UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT
Human Resources Development Section - TrainForTrade
Knowledge Development Branch
Division on Technology and Logistics

Report of the Twelfth Meeting of the UNCTAD TrainForTrade Advisory Group
Ad Hoc Expert Meeting on
“Future Challenges for Port Managers”

Geneva, Palais des Nations, 11-12 November 2019
I. Introduction

The UNCTAD TrainForTrade Advisory Group on the Strengthening of Training Capacities and Human Resources Development was established in 2002, following a recommendation endorsed by the 38th session of UNCTAD’s Working Party on the Medium-Term Plan and the Programme Budget in 2001. Since its inception, the Advisory Group has held 12 meetings.

UNCTAD TrainForTrade Port Management Programme (PMP)

The UNCTAD TrainForTrade Port Management Programme supports port communities in developing countries in the quest for efficient and competitive port management. In order to increase trade flows and foster economic development, the programme creates port networks bringing together public, private and international entities. The aim is to share knowledge and expertise between port operators and strengthen talent management and human resources development in port communities.

The Port Management Programme targets port managers and the main features of the programme are the following:

- Worldwide Networks of Port Entities
- Public-Private-Partnership model
- Sustainable training & capacity building
- Talent management scheme
- Value-added solutions in port communities
- Systematic methodology combining blended learning and digital technology
- “Modern Port Management” course
- Port Performance measurements

The Modern Port Management course consists of 240 hours of instruction delivered over a two-year period. Participants must successfully complete eight modules and defend a final dissertation in order to obtain the UNCTAD Certificate in Modern Port Management. The course content is adapted to local contexts, and the final dissertation identifies challenges within the participants’ respective ports and proposes concrete management solutions.

Topics covered by the 8 modules

1. International trade and transport
2. Organisation of a port system
3. Functioning of a port system
4. **Future challenges to ports**
5. Methods and tools of port management
6. Economic and commercial management
7. Administrative and legal management
8. Technical management and human resources development
II. Agenda

The 12th Advisory Group Meeting was moderated by Mr. Mark Assaf with the support of Mr. Dominique Chantrel and Mr. Tomasz Kulaga. The meeting was attended by a special guest, H.E. Michael Gaffey, the Ambassador of Ireland in Geneva. Representatives from UNCTAD, Dublin Port Company, Port of Cork Company, Port of Valencia, and the Port of Nantes-Saint-Nazaire took part in the twelfth session and contributed through sharing their ideas and views and exchanging their knowledge on the existing structure of Module 4 of the Modern Port Management Course of the UNCTAD Port Management Programme. The working language of the meeting was English.

The Ambassador of Ireland H. E. Michael Gaffey opened the meeting and highlighted the importance of the UNCTAD TrainForTrade Port Management Programme and its significant impact. He stressed the need for constant adaptation to emerging trends and challenges linked to the more rapidly changing landscape. He pointed out the importance of straightening the links to the Sustainable Development Goals and other important topics such as climate change. Finally, he expressed his full support and belief in the programme and confirmed the continuous involvement and support of Irish Aid.

Ms. Geneviève Féraud, Head of UNCTAD’s Knowledge Development Branch, welcomed all the participants and thanked the experts for their involvement and support to make the UNCTAD TrainForTrade Port Management Programme a success story.

Mr. Mark Assaf, Chief of Human Resources Development Section/TrainForTrade outlined the plan of the meeting and introduced the background information regarding the UNCTAD Advisory Group Meeting. Mr. Assaf also elaborated on the feedback received over time by the beneficiaries regarding the need to deeply revise the contents of Module 4 on future challenges for port managers. The participants then introduced themselves and engaged in the discussions and brainstorm sessions.

For the detailed agenda, please refer to Annex I: Agenda.

For the detailed list of participants, please refer to Annex II: Contributing Participants.

III. Conduct of the meeting

In the main sessions of the meeting, participants brainstormed about the updated content of Module 4. The ideas were first captured and recorded as brief statements and rearranged into a new structure of the module. Next, the content was further explained to make sure the common understanding is reached. At the same time, the content was linked with the end-of-module objectives and tests. Additionally, references to background materials elaborating on updated content were added. These materials will be essential in the further drafting process.

Further recommendations from the experts

Apart from detailed comments and the new outline, some additional valuable comments can be summarized as follows:
Drafting process:
- Materials existing in other modules should be taken into consideration when drafting updated Module 4 to avoid unnecessary repetition, but it is also acceptable and sometimes favourable to mention and reference some topics covered in different modules. At the same time, it should be verified that there is no topic that existed in the previous version of Module 4 and that is accidentally omitted in the drafting process.
- It was proposed that this module could be reviewed periodically, for example every three years, to make it up to date as some topics covered are changing and evolving.

Updated Module 4 contents:
- Health safety should be properly addressed and linked to potential harm to the port reputation and costs related to possible accidents. It could also include some brief evaluation of health risks.
- Automation could be seen as an opportunity for moving towards gender balance.
- An example of an offshore wind farm was mentioned as an opportunity that some ports can be given and a question of identifying main challenges and opportunities related to it was raised.
- Diversification of business exists in some ports and some examples could be mentioned. However, this topic was considered as probably going beyond the intended scope.
- Linking port activities to Sustainable Development Goals might create some funding opportunities.
- In the coming years, project funding can increasingly depend on a positive environmental impact.
- Some information related to Port Meteorological Officers (PMOs) (services provided by PMOs, benefits to mariners, importance of climate change monitoring, etc.) could be included to encourage interactions among PMOs and port managers to for example facilitate access and deployment of instruments.

Other comments:
- Some topics might be more relevant to developed ports as for example digitization, automation or cybersecurity.
- In some cases, ports are facing economic challenges and it might be difficult to find a way to integrate economic growth with sustainability and environmental matters.

IV. Outcomes of the Meeting

As a result of the discussions, the title of the module will be changed to “Challenges of Sustainable Ports”. The module will start with an introduction linked to Sustainable Development Goals that are relevant to ports. The module itself will be divided into the following six sections, with estimated percent share indicated in the brackets:
1. Climate Change and Environment (35%)
2. Safety (25%)
3. Quality (10%)
4. Security (10%)
5. Corporate Social Integration (10%)
6. Emerging Trends / Future Proofing (two alternative proposals for the section title) (10%)
Participants also agreed to introduce one or two group exercises to help better engage trainees and to better deliver the module. The first group exercise is planned to be conducted at the beginning of the module and to be linked to the whole module contents.

The detailed structure of the updated module 4 including topics covered in each of the sections, relevant reference documents and further details can be found in Annex III: Outline of the Revised Module 4.

As for the next step, UNCTAD TrainForTrade will work on updating the materials and engage in the drafting process. The first revised version of Module 4 is expected to be available by the first quarter of 2020, which will be followed by interactive online exchanges with representatives from port communities in the UNCTAD TrainForTrade Port Management Programme Networks before the finalization and validation of the materials.

V. Closing of the Meeting

Mr. Mark Assaf thanked the participating experts for their important contributions to the update of Module 4. He explained that their comments and suggestions will be taken into consideration in the formulation of the new materials.
# ANNEX 1: AGENDA

## UNCTAD ADVISORY GROUP 12

**11-12 November 2019**  
**Ad Hoc Expert Meeting on**  
"Future Challenges for Port Managers"

Room S4  
Palais des Nations, Geneva, Switzerland

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### MONDAY 11 NOVEMBER 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>1100-1230</td>
<td>Opening address: Agenda, objectives, background documentation H. E. Ambassador Michael Gaffey, Permanent Mission of Ireland Ms. Geneviève Féraud, Head Knowledge Development Branch, Division on Technology and Logistics (KDB-DTL)/UNCTAD Round table presentation</td>
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<tr>
<td>1230-1400</td>
<td>Lunch - free</td>
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| 1400-1500| - Browsing through the existing structure of the M4: "Future Challenges of Port Managers". (1)  
- Feedback from users/beneficiaries of the Module 4 |
| 1500-1600| Presentations by some port experts of latest development in the subject that should be included in the revised training package: Blue ocean economy sustainable ports and SDGs, climate change effects on ports, cyber security, etc. |
| 1600-1615| Break                                                                      |
| 1615-1715| - Defining the target population (in the context of the Port Management Programme)  
- Brainstorming on the main tasks required by the target population to perform the functions or required knowledge. |
| 1930     | Working dinner. Restaurant “La Mère Royaume”                               |

### TUESDAY 12 NOVEMBER 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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| 0900-1030| - Describe what the trainees would be able to do as a result of the training  
- Define objectives in-line with the TrainForTrade methodology  
- Design tests for each objectives and measure for performance |
| 1030-1045| Break am                                                                   |
| 1045-1245| - Outline of the structure of the revised Module 4  
- Next steps for revision  
- Conclusion |
| 1245-1400| Lunch at the Delegates’ Restaurant (8th Floor)                             |
ANNEX 2: CONTRIBUTING PARTICIPANTS

Contributing participants (23):

- H. E. Ambassador Michael Gaffey, Permanent Mission of Ireland
- Mr. John Moore, Dublin Port Company, Ireland
- Mr. (Capt.) Paul O'Regan, Port of Cork Company, Ireland
- Mr. Peter O'Shaughnessy, Port of Cork Company, Ireland
- Mr. Trevor Anderson, Belfast Harbour, NI, UK
- Mr. Juan Manuel Díez Orejas, Autoridad Portuaria de Valencia, Spain
- Mr. Jose Garcia Pedrayes, Autoridad Portuaria de Gijón, Spain
- Ms. Morgane Sibué Chopin, The Port of Nantes – Saint Nazaire, France
- Ms. Boram Lee, WMO
- Ms. Geneviève Féraud, UNCTAD
- Mr. Mark Assaf, UNCTAD
- Mr. Gonzalo Ayala, UNCTAD
- Mr. Dominique Chantrel, UNCTAD
- Mr. Tomasz Kulaga, UNCTAD
- Mr. Alvaro Moreira, UNCTAD
- Ms. Erika Morishita Sarmiento, UNCTAD
- Ms. Debbie Francisco, UNCTAD
- Ms. Maria Luz Jaurenguiberry, UNCTAD
- Mr. Jan Hoffmann, UNCTAD
- Ms. Luisa Antonia Rodriguez Ortega, UNCTAD
- Ms. Regina Asariotis, UNCTAD
- Mr. Ciarán Callan, TrainForTrade Expert
- Ms. Janjarang Kijtikhun, TrainForTrade Expert
## ANNEX 3: OUTLINE OF THE REVISED MODULE 4

### OUTLINE OF SUB-MODULE 5c

### Challenges of Sustainable Ports

#### End-of-module objective & test

<table>
<thead>
<tr>
<th>Be able to:</th>
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<tbody>
<tr>
<td>- To identify and rank risks inside the port community</td>
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<tr>
<td>- To plan, do, check, act on quality management</td>
<td></td>
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<tr>
<td>- To identify the legal framework on a national and international basis</td>
<td>safety and security) and determine your obligations</td>
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<tr>
<td>- To identify potential risks related to security (physical and digital)</td>
<td>and describe appropriate mitigation measures</td>
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<tr>
<td>- To recognize the social implications of port activity</td>
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<tr>
<td>- To appreciate the diversity in a workforce</td>
<td></td>
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<tr>
<td>- To foresee future changes in workplace and labor force structure</td>
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<tr>
<td>- To identify and rank environmental aspects and impacts (three headings)</td>
<td>decarbonisation of trade</td>
</tr>
<tr>
<td>- To recognize the potential and implications of a circular economy and</td>
<td></td>
</tr>
<tr>
<td>decarbonisation of trade</td>
<td></td>
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<tr>
<td>- To evaluate Mitigation/adaptation/resilience</td>
<td></td>
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<tr>
<td>- To identify emerging trends that affect the port community</td>
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<tr>
<td>- To assess the potential for syncromodality</td>
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#### Test:

Identify quality components inside the ports.
How would you define a quality improvement cycle?
Which conventions and obligations (compliance) are relevant for improvement in security, safety, etc.?

### Tasks

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### Outline of content of module

<table>
<thead>
<tr>
<th>Subject matter</th>
<th>Job Aids&lt;sup&gt;2&lt;/sup&gt; / Exercises</th>
<th>Reference Documents&lt;sup&gt;3&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global exercise touching upon different topics:</td>
<td>Example of LNG being introduced to the port – look at different</td>
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</tbody>
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<sup>1</sup> Detail on how the test is to be conducted, source of case material, type of activity.

<sup>2</sup> Job aids are devices made available on the job and designed to facilitate correct performance of the task (e.g. numerical tables, checklists, guidelines, forms, etc.). In particular a job aid could be a flowcharts and/or decision tables which show the interrelations and sequence of steps, as well as directions on what to do in each possible situation. Such a job aid provides a more or less complete plan for how to achieve the task objectives.

<sup>3</sup> Document references, subject matter experts, electronic forums & databases.
### Introduction to SDGs relevant to ports

Role play / discussion on which SDGs are relevant

### Section 1: Climate Change and Environment (35%)

**MARPOL**
- Circular economy
- Air quality
- Assessment of the port environmental impact
- Adaptation of old infrastructures vs new ones
  - trade challenges
  - environmental challenges
- Green bank investment (climate finance fund by WB)
- Energy management

**Future diversification of port activity**
- carbon => green
- Assign/define/allocate services to ships to reduce CO2 emission
- Port preparation for new ships, LNG
- Energetic transition: fossil vs renewable
  - economic models of ports

**To realize the contribution of ports to green shipping**
- Port tariffs in the modern economy
- Climate change - dual challenges
  - mitigation
  - impacts, adaptation, resilience
  - mainstreaming
  - capacity building
- Sea levels rising
- Climate factors in port management
  - extremes in port management
  - adaptation/mitigation measures
- Connecting/interacting with port meteorological officers
  - meteorological/climate information services
  - observation and instrumentation
- To appreciate the need of a port city relationship perspective
- Towards carbon-free future / emission reduction

### Additional Resources

- [https://sidsport-climateadapt.unctad.org/](https://sidsport-climateadapt.unctad.org/)
- EMSA ship bunkering
- Environmental Ship Index
- Examples on big ports Amsterdam, Hamburg.
- ESPO website
- Global Maritime Energy Efficiency Partnerships
- Sea levels rise in ports – a wider focus on impact (Springer)
- Port Meteorological Officers: [http://sot.jcommops.org/vos/pmo.html](http://sot.jcommops.org/vos/pmo.html)
<table>
<thead>
<tr>
<th>Section 2: Safety (25%)</th>
<th>Group exercise</th>
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<tbody>
<tr>
<td>IMDG and other</td>
<td>European Foundation of Quality Management Safety at Sea and BIMCO – cybersecurity white paper</td>
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<tr>
<th>Section 3: Quality (10%)</th>
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<tbody>
<tr>
<td>Quality management</td>
<td>European Foundation of Quality Management Safety at Sea and BIMCO – cybersecurity white paper</td>
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<tr>
<td>ISO and other standards</td>
<td></td>
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<tr>
<th>Section 4: Security (10%)</th>
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<tr>
<td>ISPS</td>
<td>European Foundation of Quality Management Safety at Sea and BIMCO – cybersecurity white paper</td>
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<tr>
<td>ISO and other standards</td>
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<tr>
<td>Electronic security, cybersecurity</td>
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<td>Business continuity plan</td>
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<th>Section 5: Corporate Social Integration (10%)</th>
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<tr>
<td>To value the contribution of a gender perspective to the social value of ports</td>
<td>European Foundation of Quality Management Safety at Sea and BIMCO – cybersecurity white paper</td>
</tr>
<tr>
<td>To identify the main implication for ports concerning blue economy: fisheries, tourism, renewable energy</td>
<td>European Foundation of Quality Management Safety at Sea and BIMCO – cybersecurity white paper</td>
</tr>
<tr>
<td>Indicators performance assessment: correlating, integrating environment criteria and improved efficiency/economic performance criteria</td>
<td>European Foundation of Quality Management Safety at Sea and BIMCO – cybersecurity white paper</td>
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<tr>
<td>Know what corporate social responsibility policies are</td>
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<tr>
<td>Transparency, port reputation, social integration</td>
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<th>Section 6: Emerging Trends / Future Proofing (10%)</th>
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<tbody>
<tr>
<td>Local stakeholder engagement</td>
<td>European Foundation of Quality Management Safety at Sea and BIMCO – cybersecurity white paper</td>
</tr>
<tr>
<td>Automation of manual services: climate, productivity, cost, safety</td>
<td>European Foundation of Quality Management Safety at Sea and BIMCO – cybersecurity white paper</td>
</tr>
<tr>
<td>Ports contribution to syncromodality</td>
<td>European Foundation of Quality Management Safety at Sea and BIMCO – cybersecurity white paper</td>
</tr>
<tr>
<td>To adapt to the next technological revolutions</td>
<td>European Foundation of Quality Management Safety at Sea and BIMCO – cybersecurity white paper</td>
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<tr>
<td>Understand the implications of the challenge of digital transformation</td>
<td>European Foundation of Quality Management Safety at Sea and BIMCO – cybersecurity white paper</td>
</tr>
<tr>
<td>Network global connectivity via digitization, examples, global exchange of information and statistics, chain ports</td>
<td>European Foundation of Quality Management Safety at Sea and BIMCO – cybersecurity white paper</td>
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</table>

Spanish document on integrity being rewarded
IAPH and ESPO
AIVP
Blue economy dashboard EU (interactive database)
UN CC:Learn - Course on Gender and Environment

Malmo University about automation in transport in general: Transport 2040 Automation Technology Employment African Union Strategy for 2063