User-Operating Manual

IHM Green Server (IGS) for customers

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(Complete version)

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3.0	2016-02-01	Revision of content
4.0	2016-10-01	Revision of content
5.0	2018-05-25	Revision of content
6.0	2019-09-19	Revision of content

OVERVIEW

1 INTRODUCTION

The IHM Green Server, hereafter referred as IGS, is a web-based application for preparation and maintenance of the Inventory of Hazardous Materials (IHM) established by DNV GL for the benefit of its customers.

By using IGS, IHMs can be prepared and maintained based on the EU Regulation on Ship Recycling (EU SRR) No. 1257/2013, IMO requirements of the "International Convention for safe and environmentally sound recycling of ships" (Hong Kong Convention) (SR/CONF/45), "Guidelines for the Development of the Inventory of Hazardous Materials" Resolution MEPC 269(68), and EMSA Guidance on the Inventory of Hazardous Materials.

The structure of IGS follows the fleet and ship structure. For each ship the opening screen shows general data of the vessel such as type, IMO number, building yard, flag, owner, manager, etc. Each ship is structured in 3 clusters; processed materials, machinery & equipment and systems. The IGS provides an overview about the conducted IHM inspections and a list of material declarations. The various information can be edited through the system. It enables the customer to add or delete locations as well as to add or delete material declarations to download an updated IHM at any time. For reviewing purposes the user and initiator of changes and updates is continuously traced. The user is working in the system by using an individual log-in, which ensures data safety and access to the system only for the respective user. Additionally, the IGS is compatible with many other software through different interfaces.

2 GENERAL

2.1 System requirements

IGS is operated through a web browser.

Supported Browsers
Microsoft Internet Explorer 10 or higher
Firefox 4.0 or higher

All browsers must allow session cookies and JavaScript must be enabled (default settings of supported browsers).

2.2 Security and data backup

Access to IGS is provided via a Hypertext Transfer Protocol Secure (https). Therefore, the data being transferred cannot be read or modified by third parties. Backups will be made daily and saved for 30 days.

2.3 Data model of IGS

Although knowledge of the data model is not necessary for operational use of IGS, a brief explanation of it is given here to improve understanding of the required work steps.

As mentioned above, IGS is web-based application working with data objects. The ship, its components and its locations must be mapped onto the data model of IGS. For example, if someone wants to inspect the main engine of a ship, which is located in the engine room, then he must create a ship data object for the ship, a component data object for the main engine and a location data object for the engine room. Furthermore, data objects must be associated to one another. Regarding the example, the data object representing the engine room must refer to the data object representing the main engine.

The main target of the whole process is the preparation and maintenance of an IHM. An IHM requires the information what kind of hazardous material is contained in what component and where on the ship is that component installed. In terms of IGS, an IHM is based on material declaration data objects containing information about present hazardous materials. These objects are associated with component data objects representing components installed on the ship. Component data objects again are associated with location data objects representing zones and compartments. Hence, an IHM can be automatically created by IGS using the data stored in data objects and their associations to other data objects.

2.4 User profiles and user rights

In IGS there are different user profiles are defined such as; shipyard admin, shipowner admin, HazMat Expert, shipyard user, shipowner user and DNV GL Admin. Shipyard admin, shipowner admin and HazMat Expert profiles have almost the same user rights and same actions in their IGS user interfaces. The only difference is that shipowner can see the all ships under a fleet, where shipyard admin and HazMat Experts can only see the ships that they are assigned to.

Below some information is provided regarding the working processes of different user profiles.

2.4.1 IGS for shipyards

For ships under construction the IGS focuses on the documentation of the hazardous materials contained in all components and materials used for the construction of a new building. The documents required are the Material Declaration (MD) and the Suppliers Declaration of Conformity (SDoC). For the preparation of an IHM it is necessary to compile all required data of the components and materials used for the construction of the new building in the form of MD and SDoC.

Due to that for ships that are under construction, shipyards mainly work in inbox of IGS for the IHM preparation. Inbox is the place to upload MDs and SDoCs for materials and components installed on board. This data is used to set up the configuration of the new building in the IGS, by adding attributes to materials and components such as installed location and the quantity on board the ship. If the shipyard would like to do some random sampling check, then inspection feature of IGS should be used.

2.4.2 IGS for shipowners

According to the HKC the shipowner is obliged to prepare and maintain the Inventory of Hazardous Materials (IHM) over the entire life time of the ship. For the maintenance of the IHM it is necessary to maintain the configuration of the ship, by adding, exchanging and deleting build in components and materials of the Ship in form of MDs and SDoCs as well as to add or change information about the components and materials, e.g. installed location and quantity.

2.4.3 IGS for HazMat experts

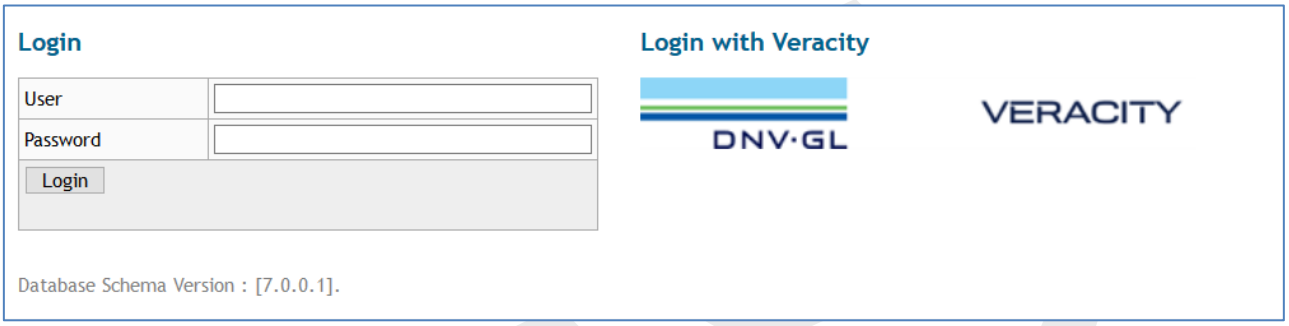
For ships in operation, if the IHM is not prepared during the new building phase, it should be prepared based on inspections and document checks if available. If documents are available in the form of MDs and SDoCs, those should be uploaded into the inbox. For the rest an inspection is needed in the form of sampling and visual check. An inspection is created in IGS, which contains information about the document analysis, the conducted check procedure (visual check, sampling check) and the check results (qualitative or quantitative judgement about presence of hazardous material in a component). The preparation of a Visual & Sampling Check Plan (VSCP) is required for the inspection. The VSCP contains entries about the document analysis results, the on-board inspection and the results of the analysis.

2.5 Login and logout

2.5.1 Log-in into IGS

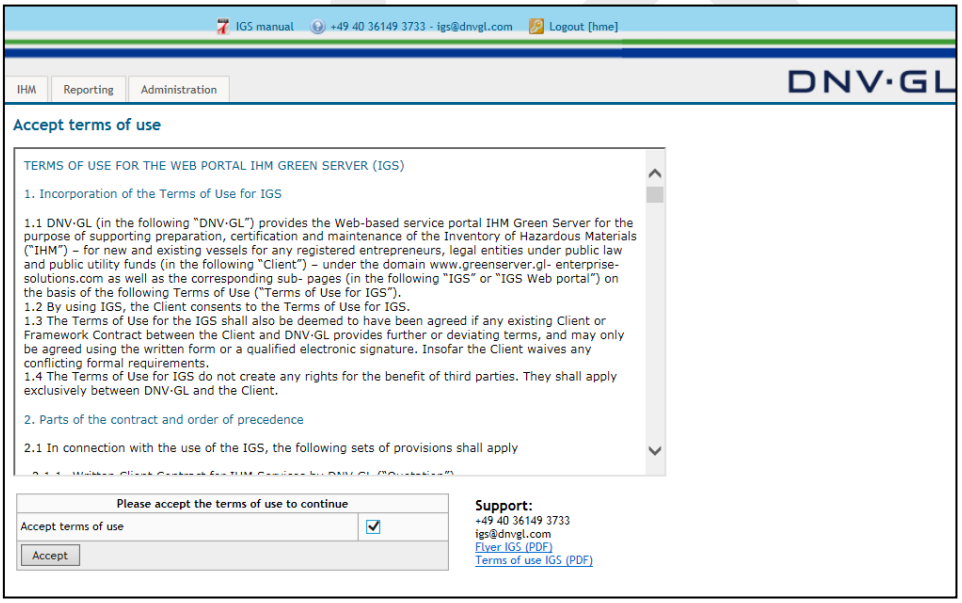
To use IGS, a user ID and a password should be provided for the specific account to the applicant by DNV GL Admin.

After receiving the IGS log-in information the applicant can reach their account in IGS directly via the URL https://nigs.dnvgl.com/account_number the login page of IGS then appears.



Enter the User ID in the "User" field and the personal password in the "Password" field. After that press enter or click on the "Login" link.

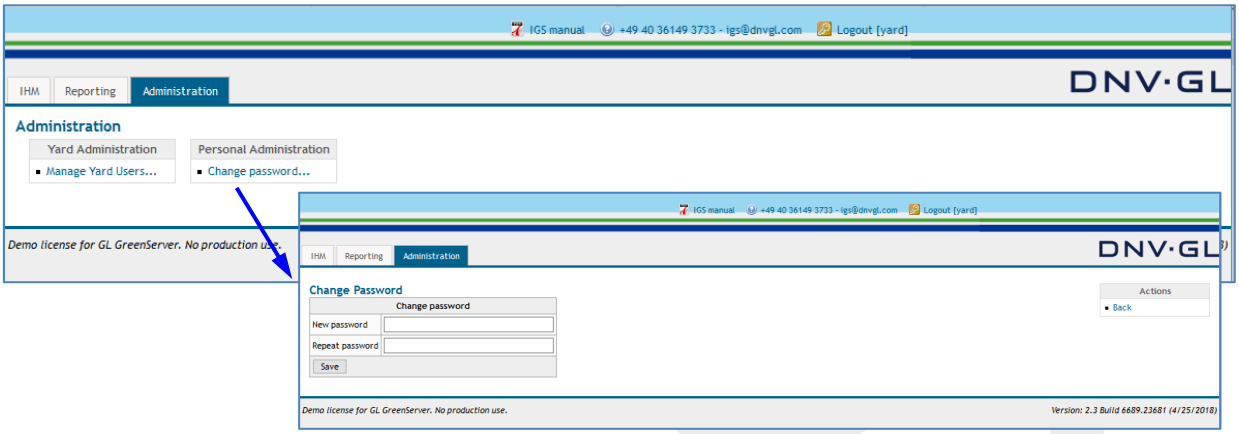
Following to access the IGS database accept the legal terms of use. Tick off the "Accept terms of use" box and confirm by clicking on the "Accept" link.



Finally click on "Accept".

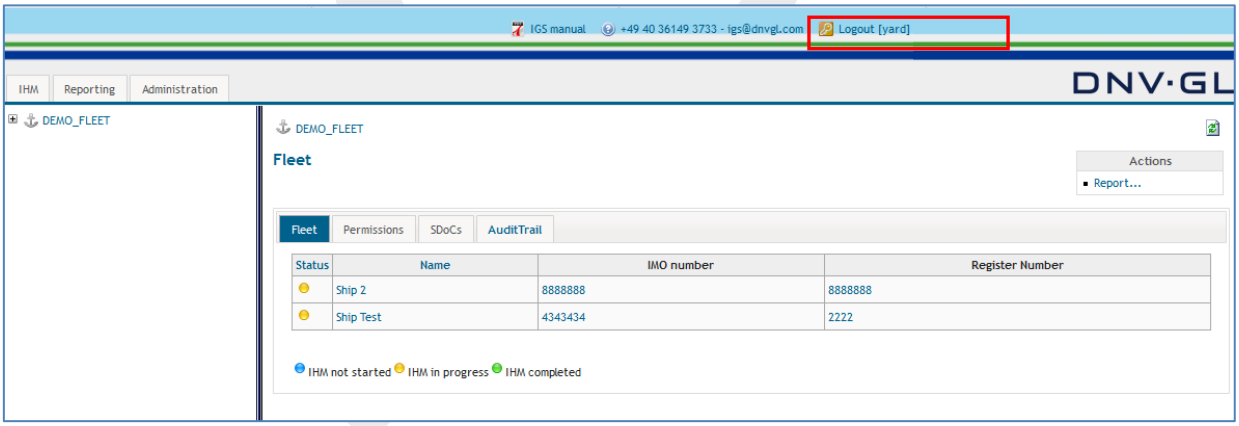
2.5.2 Change password

It is recommended to change the password, the first time the user logged into IGS. Select the "Administration" tab on the main navigation bar on top of the screen to change the password. A new page appears in the main view containing a link "Change password…".



The new changed password has to be filled in twice, in the "New Password" and the "Repeat password" fields. Finally, click on "Save" to confirm the new password. The new password remains valid until the user changes it again or the user access rights expire.

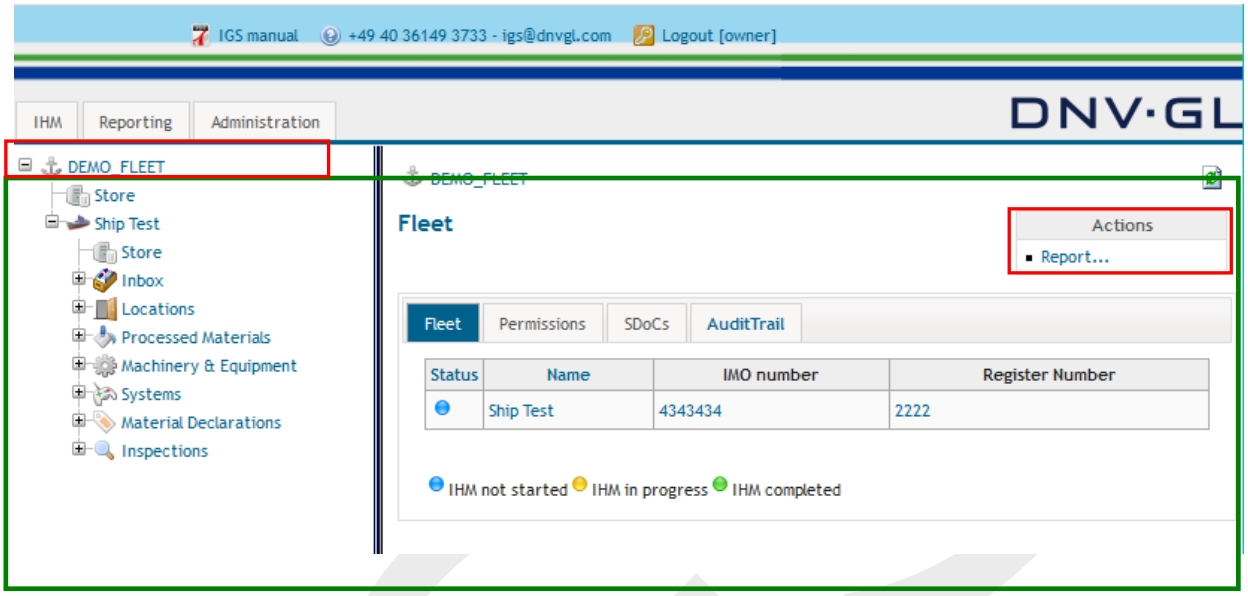
2.5.3 Logout of IGS



To logout of IGS system, select the "Logout" link located in the right top corner of the header. Furthermore, closing the browser or being inactive for more than twenty minutes will automatically log you out.

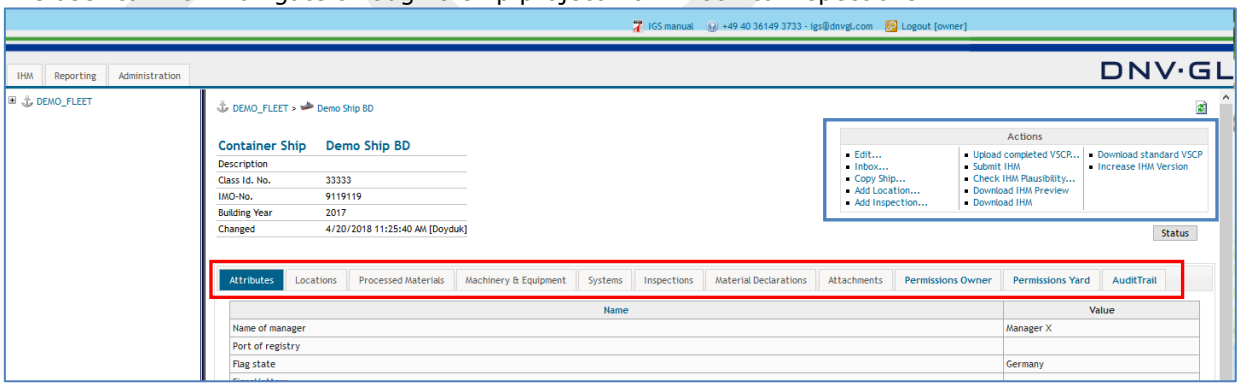
2.6 Layout of IGS

After successful log in, the user will be automatically redirected to the start page. The layout of a typical IGS screen is shown in the figure below. On top (red marked) is the "main navigation bar" from which the user gains access to IHM, reporting and administration tabs. The green marked area is the "main view". If the user selects one of the tabs of the main navigation bar, the associated page will be shown in the main view.



The main view is subdivided into two parts, a navigation tree on the left side and the fleet or ship project view on the right side. There will be an actions box on the upper right corner of the fleet or ship project view. The navigation tree on the left side can be used to navigate through the fleet or the specific ship project directly. Clicking on a node "+" of the navigation tree will open the specific view on the corresponding object in the right side of the screen, as shown in the figure below.

The user can now navigate through a ship project from inbox to inspections.



The right side shows the fleet or ship project view. It contains a second navigation bar (red marked) from which the user can toggle between specific topics, e.g. Attributes, Locations, Systems, Inspections, etc. of the ship project. For Example, by clicking on the "Attributes" tab of the navigation bar a table listing these ship attributes is shown.
Furthermore, each view of the navigation tabs contains also an actions box (blue marked) in the upper right corner.
All possible actions on a navigation tab are listed in that Action box, e.g. "Create Ship…", "Add Location…", "Add Inspections…", etc. allowing the user to work on the ship project or navigate through the ship functions.

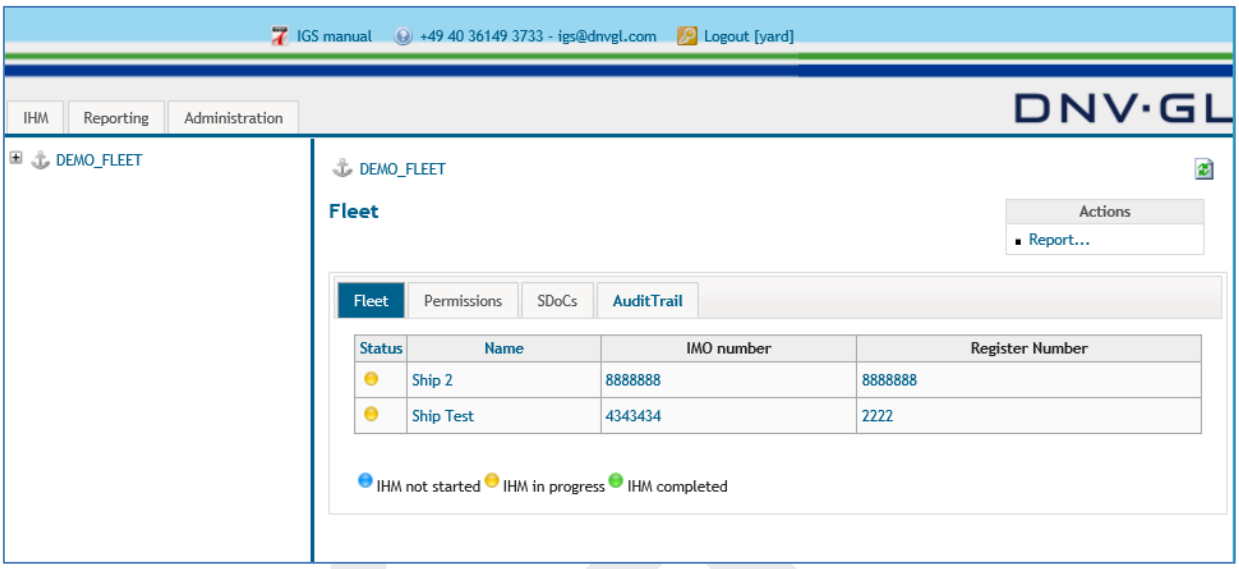
2.7 Fleet status overview

The fleet status overview follows a clear status indication. As descripted below:

The status green indicates that the IHM is complete and accepted.

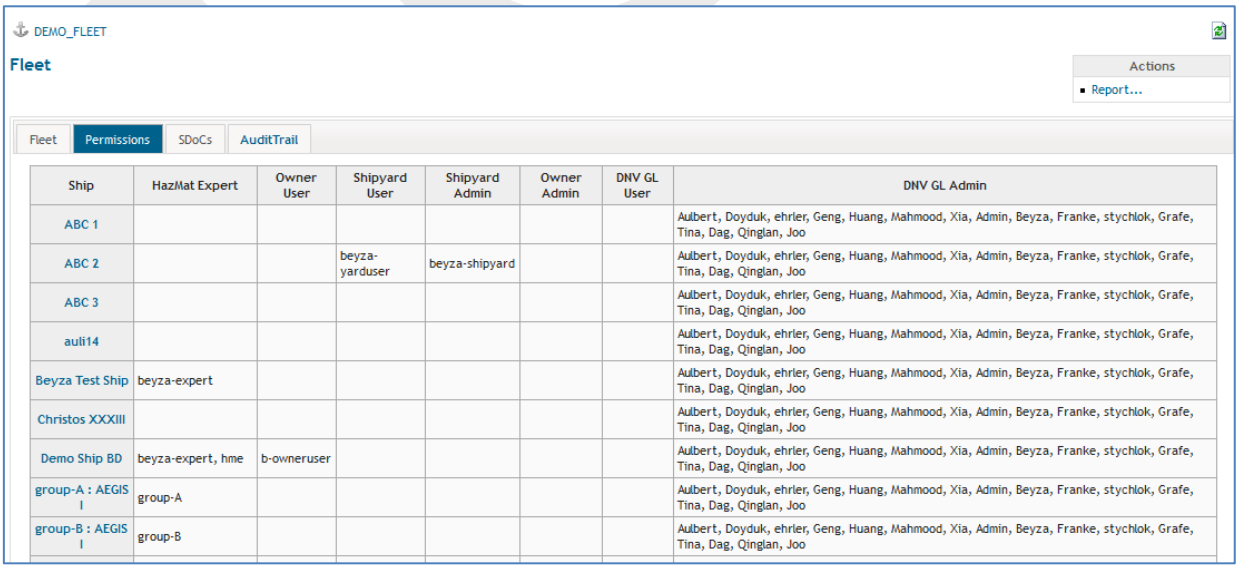
The status blue indicates that the IHM is not yet started to be prepared.

The status yellow indicates that the IHM is in progress.



2.8 Permissions

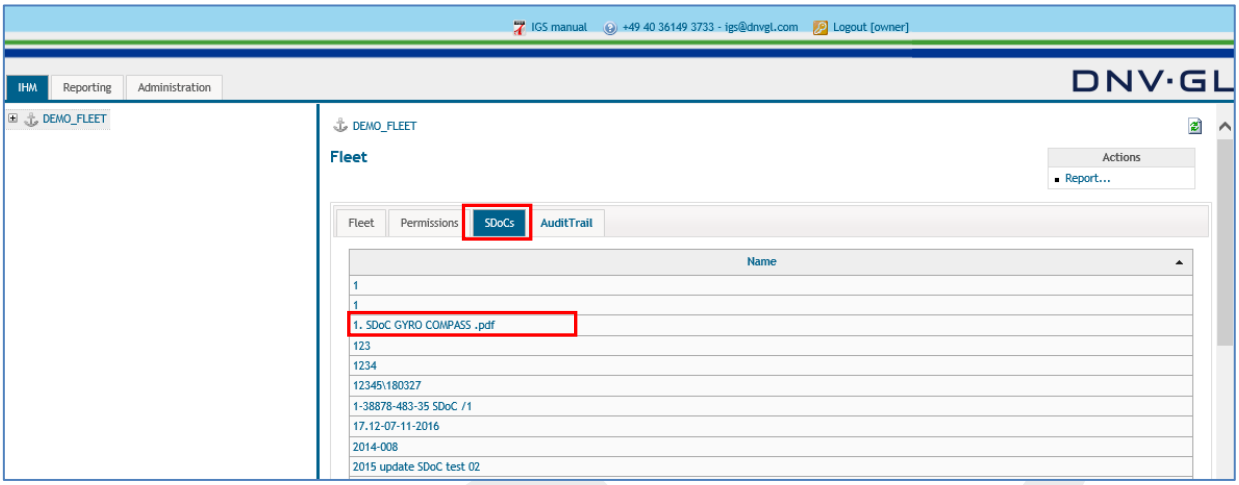
Permissions tab displays on fleet level the users assigned to work in different ships.



Ship	HazMat Expert	Owner User	Shipyard User	Shipyard Admin	Owner Admin	DNV GL User	DNV GL Admin
ABC 1							Aulbert, Doyduk, ehrler, Geng, Huang, Mahmood, Xia, Admin, Beyza, Franke, stychlok, Grafe, Tina, Dag, Qinglan, Joo
ABC 2			beyza-yarduser	beyza-shipyard			Aulbert, Doyduk, ehrler, Geng, Huang, Mahmood, Xia, Admin, Beyza, Franke, stychlok, Grafe, Tina, Dag, Qinglan, Joo
ABC 3							Aulbert, Doyduk, ehrler, Geng, Huang, Mahmood, Xia, Admin, Beyza, Franke, stychlok, Grafe, Tina, Dag, Qinglan, Joo
auli14							Aulbert, Doyduk, ehrler, Geng, Huang, Mahmood, Xia, Admin, Beyza, Franke, stychlok, Grafe, Tina, Dag, Qinglan, Joo
Beyza Test Ship	beyza-expert						Aulbert, Doyduk, ehrler, Geng, Huang, Mahmood, Xia, Admin, Beyza, Franke, stychlok, Grafe, Tina, Dag, Qinglan, Joo
Christos XXXIII							Aulbert, Doyduk, ehrler, Geng, Huang, Mahmood, Xia, Admin, Beyza, Franke, stychlok, Grafe, Tina, Dag, Qinglan, Joo
Demo Ship BD	beyza-expert, hme	b-owneruser					Aulbert, Doyduk, ehrler, Geng, Huang, Mahmood, Xia, Admin, Beyza, Franke, stychlok, Grafe, Tina, Dag, Qinglan, Joo
group-A : AEGIS I	group-A						Aulbert, Doyduk, ehrler, Geng, Huang, Mahmood, Xia, Admin, Beyza, Franke, stychlok, Grafe, Tina, Dag, Qinglan, Joo
group-B : AEGIS I	group-B						Aulbert, Doyduk, ehrler, Geng, Huang, Mahmood, Xia, Admin, Beyza, Franke, stychlok, Grafe, Tina, Dag, Qinglan, Joo

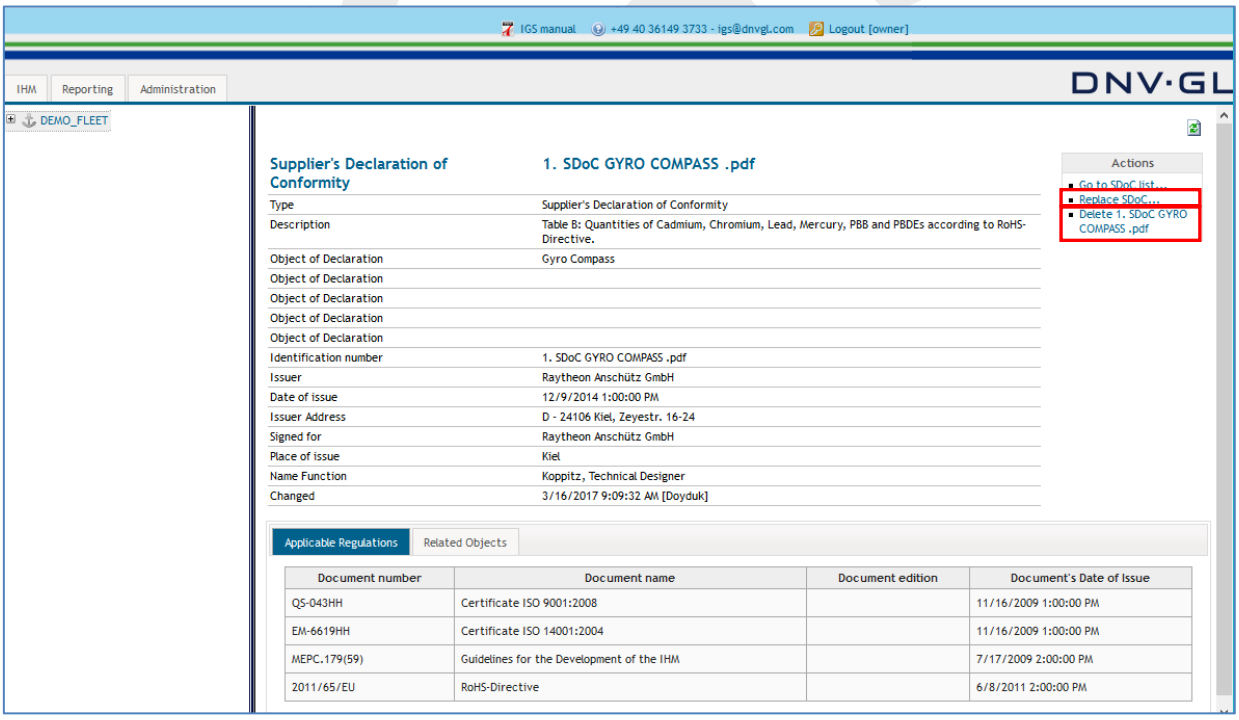
2.9 SDoCs tab - replace or delete SDoCs

For administrative purposes the user has the possibility to replace and delete SDoCs. Open the SDoC tab in the main navigation bar of the fleet view and select the SDoC which should be replaced or deleted in the occurring table.



Either, select the "Replace SDoC…" link in the actions box to replace the SDoC.

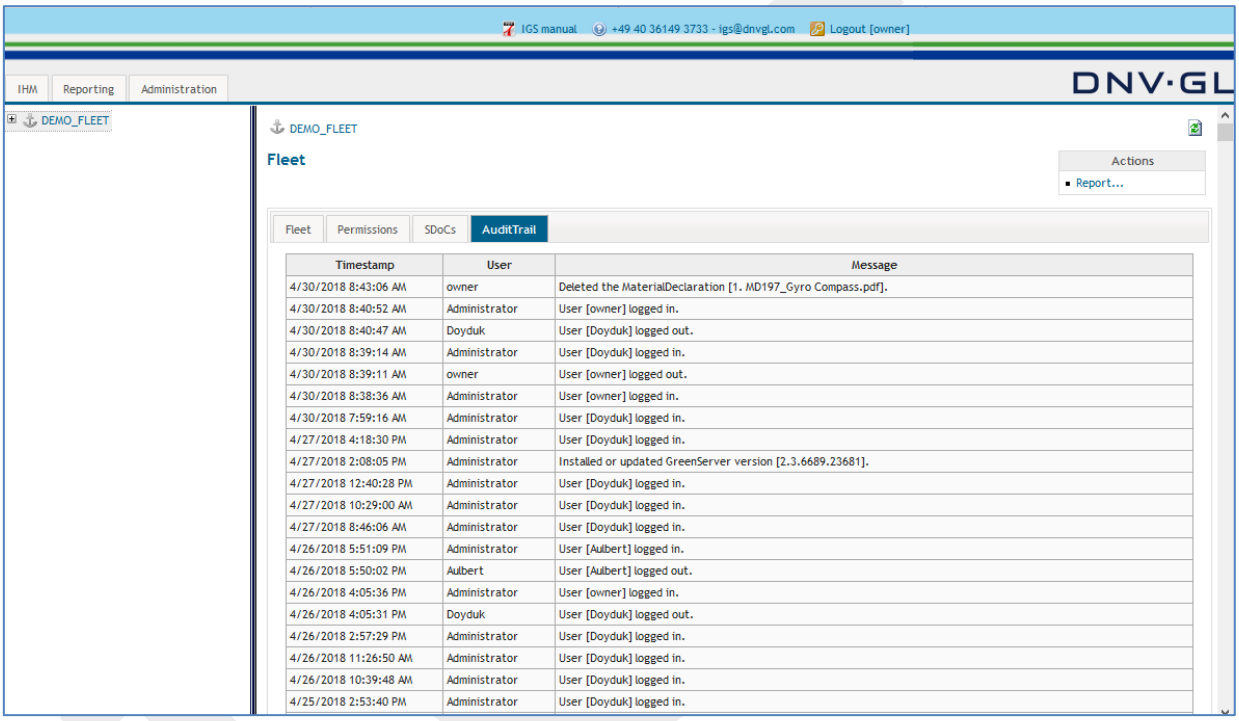
Or, select the "Delete (SDoC Name)" link in the actions box to delete the SDoC.



2.10 Audit trail

Audit trail in the main navigation bar of the fleet view displays the following actions done by a specific user;

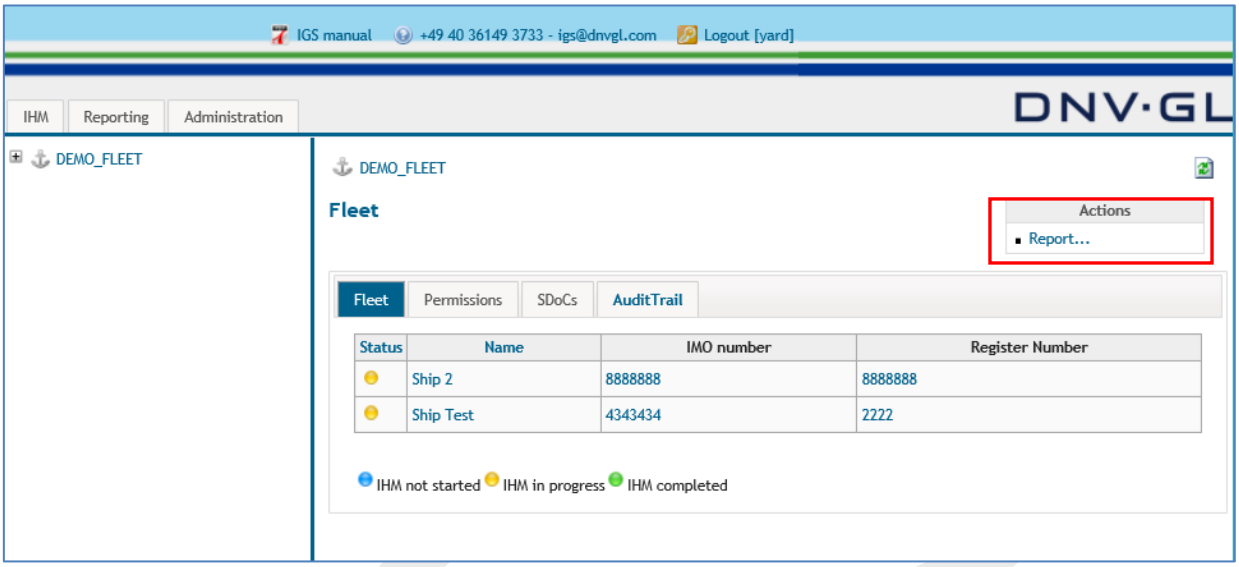
- Users log in and log out information
- Deleted SDoC
- Deleted MD
- Deleted installations from fleet store
- Replaced MDs
- Users who accepted the terms of use for that account
- Deleted ships



Timestamp	User	Message
4/30/2018 8:43:06 AM	owner	Deleted the MaterialDeclaration [1. MD197_Gyro Compass.pdf].
4/30/2018 8:40:52 AM	Administrator	User [owner] logged in.
4/30/2018 8:40:47 AM	Doyduk	User [Doyduk] logged out.
4/30/2018 8:39:14 AM	Administrator	User [Doyduk] logged in.
4/30/2018 8:39:11 AM	owner	User [owner] logged out.
4/30/2018 8:38:36 AM	Administrator	User [owner] logged in.
4/30/2018 7:59:16 AM	Administrator	User [Doyduk] logged in.
4/27/2018 4:18:30 PM	Administrator	User [Doyduk] logged in.
4/27/2018 2:08:05 PM	Administrator	Installed or updated GreenServer version [2.3.6689.23681].
4/27/2018 12:40:28 PM	Administrator	User [Doyduk] logged in.
4/27/2018 10:29:00 AM	Administrator	User [Doyduk] logged in.
4/27/2018 8:46:06 AM	Administrator	User [Doyduk] logged in.
4/26/2018 5:51:09 PM	Administrator	User [Aulbert] logged in.
4/26/2018 5:50:02 PM	Aulbert	User [Aulbert] logged out.
4/26/2018 4:05:36 PM	Administrator	User [owner] logged in.
4/26/2018 4:05:31 PM	Doyduk	User [Doyduk] logged out.
4/26/2018 2:57:29 PM	Administrator	User [Doyduk] logged in.
4/26/2018 11:26:50 AM	Administrator	User [Doyduk] logged in.
4/26/2018 10:39:48 AM	Administrator	User [Doyduk] logged in.
4/25/2018 2:53:40 PM	Administrator	User [Doyduk] logged in.

2.11 Actions in the fleet view

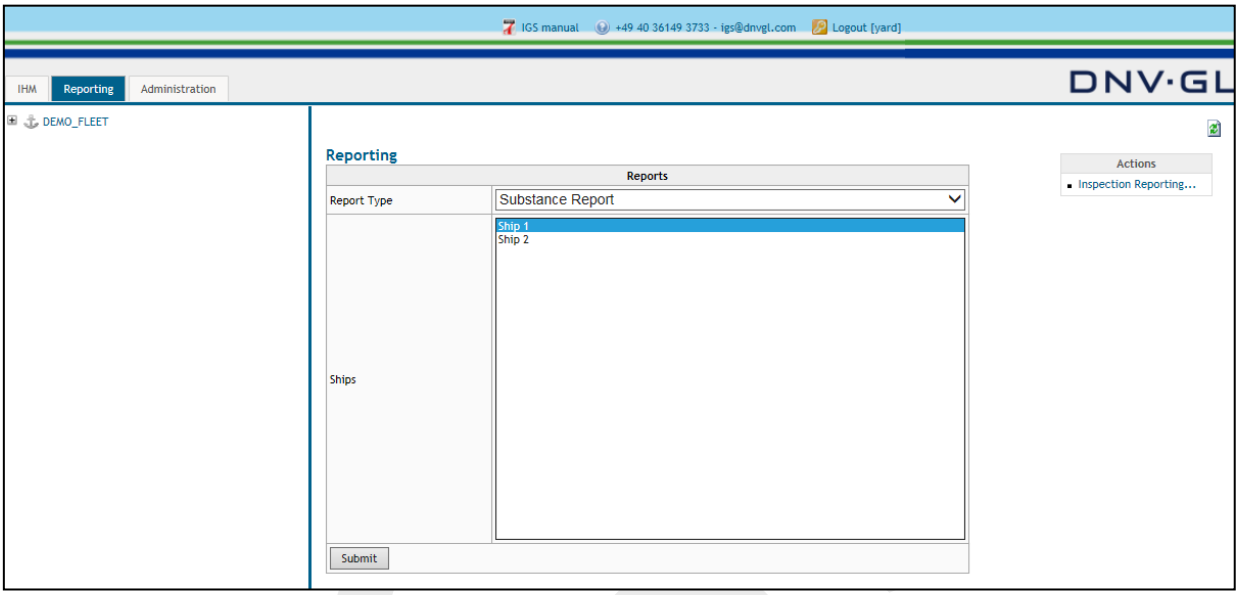
On the upper right corner of the fleet view, actions box is displayed. Under the fleet view, users have only one action "Report…" which leads the user to the "Reporting" tab of the main navigation bar.



2.12 Reporting of ship projects

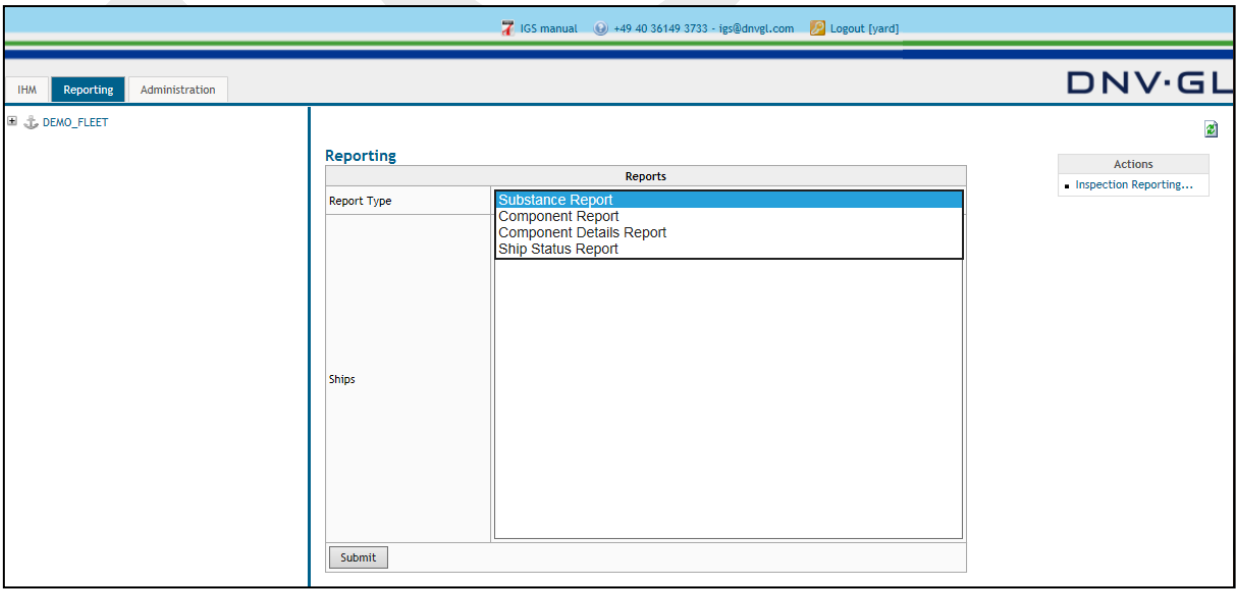
The shipyard admin, shipowner admin, and HazMat Expert profiles have the option to choose among 5 different statistical reports for a ship project or for the entire fleet as described below.

To use the reporting function the user must select the "Reporting" tab in the main navigation bar. Then the user must select in the following main view on the right side the respective ship project or several ship projects for comparison matters.



Select the "Reporting" tab in the main navigation bar and the respective ship projects in the main view on the right side.

Afterwards the user must select the requested "Report Type" in the main view to generate the required project report.



Select the "Report Type" in the main view and select "Submit" to generate the required ship project report.

2.12.1 Substance report

Substance Report summarizes the total quantity of found hazardous materials for a ship.

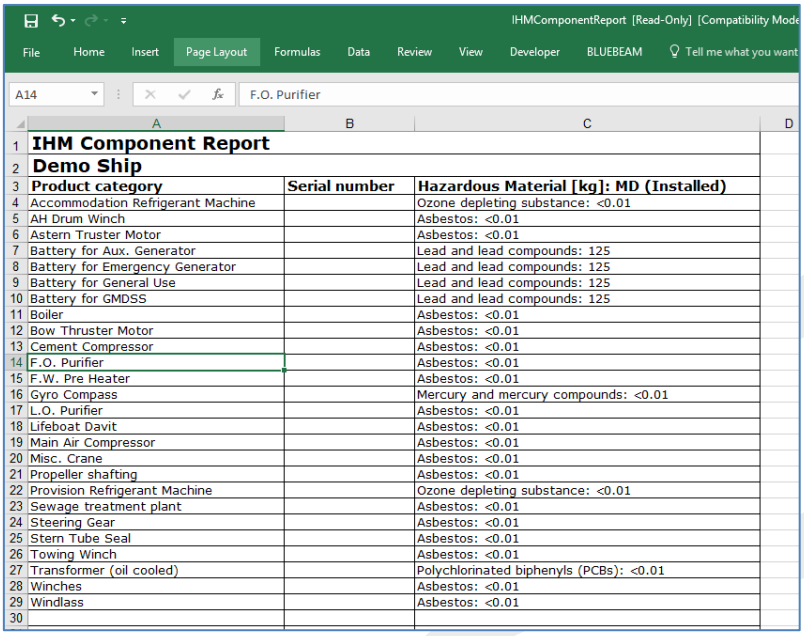
	IHM Substance Report [kg]	
	Substances	**Demo Ship**
A-1	Asbestos	< 0.01
A-2	Polychlorinated biphenyls (PCBs)	< 0.01
A-3	Chlorofluorocarbons (CFCs)	0
A-3	Halons	0
A-3	Other fully halogenated CFCs	0
A-3	Carbon tetrachloride	0
A-3	1,1,1-Trichloroethane	0
A-3	Hydrochlorofluorocarbons	0
A-3	Hydrobromofluorocarbons	0
A-3	Methyl bromide	0
A-3	Bromochloromethane	0
A-4	Anti-fouling systems containing organotin compounds as a biocide	< 0.01
A-5	Perfluorooctane sulfonic acid (PFOS)	< 0.01
B-1	Cadmium and cadmium compounds	< 0.01
B-2	Hexavalent chromium and hexavalent chromium compounds	< 0.01
B-3	Lead and lead compounds	500
B-4	Mercury and mercury compounds	< 0.01
B-5	Polybrominated biphenyl (PBBs)	0
B-6	Polybrominated dephenyl ethers (PBDEs)	< 0.01
B-7	Polychloronaphthalenes (Cl >= 3)	< 0.01
B-8	Radioactive substances	199
B-9	Certain shortchain chlorinated paraffins	< 0.01
B-10	Brominated Flame Retardant (HBCDD)	0
	Ozone depleting substance	< 0.01

It is also possible to generate the report for more than one ship, to easily compare the quantity of hazardous materials.

	IHM Substance Report [kg]		
	Substances	**Test Ship**	**Demo Ship**
A-1	Asbestos	0	< 0.01
A-2	Polychlorinated biphenyls (PCBs)	0	< 0.01
A-3	Chlorofluorocarbons (CFCs)	0	0
A-3	Halons	0	0
A-3	Other fully halogenated CFCs	0	0
A-3	Carbon tetrachloride	0	0
A-3	1,1,1-Trichloroethane	0	0
A-3	Hydrochlorofluorocarbons	0	0
A-3	Hydrobromofluorocarbons	0	0
A-3	Methyl bromide	0	0
A-3	Bromochloromethane	0	0
A-4	Anti-fouling systems containing organotin compounds as a biocide	0	< 0.01
A-5	Perfluorooctane sulfonic acid (PFOS)	0	< 0.01
B-1	Cadmium and cadmium compounds	0	< 0.01
B-2	Hexavalent chromium and hexavalent chromium compounds	0	< 0.01
B-3	Lead and lead compounds	< 0.01	500
B-4	Mercury and mercury compounds	0	< 0.01
B-5	Polybrominated biphenyl (PBBs)	0	0
B-6	Polybrominated dephenyl ethers (PBDEs)	0	< 0.01
B-7	Polychloronaphthalenes (Cl >= 3)	0	< 0.01
B-8	Radioactive substances	0	199
B-9	Certain shortchain chlorinated paraffins	0	< 0.01
B-10	Brominated Flame Retardant (HBCDD)	0	0
	Ozone depleting substance	0	< 0.01

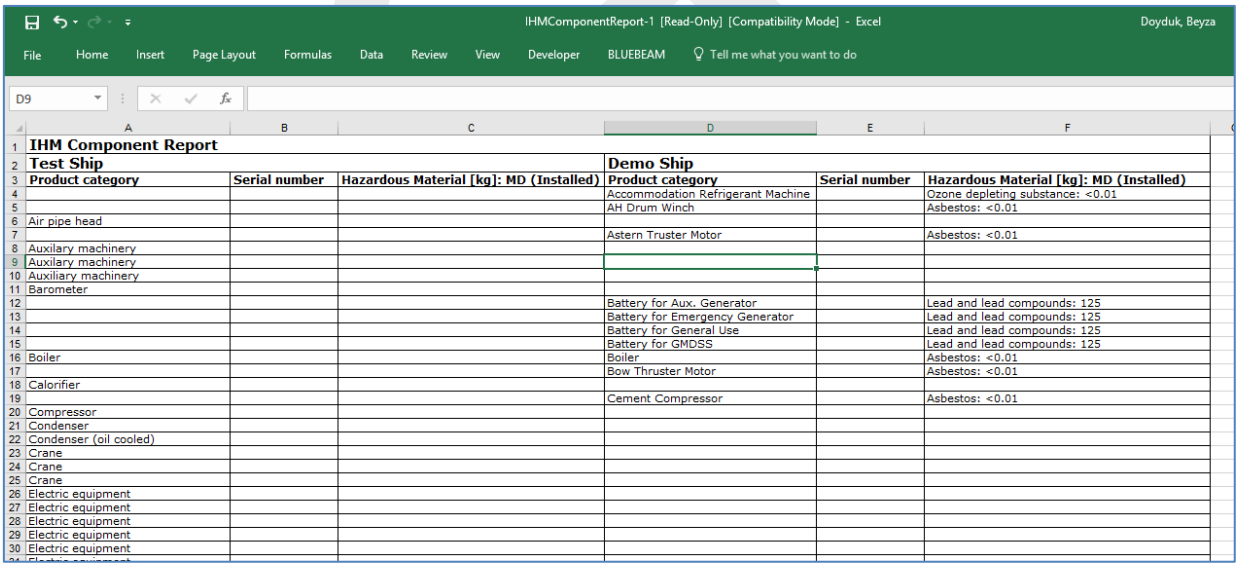
2.12.2 Component report

Component Report lists which hazardous materials are found in which product category in quantity (kg).



IHM Component Report		
Demo Ship		
Product category	**Serial number**	**Hazardous Material [kg]: MD (Installed)**
Accommodation Refrigerant Machine		Ozone depleting substance: <0.01
AH Drum Winch		Asbestos: <0.01
Astern Truster Motor		Asbestos: <0.01
Battery for Aux. Generator		Lead and lead compounds: 125
Battery for Emergency Generator		Lead and lead compounds: 125
Battery for General Use		Lead and lead compounds: 125
Battery for GMDSS		Lead and lead compounds: 125
Boiler		Asbestos: <0.01
Bow Thruster Motor		Asbestos: <0.01
Cement Compressor		Asbestos: <0.01
F.O. Purifier		Asbestos: <0.01
F.W. Pre Heater		Asbestos: <0.01
Gyro Compass		Mercury and mercury compounds: <0.01
L.O. Purifier		Asbestos: <0.01
Lifeboat Davit		Asbestos: <0.01
Main Air Compressor		Asbestos: <0.01
Misc. Crane		Asbestos: <0.01
Propeller shafting		Asbestos: <0.01
Provision Refrigerant Machine		Ozone depleting substance: <0.01
Sewage treatment plant		Asbestos: <0.01
Steering Gear		Asbestos: <0.01
Stern Tube Seal		Asbestos: <0.01
Towing Winch		Asbestos: <0.01
Transformer (oil cooled)		Polychlorinated biphenyls (PCBs): <0.01
Winches		Asbestos: <0.01
Windlass		Asbestos: <0.01

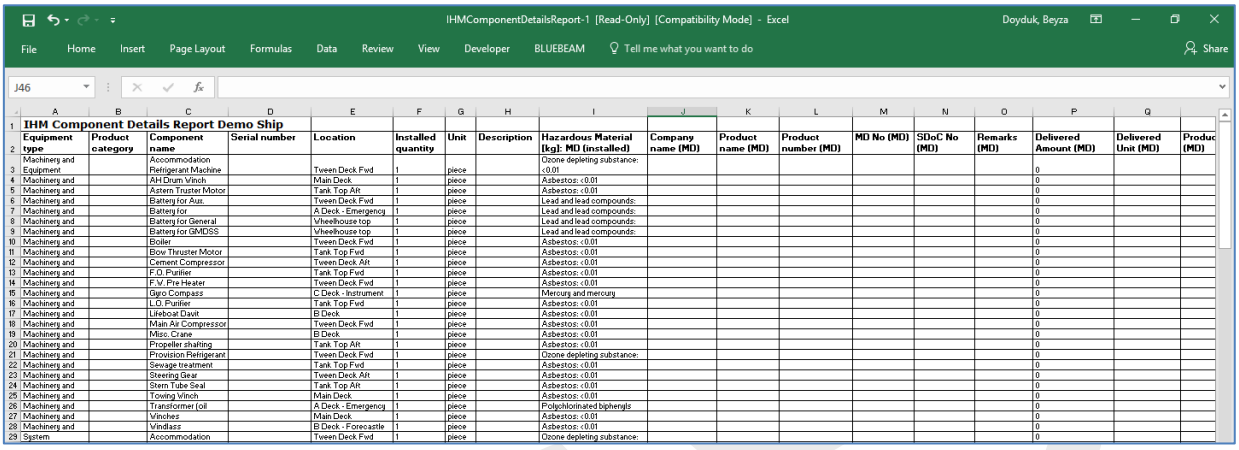
It is also possible to generate the report for more than one ship, to easily compare the location and quantity of hazardous materials.



IHM Component Report					
Test Ship			**Demo Ship**		
Product category	**Serial number**	**Hazardous Material [kg]: MD (Installed)**	**Product category**	**Serial number**	**Hazardous Material [kg]: MD (Installed)**
			Accommodation Refrigerant Machine		Ozone depleting substance: <0.01
			AH Drum Winch		Asbestos: <0.01
Air pipe head					
			Astern Truster Motor		Asbestos: <0.01
Auxilary machinery					
Auxilary machinery					
Auxiliary machinery					
Barometer					
			Battery for Aux. Generator		Lead and lead compounds: 125
			Battery for Emergency Generator		Lead and lead compounds: 125
			Battery for General Use		Lead and lead compounds: 125
			Battery for GMDSS		Lead and lead compounds: 125
Boiler			Boiler		Asbestos: <0.01
			Bow Thruster Motor		Asbestos: <0.01
Calorifier					
			Cement Compressor		Asbestos: <0.01
Compressor					
Condenser					
Condenser (oil cooled)					
Crane					
Crane					
Crane					
Electric equipment					
Electric equipment					
Electric equipment					
Electric equipment					
Electric equipment					

2.12.3 Component details report

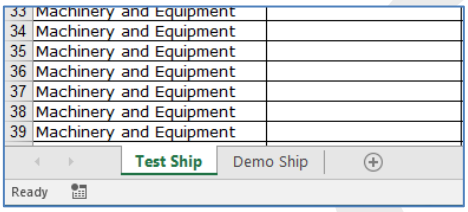
Component Details Report is a projection of information contained in the MD, or inspection based MD. The users can clearly see all the information about component and materials which are installed with an MD, or inspected during the IHM preparation.



IHM Component Details Report Demo Ship

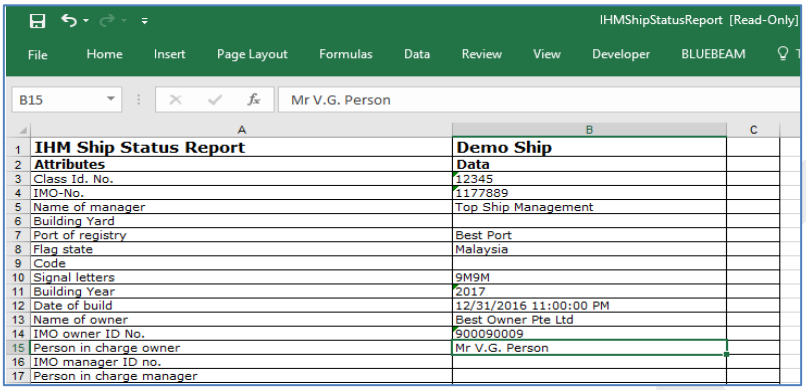
Equipment type	Product category	Component name	Serial number	Location	Installed quantity	Unit	Description	Hazardous Material [kg]: MD installed	Company name (MD)	Product name (MD)	Product number (MD)	MD No (MD)	SDoC No (MD)	Remarks (MD)	Delivered Amount (MD)	Delivered Unit (MD)	Produc (MD)
Machinery and Equipment		Accommodation Refrigerant Machine		Tween Deck Fwd	1	piece		Ozone depleting substance: <0.01							0		
Machinery and		AH Drum Winch		Main Deck	1	piece		Asbestos: <0.01							0		
Machinery and		Astern Truster Motor		Tank Top Aft	1	piece		Asbestos: <0.01							0		
Machinery and		Battery for Aux.		Tween Deck Fwd	1	piece		Lead and lead compounds:							0		
Machinery and		Battery for		A Deck - Emergency	1	piece		Lead and lead compounds:							0		
Machinery and		Battery for General		Wheelhouse top	1	piece		Lead and lead compounds:							0		
Machinery and		Battery for GMDSS		Wheelhouse top	1	piece		Lead and lead compounds:							0		
Machinery and		Boiler		Tween Deck Fwd	1	piece		Asbestos: <0.01							0		
Machinery and		Bow Thruster Motor		Tank Top Fwd	1	piece		Asbestos: <0.01							0		
Machinery and		Cement Compressor		Tween Deck Aft	1	piece		Asbestos: <0.01							0		
Machinery and		F.O. Purifier		Tank Top Fwd	1	piece		Asbestos: <0.01							0		
Machinery and		F.V. Pre Heater		Tween Deck Fwd	1	piece		Asbestos: <0.01							0		
Machinery and		Gyro Compass		C Deck - Instrument	1	piece		Mercury and mercury							0		
Machinery and		L.O. Purifier		Tank Top Fwd	1	piece		Asbestos: <0.01							0		
Machinery and		Lifeboat Davit		B Deck	1	piece		Asbestos: <0.01							0		
Machinery and		Main Air Compressor		Tween Deck Fwd	1	piece		Asbestos: <0.01							0		
Machinery and		Misc. Crane		B Deck	1	piece		Asbestos: <0.01							0		
Machinery and		Propeller shafting		Tank Top Aft	1	piece		Asbestos: <0.01							0		
Machinery and		Provision Refrigerant		Tween Deck Fwd	1	piece		Ozone depleting substance:							0		
Machinery and		Sewage treatment		Tank Top Fwd	1	piece		Asbestos: <0.01							0		
Machinery and		Steering Gear		Tween Deck Aft	1	piece		Asbestos: <0.01							0		
Machinery and		Stern Tube Seal		Tank Top Aft	1	piece		Asbestos: <0.01							0		
Machinery and		Towing Winch		Main Deck	1	piece		Asbestos: <0.01							0		
Machinery and		Transformer (oil		A Deck - Emergency	1	piece		Polychlorinated biphenyls							0		
Machinery and		Winches		Main Deck	1	piece		Asbestos: <0.01							0		
Machinery and		Windlass		B Deck - Forecastle	1	piece		Asbestos: <0.01							0		
System		Accommodation		Tween Deck Fwd	1	piece		Ozone depleting substance:							0		

It is also possible to generate the report for more than one ship, however due to the size of the columns, ships will be allocated in different worksheets in the same file.



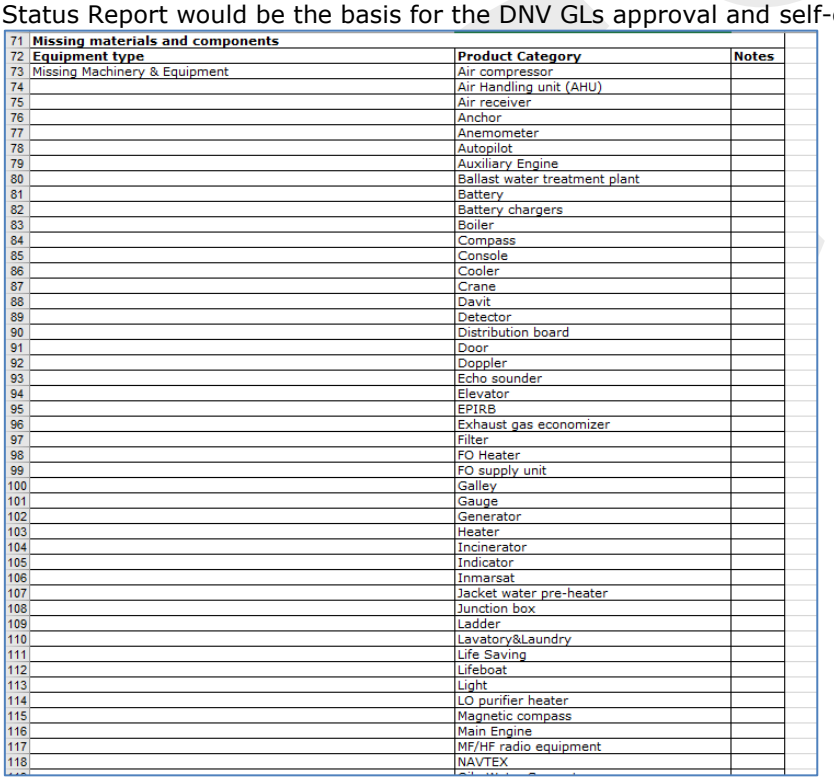
2.12.4 Ship status report

Ship status report not only lists the ships attributes and provides the Substance Report which summarizes the total quantity of found hazardous materials for a ship, it also lists, mainly for the MD based IHMs, which products are submitted with an MD and which aren't.



	A	B	C
1	**IHM Ship Status Report**	**Demo Ship**	
2	**Attributes**	**Data**	
3	Class Id. No.	12345	
4	IMO-No.	1177889	
5	Name of manager	Top Ship Management	
6	Building Yard		
7	Port of registry	Best Port	
8	Flag state	Malaysia	
9	Code		
10	Signal letters	9M9M	
11	Building Year	2017	
12	Date of build	12/31/2016 11:00:00 PM	
13	Name of owner	Best Owner Pte Ltd	
14	IMO owner ID No.	900090009	
15	Person in charge owner	Mr V.G. Person	
16	IMO manager ID no.		
17	Person in charge manager		

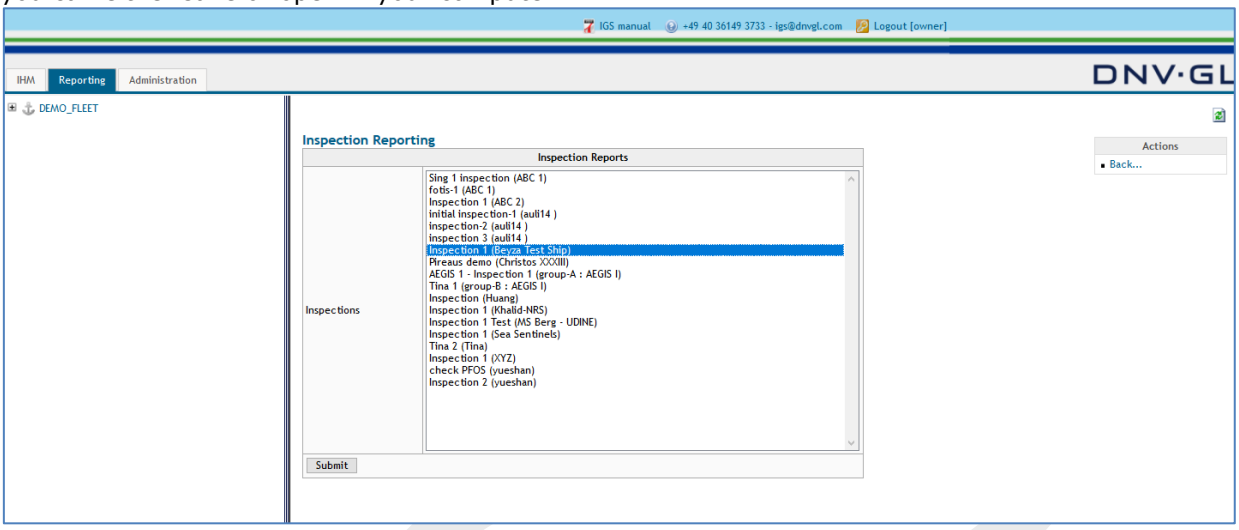
The list will only show the product category for which no MDs are uploaded into the system. The Ship Status Report would be the basis for the DNV GLs approval and self-check of the user itself.



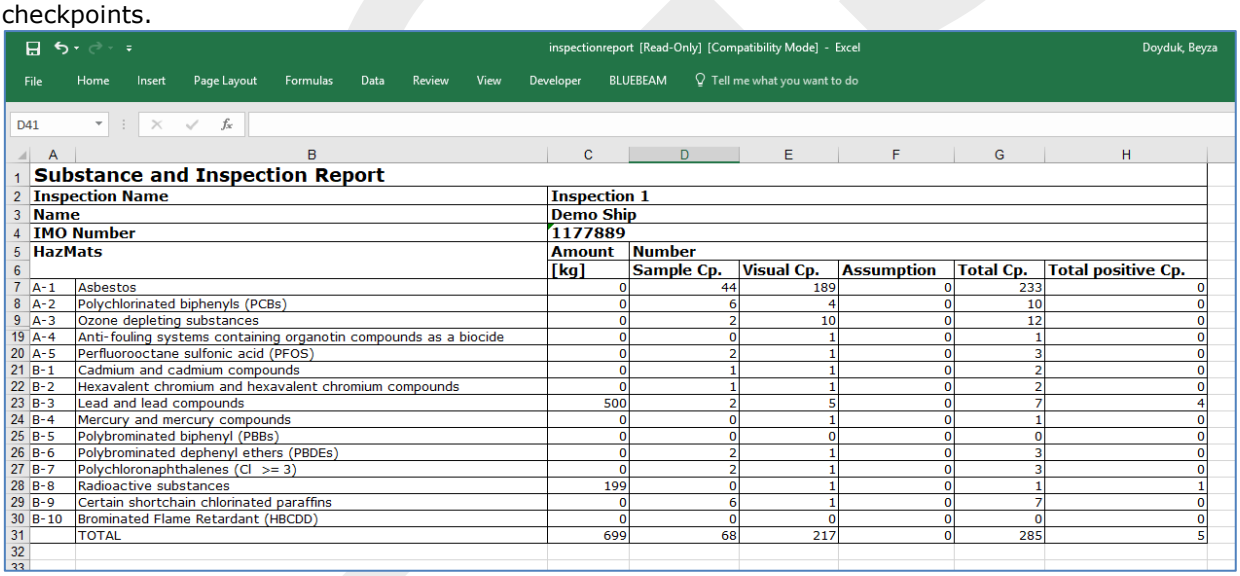
71	**Missing materials and components**		
72	**Equipment type**	**Product Category**	**Notes**
73	Missing Machinery & Equipment	Air compressor	
74		Air Handling unit (AHU)	
75		Air receiver	
76		Anchor	
77		Anemometer	
78		Autopilot	
79		Auxiliary Engine	
80		Ballast water treatment plant	
81		Battery	
82		Battery chargers	
83		Boiler	
84		Compass	
85		Console	
86		Cooler	
87		Crane	
88		Davit	
89		Detector	
90		Distribution board	
91		Door	
92		Doppler	
93		Echo sounder	
94		Elevator	
95		EPIRB	
96		Exhaust gas economizer	
97		Filter	
98		FO Heater	
99		FO supply unit	
100		Galley	
101		Gauge	
102		Generator	
103		Heater	
104		Incinerator	
105		Indicator	
106		Inmarsat	
107		Jacket water pre-heater	
108		Junction box	
109		Ladder	
110		Lavatory&Laundry	
111		Life Saving	
112		Lifeboat	
113		Light	
114		LO purifier heater	
115		Magnetic compass	
116		Main Engine	
117		MF/HF radio equipment	
118		NAVTEX	

2.12.5 Inspection reporting

For the IHM projects that are based on inspections, the users of IGS can create inspection report. This report gives an overview of the created inspection. To generate the inspection report of a specific ship or ships, select the ship/s from the list and click on "Submit". The reports will be generated in excel, which you can either save or open in your computer.



Inspection report shows the number of checkpoints and the results of found hazardous materials in those checkpoints.



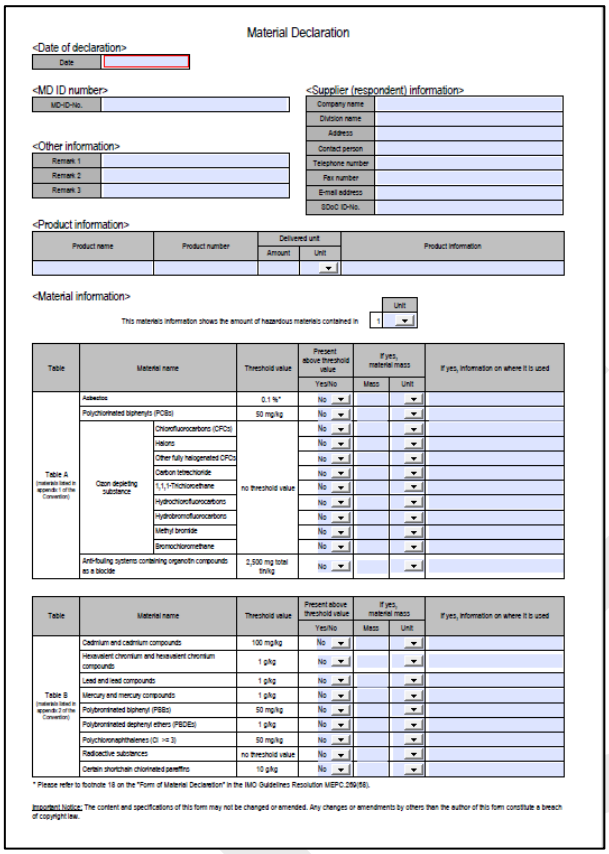
Substance and Inspection Report							
Inspection Name		**Inspection 1**					
Name		**Demo Ship**					
IMO Number		**1177889**					
HazMats		**Amount**	**Number**				
		[kg]	**Sample Cp.**	**Visual Cp.**	**Assumption**	**Total Cp.**	**Total positive Cp.**
A-1	Asbestos	0	44	189	0	233	0
A-2	Polychlorinated biphenyls (PCBs)	0	6	4	0	10	0
A-3	Ozone depleting substances	0	2	10	0	12	0
A-4	Anti-fouling systems containing organotin compounds as a biocide	0	0	1	0	1	0
A-5	Perfluorooctane sulfonic acid (PFOS)	0	2	1	0	3	0
B-1	Cadmium and cadmium compounds	0	1	1	0	2	0
B-2	Hexavalent chromium and hexavalent chromium compounds	0	1	1	0	2	0
B-3	Lead and lead compounds	500	2	5	0	7	4
B-4	Mercury and mercury compounds	0	0	1	0	1	0
B-5	Polybrominated biphenyl (PBBs)	0	0	0	0	0	0
B-6	Polybrominated dephenyl ethers (PBDEs)	0	2	1	0	3	0
B-7	Polychloronaphthalenes (Cl >= 3)	0	2	1	0	3	0
B-8	Radioactive substances	199	0	1	0	1	1
B-9	Certain shortchain chlorinated paraffins	0	6	1	0	7	0
B-10	Brominated Flame Retardant (HBCDD)	0	0	0	0	0	0
	TOTAL	699	68	217	0	285	5

2.13 MD format and regulations

The IGS system is able to comply with the two main standards for the preparation of the Inventory of Hazardous Materials (IHM). The Hong Kong Convention; HKC (SR-CONF-45) and the EU Ship Recycling Regulation, EU SRR (1257/2013).

Both standards require different Material Declaration (MD) forms as shown below. The HKC requires the IMO MD with thirteen hazardous materials to be declared by the suppliers. And the EU SRR requires the EU MD with two additional (fifteen) materials to be declared by the suppliers.

MD IMO:



Material Declaration

<Date of declaration>

Date	

<MD ID number>

MD-ID-No.	

<Supplier (respondent) information>

Company name	
Division name	
Address	
Contact person	
Telephone number	
Fax number	
E-mail address	
SDoC ID-No.	

<Other information>

Remark 1	
Remark 2	
Remark 3	

<Product information>

Product name	Product number	Delivered unit		Product information
		Amount	Unit	

<Material information>

This materials information shows the amount of hazardous materials contained in | Unit | 1 |

Table	Material name		Threshold value	Present above threshold value	If yes, material mass		If yes, information on where it is used
				Yes/No	Mass	Unit	
Table A (materials listed in appendix 1 of the Convention)	Asbestos		0.1 %*	No			
	Polychlorinated biphenyls (PCBs)		50 mg/kg	No			
	Ozon depleting substance	Chlorofluorocarbons (CFCs)	no threshold value	No			
		Halons		No			
		Other fully halogenated CFCs		No			
		Carbon tetrachloride		No			
		1,1,1-Trichloroethane		No			
		Hydrochlorofluorocarbons		No			
		Hydrobromofluorocarbons		No			
		Methyl bromide		No			
		Bromochloromethane		No			
	Anti-fouling systems containing organotin compounds as a biocide		2,500 mg total tin/kg	No			

Table	Material name	Threshold value	Present above threshold value	If yes, material mass		If yes, information on where it is used
			Yes/No	Mass	Unit	
Table B (materials listed in appendix 2 of the Convention)	Cadmium and cadmium compounds	100 mg/kg	No			
	Hexavalent chromium and hexavalent chromium compounds	1 g/kg	No			
	Lead and lead compounds	1 g/kg	No			
	Mercury and mercury compounds	1 g/kg	No			
	Polybrominated biphenyl (PBBs)	50 mg/kg	No			
	Polybrominated dephenyl ethers (PBDEs)	1 g/kg	No			
	Polychloronaphthalenes (Cl >= 3)	50 mg/kg	No			
	Radioactive substances	no threshold value	No			
	Certain shortchain chlorinated paraffins	10 g/kg	No			

* Please refer to footnote 18 on the "Form of Material Declaration" in the IMO Guidelines Resolution MEPC.269(68).

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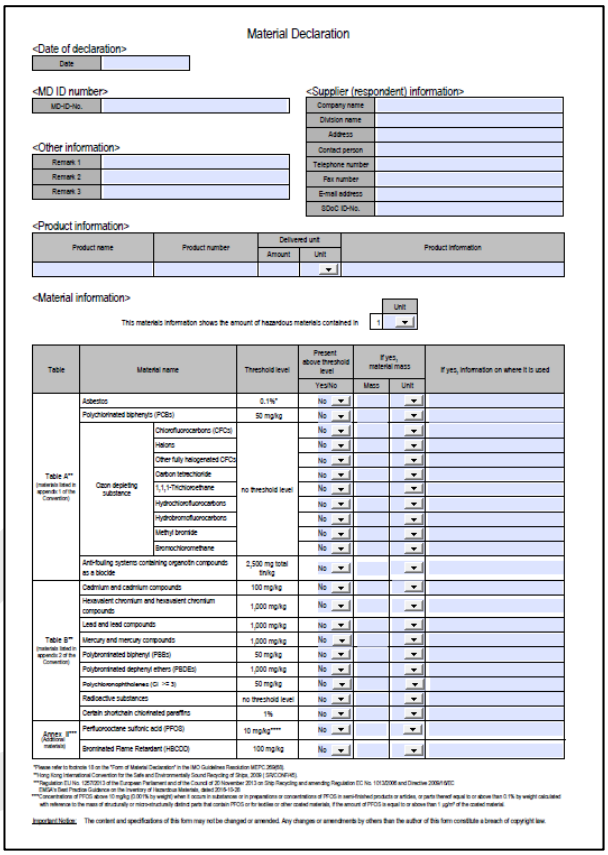
MD EU SRR:



Material Declaration

<Date of declaration>

Date	

<MD ID number>

MD-ID-No.	

<Supplier (respondent) information>

Company name	
Division name	
Address	
Contact person	
Telephone number	
Fax number	
E-mail address	
SDoC ID-No.	

<Other information>

Remark 1	
Remark 2	
Remark 3	

<Product information>

Product name	Product number	Delivered unit		Product information
		Amount	Unit	

<Material information>

This materials information shows the amount of hazardous materials contained in | Unit | 1 |

Table	Material name		Threshold level	Present above threshold level	If yes, material mass		If yes, information on where it is used
				Yes/No	Mass	Unit	
Table A** (materials listed in appendix 1 of the Convention)	Asbestos		0.1%*	No			
	Polychlorinated biphenyls (PCBs)		50 mg/kg	No			
	Ozon depleting substance	Chlorofluorocarbons (CFCs)	no threshold level	No			
		Halons		No			
		Other fully halogenated CFCs		No			
		Carbon tetrachloride		No			
		1,1,1-Trichloroethane		No			
		Hydrochlorofluorocarbons		No			
		Hydrobromofluorocarbons		No			
		Methyl bromide		No			
		Bromochloromethane		No			
	Anti-fouling systems containing organotin compounds as a biocide		2,500 mg total tin/kg	No			
Table B** (materials listed in appendix 2 of the Convention)	Cadmium and cadmium compounds		100 mg/kg	No			
	Hexavalent chromium and hexavalent chromium compounds		1,000 mg/kg	No			
	Lead and lead compounds		1,000 mg/kg	No			
	Mercury and mercury compounds		1,000 mg/kg	No			
	Polybrominated biphenyl (PBBs)		50 mg/kg	No			
	Polybrominated dephenyl ethers (PBDEs)		1,000 mg/kg	No			
	Polychloronaphthalenes (Cl >= 3)		50 mg/kg	No			
	Radioactive substances		no threshold level	No			
	Certain shortchain chlorinated paraffins		1%	No			
Annex II*** (Additional materials)	Perfluorooctane sulfonic acid (PFOS)		10 mg/kg****	No			
	Brominated Flame Retardant (HBCDD)		100 mg/kg	No			

*Please refer to footnote 18 on the "Form of Material Declaration" in the IMO Guidelines Resolution MEPC.269(68).
**Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 (SR/CONF/45).
***Regulation (EU) No. 1257/2013 of the European Parliament and of the Council of 20 November 2013 on Ship Recycling and amending Regulation (EC) No. 1013/2006 and Directive 2009/16/EC.
EMSA's Best Practice Guidance on the Inventory of Hazardous Materials, dated 2019-10-28
****Concentrations of PFOS above 10 mg/kg (0.001% by weight) when it occurs in substances or in preparations or concentrations of PFOS in semi-finished products or articles, or parts thereof equal to or above than 0.1% by weight calculated with reference to the mass of structurally or micro-structurally distinct parts that contain PFOS or for textiles or other coated materials, if the amount of PFOS is equal to or above than 1 µg/m² of the coated material.

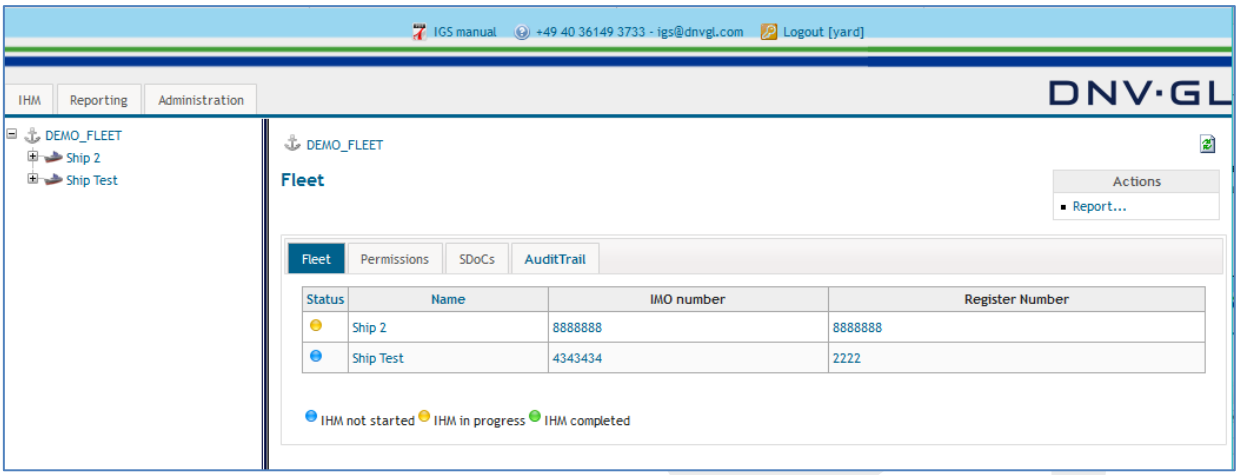
Important Notice: The content and specifications of this form may not be changed or amended. Any changes or amendments by others than the author of this form constitute a breach of copyright law.

Note: The IGS system will be set up according to the contracted standard.

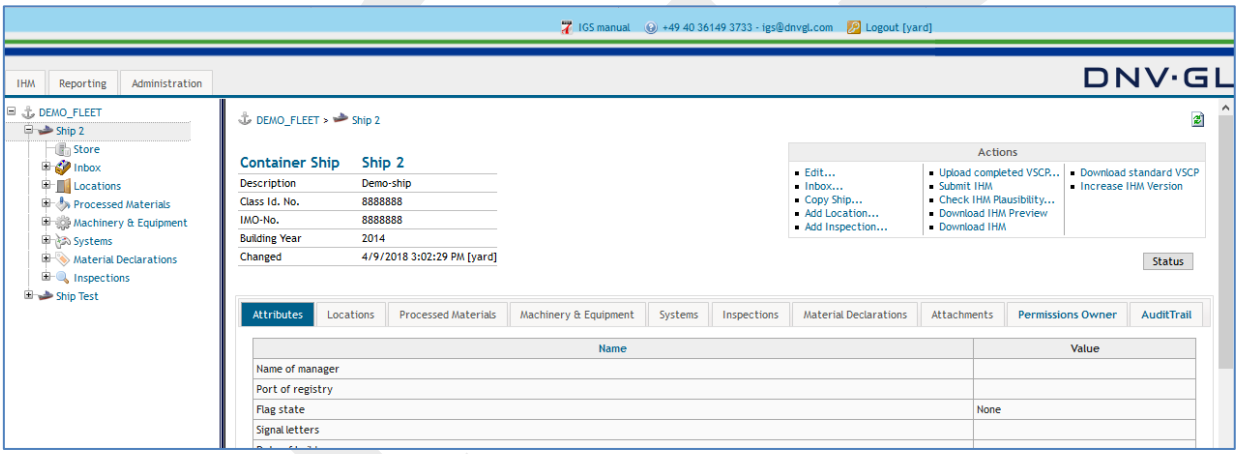
Note: Following options are available for the "MD Standard": IMO197, IMO197EU, IMO269, IMO269EU

2.14 Open a ship project

After the ship project was created, the user has to open the IHM tab on the main navigation bar and then click on the fleet node "+" to open the fleet view.



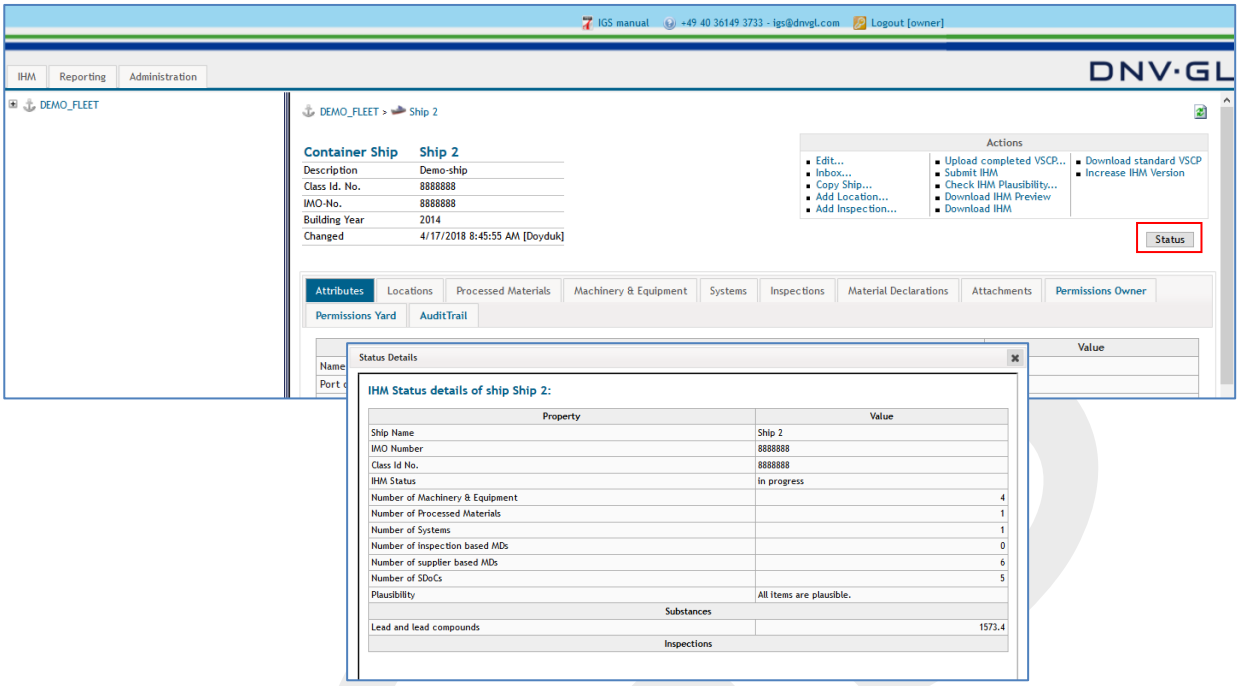
Then the user can select the ship project from the navigation tree on the left side by opening the node "+" of the respective ship project in the navigation tree, e.g. Ship 2, to see the ship project view on the right side.



The specific ship project navigation tree opens by clicking on the ship name node "+". Now, the ship project can be processed and administered by using the functions in the actions box.

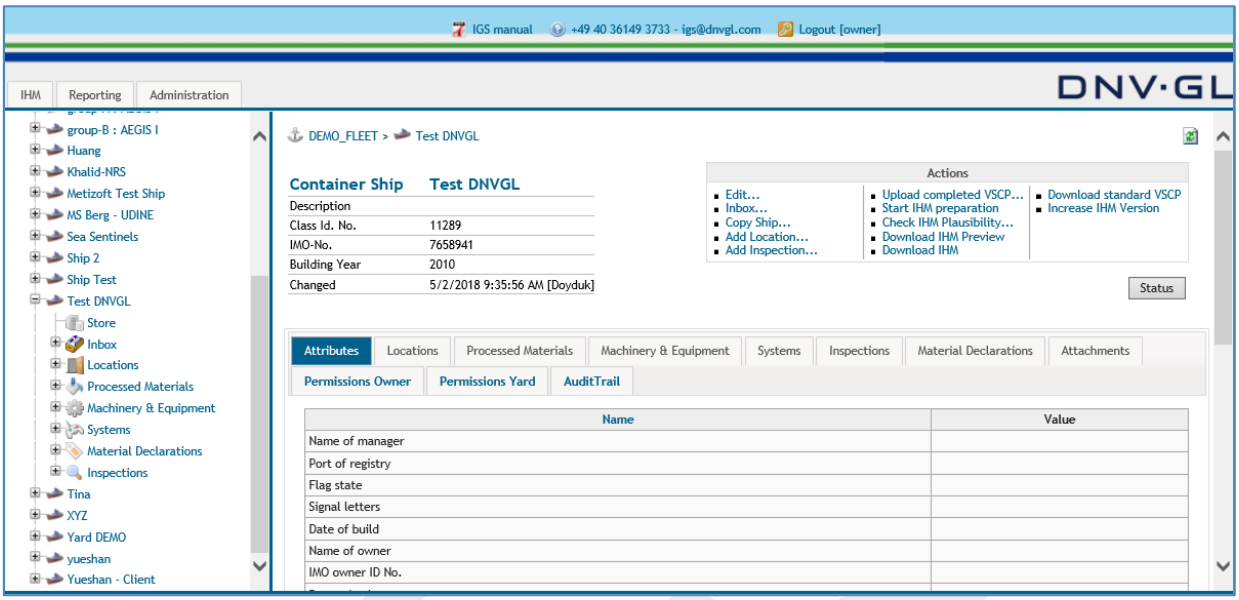
2.15 Ship status function

For administrative purposes the user has the opportunity to view the ship status details in a pop-up window. Select the “Status” link on the right side of the ship project view to view the ship status details.



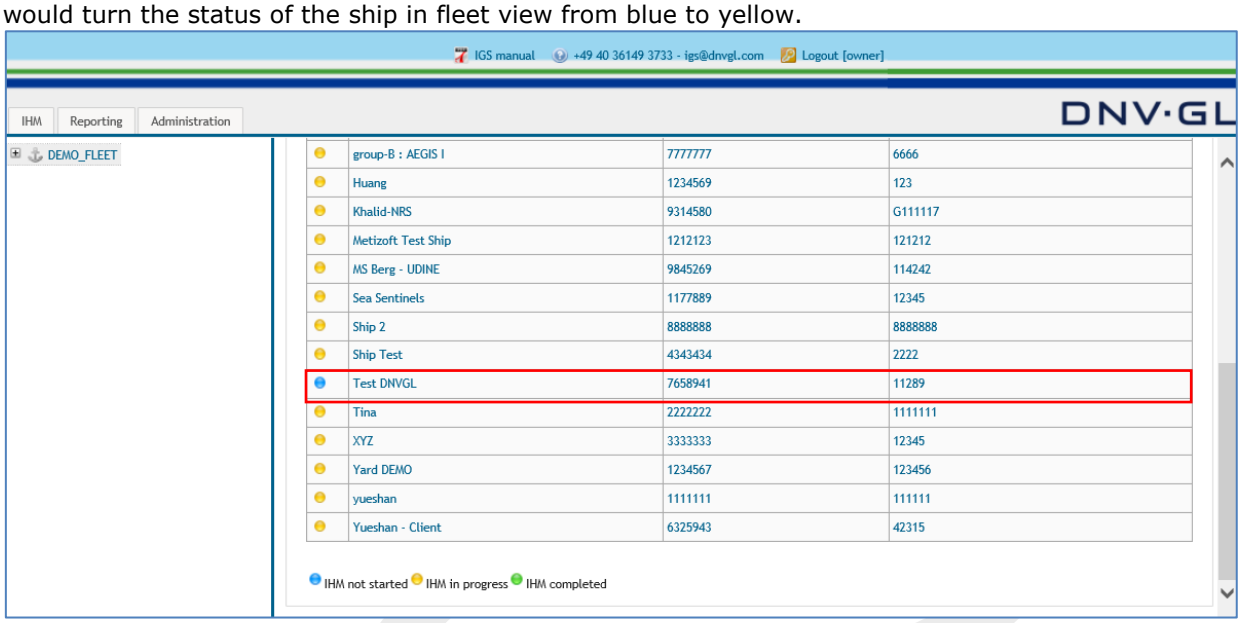
3 ACTIONS IN THE SHIP VIEW

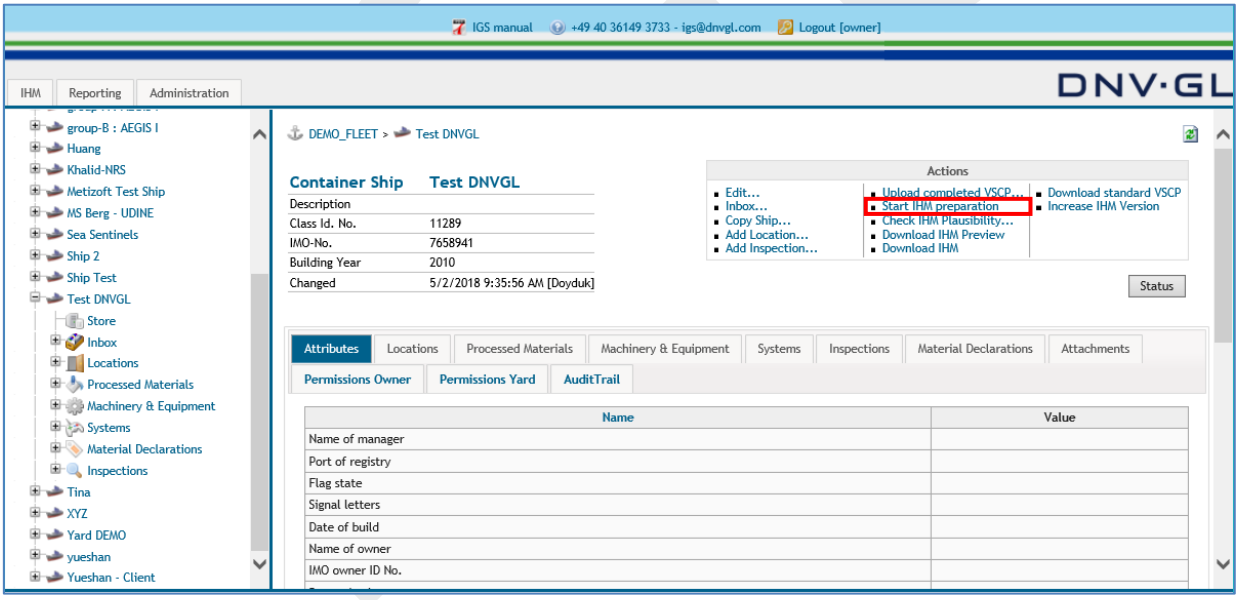
On the upper right corner of the ship project view, actions box is displayed. Under the ship project view, users (shipyard admin, shipowner admin and hazmat experts) see the same actions box. In sub-chapters of this section, each action will be defined.



3.1 Start IHM preparation

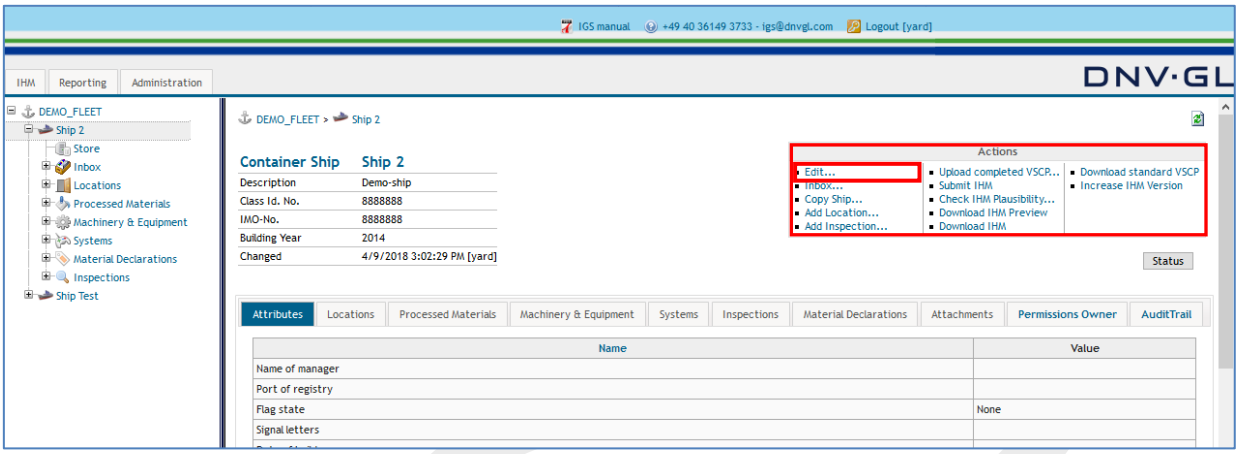
The first thing to be done by the user is to click on the "Start IHM preparation" in the actions box. This would turn the status of the ship in fleet view from blue to yellow.





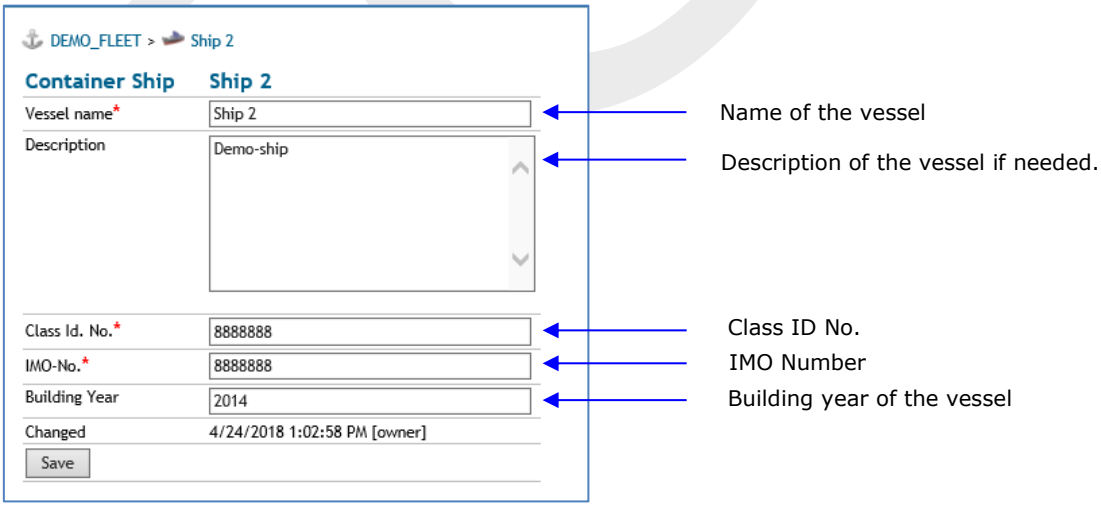
3.2 Edit a ship project

The ship project must be further edited after it was created. For editing the ship project, first choose the IHM tab on the main navigation bar again, then click on the fleet node "+" to open the fleet view and on the specific ship to open the ship project view. Now select in the actions box "Edit…" to edit the attributes of the ship project.



The following dialog appears. (Information are available in SIS/NPS System)

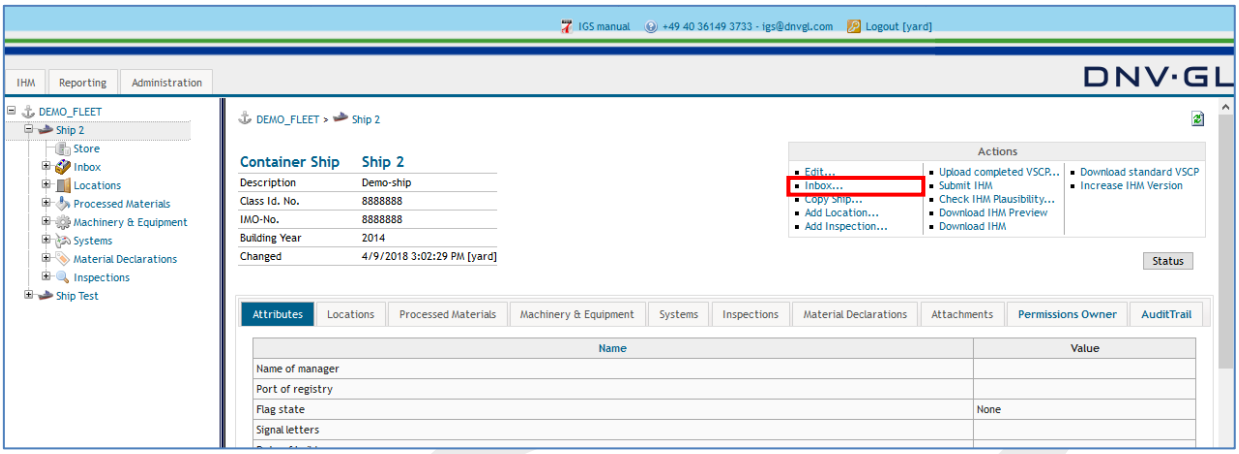
Finally click on "Save".



Name	Value	
Name of manager		Name of the current Ship Manager
Port of registry		Name of Port of Registry
Flag state	?	Name of Flag State
Signal letters		Call Sign / Signal Letters
Date of build		Building date
Name of owner		Name of the current shipowner
IMO owner ID No.		Unique IMO number of registered Shipowner
Person in charge owner		Name of Person in charge of the current shipowner
IMO manager ID no.		Unique IMO number of the ship manager
Person in charge manager		Name of Person in charge of the current ship manager
Name of yard		Name of shipyard, which has/is built/ding the ship
IMO yard ID no.		Unique IMO number of the building yard
Person in charge yard		Name of Person in charge of shipyard
Hull No.		Hull number
Class society		Name of ships classification society
Person in charge class society		Name of class expert responsible for the project
Active	?	Active Status (Yes/No)
In Construction	?	Construction Status (Yes for NB / No for FiS)
IHM Status		IHM Status (in progress, submitted, accepted)
MD Standard	?	MD Standard (IMO197; IMO269 /IMO197EU; IMO269EU)
IHM Version Number		NB Status (started, progress, approval,
Inbox Workflow State		Inbox workflow state (processing)
Class IHM Rules		Rules of class society applicable for IHM
IHM Method	?	IHM Method (FiS for inspection or NB for only MDs)

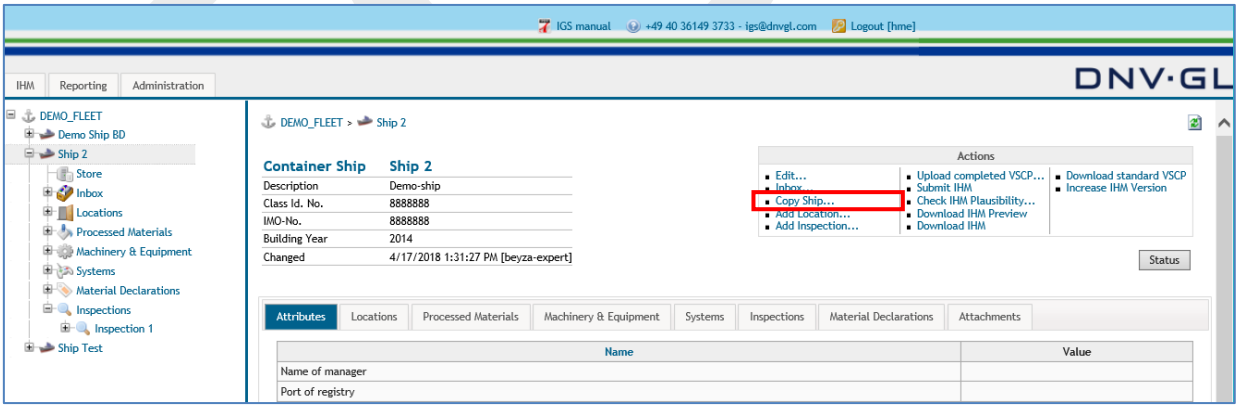
3.3 Inbox

Inbox is the place where MDs and SDoCs are uploaded to the ship project to prepare the IHM. Inbox is the main working location of the shipyards. However, shipowners and hazmat experts can also use inbox to upload MDs, if they receive any for a ship in operation. Details on how to work in inbox is provided in **Chapter 4**.



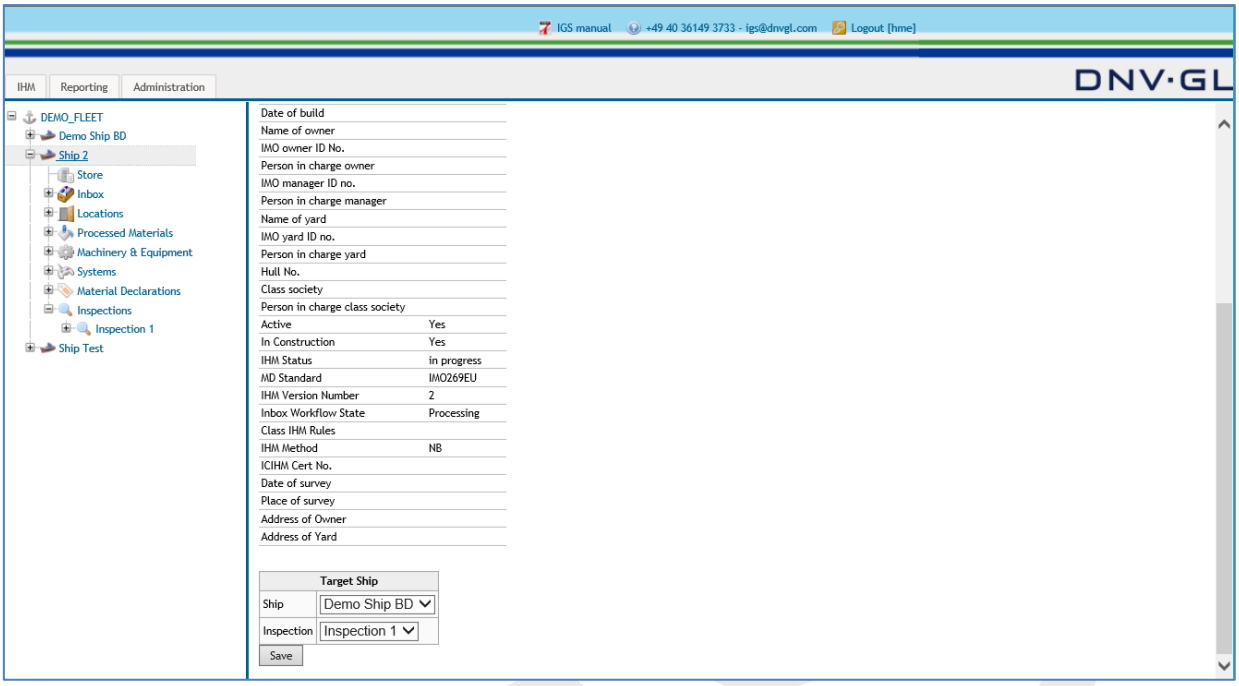
3.4 Copy ship

The user has the option to copy a prototype ship, the MDs and inspections to a sister ship. First, the user has to open the IHM tab on the main navigation bar to see fleet view. Now, the user can select the specific ship project from the navigation tree on the left side by opening the fleet node "+" and then select the name in the navigation tree, e.g. Ship 1, to see the ship project view on the right side.



To copy a ship (MDs or an inspection) to a sister ship select the "Copy Ship..." link in the actions box.

Then select the name of sister ship under the "Ship" tab and the inspection (VSCP) which should be copied under "Inspection" tab in the "Target Ship" table to copy the prototype ship to the selected sister ship.



Finally click on “Save” to copy the sister ship.

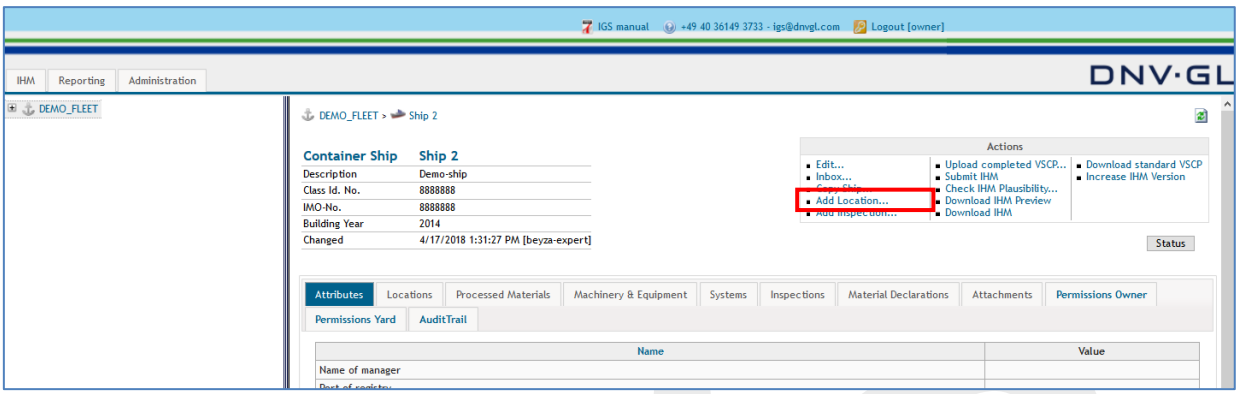
Note: All ship data of the prototype ship will be moved to the sister ship. The transferred ship data has to be verified in the inbox or in the inspection of the sister ship to finalize the IHM preparation process of the sister ship.

Note: The sister ship has to be created by the DNV GL Admin before the user can apply the “Copy Ship...“ link.

Note: The inspection can only be copied if the sister ship is empty.

3.5 Add a new location and sublocation to the ship project

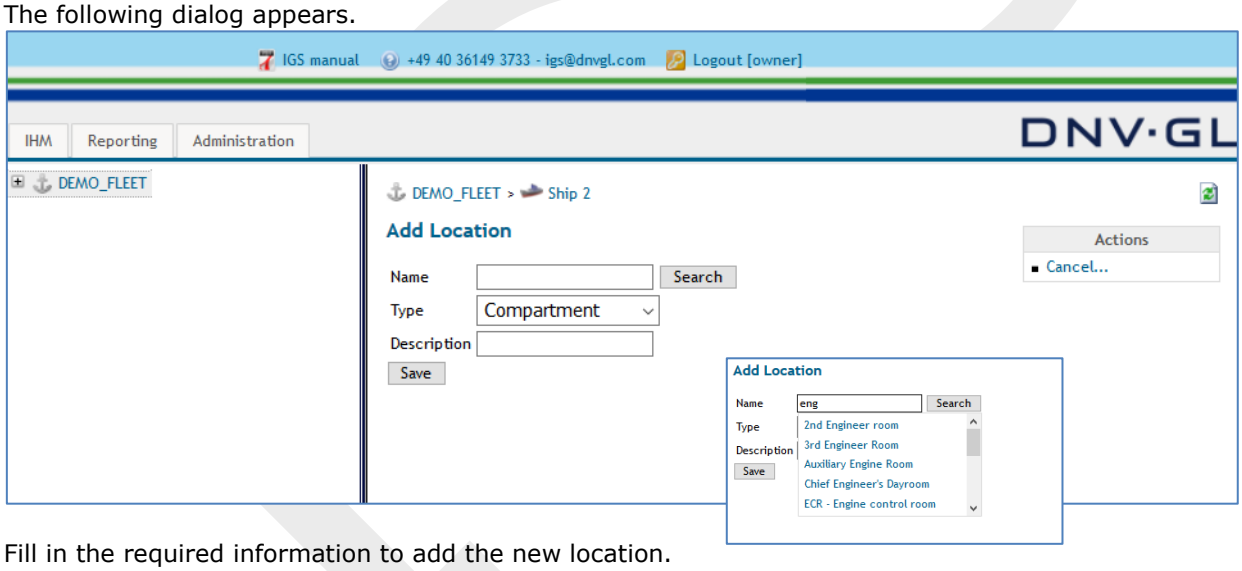
To add a new location to the ship project the user has to select the ship project tab from the navigation tree on the left side and open the node "+". Then select the "Add Location..." link in the actions box on the upper right side of the main view to add a new location to the ship.



Select "Add Location..." in the actions box on the upper right side to add a new location to the ship.

For adding locations to the ship the user must fill in the required information.

The following dialog appears.

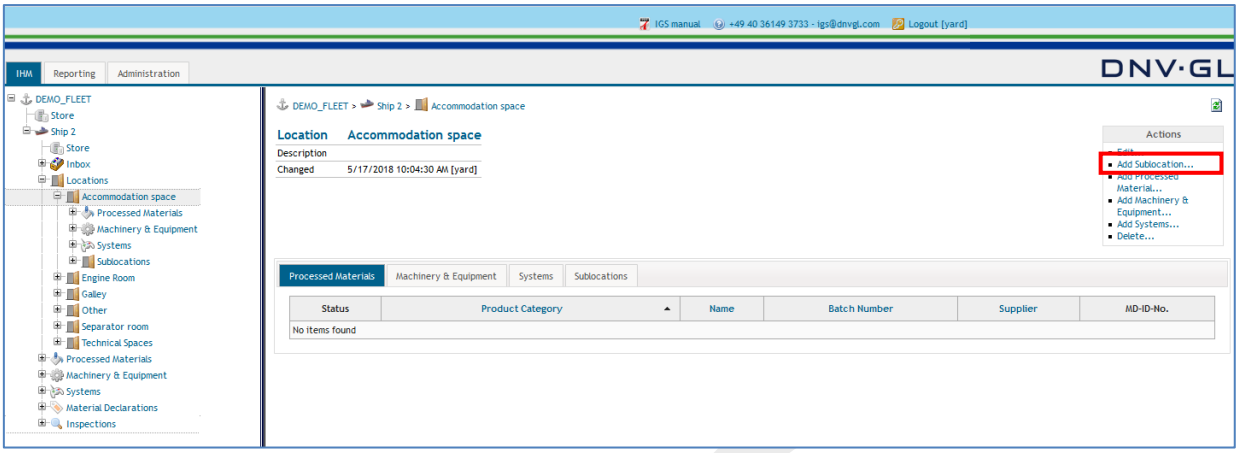


Fill in the required information to add the new location.

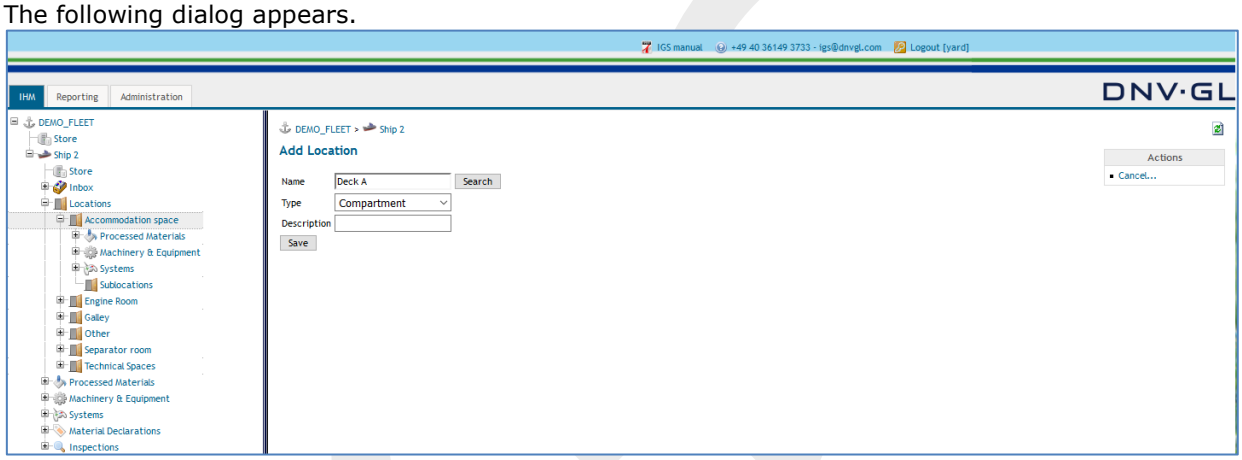
Finally click on "Save".

Note: This procedure must be conducted for all locations which were not defined during the preparation of the Initial IHM. (Use location names of General Arrangement Plan or Fire Control & Safety Plan).

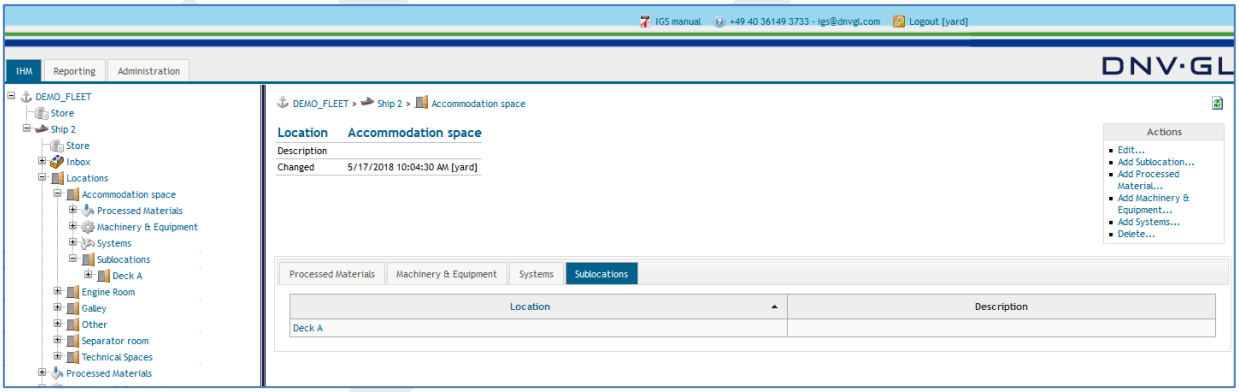
To add a sub-location to a main location, open the main location from the navigation tree on the left side by clicking the node "+". Then select the "Add sublocation" link in the actions box on the upper right side of the main view to add a new sublocation to the ship.



The following dialog appears.



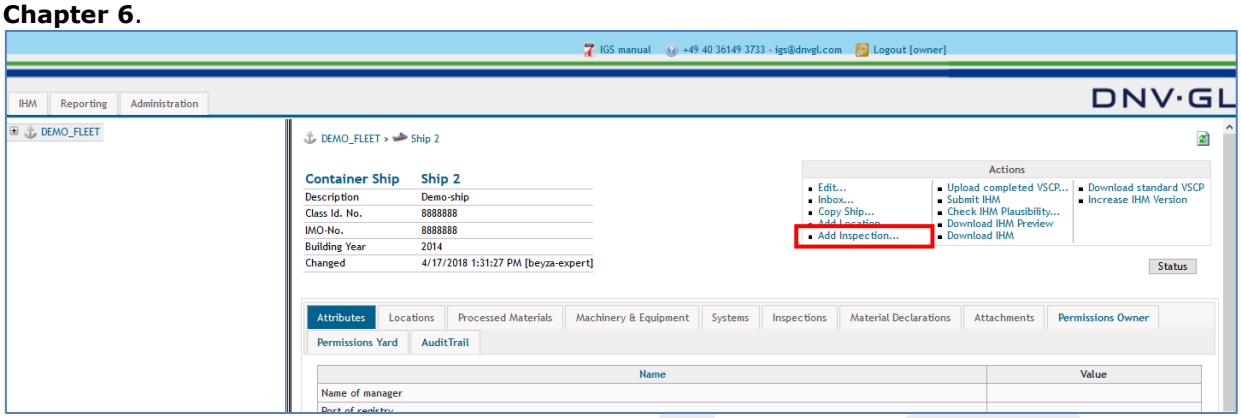
Enter the sublocation name into “Name” field. Click “Save”.



Sublocation will appear under the main location.

3.6 Add inspection

An inspection can be created directly in IGS. If the user wants to create the inspection (VSCP) without using excel VSCP, this option can be selected. The details of creating inspection will be detailed under **Chapter 6**.

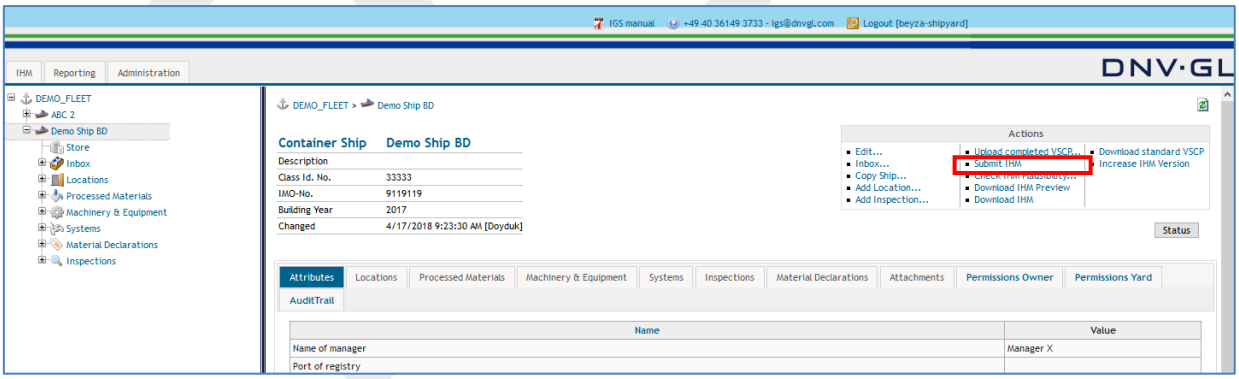


3.7 Upload completed VSCP

An inspection can be created directly in excel and be uploaded into IGS when completely filled in. If the user wants to work in MS Excel to create an inspection (VSCP), this option can be selected. The details of creating inspection will be detailed under **Chapter 6**.

3.8 Submit IHM

After all inbox items (SDoCs and MDs) have been confirmed in the inbox and / or the inspection have been accepted, the user must submit the IHM for DNV GL's review. Select the "Submit IHM" link in the actions box of the ship project to request review of the prepared IHM by DNV GL.



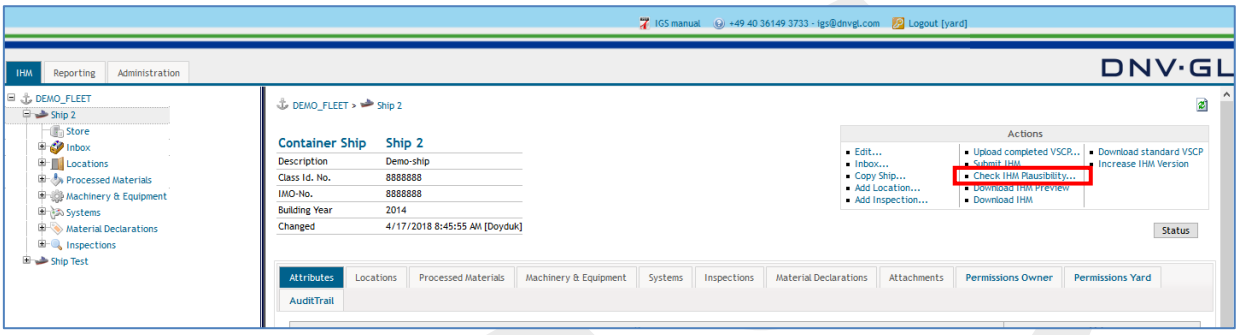
The DNV GL approval engineer in charge will than evaluate the inserted data of the IHM preparation and issue the certificate if no further deficiencies occur. In case of open deficiencies, the DNV GL approval engineer in charge will send an e-mail with the open remarks through the NPS system to the shipyard/shipowner.

Note: This procedure will be repeated until all deficiencies have been cleared and the certificate can be issued.

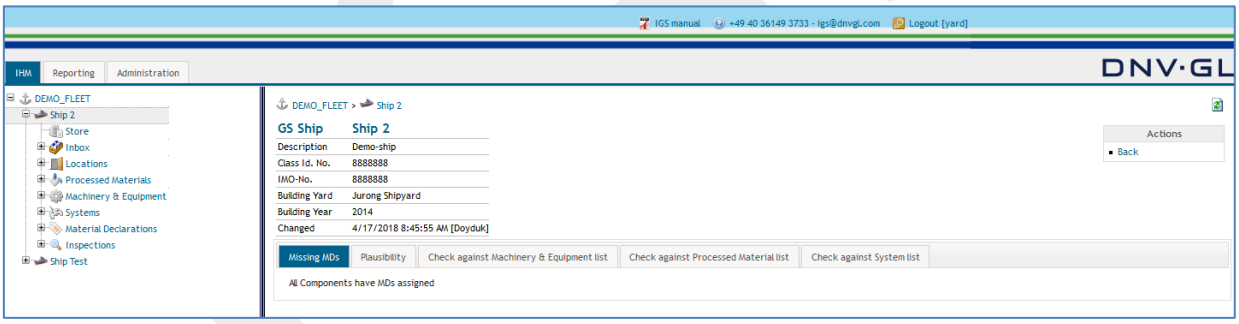
3.9 Check IHM plausibility

With the plausibility check option, it is possible to perform a verification check of the entered component and material (MD) information and the submitted SDoC and MD documentation. The submitted SDoC and MD documentation and entered specific MD information (attributes) will be checked against a standard list of components and materials (Processed Materials, Machinery & Equipment and Systems).

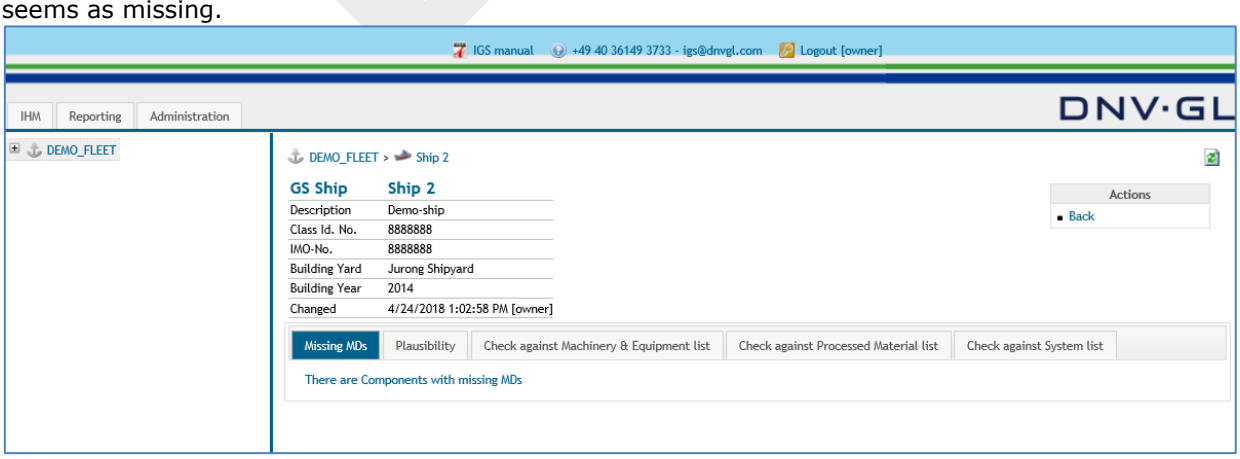
Select the "Check IHM Plausibility..." link in the actions box in the upper right corner of the main view to perform a plausibility check. Plausibility check can be performed even before clicking "Request Confirmation" link in the inbox.



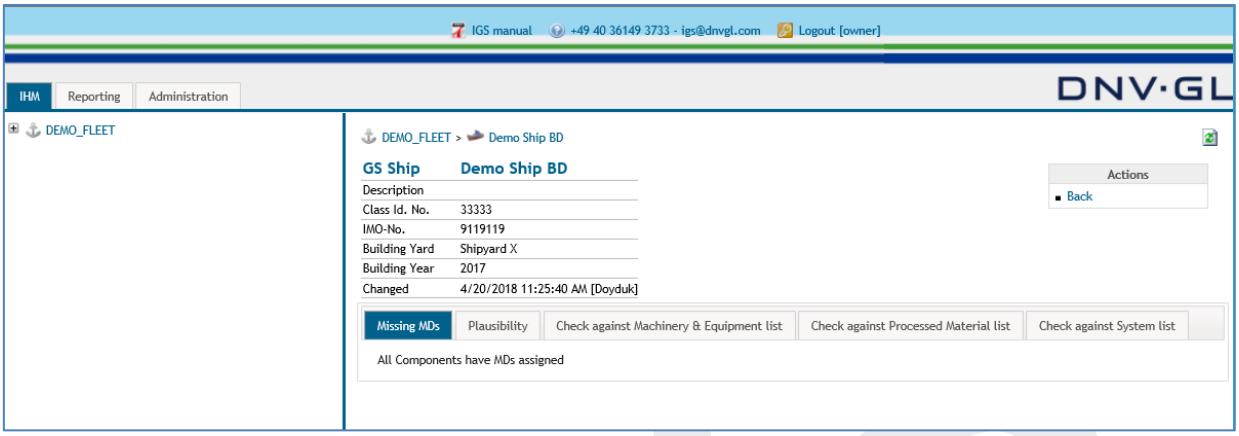
The first tab "Missing MDs" checks the components and materials (Processed Materials, Machinery & Equipment and Systems) against missing MDs and related SDoCs. If the MDs are uploaded to inbox only, "Missing MDs" field will always give "All components have MDs assigned" message.



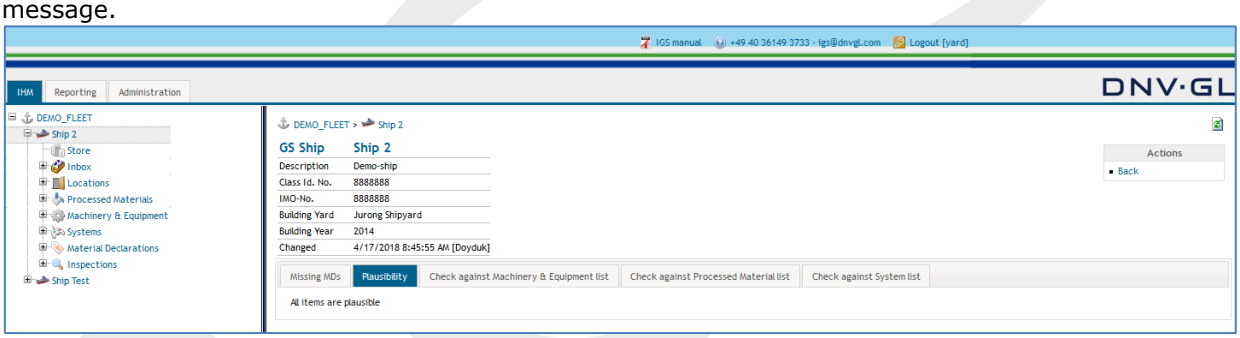
For the projects, where there is an inspection created and not yet accepted, "Missing MDs" tab will have the message as "There are Components with missing MDs" always, because inspection creates "inspection based Material Declarations" and until accepted, those MDs are not totally created, thus seems as missing.



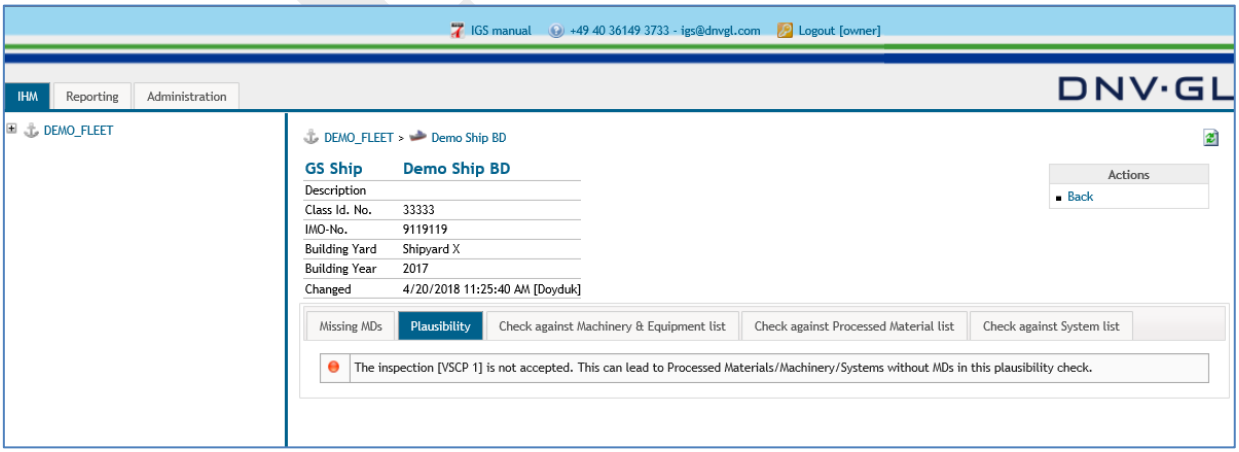
After inspection is accepted, inspection based material declarations will be created and "Missing MDs" under the plausibility check will give the message as "All components have MDs assigned".



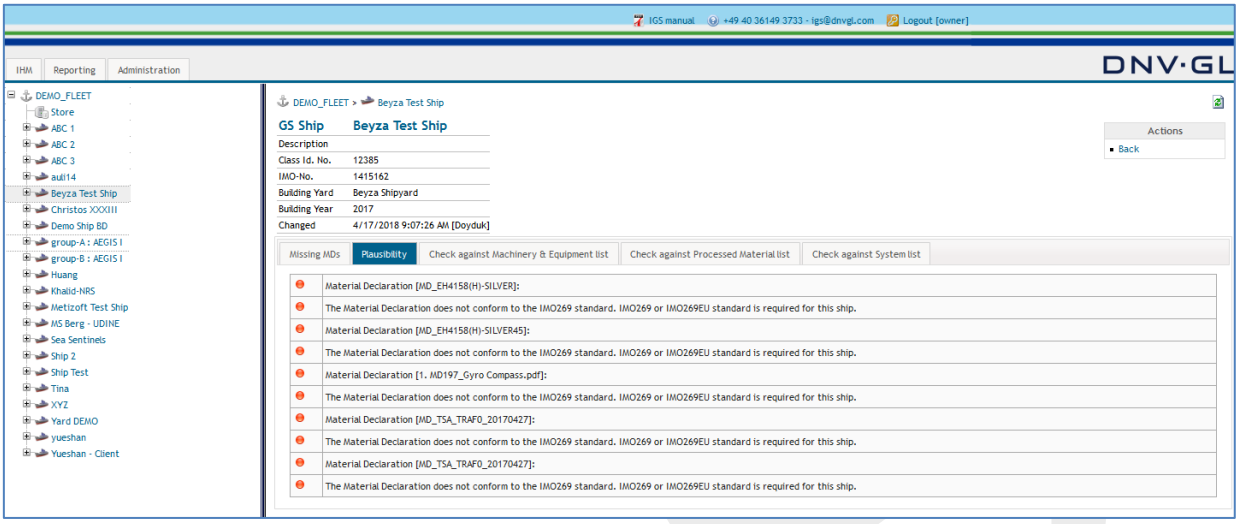
The second tab "Plausibility" checks the components and materials (Processed Materials, Machinery & Equipment and Systems) against the plausibility of the submitted data (SDoCs and MDs) and entered specific MD information (attributes).
If the MDs are uploaded to inbox only, "Plausibility" field will always give "All items are plausible" message.



For the projects, where there is an inspection created and not yet accepted, "Plausibility" tab will have the message as several products "has no MD assigned" always, because inspection creates "inspection based Material Declarations" and until accepted, those MDs are not totally created, thus seems as missing.

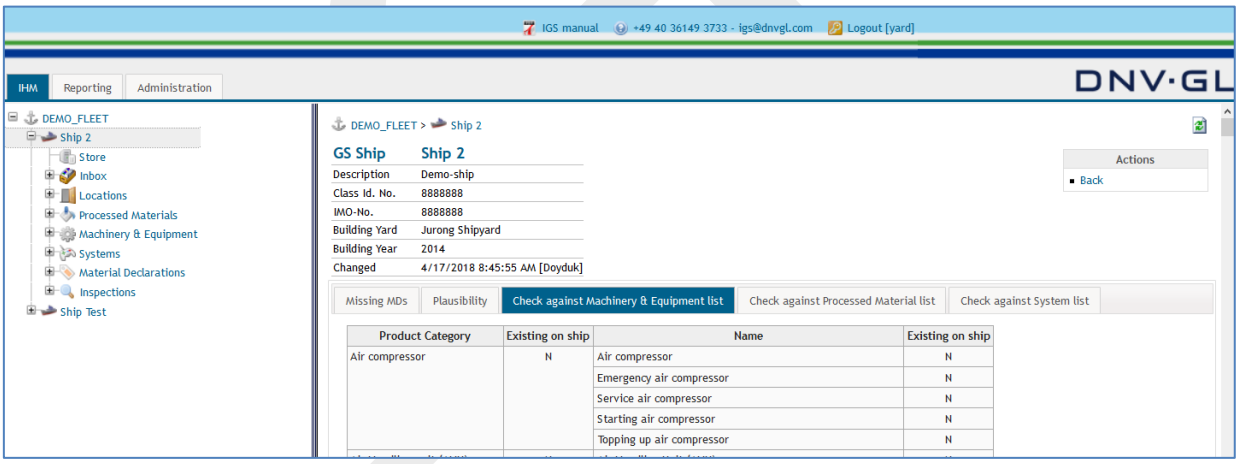


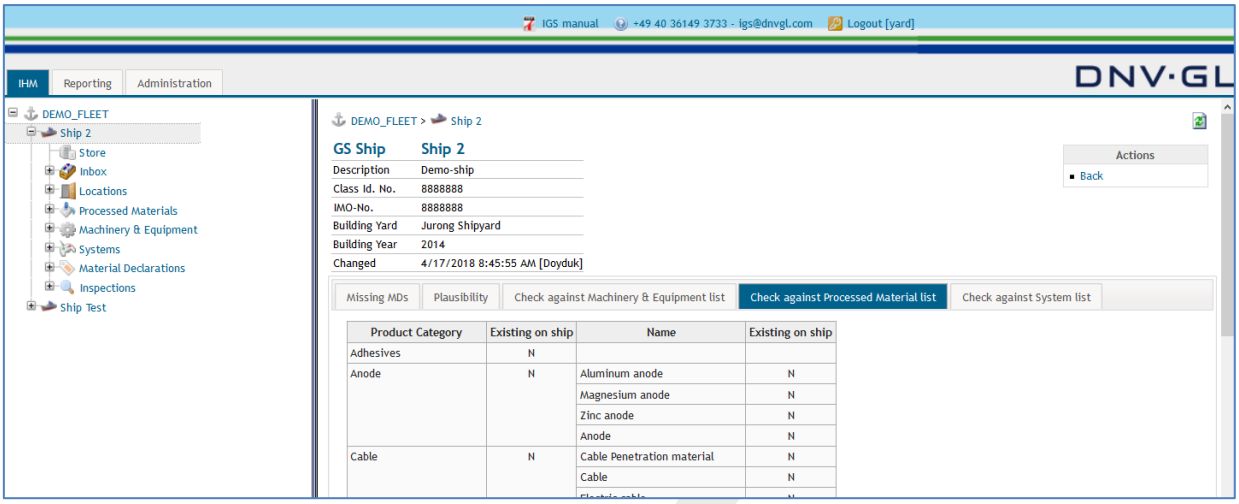
After inspection is accepted, inspection based material declarations will be created and “Plausibility” will list only the MDs that have nonconformities with the project.



Under the following three tabs the standard list of components and materials (Processed Materials, Machinery & Equipment and Systems) are checked against the submitted components and materials information. The tables under the three different tab views show whether the components and materials (MDs and related SDoCs) of the standard list are installed Y or not installed N on the ship.

Note: This plausibility check for the mentioned 3 tabs is only conducted for the uploaded MDs. It doesn’t check uploaded inspections and inspection based material declarations.

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Reporting
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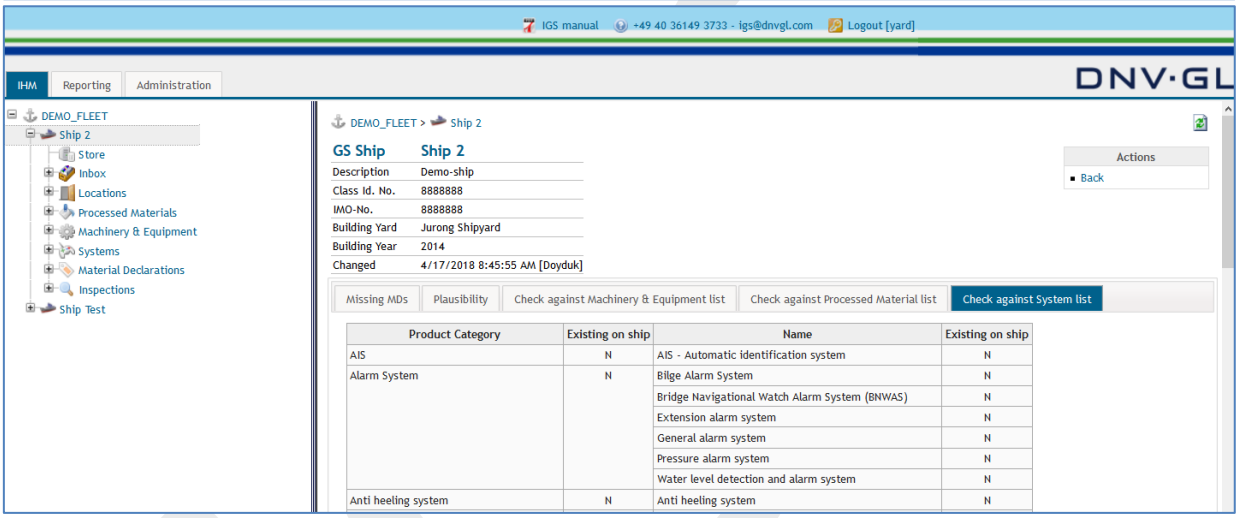
DEMO_FLEET
Ship 2
Store
Inbox
Locations
Processed Materials
Machinery & Equipment
Systems
Material Declarations
Inspections
Ship Test
DEMO_FLEET > Ship 2
GS Ship Ship 2
Description Demo-ship
Class Id. No. 8888888
IMO-No. 8888888
Building Yard Jurong Shipyard
Building Year 2014
Changed 4/17/2018 8:45:55 AM [Doyduk]
Actions
Back
Missing MDs
Plausibility
Check against Machinery & Equipment list
Check against Processed Material list
Check against System list
Product Category
Existing on ship
Name
Existing on ship
Adhesives N
Anode N
Aluminum anode N
Magnesium anode N
Zinc anode N
Anode N
Cable N
Cable Penetration material N
Cable N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Ship 2
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Machinery & Equipment
Systems
Material Declarations
Inspections
Ship Test
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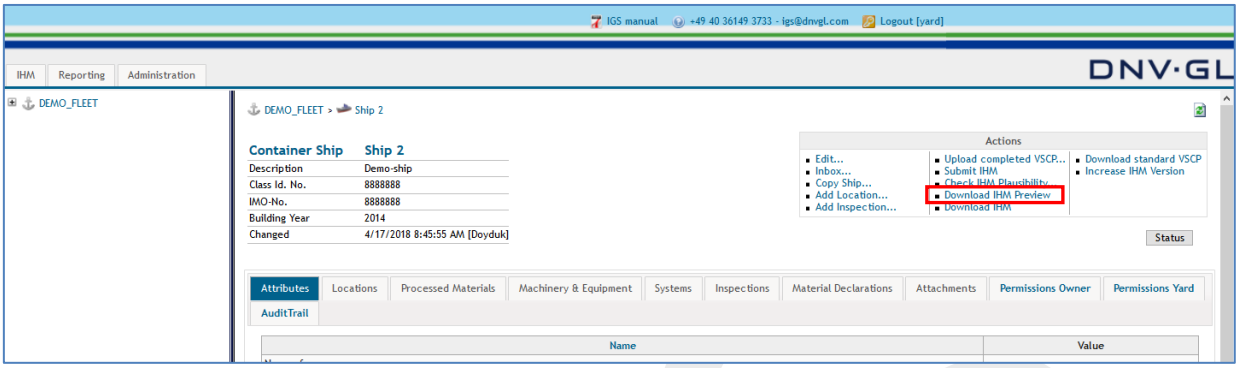
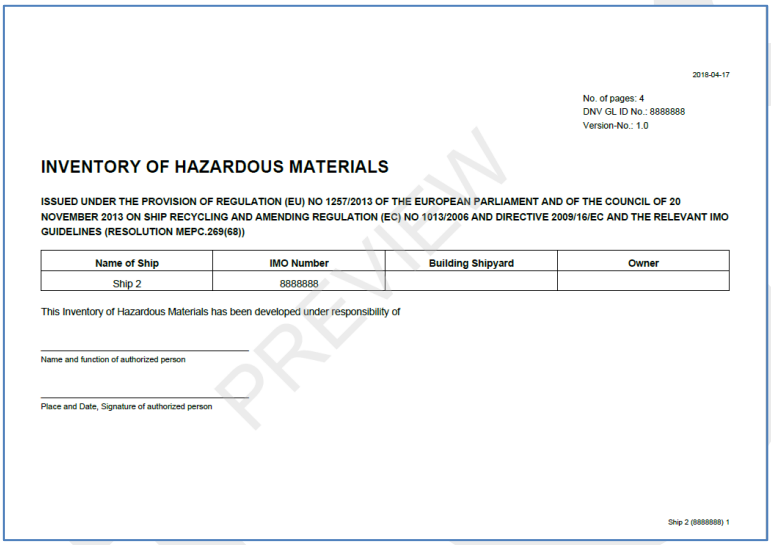
GS Ship Ship 2
Description Demo-ship
Class Id. No. 8888888
IMO-No. 8888888
Building Yard Jurong Shipyard
Building Year 2014
Changed 4/17/2018 8:45:55 AM [Doyduk]
Actions
Back
Missing MDs
Plausibility
Check against Machinery & Equipment list
Check against Processed Material list
Check against System list
Product Category
Existing on ship
Name
Existing on ship
AIS N
AIS - Automatic identification system N
Alarm System N
Bilge Alarm System N
Bridge Navigational Watch Alarm System (BNWAS) N
Extension alarm system N
General alarm system N
Pressure alarm system N
Water level detection and alarm system N
Anti heeling system N
Anti heeling system N

3.10 Download IHM preview

To view the draft IHM, the user must select the "Download IHM Preview" link in the actions box in the ship project view.



Click on "Download IHM Preview" link in the actions box to view or save IHM in pdf format.



2018-04-17

No. of pages: 4
DNV GL ID No.: 8888888
Version-No.: 1.0

INVENTORY OF HAZARDOUS MATERIALS

ISSUED UNDER THE PROVISION OF REGULATION (EU) NO 1257/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 20 NOVEMBER 2013 ON SHIP RECYCLING AND AMENDING REGULATION (EC) NO 1013/2006 AND DIRECTIVE 2009/16/EC AND THE RELEVANT IMO GUIDELINES (RESOLUTION MEPC.269(68))

Name of Ship	IMO Number	Building Shipyard	Owner
Ship 2	8888888		

This Inventory of Hazardous Materials has been developed under responsibility of

Name and function of authorized person

Place and Date, Signature of authorized person

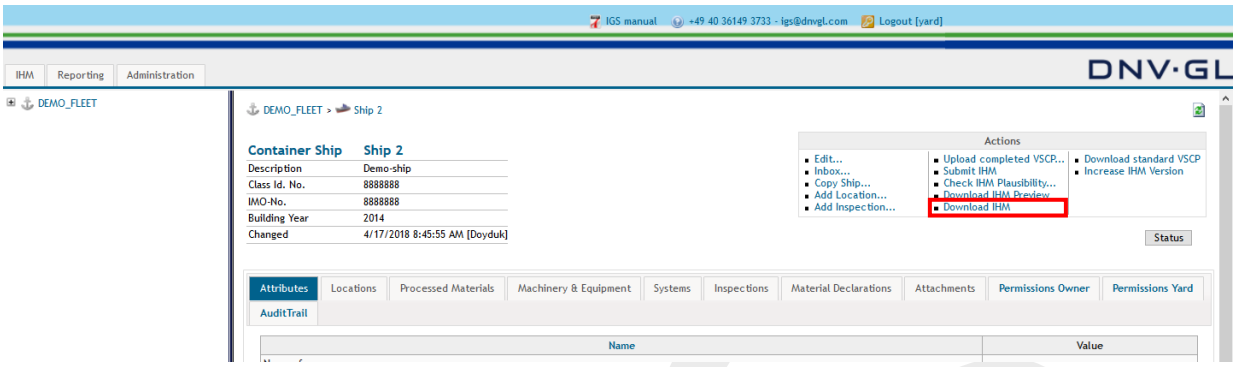
Ship 2 (8888888) 1

Note: Even before clicking "Request confirmation" link in the inbox, IHM preview can be generated so that users can clearly see and have an overview on the IHM, to check the correctness of the project.

Note: For the IHMs that are prepared based on inspections, "Download IHM Preview" link would only work after acceptance of the submitted inspection.

3.11 Download IHM

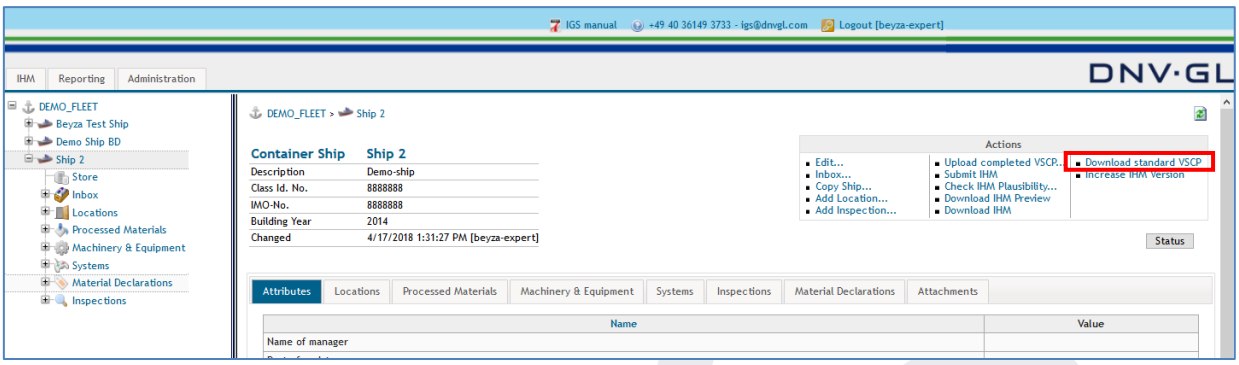
To view the prepared final IHM, the user must select the "Download IHM..." link in the actions box in the ship project view.



Click on "Download IHM..." link in the actions box to view or save IHM as pdf format. The final IHM needs to be signed by the originator and submitted to DNV GL for approval.

3.12 Download standard VSCP

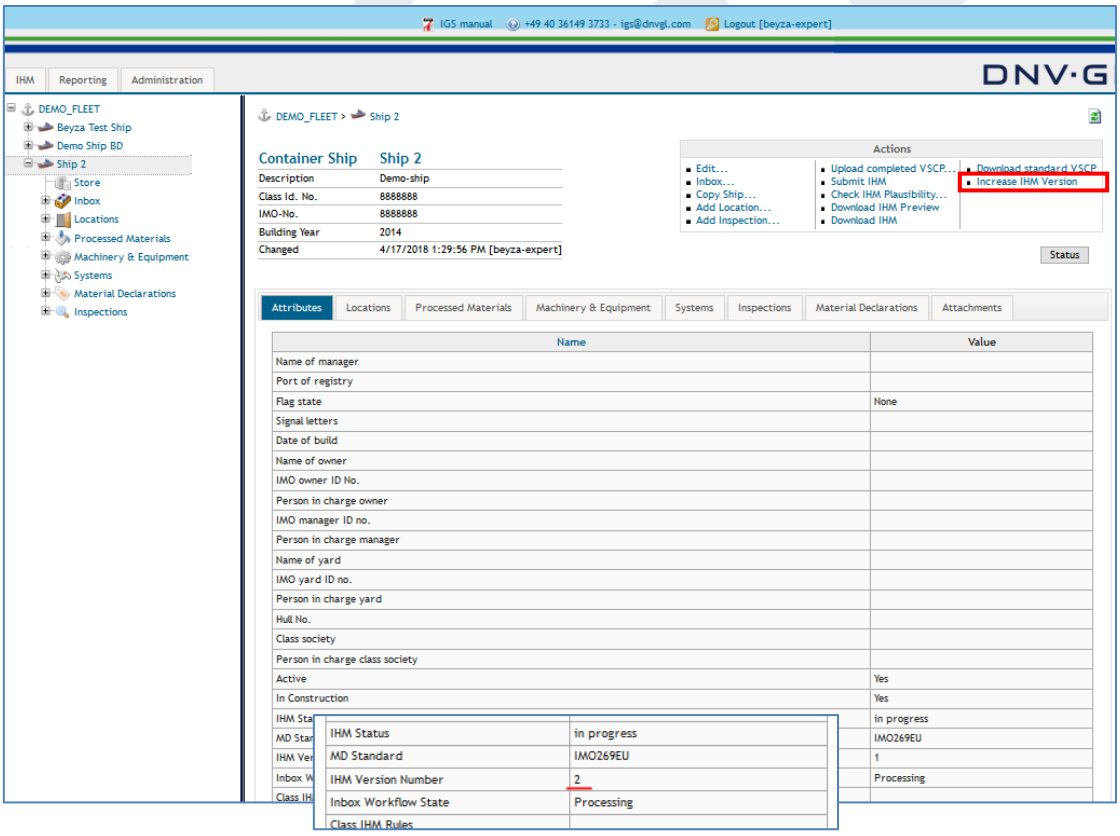
DNV GL has worked on and prepared a standard VSCP for the users of IGS. The standard VSCP is based on the check items listed in the indicative list provided in MEPC269(68) and can be downloaded in excel format by clicking "Download standard VSCP" link in the actions box.



How to work with the standard VSCP is described in **Chapter 5**

3.13 Increase IHM version

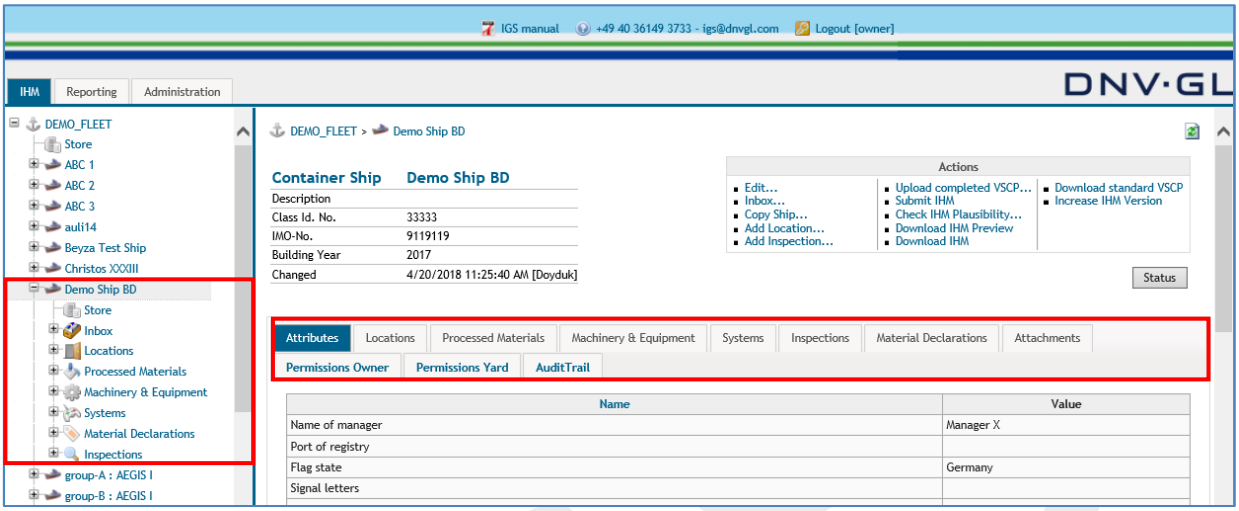
For administrative purposes the user has the opportunity to Increase IHM version. Select the "Increase IHM Version" link in the actions box in the ship project view to increase the IHM version numbering.



Note: The IHM version numbering can be revised with the "Edit…" link in the actions box in the ship project view.

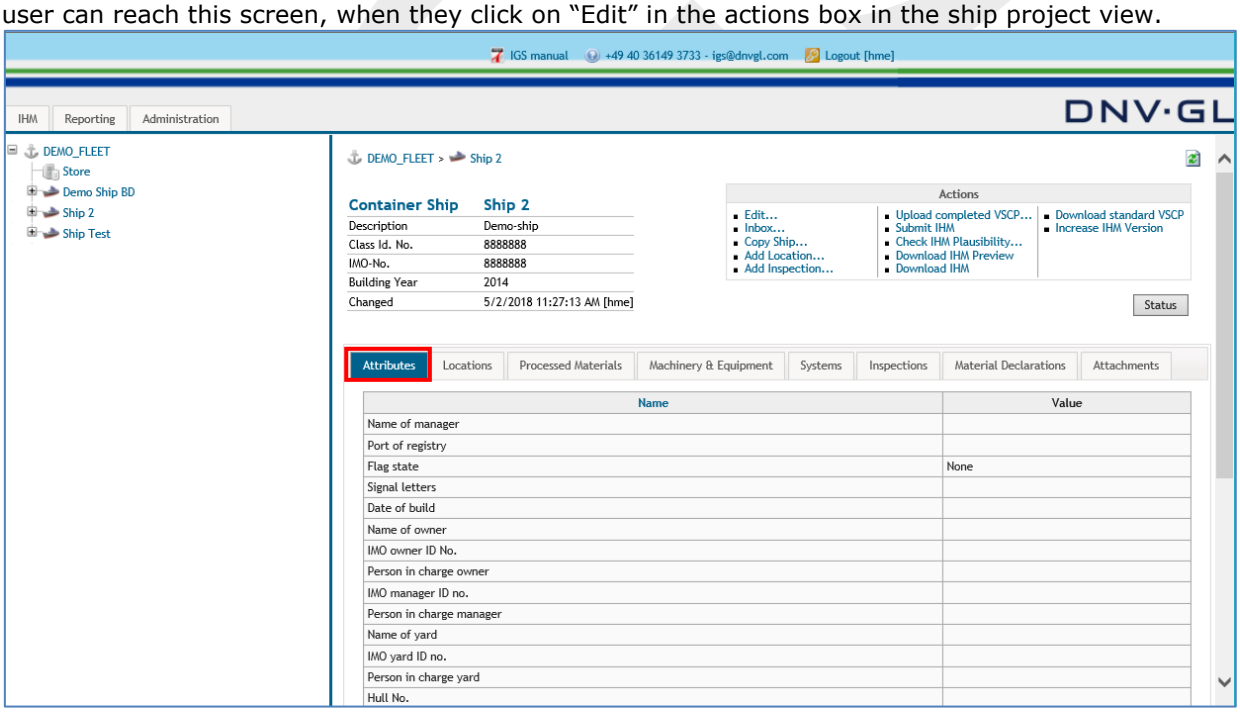
3.14 Navigation bar in ship view

The IGS user interface is subdivided into two parts, a navigation tree on the left side and navigation bar on ship project view on the right side. The user can toggle between specific topics, e.g. Attributes, Locations, Systems, Inspections, etc. of the ship project.



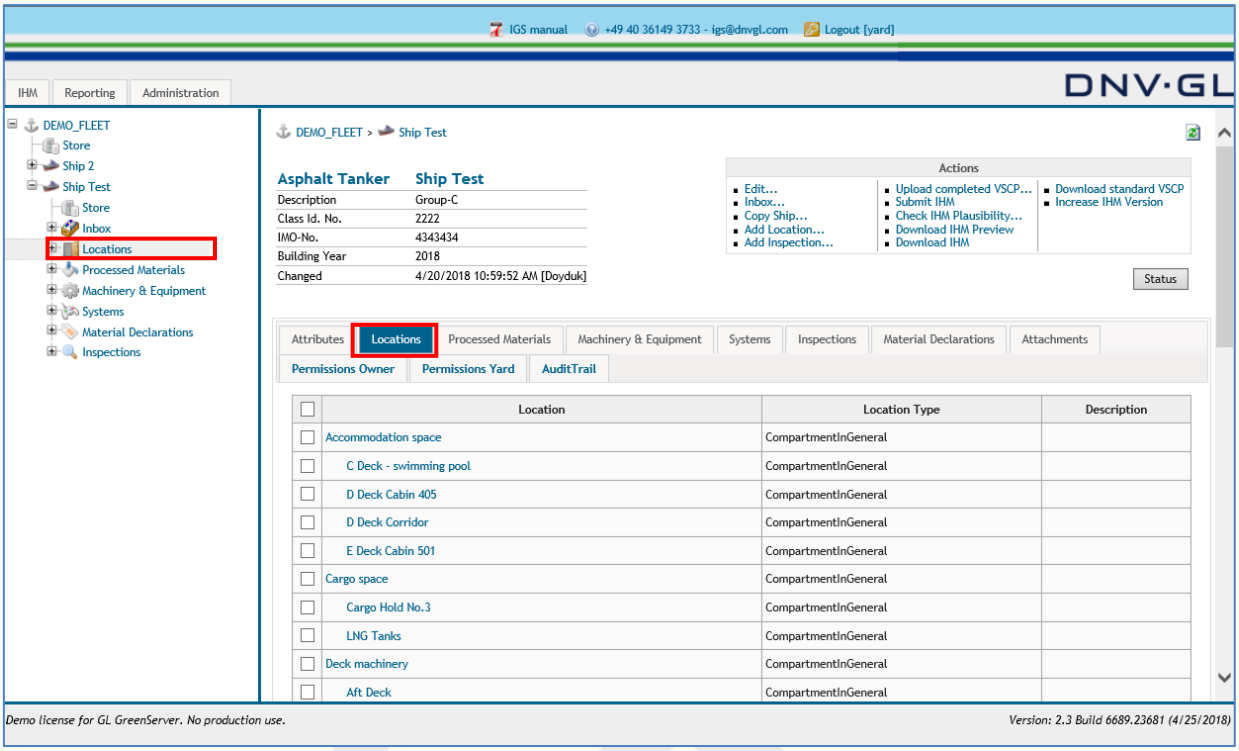
3.14.1 Attributes tab

By clicking on the "Attributes" tab of the navigation bar, a table listing the ship attributes is shown. The user can reach this screen, when they click on "Edit" in the actions box in the ship project view.

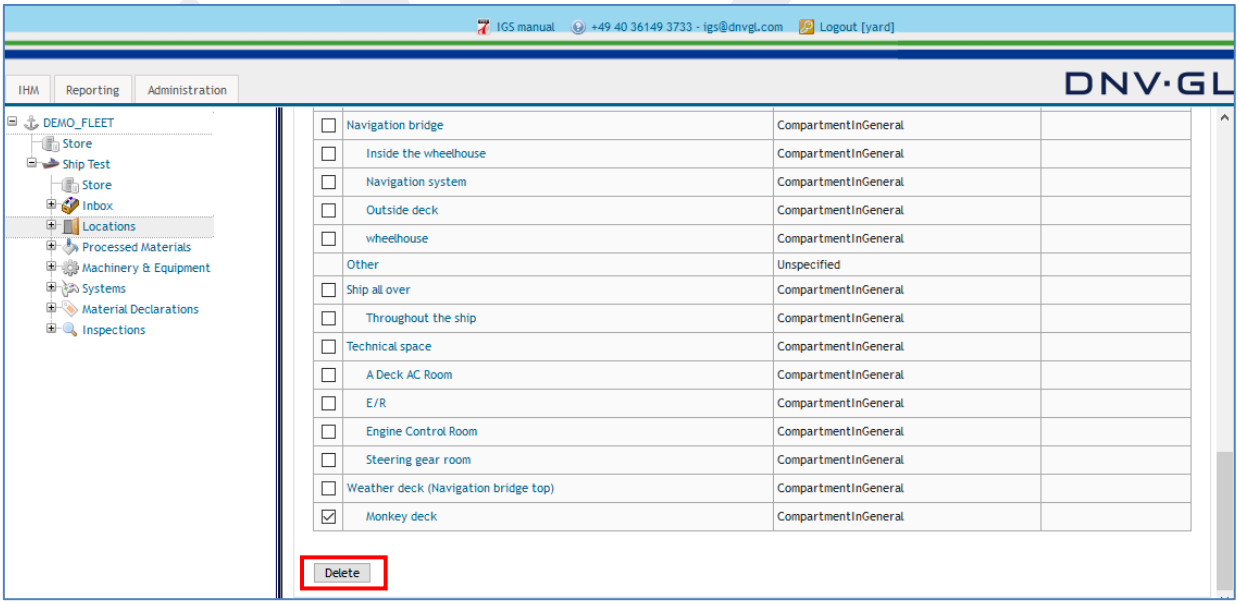


3.14.2 Locations tab

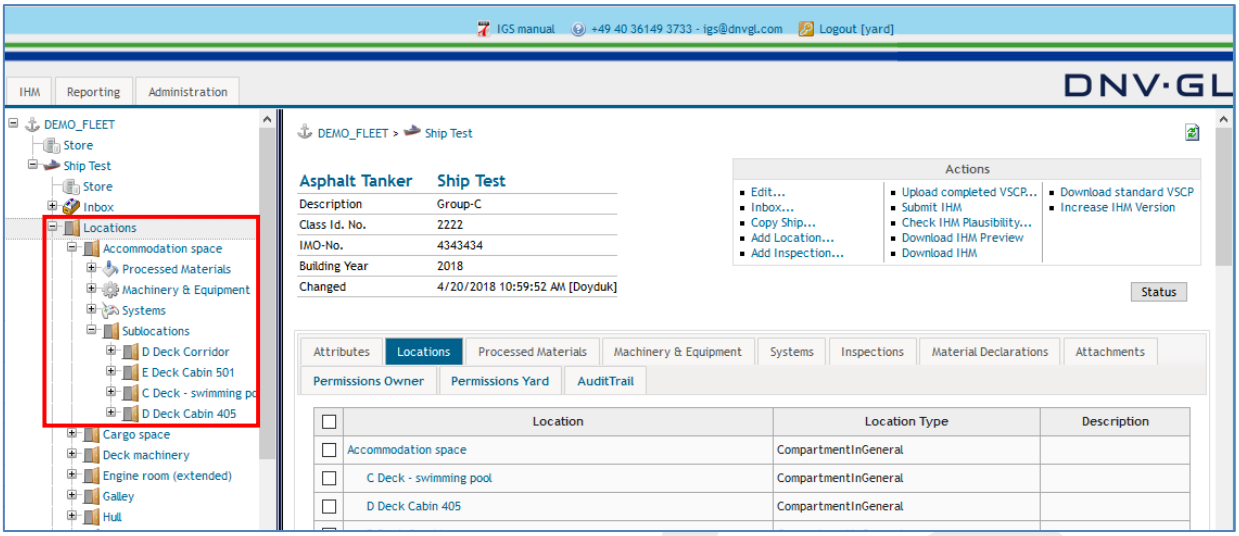
By clicking on the "Locations" tab of the navigation bar, a table listing the ship's locations are shown. The user can reach this screen, when they click on "Locations" in the main navigation tree.



To delete one or several locations, the user should check the tick boxes next to the location to be deleted and should click on delete at the end of the screen.



To navigate among the locations, the user can use the "Locations" tab in the main navigation tree to see the main and sublocations.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Accommodation space
Processed Materials
Machinery & Equipment
Systems
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D Deck Corridor
E Deck Cabin 501
C Deck - swimming po
D Deck Cabin 405
Cargo space
Deck machinery
Engine room (extended)
Galley
Hull
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Asphalt Tanker
Ship Test
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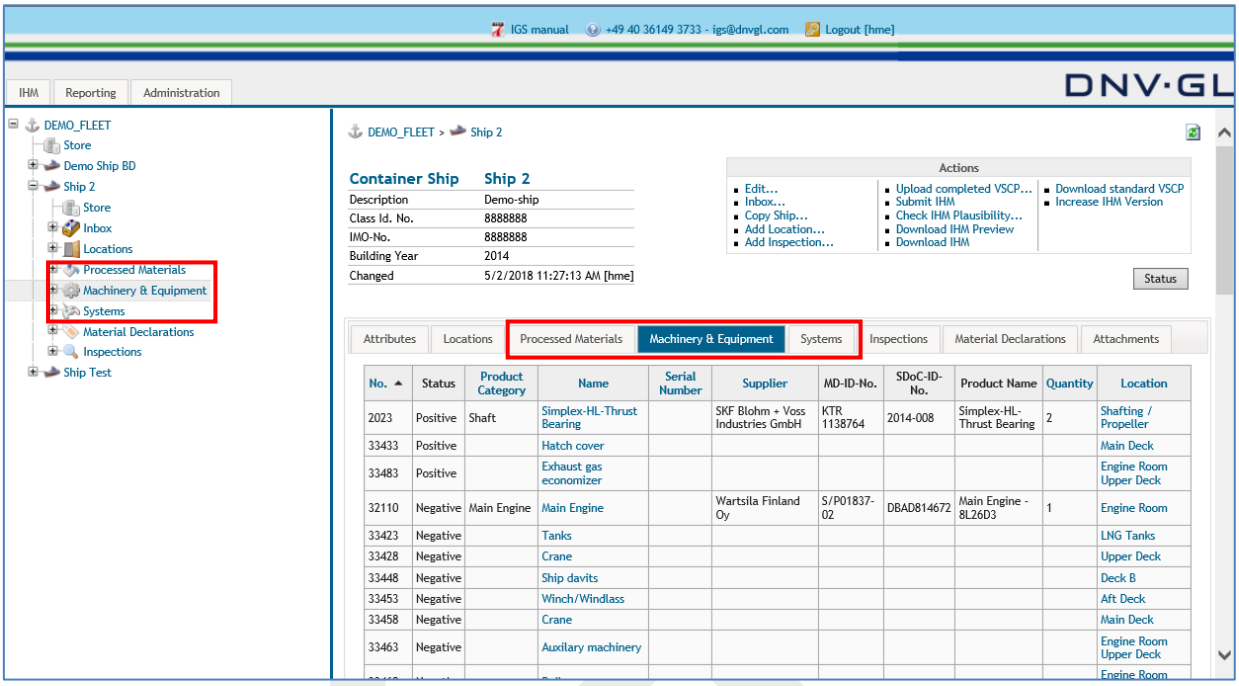
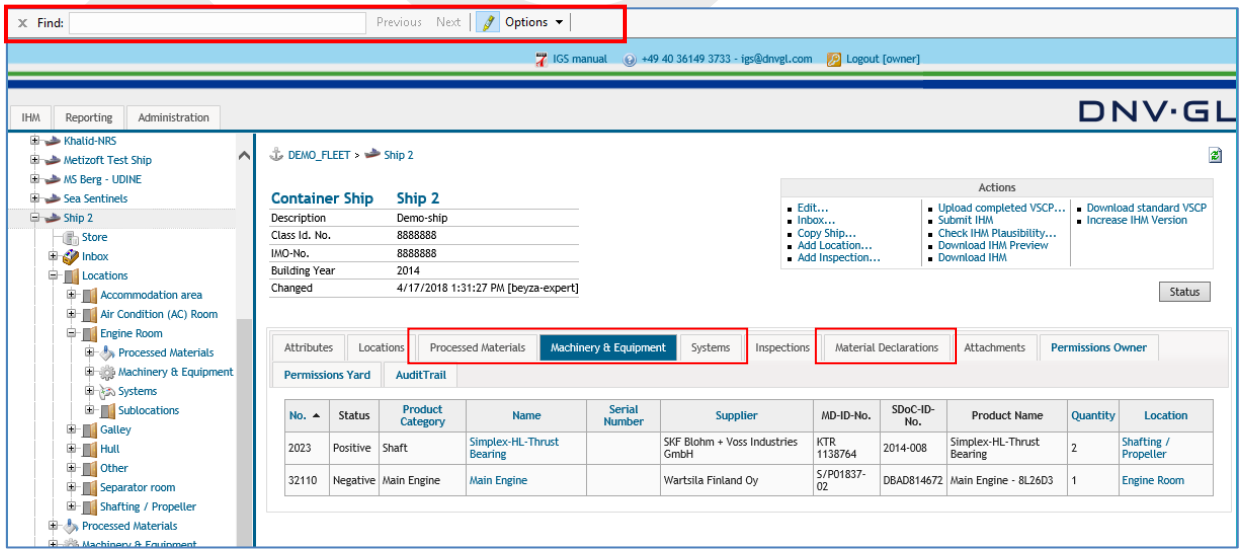
Changed
4/20/2018 10:59:52 AM [Doyduk]
Actions
Edit...
Inbox...
Copy Ship...
Add Location...
Add Inspection...
Upload completed VSCP...
Submit IHM
Check IHM Plausibility...
Download IHM Preview
Download IHM
Download standard VSCP
Increase IHM Version
Status
Attributes
Locations
Processed Materials
Machinery & Equipment
Systems
Inspections
Material Declarations
Attachments
Permissions Owner
Permissions Yard
AuditTrail
Location
Location Type
Description
Accommodation space
CompartmentInGeneral
C Deck - swimming pool
CompartmentInGeneral
D Deck Cabin 405
CompartmentInGeneral

3.14.3 Processed materials, machinery & equipment, systems

Those 3 tabs lists the component and materials either uploaded by an MD or created through an inspection. The user can reach this screen, when they click on "Processed Materials, Machinery & Equipment, Systems" in the main navigation tree."



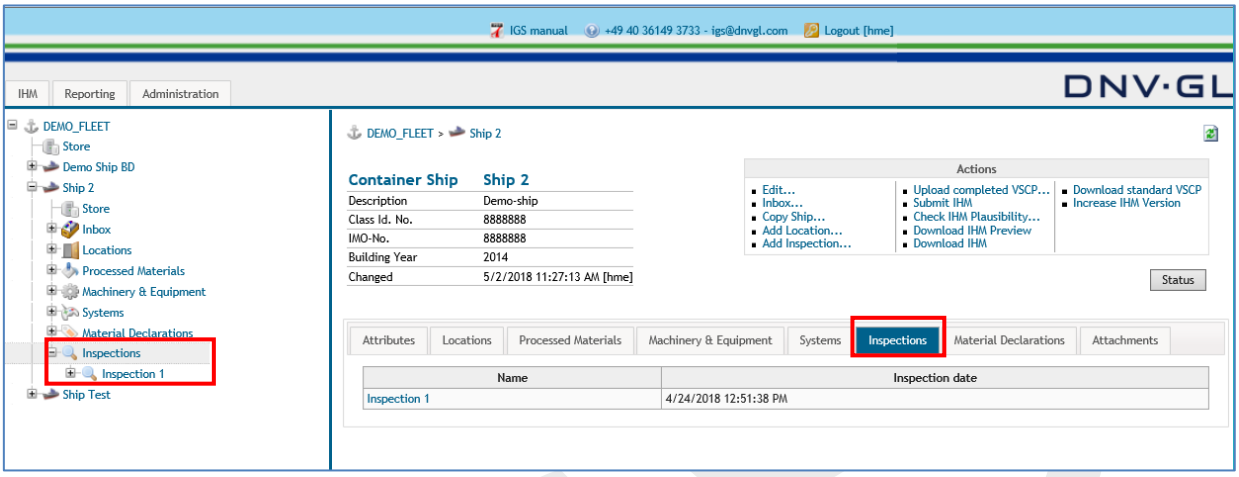
To search for a specific component or material, select either the Processed Material, Machinery & Equipment, System or "Material Declarations" tab of the navigation bar in the main view of the ship project. Use the search function of your browser. Insert search name into the search field of the browser and press "Next" or "Enter".



Note: Access the search function of the browser through pressing "CTRL and F" at the same time.

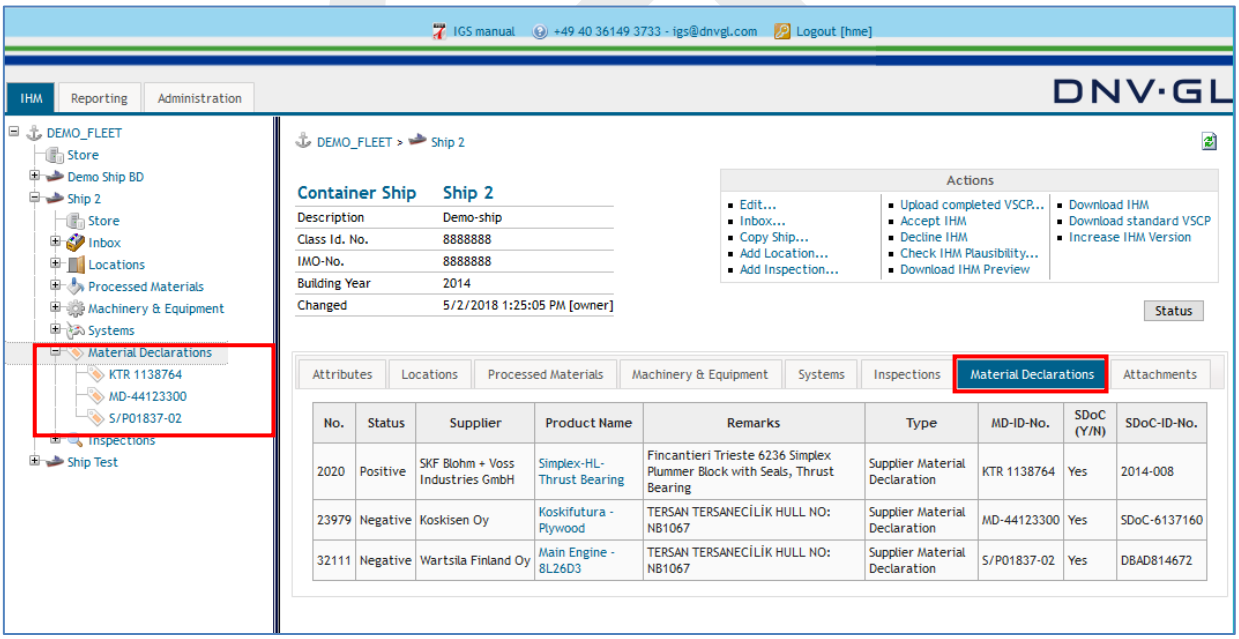
3.14.4 Inspections tab

By clicking on the "Inspections" tab of the navigation bar, the created inspections are listed in a table are shown. The user can reach this screen, when they click on "Inspections" in the main navigation tree. The user can open the inspection by clicking on it.



3.14.5 Material declarations

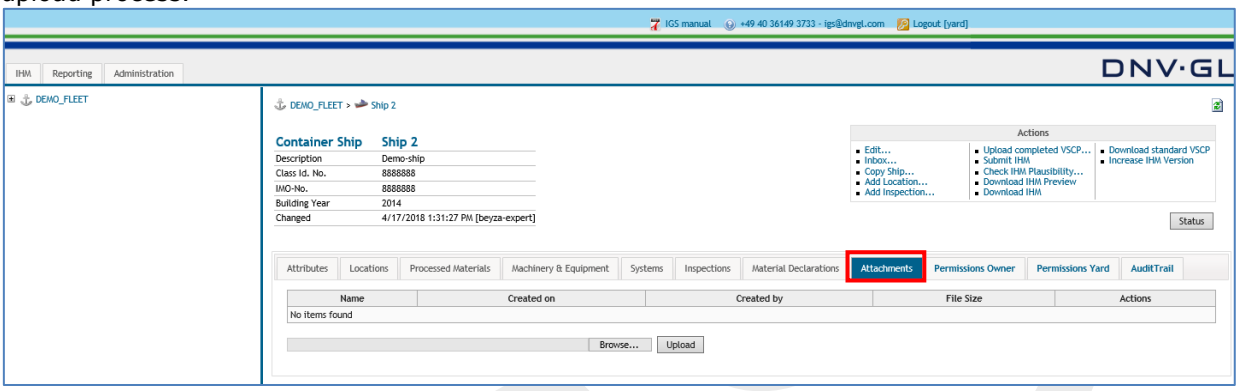
By clicking on the "Material Declarations" tab of the navigation bar, the uploaded MDs prepared by suppliers are listed in a table. The user can reach this screen, when they click on "Material Declarations" tab in the main navigation tree. Inspection based MDs will not be shown under this tab.

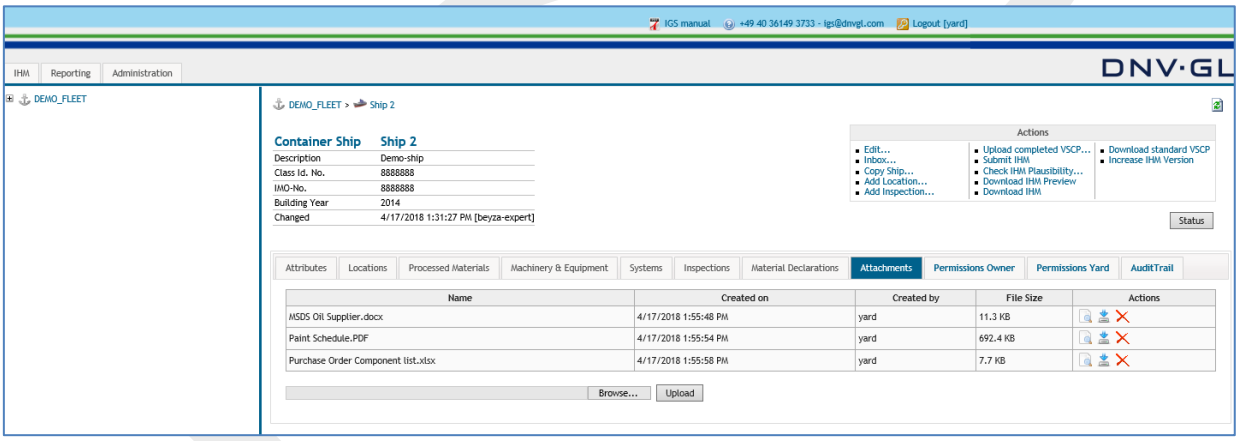


3.14.6 Attachments tab

As additional option the users of IGS have the opportunity to upload additional documents in different file types to the ship project under the "Attachment" tab in the navigation bar on the right side of the main view.

To upload additional documents, select the "Browse…" link under the "Attachments" tab. Then select the document from a folder on the hard drive of the computer. After selection of the document from the hard drive the link to this document is shown in the browse field. Click the "upload" link to complete the upload process.





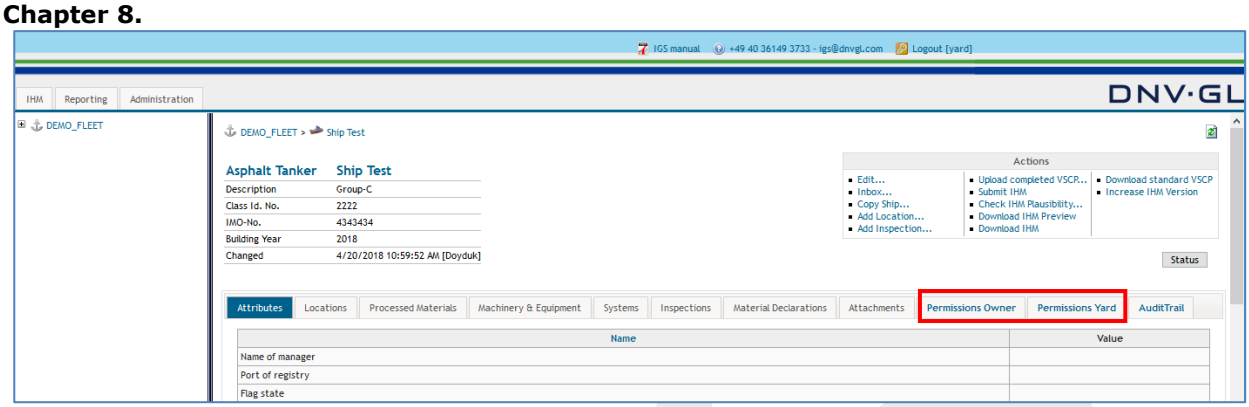
Note: The additional documents upload function is not meant as alternative to upload SDoC and MD for the preparation of the IHM.

Note: Additional documents means document with important additional information regarding the components and material of the ship project.

Note: The capacity of the upload volume of additional documents upload function is limited and should only be used to upload necessary information.

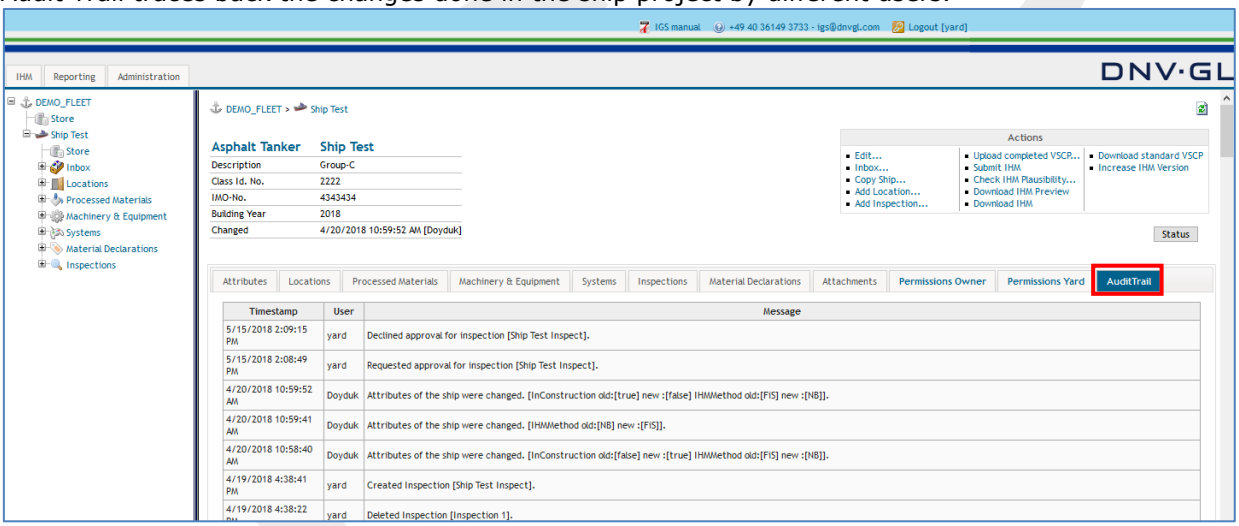
3.14.7 Permissions owner and permissions yard

To assign a shipyard user or shipowner user to a specific ship project the shipyard admin or shipowner admin must choose the respective shipyard user or shipowner user from the pull-down menu under the "Permission Yard" or "Permissions Owner" tabs. Details of permission management is provided in **Chapter 8.**



3.14.8 Audit trail

Audit Trail traces back the changes done in the ship project by different users.

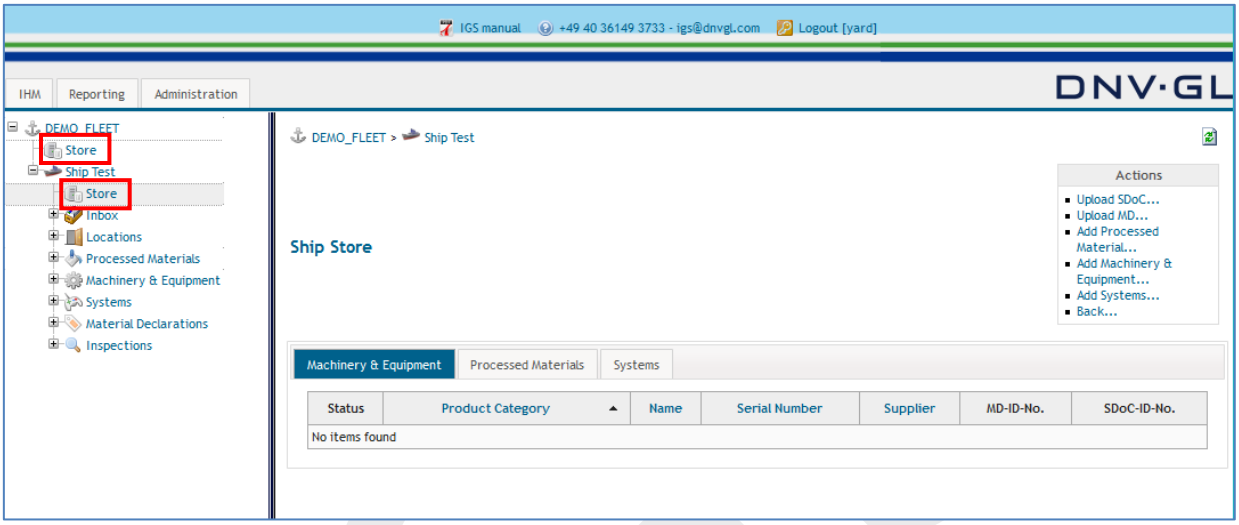


Audit Trail under ship project view displays the following actions done by a specific user;

- Changes to the ship attributes
- Add/remove authorizations for users
- Creating/Deleting a ship
- Creating/Deleting an inspection
- Creating checks [Equipment] in the inspection
- Submit/accept/decline inspection
- Uploading of MD/SDoC by the supplier
- Uploading of MD/SDoC by the user
- Re-opening the inspection
- Send invitation mail to supplier
- Created installation in a location
- Moved component from ship store to a location.
- Upload / delete attachments for the ship level
- Upload attachments for the inspection level
- Inbox confirmation requested.
- Confirming/rejecting inbox
- Submit IHM

3.14.9 Fleet store and ship store

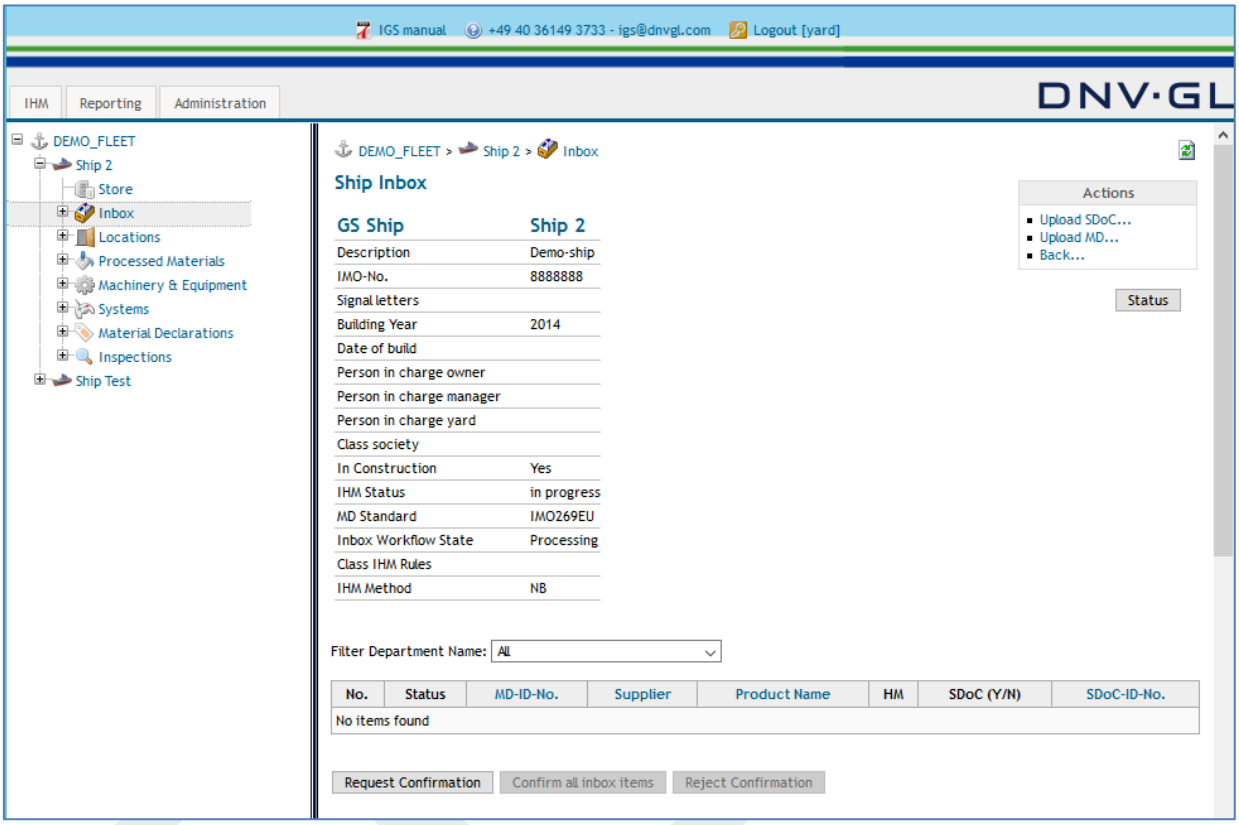
Fleet store and ship store is mainly used by the shipowners for maintenance of their IHMs. MDs and SDoCs for the products that are purchased for the fleet/ship but not yet installed should be uploaded into the stores. The shipowner either uploads a product to general fleet store and then move it to a ship or a specific location in a ship when it is installed, or can directly upload the product to ship's store and move it to a specific location when the product is installed on board. Details of store functions are provided in **Chapter 7.3.**



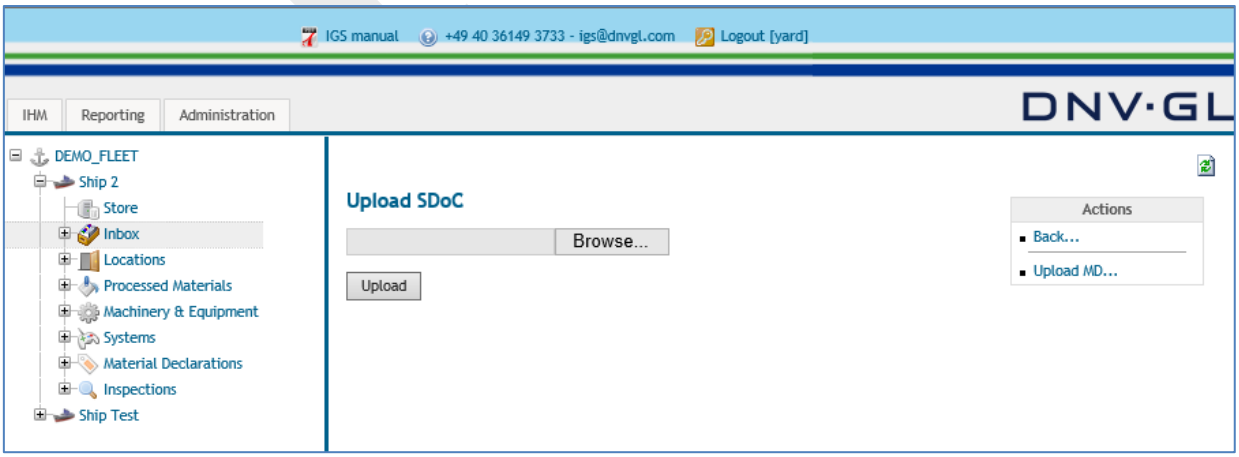
4 USING INBOX FOR PREPARATION OF IHM

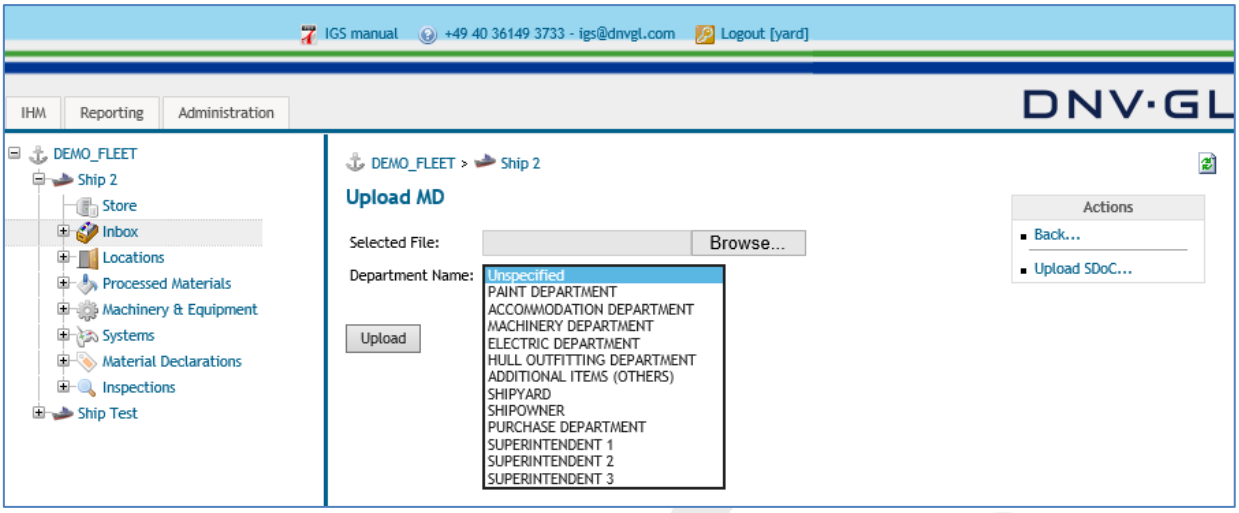
4.1 Uploading SDoC and MD into the inbox

For the preparation of the IHM the user must select within the ship project the sub-item "Inbox" in the navigation tree on the left side to see the inbox view on the right side.



To begin the IHM preparation the user must upload all project related SDoCs and MDs into the inbox by using the "Upload SDoC..." and "Upload MD..." link in the Action Box. Select the "Upload SDoC…" first, then select the "Upload MD…" link in the actions box to upload the project related MDs or SDoCs.

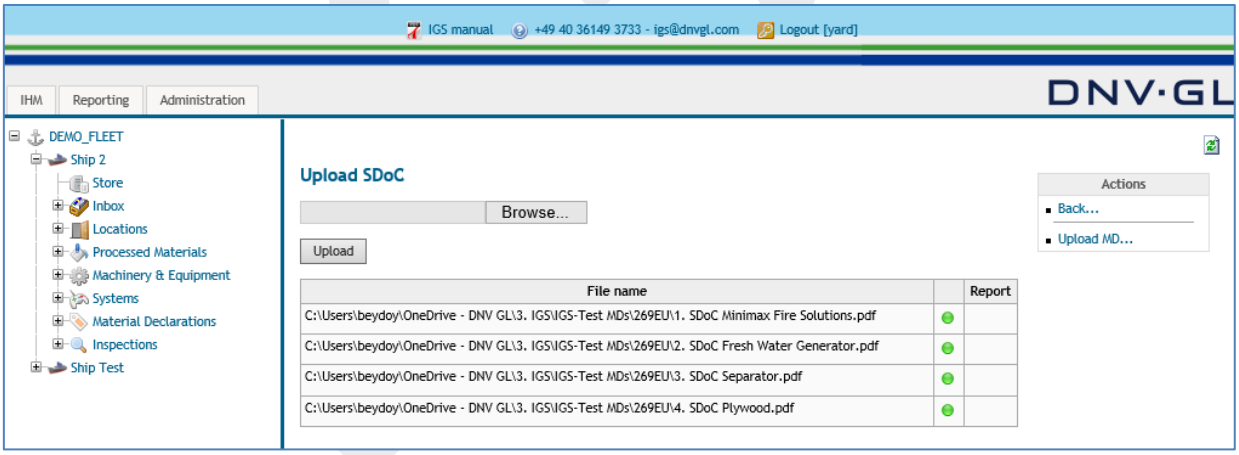


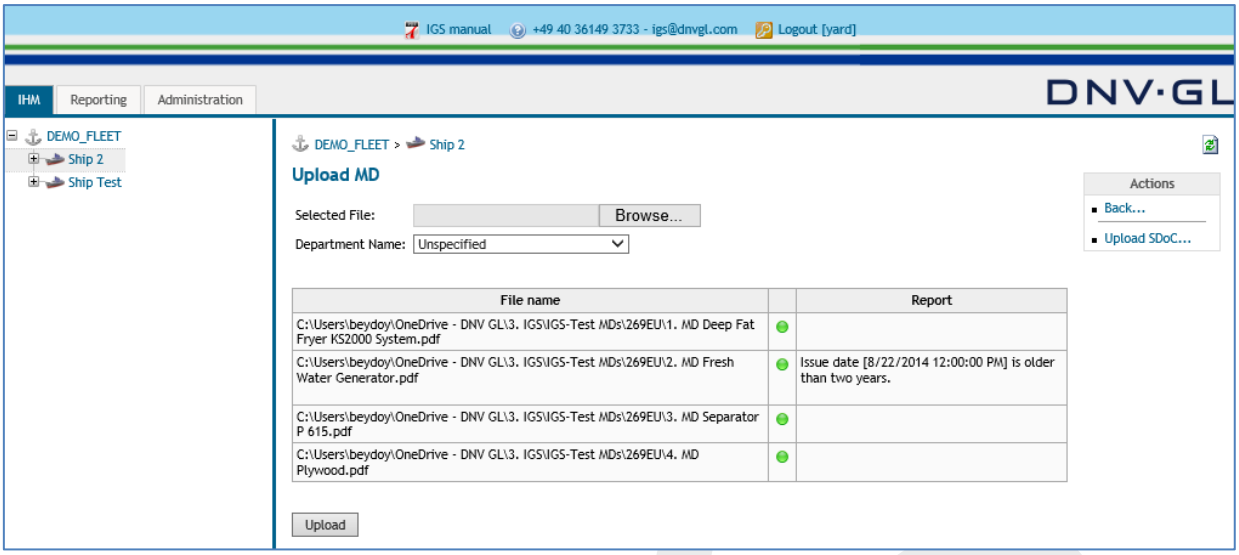


While uploading MD, the responsible department's name within the shipyard or shipowner for the uploaded MD can be selected from the drop-down menu. In case MDs are not required to be clustered and there is only 1 responsible employee working for the whole IHM preparation, selection can be left as "unspecified". Filling in "Department Name" field is not mandatory.

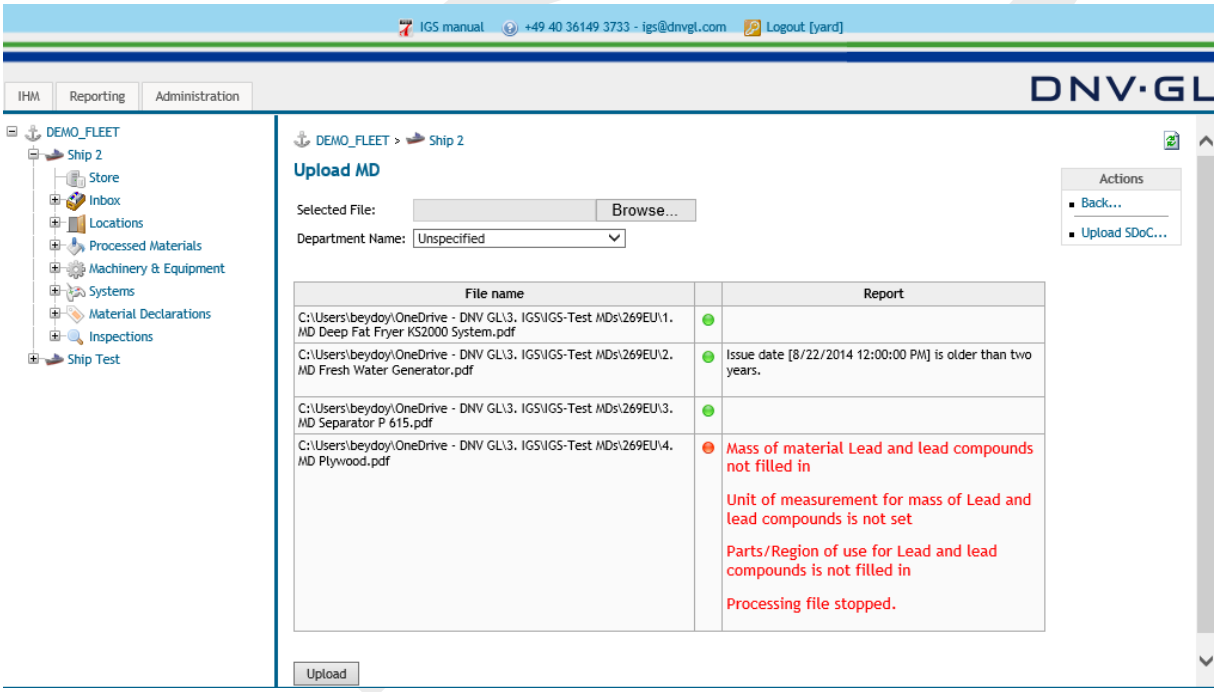
Note: According to uploading sequence the SDoC must be uploaded first. When uploading a MD without a corresponding SDoC available in the system an error message pops up and the MD will not be uploaded.

Note: The procedure of uploading SDoCs and MDs into the inbox can be accelerated by using the multi-selection function in the browser. Please note that the browser needs a certain development status (see Chapter 1.1).





When SDoCs and MDs are selected and upload link is clicked, the result of the upload is shown in a table structured report. Green dot means, MD is uploaded in the IGS inbox. Sometimes, some messages pop-up under the report column to give information to the user. If the dot is red, MD is not uploaded into the IGS and the reason is provided under report column.



Main items to be checked for error messages:

- The serial or batch number information is missing.
- In MD, no SDoC ID number is mentioned (Most probably that column is left empty by the supplier).
- SDoC ID number in MD does not match with the SDoC ID number in SDoC.
- The Material Declaration does not conform to the selected standard.

Please check the MDs you receive for:

- Company names on both documents (SDoC and MD) shall be the same.
- Dates shall be inserted according to the available date menu in pdf.
- SDoC signature field must be filled-in.
- SDoC ID numbers in both documents (SDoC and MD) shall be the same.

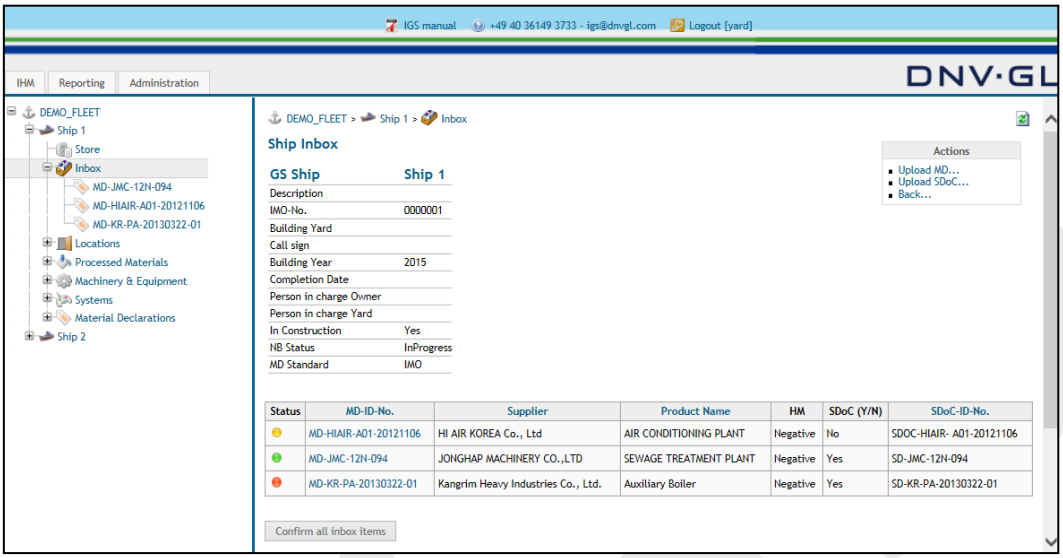
4.2 Inbox status indicator

When MDs are uploaded into the inbox, each MD's status is shown with a colour scheme under Status column. The inbox follows a clear traffic light status indication. As descripted below:

- The status **yellow** indicates that not all entries have been made to the MD.

- The status **green** indicates that all entries have been made to the MD.

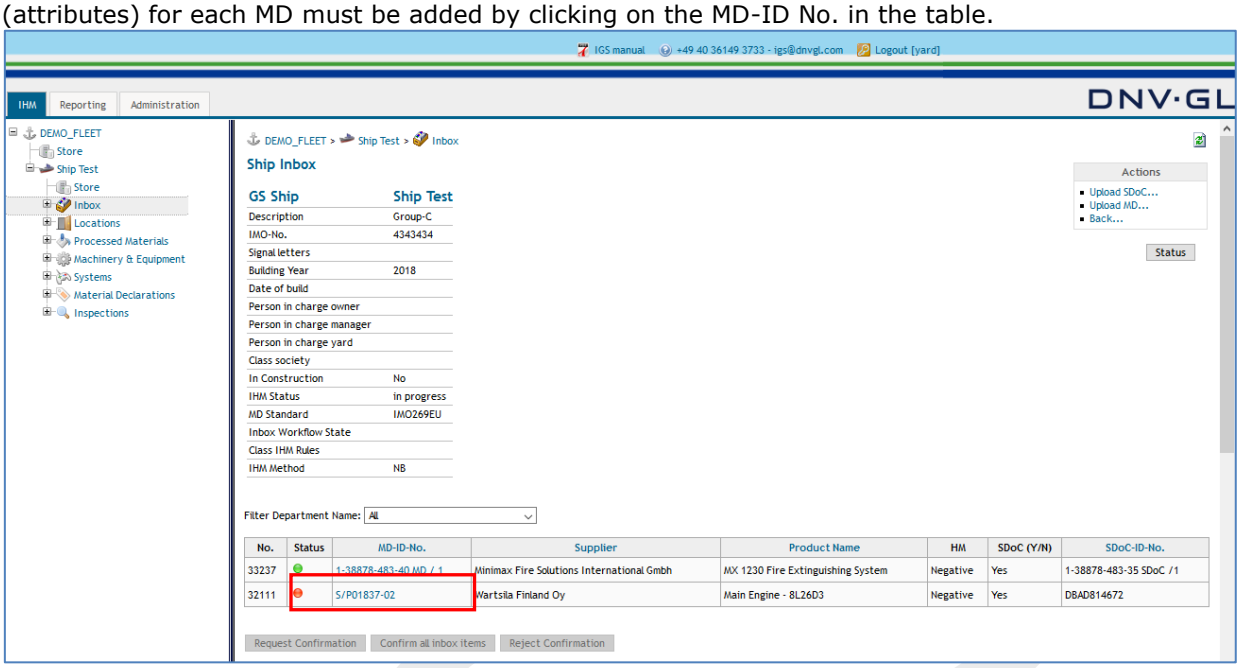
- The status **red** indicates that no entries have been made to the MD.



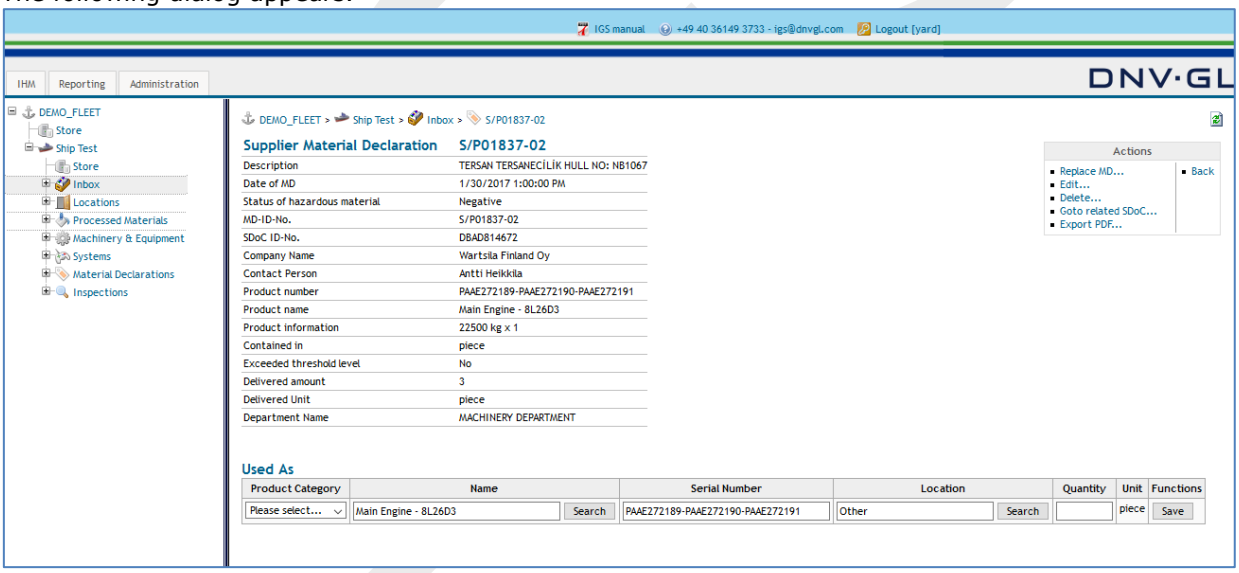
Note: The status of the MD will only go to green when all required information is entered.

4.3 Entering MD information

After all project related SDoCs and MDs have been uploaded into the inbox, specific MD information (attributes) for each MD must be added by clicking on the MD-ID No. in the table.



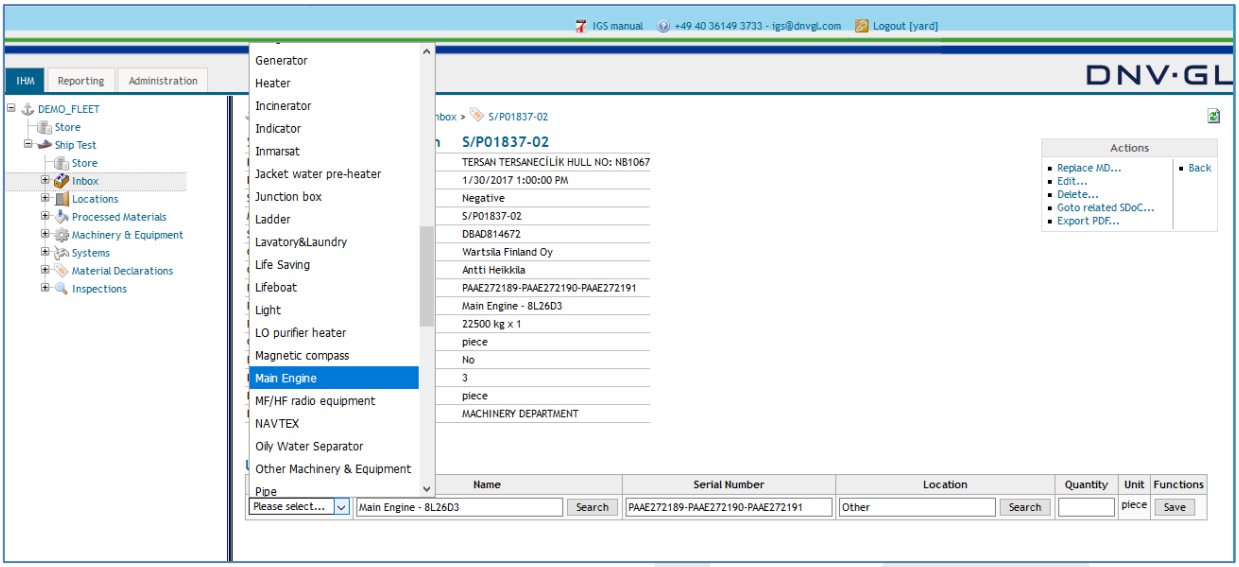
The following dialog appears.



Enter all MD information (attributes) under the table "Used As", such as Product Category, Name, Serial Number/Batch Number, Location and Approximate Quantity.

Product Category:
First select the Item "Product Category" to define the specific use of equipment, e.g. Fire extinguishing system, main engine, boiler, gasket, insulation, etc. Product category is used by DNV GL to cross check if all related MDs are submitted for the ship project.

Note: To find the required "Product Category" faster type part of the name on the keyboard.

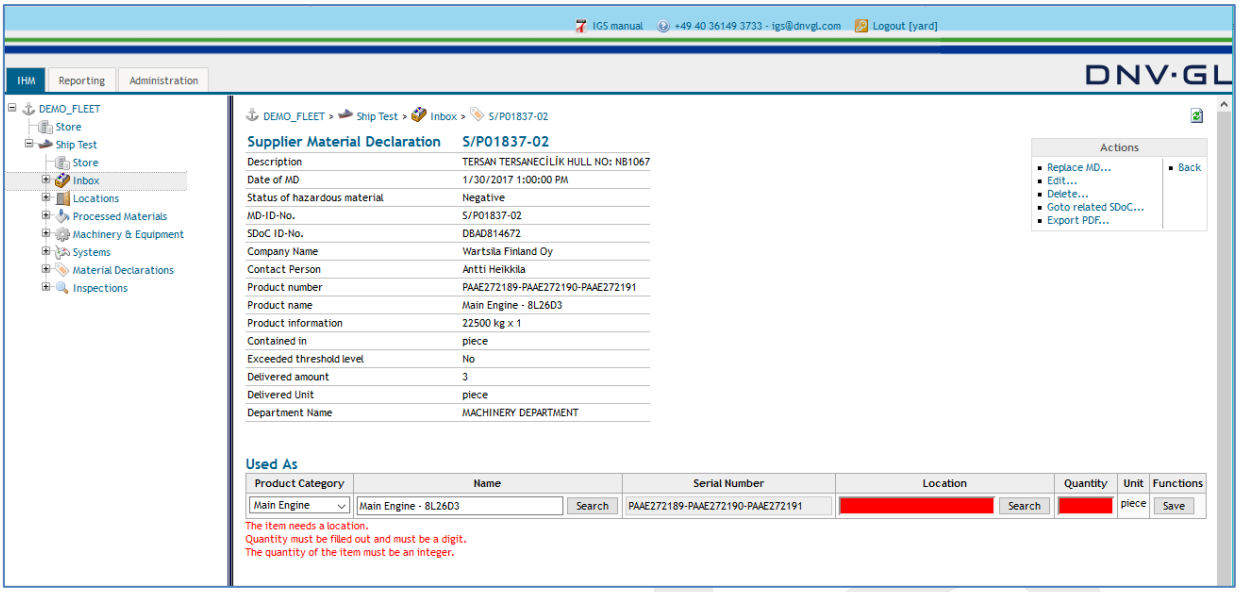


Name:
The "Name" defines the name used for that equipment by the user, e.g. ceiling insulation, exhaust pipe packing, floor carpet, main engine, auxiliary boiler, gasket, insulation, etc. The text for the "Name" field can be entered either as free text or selected from the suggestion list. The suggestion list behind the "Name" field is customisable. Customers are free to ask for exchange with own name lists. If shipyard prefers, name can be directly copied from the MD. Please refer to **Chapter 9.3.3**.

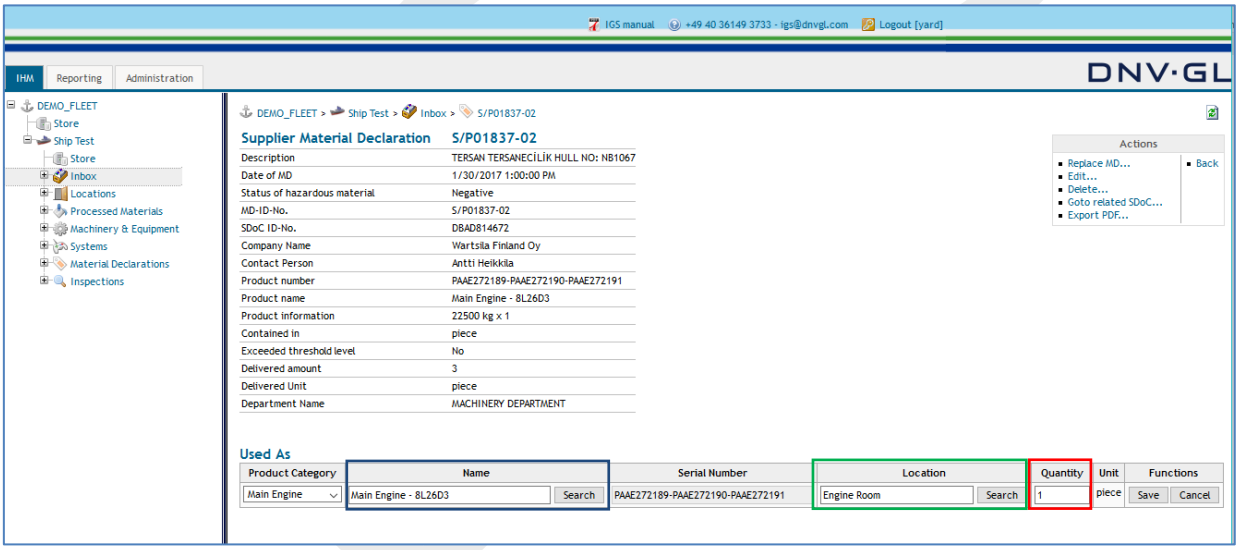
Serial No / Batch number:
Serial Number / Batch Number information is mandatory for products that contain hazardous materials. For products that do not contain hazardous materials, filling in that field is voluntary. If shipyard prefers, serial number / batch number information can be directly copied from the MD. Please refer to **Chapter 9.3.3.**

Note: For systems, "serial no" column will not be shown. For processed materials, such as gaskets, that column will be shown as "batch number".

Location:
Filling in "Location" for products that do not contain hazardous materials is voluntary. It is only mandatory for products that contain hazardous materials. For negative MDs location is set as "Other" by default, but the user can type in the correct location if more specific information is available



Quantity:
The quantity of the product used on board should be written by the user. The unit information is copied directly from the respective MD; therefore, quantity information should be compatible with its unit.
Note: The "Quantity" can only be entered with the decimal mark separator point (dot) "." e.g. 1.2



Finally click on "Save".

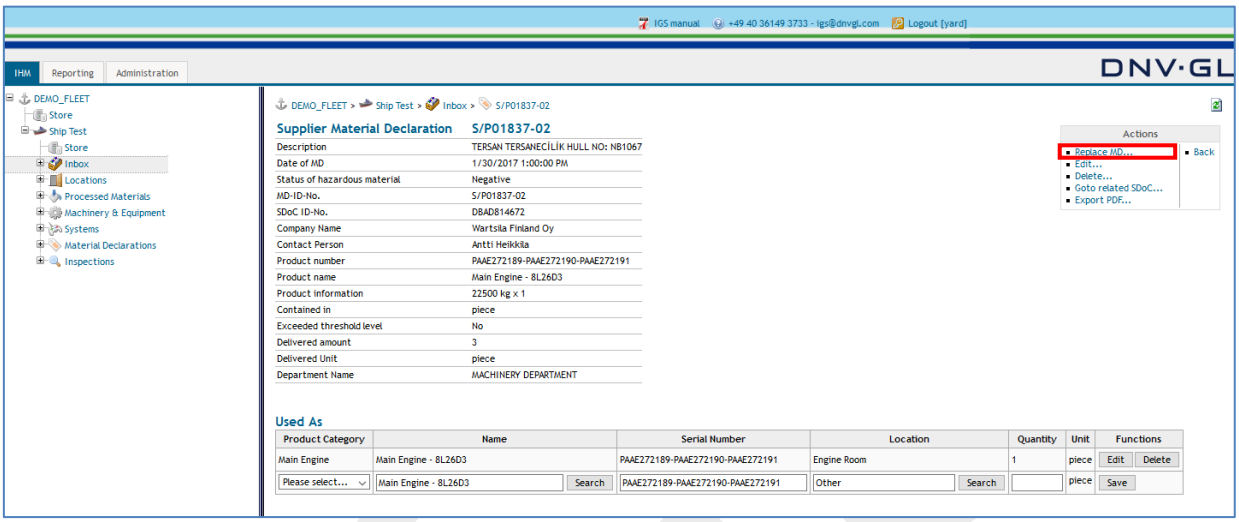
From the "Actions", MD can be deleted by clicking "Delete" link. By clicking "Go to related SDoC", the linked SDoC can be viewed in IGS view. Uploaded MD can be regenerated in pdf mode by IGS, by clicking "Export PDF" link. "Back" link would lead you back to the inbox view of IGS.

4.4 Actions box for MD under inbox

4.4.1 Replace MD in inbox

"Replace MD" link should only be used to replace corruptive MDs because the MD will be replaced in all components or materials in the ships of the fleet.

To replace a MD, select the "Replace MD…" link in the actions box of the MD view.



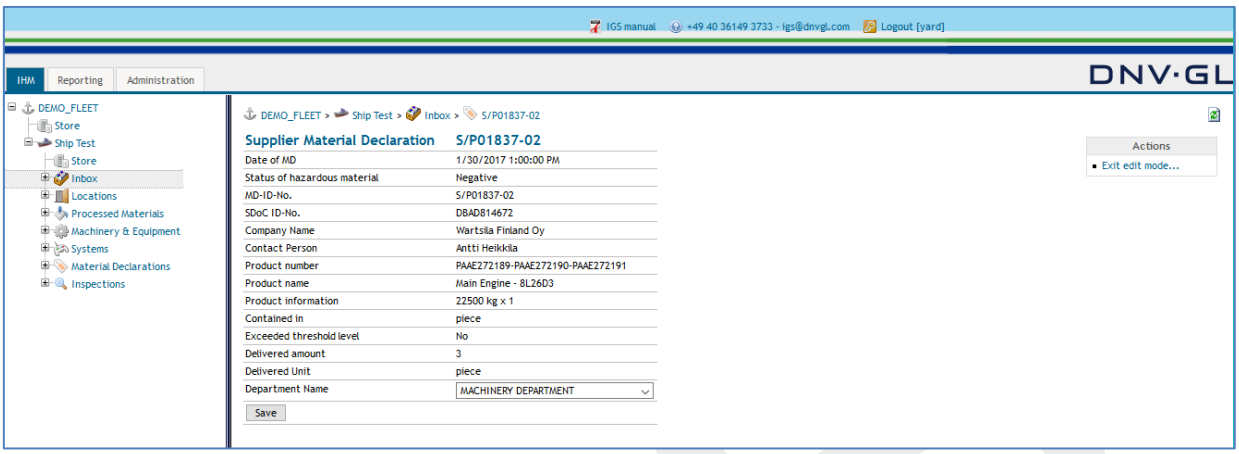
Note: The IGS users must replace a MD by deleting the component or material of the MD and add a new component or material to the ship project.

Note: The "Replace MD" link should only be used to replace MDs because the MD will be replaced in all components or materials in the ship project of the customer fleet.

Note: The "Replace MD" link is disabled if the MD is already referenced (used) in another ship project. The MD can only be corrected while initially in inbox but remain fixed if attached to a part in another ship project.
MDs with new content require a new MD ID!

4.4.2 Edit MD in inbox

Edit MD function is used the edit the department name info of the respective MD. Click on the "Edit" in the actions box of the MD. Following dialog box appears;



Change the Department Name and click "Save".

4.4.3 Delete the MD in inbox

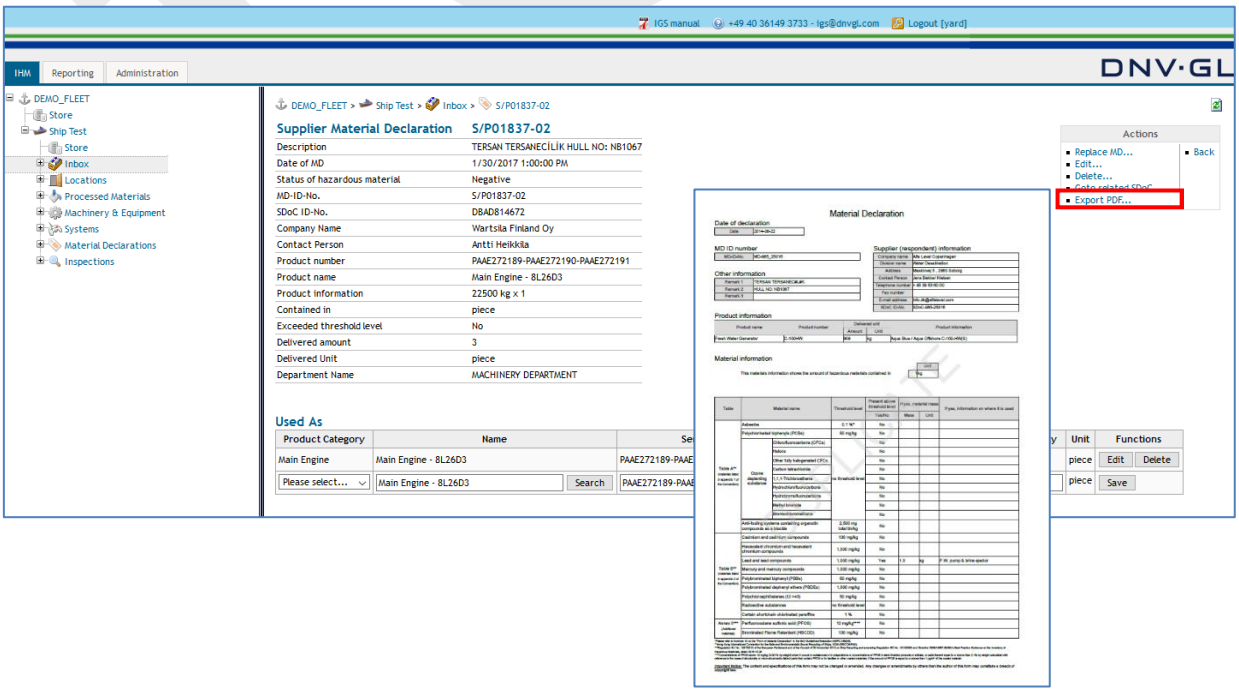
While the MD is still in the inbox and still not confirmed, the user can delete the MD if necessary by clicking on the "Delete" link in the actions box.

4.4.4 Go to related SDoC

The user can see the relevant SDoC of that particular MD by clicking the "Goto related SDoC" link in the actions box.

4.4.5 Export MD

For administrative purposes the user has the opportunity to view the uploaded MD as pdf format in the inbox. Select the "Export PDF…" link in the actions box of the MD view to view the MD as pdf format.



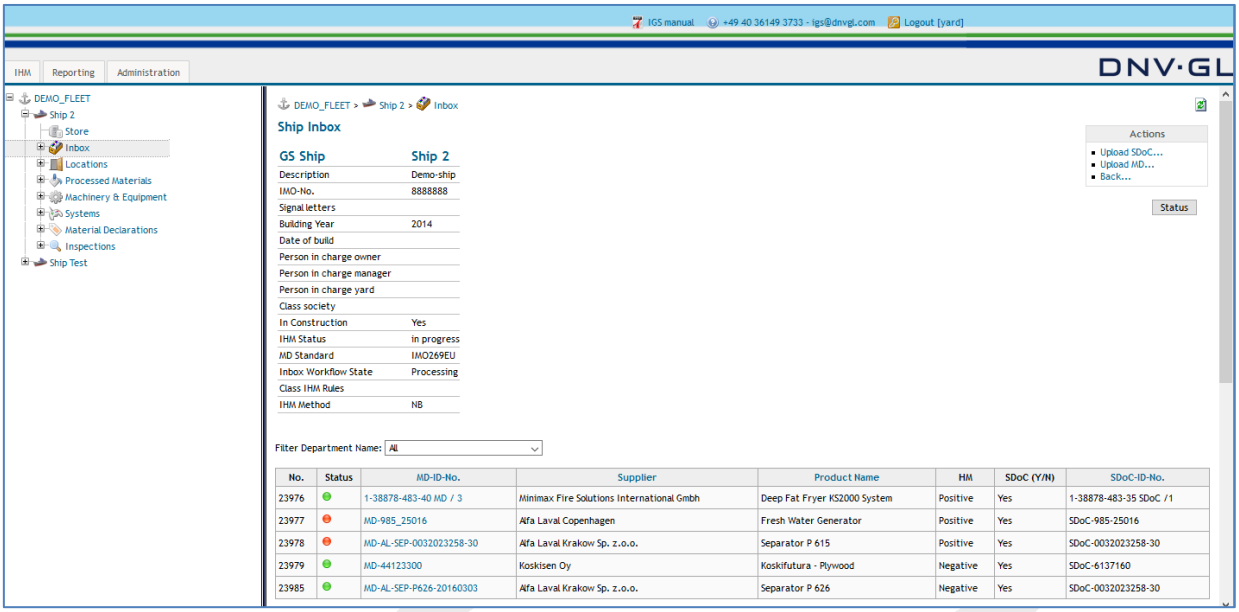
Click on "Export PDF…" link in the actions box to view MD as pdf format. MD will have a "duplicate" watermark to indicate that it is generated through the IGS.

4.4.6 Back

Back function will bring the user back to the inbox screen when clicked.

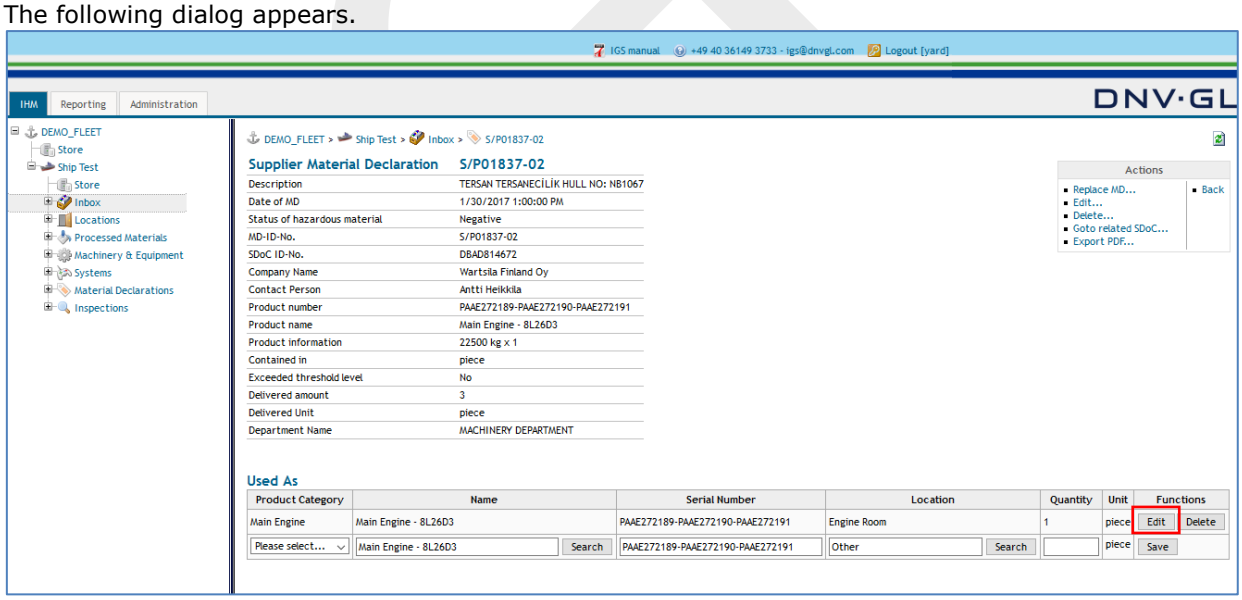
4.5 Edit specific MD information (attributes) in the inbox

When the user must apply changes to the MD information (attributes) in the inbox select the respective MD from the table in the inbox to edit the shipyard specific MD information (attributes).



Select the respective MD from the table to edit the shipyard specific MD information.

The following dialog appears.

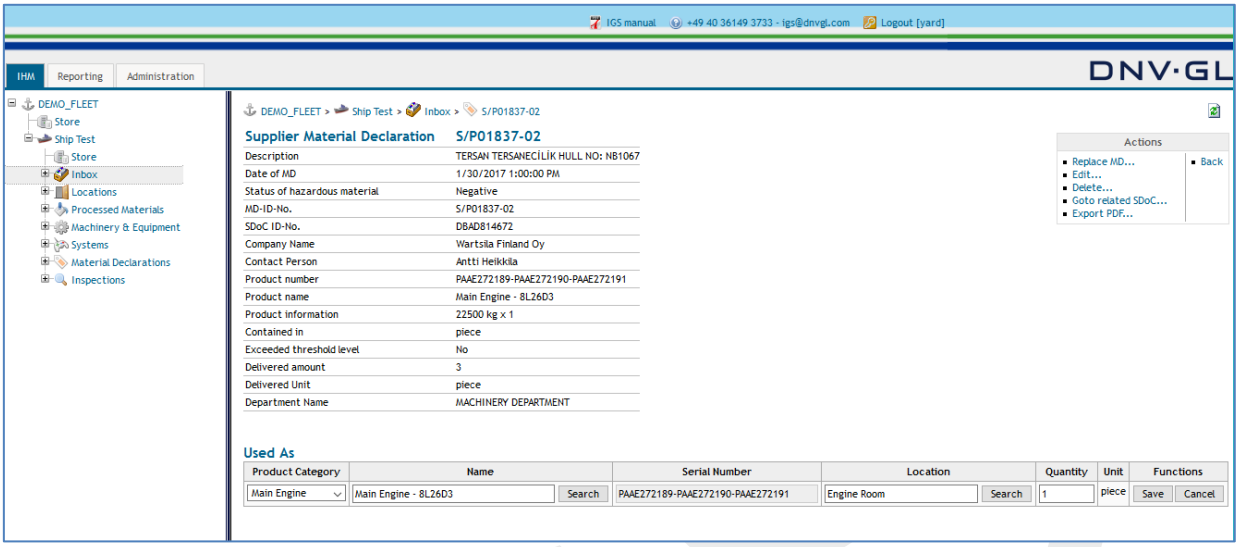


Under the column "Functions" in the "Used As" table the user can either edit or delete the shipyard specific MD information (attributes) by selecting the "Edit" or "Delete" link. To delete the entire MD use the "Delete…" link in the actions box. The "Delete…" link is available in each MD view.

Note: By using the delete function all associations between that data object and other ones will be deleted.

Select the “Edit” link to edit the shipyard specific MD information.

The following dialog appears.

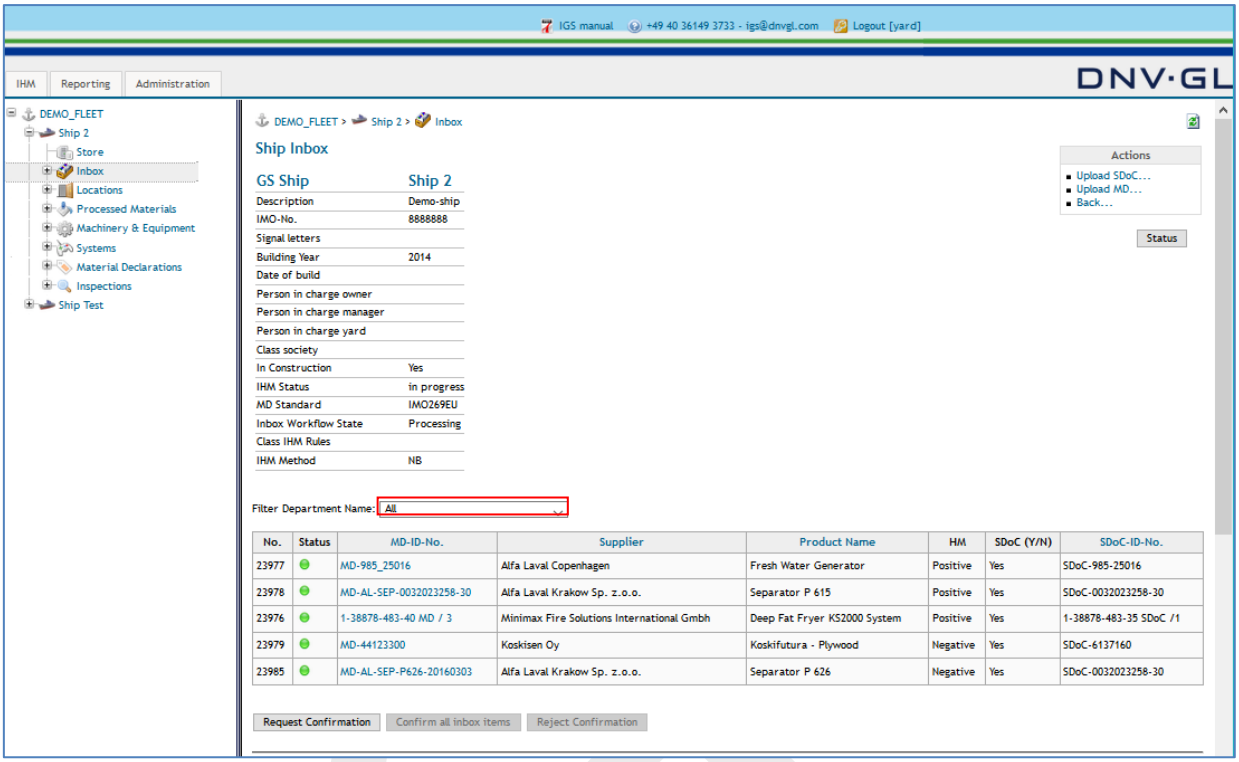


Apply the required changes to the specific MD information, e.g. Product Category, Name, Serial Number, etc.

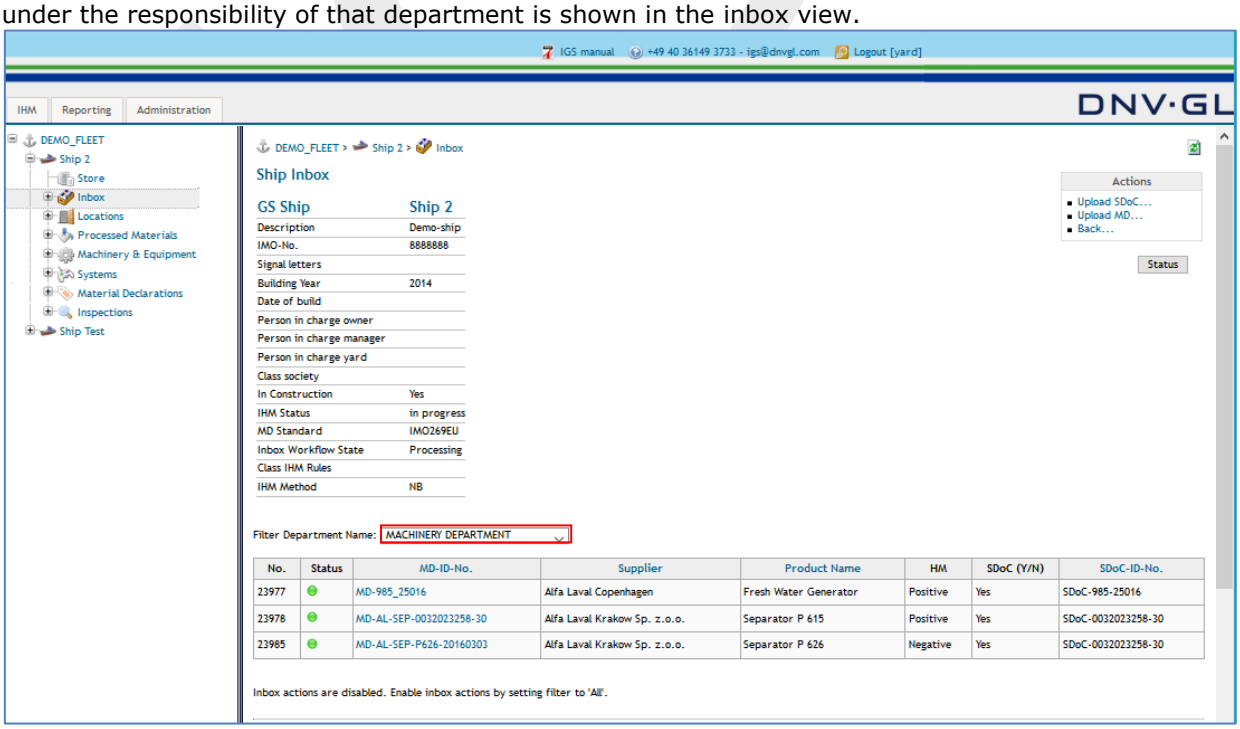
Select “Save” link to confirm the made changes to the specific MD information.

4.6 Filter department name

If the user is working in IGS within different department, the inbox view can be filtered based on the initial selection on departments when uploading an MD.

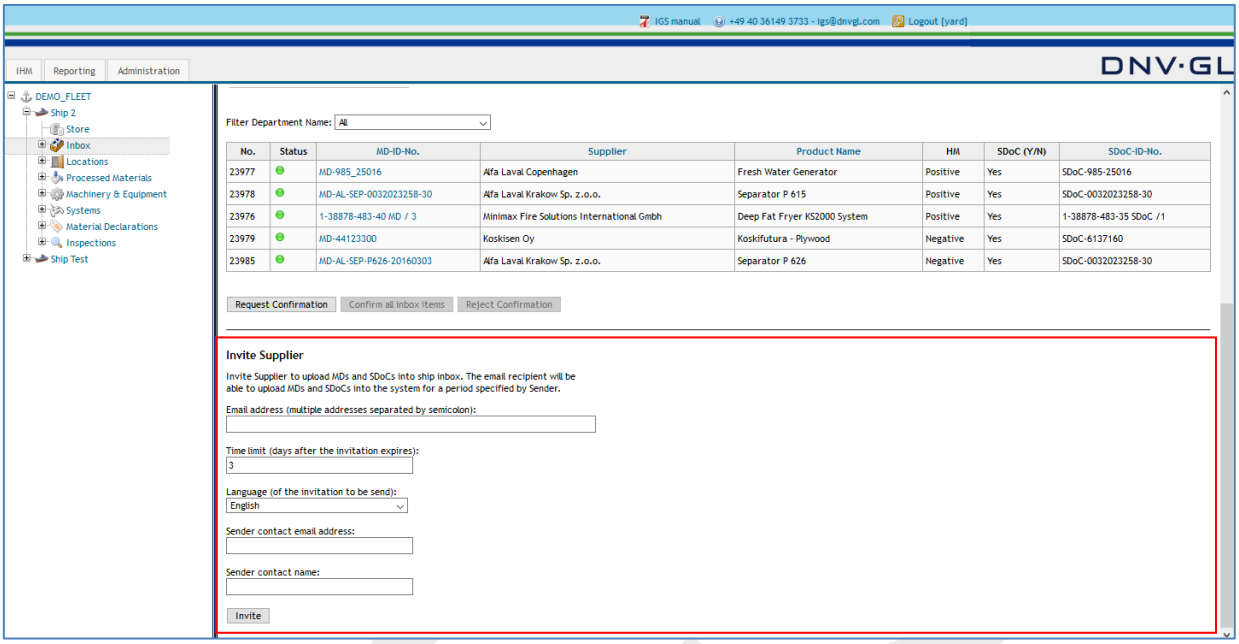


To filter the view, select the department name from the drop-down menu, so that MDs uploaded by or under the responsibility of that department is shown in the inbox view.



4.7 Invite suppliers to upload SDoC and MD documents

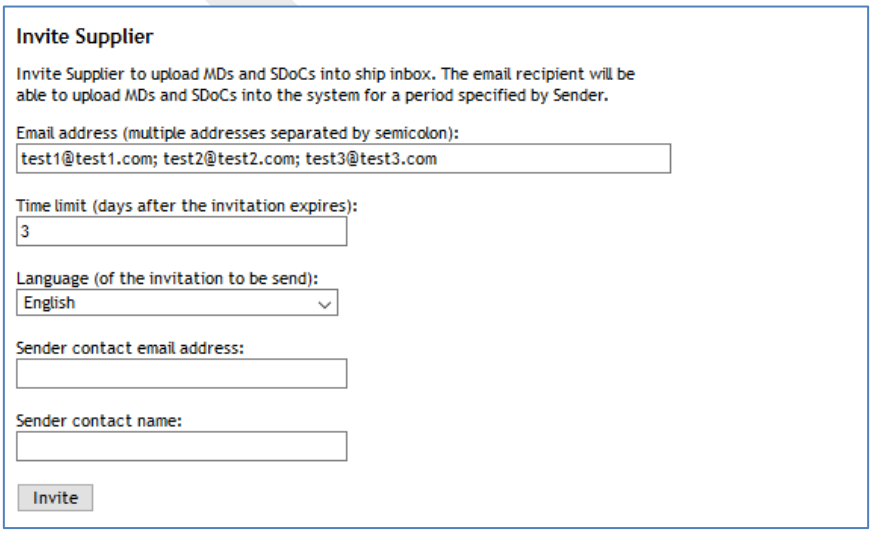
In the inbox, the user has additionally the option to invite suppliers to upload their product related SDoCs and MDs.



Each user (product responsible person) can invite suppliers one by one or all together by entering the e-mail address into the "E-Mail address" field. Use semicolon ";" to separate the different e-mail addresses of the product related Suppliers.

The IGS users can define a time limit for the invitation link to be valid. Default time limit is 3 days, but the IGS user can define it according to their needs.

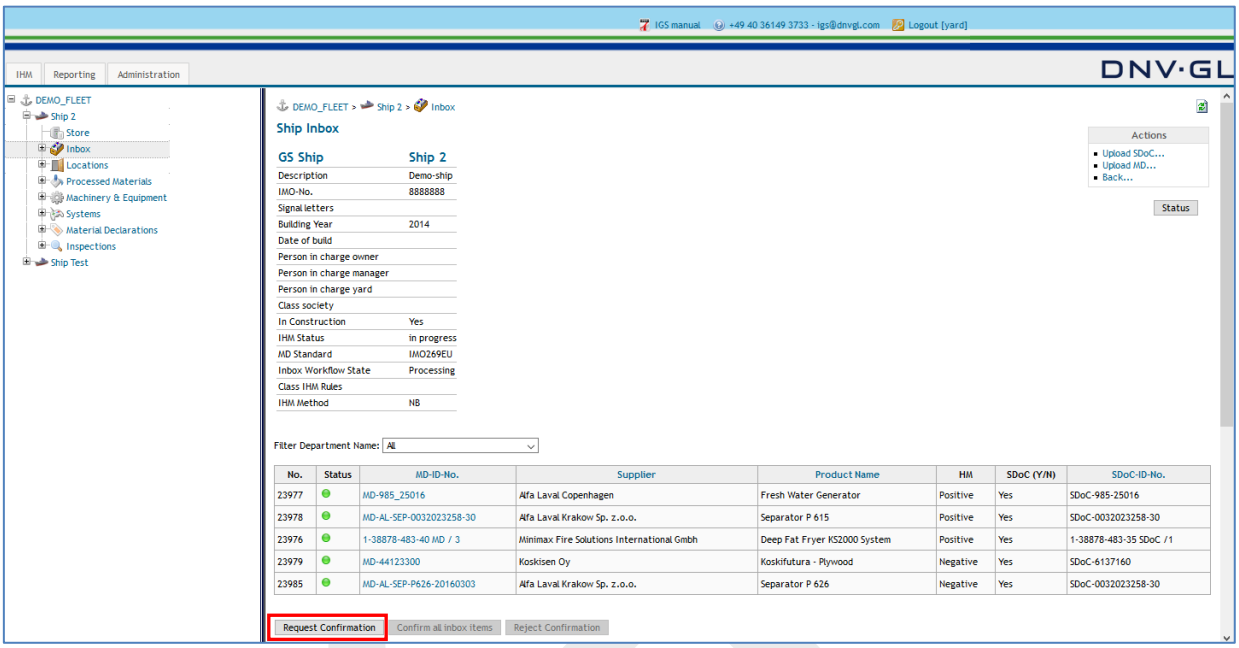
The invitation email can be sent in 3 different languages; English, Korean and Chinese.
The engineer who is sending the invitation email can write his name and email address as well next to "Sender contact email address" and "sender contact name" fields, so that suppliers can see the requested party's contact details easily.

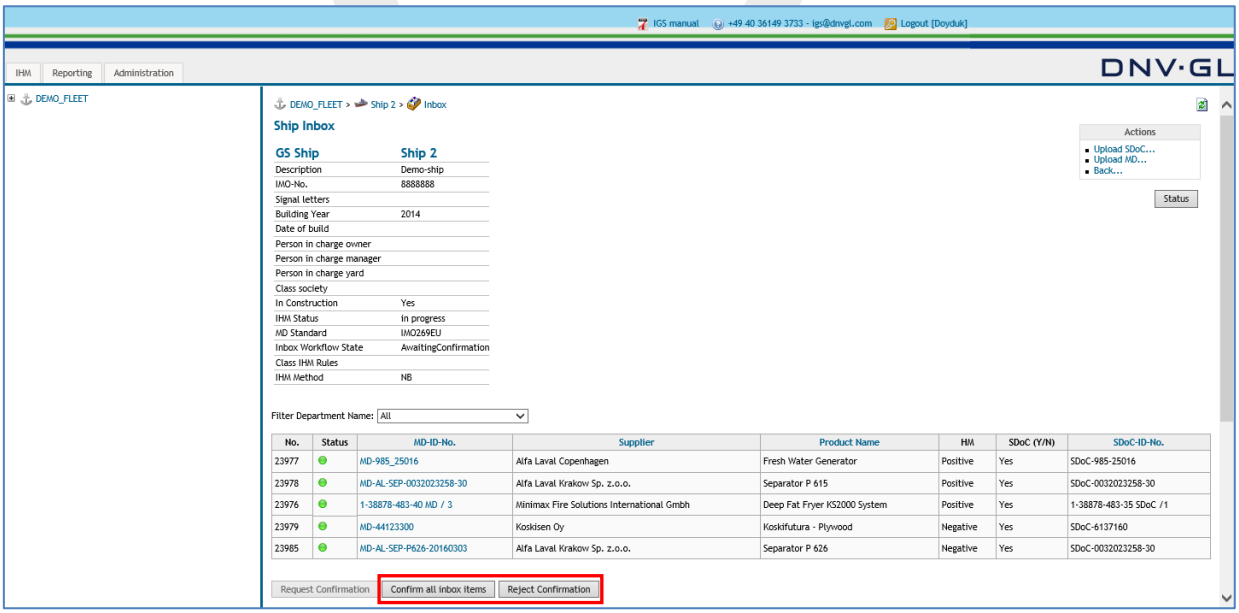


Finally click on "Invite". The email will be sent to the suppliers automatically.

4.8 Confirmation of inbox items

After all project related SDoCs and MDs have been uploaded into the inbox and specific MD information (attributes) for each MD have been added, the user must confirm the process by selecting the "Request Confirmation" link at the end of the MD table in the MD view. To be able to click on "Request Confirmation" link, status of all MDs must be green. This step is a self-check of the user; therefore, if the user confirms that information entered into the inbox is correct, they can click "Confirm all inbox items". If the user wants to change entries in the inbox, they can click "Reject Confirmation" link.



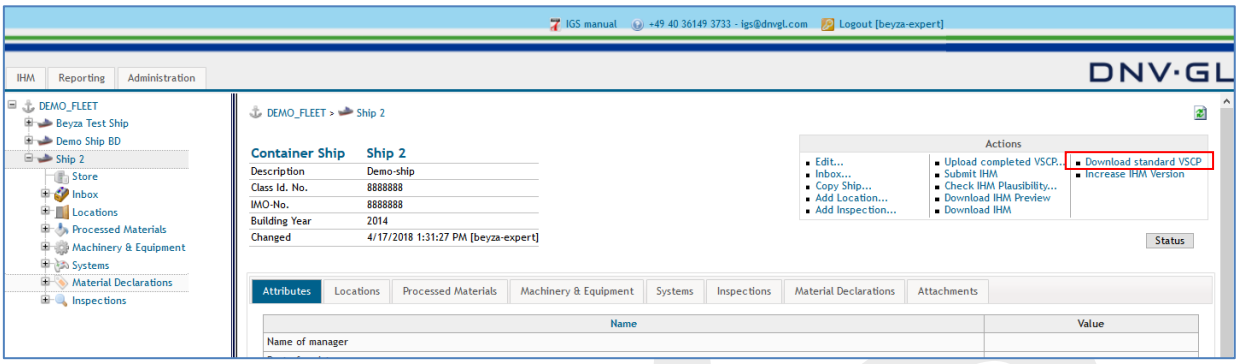


Note: MDs will be displayed under Material Declarations tab, after confirmation of the inbox.

Note: This procedure must be repeated until all ship project relevant SDoCs and MDs are loaded to the ship structure.

5 WORKING WITH THE STANDARD VSCP

DNV GL has worked on and prepared a standard VSCP for the users of IGS. The standard VSCP is based on the check items listed in the indicative list provided in MEPC269(68) and can be downloaded in excel format by clicking "Download standard VSCP" link in the actions box.



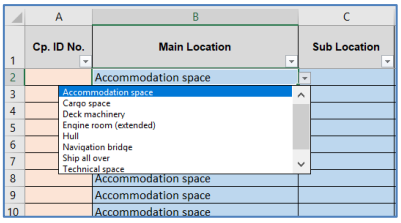
Standard VSCP is designed in a way that the data in the VSCP can be read by IGS. To do that some columns are fixed and some columns have pre-defined entries. The user is free to delete or add rows in to this standard VSCP. The aim of the standard VSCP is just to show a way for to the users on how to prepare a VSCP according the MEPC269(68) requirements. Detailed information on the standard VSCP is provided below.

Note: The HazMat Expert must fill in the VSCP up to column I (dark blue cells) before conducting the on-board inspection.
Note: **To be able to upload the excel VSCP in IGS, at least the dark blue cells shall be filled in. If the user wants to continue working in the VSCP in IGS, the rest of the entries for light blue cells can be entered in IGS. Or the user can upload the VSCP when it is completely filled in.**

	A	B	C	D	E	F	G	H	I	J
1	Cp. ID No.	Main Location	Sub Location	Equipment type	Equipment	Object to Check	Material	Document Analysis Result	Check procedur	Sample No.
2		Accommodation space		Processed Material	Ceiling	insulation inner and outer wall	Asbestos	Unknown	Sampling	
3		Accommodation space		Processed Material	Ceiling	insulation inner and outer wall	PBB	Unknown	Sampling	
4		Accommodation space		Processed Material	Ceiling	insulation inner and outer wall	PBDE	Unknown	Sampling	
5		Accommodation space		Processed Material	Ceiling	insulation inner and outer wall	HBCDD	Unknown	Sampling	
6		Accommodation space		Processed Material	Ceiling	structure material	Asbestos	Unknown	Sampling	
7		Accommodation space		Processed Material	Ceiling	structure material	PCN	Unknown	Sampling	
8		Accommodation space		Processed Material	Ceiling	panel	Asbestos	Unknown	Sampling	
9		Accommodation space		Processed Material	Ceiling	sealing and packing for covers, c	Asbestos	Unknown	Sampling	
10		Accommodation space		Processed Material	Ceiling	paint	Asbestos	Unknown	Sampling	
11		Accommodation space		Processed Material	Ceiling	paint	PCB	Unknown	Sampling	
12		Accommodation space		Processed Material	Ceiling	paint	PFOS	Unknown	Sampling	

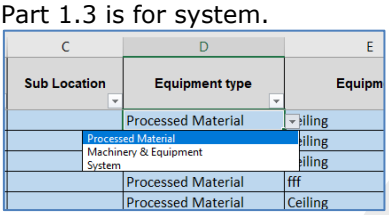
Column A: CP. ID No.
Check point (CP) identity number will be assigned by IGS for each hazardous material to be checked, after the standard VSCP is uploaded into the IGS. The number will be a combination of "Sublocation" + "Equipment" + "Material" columns. For working on board, HazMat Expert is free to type in this column their own numbering, however please keep in mind that those data will not be kept in the system and will be deleted automatically after uploading into IGS.

Column B: Main Location
9 main locations are identified under Column B. Those main locations can't be changed, because those are the anchors that make the data to be read by IGS. The inspection is based on locations therefore, with the upload of standard VSCP into IGS, those 9 main locations will be created automatically. When creating a check item, the user must select one of the relevant locations from the dropdown menu, e.g.: Accommodation space.



Column C: Sub Location
User is free to identify the location of the checkpoint more detailed under this column. Locations names should be taken from the ship's general arrangement plan. The user can specify the exact location in their own words: e.g.: D deck, Cabin 403.

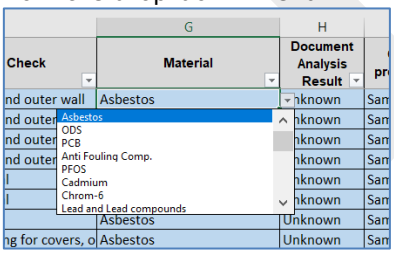
Column D: Equipment type
Equipment type should be selected from the drop-down menu and can only be one of the following: Processed Materials, Machinery & Equipment, and System. That information will eventually be used to distribute the check items that are containing hazardous materials under sub-tables of IHM Part I, such as;
Part 1.1 is for processed materials,
Part 1.2 is for machinery, and
Part 1.3 is for system.



Column E: Equipment
Equipment should define the item to be checked on board. It should describe in a general way, where you are checking. E.g.: Ceiling. Equipment column is a free typing field, but the suggestions are stated in the standard VSCP.

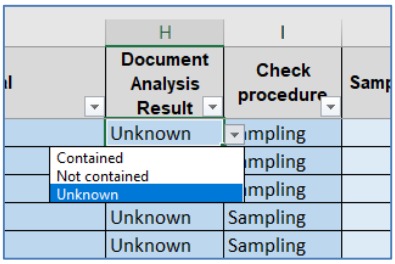
Column F: Object to Check
Object to check is the detailed description of your final check item. For instance, if your "Equipment" is ceiling, then object to check in the ceiling can be the e.g.: ceiling panel. Object to check column is a free typing field, but the suggestions are stated in the standard VSCP

Column G: Material
Material states the hazardous material that is going to be investigated. This column is a pre-defined column with in total of 15 hazardous materials name and the user must select one hazardous material from the drop-down menu.



Column H: Document Analysis Result

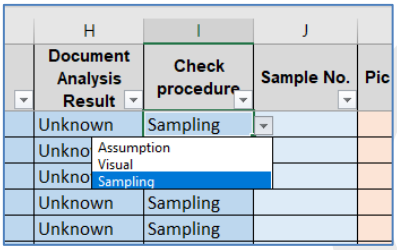
Document Analysis Result is the result of users document check. It is a pre-defined field with, Contained, Not contained and Unknown entries. Unknown is defined by default in the standard VSCP.



- Contained: According to documentation, the component contains that hazardous material above the threshold level.
- Not contained: Documentation declares explicitly that the component is free of that hazardous material (e.g. a valid asbestos free certificate) or the concentration is below the mandatory threshold level.
- Unknown: There is no documentation or information available and it is insufficient to make any decisions about the containment of that hazardous material

Column I: Check procedure

Check procedure column is a pre-defined field with; Sampling, Visual and Assumption entries. Sampling is defined by default in the standard VSCP



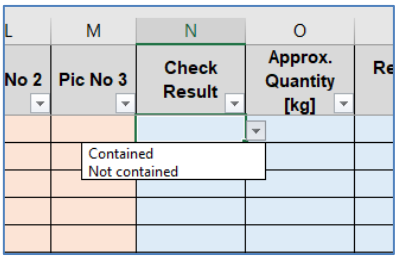
- Sampling: A sample is to be taken for that checkpoint. From the chemical analysis result of this sample the HazMat Expert can judge whether the component contains that hazardous material above the threshold level or not.
- Visual: A visual check is done for that checkpoint. If the document analysis result is contained, or not contained, the document check can be regarded as Visual check as well. Visual check can also be done for some checkpoints on board, where you have taken samples from the same system and visually verify that the same equipment is used in that checkpoint. E.g.: You know that the same insulation system is used in Deck B, C and D. You have taken samples from Decks B and C, but visually check the insulation on Deck D by taking a photo as well.
- Assumption: When there are no documents available regarding the hazmat content of that checkpoint and when it is not possible to take a sample, the HazMat Expert makes an experience-based assumption, e.g. HazMat Expert cannot see inside the boiler insulation but knows that the boiler is manufactured in a country in which at the date of manufacturing that hazardous material was still in use in that country and not prohibited by law. Therefore; the HazMat Expert can make an assumption that the component contains that hazardous material.

	H	I	J	K	L	M	N	O	P	Q	R
1	Document Analysis Result	Check procedure	Sample No.	Pic No 1	Pic No 2	Pic No 3	Check Result	Approx. Quantity [kg]	Remarks 1 / Lab result	Remarks 2	Remarks 3
2	Unknown	Sampling									
3	Unknown	Sampling									
4	Unknown	Sampling									
5	Unknown	Sampling									
6	Unknown	Sampling									
7	Unknown	Sampling									
8	Unknown	Sampling									
9	Unknown	Sampling									

Column J: Sample No.
Sample numbers should be entered by the HazMat Expert into the standard VSCP based on the on-board sampling work.

Column K, L, M: Pic No
Picture number columns are marked with orange colour which means that the numbers will be assigned by IGS automatically after uploading pictures of checkpoints into IGS. The user is free to write/type here entries, however those data will not be stored in IGS after uploading the excel VSCP into IGS and the data here will be lost.

Column N: Check Result
Check result column is a pre-defined field with; Contained and Not contained entries. Check result should be entered by the HazMat expert after laboratory analysis results are received and based on the info from the laboratory, the HazMat expert should choose one of the two entries.



Note: For the check points where check procedure is assumption, and it is assumed that the sample is containing hazardous materials, the check result should be written as "Contained". The PCHM (potentially containing hazardous materials" term should be mentioned under remarks column by the HazMat Expert.

Column O: Approx. Quantity [kg]
Approximate quantities should be calculated by the HazMat Expert based on the laboratory results and should be entered into the VSCP in the unit kilograms.

This information is technically relevant only, when "Check result" has been set to "Contained" or PCHM.

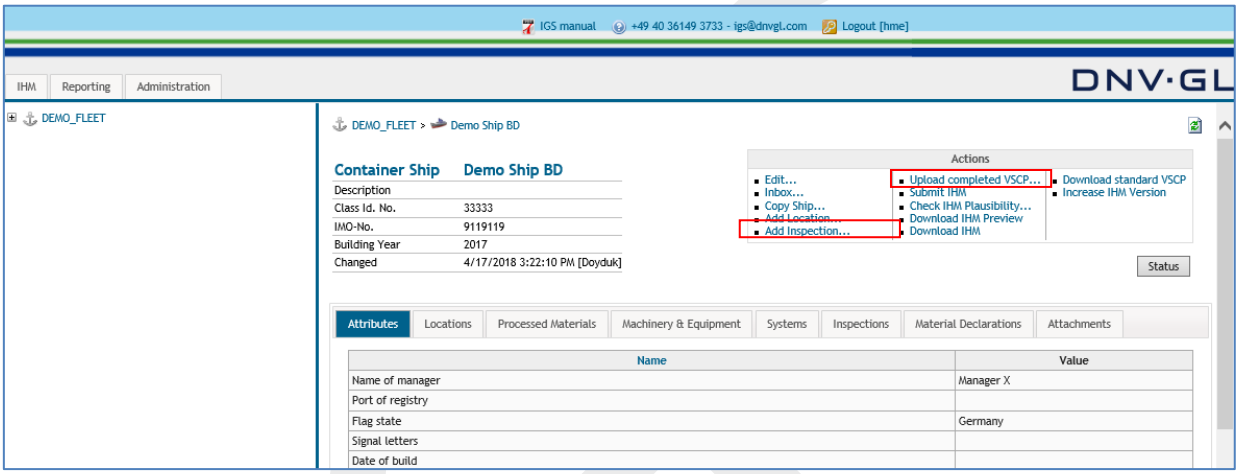
Column P, Q, R: Remarks / Lab result
The users can write their remarks under remarks fields; such as mentioning samples from the same systems, the colour of the paints or PCHM entries. The first remarks column can optionally be used to write the result of the laboratory analysis, to make it clear for the reader about the result.

6 USING INSPECTION FOR PREPARATION OF IHM

For the vessels, which inspection (sampling and analyses) method is chosen, a VSCP must be prepared before the on-board sampling. The VSCP can be prepared either by directly creating the VSCP in IGS or using the standard VSCP template provided by IGS.

Note: It is recommended to use the Standard VSCP for preparation of the inspection due to easiness in working excel and smoother preparation of the VSCP.

First, the user must open the ship project from the navigation tree on the left side by opening the fleet node "+". Then select the ship name, e.g. Demo Ship BD, to see the ship project view on the right side. Now, the ship project can be processed and administered by using the functions in the actions box on the upper right side.



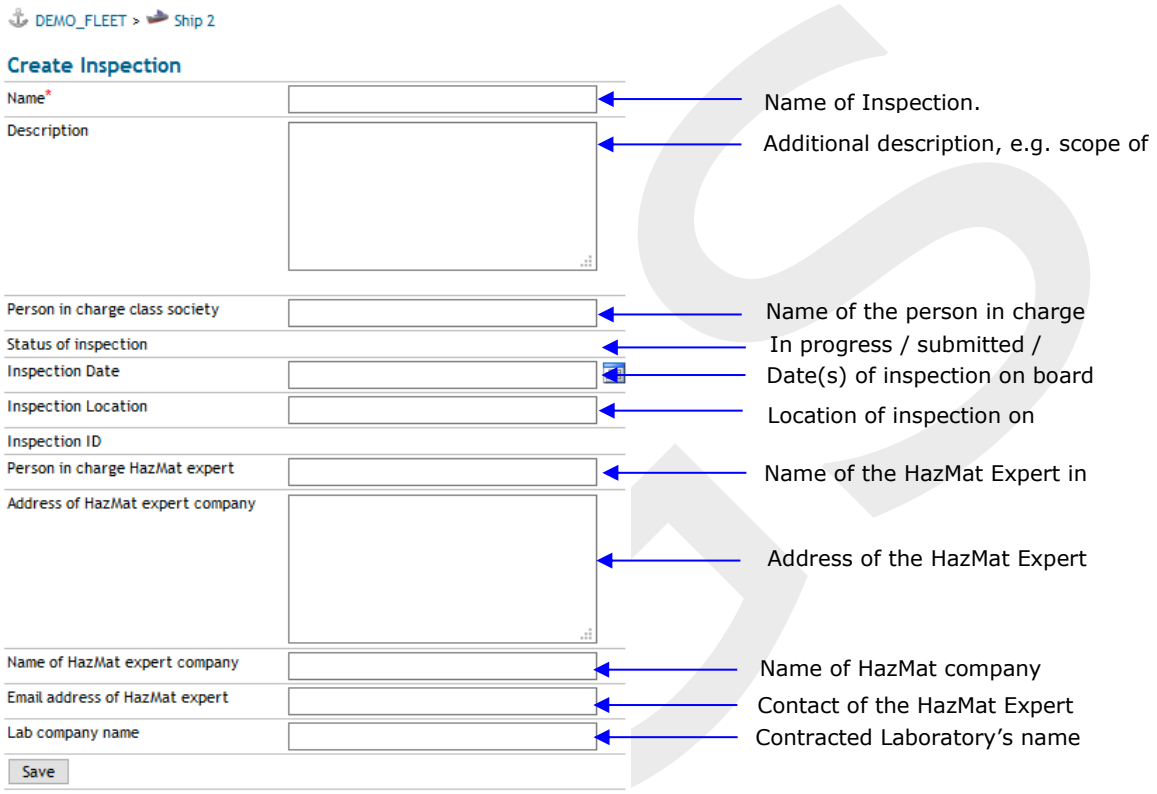
To create an inspection the user can either click on the "Add Inspection" link or "Upload completed VSCP" link in the actions box on the upper right side of the main view.

6.1 Add inspection

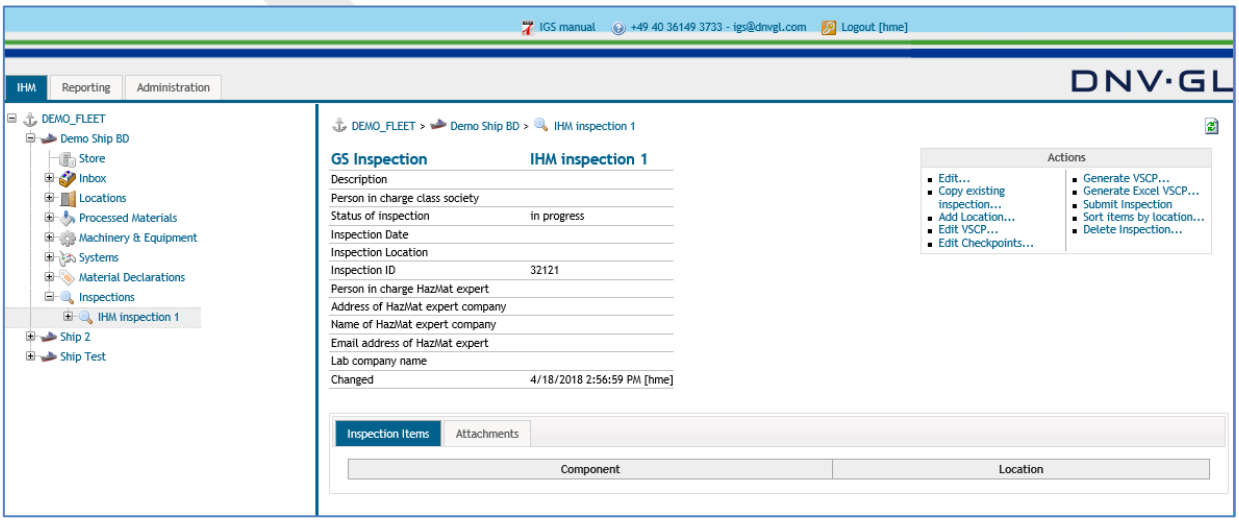
"Add Inspection" is only used when the user wants to prepare the VSCP completely in IGS. That means, with this function, it is not possible to work with the Excel standard VSCP, which is explained in Chapter 5.

6.1.1 Creating the inspection

When "Add Inspection" is clicked, the user must fill in the relevant data first to create the inspection. The following dialog appears.



When finished, click on "Save". Following dialog appears;



User can select within the ship project the sub-item "Inspections" or open the node "+" in the navigation tree on the left side. Now the Inspection can be opened by selecting it either from the navigation tree on the left side or from the ship project view on the right side.

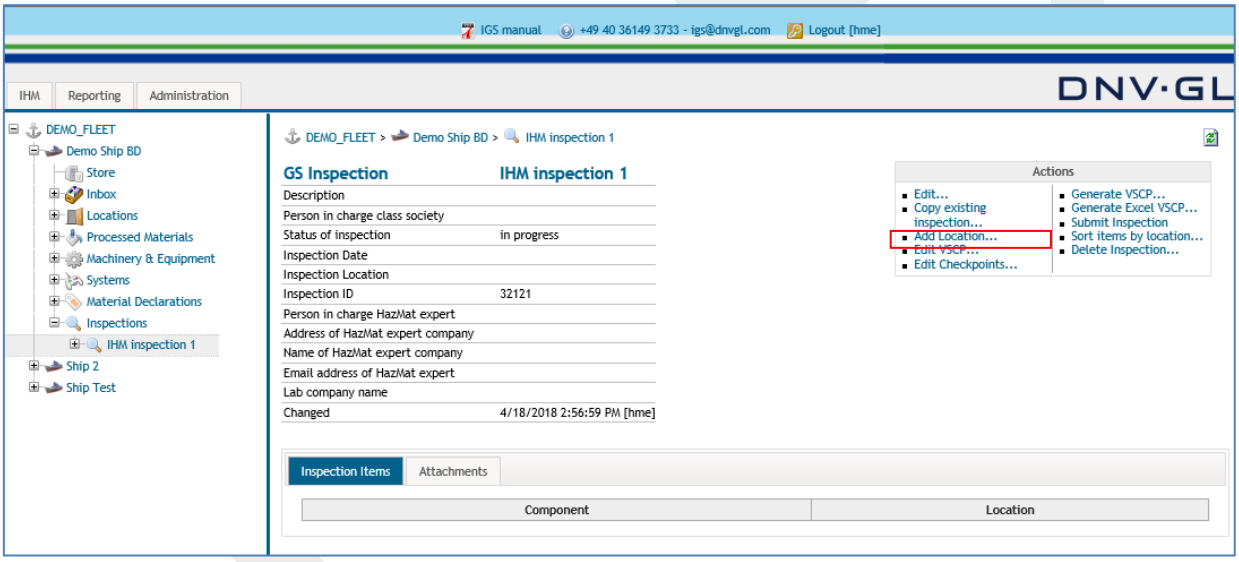
To further work on the inspection, the user needs to prepare a VSCP. If not created before, the user first shall make sure that locations and sublocation of the ship are created, before starting the VSCP preparation.

6.1.2 Add location to ship inspection

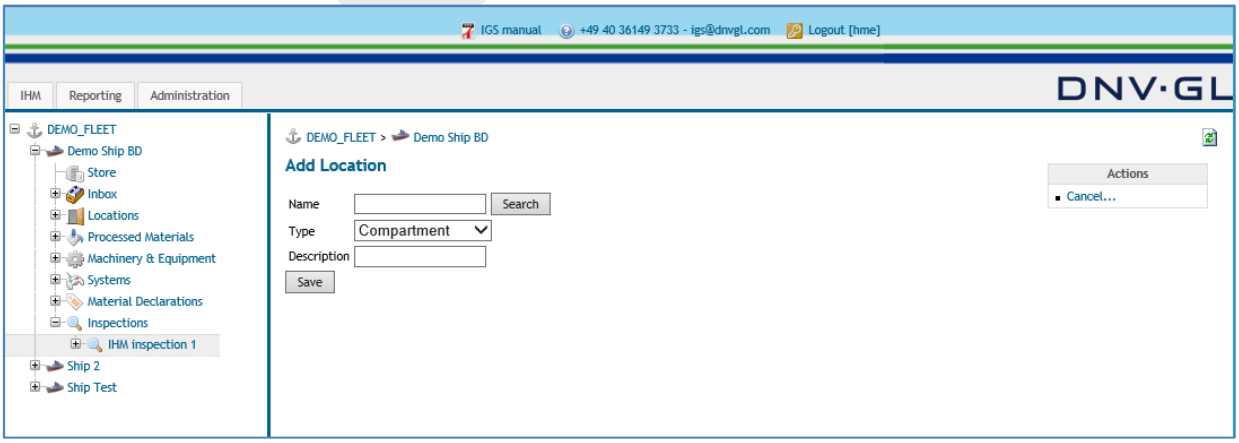
Note: There are two ways to add locations to the ship. The first method is described under **Chapter 3.5**. It is recommended to use the method described under **Chapter 3.5** due to the fact that sublocations cannot be created under add location to inspections.

The user first selects the Inspections tab from the navigation tree on the left side by opening the node "+". Then select the specific Ship Inspection to open the Inspection view on the right side.

To define the locations for the Inspection of the ship, select "Add Location..." in the actions box on the upper right side to add a new location to the ship.



The following dialog appears.

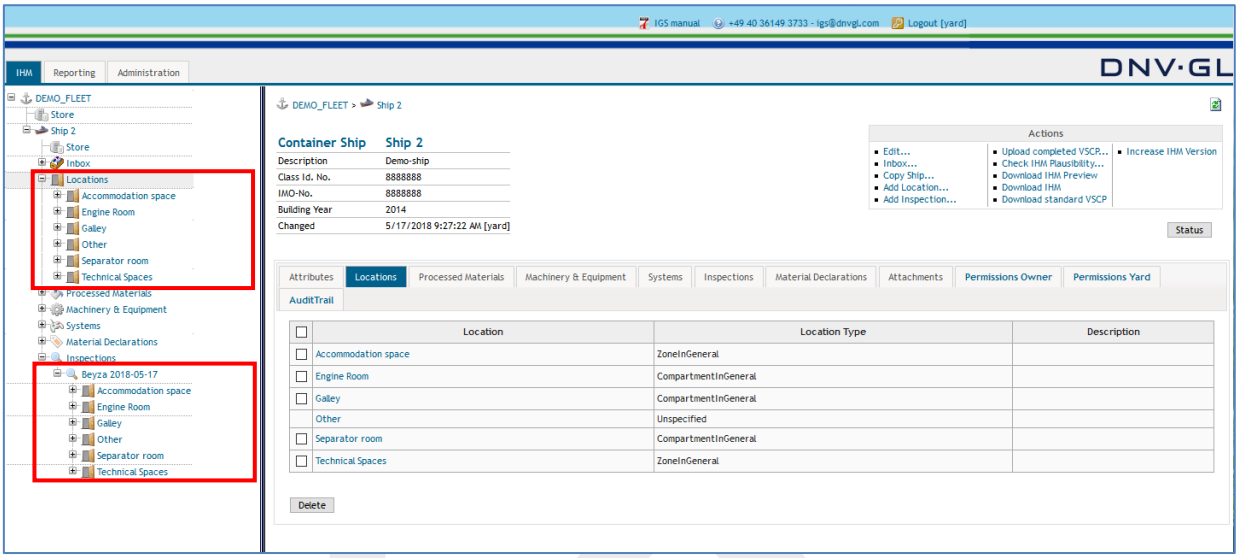


Then enter the required information under “Add Location” to add the new location to the Ship Inspection.

Finally click on “Save”.

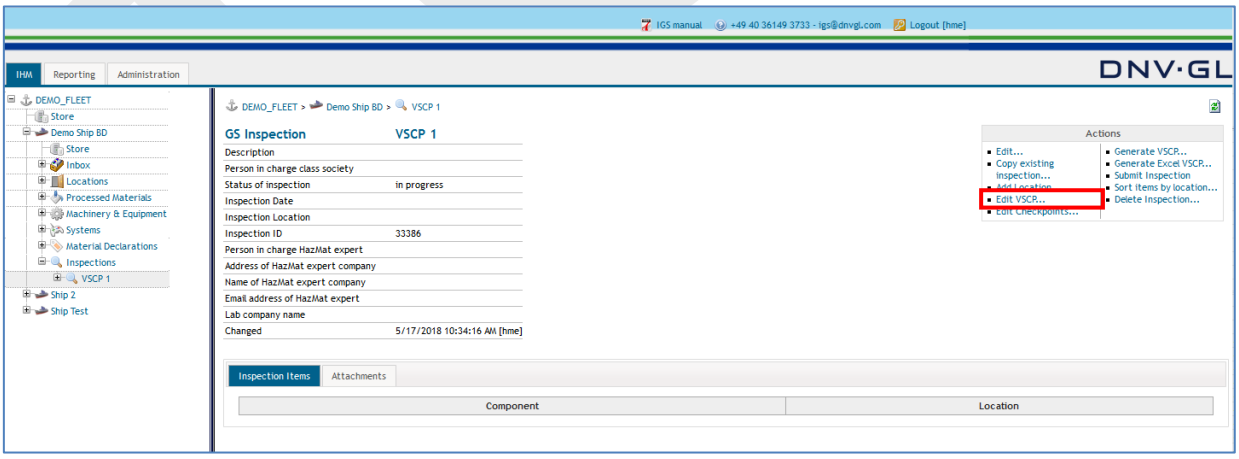
Note: This procedure can only create main locations, but not any sub-locations. Please use “add location” link in the ship view to make sure that sublocations can be created. You would need sublocations to prepare the VSCP.

Note: The created inspection will appear under both Locations of the ship and Locations of the Inspection.



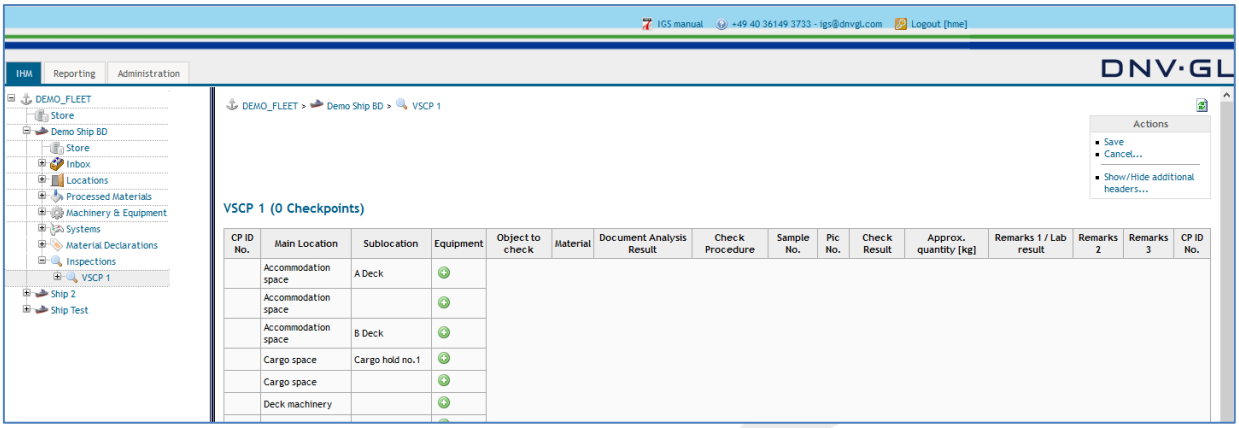
6.1.3 Preparation of the VSCP by “Edit VSCP” link

After all locations and sublocations have been added to the ship, the user can begin to prepare the VSCP for the on-board inspection by clicking the “Edit VSCP” link.



First select the “Edit VSCP…” link in the actions box of the inspections view to edit the VSCP.

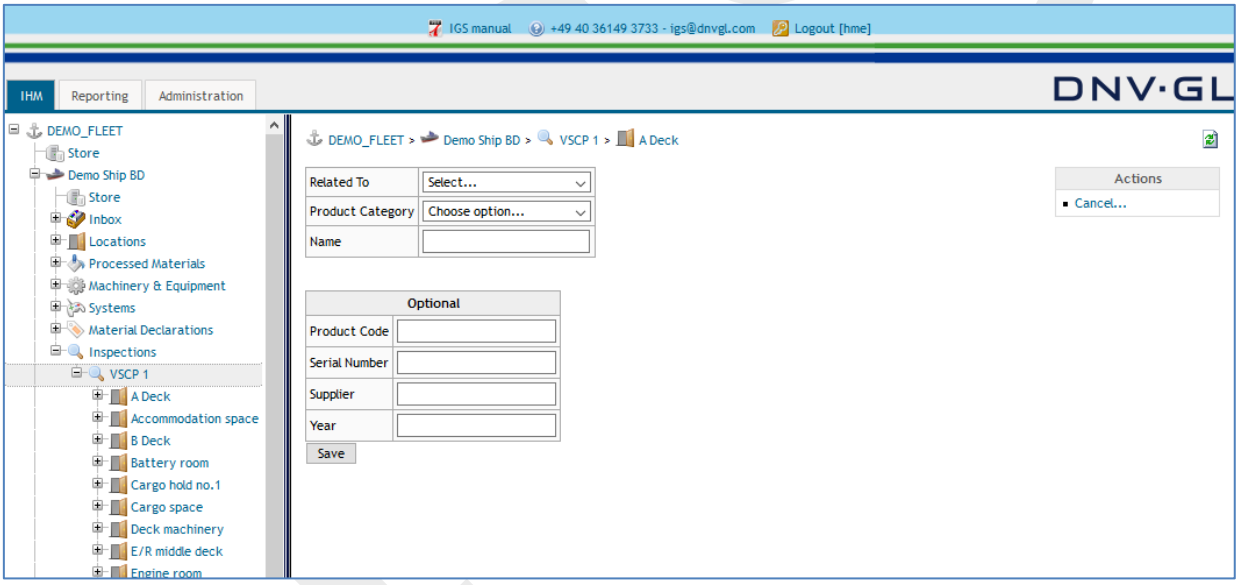
The following dialog appears.



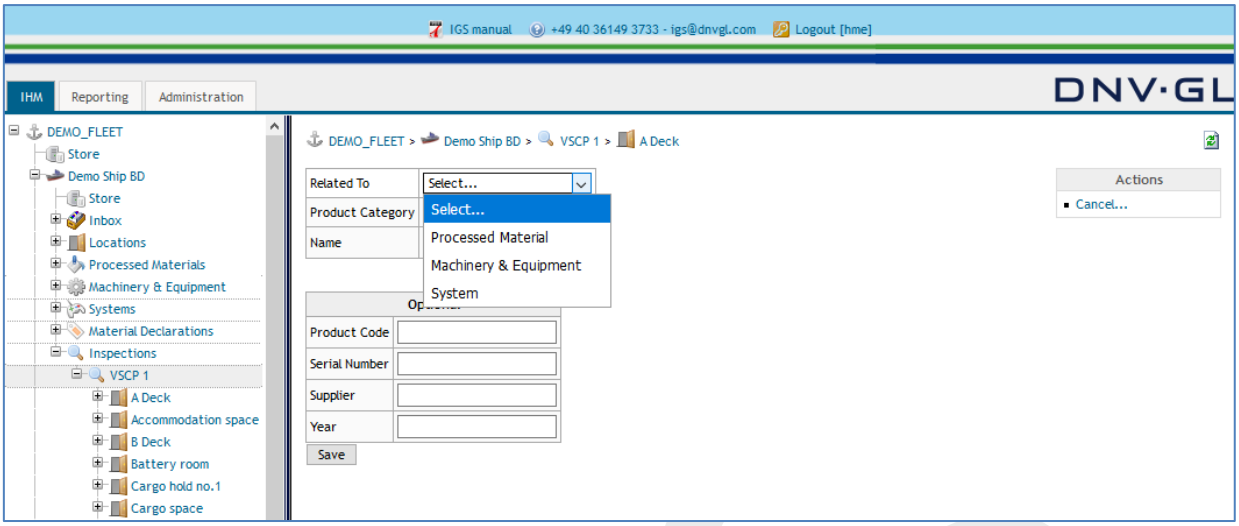
Then fill in the required information for each inspection Item (on board check) according to the knowledge gained for preparation of VSCP during the DNV GL Approved HazMat Expert course.

Select under the "Equipment" column the plus "+" node to define the equipment for the inspection.

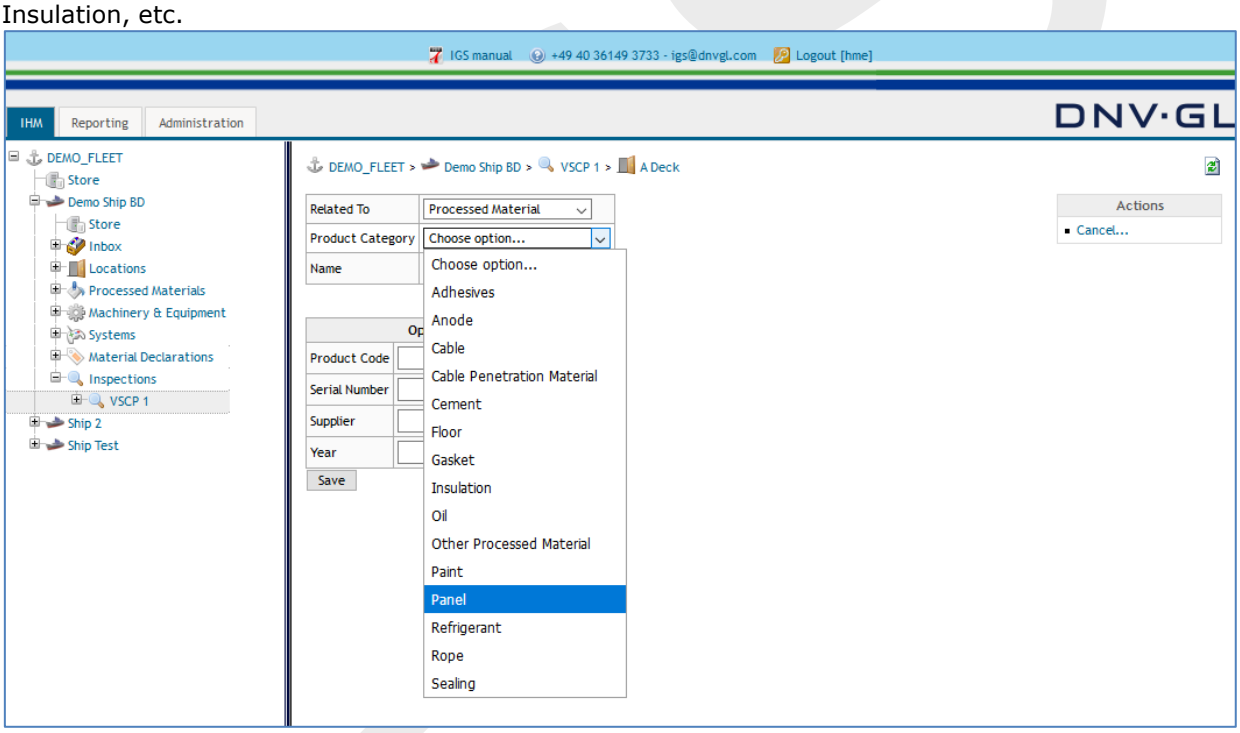
The following dialog appears.



Select first the item "Related To" to define the type of the equipment, e.g. Processed Material, Machinery & Equipment or System.

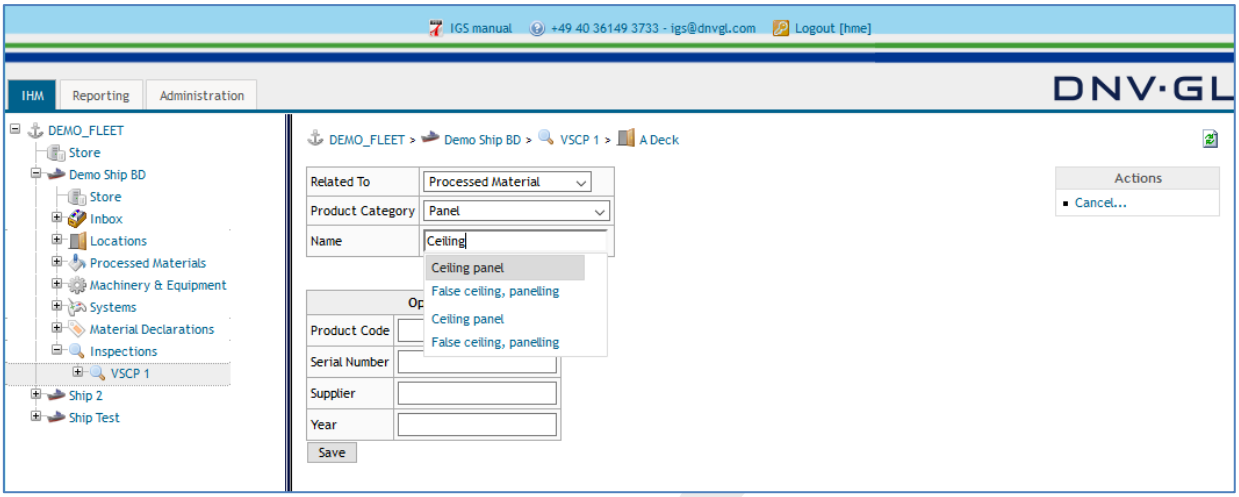


Then select the Item "Product Category" to define the specific use of equipment, e.g. Floor, Gasket, Insulation, etc.



Note: To find the required "Product Category" faster type part of the name on the keyboard.

Finally fill in the Item "Name" to define the name used for the equipment, e.g. ceiling insulation, exhaust pipe packing, floor carpet, etc.

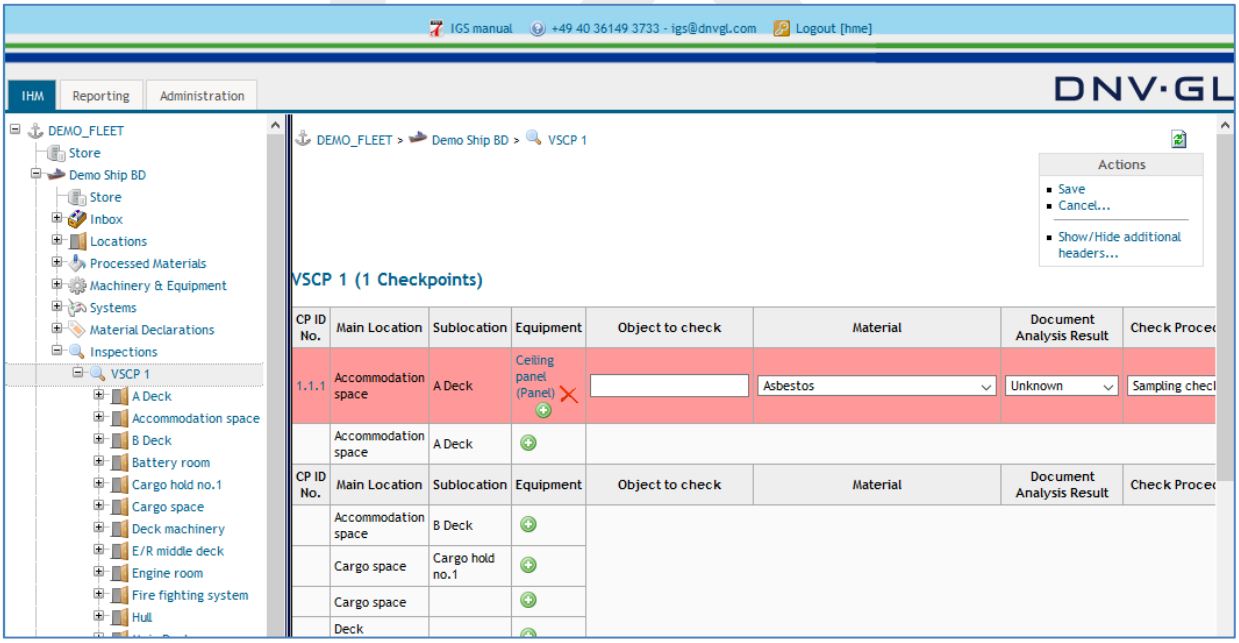


Finally click on “Save”.

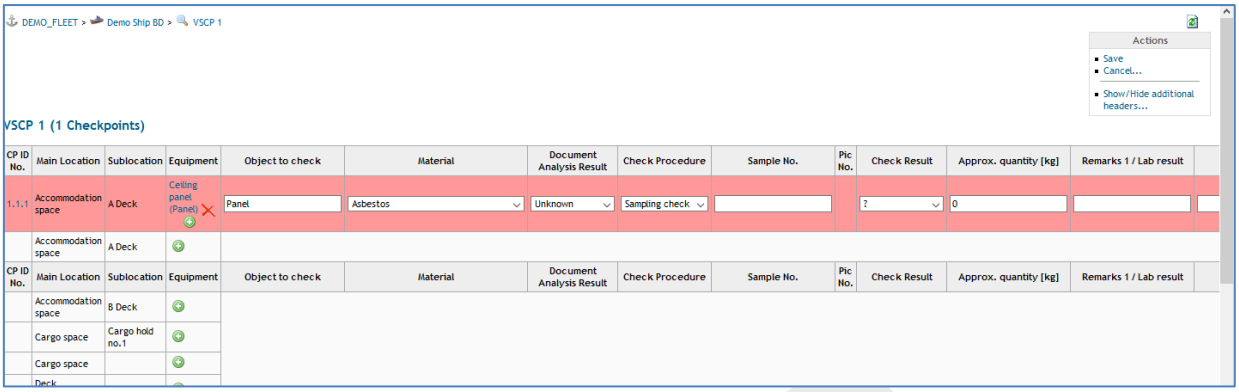
Note: The requested information under “Optional” is not mandatory but nonetheless very important for the traceability of the origin of the material or component.

Note: The list behind the field “Name” is customisable. The list will be replaced with a customised list of the shipyard or shipowner on request.

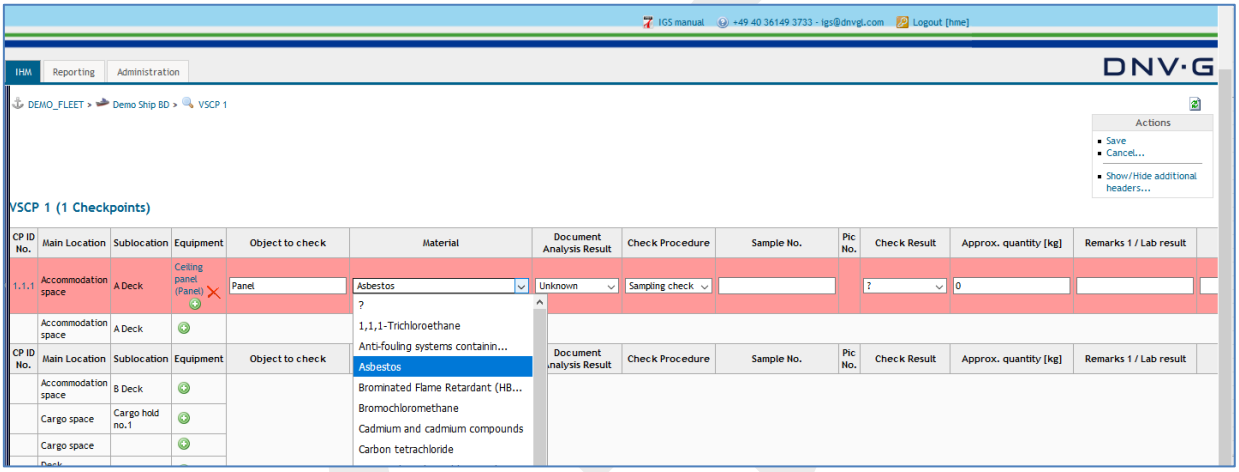
After all locations, related Equipment (Inspection Items) for the on-board inspection must be added to the VSCP. The user must fill in the required information for each Inspection Item.



Enter “Object to Check” into the VSCP, e.g. gasket, insulation, putty, concrete, panel etc.

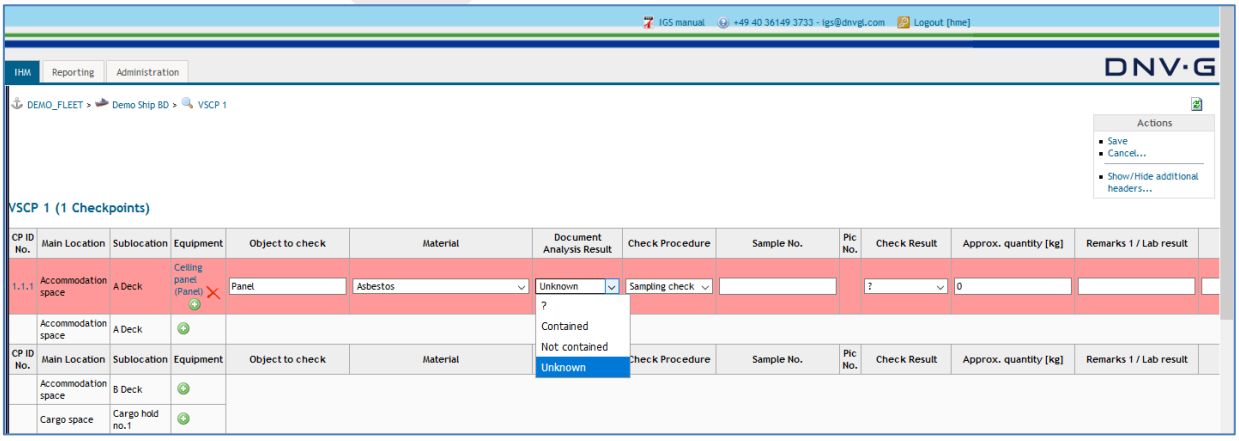


Then select the hazardous "Material" to be checked according to on-board Inspection:



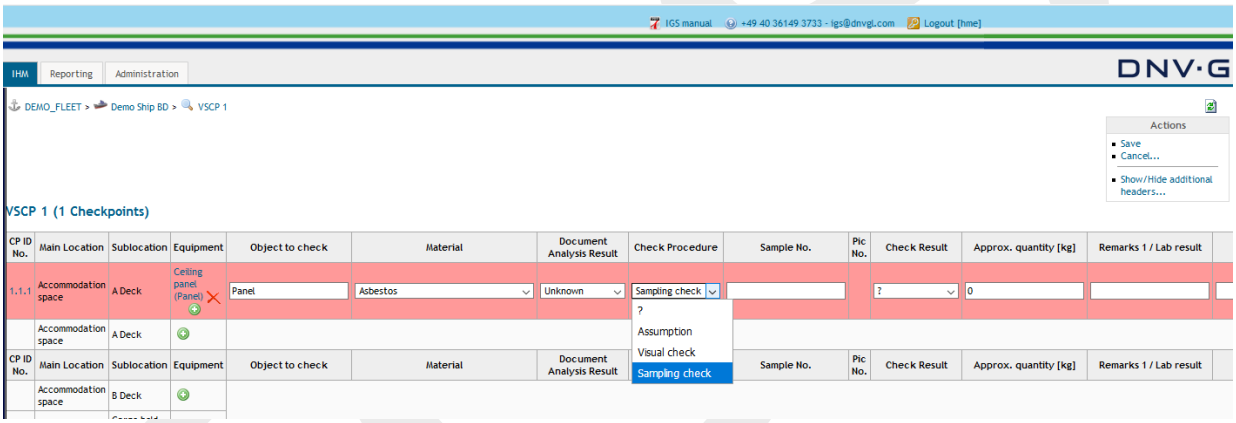
Then select the "Document Analysis Result" made according to the documentation analysis. Document Analysis Result is the result of users document check. It is a pre-defined field with, Contained, Not contained and Unknown entries. Unknown is defined by default in the VSCP.

- Contained: According to documentation, the component contains that hazardous material above the threshold level.
- Not contained: Documentation declares explicitly that the component is free of that hazardous material (e.g. a valid asbestos free certificate) or the concentration is below the mandatory threshold level.
- Unknown: There is no documentation or information available and it is insufficient to make any decisions about the containment of that hazardous material



Then select the "Check Procedure". Check procedure column is a pre-defined field with; Sampling, Visual and Assumption entries. Sampling is defined by default in the standard VSCP

- Sampling: A sample is to be taken for that checkpoint. From the chemical analysis result of this sample the HazMat Expert can judge whether the component contains that hazardous material above the threshold level or not.
- Visual: A visual check is done for that checkpoint. If the document analysis result is contained, or not contained, the document check can be regarded as Visual check as well. Visual check can also be done for some checkpoints on board, where you have taken samples from the same system and visually verify that the same equipment is used in that checkpoint. E.g.: You know that the same insulation system is used in Deck B, C and D. You have taken samples from Decks B and C, but visually check the insulation on Deck D by taking a photo as well.
- Assumption: When there are no documents available regarding the hazmat content of that checkpoint and when it is not possible to take a sample, the HazMat Expert makes an experience-based assumption, e.g. HazMat Expert cannot see inside the boiler insulation but knows that the boiler is manufactured in a country in which at the date of manufacturing that hazardous material was still in use in that country and not prohibited by law. Therefore; the HazMat Expert can make an assumption that the component contains that hazardous material.



Finally click on "Save".
The VSCP should be prepared up to and including check procedure before conducting the on-board inspection.

Note: This procedure must be repeated until the required information for all Inspection Items (on board checks) have been defined. Use the General Arrangement Plan or Fire Control & Safety Plan as guidance.

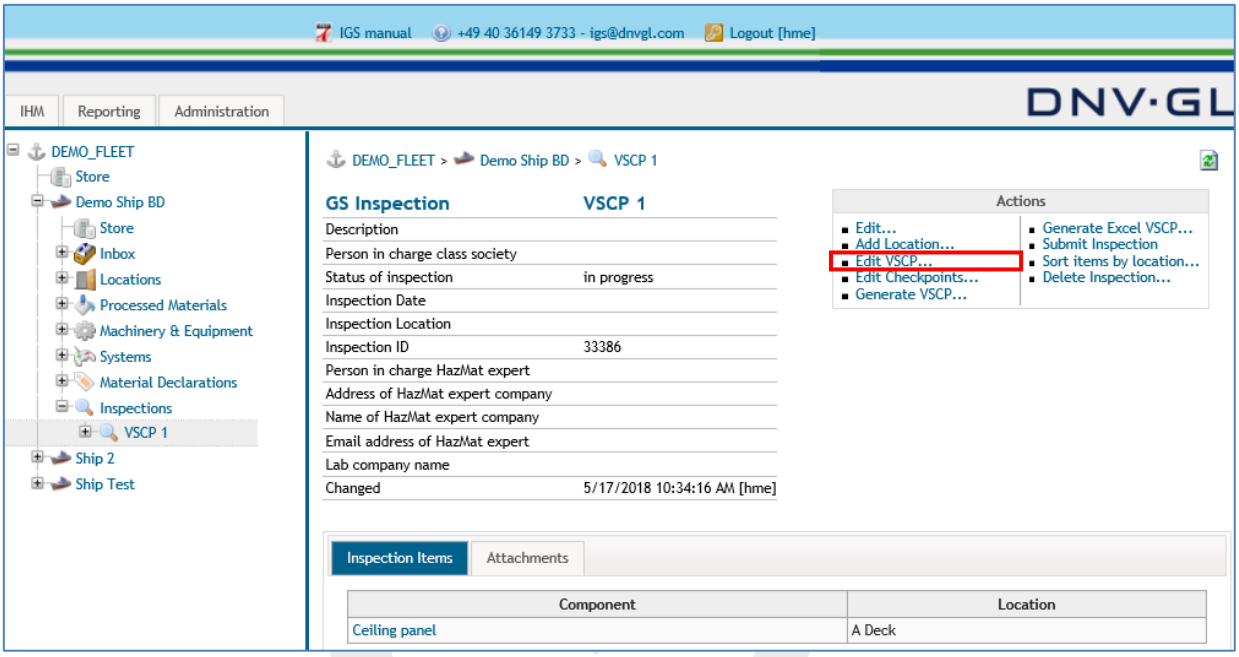
Note: The "Save" function in the actions box should be used more frequently to avoid a loss of already inserted data.

Note: The row is displayed as pink due to plausibility check of the logical data among document analysis, check procedure and check result.

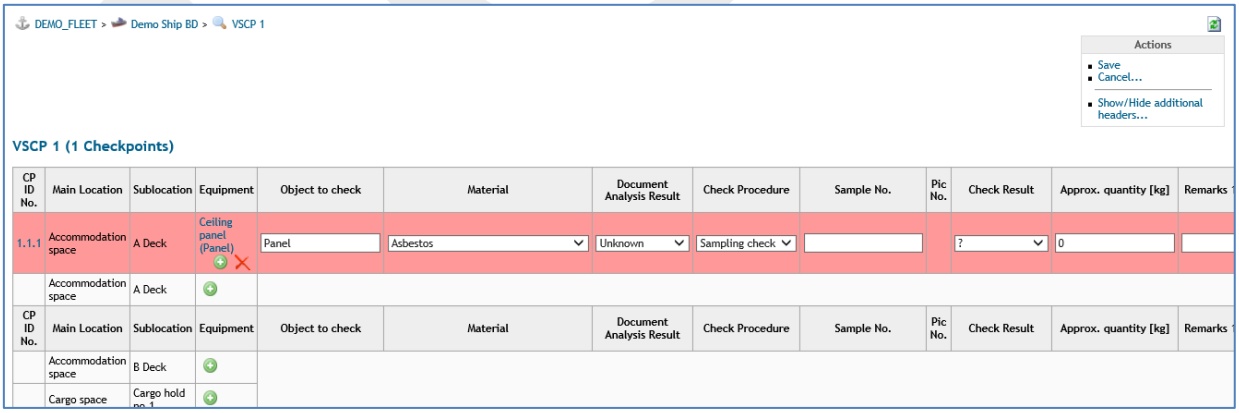
6.1.4 Completion of the VSCP by "Edit VSCP" link

The VSCP must be completed during and after the results of the on-board inspection are available from the laboratories. During the on-board inspection, the HazMat Expert enters the sample no information into the VSCP. To complete the VSCP the user can either use the "Edit VSCP", or "Edit Checkpoints". In this chapter "Edit VSCP" link will only be described. For "Edit Checkpoints", refer to **Chapter 6.4**, and for excel standard VSCP refer to **Chapter 6.2**.

Select the "Edit VSCP…" link in the actions box of the inspections view to edit the VSCP.



The following dialog appears.



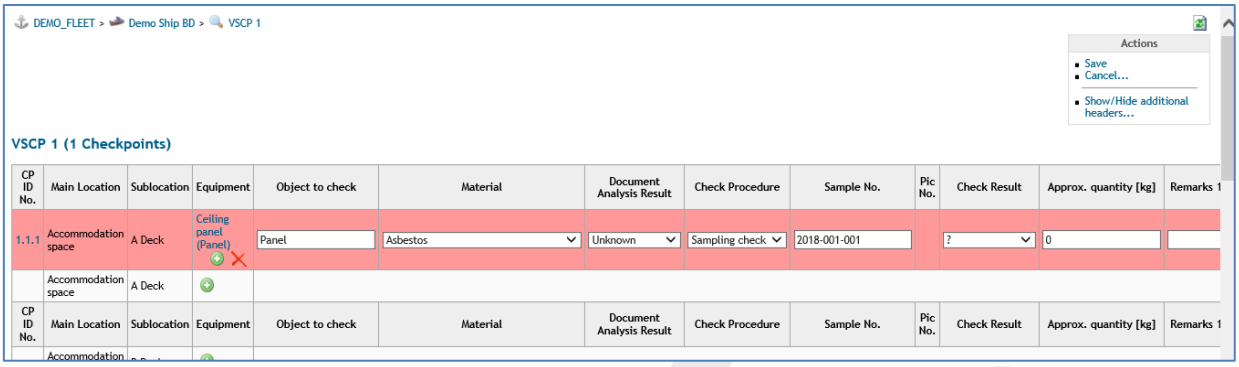
Complete all the missing entries based on the laboratory results to accomplish the VSCP for the IHM preparation.

Note: Fill in the required information according to the knowledge gained for preparation of VSCP during the DNV GL Approved HazMat Expert qualification.

Note: The "Save" function in the actions box should be used more frequently to avoid a loss of already inserted data

Note: Use the "Remarks column" to insert specific information about the Inspection Item (Equipment), e.g. sub-location, customised room name (Cabin1 to Captain Cabin), colour, special attributes, etc.

First enter the "Sample No. ", e.g. 2018-184-01; S01; 20-520-001, etc.

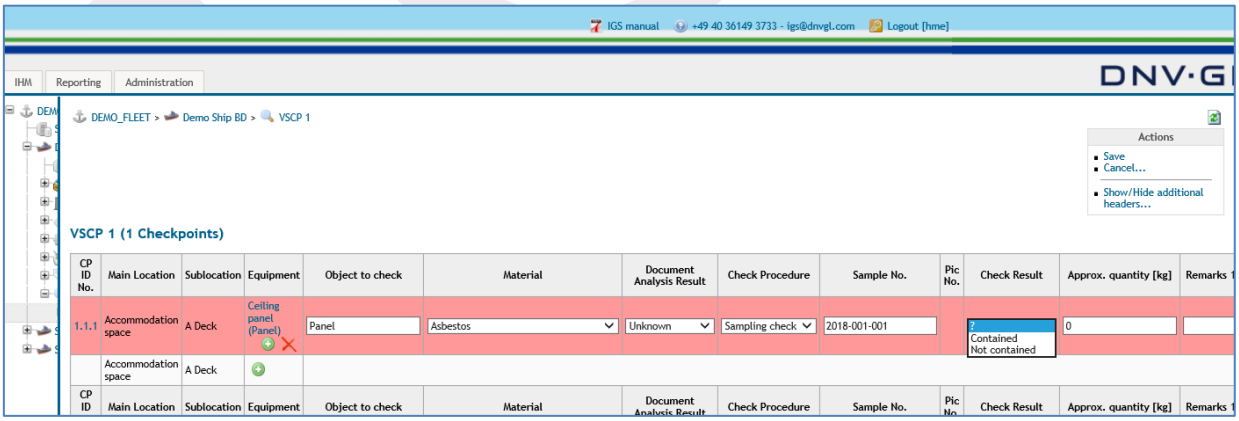


Then enter the "Pic. No. ", e.g. DSC2015; Pic 1; 001, etc., if the pictures are not uploaded to IGS. IGS will assign the picture numbers automatically if they are uploaded into IGS.

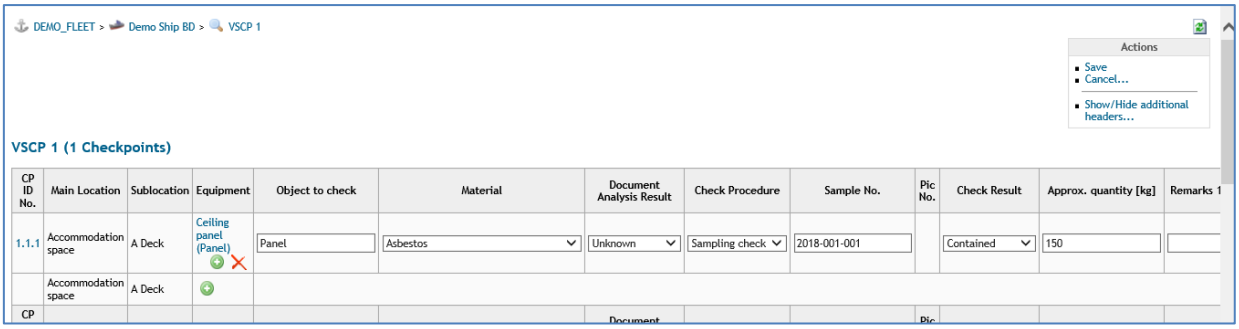
Then select the "Check Result" according to the analysis result of the sample/inspection. Check result column is a pre-defined field with; Contained and Not contained entries. Check result should be entered by the HazMat expert after laboratory analysis results are received and based on the info from the laboratory, the HazMat expert should choose one of the two entries.

Note: For the check points where check procedure is assumption, and it is assumed that the sample is containing hazardous materials, the check result should be written as "Contained". The PCHM (potentially containing hazardous materials" term should be mentioned under remarks column by the HazMat Expert.

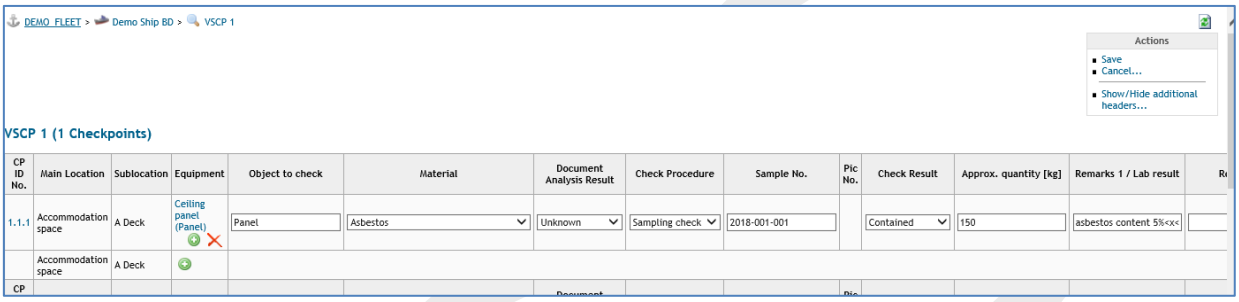
- **Contained:** The component contains that hazardous material above the mandatory threshold level.
- **Not contained:** It has been proven, that the component does not contain that hazardous material.



Then enter the "Approx. quantity [kg]". The "Approx. quantity [kg]" of the contaminated material is recorded in the "Approx. quantity [kg]" column and must be entered in kilograms [kg]. This information is technically relevant only, when "Check result" has been set to "Contained".



Then finally enter the "Remarks" to describe some additional information about the material or component:



Note: The "Check Result" column is filled with "not contained" by default. If otherwise, change to the actual "Check Result"

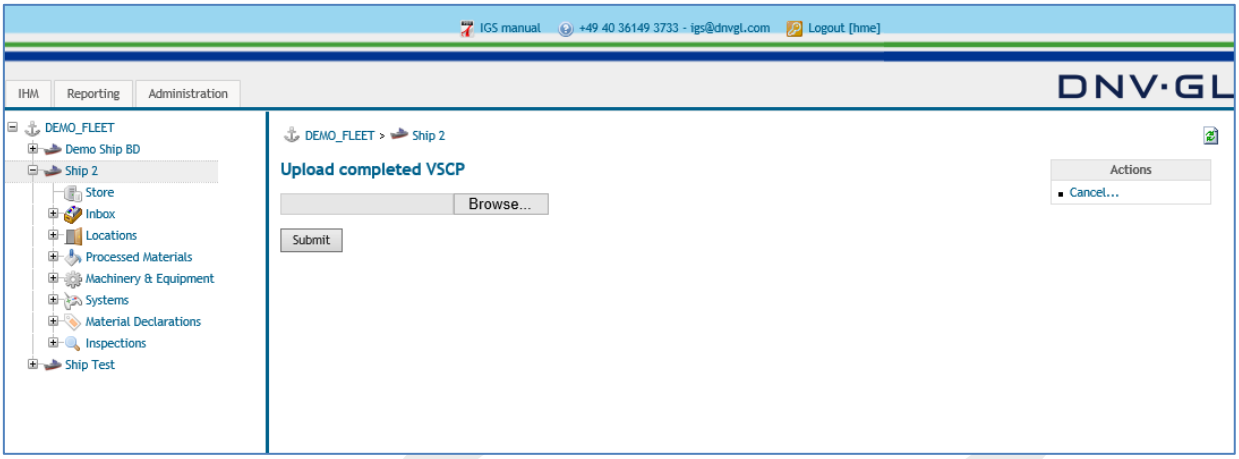
Note: The "Save" function in the actions box should be used more frequently to avoid a loss of already inserted data.

Note: Use the "Remarks column" to insert specific information about the Inspection Item (Equipment), e.g. PCHM, sub-location, customised room name (Cabin1 to Captain Cabin), colour, special attributes, etc.

6.2 Upload completed VSCP

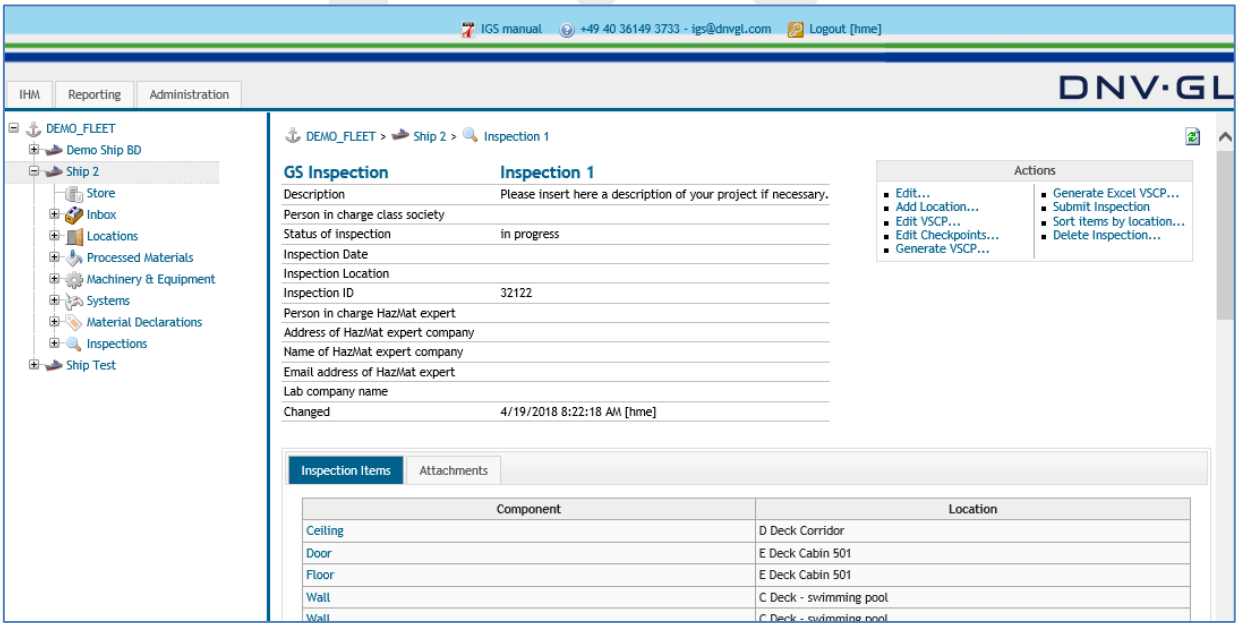
Users of IGS can work with a standard VSCP provided by DNV GL. The standard VSCP can be downloaded by clicking the "Download standard VSCP" link in the actions box of the ship view. Standard VSCP is designed in excel and users can work in excel standard VSCP during the whole IHM preparation process. When the VSCP is filled in, users can upload it to IGS by clicking the "Upload completed VSCP" link in the actions box of the ship view.

Following dialog box appears;



Click the "Browse" link to select the filled VSCP from your computer. Then click on "Submit" to upload it to IGS.

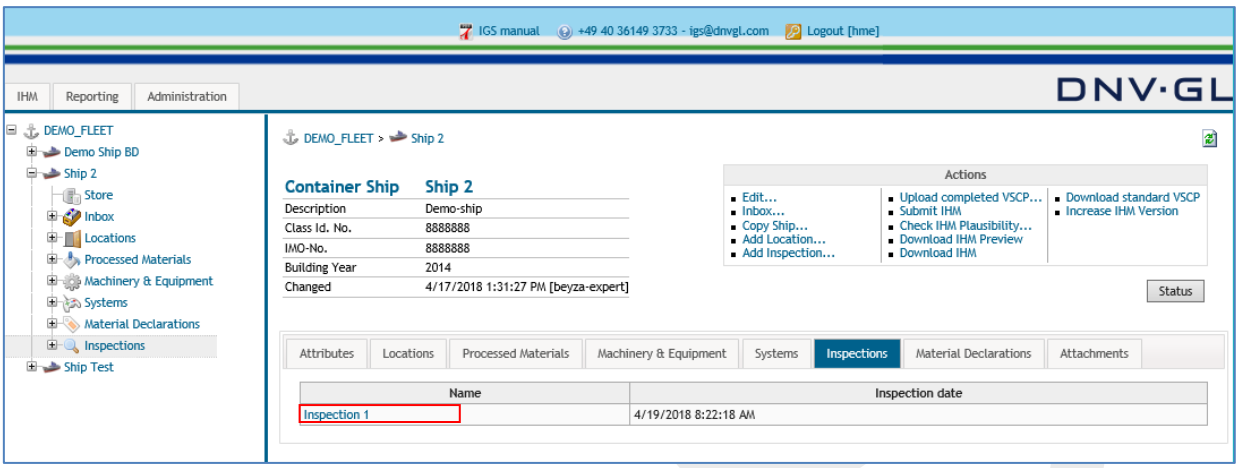
Following dialog box appears;



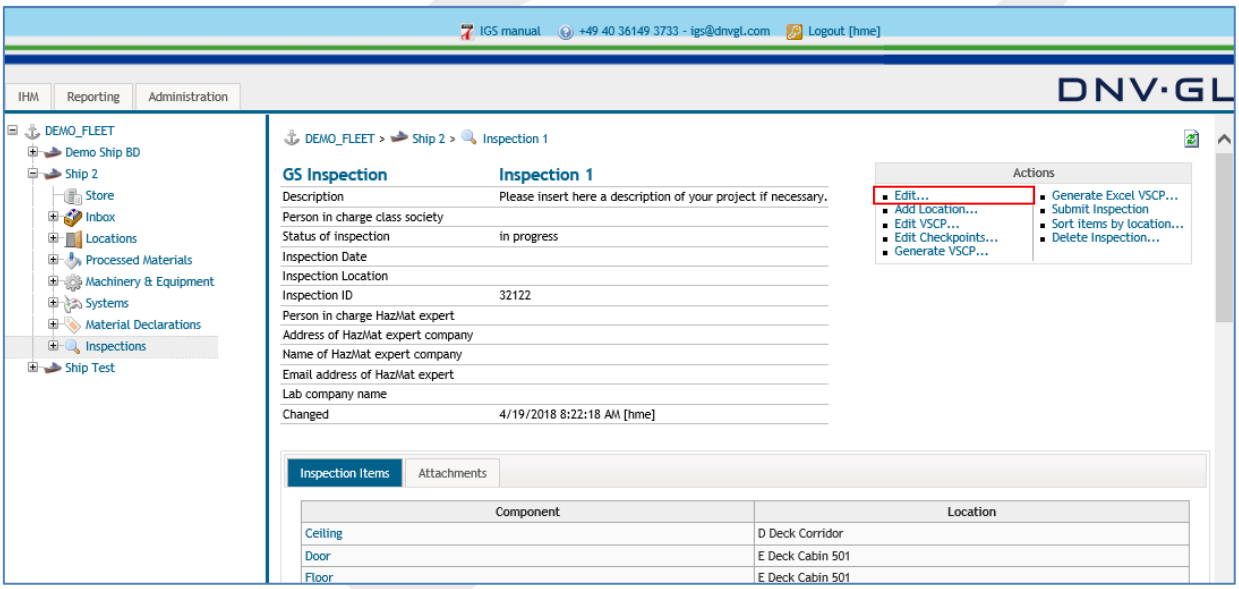
VSCP is uploaded and an inspection is automatically created in the name given by the user. Now the users can edit the inspection data and can further edit and work on the VSCP through IGS by "Edit Checkpoints" link in the actions box. Details of this function are provided in **Chapter 6.4**.

6.3 Edit an inspection

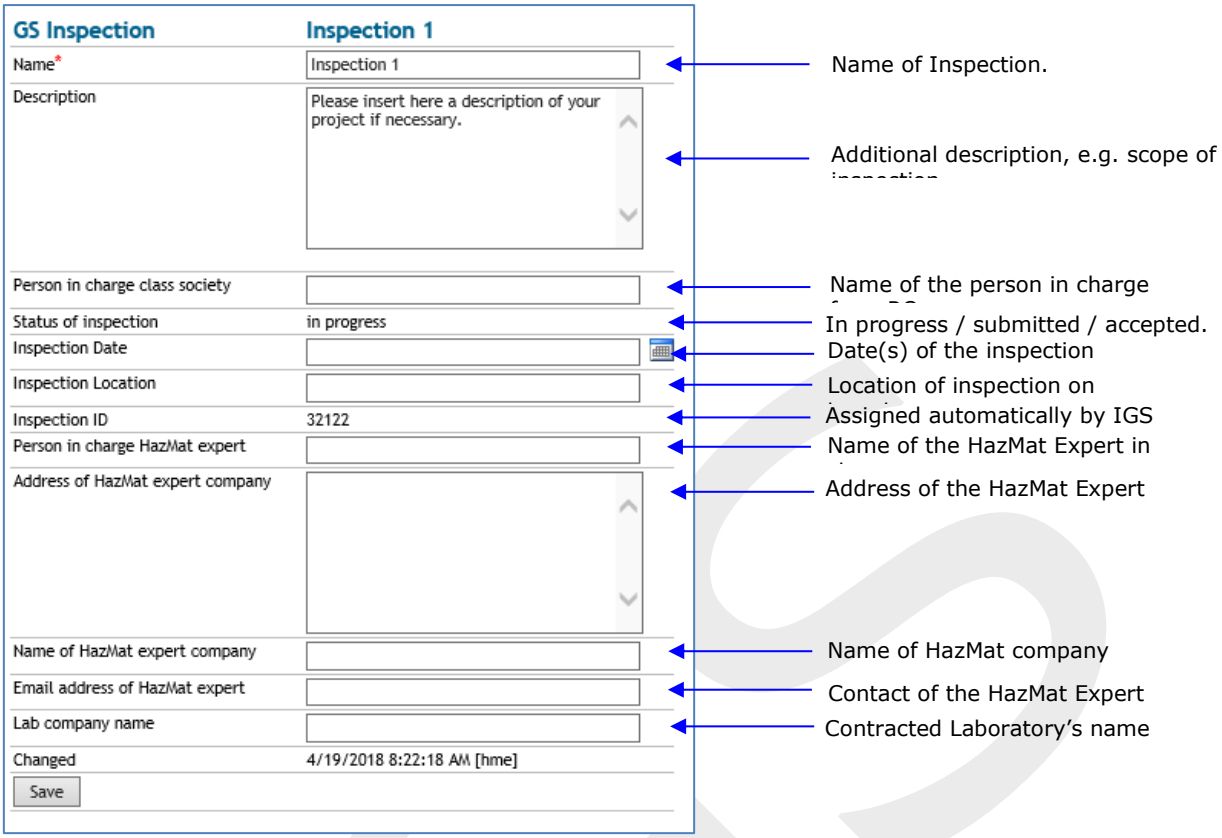
For editing an Inspection, the user must select within the ship project the sub-item "Inspections" or open the node "+" in the navigation tree on the left side. Now the Inspection can be opened by selecting it either from the navigation tree on the left side or from the ship data view on the right side.



After opening the inspection, the user can begin to edit the Inspection by selecting "Edit…" in the actions box of the inspections view.



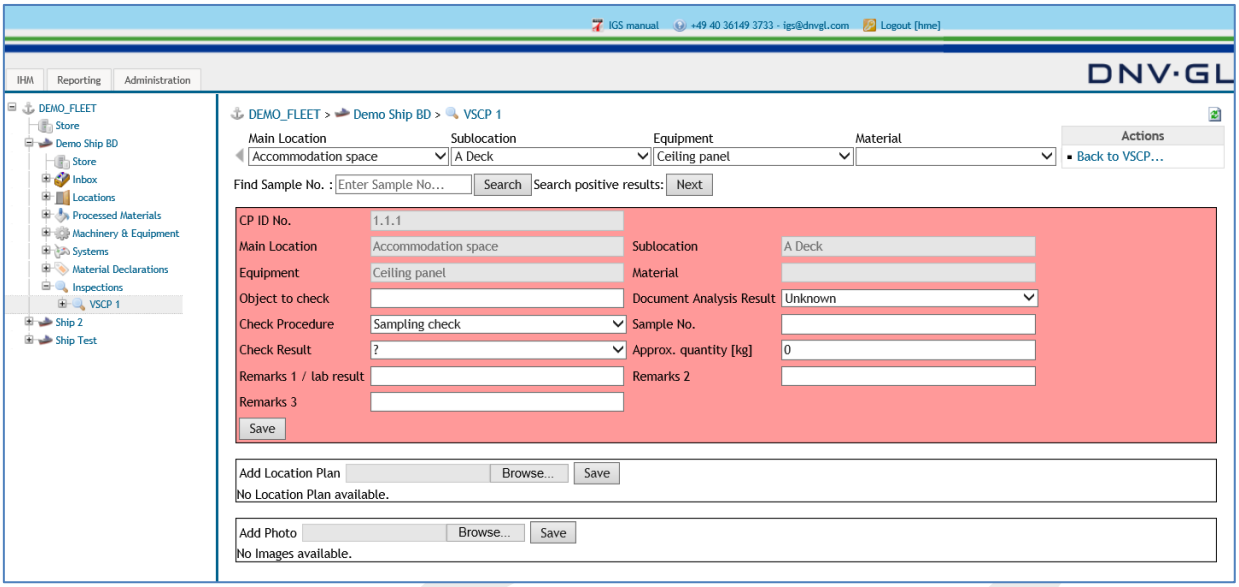
Select the "Edit…" link in the actions box of the inspections view to edit an inspection. The following dialog appears.



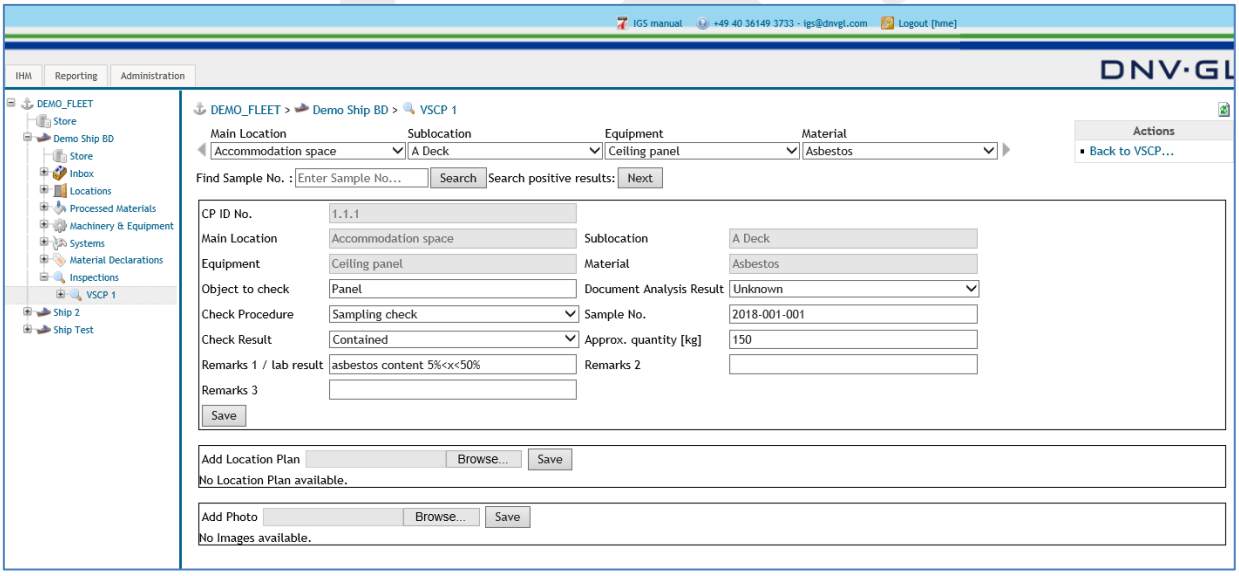
Finally click on "Save".

6.4 Edit checkpoints

"Edit Checkpoints" function would only work if the VSCP is prepared in IGS up to and including "Check Procedure" column or if the Excel VSCP which is completely filled in is uploaded into IGS.



Fill in or edit the relevant fields in the checkpoint graphical user interface (GUI) as you do for "Edit VSCP" or "Excel Standard VSCP".



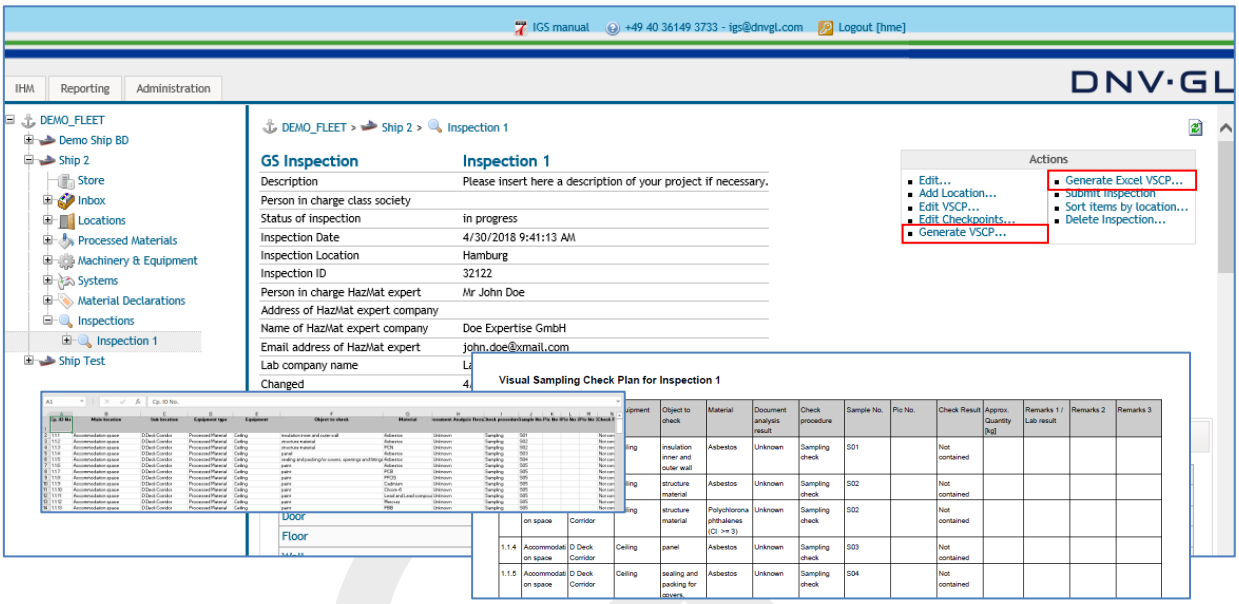
The users can upload the hazardous material location plan and 2 pictures of the relevant checkpoint in the Checkpoint GUI. The Location Plan and pictures should be in jpg format.

Note: 960px is used for the Location plan diagram to make it more landscape orientation

Note: The Checkpoint GUI is displayed as pink due to plausibility check of the logical data among Document analysis, Check procedure and Check result.

6.5 Generate VSCP

The HazMat Expert has the option to generate the prepared VSCP as pdf or xls format for the on-board inspection and for further processing of the information in the VSCP. To generate a VSCP in the pdf format the user must select the "Generate VSCP…" link in the actions box of the inspections view. To generate a VSCP in the xls format the user must select the "Generate Excel VSCP…" link in the actions box of the inspections view.

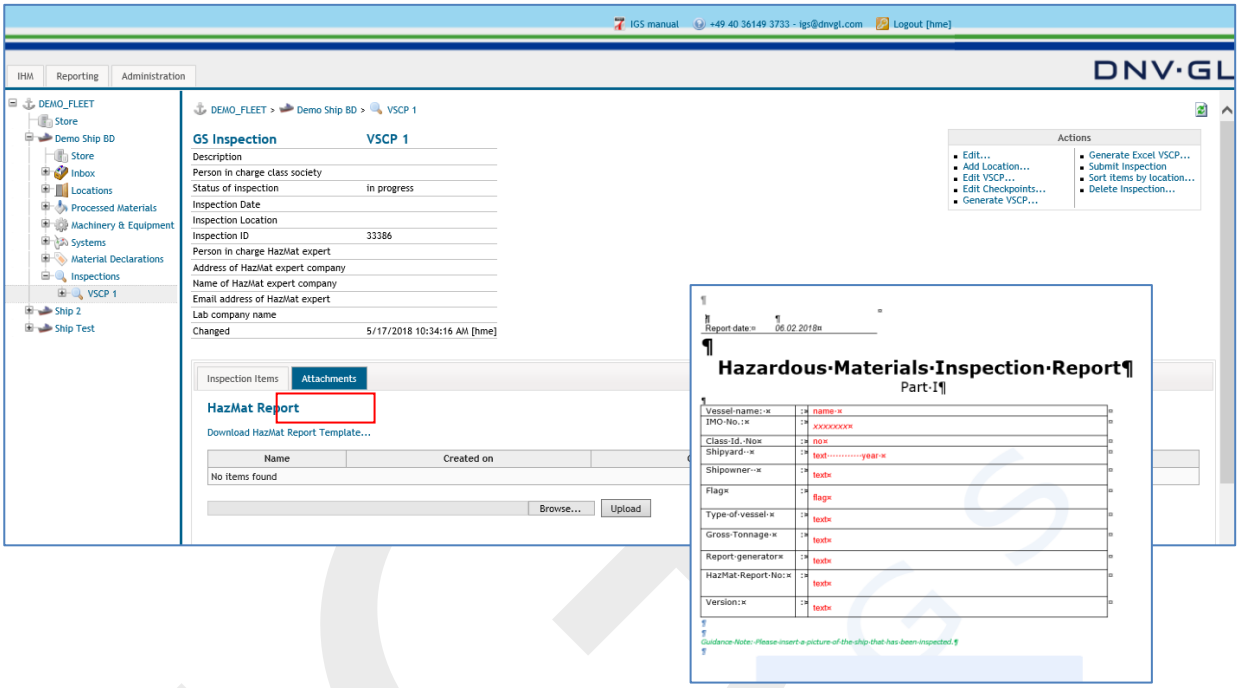


Select the "Generate VSCP…" link or the "Generate Excel VSCP…" link in the actions box of the inspections view to generate the VSCP for the on-board inspection.

6.6 Attachments tab of the inspection

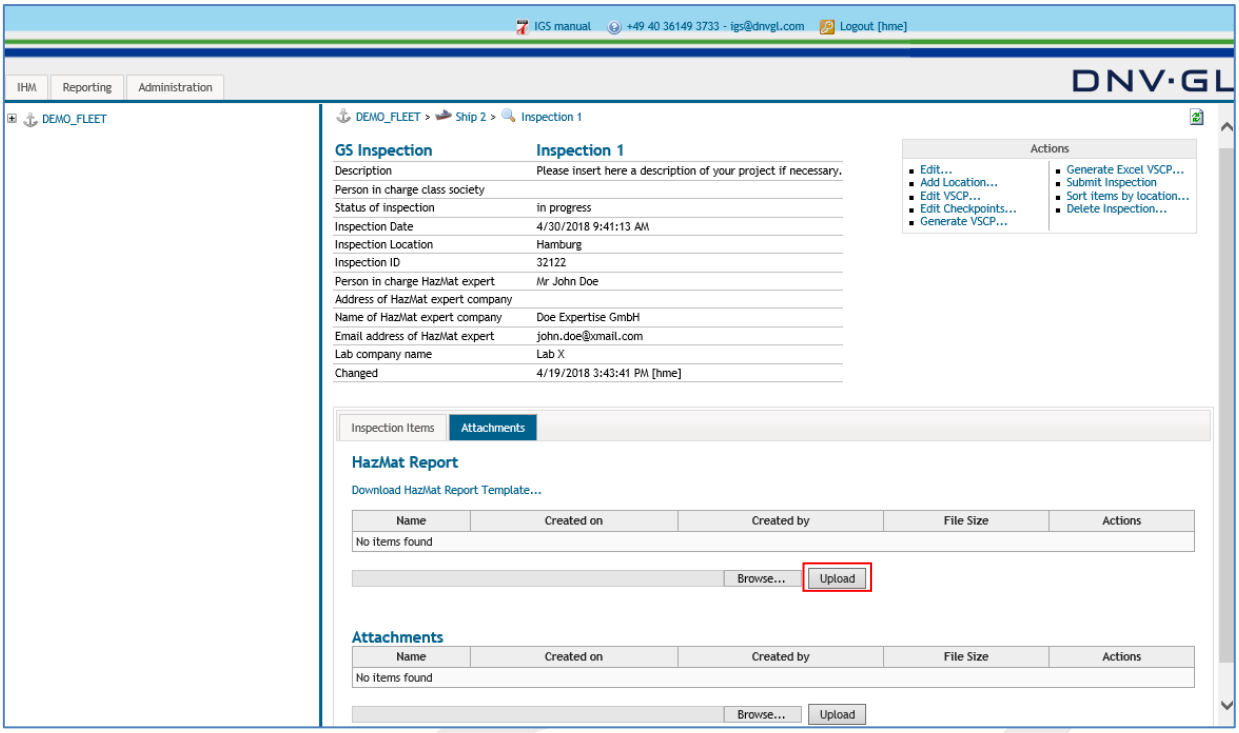
After the HazMat Expert has completed the work for the preparation of the VSCP, the HazMat Inspection Report about the on-board inspection and the results of the laboratory analysis must be uploaded to the IHM Inspection.

To prepare the HazMat Inspection Report, users of IGS can use the template HazMat Inspection Report provided by DNV GL. The template HazMat Inspection Report can be found under the Attachments tab of the Inspection.

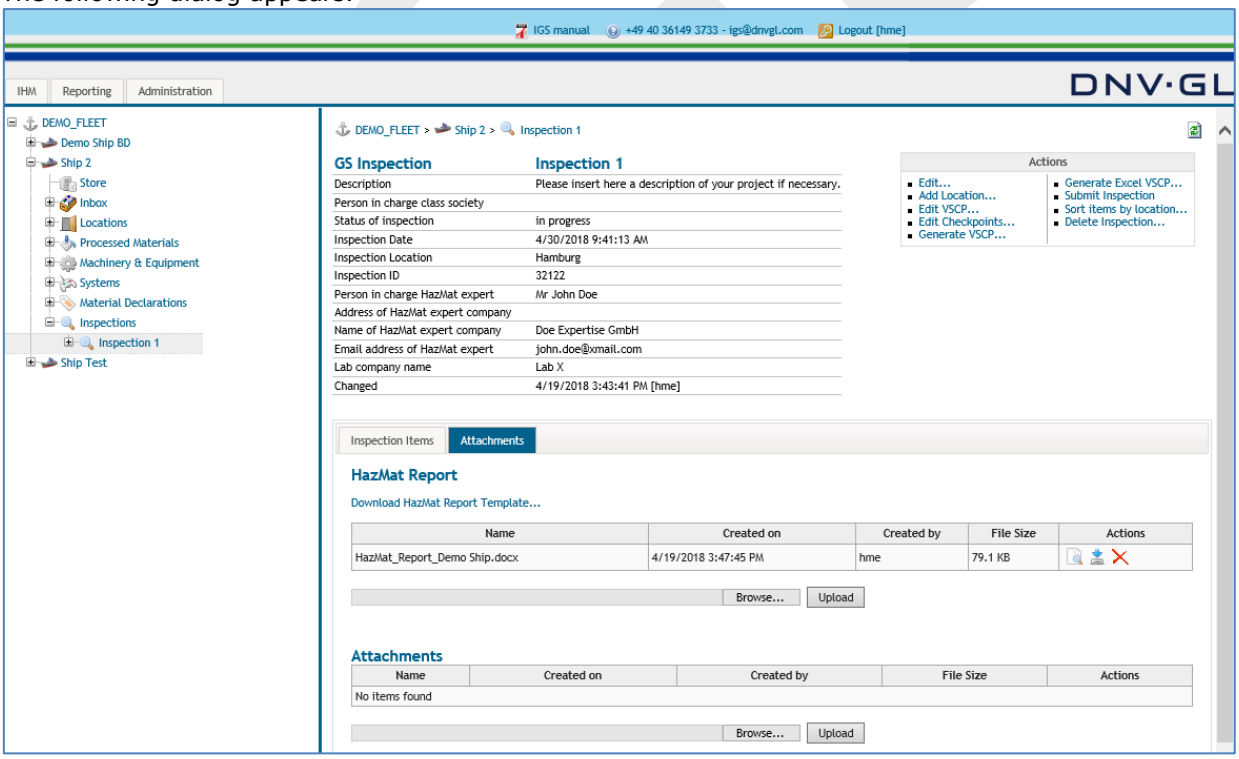


By clicking the “Download HazMat Report Template” link, users can download the report and work on it.

To upload the prepared HazMat Inspection Report , the user has to browse the report in their computer and select the “Upload” link under HazMat Report title in the attachments tab of the inspection view.



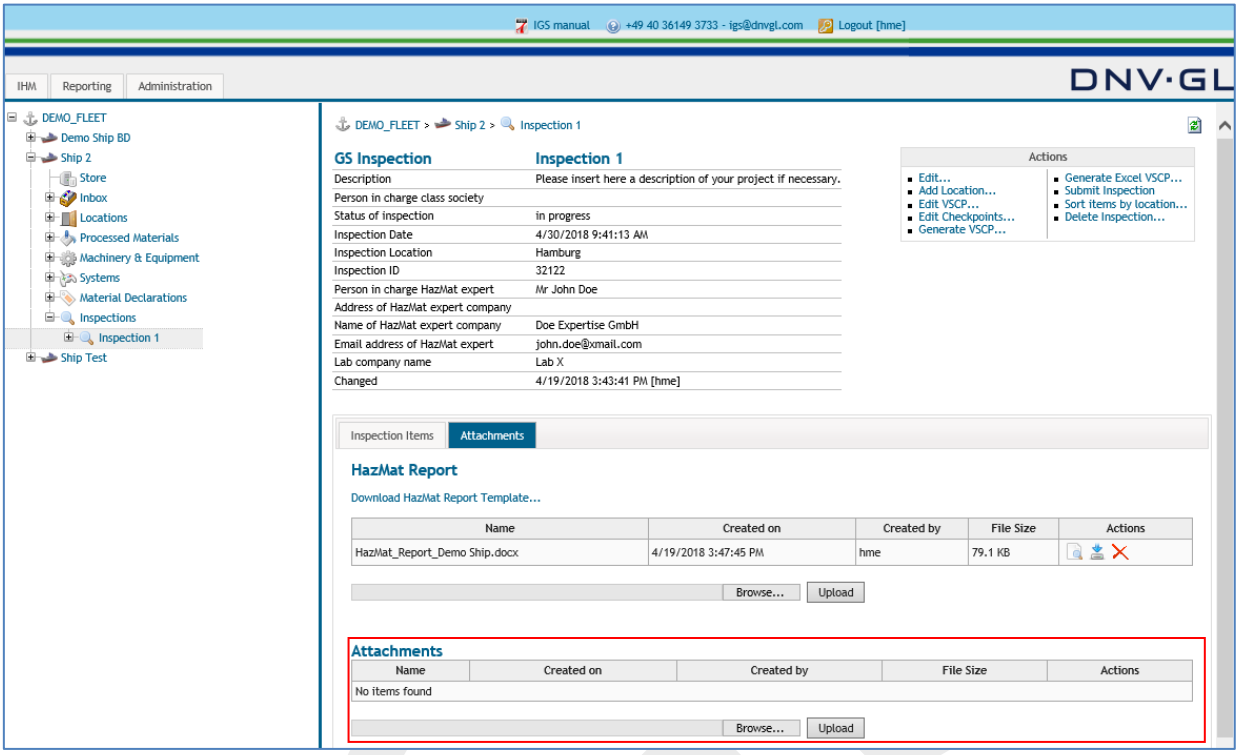
The following dialog appears.



To view, download and delete the uploaded report, click on the functions under the “Actions” of the table.

Note: The upload “HazMat Report” function is for pdf, word, and excel documents

Under the "Attachments" table of the inspection tab, the users can upload project related documents such as; mass calculation sheet, lab analysis results, vessel certificates, hazmat expert qualifications, etc.

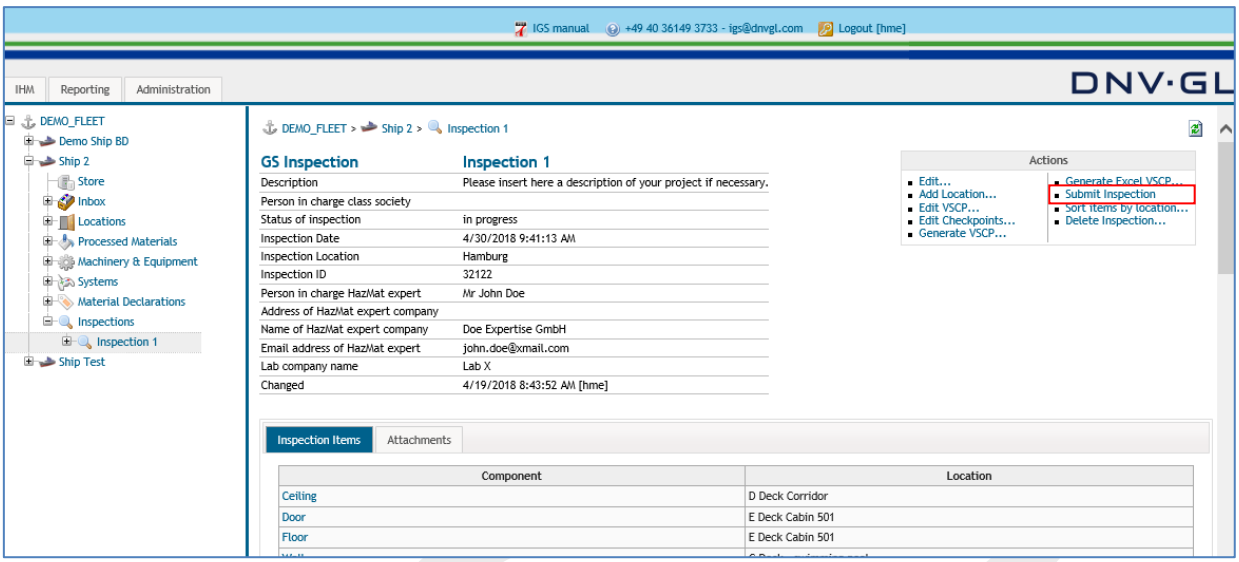


Note: The additional documents upload function under Attachments is not meant as option to upload SDoC and MD documentation or other documentation such as VSCP for the preparation of the IHM.

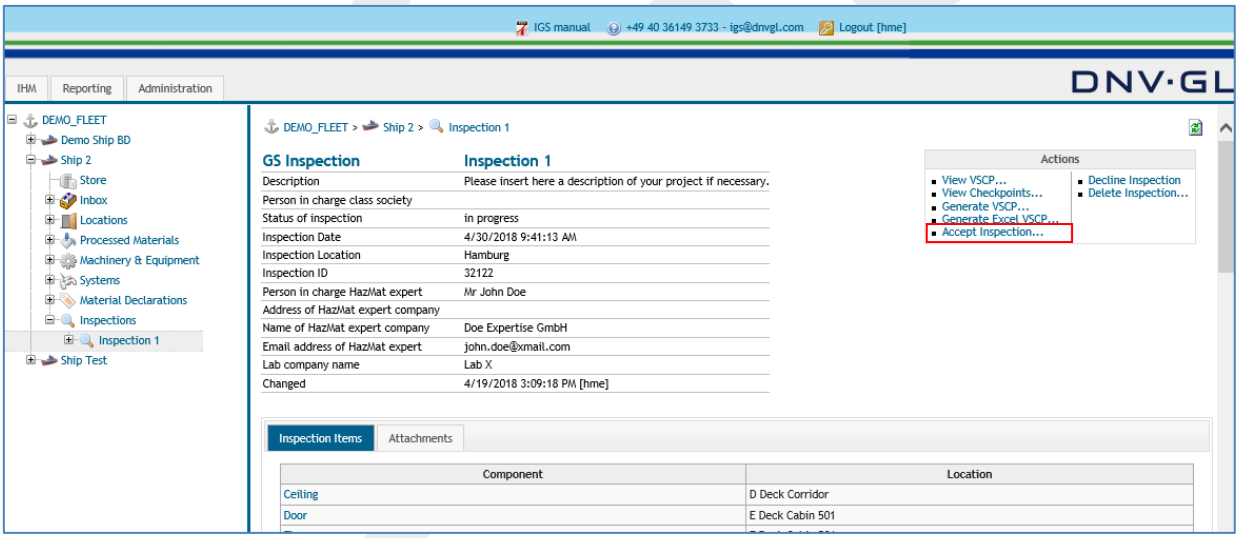
Note: The capacity of the upload volume of Attachments tab is limited and should only be used to upload necessary information.

6.7 Submit inspection

The completed inspection (VSCP) must be submitted in order the inspection data to be transferred to IGS database. To submit the inspection the user must click the "Submit Inspection" link in the actions box of the inspections view.

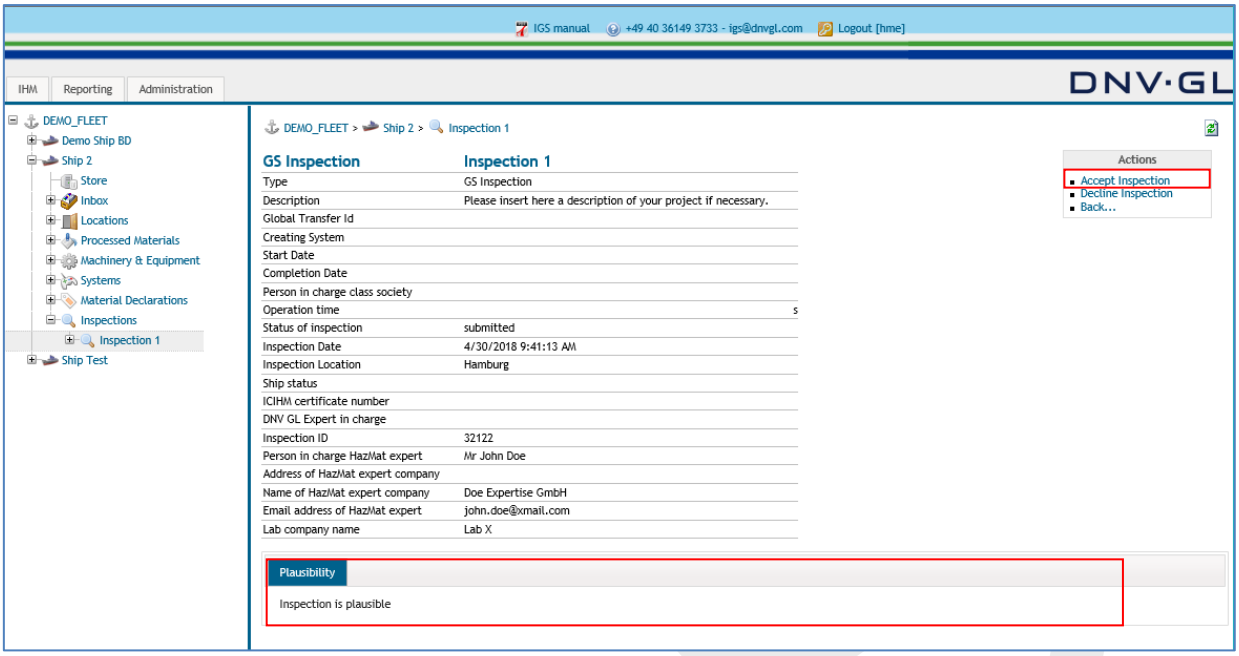


After "Submit Inspection" is clicked, following dialog appears;



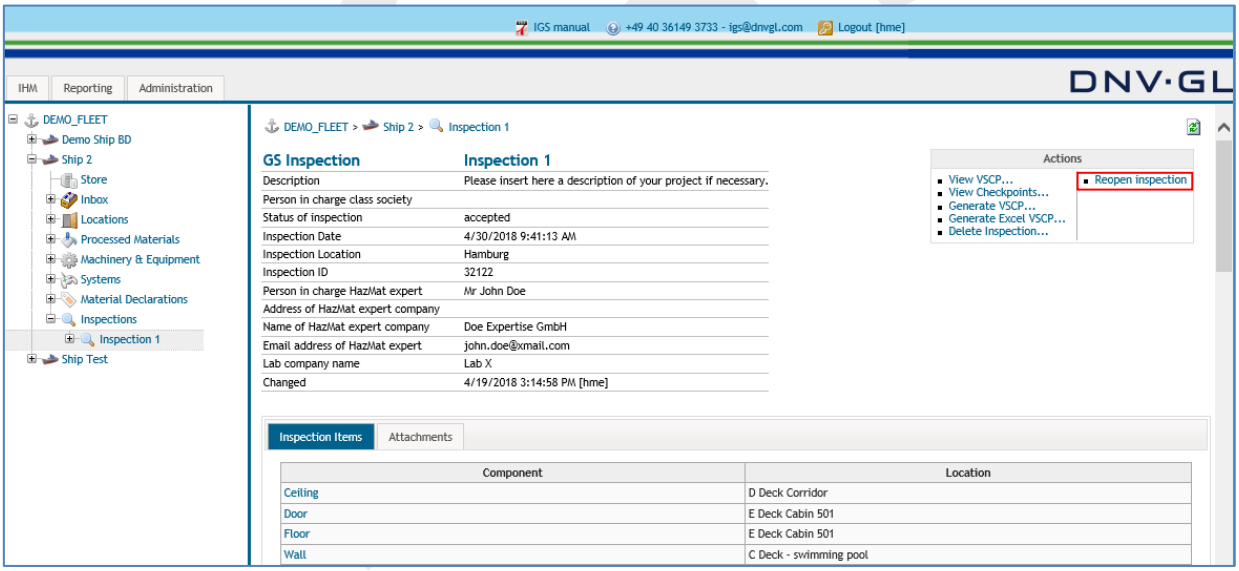
If users want to accept the inspection, the user click on "Accept Inspection" link. If the user wants to go back to the edit inspection, "Decline Inspection" link needs to be clicked.

When "Accept Inspection" link is clicked, following dialog appears;



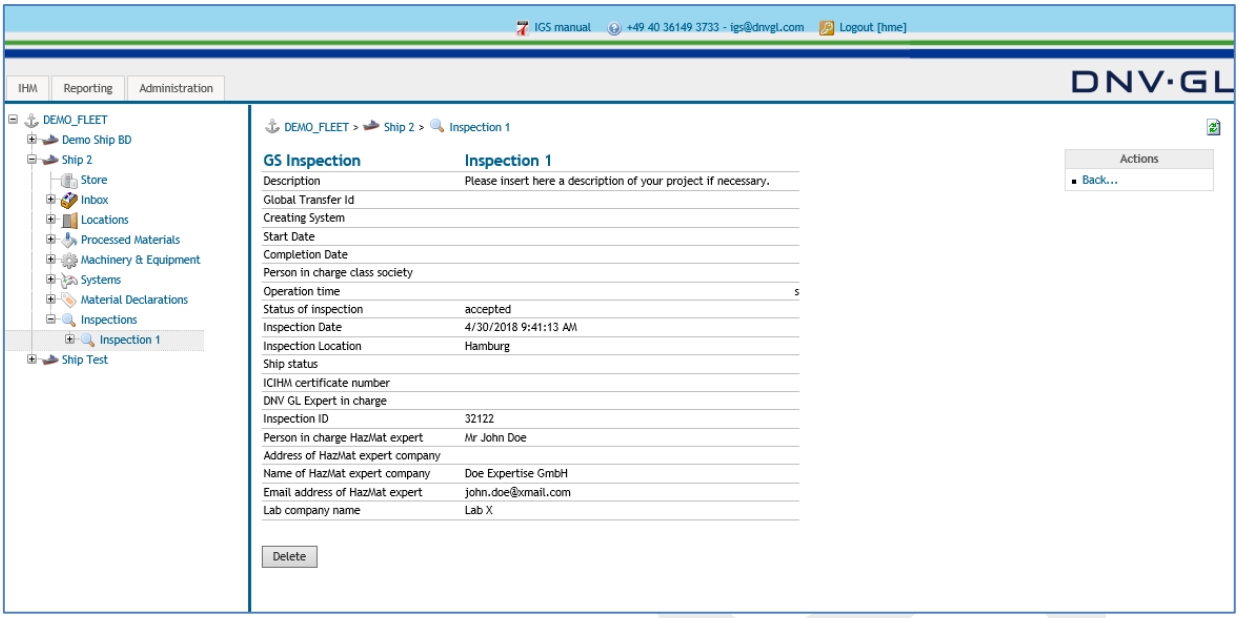
"Submit Inspection" is the self-check of the user of its own work. At the acceptation phase, plausibility of the inspection will be shown to user. If all items are plausible, then the user can accept the inspection by clicking on the "Accept Inspection" link for the last time.

Following dialog box appears;



If the user want to continue working on the inspection after accepting it, it is still possible to open the inspection. To work in the inspection again, the user clicks on the "Reopen inspection" link in the actions box of the inspection view.

The user can delete the inspection completely as well by clicking "Delete Inspection" link.


IGS manual
+49 40 36149 3733 - igs@dnvgl.com
Logout [hme]
IHM
Reporting
Administration
DNV·GL
DEMO_FLEET
Demo Ship BD
Ship 2
Store
Inbox
Locations
Processed Materials
Machinery & Equipment
Systems
Material Declarations
Inspections
Inspection 1
Ship Test
DEMO_FLEET > Ship 2 > Inspection 1
GS Inspection
Inspection 1
Description
Please insert here a description of your project if necessary.
Global Transfer Id
Creating System
Start Date
Completion Date
Person in charge class society
Operation time
s
Status of inspection
accepted
Inspection Date
4/30/2018 9:41:13 AM
Inspection Location
Hamburg
Ship status
ICIHM certificate number
DNV GL Expert in charge
Inspection ID
32122
Person in charge HazMat expert
Mr John Doe
Address of HazMat expert company
Name of HazMat expert company
Doe Expertise GmbH
Email address of HazMat expert
john.doe@xmail.com
Lab company name
Lab X
Delete
Actions
Back...

6.8 Plausibility of the VSCP

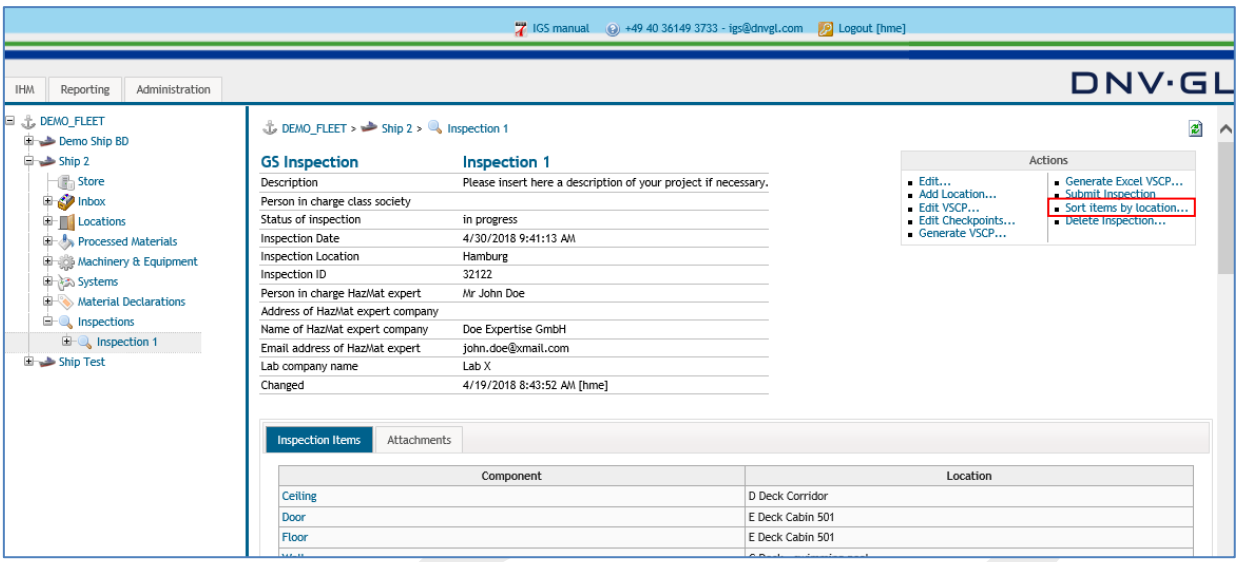
The plausibility check of the VSCP cross checks the logical data among Document analysis, Check procedure and Check result. Following checks are conducted:

Document Analysis Result	Check procedure	Sample No.	Pic No 1	Pic No 2	Pic No 3	Check Result
Contained	Visual					Contained
Contained	Visual					Not contained
Contained	Sampling					Contained
Contained	Sampling					Not contained
Contained	Assumption					Contained
Contained	Assumption					Not contained
Not contained	Visual					Not contained
Not contained	Visual					Contained
Not contained	Sampling					Not contained
Not contained	Sampling					Contained
Not contained	Assumption					Contained
Not contained	Assumption					Not contained
Unknown	Visual					Contained
Unknown	Visual					Not contained
Unknown	Sampling					Contained
Unknown	Sampling					Not contained
Unknown	Assumption					Contained
Unknown	Assumption					Not contained

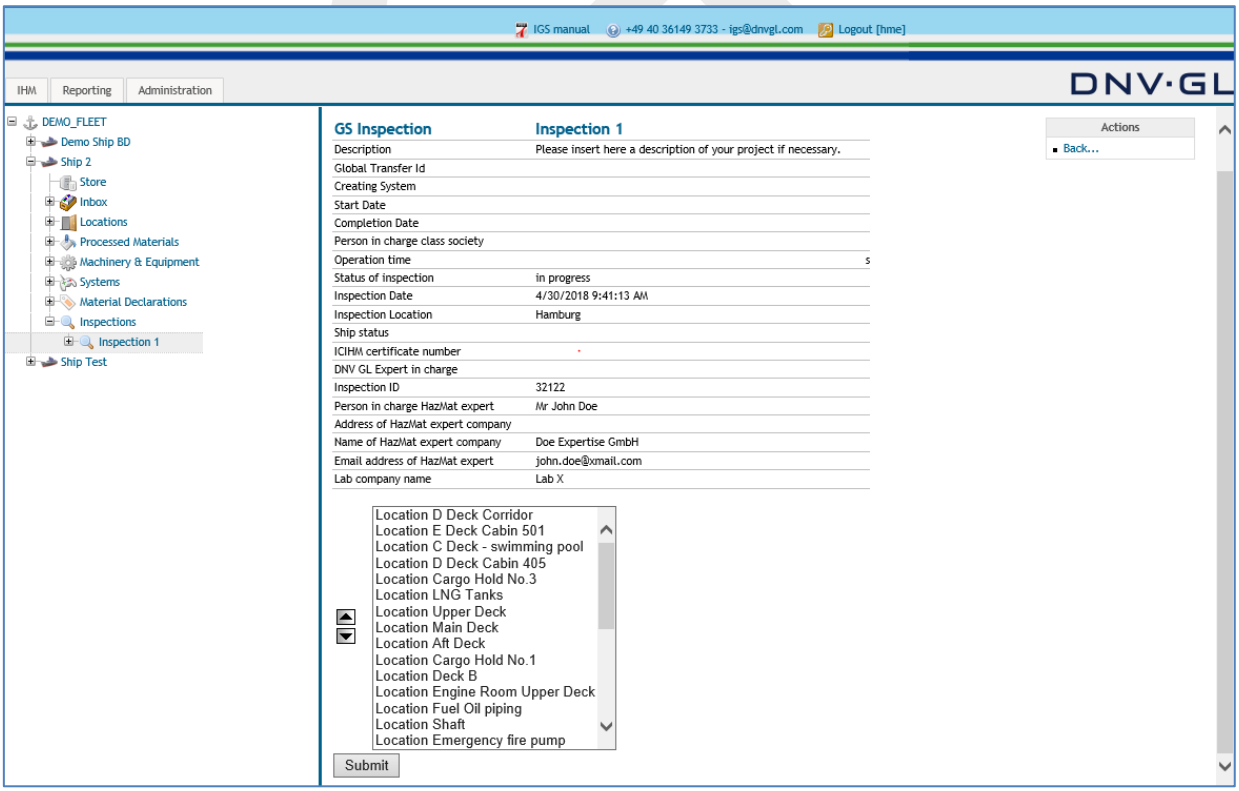
In addition to the above-mentioned checks, IGS checks the logical data between the Check Result and approximate quantity columns. If “contained” selected as the check result, approximate quantity must be filled in with a figure bigger than zero. If “not contained” selected as the check result, approximate quantity must be filled zero.

6.9 Sort VSCP items by location

The preparation process of the VSCP includes several sorting and adjustment functions. The user has the possibility to sort the VSCP by location to adjust the order of the planned inspection on board by using the "Sort items by location..." link in the actions box.



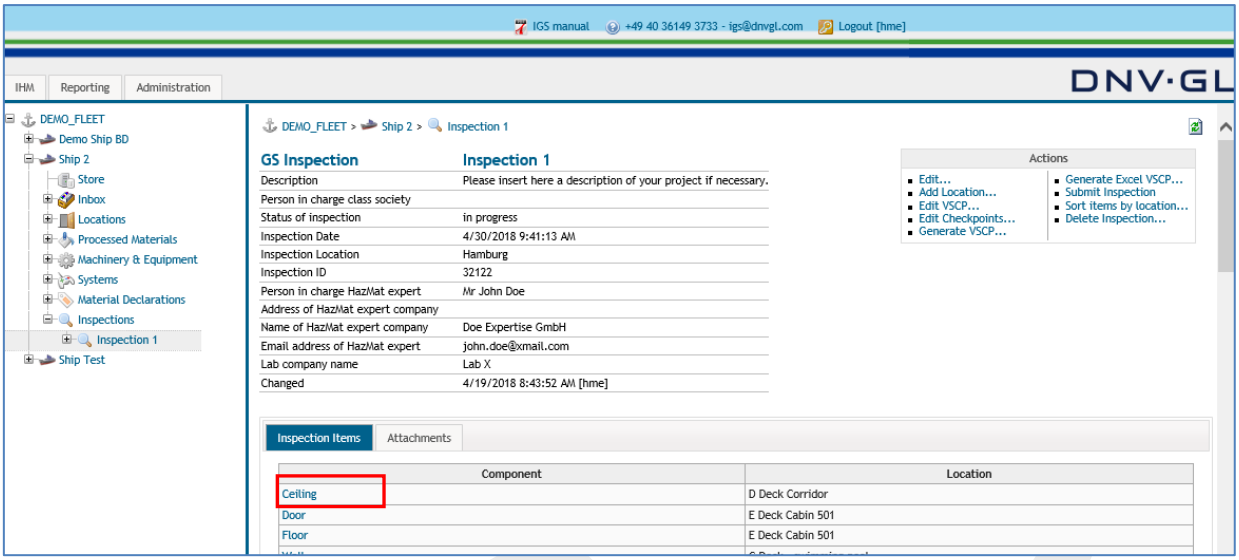
After opening the "Sort items by location..." function, the user can begin with the sorting of the location. Select a location in the box to change the order by using the arrows on the left side of the box and move the location to the appropriate position in the VSCP.



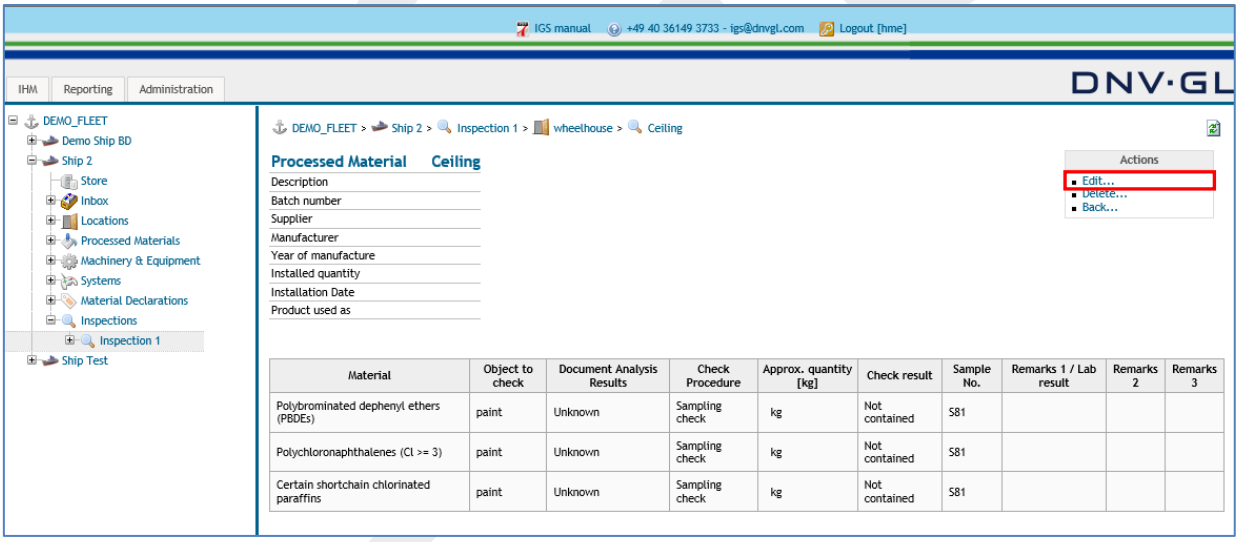
Select the "Submit" link to confirm the sorting.

6.10 Edit and delete inspection items

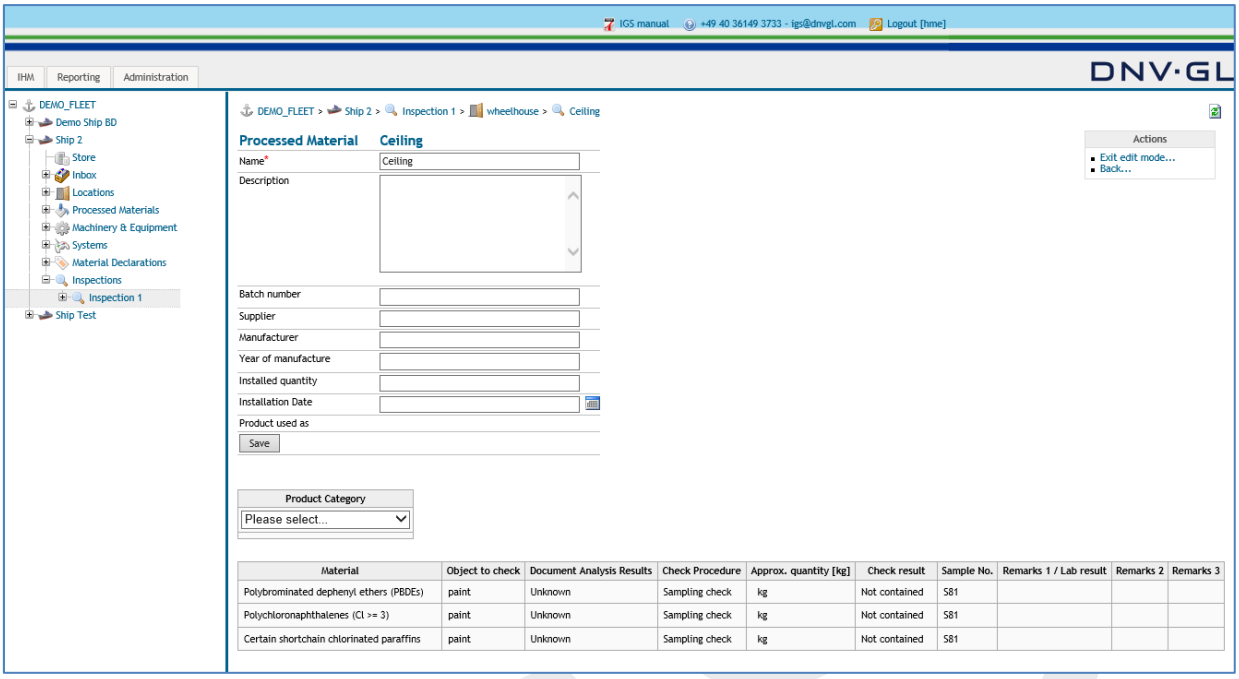
To edit an Inspection Item, select the Inspection Item tab under the Inspection view and then select the Inspection item, e.g. ceiling.



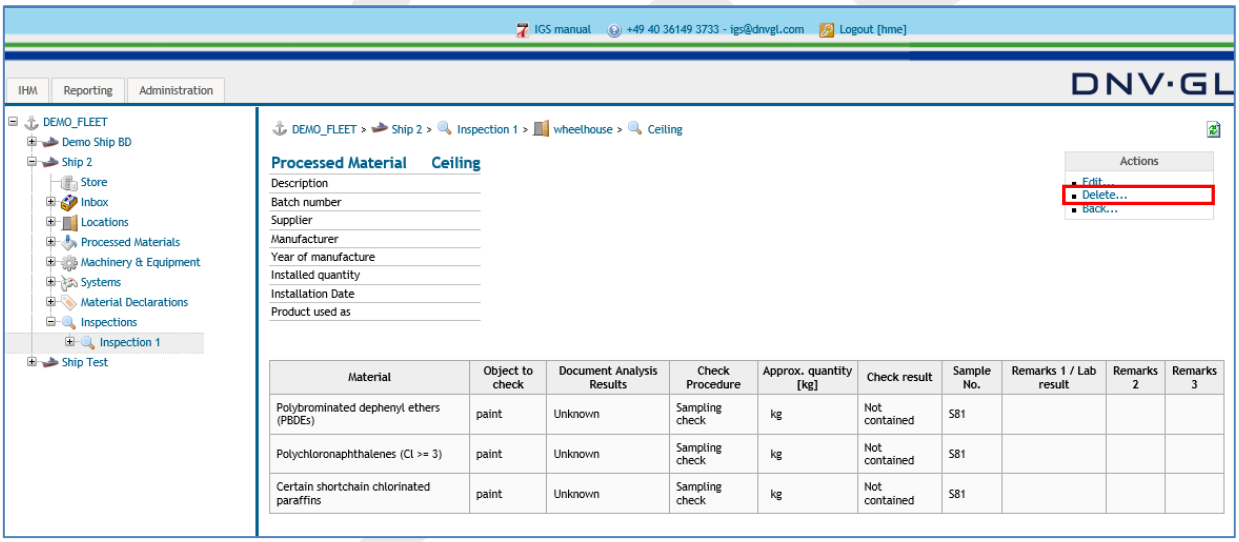
Then select the "Edit…" link in the actions box. The "Edit…" link is located in each inspection item.



A dialog appears where the user can make changes on the attributes of the Inspection Item.



To delete an inspection item, select the inspection item under the location tab and then select the "Delete…" link placed in the actions box. The "Delete…" link is located in each data object view.



Note: When using the "Delete…" link **all** connections between that inspection item and other inspection items will be deleted as well.

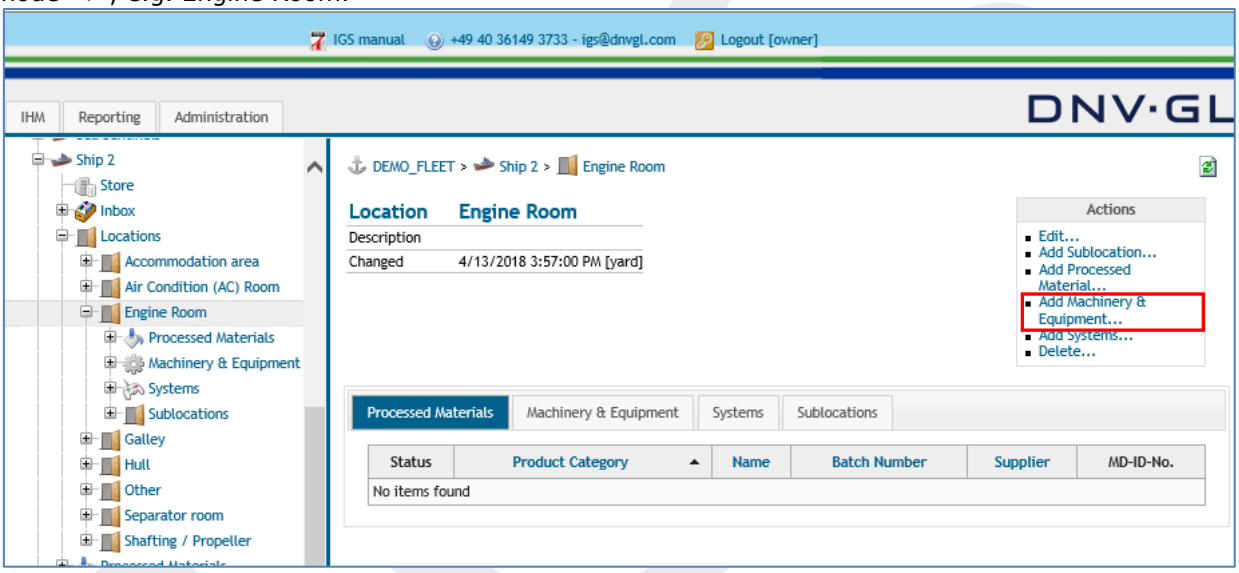
7 MAINTENANCE OF IHM

For maintaining the IHM over the entire life cycle of a ship, the designated person of the ship owner must exchange, add and delete information about the hazardous materials inherent in the components and materials of the ship.

7.1 Add a new component or material (SDoC and MD) to a location in the ship project

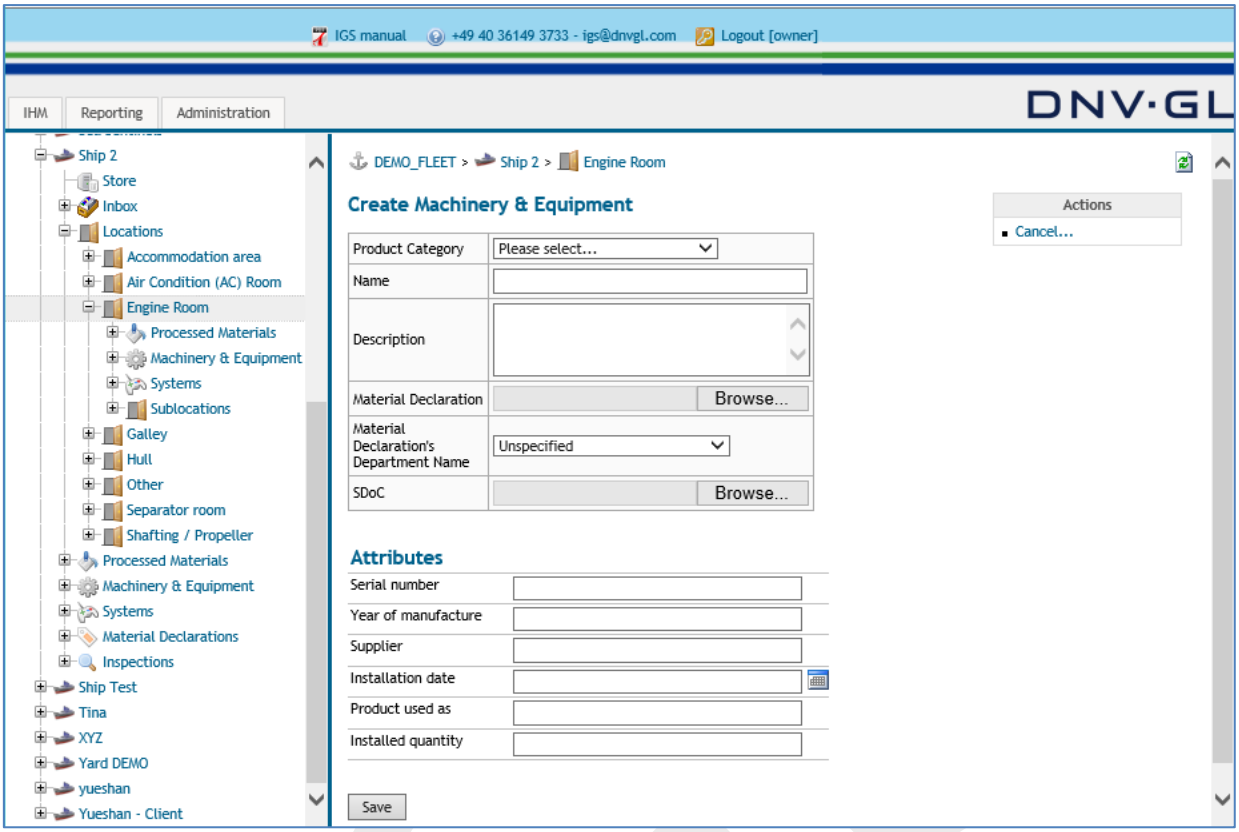
To add a new component or material (SDoC and MD) to the ship project the user must select from the navigation tree on the left side the respective location under the "Locations" tab, e.g. Engine Room.

First Select the "Locations" tab and open the node "+". Then Select the respective location and open the node "+", e.g. Engine Room.



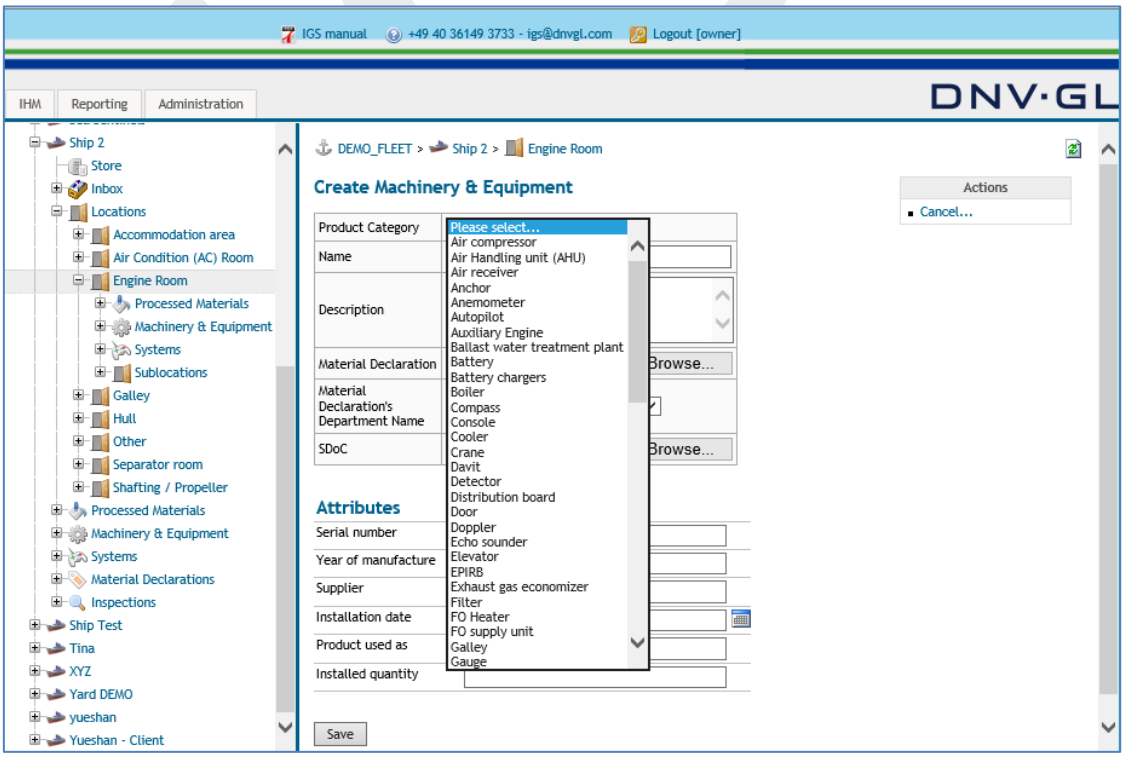
Then the user must pre-define the specific use of the new component or material (SDoC and MD), e.g. Processed Material, Machinery & Equipment or System.

After the pre-definition of the new component or material (SDoC and MD), the user has either to choose "Add Processed Material..." or "Add Machinery & Equipment..." or „Add Systems..." link in the actions box to upload the MD and the SDoC to the respective location. The following dialog appears.

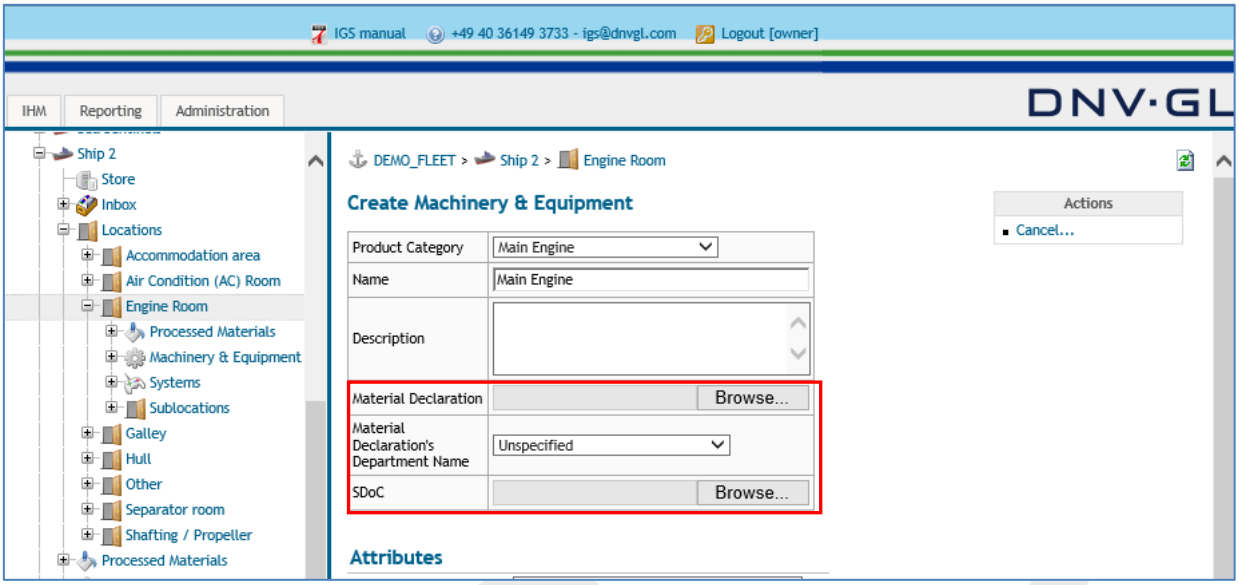


First select the Item "Product Category" to define the specific use of equipment, e.g. Gasket, Insulation, Main Engine, Control …, etc.

Note: To find the required "Product Category" faster type part of the name on the keyboard.



Then select the Item "Name" to define the name used for the equipment, e.g. ceiling insulation, exhaust pipe packing, floor carpet, Engine 1-A1, Control Unit ECR, etc.

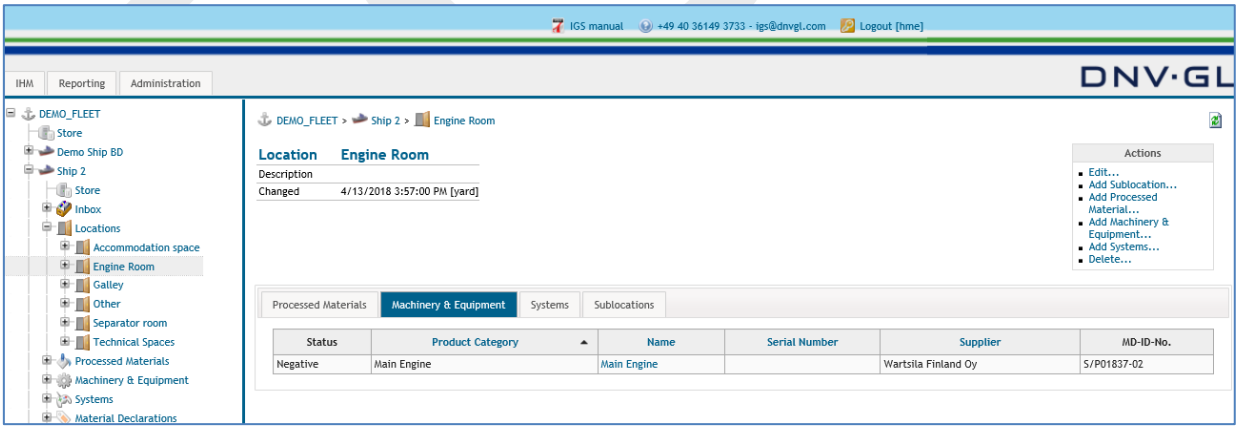


Note: The text for the "Name" field can be entered either as free text or selected from the suggestion list. The suggestion list behind the "Name" field is customisable. Customers are free to ask for exchange with own name lists.

Then select the SDoC and MD for the new component or material by using the "Browse" link to upload the related MD or SDoC.

Select the "Browse" link to upload the new component or material related MD or SDoC.

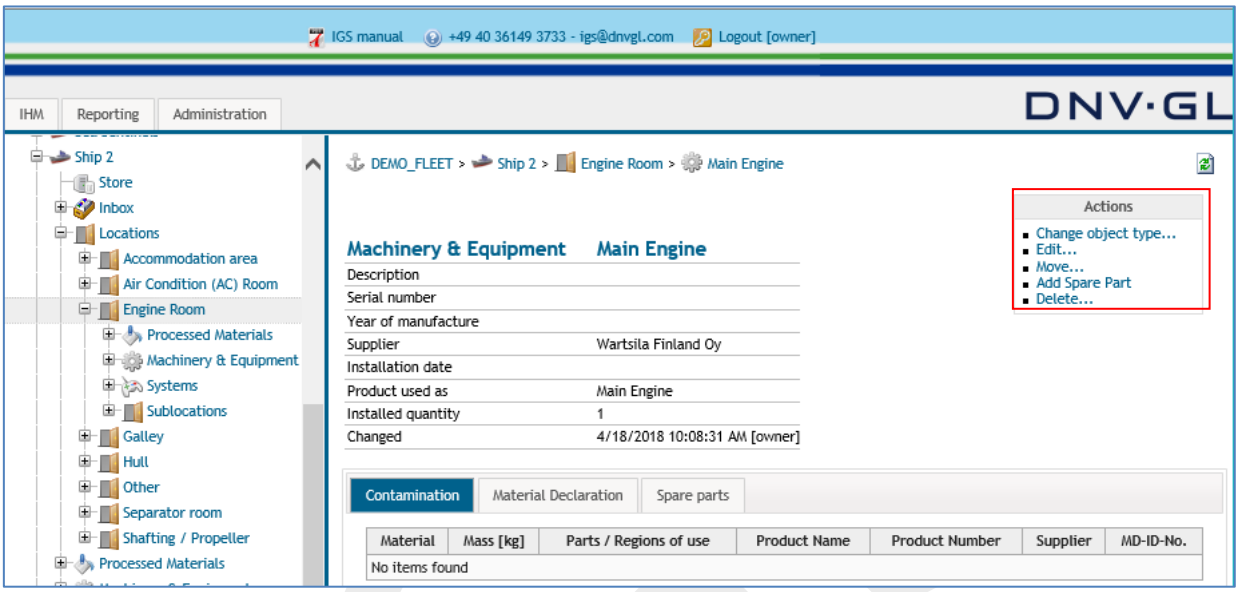
Finally click on "Save". Following dialog box appears.



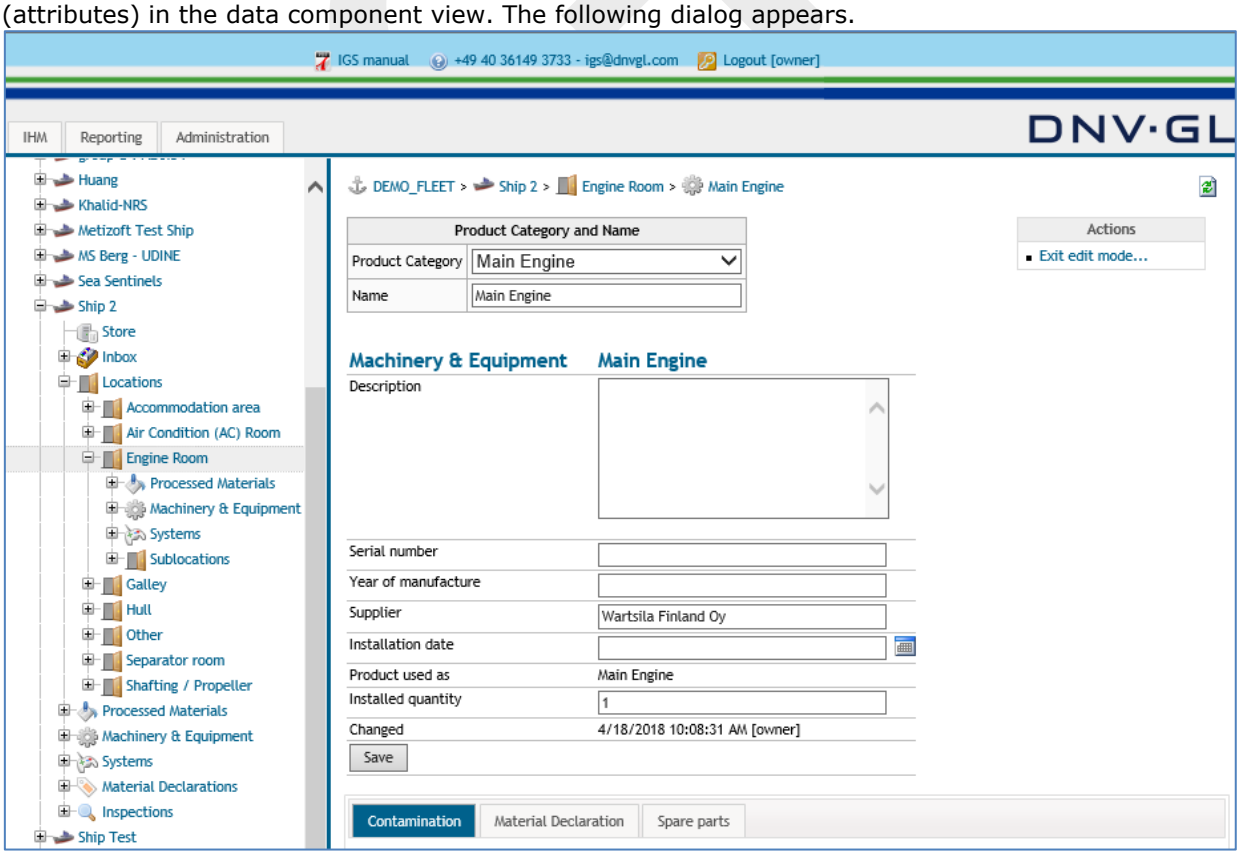
Note: The requested information under "Attributes" are not mandatory but nonetheless very important for the traceability of the origin of the material or component (SDoC and MD). **Please, at least insert the serial or batch number for the new component or material!**

7.2 Edit specific MD information (attributes) in components and materials

When the user must apply changes to the MD information (attributes) select the respective component or material either over "Locations" tab or the component type tab (Processed Material, Machinery & Equipment or System). The "Edit…" link is available in each component view to edit the shipyard specific MD information (attributes).



Select the "Edit…" link in the actions box on the upper right side to edit the specific MD information (attributes) in the data component view. The following dialog appears.



Apply the required changes to the specific MD information of the component or material (MD), e.g. Product Category, Name, Serial Number, etc. Finally click on "Save".

Select "Save" link to confirm the made changes to the specific MD information.

To delete the shipyard specific MD information (attributes) the component or material must be deleted completely.

Select the "Delete…" link in the actions box of the component view.

Note: By using the delete function all associations between that component or material and other ones will be deleted.

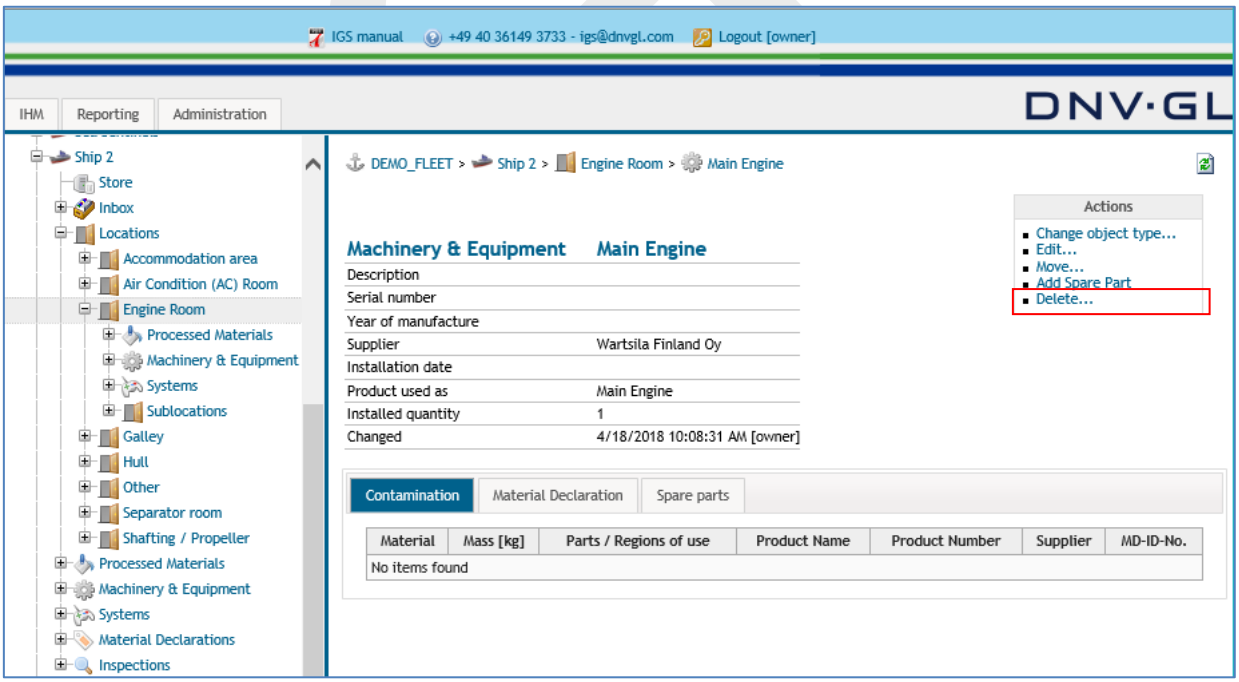
Note: The MD itself will not be deleted by deleting a component or material because it might be associated to other components or materials in other ships in the customer fleet.

7.2.1 Replace a component or material after maintenance or repair

To replace a component or material (SDoC and MD) from a location of the ship project the component or material must be **deleted** entirely. The component can be accessed either over "Locations" tab or the component type tab (Processed Material, Machinery & Equipment or System).

First, the user must select the ship project from the navigation tree on the left side and open the ship project node "+". Then select either the "Locations" tab or the component type tab to delete the specific component or material (SDoC and MD).

Select the "Delete..." link in the actions box on the upper right side to delete the component or material entirely from the respective location of the ship project.

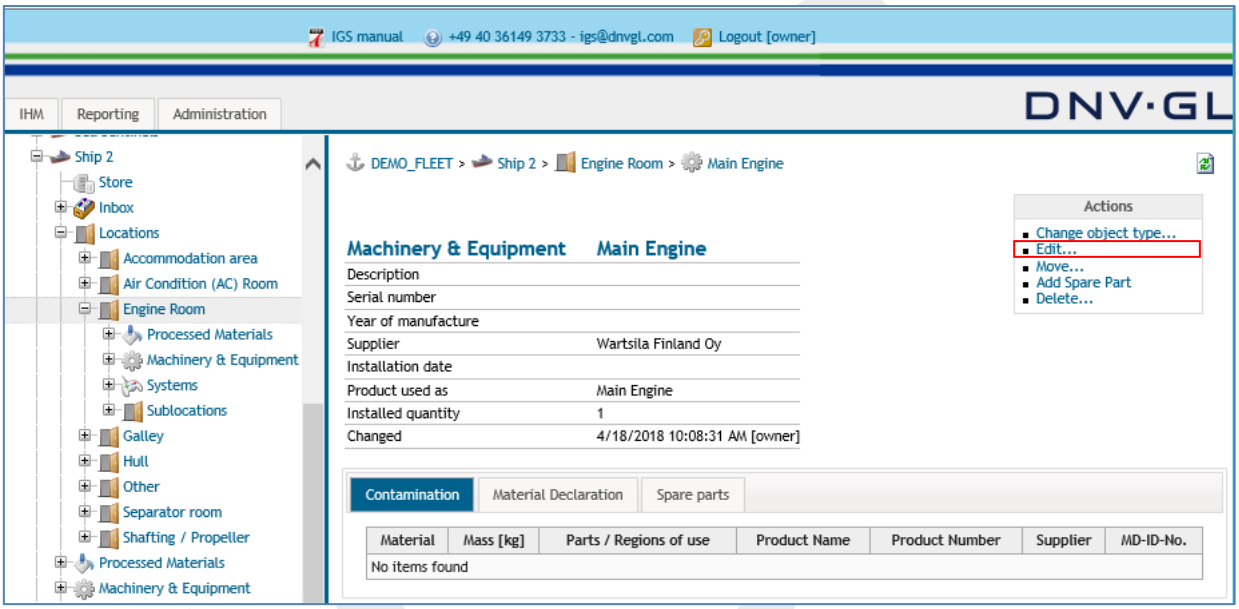


Note: To add a new component or material (SDoC and MD) to the respective location of the ship project use the "Add a new component or material (SDoC and MD)" option (Chapter 7.1).

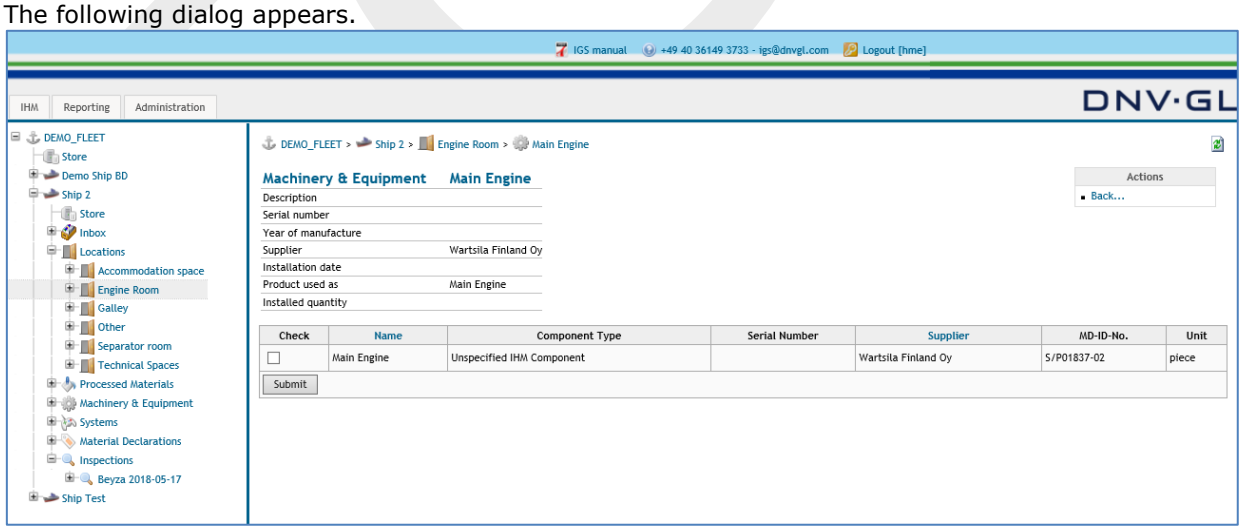
Note: Do not delete MDs from a component or material. MDs might be associated to different ship projects and cause fatal error when deleted intentionally. Always delete component or material only.

7.2.2 Add a spare part to an existing component or material

To add a spare part to an existing component or material (SDoC and MD) select the "Add Spare Part" link in the actions box on the upper right side of the main view to add the spare part to the respective component or material (SDoC and MD) of the ship project.

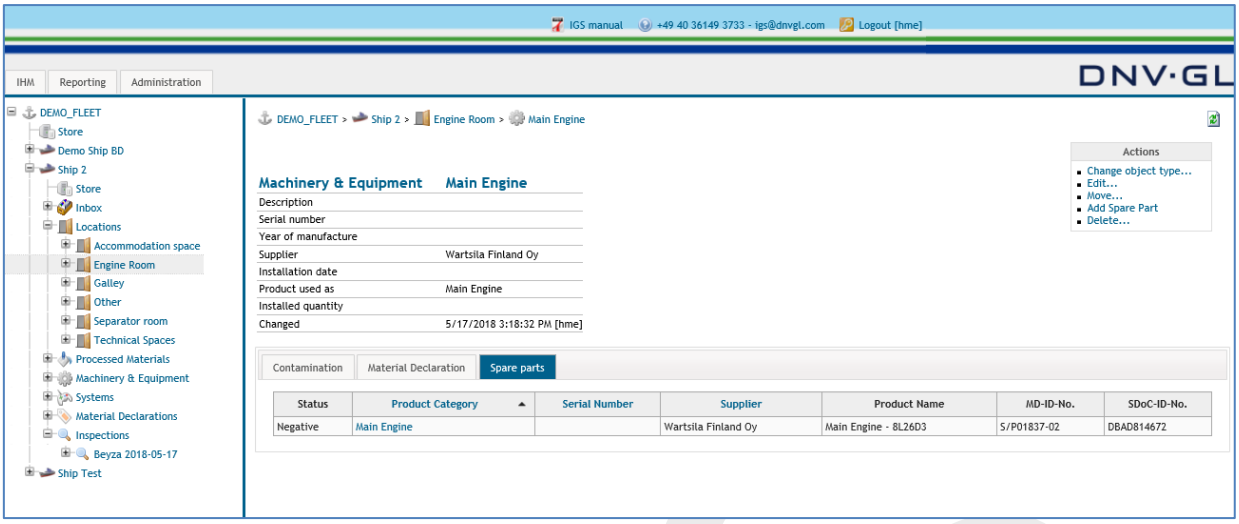


The following dialog appears.



Select the SDoC and MD of the respective spare part by selecting the Check box in the table to add the spare part to the component or material.

Finally click on "Submit" to confirm the selection of the spare part. Following dialog box appears.



Note: Spare parts must be available in the Ship Store to add them to an existing component or material (SDoC and MD).

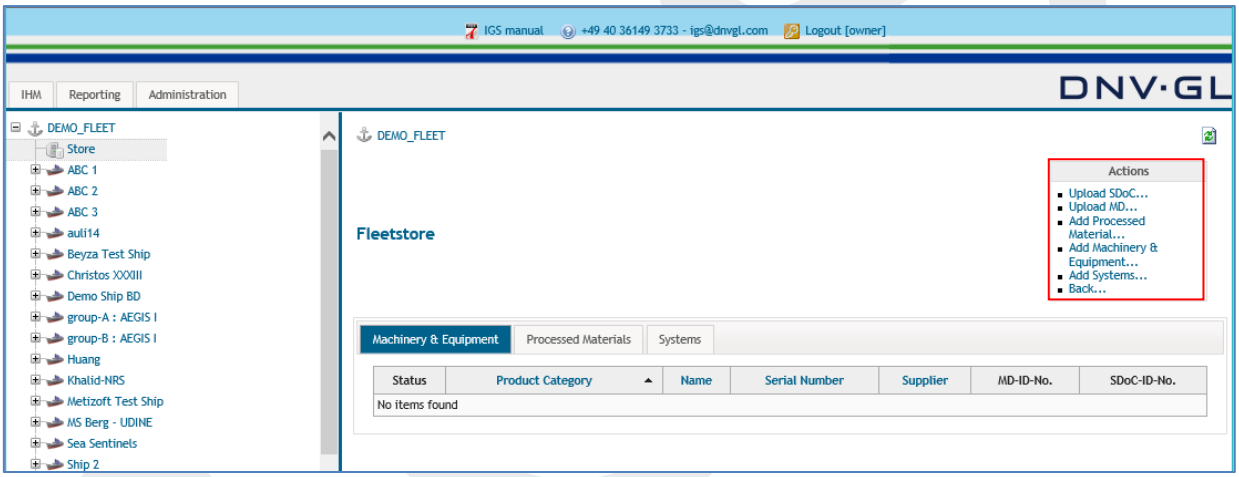
7.3 Store concept for administration of SDoC and MD documentation

The IGS provides the store concept for the shipowners for the administration of the huge amount of documentation required for the maintenance of the IHM. The store concept follows the conception of available stores at ports and on ships. The fleet store represents the stores of the shipowner or manager available at ports. The ship store represents the stores for spare parts available on the ship.

7.3.1 Upload SDoC and MD into stores

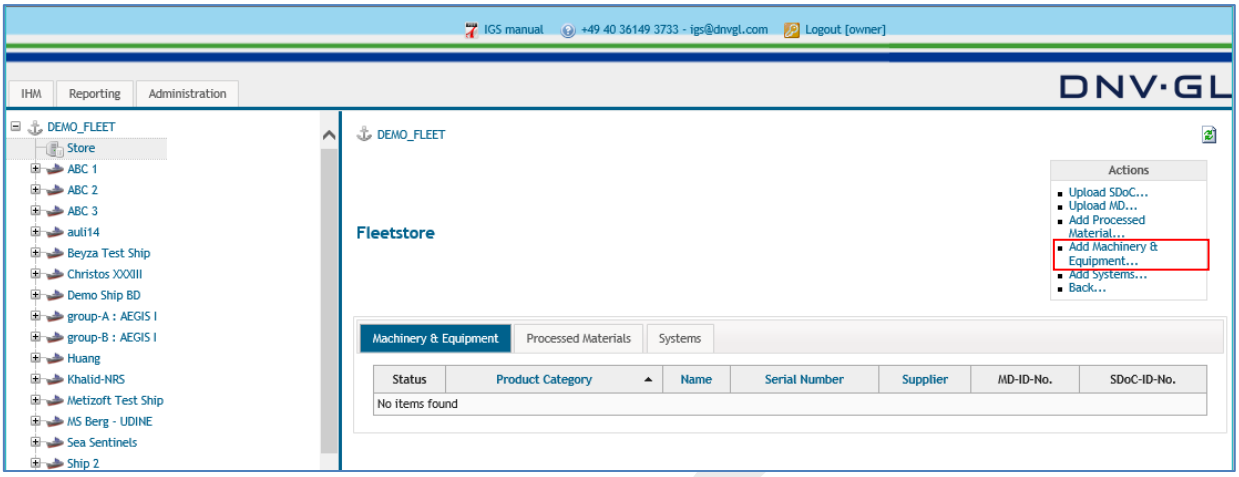
To upload SDoCs and MDs into the fleet store the user must open the fleet node "+" in the navigation tree on the left side and then select the sub-item "Store" to see the fleet store view on the right side. The user has the same option within the ship projects to open the ship store.

The following dialog appears.

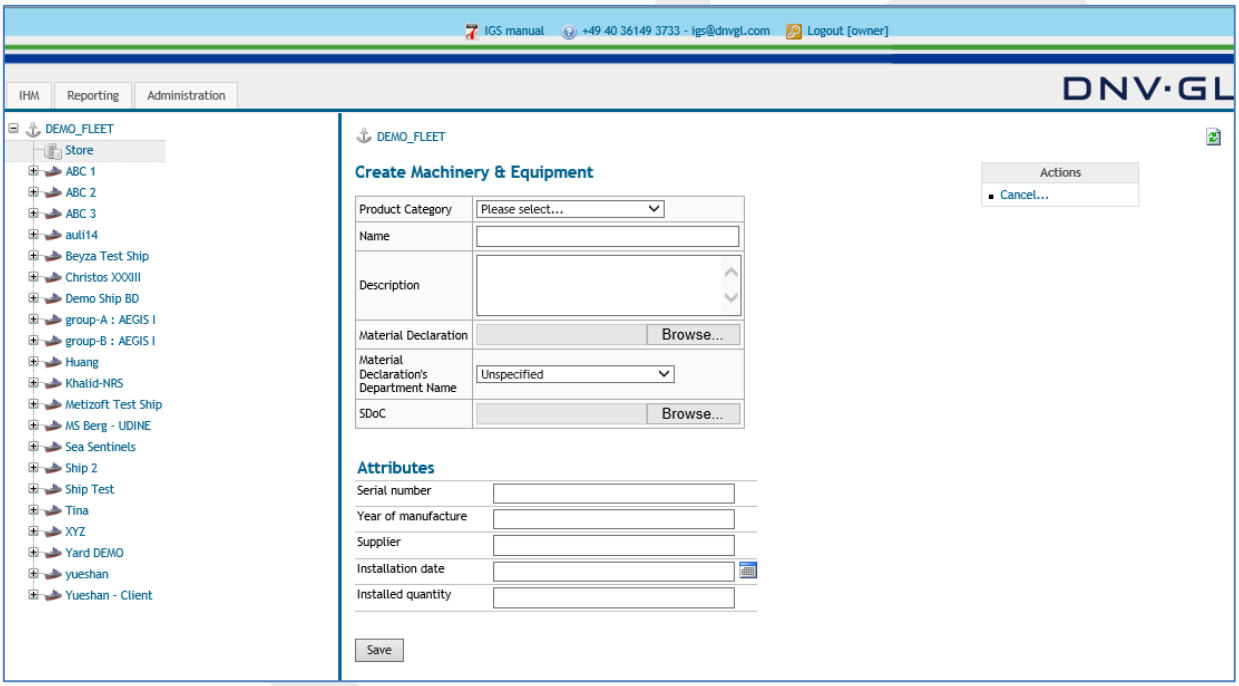


To upload the SDoCs and MDs into a Store the user has two upload options. Either to define first the specific use of the SDoC and MD, e.g. Processed Material, Machinery & Equipment, System or to upload the SDoC and MD first and afterwards define the specific use of the SDoC and MD.

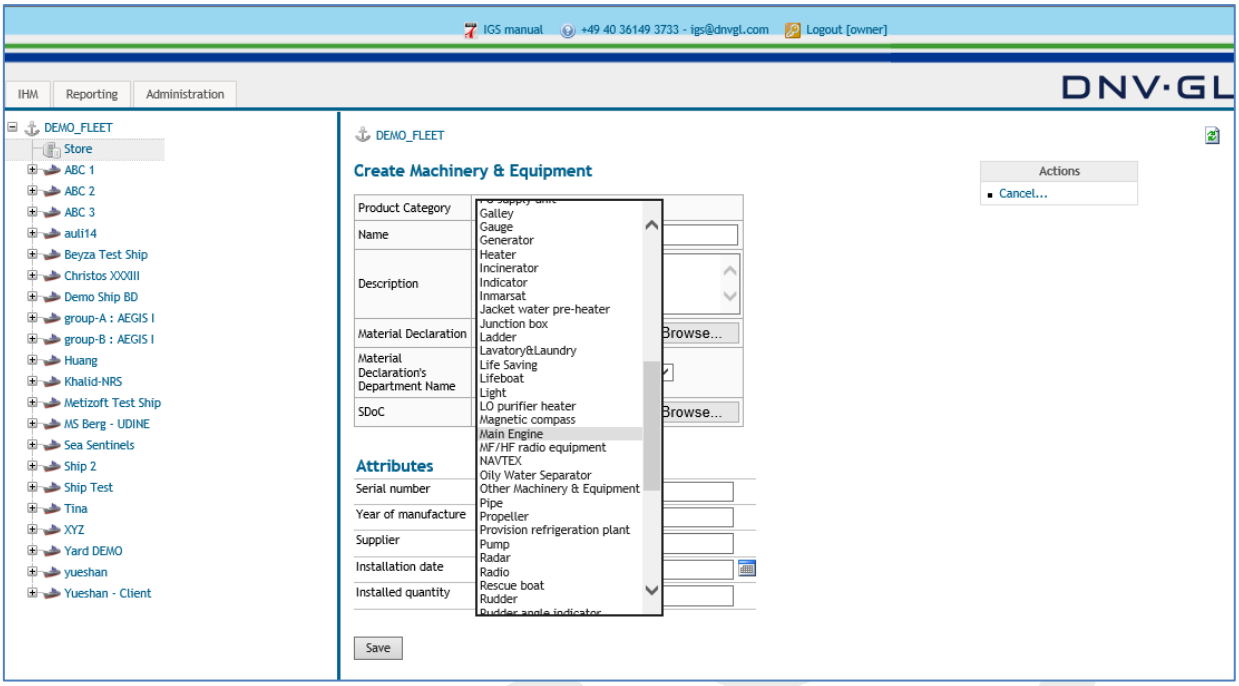
Option 1: Define first the specific use: Select "Add Processed Material..." or "Add Machinery & Equipment..." or „Add Systems..." link in the Action Box to upload the MD and the SDoC.



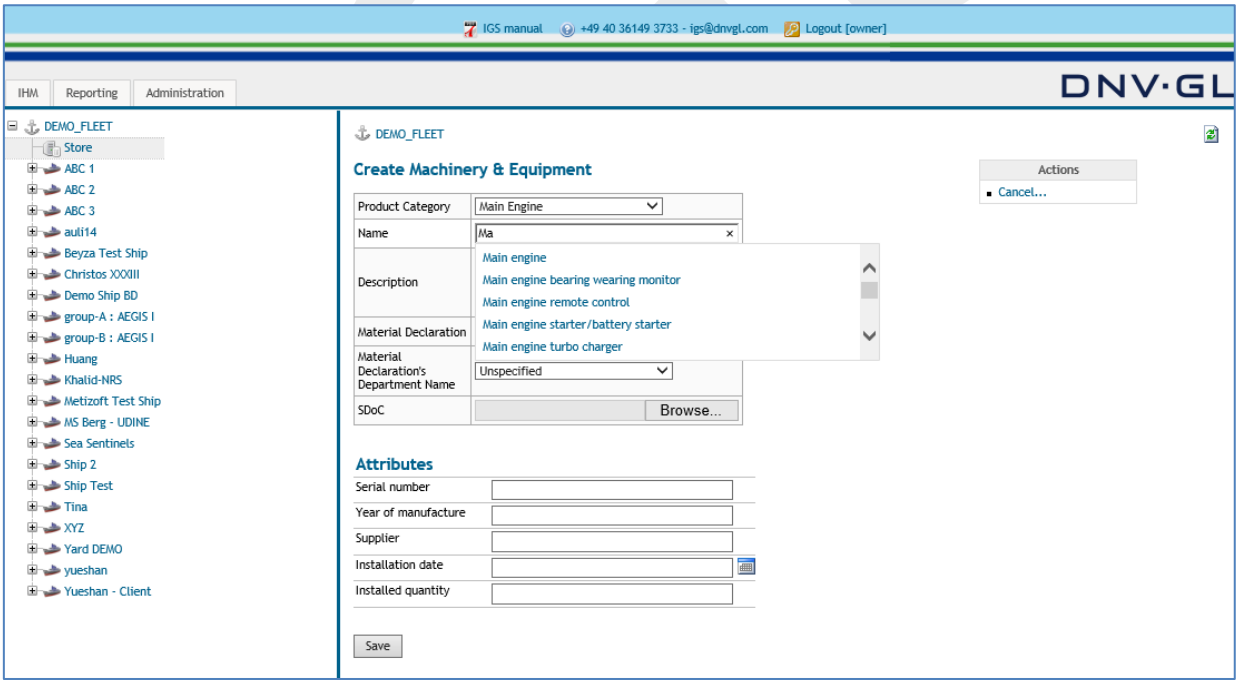
The following dialog appears.



First select the Item "Product Category" to define the specific use of equipment, e.g. Gasket, Insulation, Engine, Aux. Generator, GPS, etc. To find the required "Product Category" faster type part of the name on the keyboard.

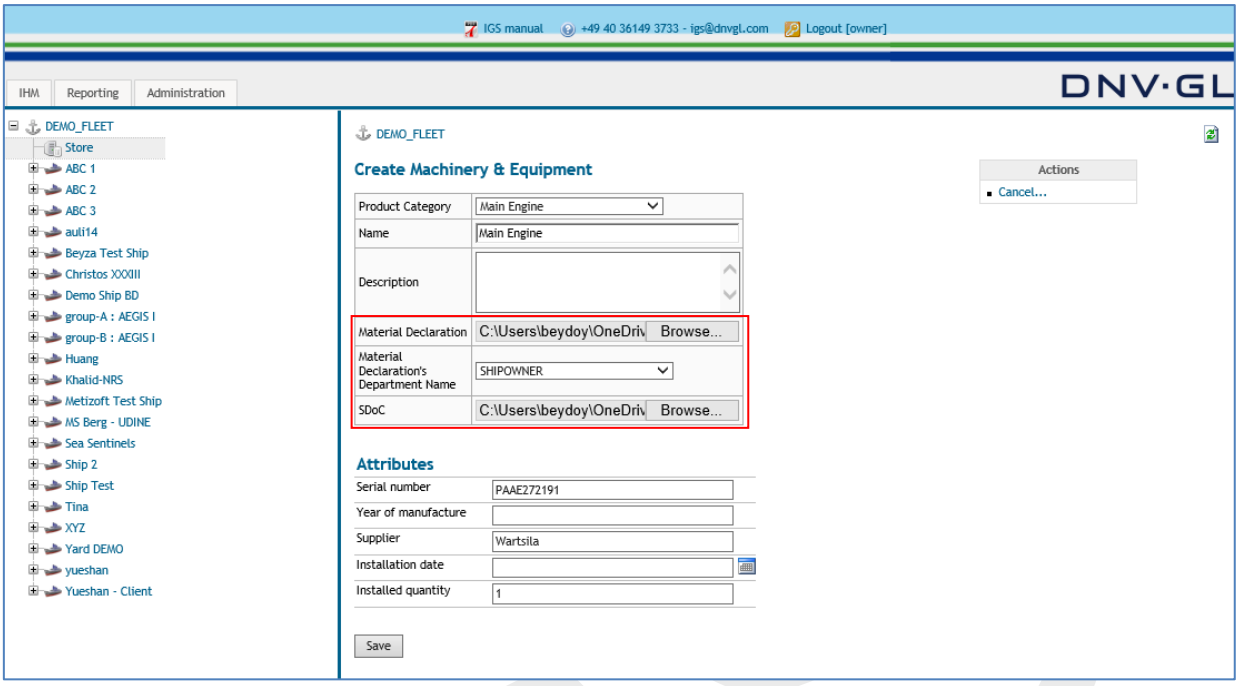


Then select the Item "Name" to define the name used by the shipowner / shipyard for the equipment, e.g. ceiling insulation, exhaust pipe packing, floor carpet, Engine 1-A1, Aux. Generator, GPS, etc.



Note: The text for the "Name" field can be entered either as free text or selected from the suggestion list. The suggestion list behind the "Name" field is customisable. Customers are free to ask for exchange with own name lists.

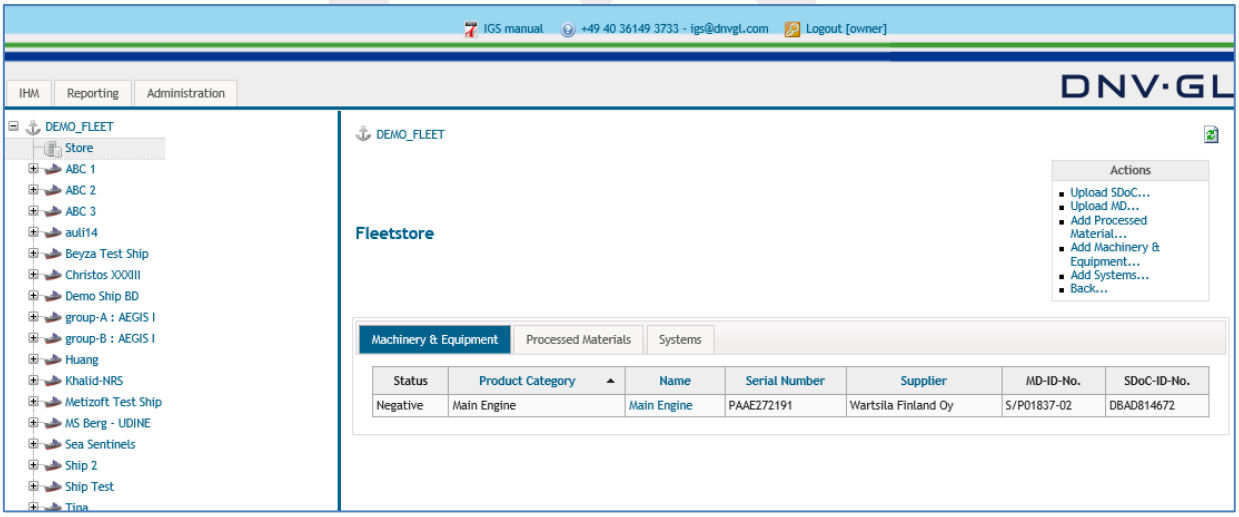
Afterwards upload the SDoC and MD under "Material Declaration" and "SDoC". Select the "Browse" link to upload the project related SDoC and MD.



Note: The requested information under "Attributes" are not mandatory but nonetheless very important for the traceability of the origin of the material or component. Please recognize to at least insert the Serial Number!

Finally click on "Save".

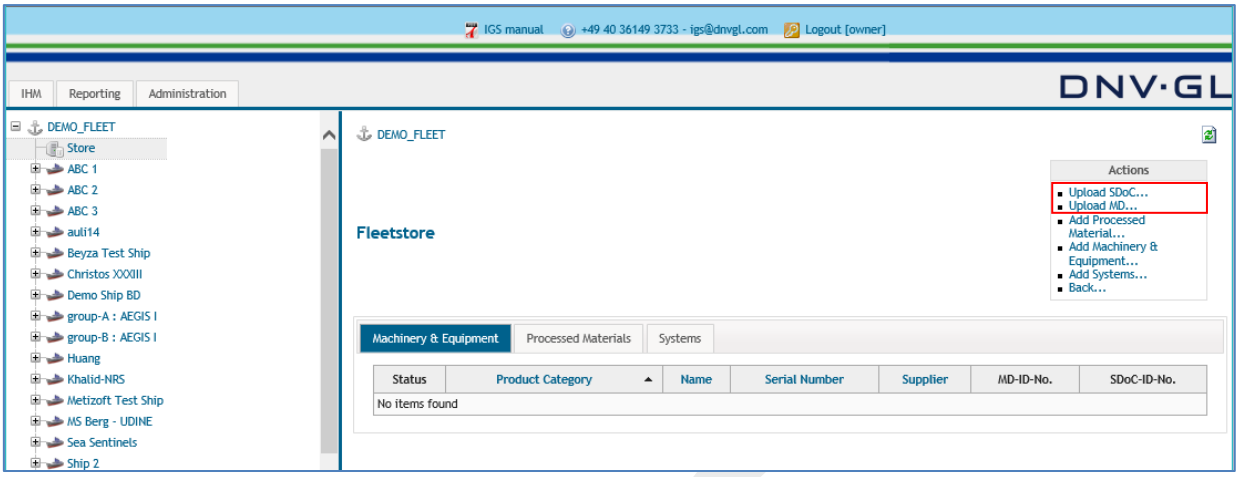
The following dialog appears.



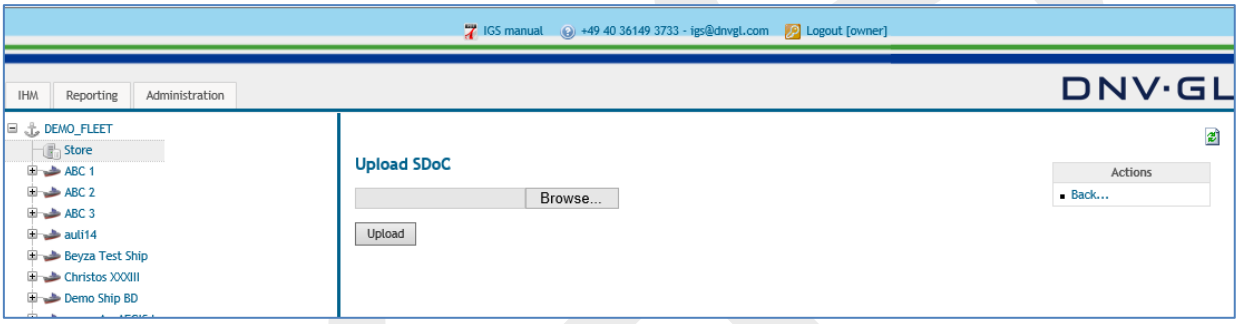
All MDs and related SDoCs uploaded into the Stores can be used by the shipowner for the maintenance of the IHMs of their entire fleet.

Note: The procedure of uploading SDoCs and MDs into the Stores should be used to administer the huge amount of incoming SDoCs and MDs.

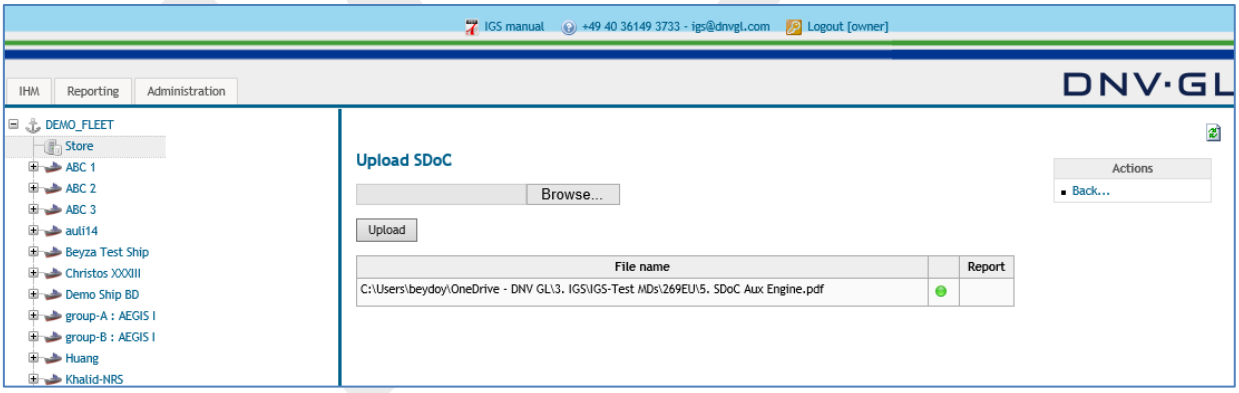
Option 2: Upload first the SDoC and MD: Select „Upload MD..." or „Upload SDoC..." link in the Action Box to upload the SDoC and MD.



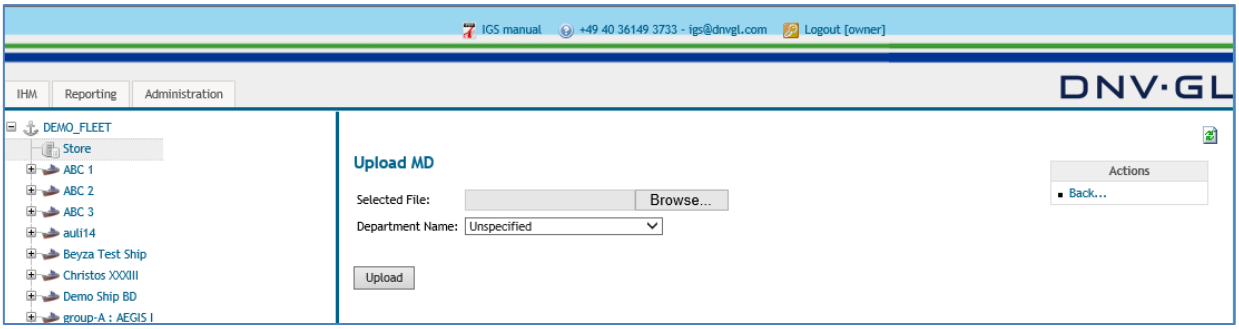
The following dialog appears.



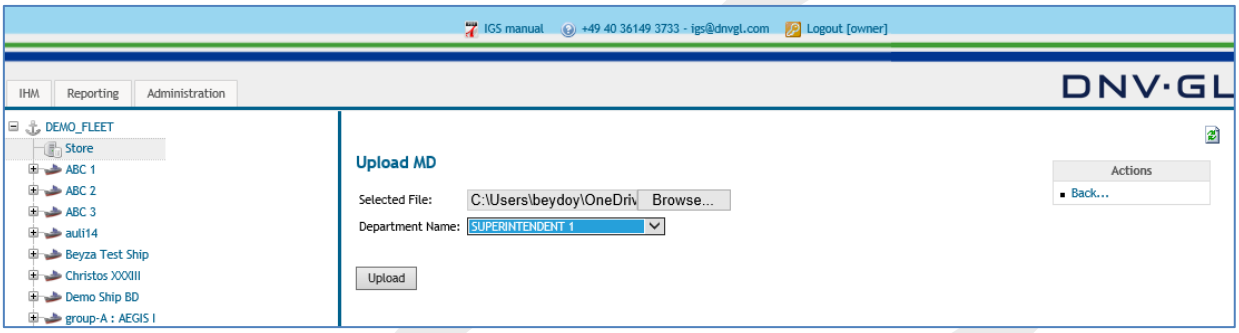
To upload the SDoCs into a Store the user must select the "Upload SDoC..." link in the Action Box.



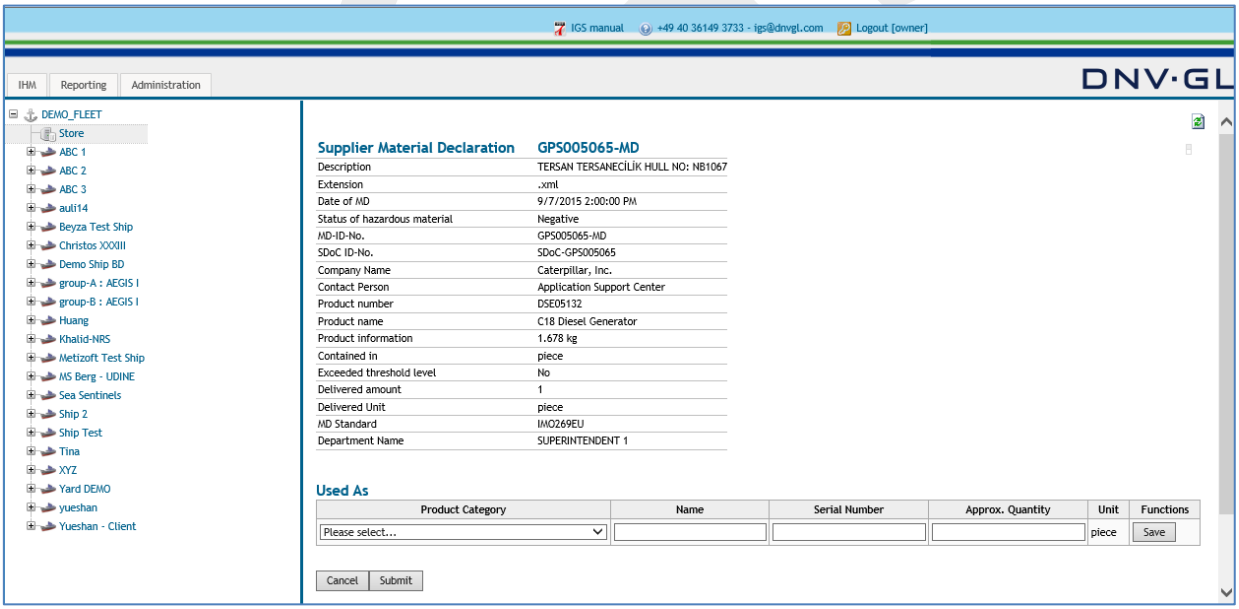
After successfully uploading the SDoC, click on the "Back" link to go back to the main view of the fleet store. There select "Upload MD" link from the actions box.



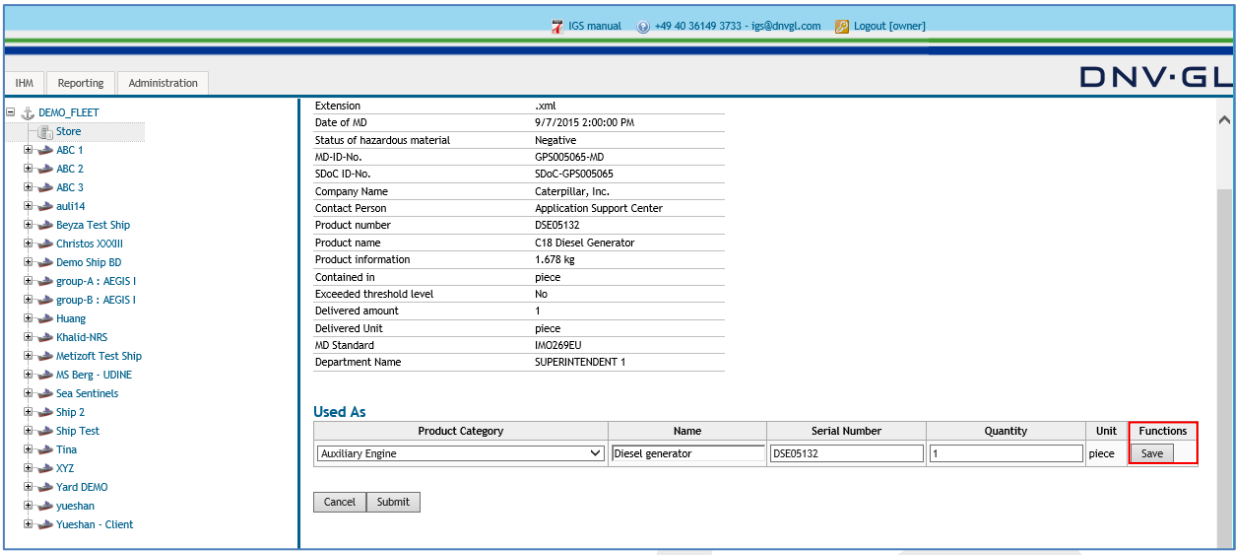
Select the MD file from your computer and select the relevant department name for that specific MD, if there are more than one department who is responsible for uploading MDs.



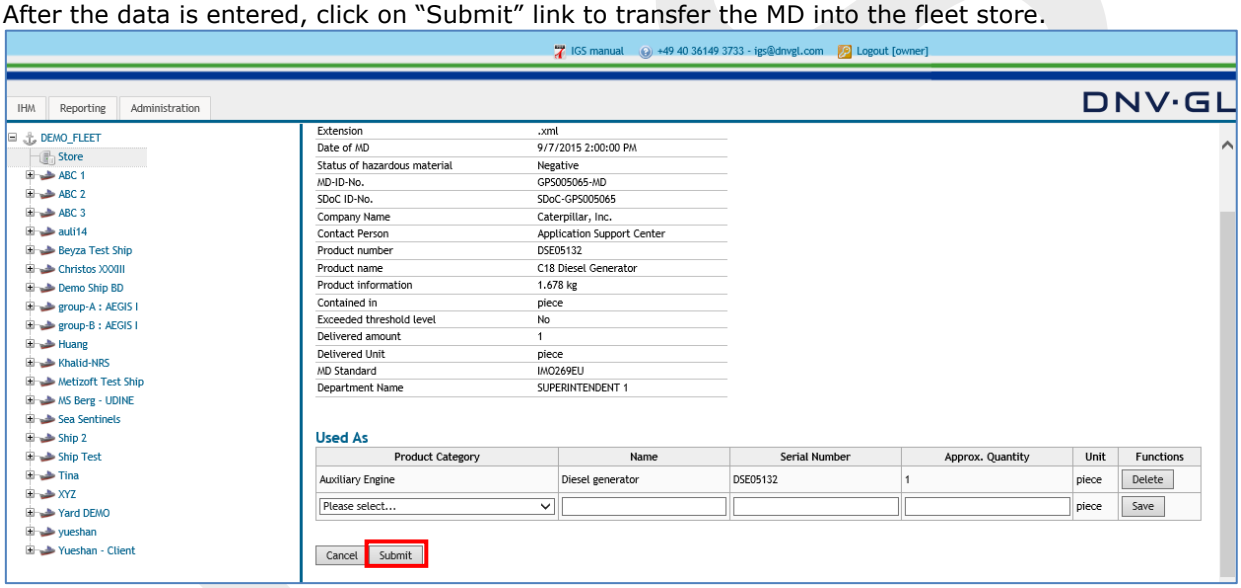
Click on “Upload” link. Following dialog box appears:



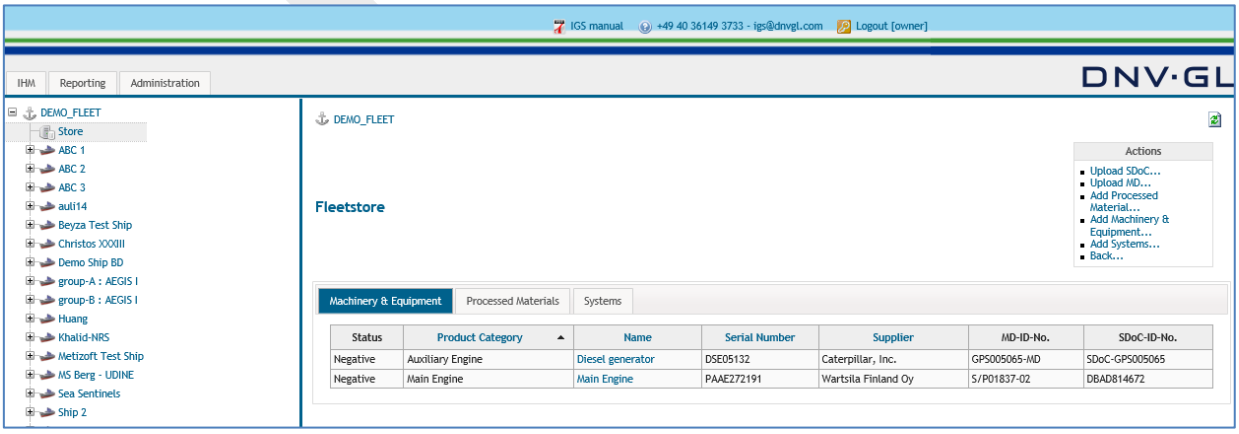
Select the relevant product category, name, serial no and approximate quantity information and click on “Save”.



After the data is entered, click on "Submit" link to transfer the MD into the fleet store.

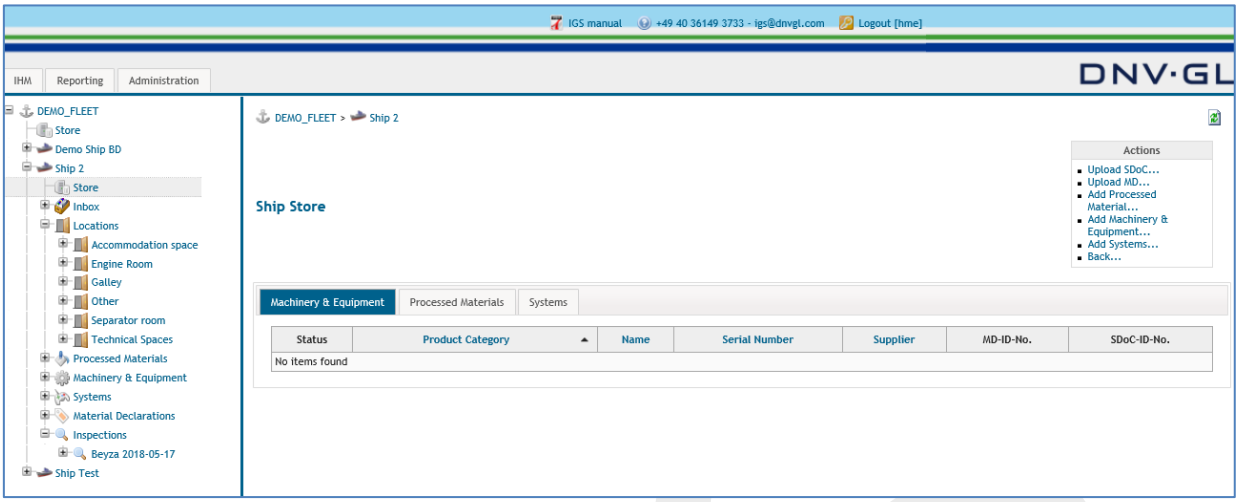


All MDs and related SDoCs uploaded into the stores can be used by the shipowner for the maintenance of the IHMs of their entire fleet.



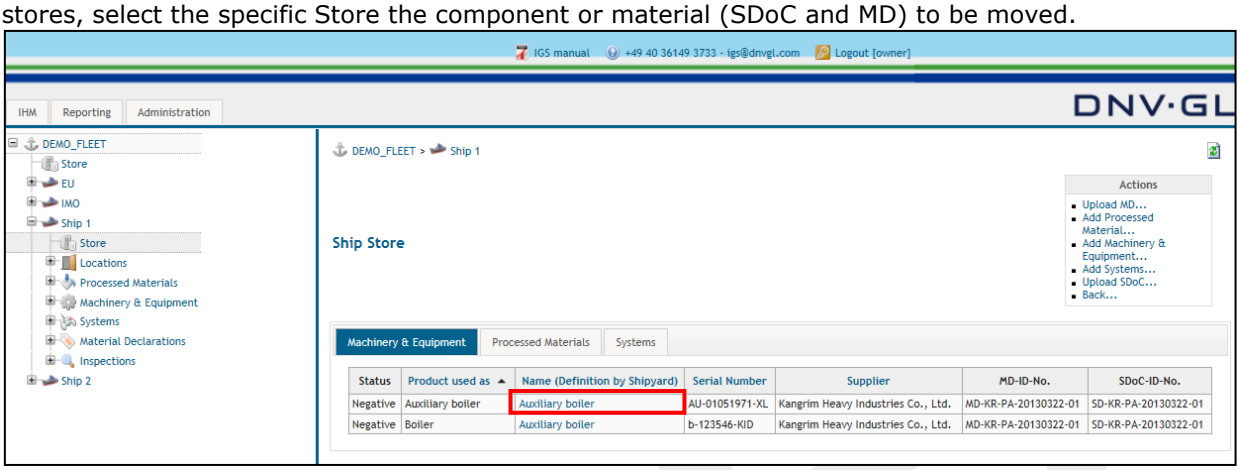
Note: The procedure of uploading SDoCs and MDs into the Stores should be used to administer the huge amount of incoming SDoCs and MDs.

Same process applies for creating components in ship store.

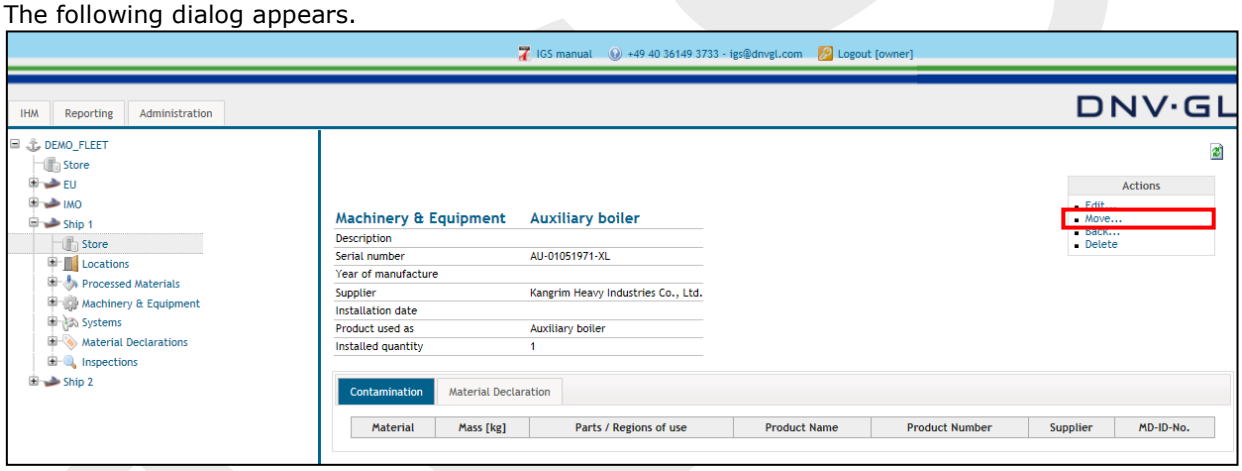


7.3.2 Move component MDs between the fleet store / ship store and locations

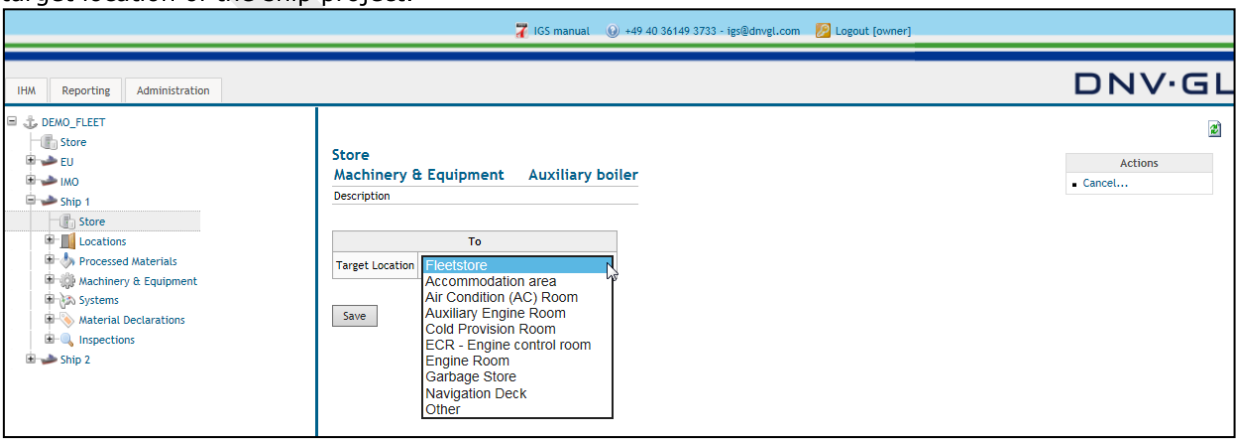
To move a component or material from the fleet store or the ship store to a location or between the stores, select the specific Store the component or material (SDoC and MD) to be moved.



The following dialog appears.



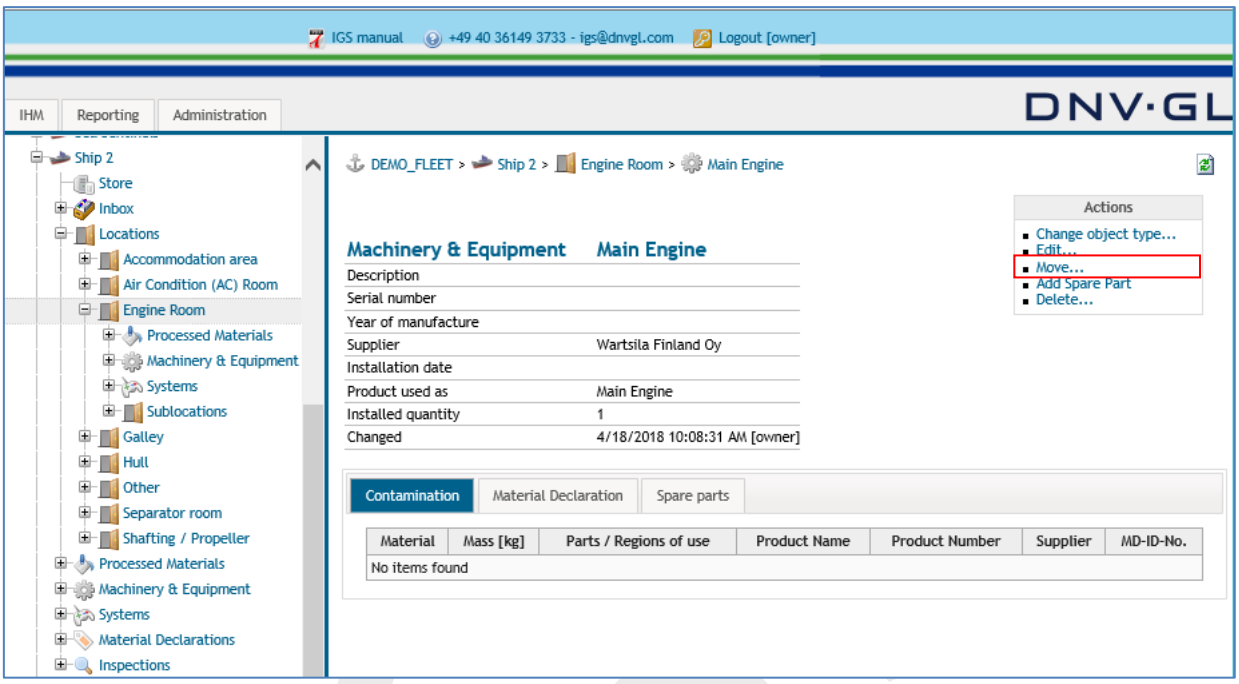
Select the "Move..." link in the actions box to move the component or material (SDoC and MD) to the target location of the ship project.



Select the respective target location from the "Move to" table to move the component or material from the fleet store or the ship store to a target location or between the stores.
Finally click on "Save".

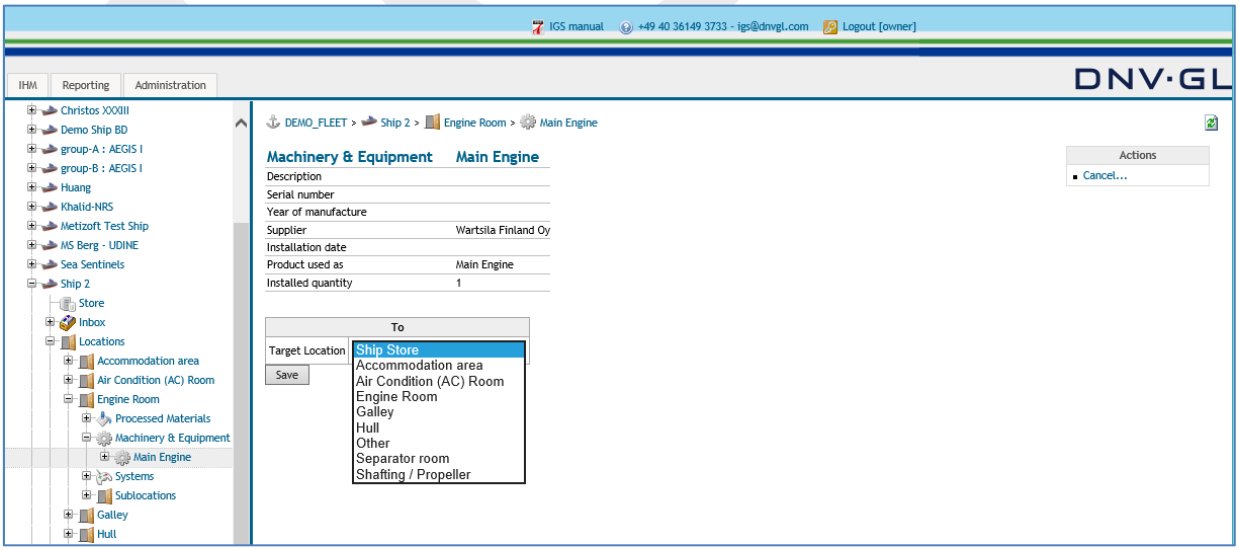
7.3.3 Move component MDs from a location to another location

To move a component or material from a location to another location or back to the ship store select the component or material either from the "Locations" tab or the component type tab (Processed Material, Machinery & Equipment or System).
Select the "Locations" tab or the component type tab to move the specific component or material.



Select the "Move..." link in the actions box to move the component or material to the respective location of the ship project.

The following dialog appears.

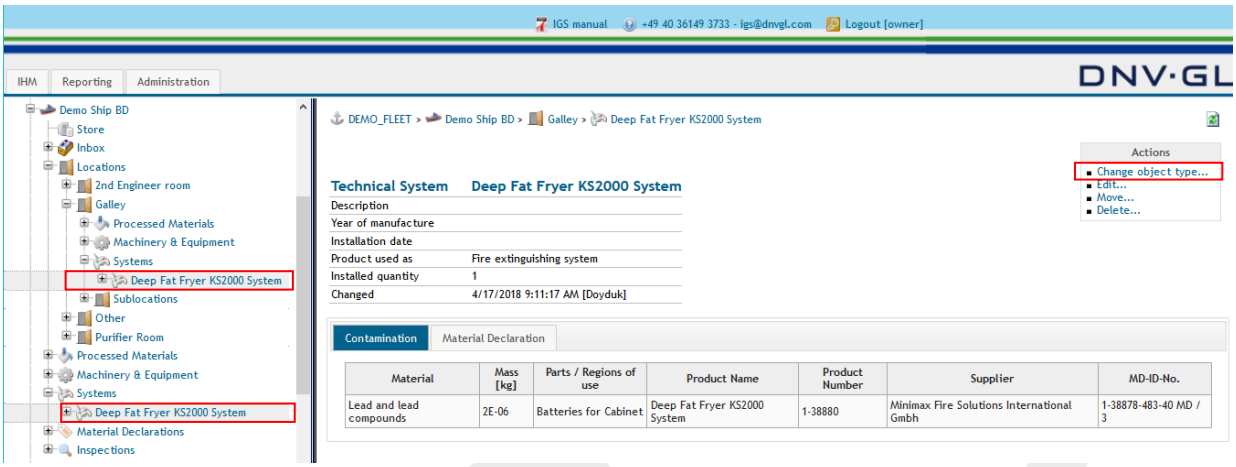


Select the respective target location from the "Move to" table to move the component or material (SDoC and MD) from one location to another location or to the Ship Store. Finally click on "Save".

7.4 Change object type of components or materials

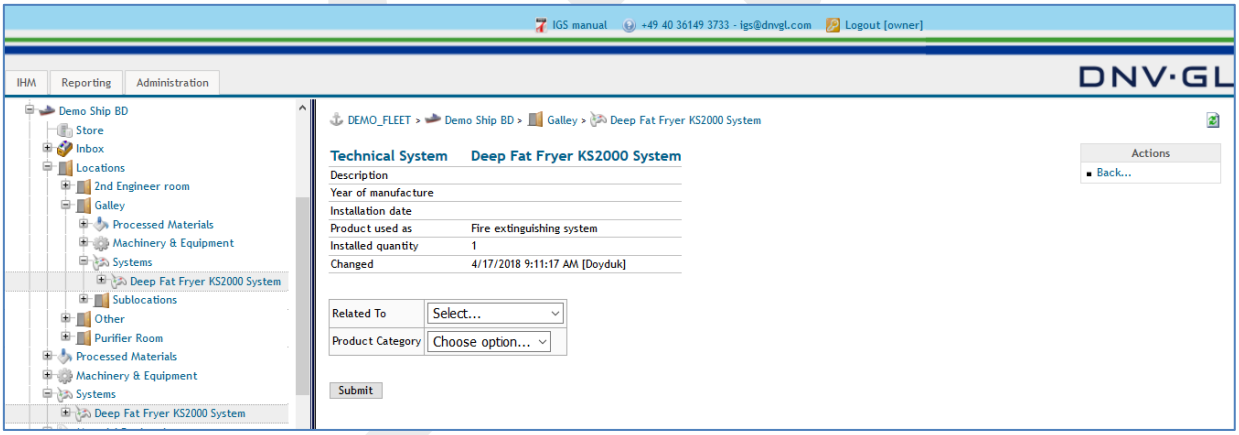
Object type means allocation of a product as either Processed Material, Machinery & Equipment or System. To change the object type of a product, MDs must have been confirmed in the inbox.

To change the object type, open the specific component or material either over "Locations" tab or Processed Material, Machinery & Equipment or System tabs.



Then select the "Change object type..." link in the actions box to change the object type of the specific component or material.

The following dialog appears.



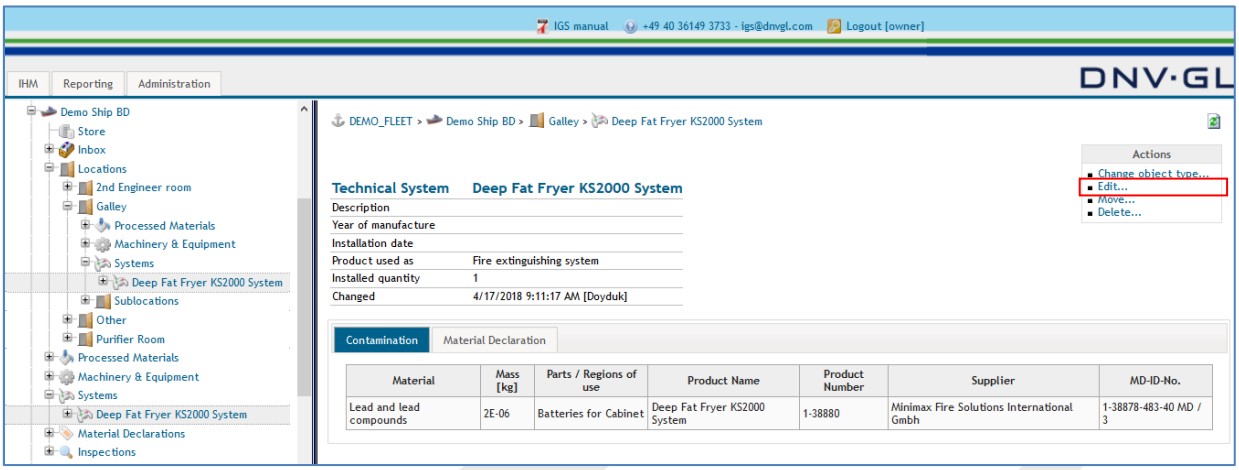
Select the new component type (Processed Material, Machinery & Equipment or System) under "Related to" in the main view and enter the new "Product Category".

Note: To find the required "Product Category" faster type part of the name on the keyboard.

Finally click on "Submit".

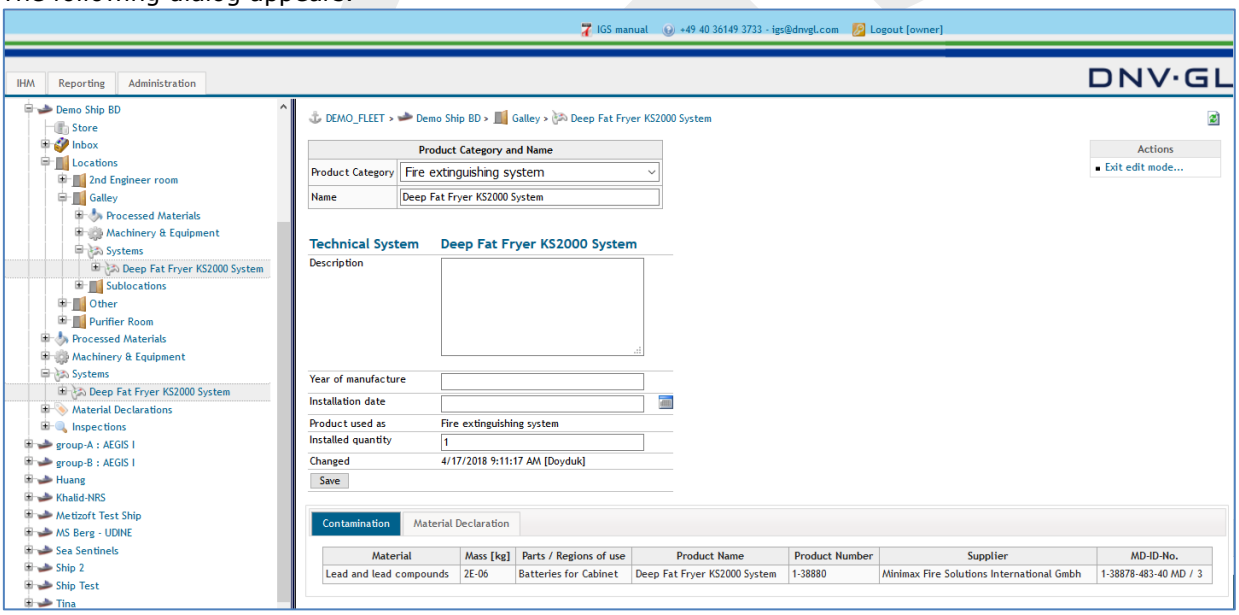
7.5 Edit specific MD information in components and materials

When the user must apply changes to the MD information (attributes) select the respective component or material either over "Locations" tab or the component type tab (Processed Material, Machinery & Equipment or System). This function would only be available after MDs in the inbox are confirmed, if there are any. The "Edit…" link is available in each component view to edit the specific MD information (attributes).



Select the "Edit…" link in the actions box on the upper right side to edit the specific MD information in the data component view.

The following dialog appears.



Apply the required changes to the specific component or material (MD), e.g. Product Category, Name, installed quantity, etc.

Select "Save" link to confirm the made changes to the specific component information.

To delete the shipyard specific MD information (attributes) the component or material must be deleted completely. Select the "Delete…" link in the actions box of the component view.

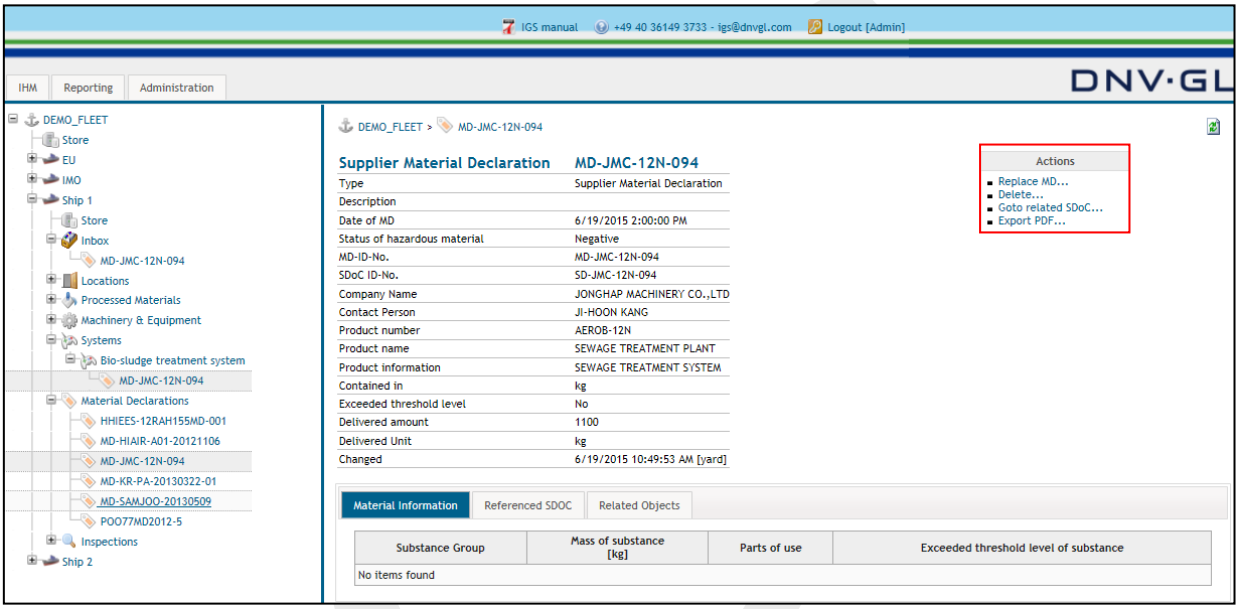
Note: By using the delete function all associations between that component or material and other ones will be deleted.

Note: The MD itself will not be deleted by deleting a component or material because it might be associated to other components or materials in other ships in the customer fleet.

7.6 Replace MD

The "Replace MD" link should only be used to replace corruptive MDs because the MD will be replaced in all components or materials in the ship projects of the customer fleet.

To replace a MD, select the "Replace MD…" link in the actions box of the MD view.



Note: The IGS users must replace a MD by deleting the component or material of the MD and add a new component or material to the ship project.

Note: By using the "Replace MD" link all MDs that are associated to components or materials in the fleet (ship projects) will be replaced.

Note: The "Replace MD" link is disabled if the MD is already referenced (used) in another ship project. The MD can only be corrected while initially in inbox but remain fixed if attached to a part in another ship project.
MDs with new content require a new MD ID!

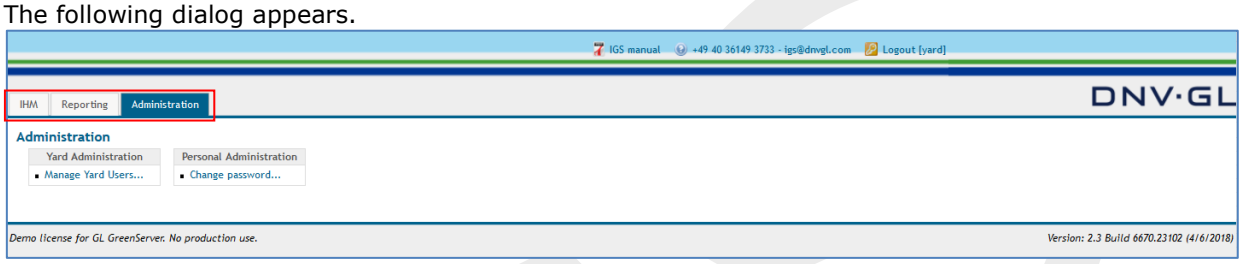
8 PERMISSION MANAGEMENT

8.1 Permission management for shipyard admins

The shipyard admin has certain permission management rights to organize the different ship projects. The shipyard admin has the possibility to distribute the work to different responsible persons (shipyard users). The shipyard admin can either select one responsible person (shipowner user) for one or several ship projects or several responsible persons (shipowner users) for one ship project.

To perform the permission management the shipyard admin must select the "Administration" tab (red marked) in the main navigation bar. The associated topic will be shown in the main view.

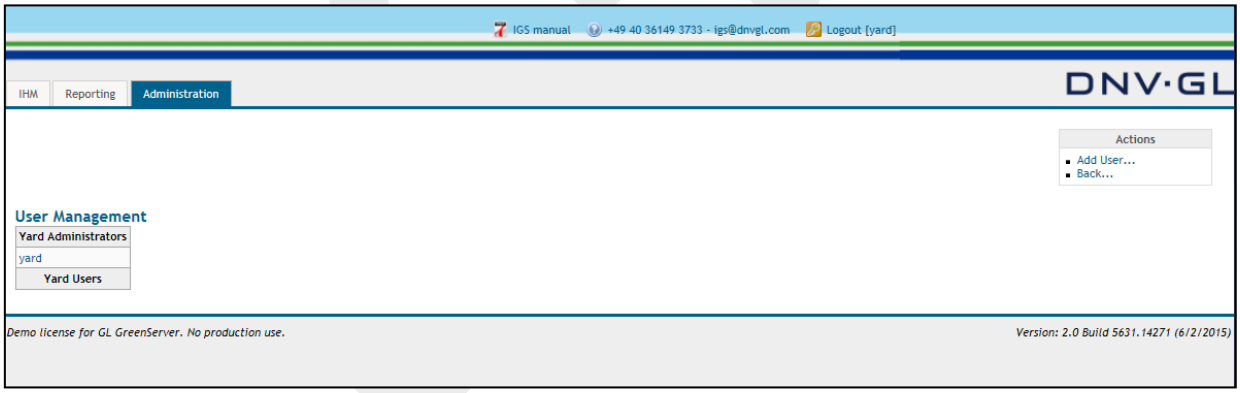
The following dialog appears.



In the main view of the "Administration" tab the shipyard admin has the option to add different shipyard users to the fleet by selecting the "Manage Yard Users" link in the action box under the table "Yard Administration".

Note: Additionally, it is possible to change the personal password under the "Change password..." link.

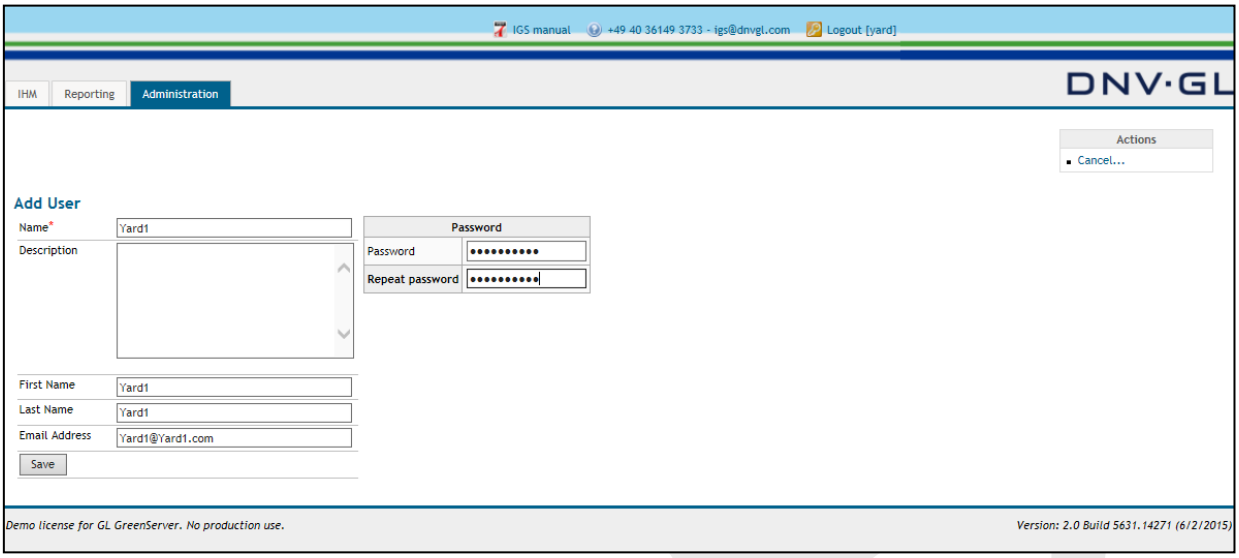
The following dialog box appears by using the "Manage Yard Users..." link.



In the user management view the shipyard admin has the option to add users to the entire fleet by selecting the "Add User..." link in the actions box in the upper right corner.

Select the "Add User..." link in the actions box to add shipyards users.

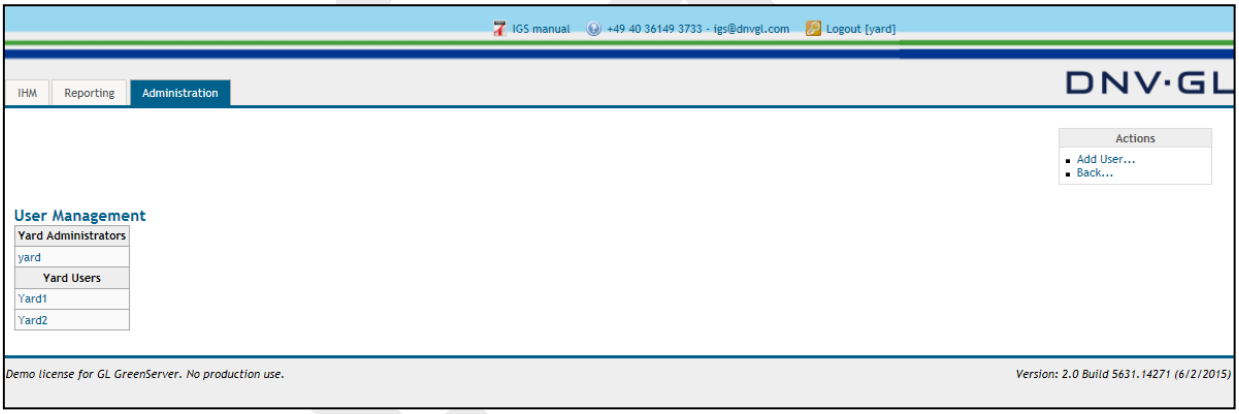
The following dialog appears.



To add a user in the "Add User" view, fill in all required attributes, e.g. Name (user name), Password, etc. Please note that the Password must be typed in twice for verification matters.

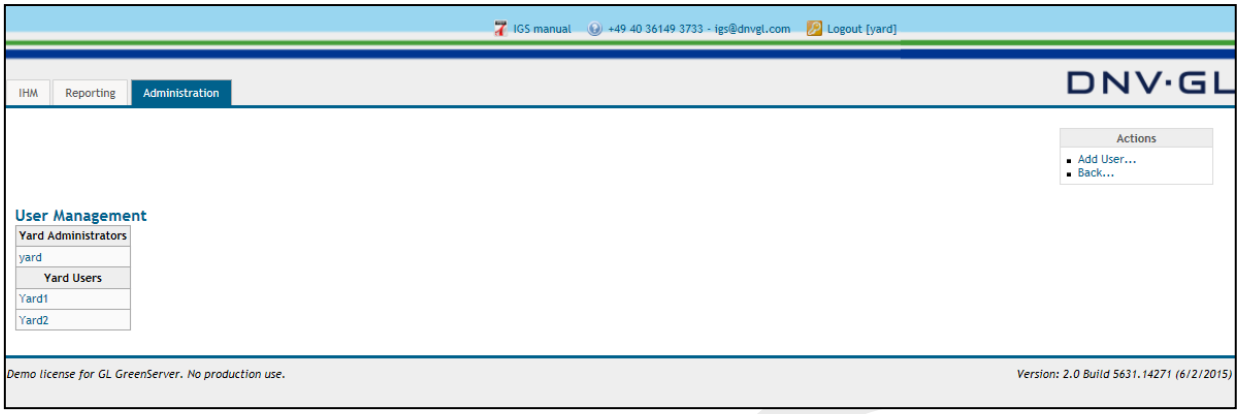
Finally click on "Save".

The following dialog appears.



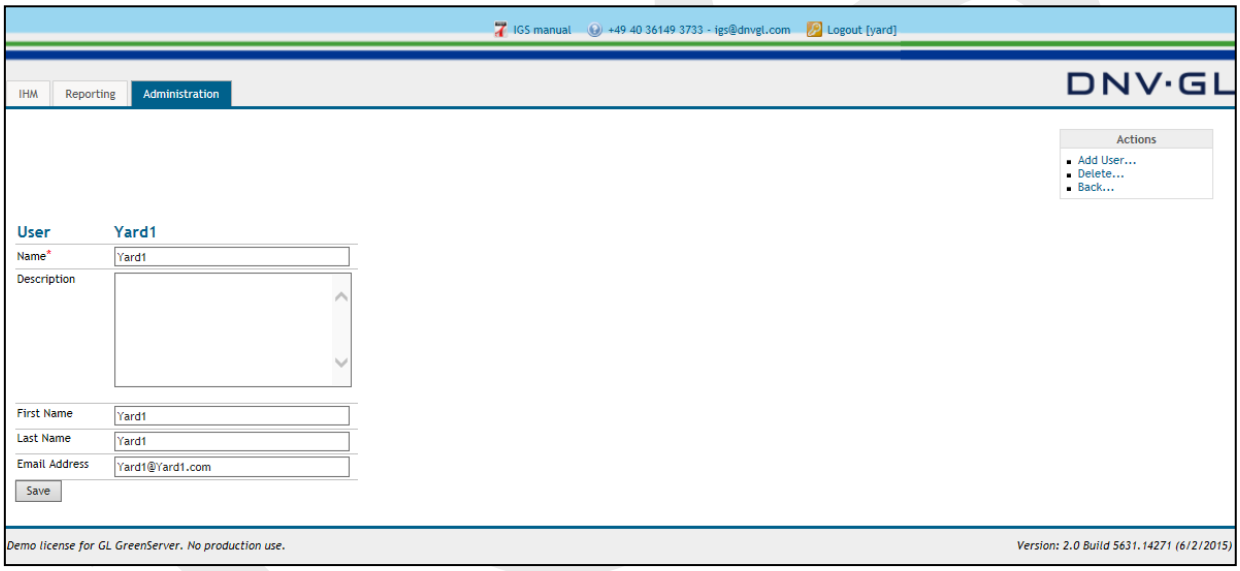
Note: This procedure must be repeated for each shipyard user who is meant to work on ship projects of the respective fleet.

To change the attributes of a shipyard user the shipyard admin must select the link of the respective shipyard user, e.g. Yard1, Yard2, etc. in the "User Management" table under "Yard Users".



Select the respective shipyard user link, e.g. yard1, yard2, etc. in the "User Management" table to change the shipyard user attributes.

The following dialog appears.



In the appearing view the shipyard admin has the option to change the attributes of the respective shipyard user if changes are required.

Finally click on "Save".

Note: The shipyard admin has additionally the option to delete the shipyard user in this view by selection the "Delete..." link in the action box.

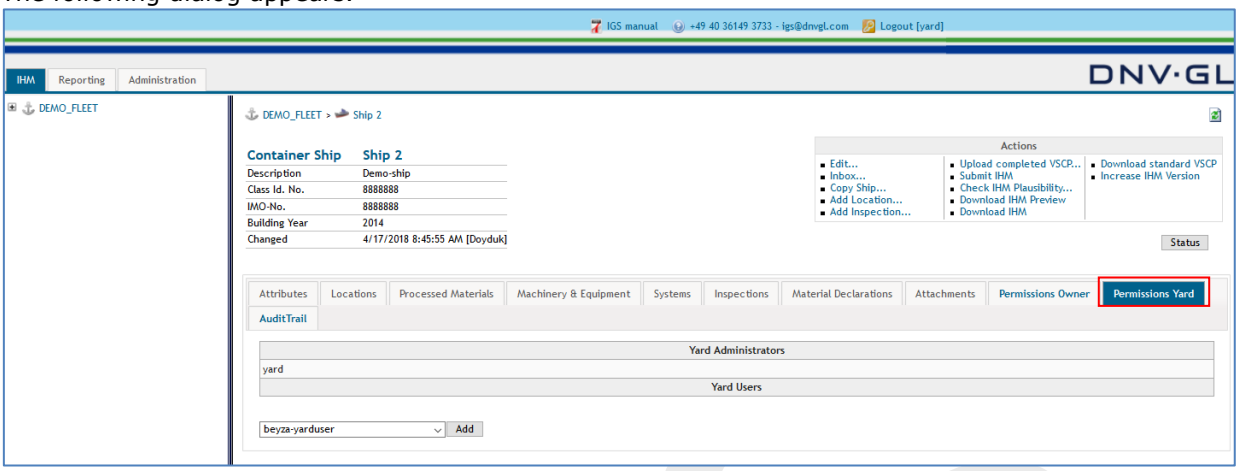
After the shipyard admin has established several shipyard users it is possible to distribute the work load to the different ship projects of the fleet.

To apply the shipyard users to the different ship projects the shipyard admin must change in the main navigation bar back to the IHM view and select the ship applicable for the respective shipyard user.

Open the IHM tab on the main navigation bar and select the fleet node "+" to open the fleet view. Then select the ship project from the navigation tree on the left side by opening the node "+" in the navigation tree.

Select in the navigation bar on the right side (red marked) the "Permission Yard" tab to apply the user rights of the shipyard users to the specific ship project.

The following dialog appears.

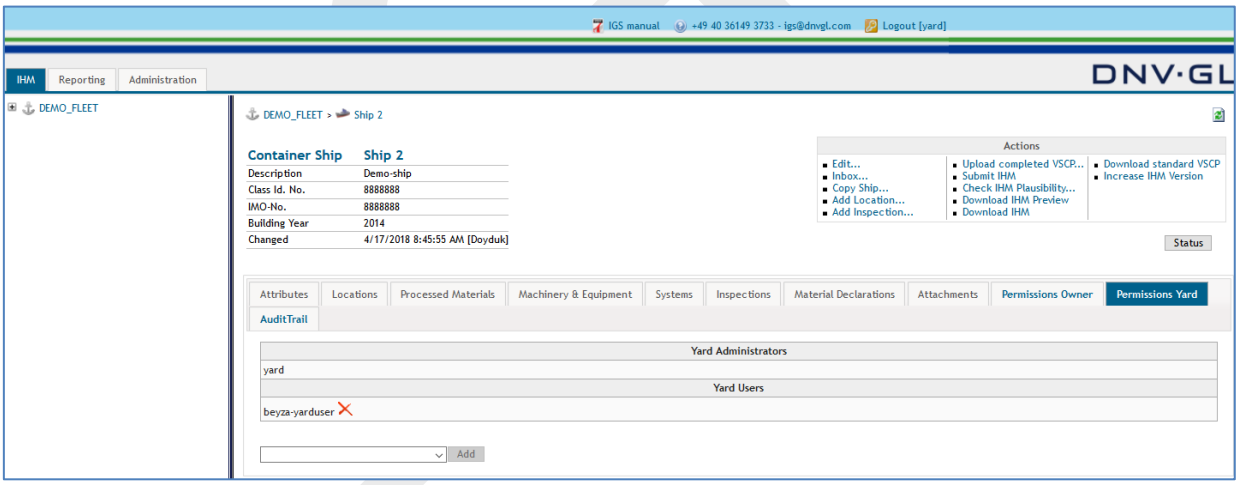


To assign a shipyard users to a specific ship project the shipyard admin must choose the respective shipyard user from the pull-down menu under the "Permission Yard" tab. After the selection of the respective shipyard user select the "Add" tab for verification.

Finally click on "Add" tab for verification.

Note: This procedure must be repeated until all shipyard users are applied to the different ship projects.

The following dialog appears.



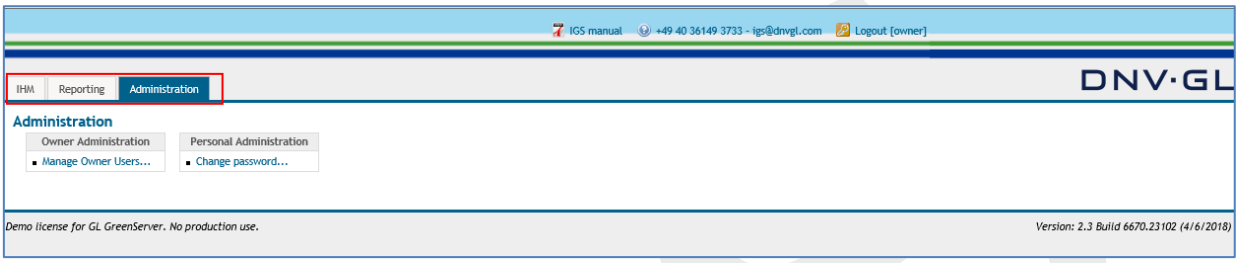
After a ship project is completed the shipyard admin has the option to delete the shipyard user from the specific ship project by selecting the red cross next to the respective shipyard users name in the "yard users" table under the "Permissions Yard" tab.

8.2 Permission management for shipowner admins

The shipowner admin has certain permission management rights to organize the different ship projects. The shipowner admin has the possibility to distribute the work to different responsible persons (shipowner users). The shipowner admin can either select one responsible person (shipowner user) for one or several ship projects or several responsible persons (shipowner users) for one ship project.

To perform the permission management the shipowner admin must select the "Administration" tab (red marked) in the main navigation bar. The associated topic will be shown in the main view.

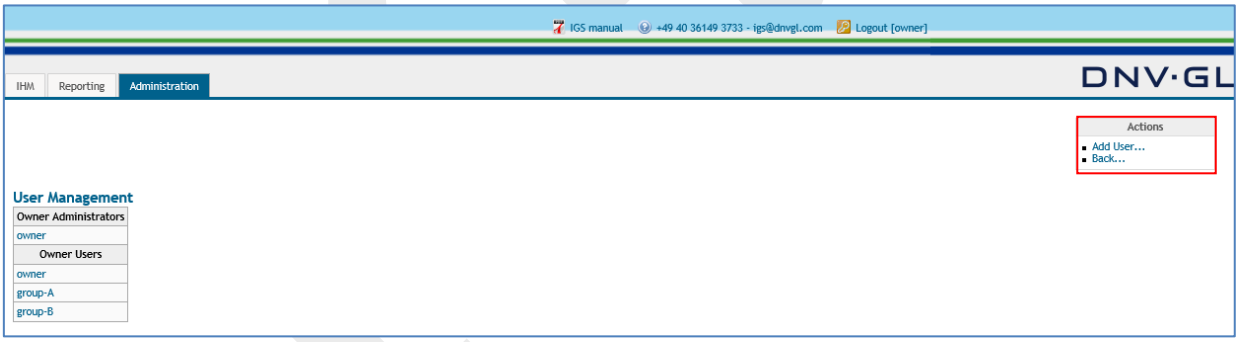
The following dialog appears.



In the main view of the "Administration" tab the shipowner admin has the option to add different shipowner users to the fleet by selecting the "Manage Owner Users" link in the action box under the table "Owner Administration".

Note: Additionally, it is possible to change the personal password under the "Change password..." link.

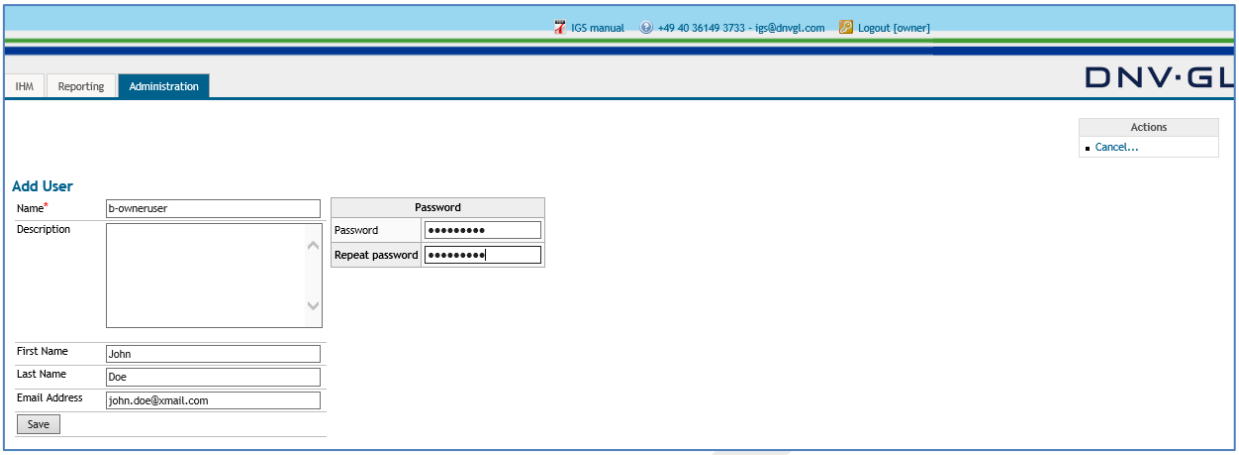
The following dialog appears by using the "Manage Owner Users..." link.



In the user management view the shipowner admin has the option to add users to the entire fleet by selecting the "Add User..." link in the actions box in the upper right corner.

Select the "Add User..." link in the actions box to add shipyards users.

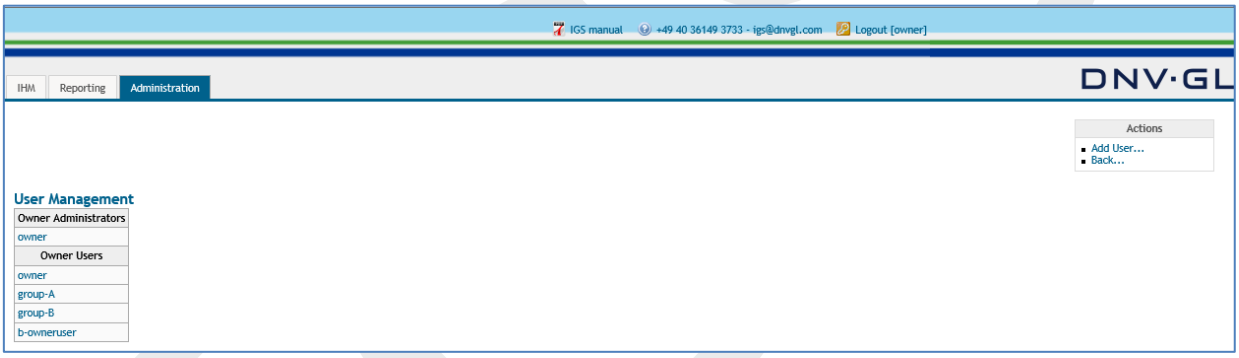
The following dialog appears.



To add a user in the "Add User" view, fill in all required attributes, e.g. Name (user name), Password, etc. Please note that the Password must be typed in twice for verification matters.

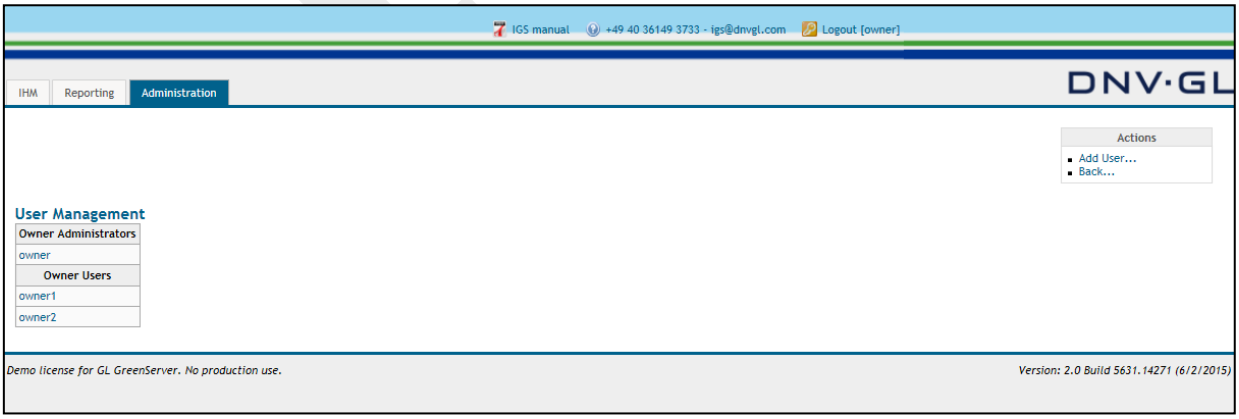
Finally click on "Save".

The following dialog appears.

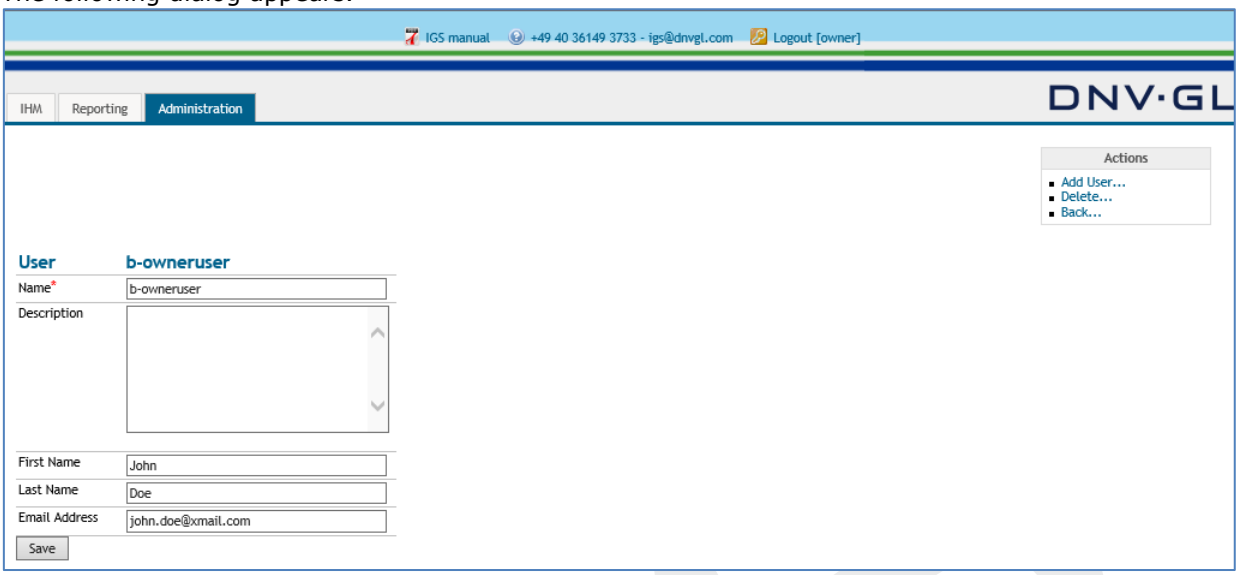


Note: This procedure must be repeated for each shipowner user who is meant to work on ship projects of the respective fleet.

To change the attributes of a shipowner user the shipowner admin must select the link of the respective shipowner user, e.g. group-A, group-B, b-owneruser, etc. in the "User Management" table under "Owner Users".



The following dialog appears.



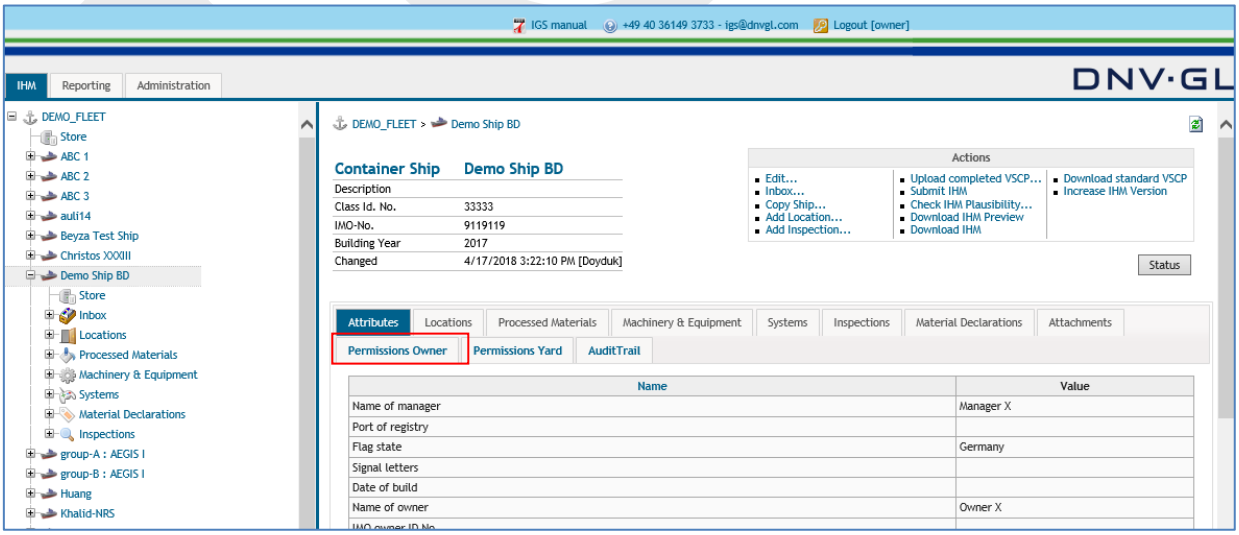
In the appearing view the shipowner admin has the option to change the attributes of the respective shipowner user if changes are required.

Finally click on “Save”.

Note: The shipowner admin has additionally the option to delete the shipowner user in this view by selection the “Delete...” link in the action box.

After the shipowner admin has established several shipowner user it is possible to distribute the work load to the different ship projects of the fleet.

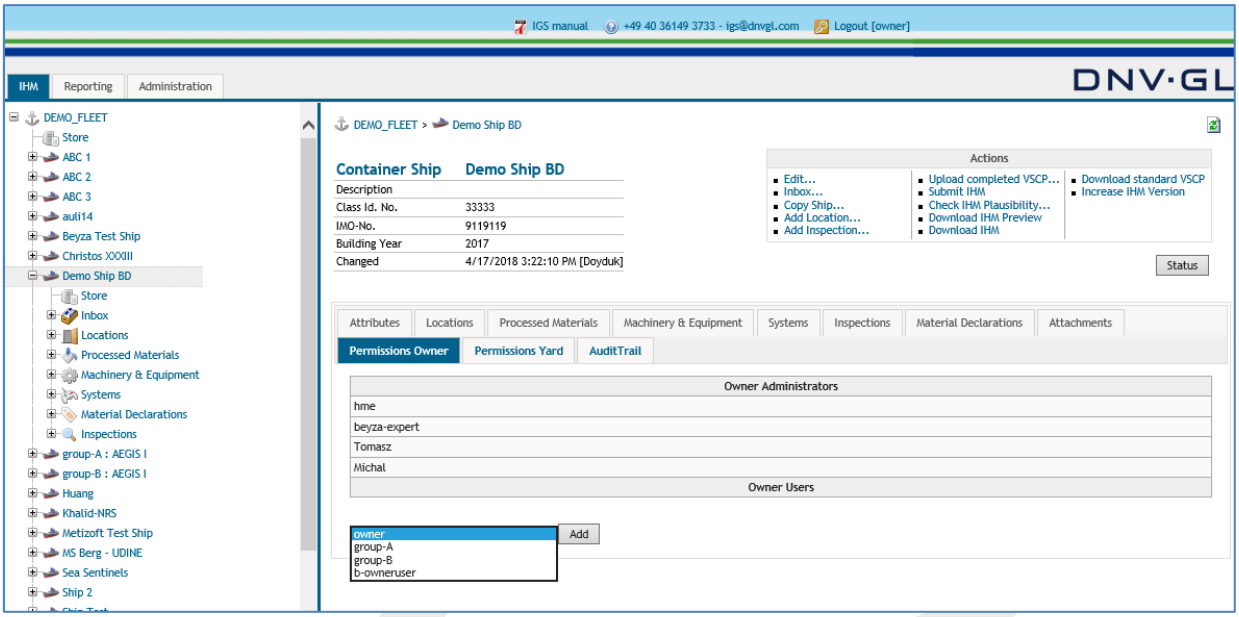
To apply the shipowner users to the different ship projects the shipowner admin must change the main navigation view back to the IHM view and select the ship applicable for the respective shipowner user.



Open the IHM tab on the main navigation bar and select the fleet node “+” to open the fleet view. Then select the ship project from the navigation tree on the left side by opening the node “+” in the navigation tree.

Select in the navigation bar on the right side (red marked) the “Permission Owner” tab to apply the user rights of the shipowner user to the ship project.

The following dialog appears.

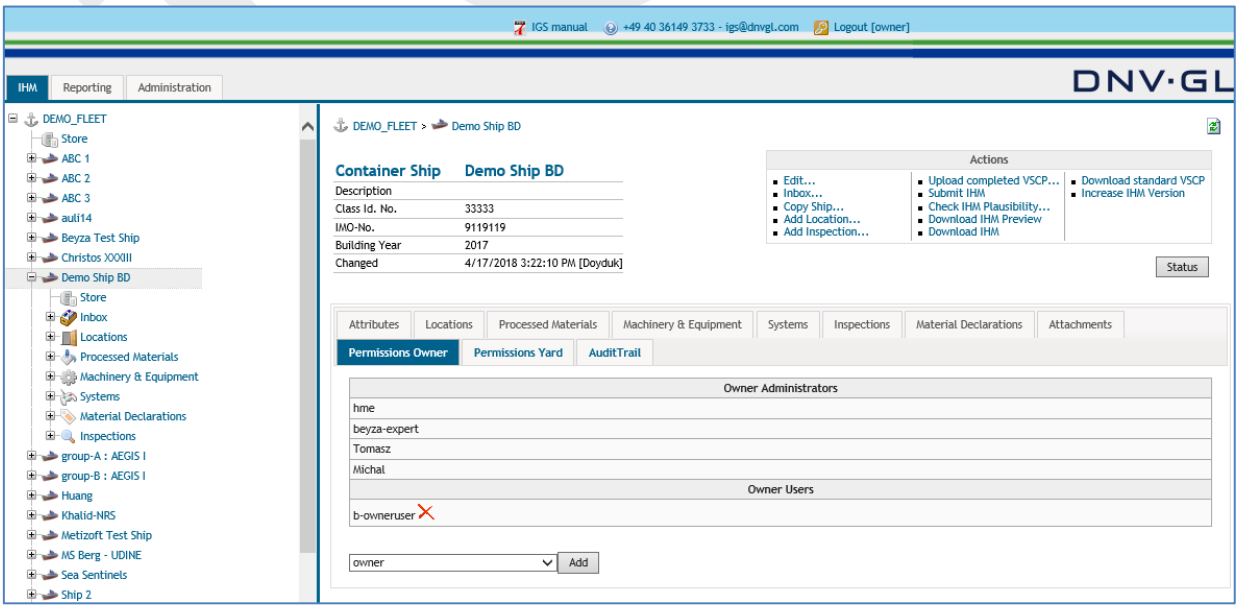


To assign the respective shipowner user to the specific ship project the shipowner admin must choose the respective shipowner user from the pull-down menu under the “Permission Owner” tab. After the selection of the shipowner user select the “Add” tab for verification.

Finally click on “Add” tab for verification.

Note: This procedure must be repeated until all shipowner users are applied to the different ship project.

The following dialog appears.



After a ship project is completed the shipowner admin has the option to delete the shipowner user from the specific ship project by selecting the red cross next to the respective shipowner users name in the "Owner Users" table under the "Permissions Owner" tab.

9 ADMINISTRATION OF IGS

This section is only relevant for DNV GL Admins.

9.1 SSO launch pad

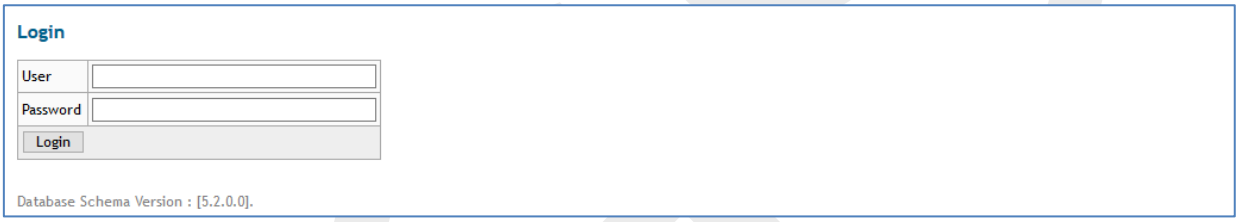
The SSO Launch Pad is a working platform for the administration of the user accounts in the IGS database. It gives the DNV GL Admins different options to administer the user accounts.

9.1.1 Log in SSO launch pad

To use the IGS SSO Launch pad, the DNV GL Admin needs a personal ID and Password. For application send a request to the IGS Administrators to apply for the DNV GL Admin permission. The new DNV GL Admin will receive the login information for the IGS SSO Launch pad within the next working days after verification.

After receiving the IGS log-in information the DNV GL Admin can log-in to IGS directly via the URL: https://nigs.dnvgl.com/gsadmin

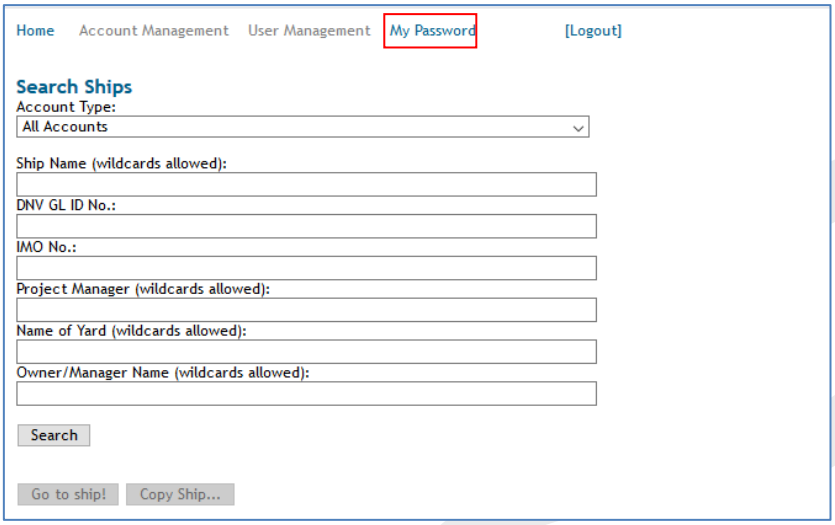
The following log-in page of IGS appears.



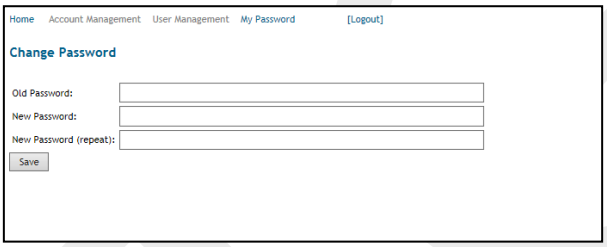
Enter the User ID in the "User" field and the personal password in the "Password" field. After that press enter or click on the "Login" link.

9.1.2 Customizing the password

It is recommended to customize the password, the first time the user logged into IGS. Select the "My Password" link located in the header of the screen to change the password. A new page appears in the main view containing a link "Change password…" to the password changing mask.

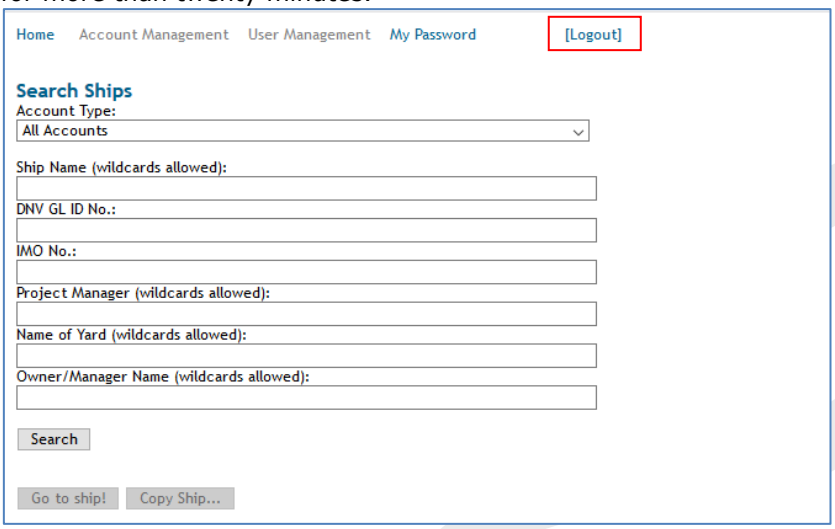


The new customized password must be filled in twice, in the "New Password" and the "Repeat password" field. Finally, click on "Submit" and the new password will be saved. It remains valid until the user changes it again or the user access rights expire.



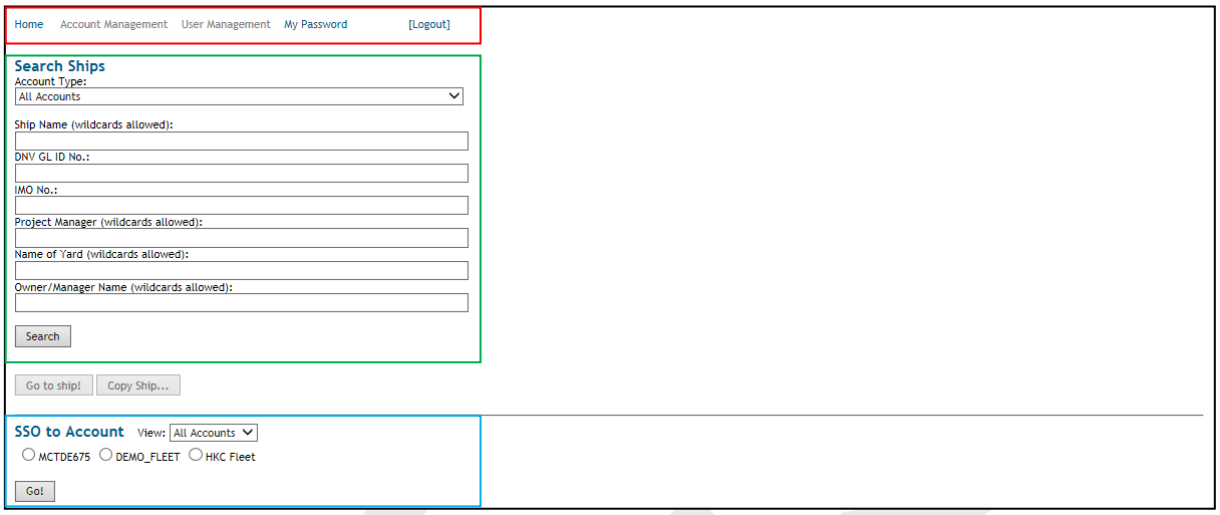
9.1.3 Logout of SSO launch pad

To logout of IGS system select the "[Logout]" link located in the right top corner of the header. Furthermore, automatically log out will be by closing the browser or after the account has been inactive for more than twenty minutes.



9.1.4 Layout of SSO launch pad

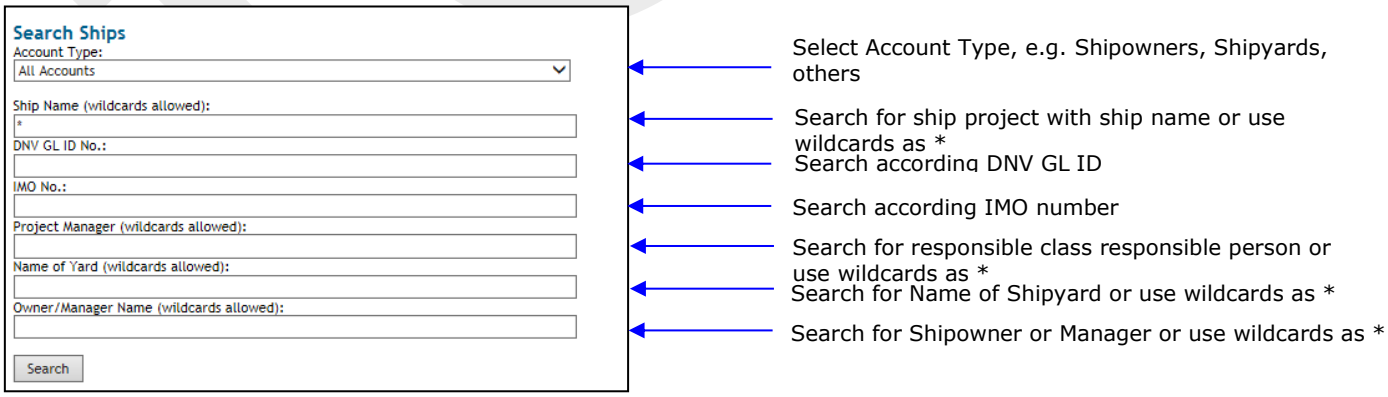
After successful log in the layout of the SSO Launch pad is shown. The SSO Launch pad is subdivided into three parts. On top (red marked) is the header which provides access to several features. In the middle (green marked) is the search tool "Search Ships" for searching ship projects in the IGS system. Below (blue marked) is the account management "SSO to Account" which includes a list of available ship projects for the respected DNV GL Admin in the IGS system.



9.1.5 Search function SSO launch pad

The DNV GL Admin has in the SSO Launch pad under "Search Ships" several opportunities to search in the different customer accounts (databases) for specific ship projects or within the ship projects for specific attributes.

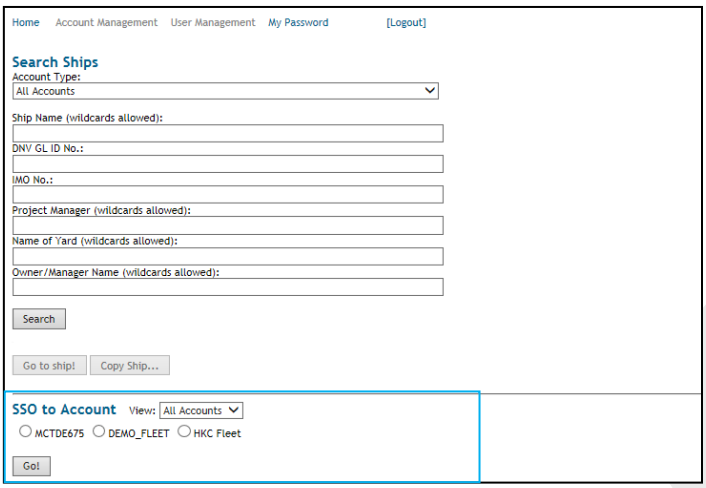
The following search options are available:



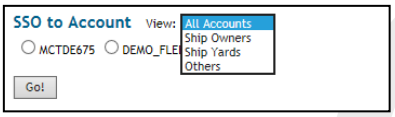
Finally click on "Search"

9.1.6 Customer accounts in SSO launch pad

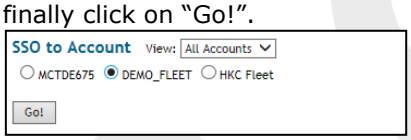
The DNV GL Admin has for a better project management in the SSO Launch pad under "SSO to Account" (blue marked) a list of different available customer accounts (databases).



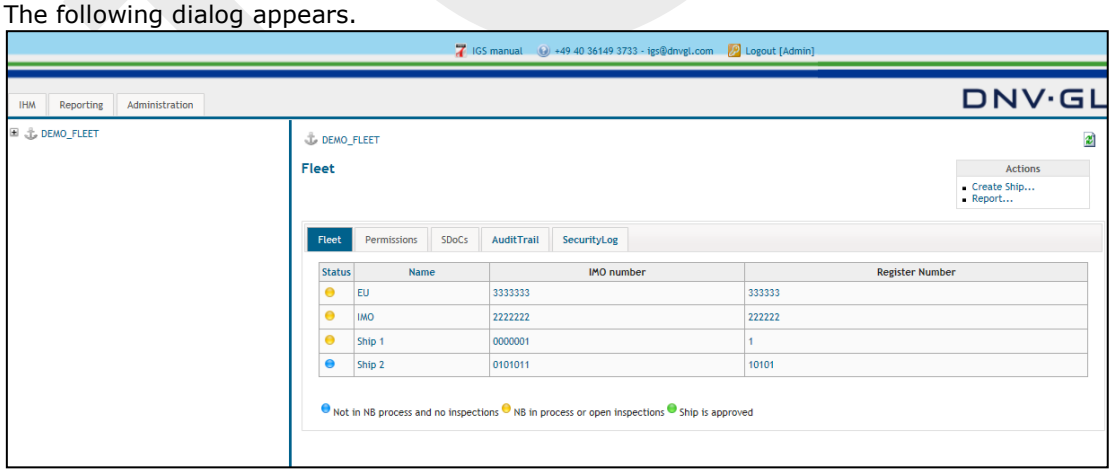
The list of different available customer accounts (databases) can be divided into four categories for a better overview of the accounts, e.g. All Accounts, Shipowners, Shipyards and Others.



To enter customer account the user must select (tick off) an available customer account (database) and finally click on "Go!".



The following dialog appears.



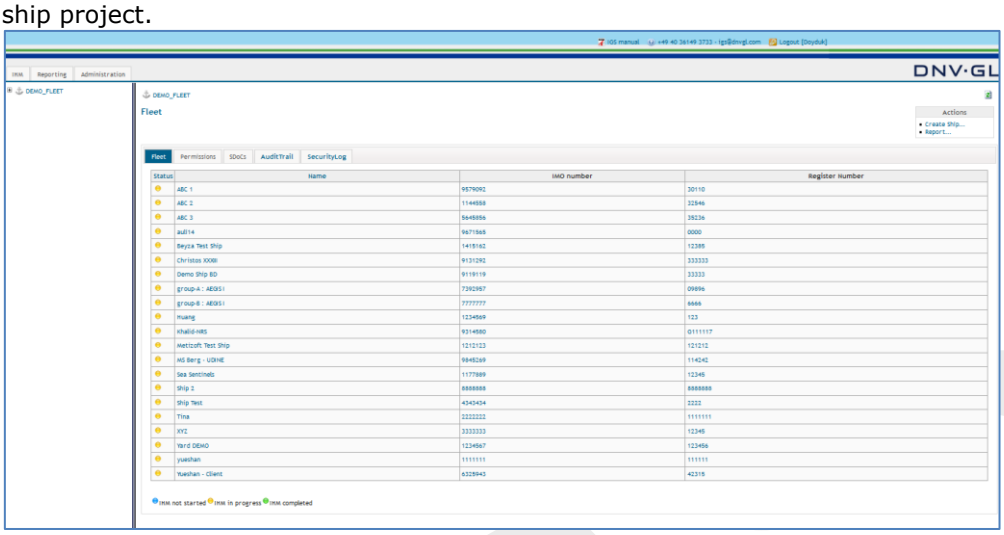
After accessing the customer account the DNV GL Admin can administer the ship projects.

Note: Not every DNV GL Admin has access to all available customer accounts. Please inform the IGS Administrators in case of missing customer account rights.

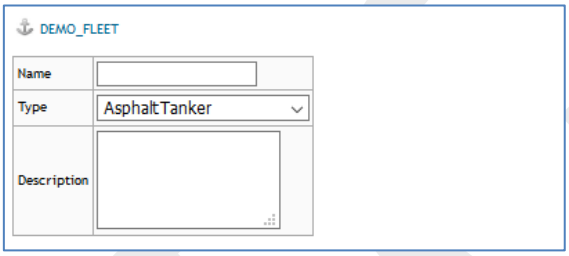
9.2 Customise ship projects

9.2.1 Create a ship project

For creating a ship project in IGS select the IHM tab on the main navigation bar, and then select the fleet node "+" to open the fleet view. Now select in the actions box "Create Ship…" link to create a new ship project.



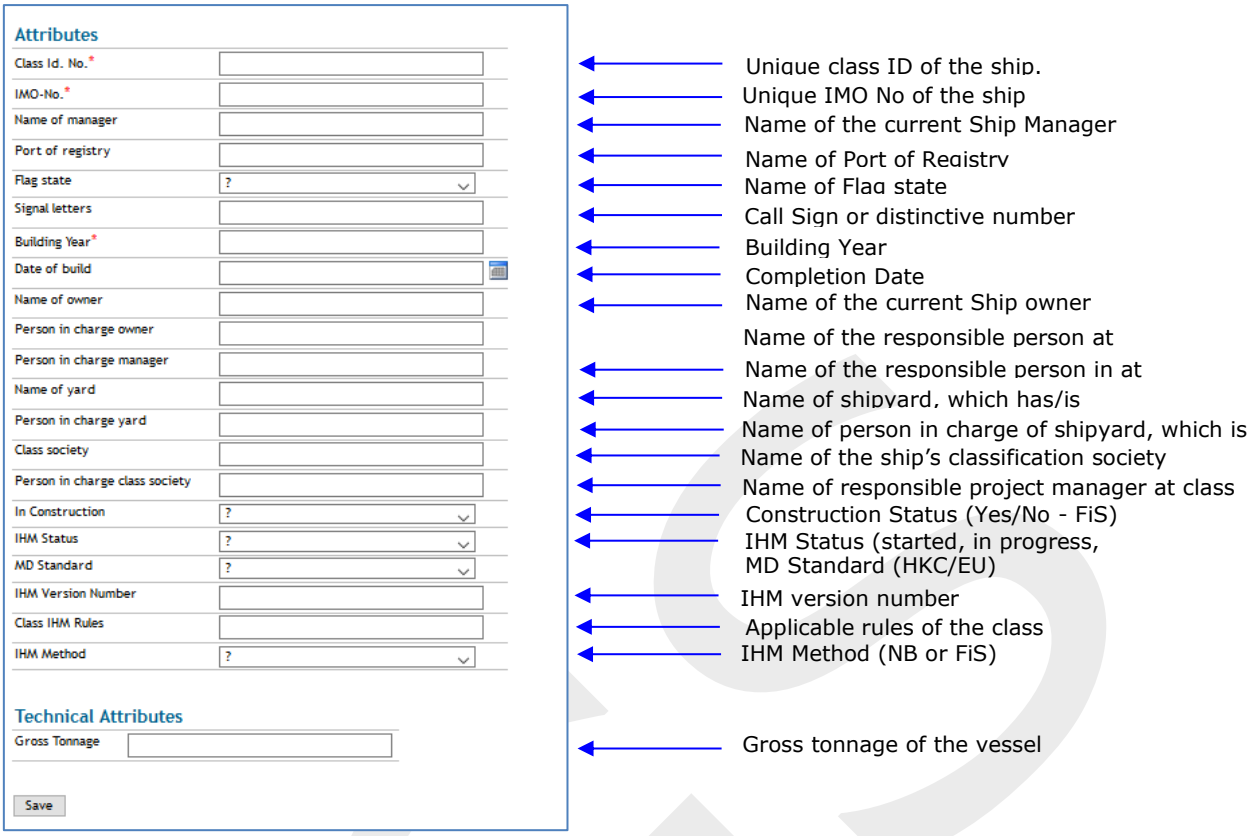
The following dialog appears. (Information are available in SIS/NPS System)



Current name of the ship.

Type of the ship.

Additional description, e.g. cargo capacity in



For the preparation of an IHM all information required in the figure above must be filled in. Nevertheless at least "Name", "Type", "Class ID. No.", "IMO-No." and "Building Year" need to be filled in directly to create a ship project. The remaining information can be filled in later under the "Edit…" link in the actions box.

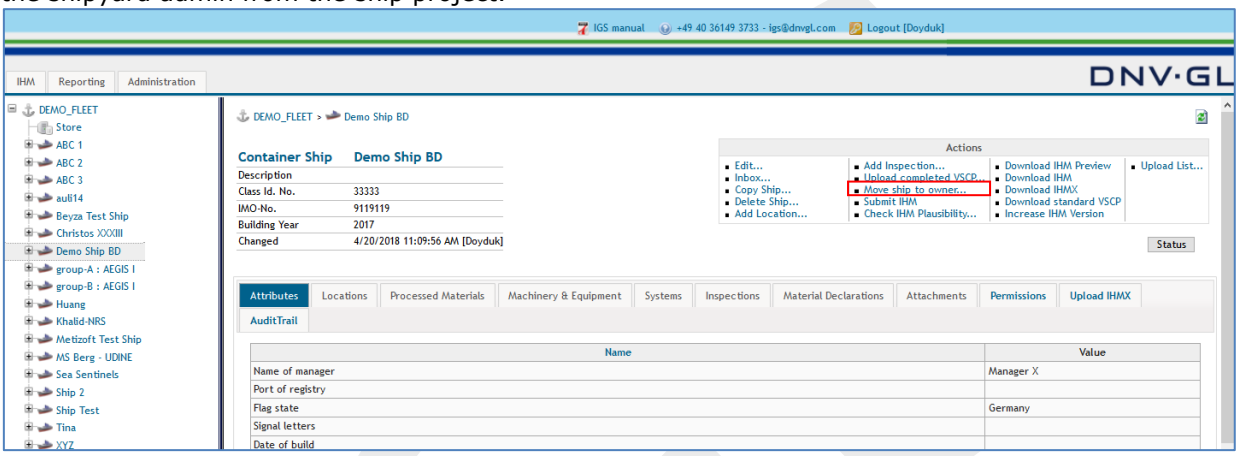
Finally click on "Save".

9.3 General functions and knowledge

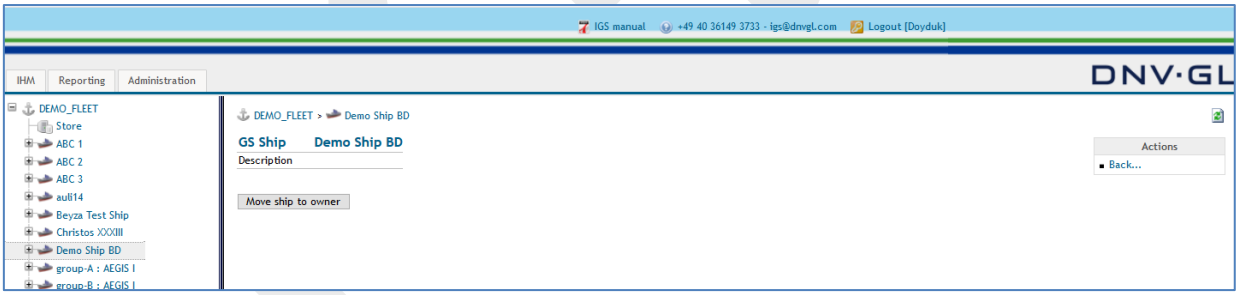
9.3.1 Move ship to owner

For the ships in construction, which means new building projects, after the IHM preparation work is finished, the DNV GL Admin can use the "Move ship to owner…" link to remove the user rights of the shipyard admin from the ship project.

Select the "Move ship to owner..." link in the actions box of the main view to remove the user rights of the shipyard admin from the ship project.



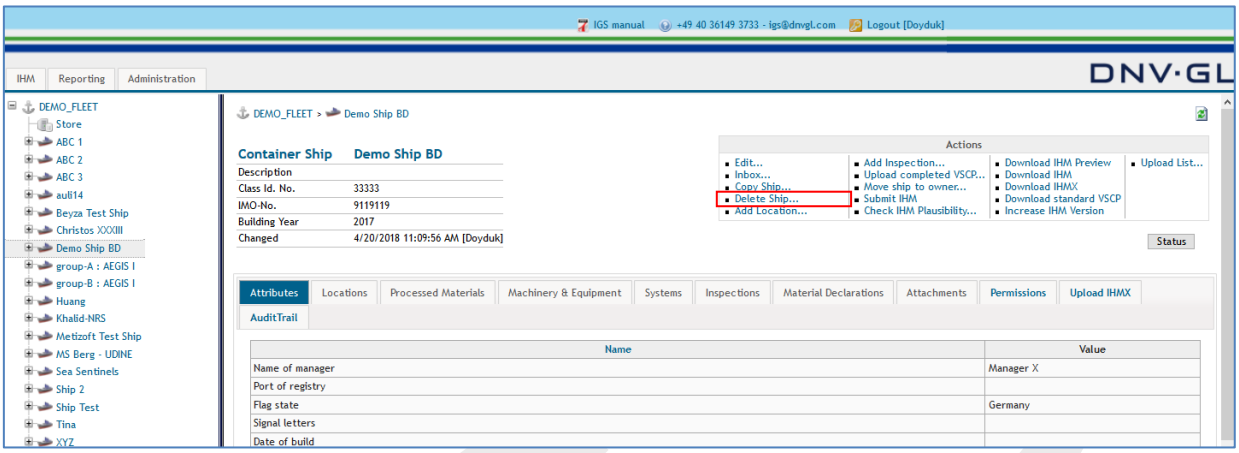
Then select on the following page the "Move ship to owner" link to confirm.



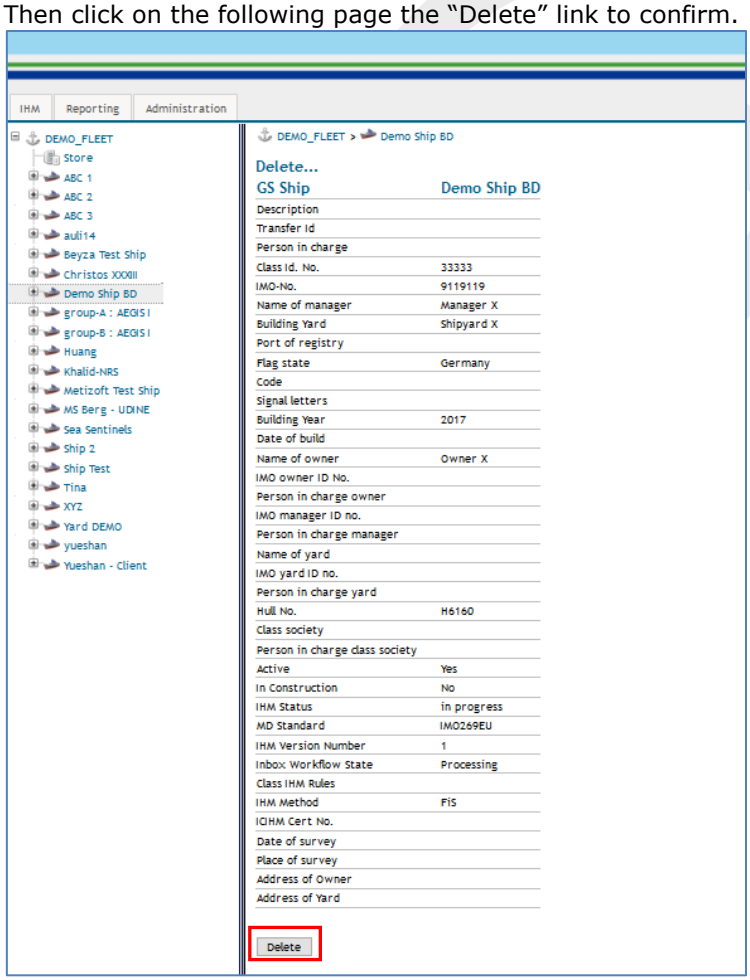
9.3.2 Delete ship

For administrative purposes, the DNV GL Admin has the possibility to remove a ship project from the Fleet account by use of the "Delete Ship..." link in the actions box on the ship project view.

Select the "Delete Ship..." link in the actions box to delete the ship project.

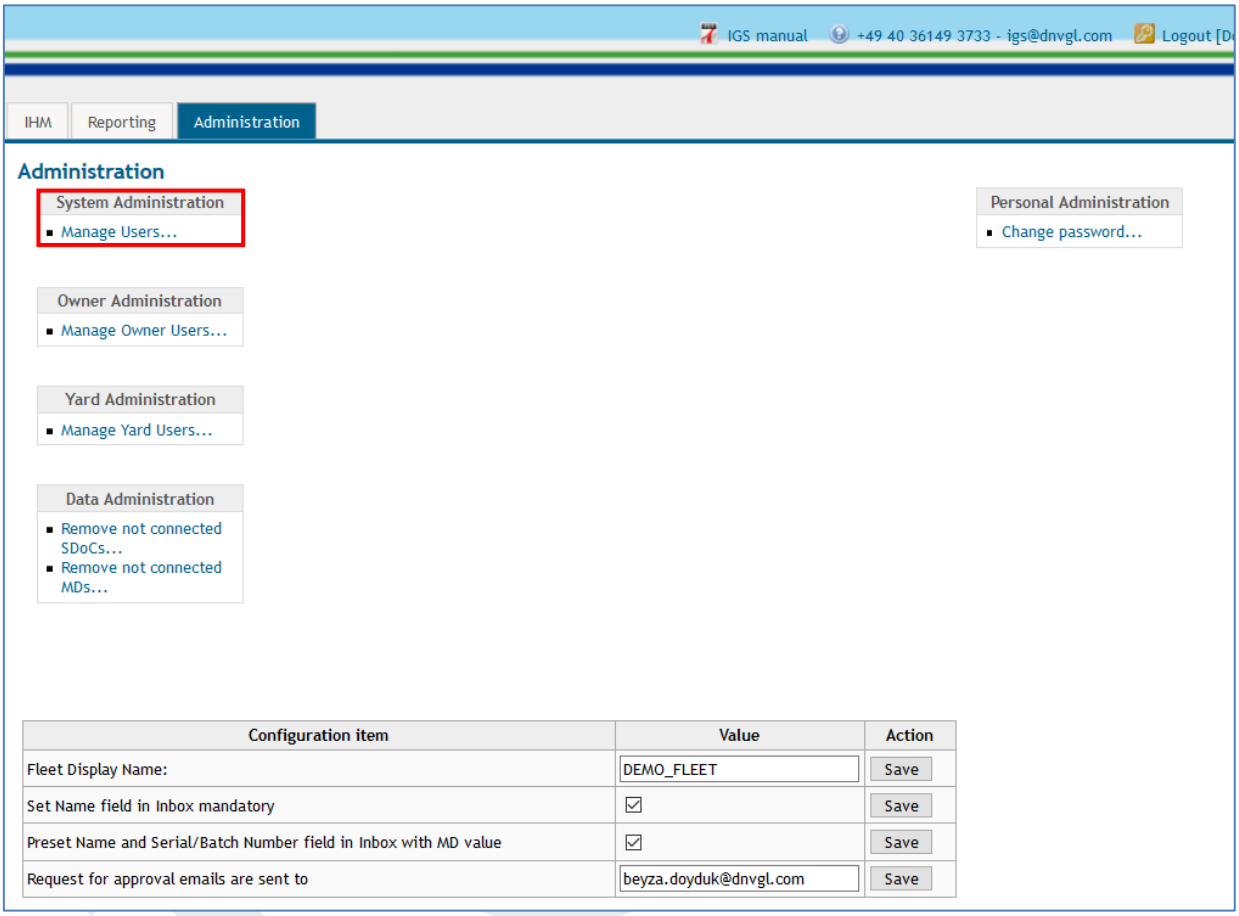


Then click on the following page the "Delete" link to confirm.



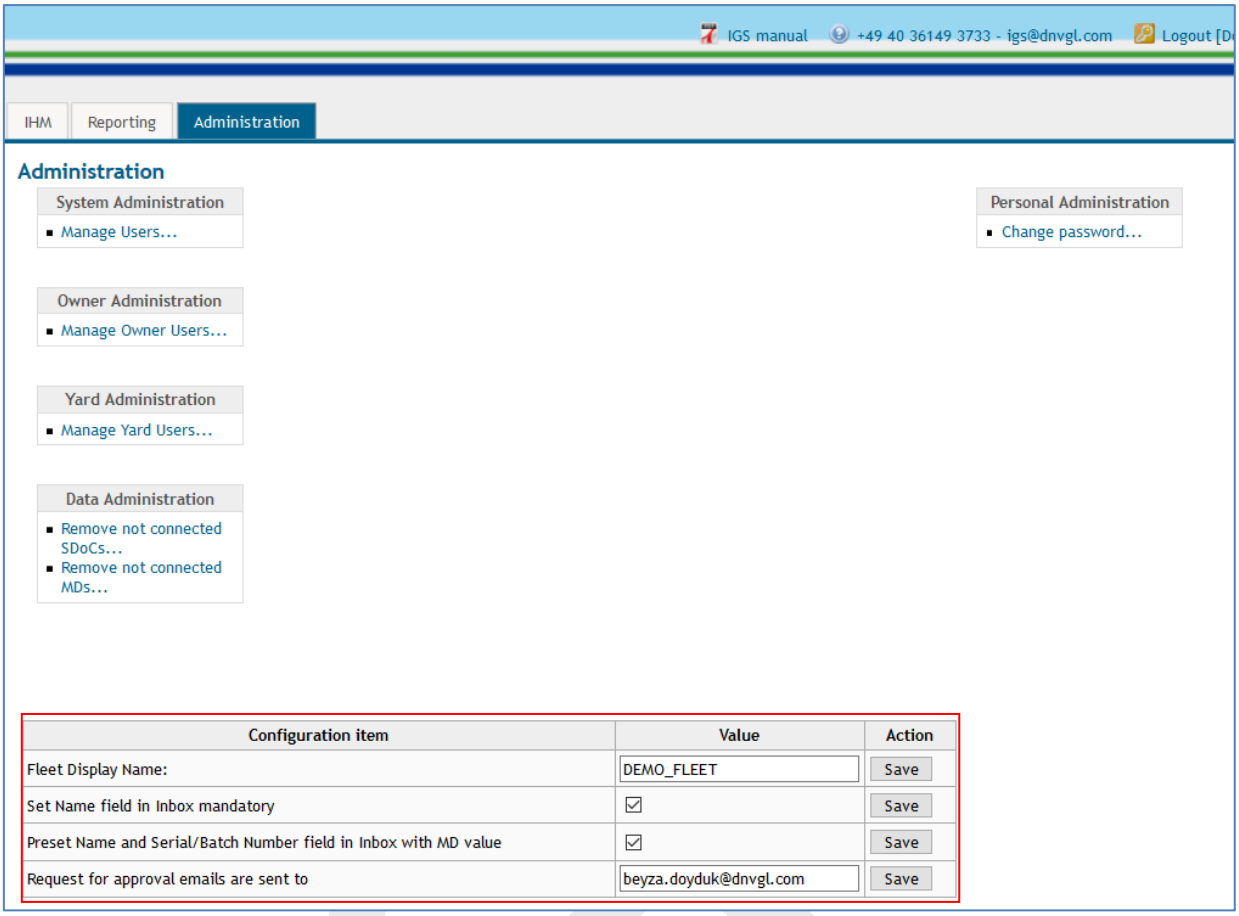
9.3.3 Administration tab

DNV GL Admins can manage all users under "System Administration" field. The user rights such as shipyard admin, shipowner admin or hazmat expert are assigned by the DNV GL Admins by the function "manage users".



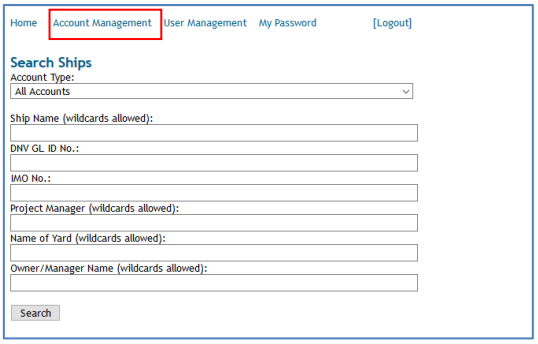
The following standard settings must be set for each ship project under the "Administration" tab.

1. **Fleet Display Name**: Enter the name of the customer fleet
2. **Set Name field in inbox mandatory**: If it is ticked, IGS would request the users to enter a name for each MD. If not filled IGs would give an error.
3. **Preset name and serial/batch number field in inbox with MD value**: If it is ticked, IGS would automatically copy the "product name" and "product number" fields of MD to "Name" and "Serial/Batch number" fields in IGS inbox respectively.
4. **Request for approval emails are sent to**: Enter email address of shipowner admin


IGS manual
+49 40 36149 3733 - igs@dnvgl.com
Logout [D
IHM
Reporting
Administration
Administration
System Administration
Manage Users...
Personal Administration
Change password...
Owner Administration
Manage Owner Users...
Yard Administration
Manage Yard Users...
Data Administration
Remove not connected SDoCs...
Remove not connected MDs...
Configuration item
Value
Action
Fleet Display Name:
DEMO_FLEET
Save
Set Name field in Inbox mandatory
Save
Preset Name and Serial/Batch Number field in Inbox with MD value
Save
Request for approval emails are sent to
beyza.doyduk@dnvgl.com
Save

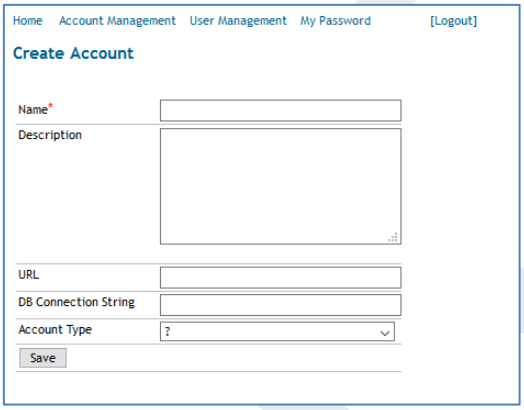
9.3.4 Create an account in IGS SSO launch pad

To Create an account in the SSO launch pad, the DNV GL Admin first should write to IT Shipmanager to create an account in IGS. Then he clicks on the "Account Management" tab in IGS.



Scroll down in the page and click on "Create Account" link, in the right corner.

Following dialog box appears;

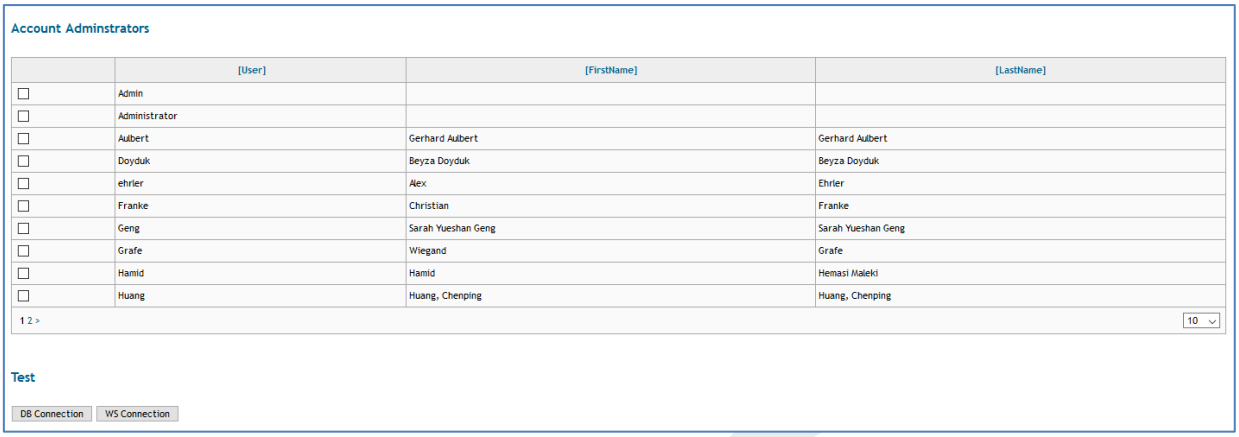


Name: ACCOUNT_NAME

URL: https://nigs.dnvgl.com/ACCOUNT_NUMBER

DB Connection String:
server=PHAMDB11.koamaru.net;trusted_connection=yes;database=ACCOUNT_NUMBER

Account Type: Shipowner or Shipyard



Account Adminstrators

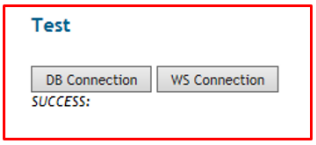
	[User]	[FirstName]	[LastName]
☐	Admin		
☐	Administrator		
☐	Aulbert	Gerhard Aulbert	Gerhard Aulbert
☐	Doyduk	Beyza Doyduk	Beyza Doyduk
☐	ehrler	Alex	Ehrler
☐	Franke	Christian	Franke
☐	Geng	Sarah Yueshan Geng	Sarah Yueshan Geng
☐	Grafe	Wiegand	Grafe
☐	Hamid	Hamid	Hemasi Maleki
☐	Huang	Huang, Chenping	Huang, Chenping

1 2 > 10

Test

DB Connection WS Connection

Select the Account Administrators from the list. Under the "Test" field, press WS Connection first. After you see the SUCCESS under the boxes, click on "DB Connection" link.



Send email to DNV GL Maritime Software IT Operations (it.shipmanager@dnvgl.com), to create the account in the server.

10 CONTACT

Homepage:
https://www.dnvgl.com/services/ship-recycling-and-hazmat-management--3413
For questions concerning the usage of the IHM Green Server (IGS), please contact:
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Phone: +49 40 36149 3733

For technical questions or to report security incidents, please contact:
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