

Annex K-7

Strategic Partners

Letters of endorsement

American Bureau of Shipping (ABS)
Arab Women in Maritime Association (AWIMA)
Association of Women Managers in the Maritime Sector in Eastern and South Africa (WOMESA)
BIMCO
Cawthron Institute
Convention on Biological Diversity
Chalmers University of Technology
DHI
DNV GL
European Bank for Reconstruction and Development (EBRD)
Florida Institute of Technology
Golden Bear Facility (GBF – California State University Maritime Academy)
Global TestNet
Helsinki Commission-Baltic Marine Environment Protection Commission (HELCOM)
International Association of Maritime Universities (IAMU)
International Council for the Exploration of the Sea (ICES)
International Council of Marine Industry Associations (ICOMIA)
International Chamber of Shipping (ICS)
Institute of Marine Engineering, Science and Technology (IMarEST)
Intergovernmental Oceanographic Commission (IOC-UNESCO)
International Ocean Institute (IOI)
International Paint and Printing Ink Council (IPPIC)
International Union for Conservation of Nature (IUCN)
Korean Institute of Ocean Science and Technology (KIOST)
Korean Register (KR)
Kyung Hee University
Maritime Environmental Resource Centre (MERC - University of Maryland)
NACE International
National Institute of Water and Atmospheric Research (NIWA)
National University of Singapore
Pacific Women in Maritime Association (PACWIMA)
Port Management Association of West and Central Africa (PMAWCA)
Plymouth Maritime Laboratory (PML)
The Royal Institute of Naval Architects (RINA)



21 November 2017

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States
Andrew.hudson@undp.org

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

American Bureau of Shipping (ABS) is pleased to confirm its support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species.

We strongly believe that the GEF-UNDP-IMO GloFouling Partnerships Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

ABS considers to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,

James Bond
Director, Advisory Services
Global Engineering & Technology



March 4th, 2018

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

The Arab Women in Maritime Association (AWiMA) is pleased to confirm its support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species.

We believe that collaboration between our Association and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

AWiMA will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,

Wijdan Alsuhaybani
President – Arab Women in Maritime Association

Arab Women in the Maritime Association Secretariat

Tel : + (203) 5610022 Direct / +(203) 5622388/66 Ext: 1641 / **Fax** : + (203) 5610022 / **Cellular** : + (2) 010 99 88 2 650

secretariat.awima@yahoo.com

P.O.Box:1029 Miami, AWiMA Secretariat, Abo Qir Campus- Arab Academy for Science, Technology & Maritime Transport
ALEXANDRIA – EGYPT



Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
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United States

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Denmark
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VAT: DK 62 48 06 10

12-10-2017

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

BIMCO is pleased to confirm its support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We are convinced this is a timely project building on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme, which can enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling.

It is our understanding that one of the main objectives of this initiative is to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. It also complements the work BIMCO undertakes by participating in the development of IMO's ballast water management convention and guidelines and their implementation.

It should be emphasized that shipowners have a strong environmental as well as economic incentive to combat biofouling and we are very supportive of IMO's biofouling guidelines. We thus regularly inform our members about the guidelines and urge their implementation. International standards are essential and we always work to improve technical standards and solutions, which are both environmentally sustainable and effective.

We strongly believe that synergies between our ongoing initiatives and this proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together relevant stakeholders, which is something we believe to be crucial to put effective invasive species management systems in place.

BIMCO will endeavour to actively contribute to and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make an important contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours sincerely,



Lars Robert Pedersen
BIMCO Deputy Secretary General

cc. Jose Matheickal, IMO, jmatheic@imo.org

25 January 2018

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States of America

Dear Mr Hudson

ENDORSEMENT OF THE GEF-UNDP-IMO GLOFOULING PROJECT

Cawthron Institute is pleased to confirm its support for the GEF-UNDP IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via ships' biofouling, a principal vector for the international transfer of HAOP whose national and international management is only starting to become adequately addressed and managed.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by Cawthron Institute, a leading provider of biosecurity science and consultancy services in Australasia. Cawthron's current research activities around marine biosecurity and biofouling include the development of:

- improved approaches and protocols for sampling and characterising biofouling organisms on ships' hulls and within 'niche areas';
- cost-effective treatment tools and technologies for killing or removing biofouling in ships' internal pipework and niche areas;
- molecular tools for risk assessment and verification/validation of biofouling and ballast water treatment;
- treatment tools and protocols for preventing biofouling in aquaculture;
- biosecurity management plans (and evaluation of compliance) for commercial ships and specialised vessels and equipment contracted to undertake work overseas;
- policy frameworks for effecting domestic and international behavioural change that will translate into reduced transfer of HAOP via vessel movements; and

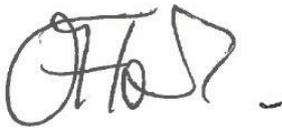
- novel and eco-innovative technologies for anti-fouling systems to prevent biofouling development and invasion risk of port, marina, aquaculture and urban environments
- training materials and resources for biofouling management for regulators, and the shipping and aquaculture industries.

We have an in-house team of more than a dozen internationally recognised biosecurity experts and work with a wide range of government agencies, industry clients, private research sector, NGOs and academic collaborators to better understand and manage the domestic and global risks posed by HAOPs. We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole.

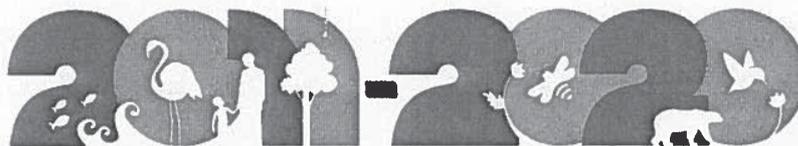
Cawthron Institute will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project. We would welcome to be included in your mailing lists and are available to discuss research priorities and approaches or to take part in GloFouling research or training activities.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours sincerely

A handwritten signature in black ink, appearing to read 'OF', followed by a horizontal line.

Dr Oliver Floerl
Team Leader – Biosecurity
Group Coordinator – Aquatic Health, Monitoring and Biosecurity



United Nations Decade on Biodiversity

Ref.: SCBD/SPS/DC/MPM/JSH/MW/86891

10 October 2017

Dear Mr. Hudson,

The Secretariat of the Convention on Biological Diversity is pleased to confirm its support for the GEF-UNDP-IMO GloFouling Partnerships Project as an initiative funded by the Global Environment Facility (GEF), and implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by harmful aquatic organisms and pathogens transferred via biofouling.

It is our understanding that the GloFouling Partnerships Project will assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, this initiative complements the work being undertaken under the Convention by its Parties and Secretariat to prevent the introduction of, and to control or to eradicate, alien species that threaten ecosystems, habitats or species in conformity with article 8h of the Convention.

We strongly believe that collaboration between our ongoing initiatives through the Inter-agency Liaison Group on Invasive Alien Species and the GloFouling Partnerships Project will allow for a more efficient management of invasive alien species in aquatic environments. It will also provide an opportunity to bring together and facilitate a dialogue among the relevant stakeholders. We believe that the GloFouling Partnerships Project will play an important role in achieving Aichi Biodiversity Target 9 on invasive alien species globally.

The Secretariat of the Convention on Biological Diversity will endeavour to actively contribute and participate in the work of the GloFouling Partnerships Project and look forward to a close cooperation.

Yours sincerely,

David Cooper
Deputy Executive Secretary

Mr. Andrew Hudson
Head, Water and Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy and Programme Support
United Nations Development Programme
New York City, United States of America
E-mail : andrew.hudson@undp.org

cc : Mr. Jose Matheickal, Mr. John Alonso, Mr. Antoine Blonce
E-mail : jmatheic@imo.org , jalonso@imo.org , ablonce@imo.org



Göteborg 180319

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

Chalmers University of Technology, Gothenburg, Sweden is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by Chalmers University of Technology such as several ongoing biofouling research projects targeting invasive species, antifouling paint efficacy and biofouling fuel penalty. In the Maritime Environmental Science group at Department of Mechanics and Maritime Sciences, we have developed a framework to describe biofouling pressure and invasive species which can be applied in different global regions. I) For characterization of species composition in biofouling and invasive species we use both traditional methods like microscopy as well as DNA -based methods. With high-throughput DNA sequencing all potentially invasive species, including larval stages and otherwise hidden microbes can be detected. II) We evaluate efficiency of antifouling paints by grade of fouling and leakage rates of toxic heavy metals. For this we use novel and quick methods and handheld easy to operate instruments. The salinity range covered are from fresh water to fully marine water.

III) With use of operational data from ships we model and calculate energy efficiency potential due to minimized hull fouling. Through hydrodynamic testing in lab with flow tank systems the drag increase caused by biofouling is achieved. For work with hull cleaning questions we have facilities for testing adhesion strength in marine organisms and conduct research targeted to optimize forces needed to remove fouling with low damage to paint during cleaning operation. In field we have a testbed for antifouling paint and hull cleaning, investigating a range of commercial paints as well as lab and full-scale hull cleaning devices including both brushes and waterjet systems. In our research we combine the fields of marine ecology, ecotoxicology and hydrodynamics and also perform environmental assessments of both biological and chemical pollution in regard to biofouling and hull cleaning.

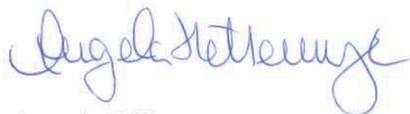
The Maritime Environmental Science group has an established stakeholder network including shipping-, antifouling paint- and hull cleaning companies and also work in several projects run by national and regional environmental authorities.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

Chalmers University of Technology will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,



Angela Hillemyr,
Head of Department Mechanics and Maritime Sciences
Chalmers University of Technology

cc. Jose Matheickal, IMO, jmatheic@imo.org



Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
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United States

DHI

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www.dhigroup.com

Ref: 11098077/2017.10.13/TMA Init: TMA Date: 13 October 2017

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

DHI is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative, which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. Furthermore, it is our understanding that the support confirmed by this letter does not bind DHI to provide resources to the GloFouling Partnerships Project. The initiative clearly complements the work being undertaken by DHI. As an example, we are currently developing a biofouling model with a global shipping company. The model predicts biofouling on commercial vessels available for charter globally and the aim is to reduce fuel costs and minimise the environmental impact.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,

A handwritten signature in blue ink, appearing to read 'Torben Madsen', is written over a light blue horizontal line.

Torben Madsen
Vice President, Ballast Water and Laboratories

cc. Jose Matheickal, IMO, jmatheic@imo.org

September 26th, 2017

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

DNV GL is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by DNV GL such as approval of biofouling management plans in relation to our Clean/Clean Design notation, approval of ballast water installation on board vessels and type approval of ballast water treatment systems (both USCG and IMO).

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

DNV GL will endeavour to participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,



Dag Sæle-Nilsen
Head of Section, Environmental Protection

cc. Jose Matheickal, IMO, jmatheic@imo.org



European Bank
for Reconstruction and Development

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

3 May 2018

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

The European Bank for Reconstruction and Development is pleased to confirm its support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it is in line with the objectives of the Memorandum of Understanding (MoU) between IMO and the Bank and complements the work being undertaken by our organization in promoting environmentally sound and sustainable development across our investments and technical cooperation activities, particularly in port and shipping sectors, where the Bank is a significant investor in our region.

We strongly believe that coordination between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.



The European Bank for Reconstruction and Development will endeavour to contribute and participate actively in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment and look forward to a close cooperation.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Alistair Clark', is positioned above the typed name.

Alistair Clark
Managing Director
Environment and Sustainability Department

A handwritten signature in black ink, appearing to read 'Sue Barrett', is positioned above the typed name.

Sue Barrett
Director
Head of Transport

cc. Jose Matheickal, IMO, jmatheic@imo.org



November 6, 2017

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

The Florida Institute of Technology, located in Melbourne, Florida (USA) is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by Florida Tech's marine and engineering programs, such as; extensive (past & current) research involving ecological studies and engineering solutions to invasive species transport. This work has been spear-headed by Professors Thomas D. Waite (engineering) and Kevin Johnson (marine ecology). Dr. Waite is well known as one of the pioneers of ballast water treatment for prevention of the transport of unwanted species, and his original concept of using "size" parameters as treatment standards was adopted by IMO in its Ballast Water Management Convention in 2004. Dr. Waite continues work on ballast water management issues, having just completed the final monograph (No. 23) in the GloBallast Monograph Series. (*Guidance on Best Management Practices for Sediment Reception Facilities under the Ballast Water Management Convention*). Dr. Waite has also done extensive research on control of biofouling in power plant condensers, utilizing novel chemical treatment schemes. Dr. Johnson, oversees a large funded research program (\$1.5M) in the areas of biofouling, benthic ecology, plankton dynamics, and invasive species. Biofouling work includes a special focus on the biofilms and microorganisms underlying the more notorious



macrofouling invertebrates. Research at Florida Tech has shown species-specific diatoms are associated with subtle differences in surface roughness. Diatoms are a key inhabitant of biofilms and can influence which macrofauna attach to surfaces. Thus, small differences in roughness can influence the composition of a macrofouling community. Additionally, Florida Tech is responsible for the first comprehensive survey of the macrofouling dominating Atlantic inlets from Georgia down into the Caribbean islands. A significant portion of the macrofouling species in this region is non-indigenous and invasive.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

Florida Institute of Technology will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,

A handwritten signature in black ink that reads "Monica H. Baloga".

Monica H. Baloga, Ph.D.
Senior Vice President and Provost

cc. Jose Matheickal, IMO, jmatheic@imo.org

14 February 2018

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

The Golden Bear Facility (GBF), part of the California State University Maritime Academy, is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work of GBF as an experienced testing facility that is dedicated to creating, promoting, and facilitating solutions to the maritime industry's current and future environmental challenges.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

The Golden Bear Facility will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,

William Davidson
Director,
Golden Bear Facility



Christopher Brown
Scientific Program Manager,
Golden Bear Facility



Nick Welschmeyer
Lead Scientist,
Golden Bear Facility

cc. Jose Matheickal, IMO, jmatheic@imo.org

Att. Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States



7th November 2017

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

Global TestNet hereby confirms its support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP), and executed by the International Maritime Organization (IMO). We believe that the GEF-UNDP-IMO GloFouling Project is a timely initiative to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP).

Global TestNet emerged in 2010 from a GloBallast Partnerships initiative and our members have been meeting yearly since then to discuss the testing of ballast water management systems for type approval. Recently, on September 8th 2017, our members agreed to widen our area of interest into biofouling issues, supporting shipping and all its stakeholders in the management of the whole risk associated with the transfer of HAOP.

Many of the Global TestNet members are already working on the application of the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species and we are expecting many new members to join our organisation in the years to come. Therefore, Global TestNet will keep improving the comparability in testing of technologies and evaluating procedures, which may be of use to the IMO and its member states.

Global TestNet is currently preparing to become eligible for NGO status with the IMO and will, regardless of the results of this application, offer its supports to the GEF-UNDP-IMO GloFouling Project within its legal and financial capabilities. As per Global TestNet by-laws, the members will decide on a case-by-case basis how to support the GloFouling project responding to requests from the IMO project team.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Best regards,

A handwritten signature in black ink, appearing to be 'Guillaume Drillet', with a stylized flourish extending to the right.

Guillaume Drillet (PhD)
Chairman of the Global TestNet
cc. Jose Matheickal, IMO, jmatheic@imo.org



21 December 2017

To: Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States via e-mail

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Partnerships Project

I am pleased to confirm HELCOM's strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

The project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP, as important as ballast water.

Transport in ballast tanks or on ships' hulls and spreading to neighbouring areas is believed to be accountable for nearly 60% of all the established species in the Baltic Sea¹. As many as 14 new non-indigenous species or cryptogenic species have appeared for the first time in the Baltic Sea during the period 2011-2015². Much progress has been achieved in HELCOM to support the ratification and harmonized implementation of the 2004 Ballast Water Management Convention by our Contracting Parties, nine Baltic Sea coastal states and EU. However, additional efforts are needed to progress towards HELCOM management objective "No introduction of alien species from ships" and to reach a good environmental status of the Baltic Sea.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken within a new international project entitled "Completing management options in the Baltic Sea Region to reduce risk of invasive species introduction by shipping (COMPLETE)" (2017-2020). The project addresses both ballast water and biofouling and is co-funded by EU and has a total budget of approx. 3,230,000 EUR.

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¹ HELCOM (2017): First version of the "State of the Baltic Sea" report – to be updated in 2018. Available at: <http://stateofthebalticsea.helcom.fi/pressures-and-their-status/non-indigenous-species/>

² HELCOM (2017). Trends in arrival of new non-indigenous species. HELCOM core indicator report. Online. Viewed 21 December 2017, <http://www.helcom.fi/baltic-sea-trends/indicators/trends-in-arrival-of-new-non-indigenous-species/>. ISSN 2343-2543

Institutes and authorities from seven Baltic Sea countries as well as HELCOM are partners in the COMPLETE project and will work together to develop a roadmap for harmonized biofouling management. The project deliverables related to biofouling are:

- a biofouling assessment protocol for leisure boats,
- collected data on biofouling potential on merchant ships and leisure boats and mapped risk areas for arrival and spreading of non-indigenous species,
- information on national biofouling regulations, cleaning procedures, and facilities,
- a catalogue of best practices inside and outside the region,
- guidance on evaluation of cost-efficiency of antifouling systems,
- identified benefits of biofouling management on ships' speed, fuel consumption, and emissions,
- a decision-support tool for selection of optimal antifouling systems and cleaning options,
- an interactive user-friendly map on hull-cleaning services.

Collaboration between our ongoing regional work and the proposed Project will be of mutual benefit and will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders across national, regional and global level; something we believe is crucial to put effective invasive aquatic species-management systems in place and thus prevent alien species from spreading between sea areas.

HELCOM will endeavour to actively participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project and to contribute to its successful implementation.

I am looking forward to our close cooperation.

Yours sincerely,



Monika Stankiewicz
Executive Secretary

cc. Jose Matheickal, IMO, jmatheic@imo.org



IAMU

International Association of Maritime Universities

16 October 2017

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

The International Association of Maritime Universities is pleased to confirm its strong support for the GEF-UNDP IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the initiatives of the IAMU, in particular the IAMU's research project programme. At a meeting of the International Executive Board of the IAMU held on 10 October 2017, your request was discussed and it was proposed that if it was of interest, the IAMU could include an extra theme relevant to the GloFouling Project in its 2018 call for research project proposals funded by the GEF-UNDP-IMO GloFouling Project. IAMU research projects are usually funded to a value of \$60,000 per project for one year. Please let us know if this would be of interest.

International Association of Maritime Universities

Secretariat

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International Association of Maritime Universities

We strongly believe that collaboration between our members' activities and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

Under these conditions, the IAMU will actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'T. Nakazawa', with a long horizontal flourish extending to the right.

Takeshi Nakazawa, Ph.D.

Executive Director,

International Association of Maritime Universities

cc. Jose Matheickal, IMO, jmatheic@imo.org

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Our Ref: B.4.p/WW/kr

11 October 2017

Subject: Letter of support for the “**GEF-UNDP-IMO GloFouling Partnerships**” project

Dear Mr. Hudson,

ICES is a global organization for enhanced ocean sustainability. Our mission is to advance the scientific understanding of marine ecosystems, and provide information, knowledge, and advice on the sustainable management of human activities affecting, and affected by, marine ecosystems.

The main objectives of the proposed project, ‘Building Partnerships to Assist Developing Countries Minimize the Impacts from Aquatic Biofouling’ (GloFouling Partnerships), will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships’ biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by the ICES/IOC/IMO Working Group on Ballast and Other Ship Vectors (WGBOSV) and ICES would be able to provide support through this group. ICES strongly believes that a collaboration with the proposed project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. ICES finds the proposed application of high importance and is ready to support and guide the work of its consortium.

As an intergovernmental organization ICES supports research initiatives from all its member states and responds to invitations to engage with any relevant infrastructure project from within the ICES community. ICES is transparent in its association and would also provide support to other applicants should they request such support from ICES.

The contact persons for the project will be the WGBOSV Chair, Sarah Bailey (Sarah.Bailey@dfo-mpo.gc.ca) and Wojciech Wawrzynski (Wojciech@ices.dk) in the ICES Secretariat.

Sincerely,

Wojciech Wawrzynski
Head of ICES Science Support Department



ICES
CIEM

International Council for
the Exploration of the Sea
Conseil International pour
l'Exploration de la Mer

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info@ices.dk | www.ices.dk



International Council of Marine Industry Associations

Brigade Pironlaan 132, B-1080 Brussels, Belgium
Please address all correspondence to London Office:

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ICOMIA
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MARINE INDUSTRY ASSOCIATIONS

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Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

22nd November 2017

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

The International Council of Marine Industry Associations (ICOMIA) is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species.

As such, it clearly complements the work being undertaken by ICOMIA who along with our international members have worked towards highlighting the need to actively manage biofouling from recreational craft, boat trailers and large yachts as well as ensure that correct decontamination procedures are agreed upon and do not negatively impact the environment, craft or marine engines.

President: J HUJU
Secretary General: U KLEINITZ
Hon. Treasurer: P METHVEN OBE

“the voice of the boating industry worldwide”
www.icomia.org

We are also actively engaged as a Stakeholder within the developments of the Maritime Strategy Framework Directive (MSFD) and the Good Environmental Status of EU Seas related to Invasive Species and the measures of reducing biofouling.

We currently also monitor EU Regulations on invasive alien species and the assessments within the Biocidal Products Regulation and how this may affect the use of anti-fouling paints within the recreational marine industry.

Together with organisations such as Sea Europe, CESA (Community of European Shipyards) and the European Confederation of Paint, Printing Ink and Artists' Colours Manufacturers Associations (CEPE) we are working with the European Commission and Member State Competent Authorities to provide a protective framework to minimise the impact of antifouling paints whilst maximising the benefits of environmental protection afforded by their use.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow global biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

ICOMIA will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Best regards



Udo Kleinitz
Secretary General
ICOMIA

cc. Jose Matheickal, IMO, jmatheic@imo.org



International Chamber of Shipping

Shaping the Future of Shipping

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Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
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New York, NY 10017
United States

28 September 2017

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

The International Chamber of Shipping (ICS) is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by ICS in which we strive for a regulatory environment which supports safe shipping operations, protection of the environment and adherence to internationally adopted standards and procedures.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

ICS will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,

A handwritten signature in blue ink, appearing to read 'J. Spremulli'.

Jonathan Spremulli CEng CMarEng MIMarEST
Technical Director

cc. Jose Matheickal, IMO, jmatheic@imo.org

Ref: GloFoulingIMarEST

Tuesday 26 September 2017

Mr. Andrew Hudson

Head, Water & Ocean Governance Programme

Global Environmental Finance Unit

Bureau for Policy & Programme Support, UNDP

FF-9100, 1 UN Plaza,

New York, NY 10017

United States



Dear Mr Hudson

Endorsement of the GEF-UNDP-IMO GloFouling Project

The Institute of Marine Engineering Science and Technology (IMarEST) is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by the IMarEST. The IMarEST has a well-established member-led expert group on Biofouling Management (BMEG) which provides a forum for exchange of practices and ideas.

To date the IMarEST has supported 3 workshops held in the ANZPAC region on Biofouling Management for Sustainable Shipping with the aims to identify, promote and develop effective and practical biofouling management strategies that will ensure shipping and other maritime industries can continue to underpin trade, security, and economic development with minimal environmental impact.

Additionally, the IMarEST made a voluntary commitment geared at driving implementation of Sustainable Development Goal 14 and its associated targets related to invasive species transfer via shipping. The objective of the commitment is focussed on the mitigation of impacts from harmful aquatic invasive species and pathogens that might be introduced via ships ballast water or on ships hulls by supporting the successful implementation of the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention) and uptake of the IMO Guidelines for the Control and Management of Ships' Biofouling.

International HQ: 1 Birdcage Walk, London, SW1H 9JJ • Asia-Pacific Office: 03-01 GSM Building, 141 Middle Road, Singapore, 188976

Tel: +44 (0) 20 7382 2600 • www.imarest.org

Registered Charity No. 212992 • Chief Executive: David Loosley • Founded 1889. Incorporated by Royal Charter 1933.

Licensed body of the Engineering Council (UK) and the Science Council

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As the first action within the voluntary commitment the IMarEST joined forces with International Paint and Printing Ink Council (IPPIC) to produce a template for a Biofouling Management Plan based on the IMO's Guidelines for the Control and Management of Ships' Biofouling to Minimize the Transfer of Invasive Aquatic Species, adopted in July 2011, which recommends that plans for managing biofouling are developed for each individual ship and that each ship shall also keep on board a biofouling record book to document the various management procedures that have been taken throughout the lifespan of the ship. Whilst IMO guidance details the information which is important to be recorded regarding fouling control, no formal template is provided in which to capture that information. The IMarEST and IPPIC template was designed to capture all relevant information prescribed in the IMO guidance with particular attention to coatings and is available free-of-charge to all stakeholders that wish to use it.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

The IMarEST will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project. We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours sincerely,

A handwritten signature in black ink that reads "David Loosley". The signature is written in a cursive, flowing style.

David Loosley

Chief Executive

cc. Jose Matheickal, IMO, jmatheic@imo.org



IMarEST Biofouling Management Expert Group

Background

The IMarEST Biofouling Expert Group was formed following the inaugural Australia /New Zealand /Pacific (ANZPAC) Workshop on Biofouling Management for Sustainable Shipping, held in Melbourne, Australia, in May 2013. The aim of the group was to assist and promote further discussions and international consultation on the development and implementation of practical, effective and globally consistent biofouling management measures for shipping.

The key issues identified were:

- Effective & practical biofouling management measures
- Biofouling management guidelines, requirements & regulations: present & future
- In-water cleaning of ship hulls: costs, benefits, impacts & regulation
- Regulation & scrutiny of new and existing fouling control coatings and antifouling biocides
- Costs & impacts of biofouling: ship energy efficiency & harmful aquatic species transfer
- Ship biofouling management: best practice guidance

Action Plan

The primary outputs from the BMEG are proposed to be a series of concise issues/information papers (maximum 20 pages) to collate current information and offer independent perspectives on the important biofouling management issues described below. Where relevant, these documents will be submitted to MEPC as information papers to support the uptake of the Biofouling Guidelines, and/or further developed for publication as industry reports or in scientific journals. In addition, one proposal is to form a specialist advisory sub-group. The issues to be addressed are:

Issue 1: Environmental, economic and social impacts from introductions of marine non-indigenous species (NIS) associated with vessel biofouling

Long-established views on the significance of, and the clear evidence for, environmental, economic and social impacts of marine NIS, and the justification for regulatory action and a global response have recently been questioned in the non-scientific literature and at industry meetings. In order to further justify efforts to minimise introductions of NIS through biofouling management and other means, a sound evidence base is required, if indeed it exists. Without a robust and effectively communicated evidence base, achieving further academic, industrial and political support in this area will be challenging.

Issue 2: Ship biofouling management and in-water cleaning: guidance, rules and regulations

For the vessel operator, the guidance, rules and regulations governing biofouling management are globally inconsistent, fragmented and un-clear. In New Zealand, Australia and California regulations have been introduced, or are proposed, that address vessel biofouling and, similarly, Australia and New Zealand have restrictions on in-water cleaning. The likelihood of effective and efficient biofouling management occurring would be increased if a global index of current and pending regulation were produced. This resource would enable operators to quickly identify which rules and regulations are relevant to their operations and allow them to budget effectively and plan for biofouling management. This resource, if appropriately distributed, would also remove the excuse of not performing responsible biofouling management due to a lack of information.

Issue 3: The balance between the efficacy and environmental impact of biocidal antifouling coatings for the global fleet

There is currently debate between regulatory bodies, environmental protection organisations and the manufacturers of antifouling coatings and biocides about the environmental effects of copper and other antifouling biocides, once disassociated from antifouling coatings. In regions including the EU and the US, this concern has led to scrutiny and review of permissible environmental biocide concentrations, and development of enforceable regulations to ban or restrict the use of some antifouling paints or specific biocides.

Restrictions on environmental copper concentrations and a reduction in the number of permissible biocides available for use in antifouling coatings could ironically result in unintentional negative environmental impacts by rendering antifouling coatings less effective. This consequential reduction in coating efficacy could result in more biofouling on ships, increased fuel consumption and consequently an increase in greenhouse gas emissions together with the increased risk of translocation of NIS.

Achieving an optimum balance between these two priorities is of immediate concern to the coatings industry, but moreover has far reaching environmental implications.

Issue 4: Biofouling management policy text review forum

Policy makers at the 2nd ANZPAC workshop suggested that individuals writing new policy documents could benefit from the collective knowledge within the BMEG. It was noted that new policy documents were frequently hampered due to a lack of the unique combination of technical and legal expertise required to deliver effective and practical policy. Both of these skill sets exist within the BMEG and could be applied to improve the effectiveness and practicality of new policies concerning biofouling management.

Issue 5: New technologies and modified ship hull designs.

Effective biofouling management is frequently hampered by a lack of suitable technologies such as husbandry compatible coatings, environmentally acceptable in-water cleaning technologies, and hull and niche designs that promote, rather than minimise, biofouling establishment and growth.

The development of new technologies is slow (approximately 7 years for a new antifouling coating) and the lead time required to modify new-build hull design has been estimated by the group at approximately 20 years. However, unless clear incentives are rapidly presented to industry, the development of suitable technologies and designs to enable efficient biofouling management will be delayed, making implementation of IMO biofouling management guidelines even more challenging.

Issue 6: Ship biofouling management: a best practice guide

Effective biofouling management on a vessel requires a suite of technologies and practices suited to the design and operational characteristics of that vessel. The relative efficacy and optimal application of these is often unclear and commercially driven. Maximum environmental and cost benefit would be achieved if operators had a clear best practice guide to enable them to quickly select the most effective and appropriate methods to both optimise vessel performance and comply with any relevant regulations. This guide would also aid in the preparation of Biofouling Management Plans consistent with the IMO Guidelines.

Drafted by: John A Lewis, Co-Chair, 27 February 2018.



INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
COMMISSION OCÉANOGRAPHIQUE INTERGOUVERNEMENTALE
COMISIÓN OCEANOGRÁFICA INTERGUBERNAMENTAL
МЕЖПРАВИТЕЛЬСТВЕННАЯ ОКЕАНОГРАФИЧЕСКАЯ КОМИССИЯ
اللجنة الدولية الحكومية لعلوم المحيطات
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Ref : IOC/VR/18.024/HE/ss

29 January 2018

Subj.: Endorsement of the GEF-UNDP-IMO GloFouling Project

Dear Mr Hudson, *Audy*

The IOC-UNESCO is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by the IOC-UNESCO such as the work within the ICES-IOC-IMO Working Group on Ballast of Ships and other Vectors (WGBOSV) and our engagement in biodiversity issues. In particular we see a potential for the WGBOSV to both contribute to the project and be used by the project to address complementary Terms of Reference, deliver reviews of specific issues, take on tasks in the development of manuals and guides. We may also explore using the IOC capacity development platform Ocean Teacher for training activities as we have a longstanding experience and track record in capacity development including e-learning platforms. It may also be relevant to investigate if the project could use the OBIS data platform to access information, as well as provide new data on the distribution of harmful species, following international standards and protocols.

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
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United States

.../...

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The IOC-UNESCO will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours sincerely,



Vladimir Ryabinin
Executive Secretary, IOC



Mr. Andrew Hudson

Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

October 4, 2017

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

The International Ocean Institute (IOI), headquartered in Malta, is pleased to confirm its strong support for the GEF-UNDP IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by the IOI such as our current capacity development and training programmes on ocean governance which are offered in several countries on an annual cycle and which provide knowledge to practitioners on these and similar topics, including other programmes of the IMO and the UNDP.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

The IOI will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Sincerely,


Antonella Vassallo
Managing Director

CC: Jose Matheic, IMO, jmatheic@imo.org
Awni Behnam, Honorary President of IOI
Peter Leder, Treasurer, IOI Board of Governors



IPPICSM
International
Paint & Printing
Ink CouncilSM

Administrative Office
901 New York Avenue, N.W.
Suite 300 West
Washington, D.C. 20001
Phone: +202 462-6272
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E-mail: secretariat@ippic.org

10 April 2018

Dr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Dear Dr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

The International Paint and Printing Ink Council (IPPIC) is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP), and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work IPPIC has previously undertaken concerning the topic of biofouling management, including developing a template for the completion of a biofouling management plan, which IPPIC, along with IMarEST, has presented at the IMO.¹ This template has subsequently been endorsed by key regulatory agencies, including California and New Zealand. IPPIC members also undertake extensive research and development efforts to develop and improve key antifouling technologies. These efforts provide tangible environmental benefits, both by averting the introduction of problematic invasive species which might attach themselves to the hulls of fouled vessels, and by increasing hull efficiency, which is a key contributor to the IMO's goal of reducing greenhouse gas emissions.²

¹ MEPC 70/INF.23 (18 August 2016).

² Antifouling coatings are estimated to provide the shipping industry with annual fuel savings of \$60 billion and produce reduced emissions of 384 million tonnes and 3.6 million tonnes, respectively for carbon dioxide and sulphur dioxide per annum. Source: "Final Report Summary - FOUL-X-SPEL (Environmentally Friendly Antifouling Technology to Optimise the Energy Efficiency

We strongly believe that collaboration between IPPIC along with its participating members and the proposed GloFouling Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put in place effective invasive aquatic species management systems.

IPPIC will endeavor to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

IPPIC is confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'H. Allen Irish', with a long horizontal flourish extending to the right.

H. Allen Irish
For the IPPIC Secretariat

cc. Jose Matheickal, IMO, jmatheic@imo.org



IUCN
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1196 Gland
Switzerland

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Mr Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

25 January 2018

Dear Mr Hudson,

Subject: Endorsement of the GEF-UNDP-IMO GloFouling Project

IUCN is pleased to confirm its support for the GEF-UNDP IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

IUCN believes that this project is a timely initiative, supporting the recent call for action made under the Honolulu Challenge on Invasive Alien Species by addressing a major pathway of introduction of marine invasive alien species. The initiative will also make much needed progress towards achieving Aichi Target 9 and the Sustainable Development Goals Target 15.8 on invasive species.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by IUCN and its Invasive Species Specialist Group (ISSG) such as the support it provides to countries, and others, through its decision support tools¹, databases² and related guidance³ to identify and prioritise invasive alien species and pathways of introduction, and develop measures to prevent their introduction and manage their impacts.

Collaboration between our on-going initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also

¹ E.g. Environmental Impact Classification of Alien Taxa - <https://www.iucn.org/eicat>

² E.g. IUCN Global Invasive Species Database (GISD) <http://www.iucngisd.org/gisd/> & Global Register of Introduced & Invasive Species & <http://griis.org/> - future developments include a Pathways Information Resource

³ <http://www.issg.org/publications.htm> - Future work includes guidance for island states to develop measures to address IAS

provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive marine species management systems in place.

IUCN will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project, in particular where our work aligns with the activities of the project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Sincerely,

A handwritten signature in black ink, appearing to read 'Inger Andersen', followed by a small comma.

Inger Andersen
Director General



Prof. Gi-Hoon Hong, President
Korea Institute of Ocean Science and Technology
385 HaeYang-ro, YonDo-gu, Busan 49111, Rep. of KOREA
T 051.664.3001, www.kiost.ac.kr

26 October 2017

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza, New York, NY 10017
United States

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

Korea Institute of Ocean Science & Technology (KIOST) is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via ship's biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

KIOST has continued its efforts to develop scientific knowledge and technological solutions in response to the emerging marine environmental problems. In relation to the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species (Biofouling Guidelines), KIOST has recently embarked a research project to develop a robust methodology to assess risk arising from the discharge of wastes during in-water hull cleaning activities, to develop biofouling resistant hull surface coating material, and to draft regulatory guidelines on the surface of ship hull and other potential areas of transferring HAOP for vessels used for international shipping for the upcoming 5 years.

KIOST will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, including global effort to achieve UN SDG 14 (Conserve and sustainably use the oceans, seas and marine resources for sustainable development).

Yours faithfully,

Gi-Hoon Hong, President of KIOST
cc. Dr. Kyoungsoon Shin, KIOST ksshin@kiost.ac.kr

KR Head office

36, Myeongji ocean city 9-ro, Gangseo-gu, Busan 49762, Republic of Korea

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Staff in charge : Shon Myung-Baek (070-8799-8258, mbshon@krs.co.kr)

To : Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Our Ref. No. : MET 4200- ~~560~~ -17
Your Ref. No. : -
Date : 14th December 2017

cc. : Jose Matheickal, IMO, jmatheic@imo.org

Job ID. No. : -

Subject : Endorsement of the GEF-UNDP-IMO GloFouling Project

Dear Mr. Hudson,

We are greatly pleased to confirm our strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. In such a project, it seems that we are able to assist training and technical support regarding development of survey technologies as well as to participate in a series of biofouling solution investment workshops/events, R&D Forum and specialized conference to exchange the latest information and knowledge on biofouling management and associated technologies.

We would appreciate it if you allow us to decide on a case-by-case basis how to assist and/or participate in the GloFouling Partnerships Project before participating in a project.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

KR will endeavor to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling

Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation. [End]

Yours very truly,

Korean Register of Shipping

A handwritten signature in black ink, appearing to read 'Jong-eun Choi', written in a cursive style.

*Choi Jong-eun / Executive Vice President of
Survey & Statutory Division*



11th Oct, 2017

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

Kyung Hee University, Seoul, Korea is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by Kyung Hee University such as initiatives or research project with experts.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

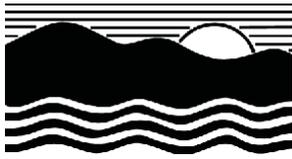
Kyung Hee University will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,

Prof. Kitae RHIE, Ph.D.
College of Sciences

cc. Jose Matheickal, IMO, jmatheic@imo.org



**University of Maryland
CENTER FOR ENVIRONMENTAL SCIENCE
CHESAPEAKE BIOLOGICAL LABORATORY**

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Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017, USA

March 23, 2018

Dear Mr. Hudson,

Support of the GEF-UNDP-IMO GloFouling Project

The Alliance for Coastal Technologies (ACT) and Maritime Environmental Resource Center (MERC) are leading a collaboration with the US Naval Research Laboratory (NRL), Smithsonian Environmental Research Center (SERC), California States Lands Commission (CSLC), Hawaii Department of Land and Natural Resources (Hawaii DLNR), US Maritime Administration (MARAD), and Maryland Port Administration (MPA), on a multi-year initiative to independently evaluate ship in-water cleaning and capture (IWCC) and in-water grooming (IWG) technologies designed to remove and capture fouling organisms. The specific goals of these efforts are to: (a) refine, customize and standardize procedures for evaluating the efficacy of IWCC and IWG cleaning technologies to remove biofouling from underwater ship surfaces, collect removed biological debris, and remove chemical contaminants from the effluent, (b) provide third-party evaluations of IWCC and IWG technologies, and (c) provide the rigorous, independent data on the performance of IWCC and IWG systems that can be used to apply for permitted commercial use in ports around the world.

I am pleased to support the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP), and executed by the International Maritime Organization (IMO). The GloFouling project is timely and will build on the foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via vessel biofouling, which is a significant vector for the transfer of invasive species.

Cooperation and coordination between our ongoing initiative and the proposed GloFouling Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something that is crucial to put effective invasive aquatic species management systems in place. I look forward to contributing and participating in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

Sincerely,

Dr. Mario N. Tamburri
Alliance for Coastal Technologies
Maritime Environmental Resource Center
University of Maryland Center for Environmental Science
tamburri@umces.edu



cc. Dr. Jose Matheickal, IMO

April 11, 2018

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017

Dear Mr. Hudson,

NACE International is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative that will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by NACE International with Technology Exchange Group discussions and meetings on the "Ecological Risks of Hull Fouling", and a Technical Group that recently finalized a NACE Standard titled "Pictorial Standard for Evaluating Degrees of Biofouling", SP21421-2017.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

NACE International will endeavor to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project. We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Sincerely,



Robert H. Chalker
Chief Executive Officer
NACE International



Buddy Reams
Chief Maritime Officer
NACE International

cc. Jose Matheickal, IMO, jmatheic@imo.org

13 October 2017

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza
New York, NY 10017
United States

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

The National Institute of Water & Atmospheric Research Ltd (NIWA) is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the research and policy advice that NIWA has undertaken for the New Zealand government and other national and international government and industry stakeholders. This has included projects to:

- Characterize the risks from vessel biofouling on international vessels⁽¹⁾
- Develop and evaluate inspection protocols for vessel biofouling^(2, 3)
- Evaluate options for managing vessel biofouling^(4, 5)
- Review and evaluate in-water vessel cleaning methods and their associated biosecurity and contaminant risks⁽⁶⁻⁸⁾
- Develop testing frameworks for biosecure in-water vessel cleaning methods⁽⁹⁾.

Some of this work contributed to the evidence-base used to develop the *IMO 2011 Guidelines for the Control and Management of Ships' Biofouling*. Subsequent work has supported development and implementation of the New Zealand *Craft Risk Management Standard for Vessel Biofouling* that will enter into force in 2018. NIWA also coordinates an international research collaboration with scientists in New Zealand, Australia, Canada and the USA who work on invasive marine species and their management. In 2016, we helped coordinate a workshop of 21 experts (scientists, engineers and regulators) in vessel biofouling from 15 institutions across the four countries (and Brazil) to discuss in-water cleaning technologies and vessel inspection protocols.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It

will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

NIWA will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,



Barbara Hayden, Chief Scientist Coasts & Oceans, NIWA

cc. Rob Murdoch, General Manager Research, NIWA

cc. Jose Matheickal, IMO, jmatheic@imo.org

Literature cited

1. Inglis GJ, Floerl O, Ahyong S, Cox S, Unwin M, Ponder-Sutton A, et al. The biosecurity risks associated with biofouling on international vessels arriving in New Zealand: summary of the patterns and predictors of fouling. 2010.
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3. Floerl O, Coutts A. Feasibility of using remote-operated vehicles (ROVs) for vessel biofouling inspections. 1 Client report. Christchurch: NIWA, 2011.
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7. Morrissey D, Woods C. In-water cleaning technologies: Review of information. 1 Client report. Wellington: Ministry for Primary Industries, 2015.
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30 October 2017

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

The Tropical Marine Science Institute (TMSI) at the National University of Singapore (NUS), is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by TMSI involving studies in the biology and ecology of alien marine invertebrates in the port waters of Singapore.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

TMSI will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,



Professor Wong Sek Man
Director, TMSI, NUS

cc. Jose Matheickal, IMO, jmatheic@imo.org

18 Kent Ridge Road, Singapore 119227
Tel: (65) 6516 5691 Fax: (65) 6776 1455
Website: www.tmsi.nus.edu.sg

Company Registration No: 200604346E





Compass of Innovation and Success

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Our ref: 01/2018MJL

08th March 2018

(“By email: andrew.hudson@undp.org”)

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Dear Mr. Hudson

RE: ENDORSEMENT OF THE GEF-UNDP-IMO GLOFOULING PROJECT

Happy International Women’s Day!

The Pacific Women In Maritime Association (PacWIMA) is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships’ biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by PacWIMA such as capacity building activities for women maritime professionals, networking and sharing information.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant

EXECUTIVE COMMITTEE

Chairperson Ms. Mavis Joseph-Logavatu – mjoseph@msaf.com.fj | Vice Chairperson Ms. Dinah Omenefa – domenefa@transport.gov.pg |
Coordinator Ms. Sidney Ikiua – Sidney.ikiua@mail.gov.nu | Public Relations & Communications Officer Ms. Jordanna Mareko – marekojordanna46@gmail.com |
Member Ms. Tanny Saepio – tsaepio@trimarinegroup.com | Member Ms. Kelela Tong – ktonga@infrastructure.gov.to

Email: pacwima@gmail.com Website: www.pacwima.org



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stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

PacWIMA will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours sincerely

MS. MAVIS E V JOSEPH-LOGAVATU
CHAIRPERSON

Cc: Antoine Blonce (ablonce@imo.org)

EXECUTIVE COMMITTEE

Chairperson Ms. Mavis Joseph-Logavatu – mjoseph@msaf.com.fj | Vice Chairperson Ms. Dinah Omenefa – domenefa@transport.gov.pg | Coordinator Ms. Sidney Ikiua – Sidney.ikiua@mail.gov.nu | Public Relations & Communications Officer Ms. Jordanna Mareko – marekojordanna46@gmail.com | Member Ms. Tanny Saepio – tsaepio@trimarinegroup.com | Member Ms. Kelela Tong – ktonga@infrastructure.gov.to

Email: pacwima@gmail.com Website: www.pacwima.org



O/Ref:71/18/SG/PMA

Date: 19th February 2018

Mr. Andrew Hudson

Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Dear Mr.Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

The Port Management Association of West and Central Africa (**PMAWCA**) is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by PMAWCA through its Network of Harbour Masters and Port Environment Focal Points to raise awareness and build technical capacity of relevant port and maritime sector operators for the effective implementation of the ballast water management Convention and its related instruments in particular, as well as ensure effective marine environment protection in general.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

PMAWCA will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,

Mr. Michael LUGUJE
SECRETARY GENERAL

cc. Antoine Blonce (ablonce@imo.org)

26 September 2017

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

Plymouth Marine Laboratory is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by Plymouth Marine Laboratory such as efficacy testing of antifouling formulations for ships hulls and propellers, bio-security assessments, in-water hull cleaning R&D, antifouling biocide assays, as well as participating on the IMarEST Biofouling Working Group.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

Plymouth Marine Laboratory will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,



Professor Stephen de Mora
Chief Executive

cc. Jose Matheickal, IMO, jmatheic@imo.org

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THE ROYAL INSTITUTION OF NAVAL ARCHITECTS

Chief Executive: Trevor Blakeley CEng FRINA FIMarEST FIMechE



Ref: Sec/IMO

5 Oct 2017

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017, United States

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

The Royal Institution of Naval Architects is pleased to confirm its strong support for the GEF-UNDP IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

The Institution considers that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is the Institution's understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. Such intention is clearly in accord with the Institution's international standing and membership, many of whom are active or concerned with this issue

It is considered that the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something which is crucial to putting an effective invasive aquatic species management systems in place.

The Royal Institution of Naval Architects will endeavour to actively contribute its collective expertise and where possible participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project. Such support is given in the confident expectation that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment.

Yours sincerely,

cc. Jose Matheickal, IMO, jmatheic@imo.org

19 March 2018

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

Women's International Shipping & Trading Association (WISTA) is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

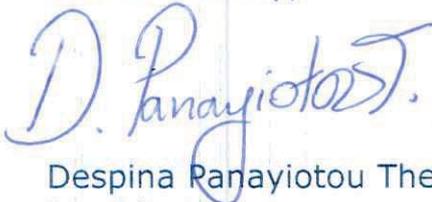
It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. We also understand that the project will decidedly contribute to the efforts for strengthening the role of women in the maritime sector, promoting gender equality and, most importantly, empowering women. As such, it clearly complements the work being undertaken by WISTA and our Vision to promote gender diversity in the maritime sector, empowering women to lead through their unique perspective and competencies, where gender diversity is key in providing a sustainable future for the shipping industry internationally.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

WISTA will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,



Despina Panayiotou Theodosiou
President
Women's International Shipping & Trading Association

cc. Antoine Blonce (ablonce@imo.org)

11 December 2017

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

The World Maritime University (WMU) is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

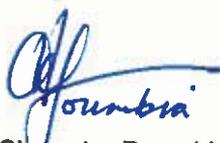
It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by WMU such as projects addressing biofouling issues and capacity-building activities on biosecurity incorporating policy, technology and environmental aspects of biofouling.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

WMU will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,



Dr Cleopatra Doumbia-Henry
President

cc. Jose Matheickal, IMO, jmatheic@imo.org



07 March 2018

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

Women in Maritime Asia (WIMA Asia) is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the VISION, MISSION AND GOALS of WIMA Asia specifically on the protection of marine environment.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.



WIMA Asia will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,

MERLE JIMENEZ-SAN PEDRO
President

March 5, 2018

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Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

Women in Maritime Philippines (WIMAPHIL) is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by WIMAPHIL such as our banner program on the marine environment protection known as **WIMaforMARINELIFE** promoted by our chapters all over the country.



Women in Maritime
Philippines

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

Women in Maritime Philippines will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,

MERLE JIMENEZ- SAN PEDRO
President

cc. Antoine Blonce (ablonce@imo.org)



"Think Maritime, Think Women"

**Association of Women Managers in the Maritime Sector
in Eastern & Southern Africa**

23 February 2018

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

The Association of Women Managers in the Maritime Sector in Eastern and Southern Africa (WOMESA) is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by WOMESA in its endeavour to integrate women in the mainstream maritime activities through partnership and collaboration with Development Partners. Achieving gender parity and sustainable development by 2030 no doubt requires stepping up efforts at all fronts.

..12

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

WOMESA will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Meenaksi Bhookhun', written over a faint, illegible stamp or background.

Meenaksi Bhirugnath-Bhookhun (Mrs)
Chairperson, WOMESA

cc. Antoine Blonce (ablonce@imo.org)

26 September 2017

Mr. Andrew Hudson
Head, Water & Ocean Governance Programme
Global Environmental Finance Unit
Bureau for Policy & Programme Support, UNDP
FF-9100, 1 UN Plaza,
New York, NY 10017
United States

Dear Mr. Hudson,

Endorsement of the GEF-UNDP-IMO GloFouling Project

World Sailing is pleased to confirm its strong support for the GEF-UNDP-IMO GloFouling Partnerships Project, an initiative funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the International Maritime Organization (IMO).

We believe that this project is a timely initiative which will build on the solid foundation of the GEF-UNDP-IMO GloBallast Partnerships Programme to enable developing countries to address the risks posed by Harmful Aquatic Organisms and Pathogens (HAOP) transferred via biofouling, which is considered to be another vector for transfer of HAOP as important as ballast water.

It is our understanding that one of the main objectives of this initiative will be to assist participating countries to build their capacity to implement the IMO 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species. As such, it clearly complements the work being undertaken by World Sailing as part of our Sustainability Agenda 2030 which is due to be launched in November. We have a network of members across the world and the impact on biodiversity through biofouling is one of the issues that we are focusing on. By setting ourselves ambitious targets and milestones we hope to collaborate with the GloFouling project on collaborative research and scalable solutions.

We strongly believe that collaboration between our ongoing initiatives and the proposed Project will allow biofouling issues to be better addressed within the context of invasive species management as a whole. It will also provide an opportunity to bring together all relevant stakeholders, something we believe is crucial to put effective invasive aquatic species management systems in place.

World Sailing will endeavour to actively contribute and participate in the work of the GEF-UNDP-IMO GloFouling Partnerships Project.

We are confident that the GEF-UNDP-IMO GloFouling Partnerships Project will make a positive contribution to the global effort to protect the marine environment, and look forward to a close cooperation.

Yours faithfully,



Dan Reading
Sustainability Programme Manager

cc. Jose Matheickal, IMO, jmatheic@imo.org