



To promote, develop and support in the spirit of cooperation, the common interests of its members in all matters concerning the development and quality of maritime education and training.

NEWSLETTER

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TRAIN, TRAIN, RETRAIN, RETAIN!



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Editorial

If there is a similar emergency aboard a much larger passenger ship ...

In the last issue of this newsletter 'Allure of the Seas' alongside with many 'guests' walking ashore was featured on the last page. Another picture of this 'largest passenger ship', LOA 362 metres, beam 47 metres, height 72 metres, with a maximum 'guest' capacity of 6296, with a crew of 2384, a total of 8680, is on this page.

Three times a year I assist with the teaching of around 100 maritime experiential learning students from several Asian countries, on a four day cruise aboard a Star Cruises ship with only about a third of the total number of people that could be aboard 'Allure of the Seas', or on near sister 'Oasis of the Seas'. Eight years of being on board and interacting with these young recruits into the maritime industry aboard a ship at sea, teaching in 'the finest maritime classroom in the world' is a great privilege.

Prior to sailing, all passengers are assembled at boat stations to be told about the emergency signal, the location and use of life saving appliances and procedures. It is well done by well-trained crew in clear English. In the cabins there are instructions as to what to do in an emergency on the inside of the cabin door and also a safety video on the television. The ship is very well run and maintained and safety is emphasised. Much of the time she operates in heavy traffic.

The Safety Officer delivers a much appreciated half hour presentation to the students on his responsibilities, the on-board safety organisation, equipment and training, which concludes with a question and answer session. Frequently, he is questioned about how, given that with a variety of different, nationalities, cultures and mother tongues on

board, effective communication and control can be assured if a sudden emergency occurs.

Although the findings following a thorough investigation into the appalling capsizing of the ferry 'Sewol' with heavy loss of life are not yet available, this issue includes an article by an experienced serving Chief Engineer expressing deep concern about apparent lack of competence. What is already known reflects very badly on the design and operation of the vessel. Sewol had less than 500 passengers, presumably with a common language. Some 300 lives were lost.

While a large cruise ship is very different from a relatively small but also crowded ferry, in a sudden emergency effective control must be exercised over many more people confined in the hull and superstructure, largely unfamiliar to them, probably with a relatively large number 'panicking in their own language'. In other words, effective communication – and hence control – would be very difficult to maintain in a serious emergency.

Although in recent years maritime training has given more attention to 'soft' skills such as communication in 'Maritime English', leadership and teamwork, attitude and overall competence in all aspects of ship operations, the coverage continues to be inadequate.

Should there be a catastrophe with a large cruise ship crowded with people, it won't be just the cruise ship sector of the global shipping industry that will be shaken to the core.

Rod Short
Executive Secretary

GEIMS is Outstanding !



The Great Eastern Institute of Maritime Studies, ISO 9001:2008 and CIP grade A1

Maritime Education and Training in India is administrated by the Director General of Shipping, Govt. of India, in accordance with the M.S. (STCW) Rules, 1998, as amended, to ensure that such training is structured in accordance with the IMO's STCW Code, and conducted, monitored, evaluated and supported by qualified persons in accordance with said Code.

The training in the sector has to remain dynamic and keep pace with technological advances. Therefore, it is imperative to bring in reforms in the monitoring process of maritime training institutes on regular basis.

The Directorate General of Shipping has developed the **Comprehensive Inspection Program (CIP)**, integrating and upgrading the existing inspection processes, while introducing an effective grading mechanism for all approved pre-sea maritime training institutes. To achieve these objectives, necessary guidelines and assessment checklist, identifying the parameters against which every institute require to be graded by a team of experts from the seven DGS recognised IACS organisations on an annual basis has been formalized as per **DGS Order No. 25 of 2013** integrating all other existing inspection processes a maritime training institute was till recently required to undergo on regular basis. This order was promulgated by DGS on **1st. January 2014**.

Accordingly **the Great Eastern Institute of Maritime Studies (GEIMS), Lonavala**, underwent the CIP Audit/Inspection by a team of 4 Experts from Indian Register of Shipping on 16th. and 17th. April 2014. The Institute was duly inspected by the team as per the CIP checklist and Audit/Inspection was of high quality and robust ! **GEIMS has been assessed and Graded A 1 (Outstanding) with credit points of 96.2% overall by IRS.**

The Institute was graded 'outstanding (A 1)' not only in overall Grading, but in all the five parameters prescribed in the DGS CIP checklist for all the **three DGS approved pre-sea courses (GME, TNOC & ETO)** i.e.: in **Infrastructure maintenance, Faculty & Human Resource Development, Student Development Programmes (Academics & Personality), On - board Training Records and Overall Performance & Management stability.**

It is significant to note that, as on date, GEIMS is the only DGS Approved maritime training Institution in the country to have achieved this distinction of being Graded 'outstanding (A1)' as stated above in all parameters for all the three DGS Approved pre-sea courses being conducted.



The Great Eastern Institute of Maritime Studies, ISO 9001:2008 and CIP grade A1



Great ambience to study



ECDIS Simulator (TRANSAS)



Full Mission Bridge Simulator



Full Mission Engine Room Simulator



TECHSIM 5000 Advanced Engine Simulator (TRANSAS)



Boiler and I.G. Plant Simulator



Main Engine



Passing Out Cadets

The following comments from an experienced serving Chief Engineer are included as they express well the very deep concerns about lack of competence, although the facts associated with this appalling accident are not yet available.



South Korean Ferry Sinking

by C/E Mahendra Singh



The visibility in this area is practically zero and to keep only a young Third mate on watch on the Bridge, in such circumstances, is a crime.

Once we were coming down through the Sea of Japan and as we altered towards Mokpo port in South Korea, we found the visibility very poor as being described in this case. Our Captain reduced speed and put additional crew on look out and even asked me to be on Port side main deck to keep relaying him via walkie - talkie if the sound from fog horn of a vessel close by is increasing or reducing to judge the proximity of the vessel. He himself was on bridge and the time was around 1000 Hr. After one hour when the sun shown on the horizon and visibility improved, we saw the ship very close to us. A very efficient look out prevented a possible collision. In such situations, if the currents are also strong, there is possibility of ship running aground with great force if the additional mistake is made by not reducing speed, again very criminal and wholly inexcusable.

In this case the vessel appears to have drifted into the shallow and grounded with a thud.

Our negligence and excessive reliance on the navigational aids solely is evident which is magnified many times by leaving a new third officer alone in-charge on bridge in zero visibility. The Master of the vessel is clearly liable for maximum punishment.

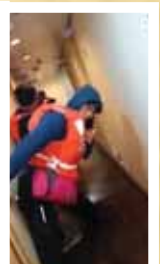
These days when I take classes, I give importance to cultivating some good habits which are vital for safe navigation, e.g. re-checking (cross checking) things. Use of our own senses of sight, smell, hearing and touch is the best instead of remaining enclosed on the bridge and remain totally unmindful of the surroundings.

STCW courses have, besides doing some good, have brought in a lot of indiscipline and casualness because the candidates are assured that they will get a certificate in any case. Have you seen any one failing in these modular courses? That says it all.

Some years back we were in open sea and things running Okay so I told my Oiler (Mr; Aspin, a Filipino) to take off after lunch. I thought that he will not be in Engine room so I went down at 1400 Hr to see things but found him mopping the area where they worked before lunch. He told me that he will go off now because he had to clean the tools and put them in place and mop the area before leaving. That is good habit.

These days "look out" is suffering, increasing our vulnerability.

You don't need additional lookout every day, it is for some time on certain days in certain adverse situations and if we even do not respond to such a call, we don't deserve to be called a competent officer, which inter-alia, means a mindful officer, a careful officer and an officer possessing good habits associated with seamanship.



MARPOL Annex VI - Ships Emission Inventory



By

Jai Acharya
MSc (Maritime studies); B.E. (Hons) EEE; FIE; CEng
Technical Director
STET Maritime Pte Ltd
Singapore

Emissions Inventory

An emissions inventory is an accounting of all significant sources of air emissions within a defined geographical area based on emissions estimates. For example, air emissions inventories exist for Australia, Hong Kong, Canada, and many others regions. An emissions inventory is one important tool in identifying air quality issues, goals, and management strategies for an area of interest. Regular updates to these emissions inventories are required to provide an indication of progress towards meeting emission targets.

The Growing Importance of Ships Emission Inventory

Burning of fossil fuels is often the most important emission source. Emissions from Ships are also increasingly important since the shipping/maritime activities are growing rapidly in Asia. Given the current rapid rate of economic development in East Asia/South East Asia and the degradation of air quality in the future likely to result from this, it becomes necessary to make use of all the scientific tools available for the management of the atmospheric environment. One of these tools is the air pollutant emission inventory. What quantities of air pollutants are emitted and where do they come from? The best way to answer these questions is to prepare an air pollutant emission inventory. Emission inventories are now regarded as indispensable tools for a wide range of environmental measures such as management of chemicals as well as the prevention of air pollution.

A Typical Breakdown of Emission Inventory in East Asia (Hong Kong Region) - 2011

Emission Sources	SOx	NOx	RSP	VOC	CO
Maritime	17,200	37,700	2310	3900	12,200
Aviation	304	4770	58	329	2340
Road Transport	207	32700	1180	7450	45,700

All Quantity above in Tons

Similarly a Typical Data on Bunker Fuel Oil Analysis is obtained for the vessels operating in this region and Type of Marine Diesel Engines (two stroke/four stroke) and the modelling creation on correlation between each.

An Emission Inventory can be utilized for the following Purposes:

Quantitative understanding of actual emissions

The quantitative emissions estimates provided by an inventory promote a better understanding of the actual emissions and help to raise the awareness of both policymakers and the general public. Through this process, the major emission sources can be identified, priorities for emission reduction defined and any data gaps requiring further work are revealed.

Use of Modelling Activities

Emission data allocated geographically and temporarily can be used for atmospheric transport and deposition models. The resulting air concentration and deposition estimates obtained by modelling, after verification with monitoring data on the ground and/or data from satellite observation, will be important information for air quality management decision making. Further useful information can be provided by estimates of the likely adverse impacts (to humans, animals, crops and natural ecosystems), which may be assessed from the modelled deposition and concentration of pollutants.

Use of Future Projections and Setting Targets

A current emission inventory can be used as the basis for estimating future emissions according to projected likely changes in socio-economic indices (e.g. population growth, economic growth, changes in energy use per unit activity), lower emission factors (e.g. by introduction of better control measures), fuel switching and so forth. Estimated future emissions provide important information for setting emission targets.

Use for the consideration of possible reduction measures

An emission inventory enables the likely effects of introducing various prevention and control measures within different source sectors to be assessed and compared, both now and in the future. Combined knowledge of cost of the different options, this also enables the most cost-effective emission reduction measures to be identified.

Use for planning of policy and measures and their follow-up

Emission inventory data can be regarded as an index to the various indices used for gauging changes in economic activity. The trend of such an index allows us to judge whether we should introduce or reinforce regulations, economic measures or technical measures to control air pollutants.

Regional Co-operation in Preparing Emission Inventories

Analyses based on emission inventories and atmospheric transport modelling is crucial when dealing with long-range transport of air pollutants. Such analyses would be made easier and more fruitful if the methodologies used were harmonized across all countries in a region. Cooperation in preparing inventories also could promote capacity building in the measurement of emissions, developing emission factors and on the use of inventories and models. The resulting increased capacity will contribute to the development of pollution control strategies in each country leading to a reduction in trans boundary air pollution.

Method for Developing Inventories

In general, anthropogenic emissions of air pollutants are estimated by the following basic formula for each source, when it is difficult to measure it directly.

$$\text{Emission} = \text{Emission Factor} \times \text{Activity Data.}$$

Examples:

- ◆ SOx emission per the amount of fuel burnt, calculated based on the sulphur content of fuel, the sulphur retained in the ash and the reduction achieved by emission control technology (fuel combustion)
- ◆ NOx emission per distance (exhaust gas emissions from ships)
- ◆ The amount of fuel burnt (fuel combustion)
- ◆ The distance of vehicle travelled (exhaust gas emissions from vehicles)
- ◆ The rates of the production of the commodity (industrial process without combustion)

Emission Factor

Emission factors are the average rate of emission of a pollutant per unit of activity data for a given sector. When there is no emission factor reflecting the actual local situation, default values in manuals are used. However, if the default factor is considered to be inappropriate, it is preferable to obtain an emission factor that reflects the real situation by direct measurement.

The rates of reduction and propagation of technical measures have to be reflected in the factor or the formula, because introduction of countermeasures reduces the emission.

Unlike diesel engines in trucks and land-based equipment, very few ocean-going vessel engines have been tested for the purposes of developing emissions factors. A recent ICF report for the US Environmental Protection Agency (EPA) described emissions factors for OGV (Ocean Going Vessels) as "the weakest link in deep sea vessel emission inventories". This is because "emission factors continue to be derived from limited data. Emission testing of OGVs is an expensive and difficult undertaking; and thus, emissions data are relatively rare. In most cases, the power generated is only estimated, leading to inaccuracies in the overall emission factors"

Activity Data

Activity data give a measure of the scale of activity causing the emissions. The necessary data basically can be collected from various reliable sources/statistics and surveys.

Inventory Manuals of various international agencies, Classification Societies (ABS, ClassNK, DNV and Lloyds' etc.), marine bunker fuel oil test laboratories and Government bodies would be the main sources of activity data.

Currently Available Emission Inventories Database in Asia and the World are through below mentioned agencies.

RAINS – GAINS This database is developed by International Institute for Applied Analysis (IIASA) to estimate emission of air pollutants including greenhouse gases.

EDGAR This database is developed by National Institute for Public Health and the Environment (RIVM) to estimate emission of air pollutants and greenhouse gases.

RAINS – GAINS This database is developed by International Institute for Applied System Analysis (IIASA) to estimate emission of air pollutants including greenhouse gases

GEIA As part of International Geosphere - Biosphere Programme (IGBP), GEIA has been developing inventories of global gas and aerosol emissions.

LTP is a joint research program among China, Japan, and Korea. Its purpose is the monitoring/modelling of Air Pollutants to improve of trans-boundary air pollutants in Northeast Asia.

ACESS is developed by Argonne National Laboratory to support the Aerosol Characterization Experiments and Transport and Chemical evolution over the Pacific Experiments.

REAS is developed by Frontier Research Centre for Global Change and National Institute for Environmental Studies to understand the role of trace constituents in the atmosphere.

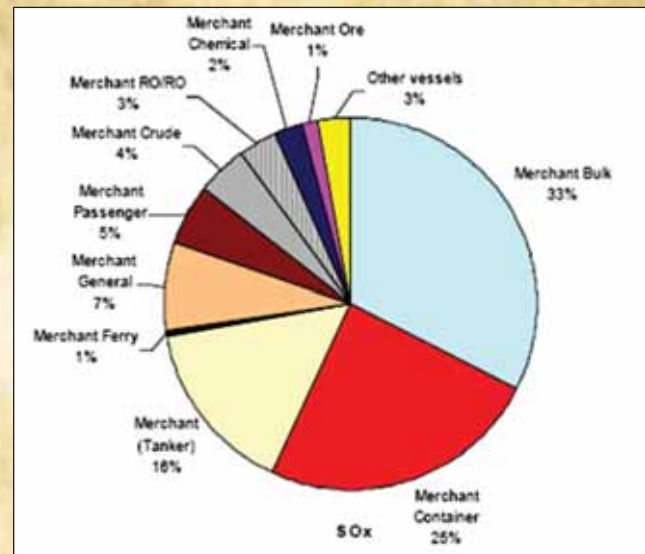
EA-Grid is developed by the Ministry of the Environment in Japan to understand trans boundary air pollutants in Northeast Asia.

Although some countries in East Asia/South East Asia have prepared inventories, the detailed information they contain is difficult to share in the region because

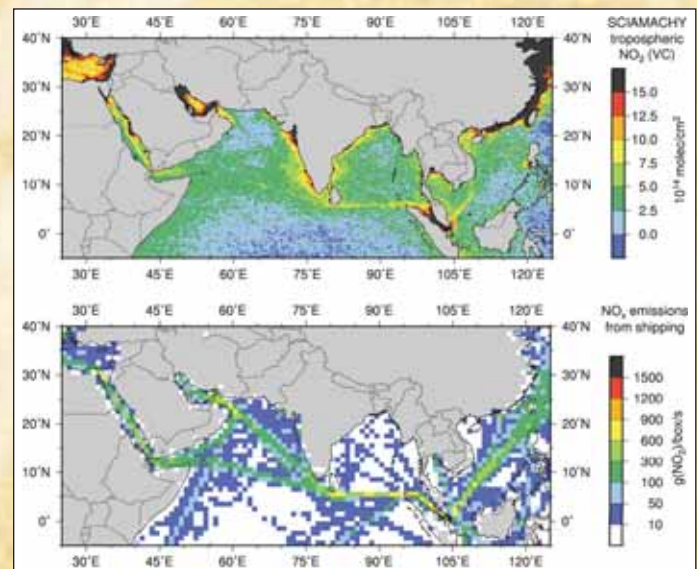
- ◆ They are prepared only for a domestic use,
- ◆ The tasks are divided among different departments such as domestic affairs, international cooperation, and human health-related departments and
- ◆ There is no reporting system for such inventories.

Substances Targeted by Inventories are SO_x, NO_x, VOC, PM10/PM2.5, CO, CO₂, CH₄ and N₂O

A Typical Marine Inventory Emission Study in Eastern Canada and Great Lakes (Source: Clear Sky Engineering)



[Following figure shows a comparison of satellite observations of the enhancement of the tropospheric NO₂ column with the ship traffic emissions data from the Endresen et al. (2003) - RETRO inventory. While this figure cannot provide further constraints on the absolute magnitude of these emissions, it nevertheless shows the very realistic description of the ship traffic locations in the Endresen et al., (2003) inventory. Both data sets show enhanced emissions in particular between India and Southeast Asia along a very narrow route.]



[NO_x signature of shipping in the Indian Ocean (a) Tropospheric NO₂ columns derived from SCIAMACHY data from August 2002 to April 2004 using the Differential Optical Absorption Spectroscopy (DOAS) technique and the reference sector method for the region of the Red Sea (5°N to 35°N and 30°E to 60°E). (b) Estimated distribution of ship traffic NO_x emissions from Endresen et al. (2003) in the same region.]



What Every Lecturer Should Know about Presenting at an International Conference

by
Iman Fiqrie Bin Muhammad
(LCDR, USN ret)

Lecturer, Malaysian Maritime Academy



Figure 1 - Gwangsan Bridge at night, Busan, South Korea.

Cheolstar (Author) CC BY SA 3.0, no changes made.

Last month I attended an education conference sponsored by the Royal Institute of Naval Architects (RINA) in Busan, South Korea; it was officially called, "Education & Professional development of Engineers in the Maritime Industry," from 15-16 April. The venue, Busan, is a beautiful city as figure 1 can attest to; this is a similar view I had from the 23rd floor of the Hanwha Resort. The intent of this article is to give those educators and professionals that may want to present at conferences in the future a look into the process and also share some of what I have learned—i.e., pass it forward!



Figure 2 - Presentation on Virtual Learning, Courtesy of RINA

This was the first international conference I've attended as a presenter and was a bit apprehensive of the whole process. The presentation was a collaboration with Dr. Wilredo Yutuc, Senior Lecturer, on the "Use of Virtual Learning Environments and Cloud Computing Systems in Maritime Education and Training [MET]: Issues and Challenges"; only one of us attended. Dr. Wilredo had done a number of international conferences previously and I had asked him some time ago if we could collaborate on a project so I could learn about the process; a few other lecturers had expressed similar interests to me.

Firstly, one should have in mind a subject they're passionate about and maybe have also written about previously; this will help you in the search on the internet for prestige international conferences and journals to possibly present and get published. The process literally begins with keyword searches like "Call for papers" (CFP) followed by a topic of interest. There will be lots of hits and one must wade through them keeping in mind the institution hosting and sponsoring the event as well as parameters like—where one wants to be published, e.g., conference papers, journal, etc. Several websites like Web of Science

or Knowledge can also help one with understanding the whole process of journal selection, "impact factors" and quality of scholarly journals (Q1, Q2, Q3, etc.) one wants to be published in. Along with the CFP will be a number of deadlines, e.g., initial call, 1st, 2nd and final submission deadlines, forms for registration, hotel and other information. At this point—"the wheels are well in motion" for your first conference! Now the focus should be on the quality of the paper and critical deadlines—as many conferences give at least 6-9 months or more, there should be little reason to miss deadlines!

Somewhere in the process includes trying to articulate a return on investment (ROI) strategy in terms that your senior management, the institution's board and investors can use to help make the decision as to funding the trip or not; at the end of the day, however, your professional development should take precedence over whether your institution funds your trip or not!

I'll forgo many details about the specifics of my presentation as this isn't the focus here, suffice it to say that the objective was to transform our virtual learning ideas into tangible and working outcomes—thus validating certain aspects of an andragogical approach to virtual learning on-line in MET.

So what did I learn and what can I pass on? (1) A number of my peers have a wide understanding of the objectives and process of the education and the teaching methodologies they choose to use! For example; the word pedagogy, unfortunately, interprets widely and some seem wanting for those; (2) there appears to be a lack of clarity between student, teaching and learning centric methodologies used for delivery of content; and in my opinion, apathy for the education discipline in general—i.e., the priority seems to be simplicity in all respects in lieu of eternal vigilance! Case in point, wanting the Learning Management System (LMS) utilizing the teaching methodology and course to be simple and easy to use to the extent that actually understanding its mechanics is not a priority even though the subject matter discipline using the methodology requires stringent, high and professional frameworks; e.g., calculus, thermal dynamics, metallurgy, etc. One could get the impression that the discipline in question rules the day and education methodologies and outcomes are secondary or even tertiary objectives; and (3) Seeing how other professionals view and see one's work and ideas is important as it gives one a reference, benchmark and perspective! The take a ways then were the need to both pursue a greater understanding of teaching methodologies and LMS.

As far as the mechanics of registration, hotels and such—don't assume your institution can easily pay for your trip even if they have approved the trip; e.g., international TT (telegraphic transactions) may not always work from country to country – as was the case from Malaysia to South Korea. Travel weight (baggage), visas and currency issues seem pretty much standard but should be looked into. I used the travel site Agoda.com and got really good information on a less expensive hotel right around the corner from the venue (Park Hyatt Busan) where the presentation was for more than half the discounted rate. The host of the event will detail venue information like hotel, formats for use with both the paper and presentation. For guys, I also recommend a decent suit (grey, blue or dark color), some good shoes, a nice hair-cut and a number of business cards. So there you have it!

In summary, it seems above all else—professionals want teaching methodologies and LMS' to be simple—really simple; for the user, i.e., student, that's probably an excellent idea—however, for teachers, I'm not too sure that's entirely reasonable or possible. When course work is done off-line by teachers, it sure isn't simple being a subject matter expert and translating that into teaching outcomes and material; personally, I prefer the term facilitator! Why should the process of teaching be any less challenging specifically for teachers using on-line methods as teaching in general isn't necessarily an easy profession if you're doing it right? A former director of training and education (DTE) at the Malaysian Maritime Academy once said, [paraphrasing] you have to love teaching and talking to be any good at it!



GlobalMET-TK Foundation Professional Development Workshop Programme Philippines April to November 2014

Report on First Phase Hosted by the Maritime Academy for Asia and the Pacific
Facilitators: Dr Christopher Haughton, United Kingdom & Capt Richard Teo, Australia

With close cooperation between the Asian Development Bank, which funded the Fisher Associate's 2013 Consultancy Report identifying activities to improve the quality of maritime education and training in the region, the TK Foundation which provided the funding and GlobalMET which initiated the development project and arranged the venue and facilitation, the five days from 28 April to 02 May saw conduct of the first phase of a significant learning programme to review and bridge perceived gaps between the STCW Code and current practice in the Philippines.

Sixteen participants from a wide range of Philippine maritime education and training organisations participated in this learning event initiating a tailor-made, six month programme in the wonderful setting of the Maritime Academy of Asia and the Pacific (MAAP) at Kamaya Point, Mariveles, Bataan. MAAP's hosting was outstanding and GlobalMET, the facilitators – **Dr Christopher Haughton FNI** of UK and **Capt Richard Teo FNI** of Australia – and the participants are indebted to **VADM Eduardo Ma R Santos AFP (Ret)**, **Prof Angelica M Baylon AFNI** and all MAAP staff involved for the highly efficient hosting and warm hospitality.

The participants included a female cadet, early-career instructors, experienced educators, administrators, legislators, superintendents, trainers, masters and chief engineers. **Dr Capt Prof Atty Alvin Tormon**, the recently appointed Executive Director of MARINA – STCW Office, graced the occasion and provided the participants inspiration and updates on MET developments as far as STCW implementations are concerned.

To the delight of all, a more eclectic mix of experience and expertise would be hard to find. With a packed agenda of student-centred learning activities, the week got off to a

cracking start. The group was divided into three working sets tasked with a wide range of tasks requiring considerable research and debate. The STCW Code was systematically and forensically unpacked and a multitude of perceived gaps identified between the competencies demanded by the maritime industry and the competencies stipulated in the Code. A significant conclusion was inescapable: any institution working strictly to the Code stands little chance of meeting industry's demands and expectations.

There was considerable and effective exploration of competency assessment, performance criteria, teaching and learning strategies, and the terminology associated with these issues. Delegates worked with unflagging enthusiasm and energy. Motivation levels were sky-high, with real eagerness to see this initiative succeed.

From about the halfway point in this highly stimulating five days, attention focused on the next substantial steps. The working sets formed a Project Team tasked with producing a written report over the next six months. The report will synthesize the initial research from this week and extend the scope to benchmark against three overseas administrations. They will continue to identify and analyse gaps in provision across all STCW functions and levels of responsibility, taking into account a range of significant stakeholders from across the industry. Action plans and recommendations will be meaningful and critical elements of the projects.



Opening Ceremony April 28, 2014



Seated L-R: MAAP External Relations Director/TKF workshop administrator for MAAP **Dr Angelica M Baylon, AFNI**; Director/TKF Workshop Facilitator **Capt Richard Teo, FNI**; **Dr Atty Capt Alvin Tormon, Exec Director of MARINA STCW Office (GOH and Speaker)**; MAAP President and GlobalMET Vice Chair **VADM Eduardo Ma R Santos, AFP (Ret)**; Education and Leadership Consultant/TKF Workshop Facilitator **Dr Christopher Haughton FNI**.

The intention is that this considerable research initiative will be presented to key decision-makers in the Philippine and the overseas maritime sector at a proposed special GlobalMET Seminar scheduled to be held in Manila on 25th November 2014, the day before the next in the series of annual conferences on Asia Pacific Manning and Training. The outcomes of the seminar will be reported during a conference plenary.

This significant step by GlobalMET has initiated a program of providing state-of-the-art teaching, learning and assessment for the maritime academy faculty in the Philippines, an initiative which given the necessary support, could be expanded into a major and significant program of development for maritime education, training and certification in the Philippines, as well as in other maritime labour supplying countries.



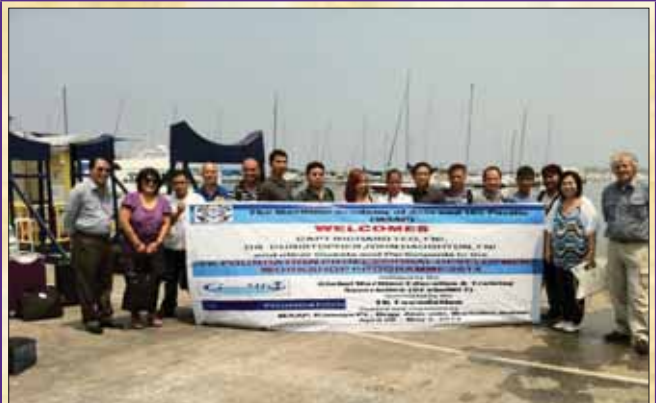
From L-R: **Dr Christopher Houghton**, **Capt Richard Teo**, **Dr Angelica Baylon**, **Atty Dr Capt Tormon**, **Capt Dionofe Tuñacao AFP (Ret)**, all thumbs-up with confidence and best wishes for the start of the 5-day highly productive workshop activities!



Facilitation by Chris and Richard begins - indeed very SERIOUS, yet FUN!



May 1, 2014: Three teams (*Utopia*, *Reformer* and *FunTaskTic*) rejoice after the Action Plan presentation for the next phase of the GlobalMET-TKF programme. The three teams fondly described the 5-day workshop as FAB (Funtabulous, Awakening and Beneficial)



Farewell photo of participants with facilitators at Manila Yacht Club - May 3, 2014

In addition to those already named in the caption to the closing ceremony photograph, this picture includes **Ms Zeny Magnial** of Harborscope (next to Capt Teo) and **Capt Lea Duma**, master of the MAAP ferry (in the centre).

Closing ceremony May 2, 2014



Seated L-R: MAAP External Relations Director/GlobalMET-TKF Workshop Administrator for MAAP **Dr Angelica M Baylon AFNI**; Director and Facilitator **Capt Richard Teo FNI**; MAAP President & GlobalMET Vice Chair **VADM Eduardo Ma R Santos AFP (Ret)**; Education and Leadership Consultant and Facilitator **Dr Christopher Houghton FNI**.
 Standing L-R: **Ms Katrina Marie Gravador** (MARINA); **OIC-EW Genesis Pasco** (MAAP); **Atty Ruben Maceda** (NMP); **C/E Jesus Mendoza** (MAAP); **Capt Danilo Valera** (NMP); **C/M Renante Garcia** (MAAP); **C/M James Hans N Romero** (NYK Maritime Academy); **C/E Alfred Haboc** (PhilCAMSAT); **C/E Aris Amado Dolot** (NYK E-Training); **M Joselito Palamo** (AJCE); **1CI Cyrrine Destreza** (MAAP); **Capt Nestor Rasco** (Mariners); **OIC-NW Ariel L. Cruz** (AIMS); **2/M Jonas Gavan** (IDESS).

New EU Support to Renewable Energy and Fighting Climate Change in the Pacific

European Commissioner for Development, Andris Piebalgs, and New Zealand Foreign Minister, Murray McCully, undertook a joint mission to the Pacific on 23 – 27 April to further strengthen development cooperation in that region. The visit focussed above all on renewable energy and energy efficiency projects, several of them co-financed by New Zealand and the EU in Samoa, Tuvalu, Kiribati (including Christmas Island) and the Cook Islands. Commissioner Piebalgs also travelled to Papua New Guinea from 28 – 30 April to discuss development challenges with members of the government and launched two projects worth almost €60 million.



The Pacific islands are victims of the adverse effects of climate change where rising sea levels have an impact upon every aspect of citizens' lives and hamper economic development. The difficulties they face are exacerbated by extremely high fossil fuel costs due to their isolated location and by the lack of access to electricity in outer islands.

Ahead of the trip, European Commissioner for Development, Andris Piebalgs, said: *"Renewable energy is something that I am strongly committed to. Energy is crucial for education and healthcare, for growth, tourism and even for the supply of water. In short, renewable energy is a country's main route towards growth and development."*

New Zealand Foreign Minister Murray McCully said: *"New Zealand places great value on our partnership with the EU in the Pacific. Converting the region to renewable energy is critical*

and it is only happening at such a rapid pace because of our close cooperation with EU."

Examples of Programmes Launched or Visited

- ◆ Solar panels to provide renewable electricity in three of Tuvalu's outer islands, which will make reliable clean electricity available for the first time. (€2.5 million)
- ◆ The construction of six photovoltaic power plants in the region, including the energy-dependant Cook Islands, co-financed with the Asian Development Bank.
- ◆ In Kiribati, a project will provide people with access to an environmentally-safe source of construction material, therefore protecting the vulnerable shores from perturbation caused by aggregate mining (€5.2 million).
- ◆ A Health Laboratory in Kiribati will be dedicated to monitoring and responding to environmental diseases, such as vector-borne diseases (vectors are small organisms such as mosquitoes, bugs and freshwater snails that can transmit disease from one person to another). (€500,000)

Development Cooperation with Papua New Guinea

The high level visit will also include Papua New Guinea. Despite its fast-growing economy and richness in natural resources and biodiversity, the country is still facing great challenges.



Around 80-85% of its population still depends on subsistence agriculture and lives in rural areas, and it is unlikely that any of the Millennium Development Goals will be achieved by 2015.

However, the change of government in 2012 came up with a number of laudable initiatives in health, education, infrastructure development and anti-corruption. During this visit, Commissioner Piebalgs will meet the country authorities and highlight that the EU stands ready to keep up the momentum initiated then.

Two new projects on human resources development (€26 million) and on rural economic development (over €32 million) will also be signed. The first one will focus on providing technical and vocational education to help the country's labour markets absorb a growing young population and provide them with a skilled workforce adapted to the national needs. The second project will aim to accelerate income generation through infrastructure-related activities such as rural road rehabilitation and maintenance, or by increasing access to financial services for agricultural value chain financing.

Energy Partnership

These projects are the first fruits of the EU-NZ Energy Partnership for the Pacific, an outcome of the Pacific Energy Summit, held in Auckland in March 2013. Its aim was to move Pacific nations closer to achieving 50% of their electricity from renewable means. Around €400 million were secured for Pacific energy projects.

Providing clean and efficient modern energy, is an important step on the Pacific's way to sustainable development. Currently, the Pacific region meets around 80% of its energy needs from imported fossil fuels. This considerably affects health, education and trade opportunities in the region. The Partnership helps to reduce the Pacific's dependence on fossil fuels, thus generating savings.

For the European Union, the Energy Partnership for the Pacific is a concrete proof of its commitment to the UN's Sustainable Energy for All (SE4ALL). Through this initiative, the EU has committed to help developing countries provide 500 million people with access to sustainable energy services by 2030. Commissioner Piebalgs is a member of the SE4ALL Advisory Board.

Background

The Pacific Island Countries and Territories have a total population of 10 million people, scattered across thousands of islands in the Pacific. These islands are very isolated developing countries which have already suffered from regular natural disasters, limited access to infrastructures and high dependence on natural resources. In the worst case scenario, some islands could disappear due to rising sea levels (in Kiribati and Tuvalu, a rise of sea level of merely 60cm will render the majority of these islands inhabitable) and increasing erosion occurring from intense storms. Moreover 80% of the Small Island States' population live in coastal areas which make them particularly prone to changes in the sea level or weather conditions.

For More Information

Website of the European Commissioner for Development, Andris Piebalgs:

http://ec.europa.eu/commission_2010-2014/piebalgs/index_en.htm

Website of EuropeAid Development and Cooperation DG:

http://ec.europa.eu/europeaid/index_en.htm

Article kindly provided by **Capt Boris Lucic**, Captain Superintendent, Marine Training Centre, Kiribati, who features in the photographs, together with NZ Minister **Murray McCully** and EU Commissioner **Andris Piebalgs**





Global Maritime Education & Training Association

GlobalMET Limited

Australian Company Number 103 233 754

www.globalmet.org

Chair:
New Zealand Maritime School
2 Commerce Street
Private Bag 92068
Auckland
New Zealand

Executive Secretary:
Rod Short
P O Box 307 Waikanae
Kapiti Coast 5250
New Zealand
rod.short3@gmail.com

Secretariat

P O Box 307 Waikanae
Kapiti Coast 5250 New Zealand
Tel 64 4 905 6198 Fax 64 4 905 6190
rod.short3@gmail.com

B1/1070 Spaze I-Tech Prak
Sector 49 Gurgaon 122002 India
Tel 91 124 45525 56/57
secretariat@globalmet.org