MARNIS — Maritime Navigation and Information Services

Training and Qualification

HA 5: Human Factors

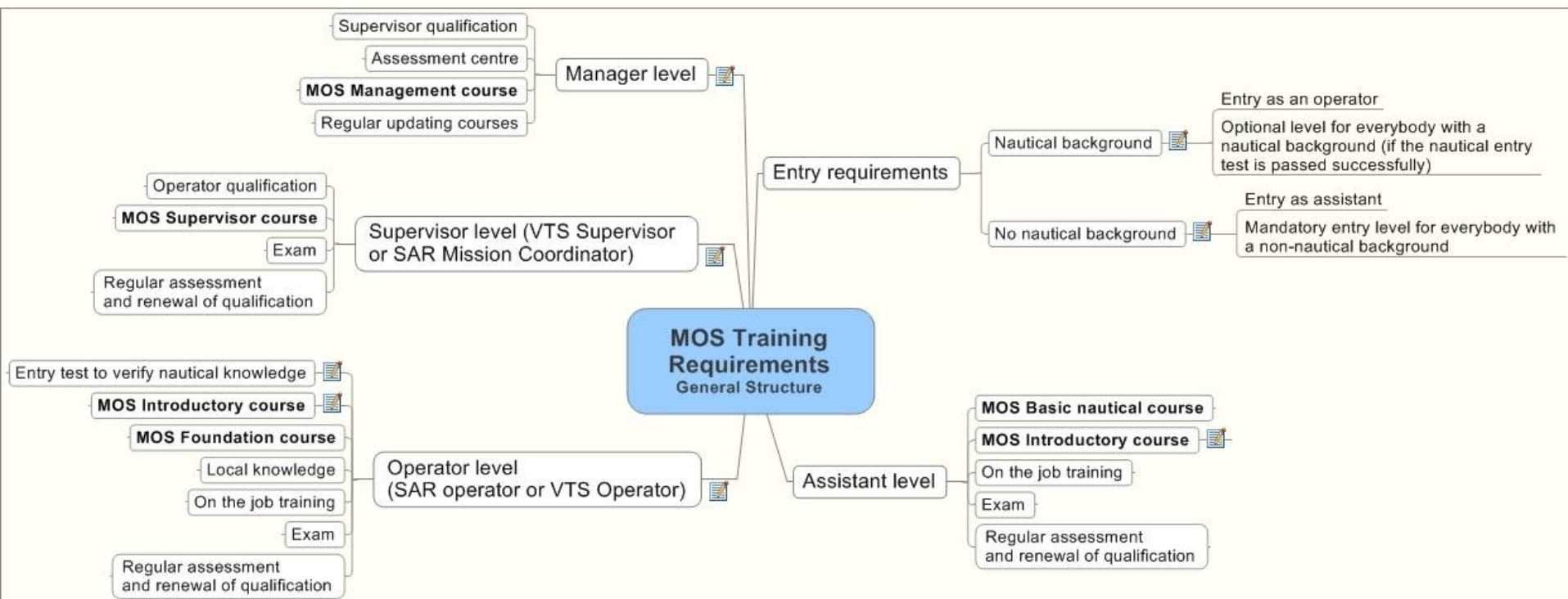Jens-Uwe Schröder, WMU (jus@wmu.se)

- Human Factors in HA 5
  - Model Courses
  - Job Profiles
  - Training Aspects

- Looking at the sources of training requirements
  - VTS
    - IALA V-103
  - SAR
    - IAMSAR Manual
    - IMO Model courses

- Main Differences
  - IALA has a combined functional and administrative structure, IAMSAR only functional
  - Details of training and certification, as well as job descriptions are more specific in IALA
  - IALA has a three level administrative structure, IAMSAR only has one functional course (SMC) for personnel in rescue centers

- MarNIS suggestions
  - No re-invention of the wheel
  - Look at existing VTS and SAR training guidelines
  - Combine them in a meaningful way

Maritime Navigation and Information Services

- ## MarNIS suggestions

- Training

Hierarchical level in MOS	IALA VTS Operator	IALA VTS Supervisor	IAMSAR SAR Mission Coordinator	IAMSAR SAR Administrator
Assistant	Partly	n.a.	Partly	Partly
Operator	Fully	n.a.	Partly	Partly
Supervisor	n.a.	Fully	Fully	Partly
Manager	n.a.	n.a.	n.a.	Fully

MarNIS suggestions (Example MOS Basic Nautical Course)

No.	Subject area	IALA Reference	IAMSAR Reference
1	**General knowledge**		
1.1	**General nautical knowledge**		
	…		
1.1.4	*Basic shipboard legal framework* International legal instruments Domestic law	IALA model course V-103/1 Module 2	IAMSAR Manual Vol. I – 3.2.11; IAMSAR Manual Vol. II – 1.8.15; IMO Model Course 3.14 – Parts B3, C3

MarNIS suggestions

Trainee	MOS Basic Nautical Course	MOS Introductory Course	MOS Foundation Course	MOS Supervisor Course	MOS Manager Course
*1. Countries that do **not** require a nautical/seafaring background*					
Assistant	Yes	Yes			
Operator	If needed	Yes	Yes		
Supervisor				Yes	
Manager					Yes
2. Countries that do require a nautical/seafaring background					
Operator	If needed	Yes	Yes		
Supervisor				Yes	
Manager					Yes

- Job profiles
  - General items (position, reporting to, qualifications)
  - Job purpose (general outline of the functions)
  - Key responsibilities (activities and tasks in VTS, SAR and OPRC related issues)
  - Other duties (if applicable)
  - Competencies required for effective job performance (behavioral, non-technical and technical competencies)

- How does the situation look like in EU member States

  - Surveyed 22 EU member States and Norway
  - Responses from 16 SAR and 13 VTS authorities
  - Supplemented the information with data from other studies and information provided in the world wide web

- How does the situation look like in EU member States
  - VTS
    - In principle following the IALA recommendations
      - Manager
      - VTS Supervisors
      - VTS Operators
    - Sometimes assistants (either during beginners training or if persons do not have a seafaring background)
    - General preference for a seafaring background
    - Regulated on the job training and a formal certification process

- How does the situation look like in EU member States
  - SAR
    - In principle following the IAMSAR recommendations
      - SAR Mission Coordinator (SMC) training
    - Often radio operators in addition to SMC
    - Maritime background considered as beneficial

- How does the situation look like in EU member States
  - Difficult to compare the 23 countries surveyed in general
    - Many similarities, but a number of significant differences
      - Training is usually in-house or coordinated in-house in order to cover different functions of VTS and SAR personnel
      - Shortage of seafaring personnel
      - Different administrative structure

- How does the situation look like in EU member States
  - Different structures in the EU regarding SAR and VTS responsibility
    - In the same authority – 10 countries
    - In the same ministry, but different authorities – 1 country
    - Different ministries, but non-military organizations – 4 countries
    - Different ministries, but a mix of non-military and military authorities – 8 countries

- How does the situation look like in EU member States
  - Different structures in the EU regarding SAR and VTS responsibility
    - SAR – military and semi-military authorities – 14 countries
    - VTS – military and semi-military authorities – 5 countries

- How does the situation look like in EU member States
  - Additional challenges - examples
    - VTS is sometimes administered by different bodies in the same countries (coastal, harbor)
    - Not all SAR resources are under the direct administration of the SAR services/authorities
    - ...

- Can this be implemented?
  - Features of the MOS concept are already implemented in a number of countries
    - France, Italy, Belgium have some kind of MOS already
    - Finland, Estonia, Russia have linked their VTS structure in the Gulf of Finland
    - In some administrations VTS personnel receives SAR training for informative reasons

- Can this be implemented?
  - It may require a lot of convincing, but there are benefits involved
    - IALA Guidelines and IAMSAR Manuals can be combined
    - Formal training and job profiles can raise the attractiveness of the profession
    - Joint harmonized training on a European level
  - Solutions may be different in different countries
    - Joint centers
    - Co-location
    - ...

THANK YOU FOR
YOUR ATTENTION