

Ref : DMA/AIFI/97/C 968

Date: 01/12/2018

Dear Captain
Good Day,

Ref to IMO resolutions regarding integration of necessary **cyber security** measures within the **Safety Management System** (SMS) of the Company and in order to assess vessel's present situation, you are kindly requested to carefully review and discuss all items of attached list during vessel's next Consolidated Meeting and ensure that all precautionary measures to avoid the threat are strictly followed on board.

You are kindly requested to revert any relevant comments regarding each and every item, such as list of concerned equipment, existing threats, possible remedies, etc...by return for our consideration.

Surely, your active participation in this step, will ensure vessel's safe and smooth operations in future.

You are requested to confirm receipt , discuss the contents in the next consolidated meeting on board and keep a copy in DA-11 file.

Best Regards,

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Cyber Security Plan for Vessels Computers,

No.	Asset Type	Type of Cyber threat	Cause
1	Email Server Computer	Virus infection	Infected Mail , Removeable Media, Network
2	NTM/Charts Computer	Virus infection	Infected Mail , Removeable Media, Network
3	Load Master Computer	Virus infection	Removeable Media
4	Other Network Computers	Virus infection	Infected Mail , Removeable Media, Network
5	V-SAT laptop	Virus infection	Removeable Media
6	Satcom-C	Virus infection	Removeable Media
7	ECR Computer	Virus infection	Removeable Media
8	VDR	Virus infection	Removeable Media
9	AIS	Interception	Outside intruder
10	GNSS/GPS	Interception	Outside intruder
11	MOP , Conning display	Virus infection	Removeable Media
12	ECDIS	Virus infection	Removeable Media

13	Radar	Virus infection	Removeable Media
14	Mf/Hf Telex	Virus infection	Removeable Media

1- Examples for **Removeable medias** are: Floppy/USB/CD/DVD/Lap top/mobile/Extern:

2- Physical protection means to limit access of **INTRUDERS** to the systems **BOTH Physic**

3- **INTRUDERS** include but not limited to unauthorised crew members or ship staff from Immigration, Service engineers, Workshops, Office personnel, Etc, ...

Communication and Navigational Equipment

Best precautionary measures to <u>avoid</u> the threat	If the cyber attack is successful, <u>remedy to eliminate</u> the damage	Remarks
Crew awareness & Physical protection	By ship's staff/Service engineer: 1- Operating Sytem to be updated, and 2-Anti-virus to be updated and computer to be scanned	
Crew awareness, Physical protection & use of dedicated USB stick	By ship's staff/Service engineer: 1- Operating Sytem to be updated, and 2-Anti-virus to be updated and computer to be scanned	
Crew awareness, Physical protection & use of dedicated USB stick	By ship's staff/Service engineer: 1- Operating Sytem to be updated, and 2-Anti-virus to be updated and computer to be scanned	
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Crew awareness & Physical protection	By service engineer	
Crew awareness & Physical protection	By service engineer	
Crew awareness, Physical protection & use of dedicated USB stick	By service engineer	
Crew awareness	N/A	
Crew awareness	N/A	
Crew awareness & Physical protection	By service engineer	
Crew awareness, Physical protection & use of dedicated USB stick	By service engineer	

Crew awareness & Physical protection	By service engineer	
Crew awareness & Physical protection	By service engineer	

al hard drive/Camera SD card, etc

ally and by password protection

ilies, Stevedors, Pilot, Custom,