



Study on the Financial Sustainability of the World Maritime University

Foreword

Thirty-four years from its inception, the influence of World Maritime University (WMU or University) within today's maritime community is immense. The University performs as a truly world class institution with an international presence and a global outreach, at a level far exceeding its founders' vision, providing the opportunity for maritime professionals from all over the world to receive the very latest education in maritime affairs and to participate at the cutting edge of maritime research. Furthermore, WMU plays a vital role in pursuing the aims of the International Maritime Organization (IMO): capacity-building is the key to positive change in the maritime industry, be it matters of safety, security, sustainable development or efficiency of management. Put quite simply, WMU graduates are the maritime leaders of tomorrow.

Central to the attainment of these objectives and to the institutions' future growth is the financial platform underpinning the University's operational activities, which, since WMU's inception in 1981 and the commencement of its operation in 1983, had been a recurring issue of concern and for which no effective long-term solution had been identified. I therefore decided to maximize the scope of the study initiated by the IMO Council, in July 2013, on the financial sustainability of WMU, to include a comprehensive analysis of the wider context of the University's future role and longer-term priorities. Through the WMU Board of Governors, which the IMO Council tasked with this exercise, a Study Preparation Team was established to take forward the review through a wide-ranging consultation process with maritime stakeholders.

It was recognized from the outset that the evolving trends of the shipping industry, in tandem with the regulatory context of IMO and the new perspective of its technical cooperation programme, would be key drivers of the University's growth over the coming decades. The review therefore centred around the redefinition of the University's core mission as a global institution for educating and training future maritime leaders of developing countries; the diversification of WMU's activities, as a necessary mechanism towards ensuring financial sustainability; the establishment of a new system of collaboration between WMU and other universities across the regions; and the expansion of the University's core mission by incorporating into its curriculum the Sustainable Development Goals for the ocean and the post-2015 Development Agenda of the United Nations. At the conclusion of 18 months of thorough assessment and consultation, including the review of the draft Study by a Panel of High-Level Advisers, the major outcome of the study focussed around eight key strategies for financial sustainability, including:

1. education and fostering of the growth of maritime leaders in both developing and developed countries as a core mission of WMU;
2. strengthening the teaching of maritime policy;
3. expansion of the WMU scope to include ocean-related matters;
4. strengthening the University research function for maritime policy and ocean subjects;
5. exploring diversified activities for generating revenues;
6. review of the current arrangement with other universities and exploring new ways of collaboration, notably with the International Association of Maritime Universities;
7. exploring further collaboration with IMO, in particular in the field of Technical Cooperation; and
8. establishment of an Endowment Fund.

Approved by the WMU Board of Governors in May 2015 and subsequently by the IMO Council at its June 2015 session, the Study on the Financial Sustainability of the World Maritime University will provide a "road-map" for the University's future, nourishing its capacity and commitment to meet the oncoming challenges of promoting and sustaining the maritime community, both for ourselves and, most importantly for the generations to come. It is now incumbent upon the various stakeholders to ensure that the resources and capacities required to implement those eight strategies are made available.

I wish to express my thanks to those who have kindly given their time to participate in the Study Preparation Team and the Panel of High Level Advisers: they all lent their support and benefit of their experience to provide for our discussions in search of better ways to ensure the financial stability of the University. I am particularly grateful to the donors who have provided sustained support to the University over the years and provided positive contributions to the study and to those who encouraged us to consider a number of ways to enable sustainable financing, including the Endowment Fund, to maintain a core foundation for WMU's growth in the future.

This has been a milestone year for the University, having just moved into its state-of-the-art academic premises which were inaugurated in Malmö, Sweden, on 19 May 2015. The University is on the cusp of a challenging new phase of development and I wish its President, Faculty and staff, and all its students, every success in WMU's mission to be the world centre of excellence in postgraduate maritime and oceans education.



Koji Sekimizu
Chancellor, WMU
Secretary-General, IMO

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Background

1. The initial reason for preparing this Study was to provide a basis for discussions within the Council of the International Maritime Organization (IMO Council), in the context of determining whether the financial support provided by International Maritime Organization (IMO) during the 2014/2015 biennium should be extended to 2016 and 2017. However, from the outset of the process it became apparent that the interests of the World Maritime University (University or WMU) would be better served if the Study were to consider its financial sustainability within the context of its future role and longer-term priorities.
2. The issue of how the operation of the University should be financed goes as far back as the first discussions, in 1983, in relation to its establishment. The IMO Council and the IMO Assembly have discussed the matter on several occasions, without defining what constitutes the financial sustainability of the University and, as the crises which lead to the discussions abate, there have been no concrete or lasting outcomes. The only thing which has been clear during the last 30 years is that the IMO membership wants the University and that it is particularly satisfied with the work it does. However, its operation should not be funded by IMO either through allocation of part of its regular budget, which is financed by the annual membership contributions, or by the allocation of a part of the funds from the surplus of revenue which is generated, through the sale of its publications, the major part of which is allocated for technical cooperation purposes.
3. Exceptionally, the IMO Council concurred with the recommendation of the IMO Secretary-General which resulted to IMO's contribution, to the University's 2012 and 2013 operating budgets, of 5% of the not less than 80% of IMO's Trading Fund in-year surplus, which is allocated to IMO's Technical Cooperation Fund (IMO TC Fund). During 2014 and 2015, the same aggregate amount was contributed to a Special Reserve Fund set up by the University for the purpose of supporting the University in building up sufficient financial reserves. In addition, and as already indicated elsewhere, during recent years, IMO has also been funding up to six fellowships for studies at the University.
4. Thus, the operation of the University, since its establishment, is funded in its entirety by voluntary donations and contributions from a variety of public and private sector donors. Since its inception, Sweden has been the dedicated primary major donor to WMU: its commitment to the University, in tandem with the provision of the hosting facilities by the City of Malmö, on a free-of-charge basis, have been and continue to be the bedrock for the operation of the University. While Sweden provides the bulk of the overall funding of the University, the Nippon Foundation and the Ship & Ocean Foundation of Japan have, since the end of the 1980's, been the largest chair providers and fellowship donors. There is also a considerable number of other donors, the majority of whom have, since the end of the 1980's, been systematically either funding chairs and/or fellowships or making monetary donations. Recently, a number of developing countries have concluded memoranda of understanding with the University through which they have committed to send to the University a number of students each year, for a period of 3 to 5 years, at their own cost.
5. Sweden has since day one provided the main source of funding for the operation of the University, providing and maintaining the facilities of the University on a free-of-charge basis, and has now constructed new premises for the University which are to be made available on the same basis. In addition it has been providing and maintaining a residence for the students, which has been expanded by the construction of an additional building.
6. The contributing power of those sponsoring chairs, fellowships and scholarships has also been increasing as each year the sums contributed are adjusted on the basis of the anticipated operating expenditure of the University. On the contrary, the contributing power of those making fixed sums and annually recurring monetary contributions has been declining.
7. Thus, the University depends on the goodwill and charity on what is a narrow handful of contributors, considering the wider spectrum of the shipping industry and maritime community stakeholders that it benefits. Each year, and without implying any unwillingness of the historical donors, considerable effort is required before there is an acceptable degree of confidence that the funds needed for the following year will be forthcoming. As a result, the University is only able to make short-term plans and long-term and multi-year considerations are not an option. However, as a result of historical experience, the primary risk which needs to be addressed relates to the financing method of the operation of the University, which is very sensitive and with hardly any margins. In fact, the withholding or termination of the funding by a major donor, especially if this takes place at short notice, would have disastrous consequences.
8. Article 18 of the Charter of the World Maritime University (the Charter) states: "The Board of Governors shall consider the methods of financing the University with a view to ensuring the effectiveness and continuity of its operations and the autonomous character of the University within the framework of the Organization". Thus, the responsibility for ensuring the availability of adequate funds for the operation of the University each year is an obligation of the WMU Board of Governors.
9. The achievement of the technical cooperation and capacity-building objectives, which further the mission of IMO, are pursued through work carried out under the Integrated Technical Cooperation Programme (ITCP), which is managed by the IMO Secretariat, and through the work carried out by both the University and the International Maritime Law Institute, which has, like the University, been established by IMO for this purpose. Nowadays, the major part of the expenditure of the ITCP is funded by IMO by allocating a major part of the IMO Trading Fund to the IMO TC Fund and by funds raised by the IMO Secretariat by submitting related proposals to intergovernmental organizations who provide project-related funds for capacity building and development in connection with specific global or regional objectives. A minor, but nevertheless important, part of the ITCP is funded by voluntary additional contributions made by IMO Member States.
10. In this respect and as the purpose and objectives of the University are not determined by the University but are set out in its Charter, which has been adopted and may be amended by the IMO Assembly, IMO and its membership have a responsibility to foster the creation and continuity of the sustainability of the University and need to ensure that the Charter allows the University to pursue related activities which generate both a surplus of revenue and, at the same time, contribute towards the academic growth of the University as a provider of higher education.

Section 1

Genesis and framework of the study

- 1.1 The provision of adequate and sustained financial resources to meet the long-term operational and development needs of WMU has, since the University's inception in 1983, been a key issue for IMO and its governing bodies. A number of resolutions¹ were adopted by the IMO Assembly in this respect, from as early as November 1983.
- 1.2 Direct IMO financial support to WMU was agreed through the IMO Council, at its 106th session in July 2011, pursuant to resolution A.1031(26) which requested the IMO Secretary General to work out ways and means to ensure the financial sustainability of the University. The mechanism agreed was to support WMU as an interim measure by ring fencing 5% of the "not less than 75%" of the IMO Trading Fund in-year surplus which was allocated to the IMO TC Fund under resolution A.1014(26).
- 1.3 The WMU Board of Governors, at its thirty-first session, in May 2013, noted that, despite improvement, the financial situation of WMU remained uncertain and emphasized the importance of the establishment of an Endowment Fund as quickly as feasible. The WMU Board of Governors also noted that many other universities had built up substantial endowment funds over the years, and that this was also important for WMU. At its 108th session, the IMO Council endorsed the proposal to establish an Endowment Fund and supported the proposed governance and management structures of the Fund, with the establishment of a Board of Trustees.
- 1.4 The IMO Council, at its 110th session in July 2013, approved the continuation of financial support to WMU and, in this respect, endorsed the IMO Secretary-General's proposal to continue IMO's financial support to WMU during the 2014-2015 biennium through the mechanism of a ring-fenced allocation from the IMO Trading Fund in-year surplus to the IMO TC Fund. It was agreed that the IMO funds would be used expressly to build up a financial reserve balance under a Special Reserve Fund to be established by the University for this purpose². The IMO Council also requested the WMU Board of Governors to prepare a study on the financial sustainability of the University and to report to the IMO Council in this regard at its first session in 2015³; with a view to deciding whether the new mechanism of financial support should be extended to 2016 and 2017⁴.
- 1.5 Thus, the initial reason for preparing this Study was to provide a basis for discussions, at the IMO Council's 114th session in July 2015, in the context of determining the extension of IMO's financial support to WMU. However, from the outset of the process it became apparent that the interests of the University would be better served if the Study were to consider its financial sustainability within the context of its future, longer-term priorities, by identifying the University's future directions and taking into consideration the programme and activities it might reasonably require in order to meet expectations in the years to come.
- 1.6 In June 2013, the WMU Board of Governors was requested by the IMO Council to prepare the Study. However, since the next session of the WMU Board of Governors, during which the Board could consider the request and start the work, was not to be held until May 2014, the IMO Secretary-General, as Chancellor and Chairman of the WMU Board of Governors, in an effort to make maximum use of the available time and aid the Board in its work, initiated the preparatory work and set up a Study Preparation Team (the Team) which was tasked with evaluating the four key issues (list of Team members is set out in appendix 1):
 1. redefine the University's core mission as the centre for educating and training future maritime leaders of developing countries;
 2. review and facilitate the diversification of WMU's activities, as a necessary mechanism towards ensuring financial sustainability;
 3. explore and establish a new system of linkage and collaboration between WMU and national maritime universities across the regions; and
 4. expand and strengthen the University's core mission by incorporating into its curriculum the Sustainable Development Goals (SDGs) for the ocean and the post-2015 United Nations Development Agenda, thus enabling WMU to educate the maritime leaders of future with an appropriate knowledge basis of ocean affairs.

¹ Resolutions A.549(13) on Report on the establishment of the World Maritime University, A.559(14) on The World Maritime University, A933(22) on Sustainable support for the World Maritime University and A.1031(26) on Sustainable financial support for the World Maritime University.

² Refer to paragraph 15(a).4 of document C 110/D.

³ Refer to paragraph 15(a).7 of document C 110/D.

⁴ Refer to paragraph 15(a).6 of document C 110/D.

- 1.7 In addition, the IMO Secretary-General established a Panel of High-level Advisers which was asked to provide governance-related inputs from the wider perspective of government, industry and maritime training institutions and to offer their views on the work in progress (list of High-level Advisers is set out in appendix 2).
- 1.8 The Team held two initial meetings on 5 December 2013 and 6 May 2014. The WMU Board of Governors, during its May 2014 session, was briefed on the actions taken by the IMO Secretary-General and decided to open work for participation by the members of the WMU Board of Governors and the WMU Executive Board. The Team met again, in its expanded format, on 20 June 2014 and 12 September 2014. The exchange of views revealed a consensus that the vision for the future activities of WMU, its diversification in its core business and its aim to be a world centre of excellence in maritime education and research would rest on the following major issues:
1. increased participation of WMU alumni as fundraising ambassadors and as participants in WMU short upgrading courses for M.Sc. graduates;
 2. focus on developing countries as a main target while also providing an opportunity for students of developed countries;
 3. accreditation by government and regional entities responsible for the recognition of academic and training institutions;
 4. establishment of a level playing field within the maritime sector, whereby developing regions can accede, on an equal footing, to the socio economic benefits of shipping and port activities;
 5. enhancement of the University's association and correlation with IMO's TC activities;
 6. strengthening of WMU's syllabus on maritime and ocean policy;
 7. review of linkage with maritime universities and with the International Association of Maritime Universities (IAMU);
 8. closer cooperation with ocean-related United Nations (UN) system bodies with a view to strengthen the ocean basis of the University, in order also to expand the support basis of the University among wider maritime and ocean community;
 9. widening the WMU's approach to ocean policy in correlation with the SDGs for the ocean and the post-2015 UN Development Agenda;
 10. definition of financial sustainability; and
 11. creation of the legal and financial mechanisms to set up an Endowment Fund together with the establishment of a working group to approach potential donors to the fund.
- 1.9 The WMU Board of Governors, at its May 2015 session, considered a draft of the Study, which had been prepared in the meantime and incorporated the comments and suggestions of the High-level Advisers as well as those of its members who had contributed to the preparatory work and adopted the present text as the Study on the financial sustainability of the University, for submission to C 114, as per the IMO Council's request at C 110.
- 1.10 Taking into account the discussions, the emerging developments within the UN system and, in particular, the ocean and environment-related discussions on the SDGs, the WMU Board of Governors approved eight strategies as a high-level vision and a core driver for the sustainable operation of the University in the coming decades.

Section 2

Review of historical developments

2.1 IMO Technical Cooperation mandate

2.1.1 The mission for IMO's technical cooperation programme is "Capacity-building for safe, secure and efficient shipping on clean oceans through the Integrated Technical Cooperation Programme". In light of the relatively modest resources available to its ITCP, the driver for the programme is the implementation of training events, seminars and workshops, to enable the sharing of knowledge and technology to developing countries.

2.1.2 IMO's technical cooperation programme, which began in the 1960s, was reformed during the early 1990s in order to adjust to the new UN approach to technical assistance, with requests identified nationally, "from the bottom up", and thereafter channelled through the framework of UNDP⁵ Country Programmes. The reform provided a policy framework for the preparation, design and implementation of the ITCP, conforming to the following key principles:

1. ownership of the programme development and implementation process rests with the recipient countries themselves;
2. IMO's regulatory priorities are systematically integrated into the programme-building process;
3. the ITCP promotes the development of human and institutional resources in the maritime sector, on a sustainable basis, including the advancement of women;
4. the ITCP promotes regional collaboration and technical cooperation among developing countries;
5. IMO builds partnerships with governments, industry and international development aid agencies to ensure appropriate funding for the ITCP;
6. IMO also seeks to mobilize regional expertise and resources for its technical assistance activities;
7. the ITCP is coordinated with other development aid programmes in the maritime field in order to maximize the benefits of combined efforts and resources; and
8. IMO ensures, through monitoring systems and impact assessment exercises, that programme targets are met and that lessons learned are transferred back to the programme-building process.

2.2 WMU objectives at its launch in 1983

2.2.1 The WMU objectives, as stated under article 2 of the initial Charter of the World Maritime University which was proclaimed on 15 June 1983, the University was established for the purpose of providing high-level training facilities and opportunities for technical and other personnel responsible for the marine programme of developing countries. Subsequent revisions to the University's governance were codified in article 2 of the current Charter of the World Maritime University, which was adopted by IMO Assembly resolution A.1030(26) and entered into force on 1 January 2010.

2.3.2 The current approach, in relation to the activities which are pursued, is also a mixture of responding to the thematic priorities identified by its various committees and an effort to respond to the ad hoc requests it receives from its membership, from non-Member States who are parties or contemplate becoming party to the various international treaties adopted within the framework of IMO, or from States which contemplate becoming Member States. The current efforts to change the approach and delivery from one which is driven by the IMO Secretariat to one driven by the needs and wishes of those who need and request assistance, are at an initial stage and it will take a number of years before this becomes a reality. The elements and data requirements of the related Country Maritime Profiles (CMPs) are still being refined and evolved in the light of the experience gained from those who have opted to submit them and/or to keep them updated. Eventually, the CMPs will become a reliable source of useful information which IMO will need to consider making available to the University as an aid in its planning work.

⁵ United Nations Development Programme.

- 2.3.3 A review of the outcomes, thus far, of the Voluntary IMO Member State Audit Scheme clearly leads to the conclusion that IMO will need to focus and allocate the major part of its ITCP so as to be able to rapidly respond and assist States to deal and close, within a reasonable time, the non-conformities which will be identified during the audits they have to undergo, as of 1 January 2016, when being audited will become a treaty obligation under the provisions of the conventions and protocols which have been adopted within the framework of IMO and which deal with the design, construction, operation and maintenance of ships.
- 2.3.4 It is reasonably foreseeable, therefore, that if States are seriously committed to demonstrating to the rest of their peers, the shipping industry and the seafaring community that they do, in fact, give full and complete effect to the provisions of the international treaties that they have adopted, they will have no other option than to increase the professional personnel of their maritime administrations and to ensure that those they employ are educated or that their education and qualifications are upgraded and/or updated so as to meet the standards of the education offered by the University, which will eventually be, as matters are progressing and through the passage of time, acknowledged and become the norm. Thus, the demand for the education offered by the University will increase as IMO has set up the University for this purpose and only provides, under its ITCP, short-term advisory services and short term training on emerging and/or specific subjects.
- 2.3.5 Evidence is increasingly transpiring - as a result of the processes and requirements which States are imposing in the context of the acceptance and recognition of the certificates of competency issued by developing countries - which suggest that considerable work needs to be done for reaching a satisfactory and acceptable implementation of the 2010 Manila amendments to the 1978 STCW Convention and the STCW Code. In this respect, and for the purpose of assisting States, IMO only offers short-term advisory services and a limited number of related training courses. IMO, by establishing the University, has assigned the comprehensive education of administrators, examiners and teaching personnel to the University. The 1978 STCW Convention, as amended, does not stipulate, as part of the quality system requirements, that the administrators, examiners and teaching personnel involved should hold a related degree awarded by the University. However, as the STCW Parties and the institutions they regulate became aware of the achievements and the confidence which is inspired by those who employ or utilize professional personnel who have studied at the University, they will be expecting and requiring the University to increase the number of persons to whom it provides related education.
- 2.3.6 IMO's technical cooperation activities have contributed to at least five of the Millennium Development Goals (MDGs), towards helping to eradicate extreme poverty and hunger; promoting gender equality and empower women; combatting HIV/AIDS, malaria and other diseases; ensuring environmental sustainability; and developing a global partnership for development. The emerging challenge for IMO, having made a positive contribution to the achievement of the MDGs, is how to adapt its technical cooperation programme so as to contribute equally to the post-2015 UN Development Agenda and the new Sustainable Development Goals (SDGs), which have ocean and environmental-related dimensions that fall within IMO's mandate. In addition, since the achievement of the SDGs will require an integrated and inter-agency approach, IMO will need to consider and evolve its response for the wider perspective of communities and special interests groups, building on the Organization's previous achievements, including the integration and enhancement of the involvement of women in the maritime transport sector.
- 2.3.7 On IMO's work agenda, there has been a continuing and growing emphasis placed on marine environmental protection. Matters such as improved ships' ballast water management methods to tackle invasive species, the prevention of air pollution from ships, greenhouse gas emissions and the recycling of ships are being addressed.
- 2.3.8 Since "9/11", maritime security has become an integral part of IMO's responsibility. In February 2002, IMO launched a global technical cooperation programme on maritime security, 11 months before the adoption of special measures to enhance maritime security designed to counter acts of terrorism and enable ships and port facilities to cooperate to detect and deter acts that threaten security in the maritime transport sector. Moreover, the alarming escalation of acts of piracy in waters off the coast of Somalia and in the Gulf of Aden has, since the latter half of 2008, put the public spotlight on the plight of seafarers.

2.4 Changes and developments in the shipping industry

- 2.4.1 A number of factors are currently reshaping international maritime transport and trade. By altering costs, prices, logistics structures, supply chains and comparative advantages, these factors are also defining countries' trade competitiveness and level of integration into the global transport and trading networks. Two overarching trends are arising as particularly important, especially for developing countries. First, developing countries have, over recent years, been increasingly fuelling global economic growth, merchandise trade and demand for maritime transport services. Second, increased specialization in the supply of maritime transport services has gathered traction as developing countries continue to gain greater market share in maritime business.
- 2.4.2 Reflecting these trends and growing demand and supply as well as the expansion of trade in manufactured goods, parts and components, liner shipping connectivity is characterized by increasing container ship sizes and a reduction in the number of carriers per country. While this pattern could benefit shippers and translate into lower freight costs, it could also squeeze out smaller players and result in an oligopolistic market structure which may drive up costs. Another potentially game-changing trend relates to rising sustainability imperatives and climate change concerns moving to the centre stage of global concerns.
- 2.4.3 Over the years, a number of developments have combined to define maritime transport and shape international seaborne trade patterns, ranging from greater globalization in manufacturing activities, an extension of supply chains, growth in intra-company trade and in intermediate goods as well as an expansion in intra-regional flows. The evolution of maritime industries has also followed trends moulded by the emergence of new major players in different sectors, especially in developing countries. In view of emerging issues, including a changing global economic architecture, rising environmental and energy sustainability imperatives and growing climate change concerns, maritime transport is having to adapt to these challenges.
- 2.4.4 Maritime transport currently handles over 80% of the volume of global trade and accounts for over 70% of its value. Global seaborne trade is expected to increase by 36% in 2020 and to double by 2033. Within this framework of shipping growth, developing countries are driving growth in global merchandise trade, with South-South links emerging strongly. The regions of Africa and Latin America are increasingly becoming suppliers of China's primary commodity needs and, in return, an increasing volume of China's consumer goods is being exported to these regions. These developments are shaping the configuration of maritime transportation and figures confirm Asia's increasing share of world trade.
- 2.4.5 Demand levels in seaborne trade are unpredictable and remain acutely sensitive to geopolitical factors. The spike in demand of world seaborne trade in 2011, fuelled by strong growth in container and dry bulk trades which led to a growth of 4%, was immediately followed, through the deep economic downturn, by a collapse in demand in 2012. In stark contrast, the world fleet grew by 37% from 2008, reaching more than 1.5 billion deadweight tons (dwt) in January 2012, creating a global oversupply of ships.
- 2.4.6 Vessel oversupply, in turn, has been a driving factor behind reductions in freight rates. Growing concerns regarding sustainable freight transport reflect its importance as a trade enabler, an engine of growth and a driver of social development. However, the associated adverse impacts of freight transport activity on the environment, human health and the climate are also cause for concern. Overall, transport consumes over 50% of global liquid fossil fuels and is projected to grow by 1.4% per year from 2008 to 2035 and to account for 82 % of the total projected increment in liquid fuel use. At the same time, the transport sector accounts for 13% of all world GHGs, of which 5.5% are related to freight transport. Nearly 25% of global energy related carbon dioxide (CO₂) emissions are transport related and these are expected to increase by 57% worldwide (1.7% a year) between 2005 and 2030⁶.
- 2.4.7 The impact of these shipping trends has resulted in a continuing decrease in the cost of transport, as expressed as a percentage of the value of the goods imported, notably in Asia and Latin America. Shipowners from developing countries own one third of the world fleet and 12 of the top 20 container operators are also from developing regions. Almost 42% of the world fleet is registered in Liberia, the Marshall Islands and Panama. Emerging flags such as, Antigua and Barbuda, the Commonwealth of Dominica and most recently, the Cook Islands, are making headway within the emerging markets.
- 2.4.8 Today most other dry cargo is transported in container ships. These standardized containers have brought a flood of technical innovations (such as special cranes at transshipment points) and fundamental organizational innovations in their wake. Being standardized, they can be transported with any mode of transport and rapidly transferred to trucks or railway cars fitted with the appropriate equipment. From an economic point of view this has dramatically reduced transportation costs, mainly as a result of faster loading and unloading. Capital investment along the entire transport chain was necessary to ensure the containers were used efficiently, considerably increasing capital intensity. In contrast, labour intensity was sustainably reduced, as fewer dockworkers were needed for loading and unloading.

⁶ United Nations Conference on Trade and Development document TD/B/C.I/30 refers.

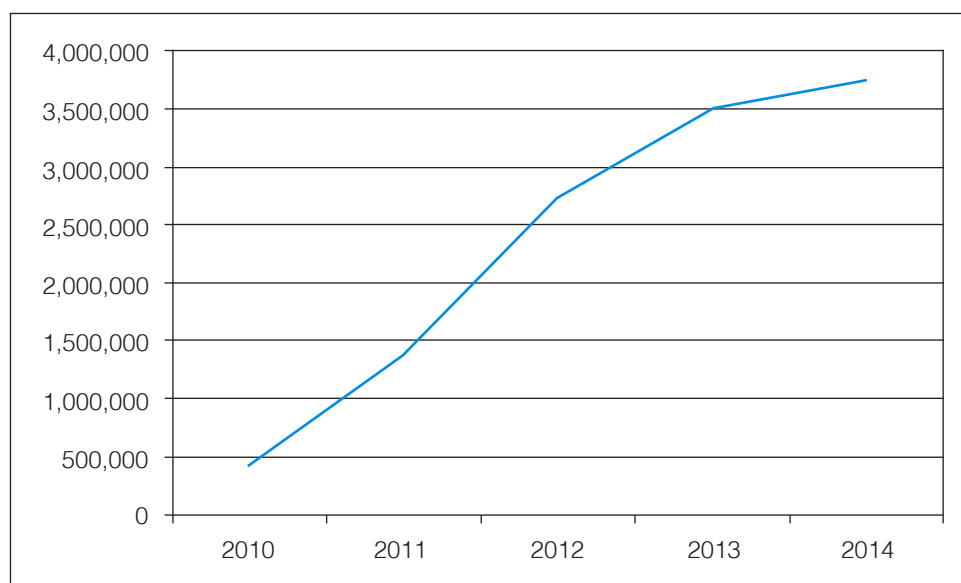
2.4.9 The nexus between transport, energy, environment and climate change is a strong one and will continue to shape transport policies and strategies of the future. For developing countries, evolving towards sustainable freight transport is particularly relevant since freight transport activities are growing substantially and transport systems are being developed. Implementing sustainability principles in freight transport, would not only help reduce dependency on oil, minimize exposure to high transport costs and limit environmental impacts, but it would also provide an opportunity to leapfrog to a sustainable and low carbon development path, while at the same time tackling persistent challenges of freight transport infrastructure deficit and inadequate transport services. For developing countries, the challenge will be to formulate their own approach to promote sustainable transportation policies that balance economic, environmental and social objectives towards sustainable development.

2.5 Recent changes and developments at WMU

2.5.1 WMU has responded actively to changes in the maritime industry and ensured that it kept pace with developments at the cutting edge of maritime education, through key changes that include the following:

1. Periodic evaluation by external assessment and internal quality assurance procedures has been effective in reinforcing the quality of WMU programme: WMU is now positioned to become the international authority in areas such as Maritime Education and Training (MET), ballast water, and ship energy efficiency, and to develop global databases of information that would establish WMU as an apex maritime university with both solid education and research expertise;
2. The issue of recognition and accreditation, a key priority for the University's future credibility and growth, marked a significant turning-point in 2014 when WMU received acknowledgement, by the Swedish Ministry of Education and Research, of WMU's power to grant its degrees in Sweden. Also in 2014, WMU engaged a globally respected German accreditation agency (ZEvA) to evaluate and, it is anticipated, provide European accreditation for the WMU core M.Sc. and Ph.D. programmes. WMU's academic degrees are currently recognized by various institutions and bodies, such as the Governments of China, Greece, Iraq, and Malta, the Provincial authorities in Ontario, and the World Education Services, based in the United States of America;
3. A marked emphasis on increasing research projects and consultancies by faculty and research associates has resulted in the recruitment of a new category of staff at WMU, in support of and funded by the expanded research portfolio. Figures for 2014 show 36 active funded research projects with total funding of EUR 3.745 million, a significant rise from the 15 projects in 2010 which resulted in research expenditures of only EUR 411,000 (Chart 1 below refers). In conjunction with this, the number of research associates/ assistants rose from 3 in 2010 to 11 in 2014 in concert with the growth of the WMU Ph.D. programme and academic collaborations with other maritime universities/regional academies around the world, which currently exceeds 30;

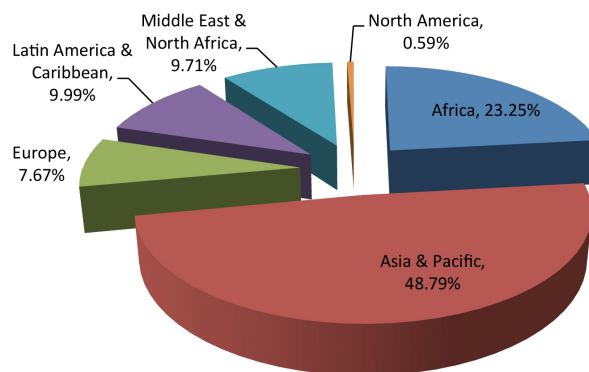
Chart 1
Research and Consultancy Budgets by Year (in EUR)



4. In addition to increasing gender equity, the expansion of the Ph.D. programme, of whom 40% are female, has proved to be a vehicle for geographical diversity since the 25 candidates originate from 15 different countries from Europe, Americas, Africa and Asia-Pacific;

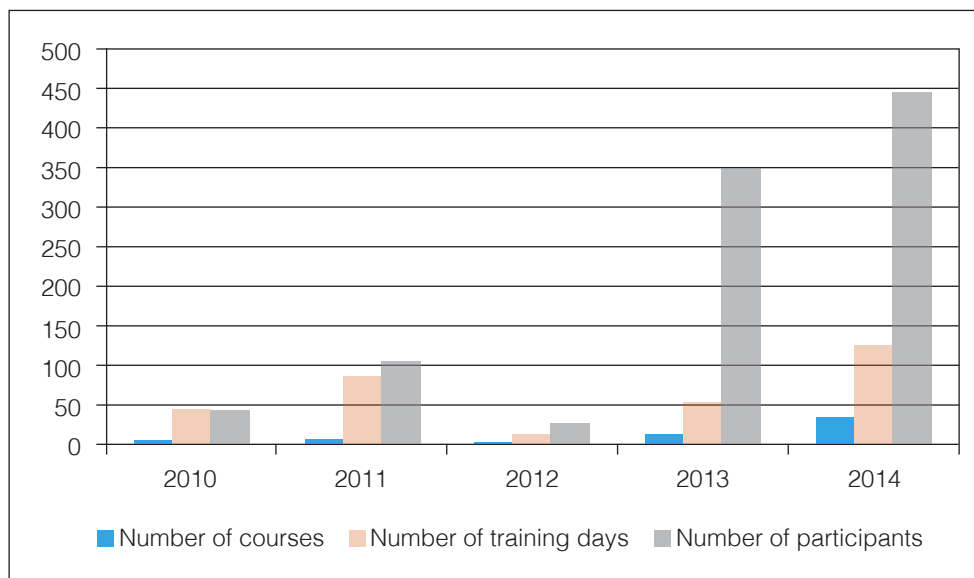
5. Regionally, the numbers of M.Sc. students from Africa has grown considerably, most notably from Nigeria and South Africa, but also from East Africa in recent years. The numbers of M.Sc. students from East Asia - Indonesia, China, the Republic of Korea, the Philippines, and newer developing countries Vietnam, Sri Lanka and Myanmar also remain steady, as well as from the India, Pakistan and Bangladesh region. The numbers of students from the Caribbean and Latin America are also increasing, but are not for North America and Western Europe (the EU) and the Middle East. In these regions there are opportunities to campaign to grow the number of M.Sc. applicants by demonstrating the quality and validity of the M.Sc. programme that will benefit aspiring candidates and their employers. This will require a concerted marketing effort by WMU in the next 1 to 2 years;
6. Significantly, the WMU graduate pool of Alumni at the end of 2014 stood at 3,923 for all postgraduate programmes from 165 countries and territories and the regional distribution is shown in Chart 2 below;

Chart 2
WMU Graduates by Region (All Programmes)



7. A new Executive EMBA in Shipping and Logistics offered by blended distance learning is to be introduced by 2016 in partnership with a triple-accredited Business School. This would be a solid new revenue stream for WMU with relatively low risk, as costs would be shared between two institutions. WMU is also considering a new M.Sc. specialization in Marine Energy Management within the M.Sc. in Maritime Affairs. There is no comparable postgraduate programme existing in the marine energy management field at this time, which will offer WMU a unique niche in a growing area of prominence to the maritime sector. These programmes, which have already been approved by the WMU Executive Board, if endorsed by the WMU Board of Governors, will be launched in mid-2016;
8. A new WMU Professional Development Course (PDC) Framework Strategy was approved by the WMU Executive Board and by the WMU Board of Governors in 2012 resulting in a major effort to introduce new PDCs under an organized and structured plan, providing cutting-edge knowledge that responds to changes in the regulatory and business environment in subject areas where there is an identified need for professional updating. From 2010 to 2014 the number of PDC courses delivered increased from 5 to 34, while the number of training days increased from 45 to 126, and the number of participants from 42 to 445, marking a significant source of revenue-generation. The development is shown in Chart 3 below;

Chart 3
PDC Growth during 2010-2014



9. Other new academic and revenue-generating initiatives include Postgraduate Diploma Courses (PGDip), notably the PGDip in Marine Insurance in partnership with the Lloyd's Maritime Academy; the new Marine Energy Management PGDip and Executive Maritime Management PGDip programme, the latter to commence in mid-2015. There are plans to introduce a new International Maritime Law PGDip and LLM in partnership with the International Maritime Law Institute (IMLI) and Lloyd's Maritime Academy, which will be the marketing arm for this distance-learning programme. A Maritime Security PGDip programme will be introduced in 2016 in response to market interest. Not only are the Distance Learning programmes projected to be a significant revenue pillar by the end of 2016 with numbers of participants increasing from 38 in 2004 to the range of 150 to 200 by 2016, but it is anticipated that this will offer a potential new feeder stream into the M.Sc. programmes;
10. Expanding WMU academic collaboration and partnerships - with other universities (most recently Nelson Mandela Metropolitan University, South Africa); with international institutions (e.g. ICES, NATO, IOC), governments and maritime administrations (e.g. the new Republic of Korea Chair in Shipping Management and fellowships, the new Indian Chair in Port Management); with shipping and port companies (e.g. Stena Northern Marine, Maersk, Indonesia PTC); with commercial academic marketers (DNVGL, LMA); with various IMO Secretariat divisions (TCD, MED, MSD), IMO-affiliated organizations (IMLI), and international organizations (e.g. IAMU and IMLA collaborations) has greatly enhanced the University's position. In all, WMU has entered into 70 memoranda of understanding with collaborating universities, academies, and government institutions, to support improved education, research and overall academic development in the maritime sector; and
11. The valuable support provided by all participating countries and their maritime administrations, to the academic development of different WMU courses over the past 30 years has given students the opportunity to experience hands-on field training which represents one of the most valuable elements of the unique experience of studying at WMU. This in-kind support represents a valuable asset to the WMU education system.

2.6 Recent strategic plans and visions of WMU

- 2.6.1 WMU established its first Strategic Vision Plan in 2010 with the particular aim of supporting the strategic plan of IMO as defined in resolution A.1011(26), adopted on 26 November 2009. The core driver of the Strategic Vision is for the University "to be the World Centre of excellence in maritime education, training, and research", and at the same time to be IMO's capacity building university. In particular, WMU has actively supported several of the strategic directions of IMO, including capacity-building programmes, the priority of the safety of human life at sea, the focus on reducing and eliminating any adverse impact by shipping on the environment, the enhancement of the quality of shipping and the importance of an environmental conscience within the shipping community.
- 2.6.2 WMU has also improved the university's business model and risk management oversight through a more rigorous, targeted WMU Business Plan 2015-2016, approved by the WMU Executive Board. The current Business Plan clearly articulates a progressive strategy to improve business practices and all academic programmes and commercial services through both an enhanced risk model and budgetary management. However, the Business Plan, together with the 2011 WMU Development Plan established to increase and better coordinate development and funding activities, will both need to be modified to encompass the broadened mandate of the University through its new Strategic Directions and the recommendations of this Study.
- 2.6.3 The Malmö intake has expanded by 10% from 102 in 2010, to 111 in 2014. Further growth is still possible with (1) a concerted marketing strategy to increase donor M.Sc. fellowships and (2) the expansion of Masters programme to attract new students to a different educational product stream, such as either the planned specialization in Marine Energy Management and/or an Executive MBA in Shipping and Logistics. WMU will continue to seek new fellowship donors to support candidates from the least-developed countries in order to fulfil its capacity-building mission.
- 2.6.4 New maritime educational concepts that are under consideration by WMU, subject to financial cost benefit and WMU Board of Governors and WMU Executive Board governance approval, include the following:
 1. a new WMU-Shipping Industry Liaison Programme/Committee;
 2. an Oceans Sustainability Institute, and Research Centres of Excellence for the shipping industry - to attract financial support for research and development from industry;
 3. Centres of Research Excellence (think tanks) for maritime and/or ocean policy alternatives;
 4. a partnership with the IAMU on the provision of visiting professors to WMU to strengthen the academic diversity of teaching in its M.Sc. programmes; and
 5. to establish a Maritime e-library & Knowledge Centre to support WMU students and researchers as well as other collaborating maritime libraries in developing nations.

- 2.6.5 New education and research opportunities with other UN system bodies, for example with UNDP, UNEP⁷, UNESCO/IOC⁸, FAO⁹, and ILO¹⁰, have already been identified by WMU, and these could be extended to include staff members from these organizations as visiting professors or lecturers to focus on oceans and sustainable development issues. Other potential topics include new and changing shipping routes, climate change and its impacts on the maritime industry, ship energy efficiency and renewable energy, maritime governance and corporate social responsibility, maritime policy and labour issues, e-navigation, hydrography and oceanography, marine environmental issues, dangerous goods management, ballast water systems, invasive marine species, anti-fouling, recycling, maritime piracy and others.
- 2.6.6 Despite its prestige within the maritime industry, WMU remains a little-known institution in the eyes of the general public. The University recognizes the need to raise its profile especially with a view to create the public resonance required by potential donors and students. In 2015 WMU plans to recruit a Marketing and Development Officer to increase its effort to market and publicize WMU's programmes and activities to as large an audience as possible, including targeted efforts to ensure WMU receives increased global exposure via its continuously improving, dynamically managed website, annual high-profile conferences, and publications. WMU is also utilizing improved IT marketing strategies and social media (Facebook, LinkedIn, Twitter) and its website portal to promote its EPDC and PGDip programmes.
- 2.6.7 Improvements in WMU's ICT Strategy - WMU is also in the process of enhancing its IT technology and integrated ERP system, in order to optimize the operations of the University, and assimilate all major activities under one fully integrated IT system - finance, procurement, asset management, academic management, research project management, and the registry. This initiative also incorporates an enhanced academic learning management platform to support students and faculty, and to provide technical capability to undertake distance learning programmes and aid universities/academies in developing nations with this new technology.
- 2.6.8 The University's faculty and researchers are focusing, and should continue doing so, on the most current, relevant maritime issues - arctic shipping and development, ballast water and invasive species, climate change and pollution reduction (marine micro plastics, marine energy efficiency, wrecks, ship recycling, oil spill preparedness and response, dangerous goods, maritime security, maritime education, maritime governance and CSR, anti-corruption business values and ethics, maritime policy and ocean policy and regional development with emphasis on Africa).

2.7 Globalization in Progress

- 2.7.1 Shipping is the most advanced industry in the context of globalisation. As markets in general have become increasingly globalized, shipping volumes have soared in response to the growth in demand. In a multiplier effect across the globe, transportation costs have fallen, ships increased in size, and economies of scale been exploited. Furthermore, there were technological advances and organizational improvements in port management - of general cargo traffic, for instance. Of overriding importance has been containerization, the greatest transportation revolution of the twentieth century.
- 2.7.2 The increasing spread of open ship registries have enable allowed the shipping companies to combine the relatively low capital costs in the industrial countries with the lower labour costs for seafarers from developing countries. It is hardly surprising, therefore, that according to UNCTAD, the ten top open and international registries accounted for about 55 % of the global merchant fleet in 2008. In 1950 this figure was only 5%. This development has helped shipping to become a genuine global economic sector. As far as ownership structure is concerned, however, it is far less global. A few countries own the bulk of the fleet. About 54% of world tonnage (measured by carrying capacity or "deadweight tonnage", dwt) is controlled by owners (shipping companies) in Japan (16.0), Greece (15.3), Germany (9.5), China (8.4) and Norway (4.5).
- 2.7.3 The geographic pattern of world trade flows continues to shift. The share of exports is almost equal for developed and developing countries, although imports of developed countries are still leading developing countries. South-South trade has continued to grow, rising from about one fifth of world trade to about one fourth in the past decade. Growth of South-South trade has accounted for a majority of the growth of world trade. North-North trade has grown at a slower rate and now accounts for about the same proportion of world trade as South-South trade. Much of the growth in South-South trade has been driven by trade in fuels - owing to both higher prices and increased demand in developing countries - and by communications equipment, which has shifted production from developed to developing countries. Trade flows between developing and developed countries still account for a significant portion of world trade. Despite some increase, shares of least developed countries (LDCs) in world trade remain low at less than 1%.
- 2.7.4 The importance of containerization for global trade has only recently started to be understood. A new study covering the introduction of containerization until 1990 concluded that containerization had a stronger impact on driving globalization than trade liberalization. A study by ESCAP¹¹ and the World Bank found that liner shipping connectivity was a more significant determinant of trade costs than the indicators for logistics performance, air connectivity, costs of starting a business and lower tariffs combined.

⁷ United Nations Environment Programme.

⁸ United Nations Educational, Scientific and Cultural Organization/Intergovernmental Oceanographic Commission.

⁹ Food and Agriculture Organization.

¹⁰ International Labour Organization.

¹¹ Economic and Social Commission for Asia and the Pacific.

- 2.7.5 It is envisaged that the current trade and shipping patterns will be significantly transformed by large ongoing infrastructural developments, including inter alia the expansion of the Panama and Suez canals; the opening of the Northern Sea Route; and port developments in Peru, Mexico and Morocco.
- 2.7.6 Maritime transportation is increasingly underpinning the growing role of the South in world trade, bringing new players into the market, not least Africa which, as identified through the African Union, has a huge potential for maritime developments.
- 2.7.7 The underlying factor on which all these large-scale projects will depend for their success is an appropriate supply of trained seafarers and maritime experts. Taken also in the context of sustainable development and the post-2015 UN Development Agenda, it is clear that WMU will be playing an even greater role, globally, in the building of national maritime capacities.
- 2.7.8 WMU is already a global entity, but it has the potential to be a far more influential maritime educational institution where “the future leaders of the maritime sector will demand to attend and learn directly from the finest and most experienced teachers and practitioners from around the entire maritime world”.
- 2.7.9 WMU is enhancing its global links, especially South-South links between governments, partners, graduates and alumni associations, shipping companies, trusts and foundations. A regional engagement strategy, linked to WMU’s Outreach Programme, its Academic Collaborative Agreements (MoUs), and its alumni engagement strategy is under development, which will involve bi-annual Alumni Conferences in different regions designed to increase greater interest in WMU’s programmes and courses. With over 4,000 alumni, WMU now needs to access their goodwill and influence in strengthening the programme and activities of the university.

2.8 The UN Sustainable Development Goals and the post-2015 UN Development Agenda

- 2.8.1 Established by the UN Secretary-General to advance the UN Development Agenda beyond 2015, the UN System Task Team on the post-2015 UN Development Agenda draws together more than sixty UN system bodies and international organizations, including IMO. In order to support the efforts of this Task Team, the UN Secretary-General also launched a High-level Panel of Eminent Persons and appointed his own Special Advisor on post-2015 UN Development Planning. These processes are complemented by a set of eleven global thematic consultations and national consultations in over 60 countries, facilitated by the United Nations Development Group, which should achieve an ambitious post-2015 UN Development Agenda that is expected to be adopted by UN Member States at the Special Summit on Sustainable Development in September 2015.
- 2.8.2 In consonance with the outcomes of the Rio+20 Conference and in order to give effect to the objectives of the post-2015 UN Development Agenda, IMO will develop specific SDGs for shipping and maritime industries and align its ITCP and technical assistance activities within the framework of the said agenda.

Section 3

The way forward: Key Strategies for Financial Sustainability

3.1 Strategy 1: Educate and foster the growth of maritime leaders in both developing and developed countries as a core mission of WMU

- 3.1.1 A “global industry in a globalized world”, the maritime industry is uniquely dependent on each stakeholder within the shipping community, as trading partners and custodians of the ocean and marine environment, to execute their obligations towards the implementation of IMO conventions and standards. Implicit in this responsibility is the requirement to supply maritime experts, including seafarers, whose knowledge will enable all countries, irrespective of their economic status, to comply with the international maritime standards of safety, security, and pollution prevention.
- 3.1.2 In the first instance, the maritime industry relies on a sizeable and regular supply of seafarers, maritime engineers, and navigators who, by enhancing their respective technical skills over the years, become the maritime experts on which the industry depends. IMO recognizes that, by virtue of its size and specialization, WMU is not designed to educate and train the extensive number of maritime experts that are needed across the sector. That role is performed by the national and regional maritime academies whose academic programmes are focused, at the under-graduate level, to producing a regular supply of well-trained seafarers and technical staff.
- 3.1.3 At the higher policy level, the maritime industry also needs a cadre of policy and regulatory leaders, committed to the improvement of maritime safety and security, the protection of the marine environment and the efficiency of international shipping, together with the fair, uniform and consistent implementation and enforcement of the IMO treaties and standards. Those leaders will act as custodians of the relevant maritime conventions and standards, with particular attention to those developed by IMO, and provide the overarching vision for national maritime transportation strategies. In so doing, taking into account the points of view of both the shipping industry and of the seafaring community, the aim of the maritime leaders should be the establishment and maintenance of a level playing-field: this implies (i) an environment which provides certainty and clarity as to the applicable rules; and (ii) the application and enforcement of the latter, by the flag, port or coastal authorities involved, in a fair, correct and consistent manner. As a result, the players and stakeholders in the maritime industry, who do not necessarily have an equal chance to succeed, will operate in an environment where they will all play by the same rules and in which seafarers enjoy fair treatment.
- 3.1.4 The formation of that global cadre of future maritime leaders is at the core of WMU's mission as an international post-graduate institution for maritime education and research, with the responsibility for imbuing its graduates with a sense of purpose, a clear understanding of the importance of the maritime field, and an appreciation for the need to collaborate on a global basis under a common framework. The outcome of this strategy will be the provision, by WMU, of a global and sustainable network of future maritime leaders, drawn from the developing world as well as from the developed and economically advanced countries: the University therefore becomes the driver for capacity building and raising maritime standards.
- 3.1.5 The notion of maritime leadership is comprehensive in its nature; it includes all the stakeholders from maritime administrations, ship registries and authorities and maritime industry including shipping, ports, and maritime education, whose contribution is essential if the shipping industry is to adapt, efficiently and effectively to technological innovations and shifting trading patterns. For WMU to address these needs will require a broadening of the basis of its ocean education and research beyond the traditional knowledge on maritime industry and policy.
- 3.1.6 The University's ability to deliver its responsibilities as a unique academic institution will also require the strengthening of its research functions and outreach, the results of which will inform the technical debates within IMO and among relevant stakeholders. This will also consolidate WMU's position with regard to national universities that lack the technical expertise and academic knowledge to educate their maritime officials in specialized maritime subjects related to the IMO conventions.
- 3.1.7 Nowadays, maintaining continuous proficiency and upgrading of qualifications is a must for many professions and indeed for seafarers it is a requirement under the 1978 STCW Convention. The WMU Board of Governors is of the view that the University should introduce new programmes and curricula in order to encourage graduates to return to WMU for upgrading and refresher courses, as a mechanism for sustaining the value-added of the University's alumni as they progress in their careers.

3.2 Strategy 2: Teach Policy to future maritime leaders

- 3.2.1 The University's central tenet which is to teach maritime and ocean policy, in tandem with the application of the IMO governance that has been firmly established, over the last half century of activities, as a global system of shared responsibilities for maritime safety, security and facilitation and environmental protection under IMO treaties.
- 3.2.2 Fundamental to this is the understanding that by educating its students in line with IMO's established values, through uniformly implemented standards, WMU becomes a key driver in achieving a level playing field for all countries, developed and developing alike, which participate in the transport or receipt of goods by sea. To achieve this effectively and efficiently, WMU must continue to teach the core elements of "the IMO system for maritime governance" including the effective implementation mechanism under the IMO treaties; the roles and functions of flag States, port States and coastal States; the audit mechanism; and the roles and functions of IMO.
- 3.2.3 The emergence and consolidation of the IMO system for maritime governance has created de facto educational and teaching needs in the academic field: these will require the University to develop the related syllabus and teaching material, to determine what is appropriate for each of the programmes of study and to quantify the individual and aggregate workload which these may entail. In correlation with this, WMU will need to consider how best to achieve the delivery of the above, by examining on the one hand the feasibility, given their current workloads, of arranging for the existing faculty staff to assume those additional related responsibilities, or on the other hand by considering the establishment of a new professorial post within WMU. The matter will need to be submitted to the WMU Board of Governors, together with the relating justifications, for a decision. Marking the symbiosis between the maritime industry and IMO's governance role, this full-time teaching position will align itself with all IMO policy and technical cooperation developments, and in doing so will be the key point of leverage to ensure the linkages and collaboration mechanisms between IMO and WMU.
- 3.2.4 In light of the above it is explicitly recognized that WMU's mission as a postgraduate educator of maritime leaders excludes the training of seafarers, marine engineers or lawyers, who have access to specialized undergraduate technical courses in national and regional maritime institutions.
- 3.2.5 A significant multiplier effect can be achieved by the University through the education of the teaching staff of maritime training institutions and maritime academies across the regions, through a cascading system which, to prove effective, will require a robust quality control system. The "training-the-trainers" model will achieve a substantive rate of increase in knowledge-transfer to the thousands of students of maritime academies across the world, who in addition to understanding the technical content of the WMU syllabi will also become fully cognizant of IMO's policies and the value of the "IMO System". The outcome of this strategy will be the education of maritime experts, available as resources to the globalized world, who thoroughly understand and support the UN system and the implementation of IMO instruments.

3.3 Strategy 3: Expand the WMU scope to include ocean-related matters

- 3.3.1 In addition to the traditional knowledge on maritime industry and maritime policy, future maritime leaders need to be provided with a sound understanding of the broad ocean issues, governance and management, which are now in the forefront of the SDGs. Ocean and marine topics and courses are extremely attractive to students, notably at postgraduate level, and although WMU would be entering a competitive field it would have the value-added of its relationship with IMO and the guarantee of high quality programmes.
- 3.3.2 The subject is not new to WMU, which has for the past decade included the oceans as an integral part of the academic programme and curriculum of its M.Sc. programme. The United Nations Convention of the Law of the Sea 1982 (UNCLOS) is covered in all specializations, and more extensively in the M.Sc. specialization, Marine Environment and Ocean Management (MEOM) which has been offered since 2003. This specialization will be reviewed and restructured to reflect other agencies' ocean interest, and thereafter widely publicized.
- 3.3.3 A reconstituted M.Sc. specialization entitled "Oceans Governance and Management (OGAM)" will be designed to be more attractive to a broader array of students with an interest in FAO (fisheries and fishing vessel safety - STCW-F), to UNEP (oceans health and sustainability, marine pollution-plastics, marine environmental impact assessment), UNESCO/IOC (marine science, marine spatial planning), UN/DOALOS¹² (deep-sea resource development, maritime boundaries, ocean law and policy), ILO (Maritime Labour Convention, seafarer rights) and UNDP (ocean energy - wave, tidal and thermal) subjects, along with ocean industries and respective representative organizations (i.e. World Ocean Council). There will be a natural synergy to link ocean governance and policy with maritime governance and policy into the WMU M.Sc. (and Ph.D./Research) programmes given the overlapping nature of many issues in both areas.

¹² Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs, United Nations.

- 3.3.4 The further expansion at WMU of ocean-related courses, which have been generated throughout the process of preparation and follow up of Rio+20, which will furnish a sound foundation for increasing the University's appeal to the wider maritime and ocean community, which would require cooperation mechanisms to be put in place with ocean-related UN system bodies. The latter should be invited to consider how they could make use of WMU's education and training resources to further their own respective education programmes.
- 3.3.5 The achievement of this strategy, whereby WMU would provide training on ocean-related issues as a shared educational platform for other ocean-related UN system bodies, would drive the re-positioning of WMU to become, in time, a virtual "oceans university" to the UN.
- 3.3.6 As a parallel outcome, the embedding of oceans into the WMU curriculum, seminars and conferences, including its outreach of this specialization area to developing nations, may well attract new donors and fellowship providers to support the broader agenda of oceans sustainability and the SDGs.

3.4 Strategy 4: Strengthen the University research function for maritime and ocean policy and related subjects

- 3.4.1 While research on maritime transport safety and marine environmental conservation contributes to IMO activities and is one of the most important roles WMU can assume, it is important that WMU strengthens its research activities in the wider field of marine and ocean policy. The expansion of WMU's syllabi to include ocean matters within its post-graduate courses would need to be supported by the concomitant research projects in the wider field of ocean and maritime policies. This would help to enhance the University's academic reputation with regard to the wider scope of its education package.
- 3.4.2 This expanded research capability should be seen in the context of WMU's network of partnerships with other maritime institutions, building on that platform of cooperation so as to maximize its research and development capacities, and in correlation with this, serve to generate funding for the University.
- 3.4.3 IMO could use WMU as its first-choice partner for funded research projects, which would have the additional benefit of engaging more members of WMU's faculty more closely with IMO's priorities and activities.

3.5 Strategy 5: Explore diversified activities for generating revenues

- 3.5.1 In addition to the core revenue stream derived from the 14-month postgraduate degree courses delivered at the Malmö campus, WMU has developed a range of capacity building activities which include international conferences, specialized seminars, short term non-degree Executive and Professional Development Courses (E/PDCs), and distance learning Postgraduate Diploma programmes.
- 3.5.2 This mechanism for generating additional revenue streams should be strengthened by increasing the number and scope of these activities and exploring new avenues of diversification, including the expansion of the University's research activities. The dual benefit derived from this strategy will be the positive impact on the University's financial base, together with a stronger "brand image" with regard to the shipping and government entities whose officials attend the customized courses.
- 3.5.3 The historical success of industry-academic research linkages may provide a model for WMU to explore, as part of an Industrial Liaison Programme, as a mechanism for attracting and retaining high-level faculty members while also attracting equally good student candidates. The effect of such collaborative projects and interdisciplinary think tanks, bringing together researchers from a range of fields to solve complex problems, would strengthen both the academic and the financial status of the University, attracting the respect of corporate entities who would sponsor such research based on shared objectives with WMU.
- 3.5.4 In the long-term, new entities could be introduced within the scope of the University's academic structure, such as a Centre for Maritime and Ocean Policy Research, or an Initiative on Maritime and Ocean Leadership Development, as a mechanism for increasing the student intake into leading-edge research and policy initiatives and attracting incremental funding from industry.

3.6 Strategy 6: Review the current arrangement with other universities and explore new ways of collaboration

- 3.6.1 Current partnerships between WMU and other universities enable the effective delivery of the WMU academic model and standards beyond the Malmö campus. This arrangement provides a strong financial contribution to the University, maintains the University's visibility in vital shipping regions, and is an effective example of positive collaboration with national universities.
- 3.6.2 In addition to this model of cooperation, new partnership mechanisms with universities and training institutions should be explored and developed as a method of driving forward national standards of compliance with IMO instruments.
- 3.6.3 As a special member of the IAMU, the WMU Board of Governors is of the view that the University should work with IAMU to explore avenues of collaboration and interaction with the latter's member institutions.

3.7 Strategy 7: Explore further collaboration with IMO, in particular in the field of Technical Cooperation

- 3.7.1 The current developments in IMO's technical cooperation focus, notably the move towards the effective implementation of the country maritime profiles and the establishment of a national maritime transportation policy in each country, will create significant areas of further potential cooperation and collaboration between WMU and IMO. In the same context, developments made to facilitate the introduction of the mandatory IMO Member State Audit Scheme will also generate partnership opportunities. By undertaking specialized training courses and seminars and providing consultancy services, WMU would assist IMO Member States in improving their respective capacity in the implementation of IMO instruments, while also assisting other organizations in the maritime field to conduct associated training activities. WMU's intellectual contribution in this regard would help to expand the WMU "brand" and contribute towards strengthening its financial base.
- 3.7.2 WMU should explore the possibility of establishing a Maritime and Ocean Policy Institute within the framework of its formal academic structure. In its role as the University's "research arm", that Institute would support IMO's activities in the field of transportation policy development by researching and analysing the maritime policies of IMO Member States. WMU would also be furnished with the capacity to undertake proactive risk-assessment studies, including maritime security threat-analyses. As a direct adjunct to this, the Institute would build on those outcomes in order to determine innovative strategies, such as facilitating the maritime transportation of trade, food and medical aid to vulnerable communities in the midst of conflict.
- 3.7.3 The further collaboration between IMO and WMU should be explored, within the parameters of their respective mandates, to identify potential partnership projects in the field of technical cooperation and in the implementation of the IMO audit scheme, in accordance with the shared objective of ensuring that IMO conventions are correctly translated into national legal systems and thereafter applied in a uniform manner.
- 3.7.4 The participation of WMU in collaborative projects, serving as consultants on IMO advisory missions, would also provide an avenue for revenue-generating activities for the University.

3.8 Strategy 8: Establish an endowment fund with a target of \$100 million

- 3.8.1 An Endowment Fund should be established imminently, as decided by the IMO Council at its 108th session, targeting contributors in the maritime industry including shipping companies, ports, and logistics as well as exploring a wider range of potential targets who are interested in sustainable oceans.
- 3.8.2 A campaign to generate interest in the Endowment Fund should be activated as soon as possible, and should include the promotion of fellowships as an element of the campaign.
- 3.8.3 The fund-raising campaign will require the development of a collaborative agenda with the private sector if it is to succeed in attraction the volume of donations that are needed. The notion of industrial liaison as a form of long-term funding, aimed at expanding targeted research, development and policy initiatives, should be explored as a strong basis for engaging and collaborating with industry. The University could derive far greater financial stability if this source of support could be accessed.
- 3.8.4 As an adjunct to this linkage with industry, the University would benefit through the recruitment and retention of excellent faculty staff due to the wider scope of research interests that such collaboration with industry provides.

Section 4

WMU short and medium-term objectives

4.1 Student composition

4.1.1 The Team discussed the optimum level of annual intake of students at the Malmö campus and concluded that, for the foreseeable future, the annual intake and output of students should be in the order of 120 taking into account the scale of the new campus and the teaching staff and the following composition would be a guide for the University.

4.1.2 In recent years, the funding breakdown has been as follows:

	Class of			
	2012	2013	2014	2015
American Bureau of Shipping & employer / self	2	2	6	6
American Bureau of Shipping & other donor	-	-	2	1
Lloyd's Register Foundation & employer	-	3	1	2

Company	9	10	12	15
Government	24	29	45	29
Self	15	9	9	12

Donor full fellowships (details below)	51	54	50	45
American Bureau of Shipping	1	1	-	-
Danida / Iraq project	-	4	-	-
BP Shipping	1	2	2	2
Gard	1	1	1	1
ICS	-	1	-	1
IMO	5	6	7	6
Government of the Republic of Korea	5	4	4	3
ITF ST	5	5	3	3
German Ministry of Transport	1	1	1	3
German Development Cooperation	-	-	5	-
Orients Fond	-	1	-	-
SafeMed	2	1	-	-
Sasakawa Fellowships	27	23	22	22
TK Foundation	2	4	4	4
WNTI	1	-	1	-

4.1.3 The intake should ideally be made up as follows:

1. Students from developing countries, supported by donor fellowships: total 55 (46% of intake). While appreciating the Nippon Foundation for its generous and continuing fellowship support, the number of fellowships given has fallen from 27 in the Class of 2012 to a level of 22 recently. A further reduction may be made for the Class of 2016. The Team agreed that further efforts should be made to search for arrangements with new donors, to support the existing generous fellowship donors which together supported 45 students in the Class of 2015. The University should seek at least 10 additional student fellowships each year.

2. Sponsored students: total 50 (42% of intake). The University has been successful in securing significant number of students sponsored by their government. The South African Government, the Nigerian Maritime Administration and Safety Agency, the Nigerian Port Corporation, the Indonesia Port Corporation II and III and the Navies and Coast guards of Argentina, Chile, and Mexico, have all sponsored significant numbers of students over a number of years. The current number of such students is around 45 annually, and the University should aim to recruit 50 such students.
3. Self-funded students from developed and advanced countries: total 15 (12% of intake). The University usually enrolls between 10 and 15 self funded students from developed and advanced countries each year. The Team agreed that it was important that this mixture be sustained, so that maritime leaders in developing countries should be educated together with maritime leaders in developed and advanced countries at the Malmö campus. This will assist in globalization and facilitate maritime leaders in developing countries and those in developed countries working more closely together to support the global shipping industry. It will also enhance the implementation of IMO policy worldwide. The University should make efforts to achieve an enrolment of 15 self-funded students each year.
4. The total target intake would therefore be 120 students in each class.
5. Junior teaching staff of maritime universities/academies as students at WMU: the Team agreed to encourage maritime academies or universities or seafarer-training institutions in IMO Member States to send their junior teaching staff members to WMU. While the educational institutions should be encouraged to pay for their own nominees, they may also be selected for fellowships by donors. It may be noted that this is not a separate funding category, as such students may be categorized as donor funded, government/company funded or self-funded, depending on the source of their funding and the Member State from which they come. However, it is an essential recruitment target for the University, as these graduates will teach their own students about the activities and policy of IMO, transferring this expertise to thousands of young recruits to the maritime industry, and embedding the ideals of IMO in their activities for decades into the future. The University should make every effort to enrol at least 15 members of the teaching staff of maritime universities and training establishments every year.

4.2 Academic staff requirement

- 4.2.1 In light of the close symbiosis between IMO and WMU, the University is in a unique position to transfer knowledge and understanding of the objectives and history of IMO, its established system of maritime governance, the contemporary issues handled by the Organization and the maritime policies thus generated.
- 4.2.2 This education can be provided only by WMU and gives the University a unique competitive advantage over other national educational institutions.
- 4.2.3 Over its five and a half decades of activities, IMO has established a global system of shared responsibility of maritime governance under the IMO conventions and measures. IMO has evolved its fields of activities from simple rule-making activities to technical cooperation and monitoring of implementation by Member States through the established mandatory IMO Member State Audit Scheme. As the unique UN specialized agency responsible for the maritime fields, IMO's activities evolve continuously to secure sustainable shipping. International shipping is the world's most globalized industry, and WMU's role and function in this cannot be underestimated. It is key to WMU's future success that the University specializes in inculcating knowledge of IMO's objectives, history, and evolution, and understanding of the challenges faced by IMO as the global centre of maritime governance.
- 4.2.4 In this context, it is essential that WMU should be able to appoint a key professorial position, to lead research and teaching on IMO policy. WMU should also be supported by IMO professional staff serving as visiting professors/lecturers, to both reduce costs and expand expertise.

4.3 Changes to the curriculum

- 4.3.1 The current WMU curriculum is sound in its academic structure and appropriate to the objectives reflected in the Charter. There is a need, however, taking into account the developments both in IMO and within the wider concept of ocean and marine environment governance, to strengthen the WMU syllabi pertaining to IMO activities and to ocean issues.
- 4.3.2 In addition to adapting the WMU programmes, on an ongoing basis, to meet the emerging regulatory requirements of IMO and of the shipping industry, one of the key aspects that WMU needs in order to fulfil its role as a supplier of maritime leaders is the inclusion of a substantially expanded course, for students across all the M.Sc. courses, on IMO governance over maritime affairs. This will require the development of a comprehensive course programme and academic material. Included in the programme will be an overview of the UN as a whole, and more specifically of the relevant work of the UN system bodies such as ILO and issues of commonality with IMO's mandate.

- 4.3.3 The University should also extend its teaching in ocean governance and management, ensuring that students have full understanding of the work of UN system bodies including UNDOALOS, UNESCO/IOC, UNDP, UNEP, ILO, and FAO, from where visiting professors should be invited to teach. While this is currently taught within the MEOM specialization, and in the Foundation subject, Marine Environmental Science, teaching should specifically cover the work of UN system bodies in ocean governance and management. The MEOM specialization will need to be restructured accordingly to incorporate these new areas of focus more fully.

4.4 Maritime and Oceans Policy Research Institute

- 4.4.1 WMU should explore the possibility of establishing a Maritime and Ocean Policy Institute within the framework of its formal academic structure. In its role as the University's research arm and think-tank, that Institute would support IMO's activities in the field of transportation policy development by researching and analysing the maritime and ocean policies of IMO Member States and offer its services to other parties.
- 4.4.2 The work of the Institute shall be guided by the post-2015 UN Development Agenda, and will be designed to give effect, inter alia, to the objectives of the Sustainable Development Goals.
- 4.4.3 WMU would also be furnished with the capacity to undertake proactive risk-assessment studies, including maritime security threat-analyses. As a direct adjunct to this, the Institute would build on those outcomes in order to determine innovative strategies, such as facilitating the maritime transportation of trade, food and medical aid to vulnerable communities in the midst of conflict.

4.5 Collaboration with other universities and with IAMU

- 4.5.1 In furtherance of its mandate from IMO, one of the important roles of WMU since its establishment has been to educate global maritime leaders in developing countries, who properly understand the aims and policies of IMO and appropriately disseminate these policies to maritime experts educated at national maritime universities in their home countries. While WMU has recently expanded its outreach from a focus on developing countries to both developing and developed countries, the potential number of global maritime leaders that could be educated at WMU is restricted by limitations of class size. In light of this limitation, the work of WMU is best augmented by a close association with national maritime universities engaged in training of maritime experts.
- 4.5.2 The University has established an effective partnership with two universities in China, which are designed to address the high demand for education from the Chinese maritime and industry authorities, without losing the academic integrity of the syllabi taught at the Malmö campus. This partnership will be maintained as a unique example of cooperation between WMU and a major shipping country.
- 4.5.3 The past concept of "WMU branches" which has been non-operational for a number of years will be discontinued, since it provides no effectiveness, either operationally or financially, in its current form. The possibility of establishing new modes of collaboration with national universities, academies and training institutions in the world will be explored, through mechanisms that will provide effective means of ensuring IMO governance policy to be reflected in the activities of various universities, academies and training institutions. The scope of collaboration should go beyond the membership of IAMU.
- 4.5.4 Further consideration will be given, initially by the University management, to the best way forward to establish a new mechanism of cooperation, such as WMU-affiliated training institutes, and/or maritime universities, with a view to providing a separate report to the WMU Board of Governors.
- 4.5.5 WMU should provide an opportunity to junior teaching staff of national universities, academies and training institutions to learn IMO maritime governance policy at WMU. Among 120 annual graduates as an output of the WMU, 15 should be the junior teaching staff members of various universities, academies and training institutions (see paragraph 4.1.3.4 above) by continuing to educate 15 teachers from various educational institutions for 20 years, WMU would generate 300 teaching staff in the world who truly understand the value of IMO governance. They in turn, through a global multiplier effect, will teach IMO governance and train thousands of maritime experts in future who can understand and support the IMO maritime system.
- 4.5.6 WMU offers degrees in Maritime Affairs at Masters and Ph.D. level. "Maritime Affairs" is recognised as an interdisciplinary field, which widely covers several academic disciplines such as law, economics, science, engineering and technology. In delivering this programme, WMU has traditionally drawn on a number of visiting professors who augment the input of resident faculty with insights into the various components of "Maritime Affairs". In order to continue to achieve quality education and research, WMU introduced and developed the visiting professor system for securing qualified teaching staff that can provide students with academic and practical information on subjects relating to international shipping as well as national administrations.
- 4.5.7 The system has developed well and 848 maritime experts from 61 countries have visited WMU from 1983 to 2014. In the last five academic years, on average more than 100 visiting professors per year were invited to WMU. It is recognised that the visiting professor system will continuously be essential for securing a wider perspective from qualified teaching staff for the M.Sc. programme offered by WMU.

- 4.5.8 However, as many of the long-term visiting professors have begun to terminate their pro bono teaching commitments, it has become necessary that WMU articulates a new strategy for the selection and appointment of new visiting professors. Traditionally candidates for new visiting professor positions have been solely introduced through limited personal relationships with resident members of faculty at WMU. WMU needs to organise an alternative way to find and appoint qualified visiting professors through well-established global networks of maritime experts who can participate in the WMU's post graduate programme.
- 4.5.9 In light of the above, a further avenue of development is the potential area for collaboration with IAMU. Founded in November 1999, with a shared recognition of the significance of maritime education and training in the rapid globalization of the international shipping arena, the Association currently has a membership of 56 maritime universities from 31 countries, to which WMU has been appointed as a special member and, as a result of that status, is a core member of the International Executive Board. It is envisaged the introduction of IAMU new policy to further widen the scope of potential members will increase and enhance its global network in the future.
- 4.5.10 Therefore, IAMU is prepared to offer a collaborative relationship with WMU through the network with national maritime universities, which was initiated in February 2015, when the Association held the First Extraordinary Meeting of the International Executive Board on the subject of "IAMU-WMU future academic collaboration in line with IMO Secretary-General's comment". The outcome of that meeting included the following:
1. IAMU will make available to WMU, a database of potential visiting professors and other academic staff who can support teaching activities as well as research activities such as supervision of dissertations leading to postgraduate academic degrees;
 2. Upon request, WMU will be able to access the IAMU's Maritime Academic Resource Database (MARD), which contains qualifications, experiences and specialization of each academic staff at IAMU member universities, in order to seek appropriate candidates for a visiting professor or a supervisor;
 3. After finding appropriate candidates, WMU or its specialised committee can select the most qualified candidate and appoint him/her as a visiting professor or a supervisor based on the academic standard set by WMU; and
 4. Since most of the professors in IAMU member universities are authorised as a supervisor of doctoral dissertations by each national government, WMU will be able to keep a high standard on its education and research activities.
- 4.5.11 IMO envisages engagement with the IAMU member universities in 31 countries to increase its outreach through their training of maritime experts who understand the governance and policy issues underpinning IMO concerns via interaction with WMU. If each of the IAMU member universities can be defined as an information terminal for each country, IMO and WMU will be able to work together with IAMU to disseminate aims and policies agreed by the maritime nations of the world under the auspices of IMO.

4.6 Collaboration with UN system bodies

- 4.6.1 The option should be considered of inviting participants put forward by sister UN system bodies to attend relevant specialized courses at WMU, taking into account the availability of robust pedagogic systems in place at the University.
- 4.6.2 By introducing an expanded curriculum to cover ocean and maritime policy, WMU would represent an appealing environment for all ocean related UN system bodies to consider the opportunities WMU would offer for the education of students in their respective fields. Ultimately, WMU would evolve into a University which serves the entire UN dealing with the sustainable ocean: in the future one might envisage a virtual "World Ocean University." The beneficial financial impact of such a development would be considerable.

Section 5

Measures to strengthen financial sustainability

5.1 Expand fellowship providers

- 5.1.1 The Class of 2015, comprising 110 students, received 45 full fellowships from 15 fellowship providers who covered all the costs for those students who were selected by the donors from the list of academically cleared candidates.
- 5.1.2 In contrast to the self and government-funded students, since the fellowships are not tied to a particular recipient country, this category of funding has the additional benefit of allowing the University a greater degree of flexibility in the selection of the best candidates. By the same token, it provides the opportunity to conduct a selection process which ensures a wide geographical spread of students. This is in addition to the basic benefits of providing financial support to the University, and giving students from developing countries the opportunity to benefit from a WMU education.
- 5.1.3 An active campaign to identify potential new fellowship providers and thereafter encourage their collaboration with WMU will be key to the financial health of the University, supplemented by efforts to strengthen existing partnerships with fellowship donors so as to achieve, eventually, an overall increase of 10 fully-funded fellowships available annually.

5.2 Expand self-supporting students

- 5.2.1 Expanding the number of self-supporting students to WMU will yield two particular advantages. In the first instance, a more equitable mix of students from different levels of economic and maritime development can only serve to enrich the alumni networks in the future. The education of those students, side by side over the course of a 14-month programme, will undoubtedly foster greater harmonization amongst the world's current and future maritime leaders. It is that shared experience on the Malmö campus which will allow the alumni to learn how to work more closely together, in support of their national authorities and of the global shipping industry as a whole.
- 5.2.2 While this is a mechanism for assisting in globalization, it will also work to the benefit of enhancing the implementation of IMO policy worldwide. One of the prerequisites for this measure to be effective is the wider recognition of WMU degrees to enable alumni to progress towards higher research and doctoral studies in other countries.

5.3 Diversification of activities

- 5.3.1 The WMU Board of Governors recognized that considerable efforts had been made, by the University administration, to develop new revenue streams. Nonetheless, business development remains an area of potential growth which requires specialized advice on the strengthening of marketing and communications capabilities.
- 5.3.2 The PDCs, of which a record 40 were planned in 2014, are recognized as representing a valuable source of revenue for the University. The opportunity for WMU to meet the needs not only of maritime administrations but also of commercially based clients, by providing tailored pedagogic expertise on technical maritime subjects, could support a wider customer base and also generate additional income.
- 5.3.3 The Board of Governors recognizes that its positioning within the UN family confers WMU with a uniquely independent and commercially-neutral ethos. However, while that linkage with IMO is valuable, WMU's recognition as a postgraduate school needs to be complemented by stronger collaboration with peer institutions and by the increased involvement of its faculty in innovative research activities. The quality of the research outcomes would play a considerable role in securing the University's reputation as the key supplier, to industry, of top level maritime specialists.
- 5.3.4 However, as with all non-core activities, a stringent monitoring process should be applied to ensure the cost-effectiveness of any given research project undertaken by the University, into which realistic administrative and operational outlays should be factored before decisions are taken.
- 5.3.5 A potential new avenue for development lies in encouraging WMU alumni to return to their alma mater for short up-grading courses: the latter, aimed specifically at updating the knowledge base of past students, would also help to cement closer collaboration with the body of alumni while also providing a demand for "repeat training".
- 5.3.6 WMU could also expand the number of alumni conferences offered around the world, and focus on IMO's priority topics for specific regions, effectively engaging graduates and upgrading their knowledge through a mechanism different from the EPDC format.

5.4 Endowment Fund

- 5.4.1 An important consideration in providing a long term income stream to the Endowment Fund will be the structure and timetable of a dedicated fund raising campaign. The allocation of specific resource-mobilization responsibilities will be a key factor, possibly through the recruitment of a dedicated staff member with the appropriate network of contacts and with the specialized experience to deliver results against a programme of activities with correlated time lines. Such pre-identified quantitative objectives will go a long way towards reviewing the type of interim periodic "course correction changes" required to meet the stated objectives.

Conclusion

1. The WMU Board of Governors concluded that the expansion of WMU academic base to incorporate, inter alia, Ph.D. studies, distance learning, professional development courses and externally-funded research projects, delivered over 30 years of operation, had yielded substantive results which placed the University at the apex of postgraduate maritime education. Those developments had evolved within, and been shaped by, the regulatory context of IMO and of emerging priorities, in tandem with the fluctuations, within the shipping industry, of trade volume, trade routes, vessel size and port infrastructure (Section 2 of the Study refers).
2. The WMU Board of Governors also recognized that the evolving context of the shipping industry, in correlation with the new perspective of IMO's technical cooperation programme, would be the drivers for the University's growth over the coming decades: the way forward for WMU, and the core foundation of that growth, will be eight key strategies for financial sustainability, including:
 1. Education and fostering of the growth of maritime leaders in both developing and developed countries as a core mission of WMU;
 2. strengthening the teaching of maritime policy;
 3. expansion of the WMU scope to include ocean-related matters;
 4. strengthening the University research function for maritime policy and ocean subjects;
 5. exploring diversified activities for generating revenues;
 6. review of the current arrangement with national universities and exploring new ways of collaboration;
 7. exploring further collaboration with IMO, in particular in the field of Technical Cooperation; and
 8. establishment of an Endowment Fund.
3. Arising from the framework of above key strategies, the WMU Board of Governors identified a number of action points related to the implementation of specific short and medium-term objectives, as detailed under Section 4 of the Study, including :
 1. new optimum level of annual intake of students at the Malmö campus, taking into account the sources of funding available;
 2. revised academic staff requirements;
 3. changes to the curriculum;
 4. establishment of a Maritime and Ocean Policy Research Institute within WMU;
 5. new mechanism for collaboration with maritime universities and IAMU; and
 6. collaboration with UN system bodies.
4. Central to the attainment of these objectives, and key to the University's future growth, are the measures identified by the Study to strengthen WMU's financial sustainability (Section 5 of the Study refers):
 1. establishment of an Endowment Fund as the cornerstone of the University's financial sustainability;
 2. expansion of fellowship providers as a key pillar of financial sustainability;
 3. expansion of the number of self-funded students; and
 4. diversification of activities.
5. The timely execution of the eight key strategies, through the implementation of the short and medium-term objectives, will determine the results achieved in shaping WMU's approach to the future. Central to this is the ability of all stakeholders, notably the WMU faculty, to dispose of the resources to translate the objectives into successful realities.

Appendix I

Study Preparation Team (in alphabetical order of surnames)

Balkin, Dr. Rosalie, Assistant Secretary-General and Director (Rtd.), Legal Affairs and External Relations Division, IMO

Barchue, Mr. Lawrence, Director, Department for Member State Audit and Implementation Support, IMO

Bellefontaine, Professor Neil, Acting President, World Maritime University

Borromeo, Mr. Gerardo, Vice President of ICS and President of InterManager

Charalambous, Mr. Nicolaos, Director, Technical Cooperation Division, IMO

Dawicki, Mr. Eric, President, Northeast Maritime Institute, United States of America

Espinoza-Ferrey, Mr. J., Director, Administrative Division, IMO

Hermansson, Mr. Anders, Senior Adviser, Ministry of Enterprise and Innovation, Sweden

Karithu, Mrs. Nancy W., Director General, Kenya Maritime Authority, Kenya & Chairman of the IMO Technical Cooperation Committee

†**Kjerfve**, Professor Björn, President (Rtd.), World Maritime University

Lantz, Mr. Jeffrey G., Director, Commercial Regulations and Standards, United States Coast Guard, United States of America & Chairman of the IMO Council

Mahapatra, Mr. Ashok, Senior Deputy Director, Subdivision for Operational Safety and Human Element, Maritime Safety Division, IMO

Nakazawa, Dr. Takeshi, Executive Director, International Association of Maritime Universities, Japan

Ritchie, Professor William, Vice-Chancellor (Rtd.), Lancaster University, United Kingdom

Sekimizu, Mr. Koji, Secretary-General, IMO

Schröder-Hinrichs, Dr. Jens-Uwe, Professor, World Maritime University

Skaanild, Mr. Torben, Chairman, Executive Board, World Maritime University

Tansey, Mrs. Pamela, Senior Deputy Director, Technical Cooperation Division, IMO

Winbow, Mr. Andrew, Assistant Secretary-General and Director, Maritime Safety Division, IMO

Appendix II

High-level Advisors (in alphabetical order of surnames)

Andersson, Mr. Kent, Chairman of Malmö City Council, Sweden

Aymeric, Mr. Michel, Secretary-General, Secrétariat General de la Mer, France

Brady, Rear Admiral (Rtd.) Peter, Director General, The Maritime Authority of Jamaica, Jamaica

Carpenter, Ms. Wendy, President (Rtd.), SUNY Maritime College, United States of America

Chrysostomou, Mr. Andreas, Acting Director, Department of Merchant Shipping, Cyprus

Dawicki, Mr. Eric, President, Northeast Maritime Institute, United States of America

Dominguez, H.E. Mr. Arsenio, Ambassador, Permanent Representative of the Republic of Panama to IMO, Panama

Eisenhardt, Dr. William, President (Rtd.), California Maritime Academy, United States of America

Elmsäter-Svärd, Ms. Catharina, Minister for Infrastructure (Rtd.), Sweden

Ismail, Professor Abdel Ghaffar, President, Arab Academy of Science, Technology & Maritime Transport, Egypt

Kinney, Ms. Laureen, Acting Assistant Deputy Minister, Safety & Security, Ministry of Transport, Canada

Magsaysay Ho, Ms. Doris, President & Chief Executive Officer, Philippines

Nordseth, Mr. Andreas, Director-General, Danish Maritime Authority, Denmark

Olerskiy, Mr. Viktor, Deputy Minister of Transport, Ministry of Transport, Russian Federation

Peachey, Mr. Graham, Chief Executive Officer (Rtd.), Australian Maritime Safety Authority, Australia

Pourzanjani, Professor Malek, President & Chief Executive Officer, Netherlands Maritime Institute of Technology, Malaysia

Pyc, Ms. Dorota, Under-Secretary of State, Ministry of Infrastructure & Development, Poland

Sasakawa, Dr. Yohei, Chairman, The Nippon Foundation, Japan

Skard, Mrs. Ida, Director General, Ministry of Trade, Industry and Fisheries, Norway

Tan, Mr. Andrew, Chief Executive, Maritime & Port Authority of Singapore, Singapore

Trivedi, Mr. Vishwapati, Secretary (Rtd.), Ministry of Shipping, India

Valenzuela Bosne, Rear Admiral Ivan, Director of Maritime Security and Operations, Chilean Navy Public Affairs Directorate, Chile

Vassallo, H.E. Mr. Lino, Ambassador, Permanent Representative of Malta to IMO, Ministry of Foreign Affairs, Malta

Watson-Wright, Mrs. Wendy, Executive Secretary (Rtd.), Intergovernmental Oceanographic Commission, UNESCO

Woodman, Mr. Ian, Director of Maritime, International Security & Environment Group, Department of Transport, United Kingdom

Yang, Mr. Zan, Director General, Department of International Cooperation, Ministry of Transport, People's Republic of China

Yildirim, Mr. Binali, Member of Turkish Parliament, Minister of Transport and Communications (Rtd.), Turkey

Zepeda-Bermúdez, Mr. Pedro Pablo, Director General, Directorate General of the Merchant Marine, Mexico



World Maritime University, PO Box 500, S-201 24 Malmö, Sweden

www.wmu.se

Fax: +46 - 40 - 12 84 42

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