **MP-MED Project** –

### **Objective of the study**



To support the Academy's reflections and development plans of their activities to meet the demand for new and future maritime and marine skills, including:

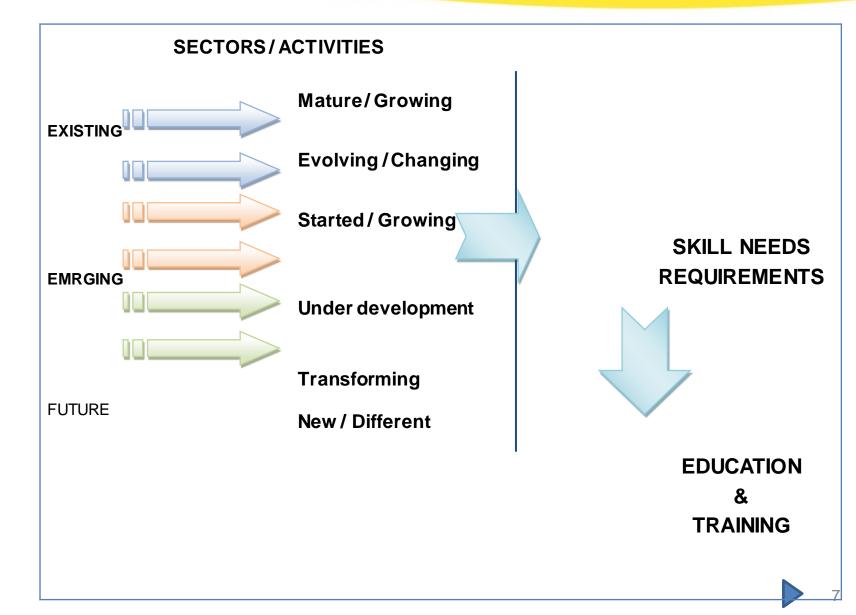
- An inventory of the new and future maritime and marine jobs (of the blue growth) and,

- A survey of the present, changing and future needs for maritime and marine skills and jobs, focusing on the possibilities of adapting and extending the scope of the Academy

- A specific section dedicated to the difficulties to fulfill the training periods at sea required by international rules for completing the education of cadets.

#### From sectors/activities to skill needs and Education & Training





#### The critical challenge of today



- The seafarers educated at the Academy are facing difficulties in obtaining the training periods at sea necessary to complete their qualifications.
- The Academy's standards of education and training are strictly in line with the levels required by international conventions (IMO), and the certificates delivered by Egypt are fully recognized by the European Union.
- The challenging priority is to find solutions which complete the first and main vocational mission of the Academy which is to educate and train seamen for industries related to maritime transport / services and navigation at sea.

## The demand for new & future maritime and marine skills



- The key questions are about the sectors / activities which should potentially require more and / or new skills for:
  - growing, emerging, and future sectors, activities and functions;
  - needs for strengthened knowledge / capacities in some sectors;
- The analysis is based on:
  - recent reference studies on the future prospects and potential of the diverse sea-related maritime and marine activities (i.e. EU Study on blue growth)
  - an overview of knowledge and skills acquired from education and training programs, curricula, and specific courses delivered by reference maritime institutions (SWOT analysis & benchmark)
- These two exercises allow for a better understanding of the demand trends and their relevance in the Mediterranean context and more particularly for Egypt, MENA Countries, AASTMT's Member States and beyond for the Academy's potential "markets".

# The inventory of maritime and marine sectors and activities



#### **Abstract / Examples**

Sectors / Activities	L	F	Ρ	Μ	G	PD	U	Comments
Shipbuilding			x	х				- Construction of small size units only
Shipbululing			^	^				- For both sea and river navigation
Ship repair and maintenance			x		x			- Maintenance and repair of all types of ships (merchant,
		x						ancillary services, yachting)
								- All types of works by more / other providers shipyards
								<ul> <li>Different perspectives / types of projects</li> </ul>
Deep sea shipping								- High feedering, combining transhipment and trade
	Х	Х	X	Х	X			- Services to maritime operators (ships and freight)
								- See also Suez Development Plan
Short sea shipping								- All kinds of short distance (including feedering)
			X		Х			- Potential growth of East Med and Red Sea markets
								- Ro-Ro and mixed Ro-pax services
Passenger ferry services	х		х	х				- Red Sea essentially
	X		X					- Important seasonal factor
Sea ports (added)	х	x	x	x				- Development expected from direct trade (gate ports)
	~							- See also Suez Development Plan

L: Large	M: Mature
F: Fast growing	G: Growth stage
P: High potential	PD: Pre development
	U: Unknown

### The supply side – Benchmark



- The purpose of this part of the study was to further identify what the international maritime academies and other educational institutions are offering in order to meet the future and changing needs for skills and capacities.
- This analysis was based on a review from open sources (web and literature) of major Universities, Academies and Institutes of some reference maritime Countries in the world.
- A few cases of specific "new skills" being acquired by students and trainees from the programs and courses delivered by these institutions have been presented.
- The most relevant conclusions of this exercise are the identification of new opportunities.



- The study questioned the possibility to adapt and extend the scope and fields of the Academy's maritime and marine education and training.
- All the 10 sea related entities of the Academy directly and indirectly concerned with such potential developments prepared their respective response to meet these prospects.
- The results of the survey are the Academy's response to the capability and feasibility of seizing opportunities to develop skills for more and new maritime and marine sectors/ activities.



The key conclusions of the consultation is that all concerned education, training and research entities consider that:

- they are in a position to respond to the growing and future skill needs of 19 of the 29 sectors / activities identified, and to deliver at their level the corresponding qualifications.
- different solutions should be explored for the other sectors / activities.



#### The AASTMT's 10 Maritime Entities









S: Maritime Safety Institute	Ŀ	Integrated Simulators Complex
T: Sea Training Institute	C:	College of Maritime Transport & Technology
P: Port Training Institute	R:	Maritime Research and Consultation Centre
L: College of International Transport and Logistics	U:	Regional Maritime Security Institute
F: College of Fisheries Technology and Aquaculture	0:	Oil & Gas Technology Program

#### The AASTMT's response



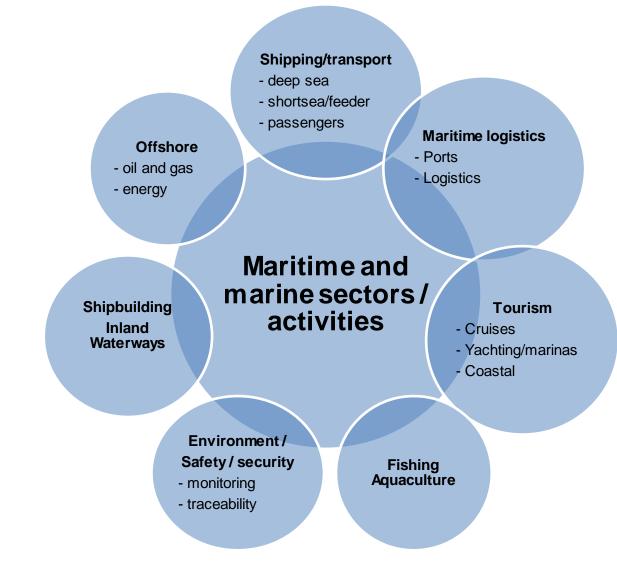
#### **Abstract / Examples**

#### Adaptation and Extension of Education and Training

Activities	S	I	т	С	Р	R	L	U	F	0	Adapt (Existing)	Extent (New)
Shipbuilding				X							C	C, I
Ship repair and maintenance												
Deep sea shipping	X	X	X	X			X	X			C, U	С
Short sea shipping	X	X		X				X			C, U	С
Passenger ferry services	X	X		X				X			C, U	С
Seaports	X	X		X	X		X	X			C, P, U	С, Р
Inland waterway transport	X	X				X	X				R	R
Fishing for human consumption and agriculture	x								x		F	F, U
Fishing for animal feeding	X											F

# Maritime and marine sectors / activities retained by the Academy







## The conclusions and suggestions proposed are addressing:

- The challenge of today (sea periods of cadets), which might be partly resolved politically and / or commercially.
- The growing, emerging and future skill needs of all the sectors and activities identified in the study, and for which the Academy is prepared to respond positively as described in the study

## Conclusions & Recommendations

### About the critical challenge of to-day

Increase/ improve access to on board training:

- School and Training Ships
- **Possible future alleviation of the international obligations?**
- Opportunities offered by the growing sectors / activities



## About the growing, emerging & future skill needs

- Meeting the demand identified
- Adapting and extending the Academy's Education and training activities
- International cooperation
- Information & communication





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