

**REPORT\***  
**OF THE 9<sup>TH</sup> SESSION OF**  
**IMO'S SUB-COMMITTEE**  
**ON HUMAN ELEMENT, TRAINING &**  
**WATCHKEEPING (HTW 9)**

**BY CAPT. C. L. DUBEY**  
**SPONSORED BY CMMI**

**\* IN HIS PERSONAL CAPACITY**

**THE 9<sup>TH</sup> SESSION OF IMO'S SUB-COMMITTEE  
ON HUMAN ELEMENT, TRAINING & WATCHKEEPING (HTW 9)  
HELD FROM 06.02.2023 TO 10.02.2023)  
ON  
COMPREHENSIVE REVISION OF STCW**



# THE MEETING WAS IN HYBRID MODE

## ❖ PHYSICALLY PRESENT AT IMO, LONDON:

1. DR. RAUT PANDURANG K – DY. DIRECTOR GENERAL OF SHIPPING (TRAINING, COASTAL & E-GOV.) – TEAM LEADER
2. CAPT. MANISH KUMAR – NAUTICAL SURVEYOR-CUM-DDG(TECH.), D. G. SHIPPING
3. MR. SENTHIL KUMAR – E & SS, D. G. SHIPPING
4. CAPT. C. L. DUBEY – CMMI SPONSORED
5. MR. RAJEEV NAYYER – IMEI SPONSORED
6. CAPT. K. N. DEBOO – MASSA SPONSORED

## ❖ ATTENDED ONLINE FROM INDIA :

1. CAPT. M. C. YADAV – FOSMA
2. CAPT. SHIV HALBE – MASSA
3. CAPT. PHILIP MATHEW – INSA
4. CAPT. VINOD NAVEEN – IMU

# INTRODUCTION

- **1<sup>st</sup> STCW came in 1978 for the first time (STCW 78)**
- **2<sup>nd</sup> STCW Amendments / Revision in 1995 (STCW 95)**
- **3<sup>rd</sup> STCW Amendments / Revision was in 2010 (MANILA Amendment) STCW 2010**
- **4<sup>th</sup> STCW Amendments / Revision expected in 2025 – 2026 for which meetings are being held in IMO Head Quarters London annually.**

**This HTW9 meeting was one such meeting for comprehensive revision of STCW.**

**Next meeting is scheduled at IMO London from 05.02.2024 to 09.02.2024.**

# ANNEX 1

## ARRANGEMENT FOR HTW 9 SUBCOMMITTEE MEETING

SR. NO.	GROUP	ITEM	NAME
1	PLENARY	-	1. DR. RAUT PANDURANG K. 2. CAPT. C. L. DUBEY, CMMI
2	WG 1 COMPREHENSIVE REVIEW OF THE 1995 STCW - F CONVENTION (ITEM 8)	8. Comprehensive review of the 1995 STCW - F convention	1. MR. J. SENTHIL KUMAR, E&SS (OR CAPT.K.N.DEBOO, MAASA) 2. CAPT. VINOD NAVEEN, IMU
3	WG 2 COMPREHENSIVE REVIEW OF THE 1978 STCW CONVENTION AND CODE (ITEM 7)	7. Comprehensive review of the 1978 STCW convention and Code.	1. CAPT. MANISH KUMAR, NS 2. MR. RAJEEV NAYYER, IMEI 3. CAPT. PHILIPS MATHEW, INSA
4	WG 3 IMPLEMENTATION OF THE STCW CONVENTION (ITEM 6 and 14)	6. Implementation of the STCW Convention 14. Any other Business	1. MR. J. SENTHIL KUMAR, E&SS 2. CAPT. S. M. HALBE, MASSA
5	DG DRAFTING GROUP ON MODEL COURSES	3. Validate model training courses	1. MR. K. N. DEBOO, MASSA 2. CAPT. MAHESHYADAV, FOSMA

## PROVISIONAL TIMETABLE FOR HTW 9

SR. NO.	DAY	AGENDA ITEMS	WG/DG
1	MONDAY, 6 FEBRUARY	<b>OPENING OF THE SESSION</b> <b>1 ADOPTION OF THE AGENDA</b> <b>2 DECISIONS OF OTHER IMO BODIES</b> <b>8 COMPREHENSIVE REVIEW OF THE 1995 STCW-F CONVENTION</b> <b>7 COMPREHENSIVE REVIEW OF THE 1978 STCW CONVENTION AND</b>	     <b>WG 1</b>    <b>WG 2</b>
2	TUESDAY, 7 FEBRUARY	<b>6 IMPLEMENTATION OF THE STCW CONVENTION</b> <b>14 ANY OTHER BUSINESS</b> <b>3 VALIDATED MODEL TRAINING COURSES</b>	<b>WG 3</b> <b>WG 3</b> <b>DG</b>

## PROVISIONAL TIMETABLE FOR HTW 9

SR. NO.	DAY	AGENDA ITEMS	WG/DG
3	WEDNESDAY, 8 FEBRUARY	<p>9 DEVELOPMENT OF MEASURES TO ENSURE QUALITY OF ONBOARD TRAINING AS PART OF THE MANDATORY SEAGOING SERVICE REQUIRED BY THE STCW CONVENTION</p> <p>10 DEVELOPMENT OF MEASURES TO FACILITATE MANDATORY SEAGOING SERVICE REQUIRED UNDER THE STCW CONVENTION</p> <p>11 DEVELOPMENT OF TRAINING PROVISIONS FOR SEAFARERS RELATED TO THE BWM CONVENTION</p> <p>4 ROLE OF THE HUMAN ELEMENT</p> <p>5 REPORTS ON UNLAWFUL PRACTICES ASSOCIATED WITH CERTIFICATES OF COMPETENCY</p>	
4	THURSDAY, 9 FEBRUARY	<i>NO PLENARY SESSION</i>	
5	FRIDAY, 10 FEBRUARY	<p>13 ELECTION OF CHAIR AND VICE-CHAIR FOR 2024 - REPORTS OF THE WORKING AND DRAFTING GROUPS</p> <p>12 BIENNIAL STATUS REPORT AND PROVISIONAL AGENDA FOR HTW 10</p> <p>15 REPORTS TO THE MARITIME SAFETY COMMITTEE</p>	

# **PROVISIONAL AGENDA OF IMO:**

## **OPENING OF THE SESSION**

- 1. ADOPTION OF THE AGENDA**
- 2. DECISIONS OF OTHER IMO BODIES**
- 3. VALIDATED MODEL TRAINING COURSES (6.2)**
- 4. ROLE OF THE HUMAN ELEMENT (6.1)**
- 5. REPORTS ON UNLAWFUL PRACTICES ASSOCIATED WITH CERTIFICATES OF COMPETENCY (6.3)**
- 6. IMPLEMENTATION OF THE STCW CONVENTION (1.32)**
- 7. COMPREHENSIVE REVIEW OF THE 1978 STCW CONVENTION AND CODE (6.17)**
- 8. COMPREHENSIVE REVIEW OF THE 1995 STCW-F CONVENTION (6.12)**
- 9. DEVELOPMENT OF MEASURES TO ENSURE QUALITY OF ONBOARD TRAINING AS PART OF THE MANDATORY SEAGOING SERVICE REQUIRED BY THE STCW CONVENTION (6.6)**
- 10. DEVELOPMENT OF MEASURES TO FACILITATE MANDATORY SEAGOING SERVICE REQUIRED UNDER THE STCW CONVENTION (6.5)**
- 11. DEVELOPMENT OF TRAINING PROVISIONS FOR SEAFARERS RELATED TO THE BWM CONVENTION (6.11)**
- 12. BIENNIAL STATUS REPORT AND PROVISIONAL AGENDA FOR HTW 10**
- 13. ELECTION OF CHAIR AND VICE-CHAIR FOR 2024**
- 14. ANY OTHER BUSINESS**
- 15. REPORT TO THE MARITIME SAFETY COMMITTEE**



**THE FOLLOWING MAJOR DECISIONS WERE TAKEN AT IMO LONDON DURING THE MEETING:**

**1. IMO MODEL TRAINING COURSES:**

**THE DRAFTING GROUP WAS HEADED BY CAPT. VINAYAK MOHLA (SPONSORED BY GlobalMET). THE GROUP FINALISED 10 IMO MODEL COURSES WHICH WERE APPROVED AND SENT FOR PRINTING. THESE FINALIZED IMO MODEL COURSES INCLUDED:**

- i. PASSENGER SAFETY, CARGO SAFETY & HULL INTEGRITY TRAINING: NEW IMO MODEL COURSE**
- ii. ENGINE ROOM RESOURCE MANAGEMENT : NEW IMO MODEL COURSE**
- iii. REVISED IMO MODEL COURSE 1.20: FIRE PREVENTION AND FIRE FIGHTING**
- iv. REVISED IMO MODEL COURSE 2.03 : ADVANCED FIRE FIGHTING TRAINING**
- v. REVISED IMO MODEL COURSE 1.23 : PROFICIENCY IN SURVIVAL CRAFT & RESCUE BOATS OTHER THAN FAST RESCUE BOAT**
- vi. REVISED IMO MODEL COURSE 1.24 : PROFICIENCY IN FAST RESCUE BOAT**
- vii. REVISED IMO MODEL COURSE 1.22 : BRIDGE RESOURCE MANAGEMENT (REPLACING THE EARLIER SHIP SIMULATOR & BRIDGE TEAM WORK COURSE)**

**THE FOLLOWING MAJOR DECISIONS WERE TAKEN AT IMO LONDON DURING THE MEETING:**

**1. IMO MODEL TRAINING COURSES:**

***THERE WAS DETAILED DISCUSSION ON IT FROM INDIAN DELEGATION. IT WAS ACCEPTED THAT 1.22 IN ITS NEW AVATAR IS AN OPERATIONAL LEVEL COURSE FOCUSING ON BRIDGE RESOURCE MANAGEMENT. THE SHIP HANDLING PRINCIPLES AND TRAINING WITH SIMULATOR EXERCISES MAY NEED TO BE INCLUDED IN A NEW MODEL COURSE FOR WHICH PROPOSALS MAY BE PUT UP BY MEMBER STATES IN THE NEXT HTW 10 MEETING. ALSO MODEL COURSE 7.01 MAY REQUIRE REVISION WHEREVER IT WAS BEING REFERENCED TO IMO MODEL COURSE 1.22.***

**viii. REVISED IMO MODEL COURSE 3.25: SECURITY AWARENESS TRAINING FOR ALL PORT FACILITY PERSONNEL**

**ix. REVISED IMO MODEL COURSE 3.27: SECURITY AWARENESS TRAINING FOR ALL SEAFARERS.**

**x. REVISED IMO MODEL COURSE 3.26: ON SECURITY TRAINING FOR SEAFARERS WITH DESIGNATED SECURITY DUTIES**

**IN THE NEXT 2 YEARS THE FOLLOWING IMO MODEL COURSES ARE PLANNED FOR REVIEW AND VALIDATION:**

- I. IMO MODEL COURSE 1.32: ***OPERATIONAL USE OF INTEGRATED BRIDGE SYSTEMS INCLUDING INTEGRATED NAVIGATIONAL SYSTEMS (2024)***
- II. IMO MODEL COURSE 1.35: ***LIQUEFIED PETROLEUM GAS (LPG) TANKER CARGO AND BALLAST HANDLING SIMULATOR (2024)***
- III. IMO MODEL COURSE 3.20: ***COMPANY SECURITY OFFICER (2025)***
- IV. IMO MODEL COURSE 3.21: ***PORT FACILITY SECURITY OFFICER (2025)***
- V. IMO MODEL COURSE 3.23: ***ACTIONS TO BE TAKEN TO PREVENT ACTS OF PIRACY AND ARMED ROBBERY (2025)***
- VI. IMO MODEL COURSE 1.25: ***GENERAL OPERATOR'S CERTIFICATE (GOC) (2025)***
- VII. MO MODEL COURSE 1.26: ***RESTRICTED OPERATOR'S CERTIFICATE (ROC) FOR THE GMDSS (2025)***

## COMPREHENSIVE REVIEW OF STCW – F (STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING ON FISHING VESSELS)

### HTW 9 WORKING GROUP – 1 TOOK TO THIS WORK:

DISCUSSED ABOUT STCW – F FOR FISHING VESSELS AND FINALISED THE COMPREHENSIVE REVIEW OF STCW -F CONVENTION BEING TERMED AS STCW – F CODE WHICH WILL BE SUBMITTED TO MSC 107 (JUNE 2023) FOR APPROVAL.

THE FOLLOWING POINTS WERE DISCUSSED AND AGREED:

- a. “FISHING VESSEL PERSONNEL” TO BE REPLACED BY “FISHER” – **NOT ACCEPTED.**
- b. QUALIFICATION OF REFRIGERATION ENGINEERS ON FISHING VESSELS – **NOT ACCEPTED**
- c. MEDICAL EXAMINATION OF FISHING VESSEL PERSONNEL – **TO BE DISCUSSED AND FINALISED.**
- d. USE OF GMDSS IN REVISED VERSION ON FISHING VESSEL - **AGREED**

## COMPREHENSIVE REVISION OF STCW 2010:

### **The working group 2: took up this matter.**

THE WORK IS STILL IN PROGRESS AND NOT FINALISED AS YET. THE FOLLOWING IMPORTANT DECISIONS ON COMPREHENSIVE REVISION OF STCW TOOK PLACE:

- i. TO CREATE A SAFE WORKING ENVIRONMENT FOR ALL SEAFARERS ONBOARD AND THE IMPORTANCE OF PSYCHOLOGICAL SAFETY WAS DISCUSSED.
- ii. THE TOPIC “BULLYING AND SEXUAL ASSAULT & SEXUAL HARASSMENT (SASH)” WAS WIDELY DEBATED AND IT WAS DECIDED TO INCLUDE IT IN PSSR COURSE OF ABOUT 1 DAY DURATION. FOR EXISTING SEAFARERS THERE HAS TO BE REFRESHER TRAINING FOR SASH. COMPETENCE TABLE IN A-VI/1-4 ADDED WITH COMPETENCIES AND KUPS FOR SASH.

INDIA COMMUNICATED THAT THERE IS ALREADY A COURSE INTRODUCED IN INDIA FOR ALL PRE-SEA & POST SEA COURSES TITLED AS “GENDER SENSITIZATION TRAINING FOR CANDIDATES UNDERGOING PRE-SEA AND POST SEA COMPETENCY COURSES”.

### iii. **THE WORKING GROUP 3:**

IMPLEMENTATION OF STCW CONVENTION WAS WIDELY DISCUSSED. THE GUIDING AIMS AND PRINCIPLES WHICH ARE TO BE FOLLOWED FOR THE COMPREHENSIVE REVIEW OF STCW CONVENTION WAS LEFT TO DISCUSSION & WORKED BY WORKING GROUP 3.

A CORRESPONDENCE GROUP WAS FORMED FOR VIRTUAL MEETINGS TO SUGGEST FUTURE ROAD MAP & REPORT TO HTW10 TO BE HELD FROM 05.02.2024 TO 09.02.2024.

# COMPREHENSIVE REVISION OF STCW 2010:

**THE WORKING GROUP 2: TOOK UP THIS MATTER.**

## **CHANGES SUGGESTED IN HTW 9:**

**1. OBSOLETE ITEMS TO BE REMOVED LIKE CELESTIAL NAVIGATION MORSE CODE, INTERNATIONAL CODE OF SIGNALS, DISTRESS SIGNALS, USE OF NARROW BAND DIRECT PRINTING IN GMDSS**

## **2. NEW ITEMS TO BE ADDED**

**(i) PSCRB : SIMULATOR USE**

**(ii) FPFF- HIGH EXPANSIVE FOAM IN MOCK UP.**

**(iii) PSCRB – ENCLOSED LIFE BOAT OF CAPACITY 8 PERSONS**

**(iv) CYBER SECURITY IN STSDSD , SSO etc COURSES**

**(v) DELETION OF NARROW BAND DIRECT PRINTING, FALSE DISTRESS ALERT CANCELLING PROCEDURE AND INCLUSION OF URGENCY IN GMDSS SYLLABUS.**



## **COMPREHENSIVE REVISION OF STCW 2010:**

**THE WORKING GROUP 2: TOOK UP THIS MATTER.**

**CHANGES SUGGESTED IN HTW 9:**

**(vi) TO ADDRESS KNOWLEDGE, UNDERSTANDING AND PROFICIENCY (KUPS) IN SEAFARERS' EDUCATION, TRAINING AND CERTIFICATION, TAKING INTO ACCOUNT NEW TECHNOLOGIES AND PERFORMANCE STANDARDS FOR INCORPORATION IN THE**

**CONVENTION SUCH AS:**

- i. INTEGRATED BRIDGE SYSTEMS;**
- ii. ENGINE TRAINING TO INCLUDE ELECTRONIC ENGINES, LOW FLASHPOINT FUEL ENGINES, DUAL FUEL ENGINES;**
- iii. ENERGY EFFICIENCY AND OPTIMIZATION, WASTE HEAT RECOVERY SYSTEM, SCRUBBER SYSTEMS;**
- iv. USE OF BIG DATA, PERFORMANCE MONITORING SYSTEMS, SCADA AND REMOTE-CONTROL SYSTEMS;**
- v. USE OF VIRTUAL REALITY AND AUGMENTED REALITY AND 3-D VISUALIZATION; AND**
- vi. CYBERSECURITY, ETC.**

**INDIA PUT UP A PAPER BROADLY COVERING THE NEW TECHNOLOGIES THAT NEED TO BE ADDED IN COMPREHENSIVE REVIEW OF STCW. THIS WAS ACCEPTED AND PASSED TO CORRESPONDENCE GROUP AND WORKING GROUP TO WORK OUT. PARTIES ALSO SUGGESTED TO ADD BWM TRAINING IN THE STCW COMPREHENSIVE REVIEW.**

# **SUMMERY OF UMBRELLA STCW REVISIONS – PAPER FROM INDIA AS PER HTW 9/7/7**

- **TO DELEBERATE & ADDRESS OBSOLETE COMPETENCIES OF STCW**
- **TO TAKE INTO ACCOUNT AND INCLUDE NEW TECHNOLOGIES IN STCW**
- **TO REVIEW CHAPTER III FOR MODIFICATION OF THE FUNCTIONS AND MAKE A SEPARATE FUNCTION ON QUALITY, HELTH, SAFETY AND ENVIRONMENT (QHSE)**
- **TO REVIEW AND OPTIMIZE SHIPBOARD TRAINING IN VIEW OF HIGH FIDELTY SIMULATORS GIVING MORE EMPHASIS ON SIMULATOR BASED TRAINING.**
- **MARITIME AUTONOMOUS SURFACE SHIP (MASS) FOR AUTONOMOUS LEVEL 1 TRAINING COULD BE INTEGRATED IN CHAPTER II AND III AND TRAINING REQUIREMENTS OF AUTONOMY LEVEL 2, 3 & 4 COULD BE PLACED IN SEPARATE CHAPTER.**



# DEGREES OF AUTONOMY OF MASS

## DEGREE ONE

SEAFARERS ARE ON BOARD TO OPERATE AND CONTROL SHIPBOARD SYSTEMS AND FUNCTIONS. SOME OPERATIONS MAY BE AUTOMATED AND AT TIMES BE UNSUPERVISED BUT WITH SEAFARERS ON BOARD READY TO TAKE CONTROL.

## DEGREE TWO

REMOTELY CONTROLLED SHIP WITH SEAFARERS ON BOARD: THE SHIP IS CONTROLLED AND OPERATED FROM ANOTHER LOCATION. SEAFARERS ARE AVAILABLE ONBOARD TO TAKE CONTROL AND TO OPERATE THE SHIPBOARD SYSTEMS AND FUNCTIONS.

## DEGREE THREE

REMOTELY CONTROLLED SHIP WITHOUT SEAFARERS ON BOARD: THE SHIP IS CONTROLLED AND OPERATED FROM ANOTHER LOCATION.

## DEGREE FOUR

FULLY AUTONOMOUS SHIP: THE OPERATING SYSTEM OF THE SHIP IS ABLE TO MAKE DECISIONS AND DETERMINE ACTIONS BY ITSELF.

## **ICS AND ITF PAPER ON COMPREHENSIVE REVIEW OF STCW 1978 (HTW 9/7/14)**

- **ONGOING WORK OF MARITIME JUST TRANSITION TASK FORCE**
- **ACTION PLAN ON “MAPPING A MARITIME JUST TRANSITION FOR SEAFARERS” DEVELOPED BY THE TASK FORCE AND INFORMED BY THE DNV.**
- **THERE WAS PRESENTATION MADE DURING LUNCH HOUR IN PLENARY**

# **ELECTRONIC CERTIFICATES & DEVELOPMENTS FOR SEAFARERS**

- ❖ **THE DISCUSSION ON ABOVE TOPIC ORIGINATES FROM HTW 8 WHERE DRAFT AMENDMENTS TO STCW CONVENTION AND CODE WAS FINALISED.**
- ❖ **AFTER DETAILED DISCUSSION IT WAS AGREED NOT TO MAKE ANY AMENDMENTS TO THE DRAFT PREPARED AT HTW 8**

## **DEVELOPMENT OF MEASURES TO FACILITATE MANDATORY SEAGOING SERVICE REQUIRED UNDER STCW CONVENTION**

**IT WAS WIDELY DISCUSSED IN THE PLENARY AND AGREED UPON AS FOLLOWS:**

**1. FULL MISSION BRIDGE & ENGINE ROOM SIMULATOR CAN BE USED ASHORE TO PROVIDE TRAINING MATCHING WITH SHIP BOARD OPERATIONS AND GIVING PARTIAL REMISSION IN SEA TIME.**

**2. PAPER PRESENTED BY INDIA**

## **PAPER SUBMITTED BY INDIA ON MANDATORY SEA GOING SERVICE HTW 9/10**

- **SO FAR, NO PROVISION OF MANDATORY SEA SERVICE PROVIDED IN STCW.**
- **SAFE MANNING DOCUMENT DOES NOT PROVIDE ANY PROVISION FOR MANDATORY SEA GOING SERVICE.**
- **PARTIAL EXEMPTION IN SEA GOING SERVICE WHEN TRAINEE IS TRAINED ON FULL MISSION SIMULATOR ASHORE.**

## PAPER SUBMITTED BY INDIA ON MANDATORY SEA GOING SERVICE HTW 9/10

- PROPOSAL :**

THE BELOW TABLE TRIES TO ILLUSTRATE THE IDEAL REQUIREMENT OF TRAINEES ON BOARD SHIPS FOR CONTINUED AND SUSTAINABLE OUTPUT OF OPERATIONAL LEVEL MANPOWER AT AN OFFICER IN CHARGE LEVEL CERTIFICATE OF COMPETENCY.

	<b>MANDATORY SEA SERVICE REQUIRED</b>	<b>NO. OF TRAINEES THAT SHOULD BE PLACED ON BOARD</b>	<b>NO. OF TRAINEES ON BOARD AT ANY GIVEN TIME</b>	<b>ANNUAL OUTPUT OF OFFICERS (II/1, III/1 AND III/6)</b>
<b>DECK OFFICERS (II/1)</b>	<b>12 MONTHS</b>	<b>2</b>	<b>3</b>	<b>2</b>
<b>ENGINEER OFFICERS (III/1)/ ELECTRO-TECHNICAL OFFICERS (III/6)</b>	<b>6 MONTHS</b>	<b>1 FOR FIRST 6 MONTHS AND ANOTHER 1 FOR NEXT 6 MONTHS (ENGINEER OFFICERS OR ELECTRO-TECHNICAL OFFICERS, AS APPROPRIATE)</b>		<b>2</b>

ANY COMBINATION OF THE ABOVE ILLUSTRATION CAN BE DEVELOPED AS LONG AS THE SAME RATIO OR PROPORTION IS MAINTAINED, CONSIDERING THAT THE NUMBER OF DECK OFFICERS AND THE ENGINEER OFFICERS REQUIRED TO MAN OR TO REPLENISH THE MANPOWER OF THE GLOBAL MARITIME FLEET IS ALMOST EQUAL.

## **OBSERVATIONS:**

- 1. THE PREPARATIONS FOR PUTTING UP PAPERS REGARDING COMPREHENSIVE REVISION IN STCW & MEETINGS IN THAT RESPECT TO BE STARTED ASAP.**
- 2. I SAW THAT THERE WAS LOBBYING TO GET SUPPORT IN FAVOUR OF CERTAIN PAPERS SUBMITTED BY COUNTRIES. SIMILAR PRACTICE IS TO BE OBSERVED BEFORE THE NEXT HTW 10 MEETING TO GARNER SUPPORT.**

## **ROAD AHEAD:**

**WIDE DISCUSSION IS TO BE HELD ON OUTDATED COMPETENCIES OF STCW WHICH ARE TO BE REMOVED AND IDENTIFY / SUGGEST NEW COMPETENCIES IN LINE WITH THE NEW TECHNOLOGIES AND REGULATORY DEVELOPMENTS.**







THANK YOU