

User-Operating Manual

IHM Green Server (IGS) for customers

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OVERVIEW

OVERVIEW	2
1 INTRODUCTION	5
2 GENERAL	6
2.1 System requirements	6
2.2 Security and data backup	6
2.3 Data model of IGS	6
2.4 User profiles and user rights	7
2.4.1 IGS for shipyards	7
2.4.2 IGS for shipowners	7
2.4.3 IGS for HazMat experts	7
2.5 Login and logout	8
2.5.1 Log-in into IGS	8
2.5.2 Change password	9
2.5.3 Logout of IGS	9
2.6 Layout of IGS	10
2.7 Fleet status overview	11
2.8 Permissions	11
2.9 SDoCs tab - replace or delete SDoCs	12
2.10 Audit trail	13
2.11 Actions in the fleet view	14
2.12 Reporting of ship projects	15
2.12.1 Substance report	16
2.12.2 Component report	17
2.12.3 Component details report	18
2.12.4 Ship status report	19
2.12.5 Inspection reporting	20
2.13 MD format and regulations	21
2.14 Open a ship project	22
2.15 Ship status function	23
3 ACTIONS IN THE SHIP VIEW	24
3.1 Start IHM preparation	25
3.2 Edit a ship project	26
3.3 Inbox	28
3.4 Copy ship	28
3.5 Add a new location and sublocation to the ship project	30
3.6 Add inspection	32
3.7 Upload completed VSCP	32
3.8 Submit IHM	32
3.9 Check IHM plausibility	33
3.10 Download IHM preview	37
3.11 Download IHM	38
3.12 Download standard VSCP	39
3.13 Increase IHM version	39
3.14 Navigation bar in ship view	40
3.14.1 Attributes tab	40

3.14.2	Locations tab	41
3.14.3	Processed materials, machinery & equipment, systems	43
3.14.4	Inspections tab	44
3.14.5	Material declarations	44
3.14.6	Attachments tab	45
3.14.7	Permissions owner and permissions yard	46
3.14.8	Audit trail	46
3.14.9	Fleet store and ship store	47
4	USING INBOX FOR PREPARATION OF IHM.....	48
4.1	Uploading SDoC and MD into the inbox	48
4.2	Inbox status indicator	51
4.3	Entering MD information	52
4.4	Actions box for MD under inbox	55
4.4.1	Replace MD in inbox	55
4.4.2	Edit MD in inbox	56
4.4.3	Delete the MD in inbox	56
4.4.4	Go to related SDoC	56
4.4.5	Export MD	56
4.4.6	Back	57
4.5	Edit specific MD information (attributes) in the inbox	58
4.6	Filter department name	60
4.7	Invite suppliers to upload SDoC and MD documents	61
4.8	Confirmation of inbox items	62
5	WORKING WITH THE STANDARD VSCP.....	63
6	USING INSPECTION FOR PREPARATION OF IHM	67
6.1	Add inspection	68
6.1.1	Creating the inspection	68
6.1.2	Add location to ship inspection	69
6.1.3	Preparation of the VSCP by "Edit VSCP" link	70
6.1.4	Completion of the VSCP by "Edit VSCP" link	76
6.2	Upload completed VSCP	79
6.3	Edit an inspection	80
6.4	Edit checkpoints	82
6.5	Generate VSCP	83
6.6	Attachments tab of the inspection	84
6.7	Submit inspection	87
6.8	Plausibility of the VSCP	90
6.9	Sort VSCP items by location	91
6.10	Edit and delete inspection items	92
7	MAINTENANCE OF IHM	94
7.1	Add a new component or material (SDoC and MD) to a location in the ship project	94
7.2	Edit specific MD information (attributes) in components and materials	97
7.2.1	Replace a component or material after maintenance or repair	98
7.2.2	Add a spare part to an existing component or material	99
7.3	Store concept for administration of SDoC and MD documentation	101
7.3.1	Upload SDoC and MD into stores	101
7.3.2	Move component MDs between the fleet store / ship store and locations	109
7.3.3	Move component MDs from a location to another location	110
7.4	Change object type of components or materials	111
7.5	Edit specific MD information in components and materials	112

7.6	Replace MD	113
8	PERMISSION MANAGEMENT	114
8.1	Permission management for shipyard admins	114
8.2	Permission management for shipowner admins	118
9	ADMINISTRATION OF IGS	123
9.1	SSO launch pad	123
9.1.1	Log in SSO launch pad	123
9.1.2	Customizing the password	124
9.1.3	Logout of SSO launch pad	125
9.1.4	Layout of SSO launch pad	126
9.1.5	Search function SSO launch pad	126
9.1.6	Customer accounts in SSO launch pad	127
9.2	Customise ship projects	128
9.2.1	Create a ship project	128
9.3	General functions and knowledge	130
9.3.1	Move ship to owner	130
9.3.2	Delete ship	131
9.3.3	Administration tab	132
9.3.4	Create an account in IGS SSO launch pad	134
10	CONTACT	136

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 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 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.

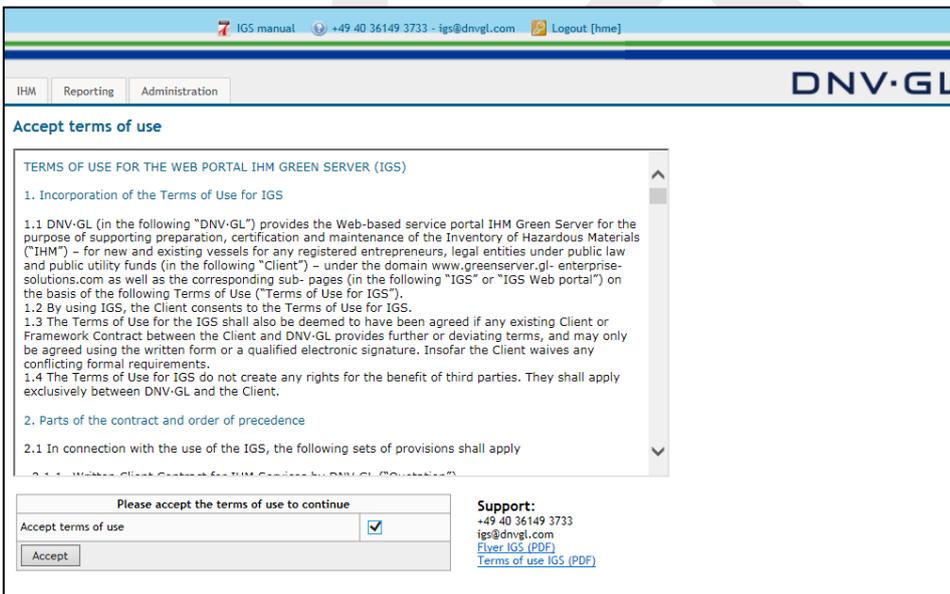
After receiving the IGS log-in information the applicant can reach their account in IGS directly via the URL https://nigs.dnvgl.com/account_number the login page of IGS then appears.



The screenshot shows the IGS login interface. On the left, there is a 'Login' form with two input fields: 'User' and 'Password', and a 'Login' button below them. To the right of the form, there is a 'Login with Veracity' section featuring the DNV-GL logo and the Veracity logo. Below the form, the text 'Database Schema Version : [7.0.0.1]' is displayed.

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.



The screenshot displays the 'Accept terms of use' page. At the top, there are navigation tabs for 'IHM', 'Reporting', and 'Administration', and the DNV-GL logo. The main content area is titled 'Accept terms of use' and contains the following text:

TERMS OF USE FOR THE WEB PORTAL IHM GREEN SERVER (IGS)

1. Incorporation of the Terms of Use for IGS

1.1 DNV-GL (in the following "DNV-GL") provides the Web-based service portal IHM Green Server for the purpose of supporting preparation, certification and maintenance of the Inventory of Hazardous Materials ("IHM") – for new and existing vessels for any registered entrepreneurs, legal entities under public law and public utility funds (in the following "Client") – under the domain www.greenserver.gl-enterprisesolutions.com as well as the corresponding sub- pages (in the following "IGS" or "IGS Web portal") on the basis of the following Terms of Use ("Terms of Use for IGS").

1.2 By using IGS, the Client consents to the Terms of Use for IGS.

1.3 The Terms of Use for the IGS shall also be deemed to have been agreed if any existing Client or Framework Contract between the Client and DNV-GL provides further or deviating terms, and may only be agreed using the written form or a qualified electronic signature. Insofar the Client waives any conflicting formal requirements.

1.4 The Terms of Use for IGS do not create any rights for the benefit of third parties. They shall apply exclusively between DNV-GL and the Client.

2. Parts of the contract and order of precedence

2.1 In connection with the use of the IGS, the following sets of provisions shall apply

2.1.1. Master Client Contract for IHM Services by DNV-GL (2016-11-17)

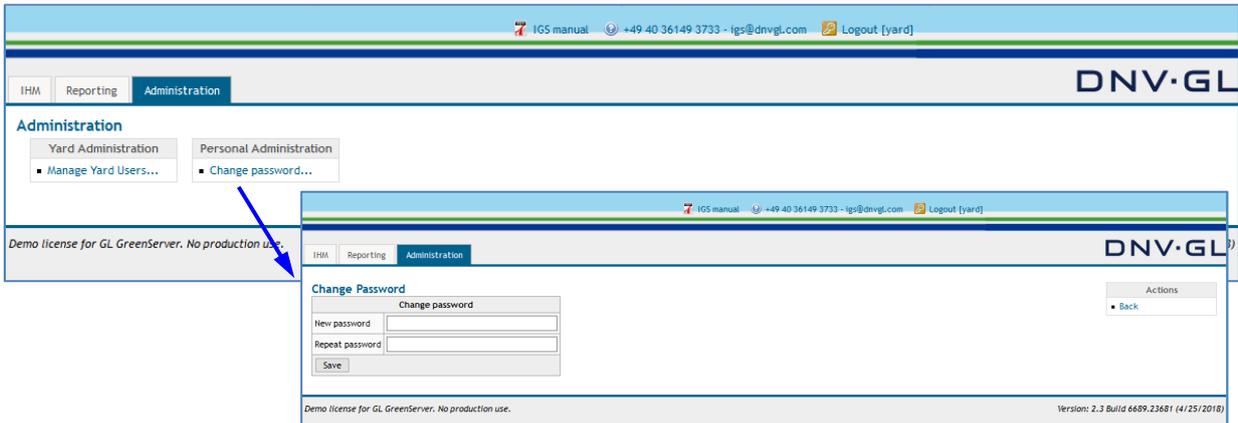
At the bottom of the page, there is a section titled 'Please accept the terms of use to continue' with a checked 'Accept terms of use' checkbox and an 'Accept' button. To the right, there is a 'Support:' section with the following information:

Support:
+49 40 36149 3733
igs@dnvgl.com
[View IGS \(PDF\)](#)
[Terms of use IGS \(PDF\)](#)

Finally click on "Accept".

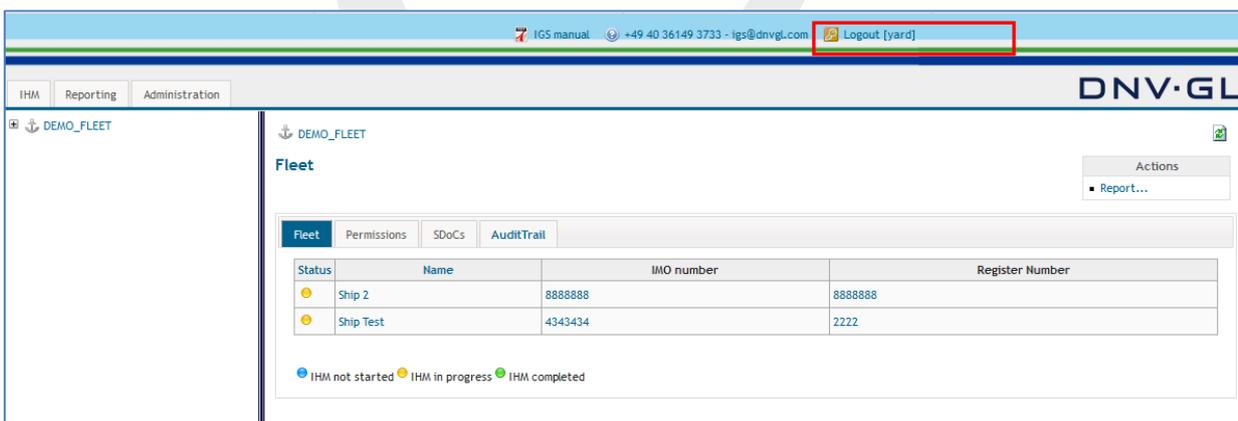
2.5.2 Change password

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.

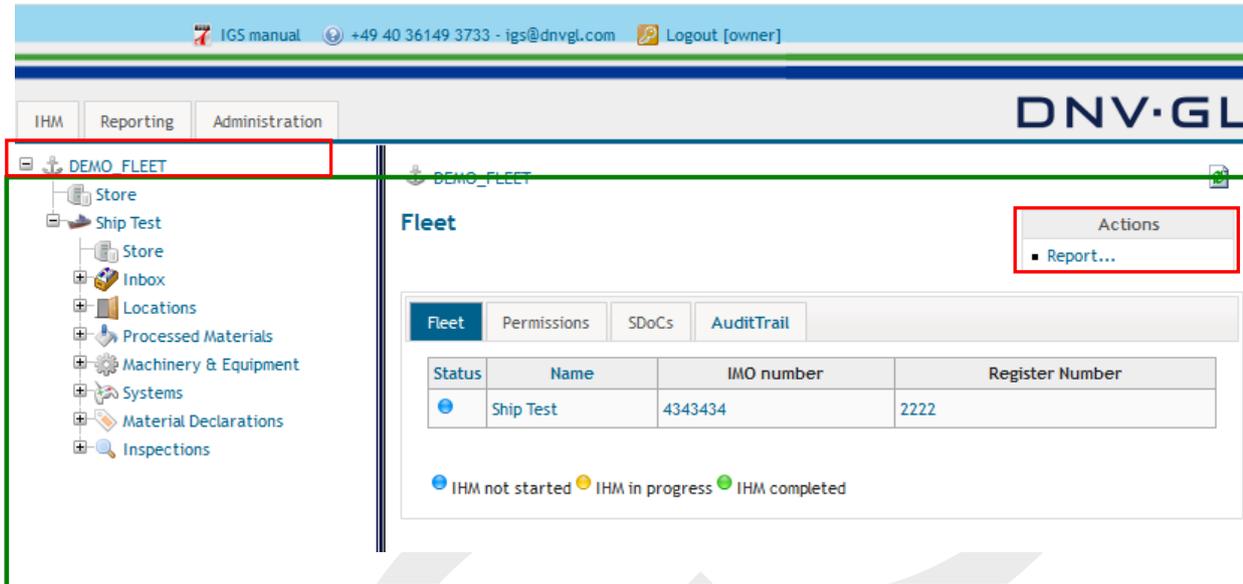
2.5.3 Logout of IGS



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.

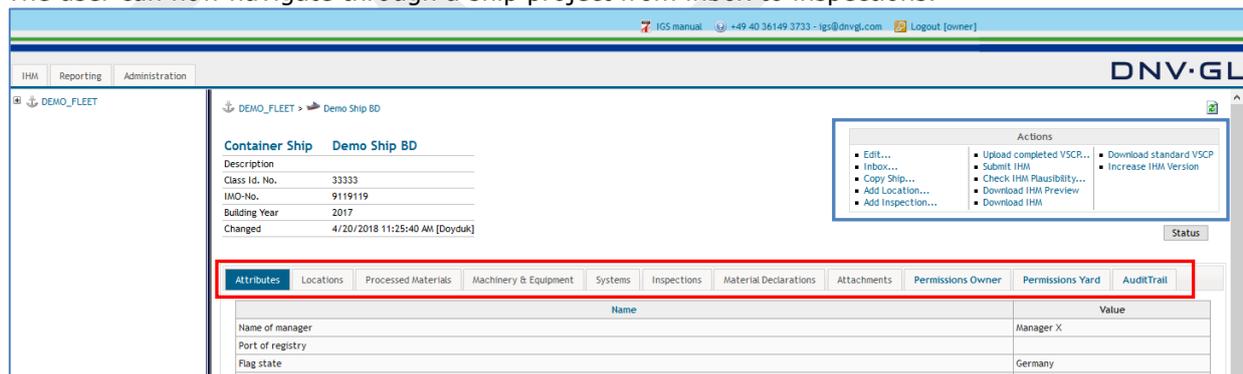
2.6 Layout of IGS

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.

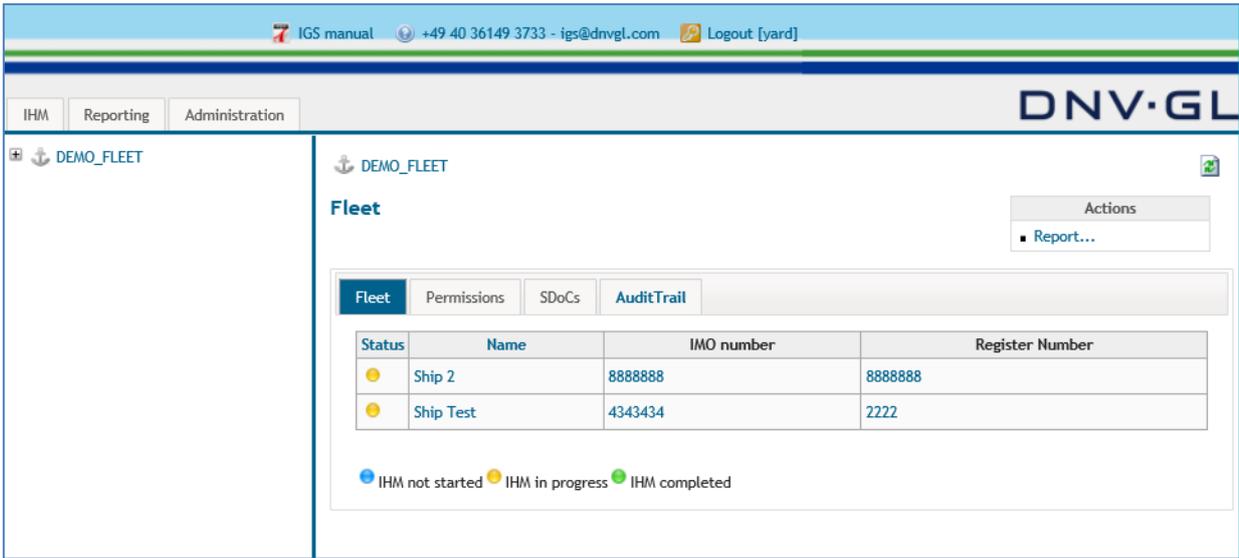
Furthermore, each view of the navigation tabs contains also an actions box (blue marked) in the upper right corner.

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 described 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.



IGS manual +49 40 36149 3733 - igs@dnvgl.com Logout [yard]

DNV-GL

IHM Reporting Administration

DEMO_FLEET

DEMO_FLEET

Fleet

Actions

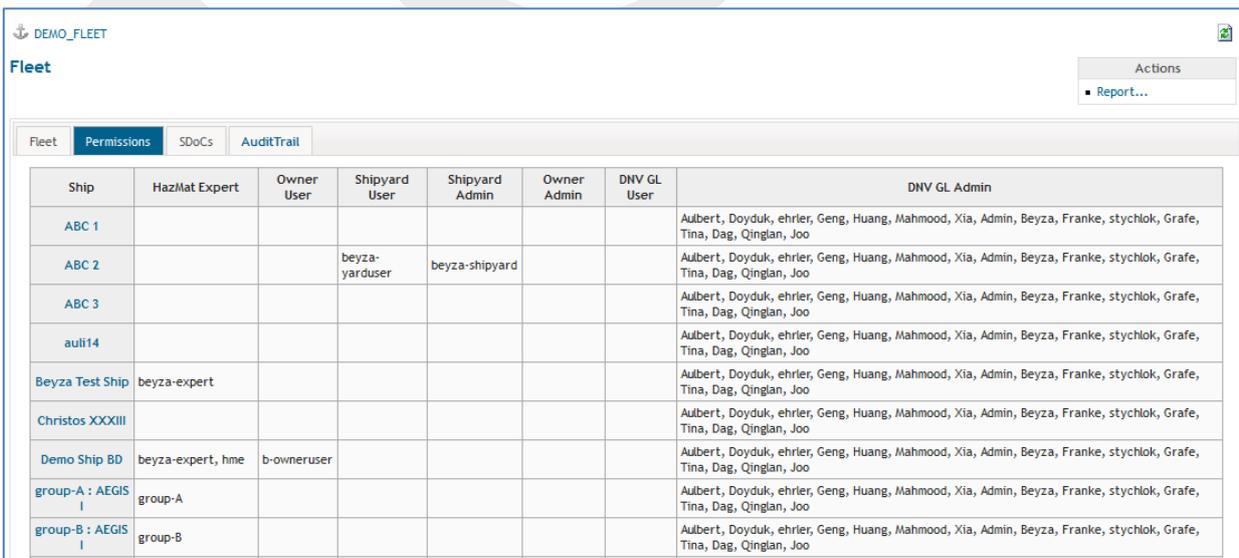
- Report...

Status	Name	IMO number	Register Number
	Ship 2	8888888	8888888
	Ship Test	4343434	2222

 IHM not started
  IHM in progress
  IHM completed

2.8 Permissions

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



DEMO_FLEET

Fleet

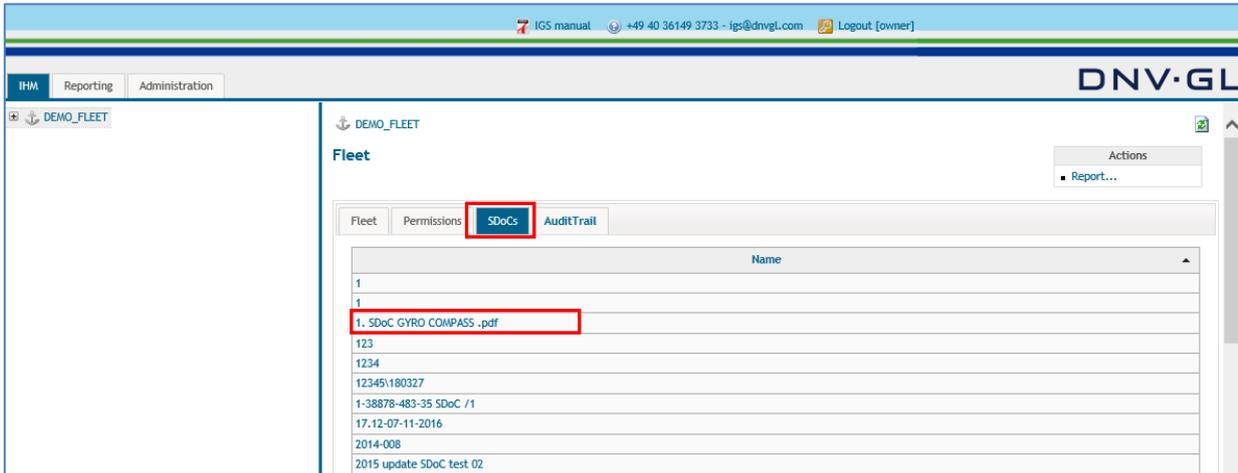
Actions

- Report...

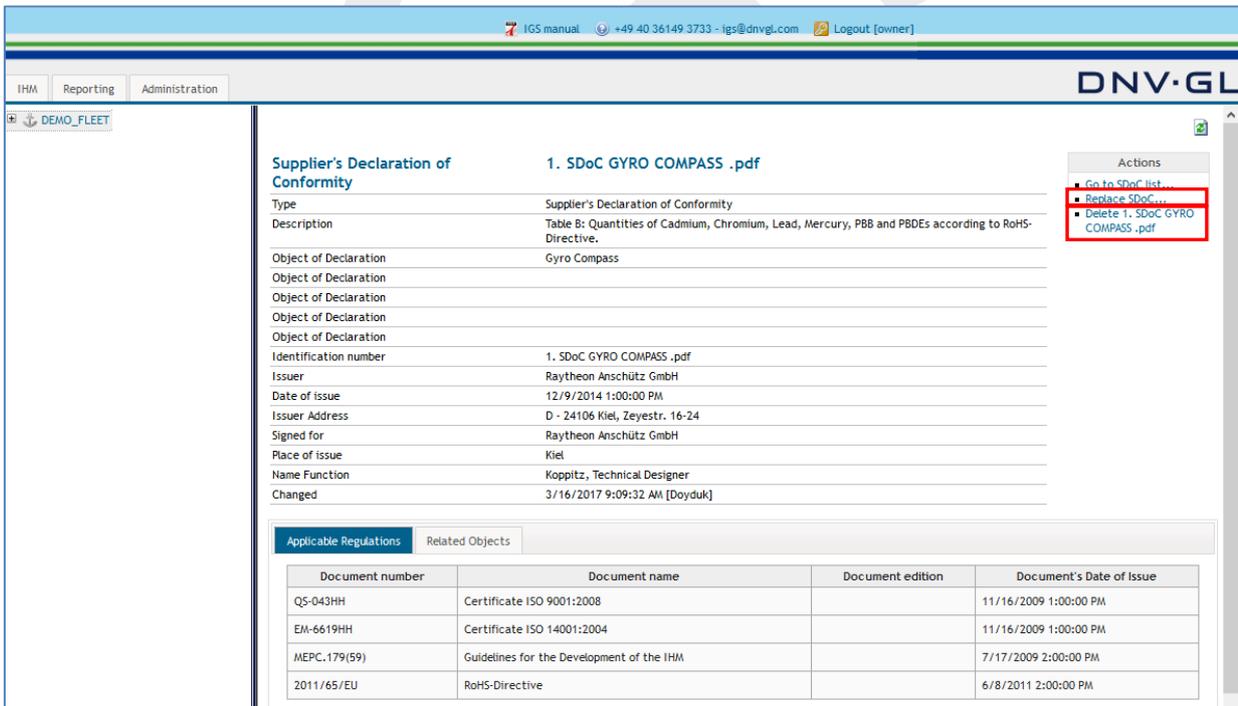
Ship	HazMat Expert	Owner User	Shipyard User	Shipyard Admin	Owner Admin	DNV GL User	DNV GL Admin
ABC 1							Aulbert, Doyduk, ehrler, Geng, Huang, Mahmood, Xia, Admin, Beyza, Franke, stychlok, Grafe, Tina, Dag, Qinglan, Joo
ABC 2			beyza-yarduser	beyza-shipyard			Aulbert, Doyduk, ehrler, Geng, Huang, 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.



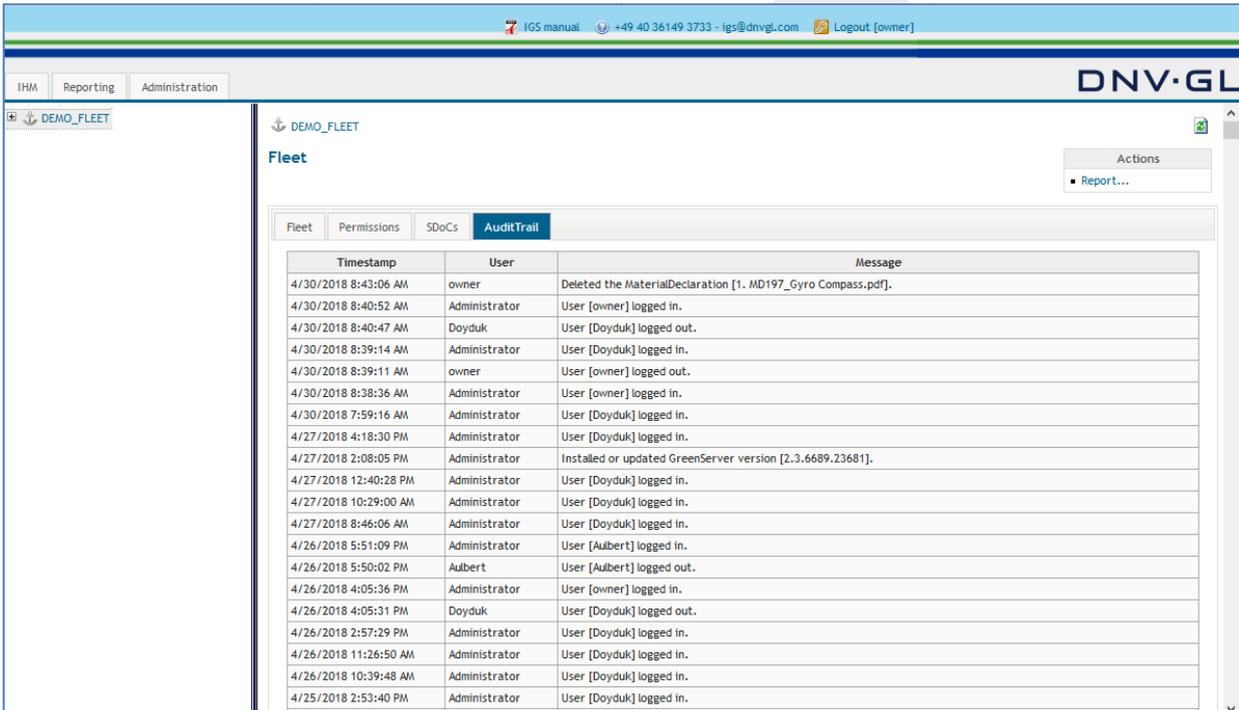
Either, select the "Replace SDoC..." link in the actions box to replace the SDoC.
Or, select the "Delete (SDoC Name)" link in the actions box to delete the SDoC.



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



The screenshot shows the DNV-GL fleet management interface. The top navigation bar includes 'IHM', 'Reporting', and 'Administration'. The main content area is titled 'Fleet' and has tabs for 'Fleet', 'Permissions', 'SDoCs', and 'AuditTrail'. The 'AuditTrail' tab is active, displaying a table of system events.

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 [Aubert] logged in.
4/26/2018 5:50:02 PM	Aubert	User [Aubert] 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.

The screenshot displays the DNV-GL IGS manual interface. At the top, there is a header with the text "IGS manual", a phone icon, "+49 40 36149 3733 - igs@dnvgl.com", and a "Logout [yard]" button. Below the header, there is a navigation bar with three tabs: "IHM", "Reporting", and "Administration". The "Reporting" tab is currently selected. The main content area is titled "DEMO_FLEET" and contains a "Fleet" view. In the top right corner of the "Fleet" view, there is an "Actions" dropdown menu with a red border, containing a single option "Report...". Below the "Actions" menu, there is a sub-navigation bar with four tabs: "Fleet", "Permissions", "SDoCs", and "AuditTrail". The "Fleet" tab is selected. Below the sub-navigation bar, there is a table with the following data:

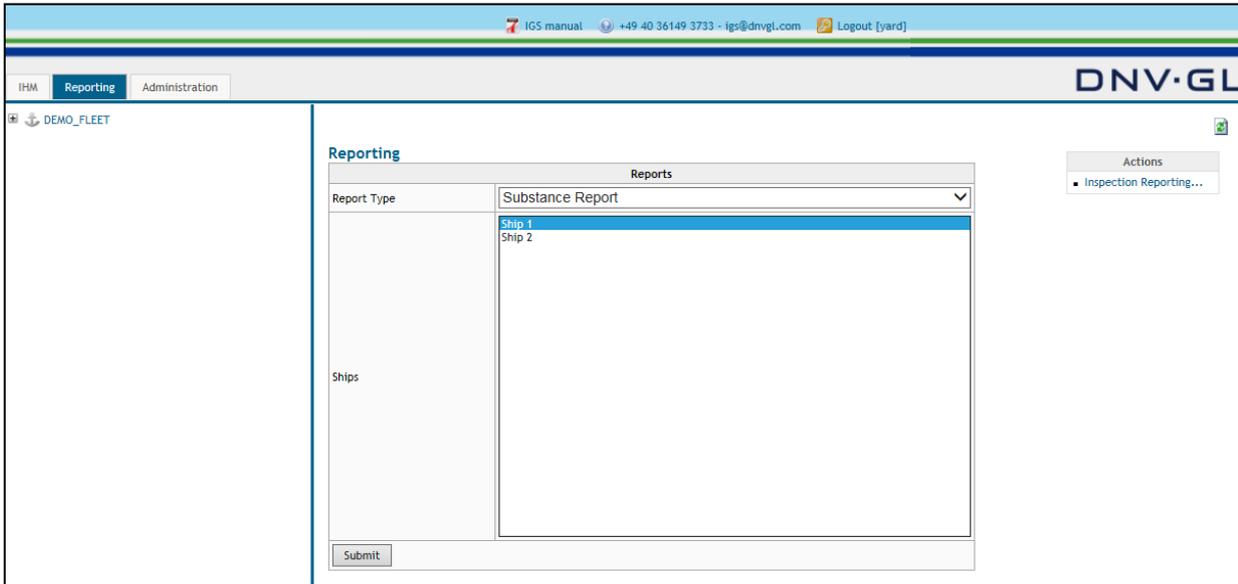
Status	Name	IMO number	Register Number
●	Ship 2	8888888	8888888
●	Ship Test	4343434	2222

Below the table, there is a legend for the status icons: a blue circle for "IHM not started", a yellow circle for "IHM in progress", and a green circle for "IHM completed".

2.12 Reporting of ship projects

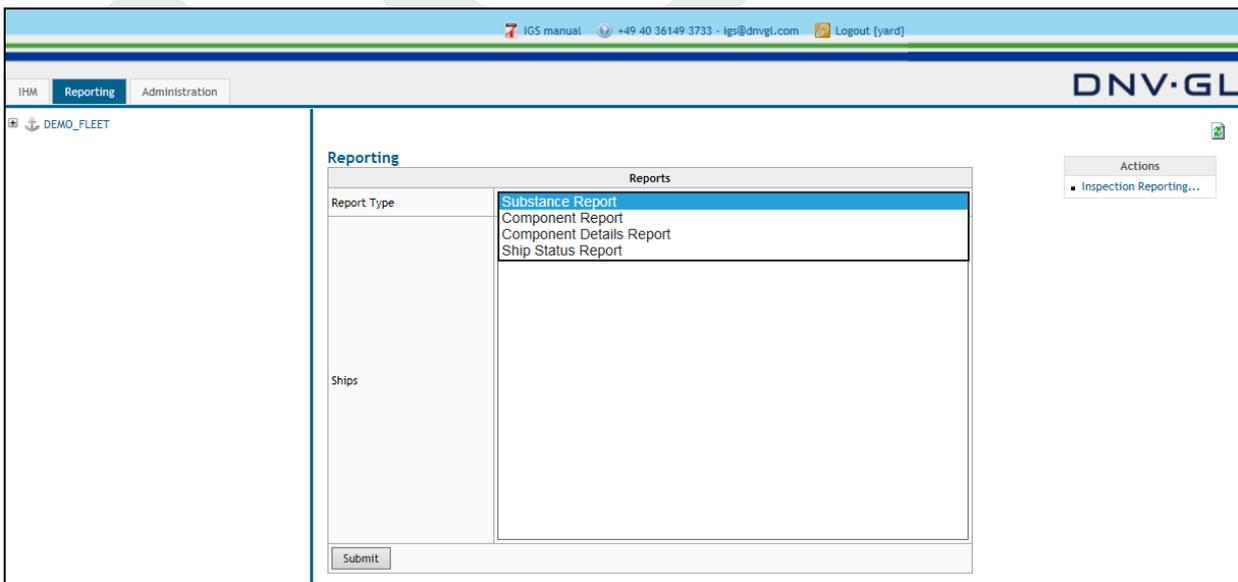
The shipyard admin, shipowner admin, and HazMat Expert profiles have the option to choose among 5 different statistical reports for a ship project or for the entire fleet as described below.

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.

	A	B	C	D
1		IHM Substance Report [kg]		
2		Substances	Demo Ship	
3	A-1	Asbestos	< 0.01	
4	A-2	Polychlorinated biphenyls (PCBs)	< 0.01	
5	A-3	Chlorofluorocarbons (CFCs)	0	
6	A-3	Halons	0	
7	A-3	Other fully halogenated CFCs	0	
8	A-3	Carbon tetrachloride	0	
9	A-3	1,1,1-Trichloroethane	0	
10	A-3	Hydrochlorofluorocarbons	0	
11	A-3	Hydrobromofluorocarbons	0	
12	A-3	Methyl bromide	0	
13	A-3	Bromochloromethane	0	
14	A-4	Anti-fouling systems containing organotin compounds as a biocide	< 0.01	
15	A-5	Perfluorooctane sulfonic acid (PFOS)	< 0.01	
16	B-1	Cadmium and cadmium compounds	< 0.01	
17	B-2	Hexavalent chromium and hexavalent chromium compounds	< 0.01	
18	B-3	Lead and lead compounds	500	
19	B-4	Mercury and mercury compounds	< 0.01	
20	B-5	Polybrominated biphenyl (PBBs)	0	
21	B-6	Polybrominated dephenyl ethers (PBDEs)	< 0.01	
22	B-7	Polychloronaphthalenes (Cl >= 3)	< 0.01	
23	B-8	Radioactive substances	199	
24	B-9	Certain shortchain chlorinated paraffins	< 0.01	
25	B-10	Brominated Flame Retardant (HBCDD)	0	
26		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.

	A	B	C	D	E
1		IHM Substance Report [kg]			
2		Substances	Test Ship	Demo Ship	
3	A-1	Asbestos	0	< 0.01	
4	A-2	Polychlorinated biphenyls (PCBs)	0	< 0.01	
5	A-3	Chlorofluorocarbons (CFCs)	0	0	
6	A-3	Halons	0	0	
7	A-3	Other fully halogenated CFCs	0	0	
8	A-3	Carbon tetrachloride	0	0	
9	A-3	1,1,1-Trichloroethane	0	0	
10	A-3	Hydrochlorofluorocarbons	0	0	
11	A-3	Hydrobromofluorocarbons	0	0	
12	A-3	Methyl bromide	0	0	
13	A-3	Bromochloromethane	0	0	
14	A-4	Anti-fouling systems containing organotin compounds as a biocide	0	< 0.01	
15	A-5	Perfluorooctane sulfonic acid (PFOS)	0	< 0.01	
16	B-1	Cadmium and cadmium compounds	0	< 0.01	
17	B-2	Hexavalent chromium and hexavalent chromium compounds	0	< 0.01	
18	B-3	Lead and lead compounds	< 0.01	500	
19	B-4	Mercury and mercury compounds	0	< 0.01	
20	B-5	Polybrominated biphenyl (PBBs)	0	0	
21	B-6	Polybrominated dephenyl ethers (PBDEs)	0	< 0.01	
22	B-7	Polychloronaphthalenes (Cl >= 3)	0	< 0.01	
23	B-8	Radioactive substances	0	199	
24	B-9	Certain shortchain chlorinated paraffins	0	< 0.01	
25	B-10	Brominated Flame Retardant (HBCDD)	0	0	
26		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).

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		Ozone depleting substance: <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.

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	Accommodation Refrigerant Machine		Ozone depleting substance: <0.01
AH Drum Winch		Asbestos: <0.01	AH Drum Winch		Asbestos: <0.01
Air pipe head			Astern Truster Motor		Asbestos: <0.01
Auxiliary machinery					
Auxiliary 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
Calonfier			Bow Thruster Motor		Asbestos: <0.01
Compressor			Cement Compressor		Asbestos: <0.01
Condenser					
Condenser (oil cooled)					
Crane					
Crane					
Crane					
Electric equipment					
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.

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)	SNoC No (MD)	Remarks (MD)	Delivered Amount (MD)	Delivered Unit (MD)	Product (MD)
Machinery and Equipment	Accommodation	Refrigerant Machine		Tween Deck Fwd	1	piece		<0.01								0		
Machinery and Equipment	Aft Churn	Aft Churn		Main Deck	1	piece		Asbestos: <0.01								0		
Machinery and Equipment	Astern Thruster Motor	Astern Thruster Motor		Tank Top Aft	1	piece		Asbestos: <0.01								0		
Machinery and Equipment	Batteries for Aux.	Batteries for Aux.		Tween Deck Fwd	1	piece		Lead and lead compounds: <0.01								0		
Machinery and Equipment	Batteries for General	Batteries for General		A Deck - Emergency	1	piece		Lead and lead compounds: <0.01								0		
Machinery and Equipment	Batteries for GMDSS	Batteries for GMDSS		Wheelhouse top	1	piece		Lead and lead compounds: <0.01								0		
Machinery and Equipment	Bow Thruster Motor	Bow Thruster Motor		Tween Deck Fwd	1	piece		Asbestos: <0.01								0		
Machinery and Equipment	Cement Compressor	Cement Compressor		Tween Deck Aft	1	piece		Asbestos: <0.01								0		
Machinery and Equipment	F.O. Purifier	F.O. Purifier		Tank Top Fwd	1	piece		Asbestos: <0.01								0		
Machinery and Equipment	F.V. Fire Heater	F.V. Fire Heater		Tween Deck Fwd	1	piece		Asbestos: <0.01								0		
Machinery and Equipment	Genset	Genset		Tween Deck Aft	1	piece		Mercury and mercury: <0.01								0		
Machinery and Equipment	L.O. Purifier	L.O. Purifier		Tank Top Fwd	1	piece		Asbestos: <0.01								0		
Machinery and Equipment	Lifeboat Davit	Lifeboat Davit		B Deck	1	piece		Asbestos: <0.01								0		
Machinery and Equipment	Main Air Compressor	Main Air Compressor		Tween Deck Fwd	1	piece		Asbestos: <0.01								0		
Machinery and Equipment	Miss. Crane	Miss. Crane		B Deck	1	piece		Asbestos: <0.01								0		
Machinery and Equipment	Propeller shafting	Propeller shafting		Tank Top Aft	1	piece		Asbestos: <0.01								0		
Machinery and Equipment	Provision Refrigerant	Provision Refrigerant		Tween Deck Fwd	1	piece		Ozone depleting substance: <0.01								0		
Machinery and Equipment	Sewage treatment	Sewage treatment		Tank Top Fwd	1	piece		Asbestos: <0.01								0		
Machinery and Equipment	Steering Gear	Steering Gear		Tween Deck Aft	1	piece		Asbestos: <0.01								0		
Machinery and Equipment	Stem Tube Seal	Stem Tube Seal		Tank Top Aft	1	piece		Asbestos: <0.01								0		
Machinery and Equipment	Towing Vlnch	Towing Vlnch		Main Deck	1	piece		Asbestos: <0.01								0		
Machinery and Equipment	Transformer (el)	Transformer (el)		A Deck - Emergency	1	piece		Polychlorinated biphenyls: <0.01								0		
Machinery and Equipment	Windlass	Windlass		Main Deck	1	piece		Asbestos: <0.01								0		
System	Accommodation			B Deck - Forecabin	1	piece		Asbestos: <0.01								0		
				Tween Deck Fwd	1	piece		Ozone depleting substance: <0.01								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.

33 Machinery and Equipment	
34 Machinery and Equipment	
35 Machinery and Equipment	
36 Machinery and Equipment	
37 Machinery and Equipment	
38 Machinery and Equipment	
39 Machinery and Equipment	

Ready | Test Ship | Demo Ship | +

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.

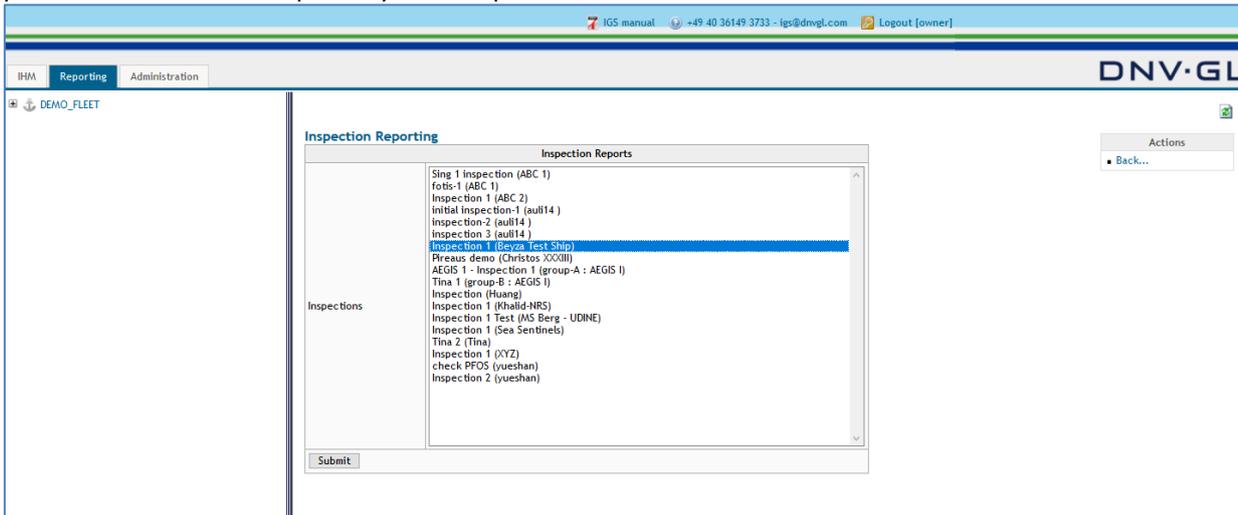
	A	B	C
1	IHM Ship Status Report	Demo Ship	
2	Attributes	Data	
3	Class Id. No.	12345	
4	IMO-No.	1177889	
5	Name of manager	Top Ship Management	
6	Building Yard		
7	Port of registry	Best Port	
8	Flag state	Malaysia	
9	Code		
10	Signal letters	9M9M	
11	Building Year	2017	
12	Date of build	12/31/2016 11:00:00 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	Product Category	Notes
72	Equipment type	Air compressor	
73	Missing Machinery & Equipment	Air Handling unit (AHU)	
74		Air receiver	
75		Anchor	
76		Anemometer	
77		Autopilot	
78		Auxiliary Engine	
79		Ballast water treatment plant	
80		Battery	
81		Battery chargers	
82		Boiler	
83		Compass	
84		Console	
85		Cooler	
86		Crane	
87		Davit	
88		Detector	
89		Distribution board	
90		Door	
91		Doppler	
92		Echo sounder	
93		Elevator	
94		EPIRB	
95		Exhaust gas economizer	
96		Filter	
97		FO Heater	
98		FO supply unit	
99		Galley	
100		Gauge	
101		Generator	
102		Heater	
103		Incinerator	
104		Indicator	
105		Inmarsat	
106		Jacket water pre-heater	
107		Junction box	
108		Ladder	
109		Lavatory&Laundry	
110		Life Saving	
111		Lifeboat	
112		Light	
113		LO purifier heater	
114		Magnetic compass	
115		Main Engine	
116		MF/HF radio equipment	
117		NAVTEX	
118			

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.

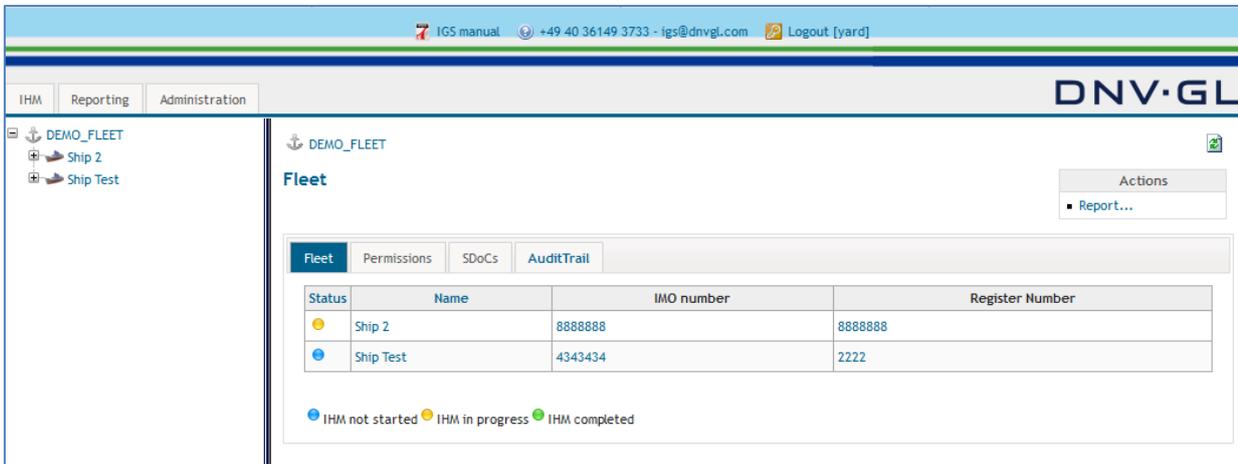


Inspection report shows the number of checkpoints and the results of found hazardous materials in those checkpoints.

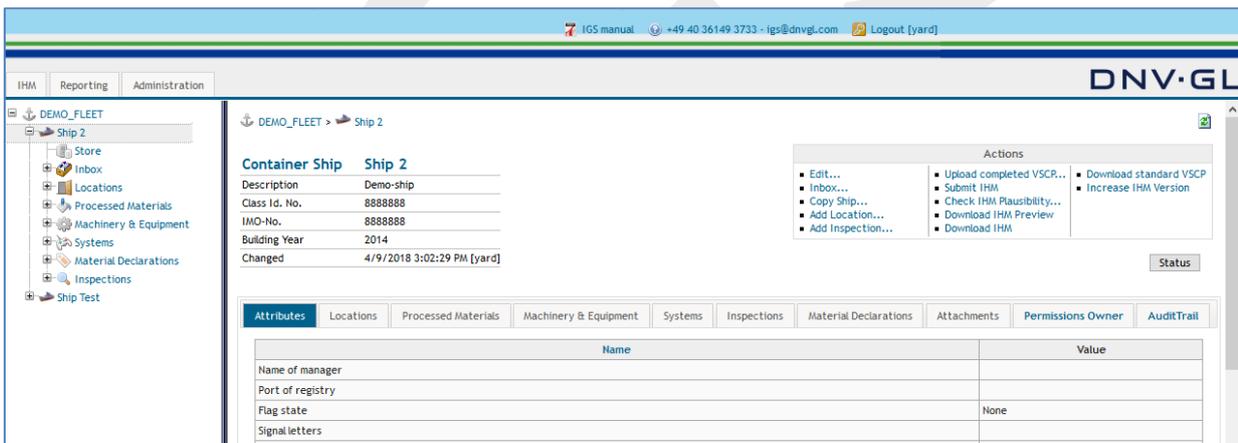
Substance and Inspection Report		Inspection 1					
Inspection Name		Demo Ship					
Name		1177889					
IMO Number							
HazMats		Amount	Number				
		[kg]	Sample Cp.	Visual Cp.	Assumption	Total Cp.	Total positive Cp.
A-1	Asbestos	0	44	189	0	233	0
A-2	Polychlorinated biphenyls (PCBs)	0	6	4	0	10	0
A-3	Ozone 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 diphenyl 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

2.14 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

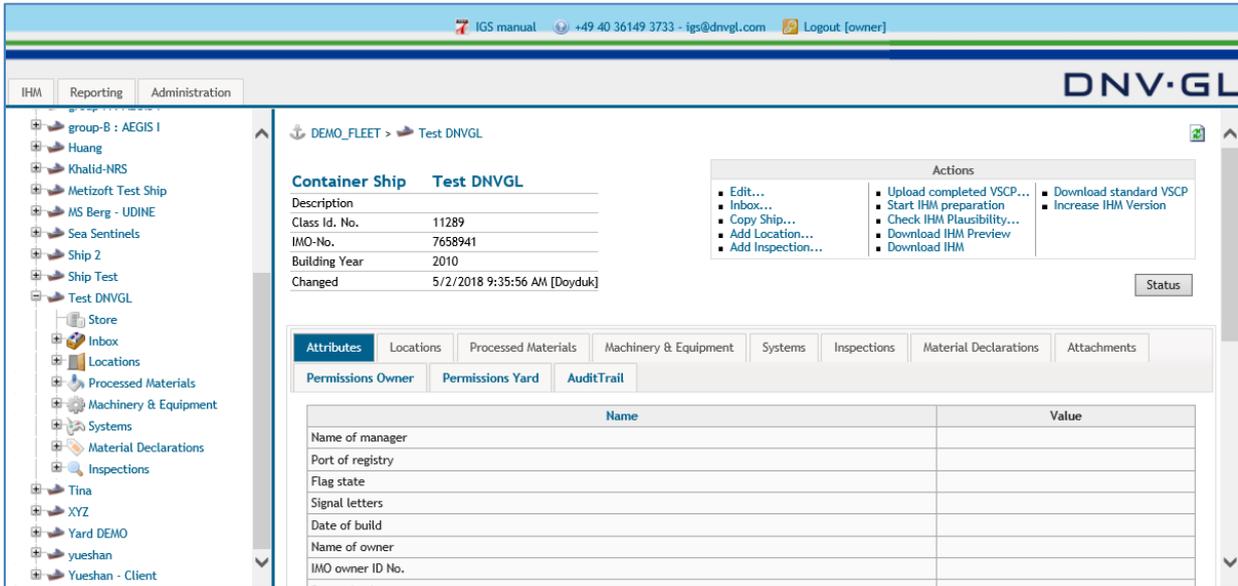
For administrative purposes the user has the opportunity to view the ship status details in a pop-up window. Select the "Status" link on the right side of the ship project view to view the ship status details.

The screenshot shows the DNV-GL IGS manual interface. The main window displays the 'Ship 2' project view. On the right side, there is an 'Actions' menu with a 'Status' link highlighted in a red box. A pop-up window titled 'IHM Status details of ship Ship 2:' is open, showing a table of ship status details.

Property	Value
Ship Name	Ship 2
IMO Number	8888888
Class Id No.	8888888
IHM Status	In progress
Number of Machinery & Equipment	4
Number of Processed Materials	1
Number of Systems	1
Number of inspection based MDs	0
Number of supplier based MDs	6
Number of SDeCs	5
Plausibility	All items are plausible.
Substances	
Lead and lead compounds	1573.4
Inspections	

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.

The screenshot shows the DNV-GL fleet view. At the top, there is a navigation bar with 'IHM', 'Reporting', and 'Administration' tabs. The main area contains a table of ships. The 'Test DNVGL' row is highlighted with a red border. Below the table, there is a legend for IHM status: 'IHM not started' (blue dot), 'IHM in progress' (yellow dot), and 'IHM completed' (green dot).

Ship Name	IMO No.	Class Id. No.
group-B : AEGIS 1	7777777	6666
Huang	1234569	123
Khalid-NRS	9314580	G111117
Metzofz Test Ship	1212123	121212
MS Berg - UDINE	9845269	114242
Sea Sentinels	1177889	12345
Ship 2	8888888	8888888
Ship Test	4343434	2222
Test DNVGL	7658941	11289
Tina	2222222	1111111
XYZ	3333333	12345
Yard DEMO	1234567	123456
yueshan	1111111	111111
Yueshan - Client	6325943	42315

The screenshot shows the DNV-GL ship details view for 'Test DNVGL'. The ship is identified as a 'Container Ship'. The 'Actions' menu is open, and the 'Start IHM preparation' option is highlighted with a red box. Below the actions menu, there are tabs for 'Attributes', 'Locations', 'Processed Materials', 'Machinery & Equipment', 'Systems', 'Inspections', 'Material Declarations', and 'Attachments'. The 'Attributes' tab is active, showing a table with columns for 'Name' and 'Value'.

Container Ship Test DNVGL

Description: _____
 Class Id. No.: 11289
 IMO-No.: 7658941
 Building Year: 2010
 Changed: 5/2/2018 9:35:56 AM [Doyduk]

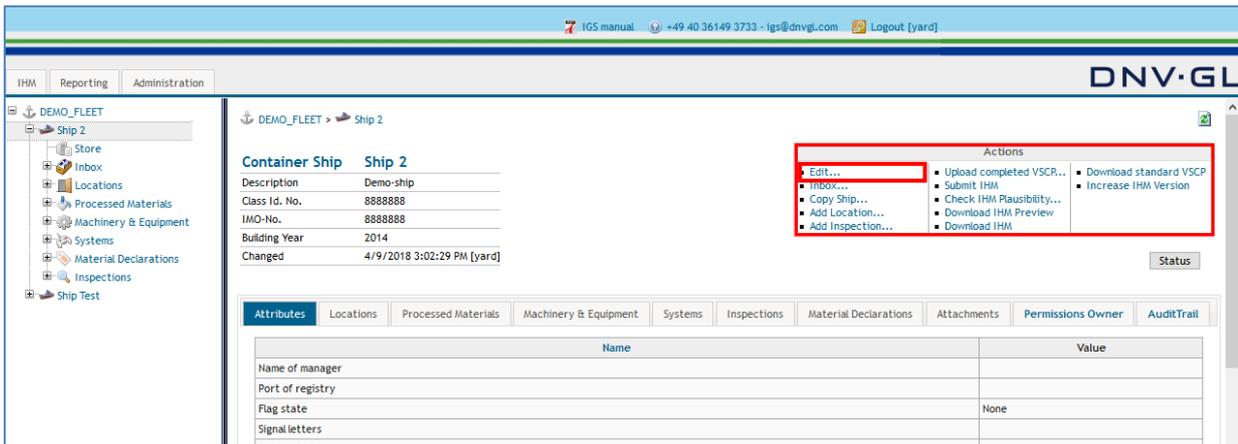
Actions

- Upload completed VSCP...
- Start IHM preparation**
- Check IHM Plausibility...
- Download IHM Preview
- Download IHM
- Download standard VSCP
- Increase IHM Version

Name	Value
Name of manager	
Port of registry	
Flag state	
Signal letters	
Date of build	
Name of owner	
IMO owner ID No.	

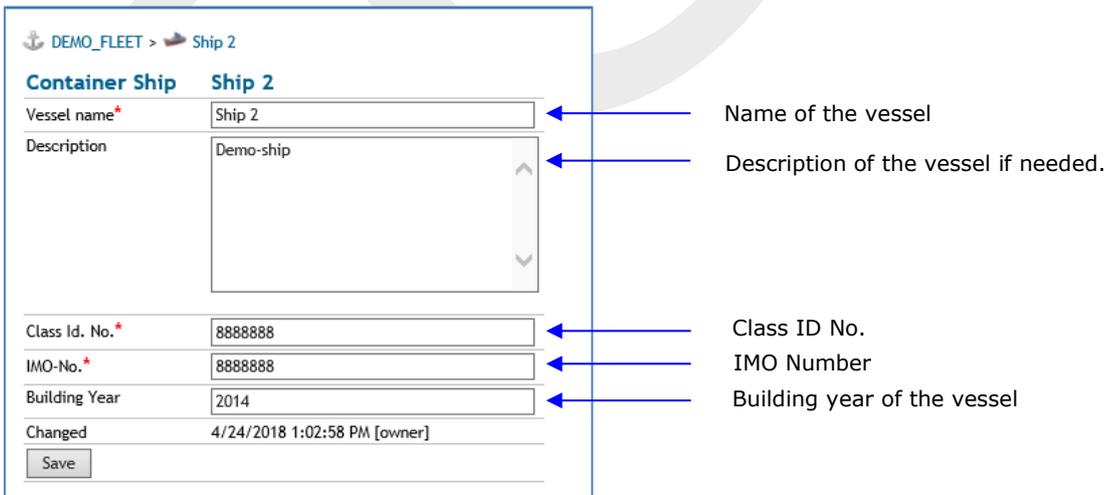
3.2 Edit a ship project

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)

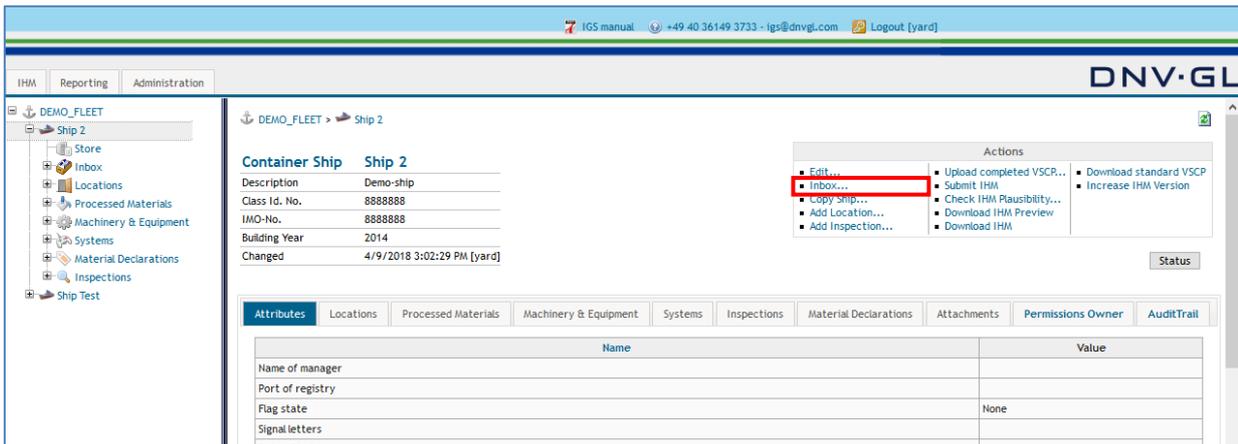
Finally click on "Save".



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

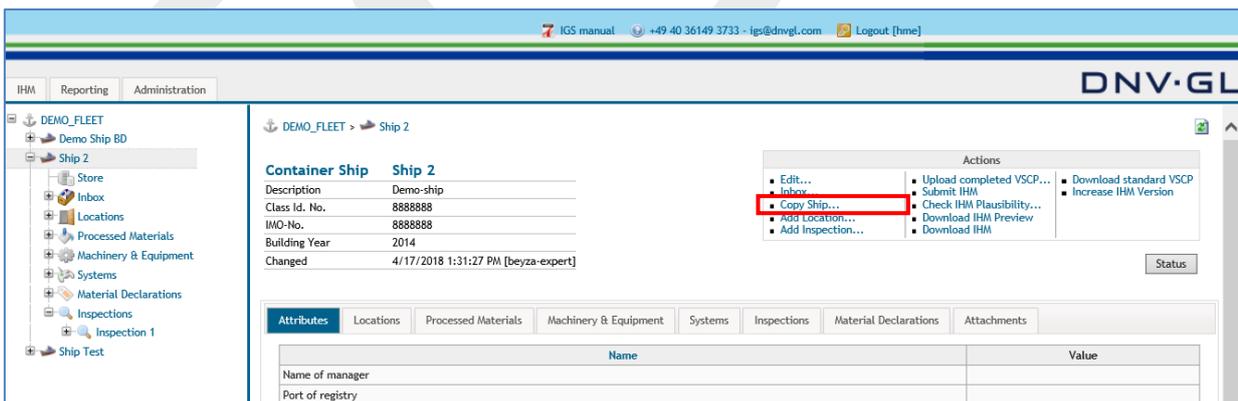
3.3 Inbox

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**.



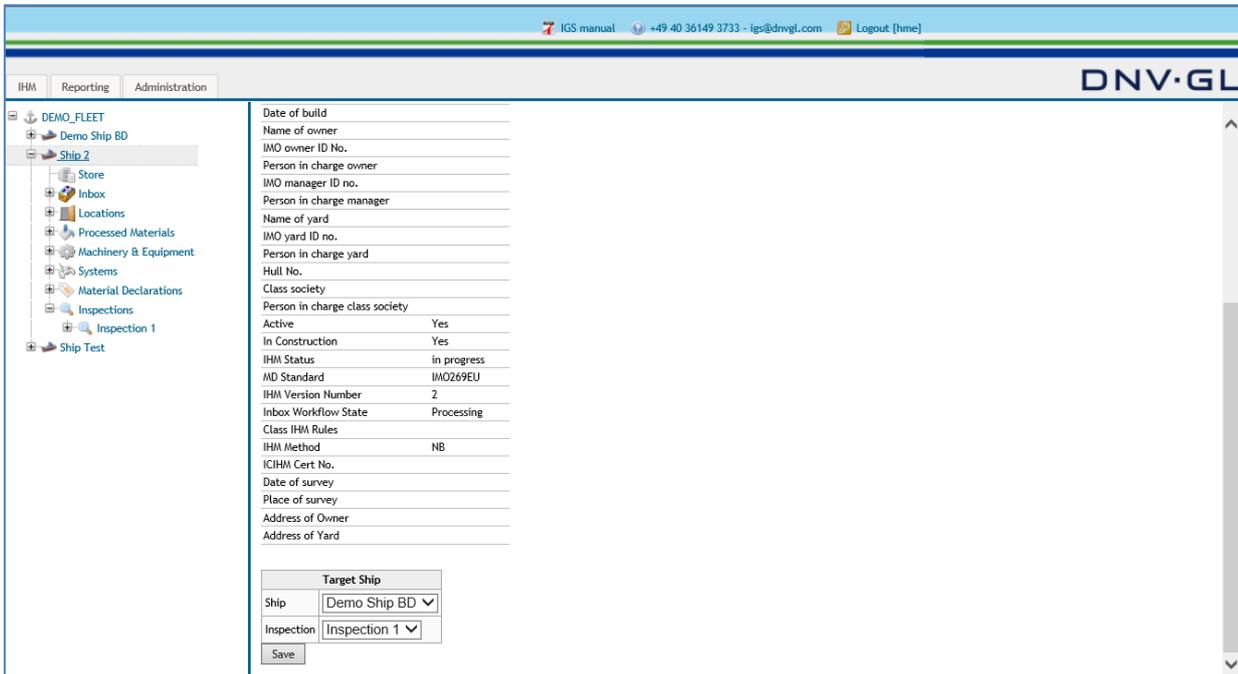
3.4 Copy ship

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.

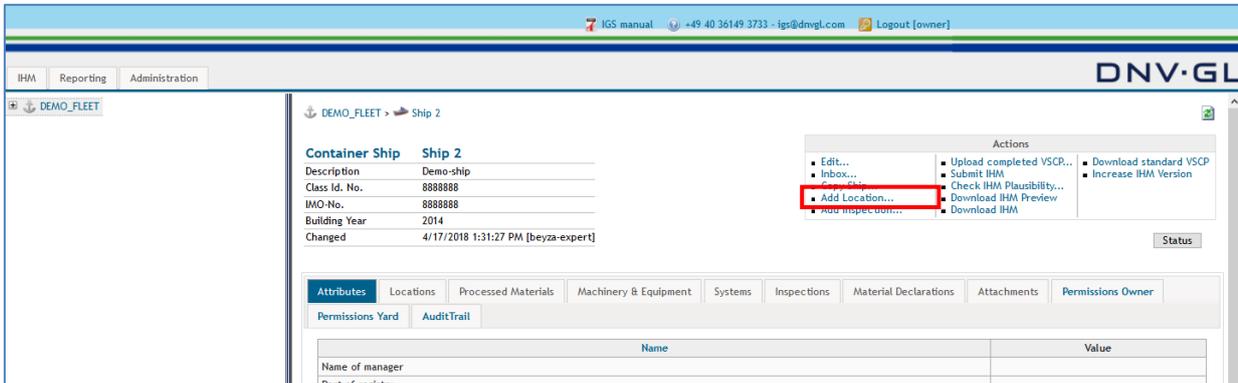
Note: All ship data of the prototype ship will be moved to the sister ship. The transferred ship data has to be verified in the inbox or in the inspection of the sister ship to finalize the IHM preparation process of the sister ship.

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

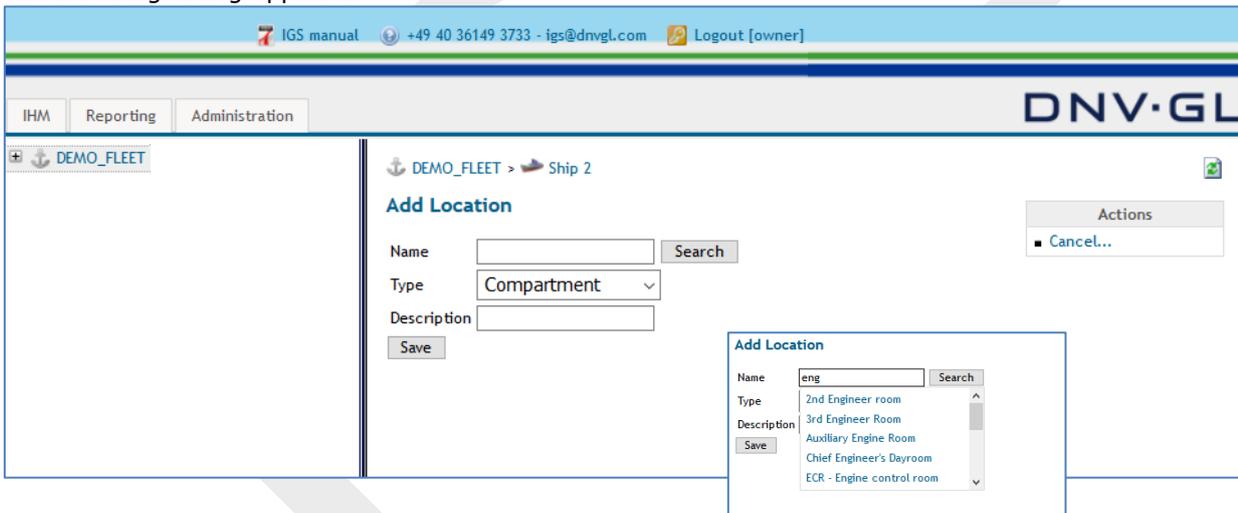
To add a new location to the ship project the user has to select the ship project tab from the navigation tree on the left side and open the node "+". Then select the "Add Location..." link in the actions box on the upper right side of the main view to add a new location to the ship.



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.

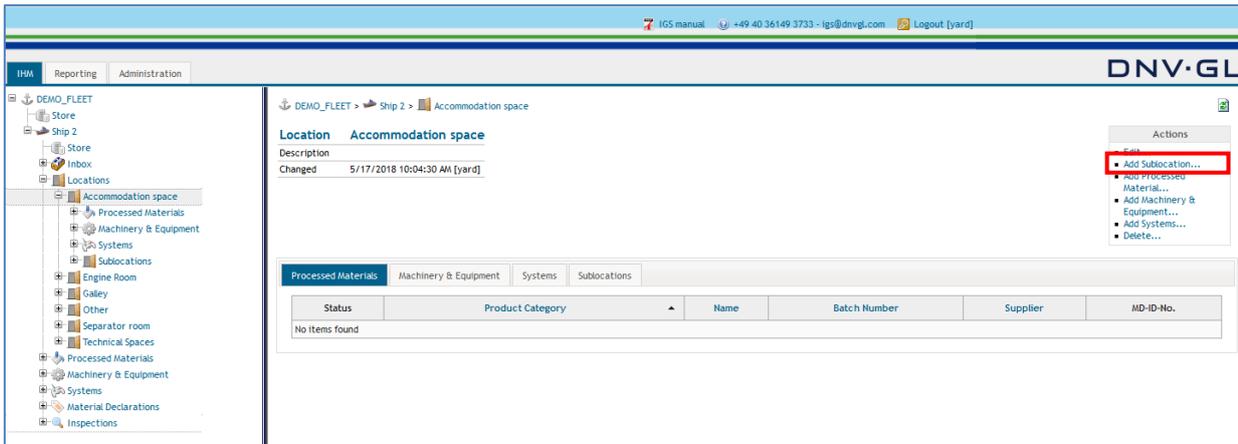


Fill in the required information to add the new location.

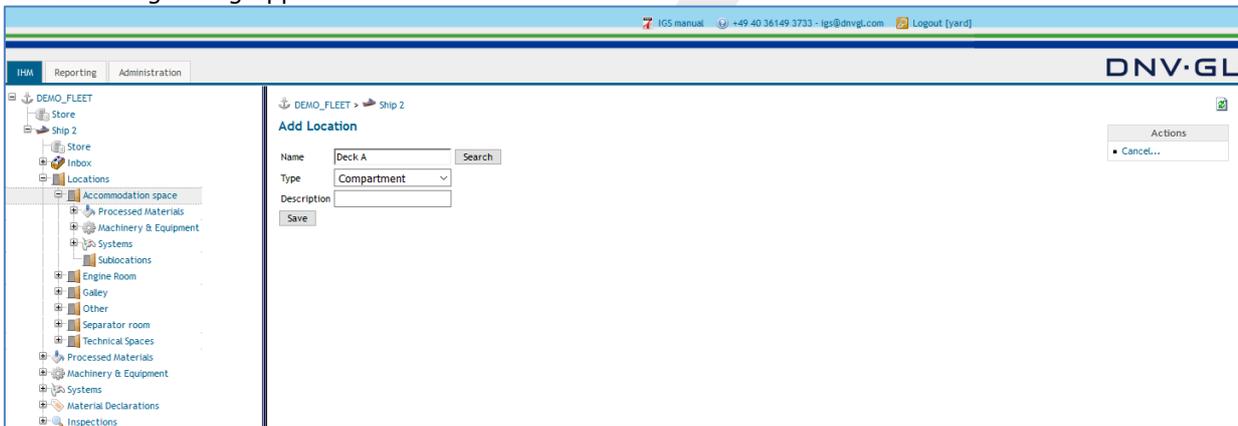
Finally click on "Save".

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).

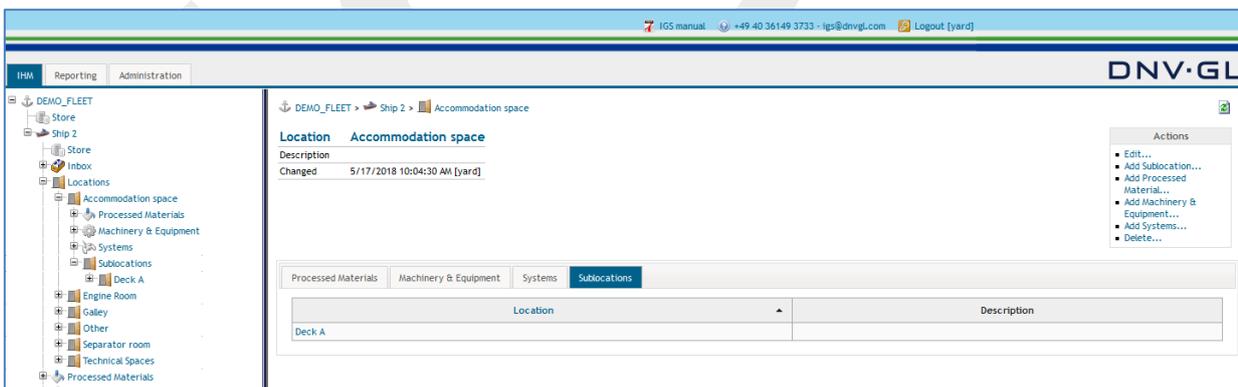
To add a sub-location to a main location, open the main location from the navigation tree on the left side by clicking the node "+". Then select the "Add sublocation" link in the actions box on the upper right side of the main view to add a new sublocation to the ship.



The following dialog appears.



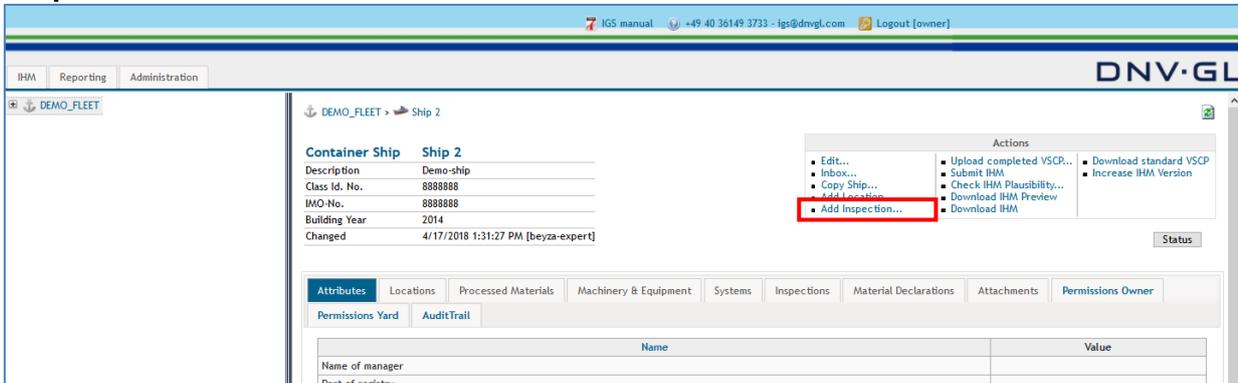
Enter the sublocation name into "Name" field. Click "Save".



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**.

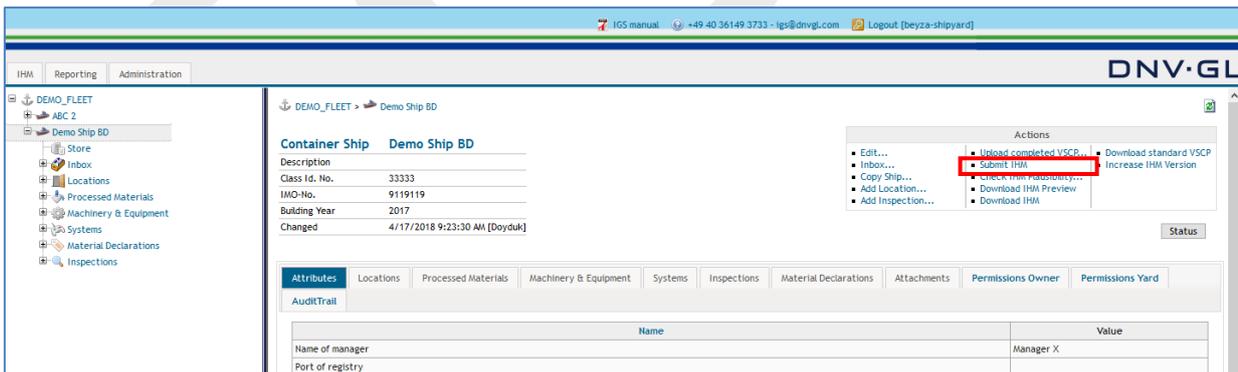


3.7 Upload completed VSCP

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.



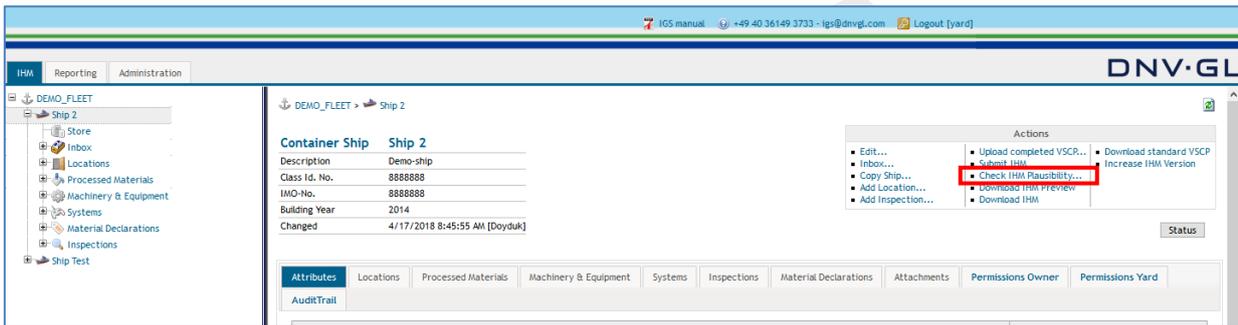
The DNV GL approval engineer in charge will then evaluate the inserted data of the IHM preparation and issue the certificate if no further deficiencies occur. In case of open deficiencies, the DNV GL approval engineer in charge will send an e-mail with the open remarks through the NPS system to the shipyard/shipowner.

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).

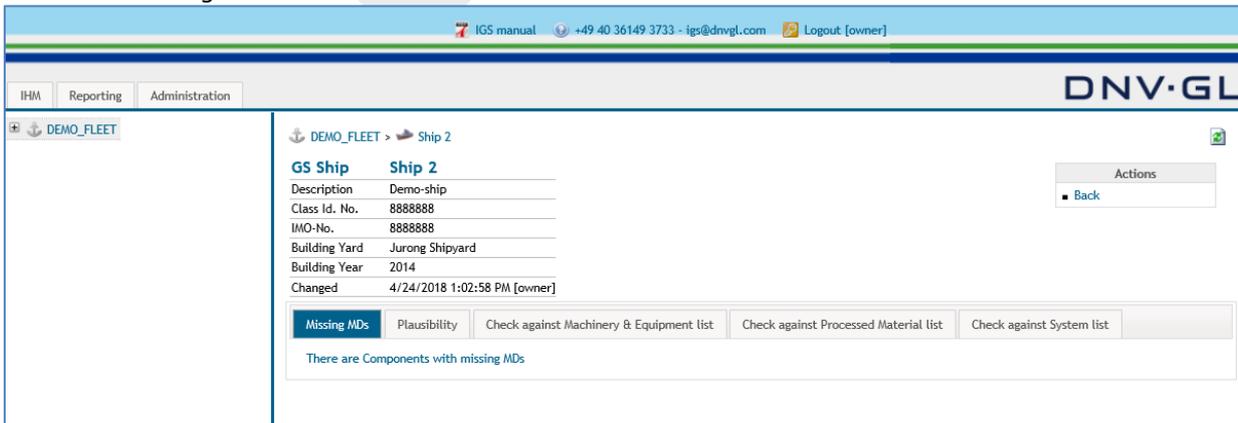
Select the "Check IHM Plausibility..." link in the actions box in the upper right corner of the main view to perform a plausibility check. Plausibility check can be performed even before clicking "Request Confirmation" link in the inbox.



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.



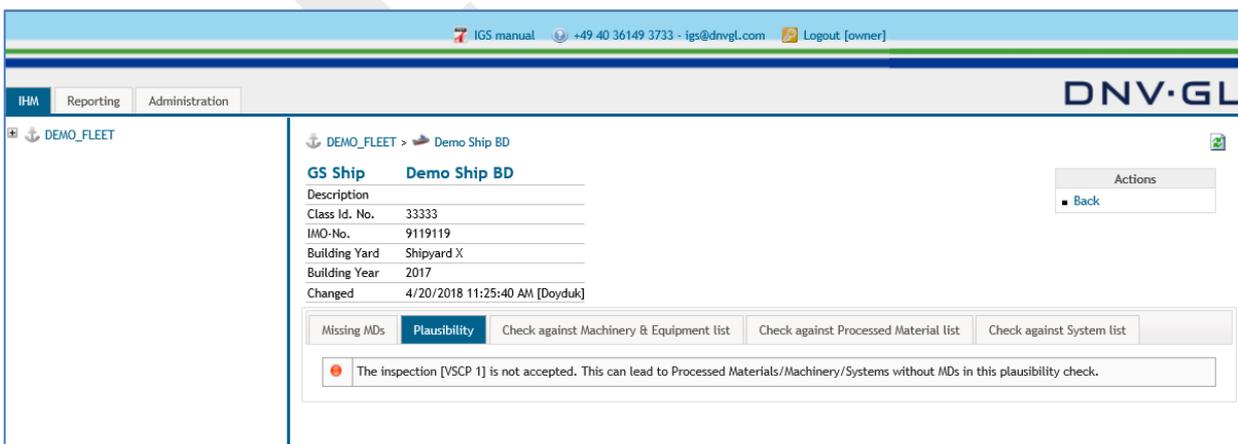
After inspection is accepted, inspection based material declarations will be created and "Missing MDs" under the plausibility check will give the message as "All components have MDs assigned".



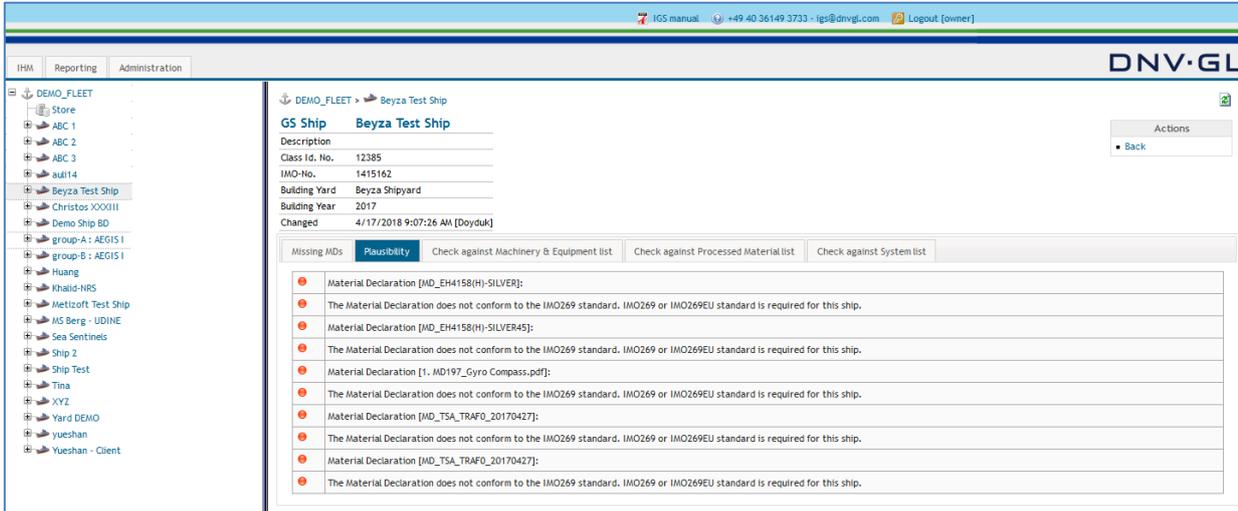
The second tab "Plausibility" checks the components and materials (Processed Materials, Machinery & Equipment and Systems) against the plausibility of the submitted data (SDoCs and MDs) and entered specific MD information (attributes). If the MDs are uploaded to inbox only, "Plausibility" field will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

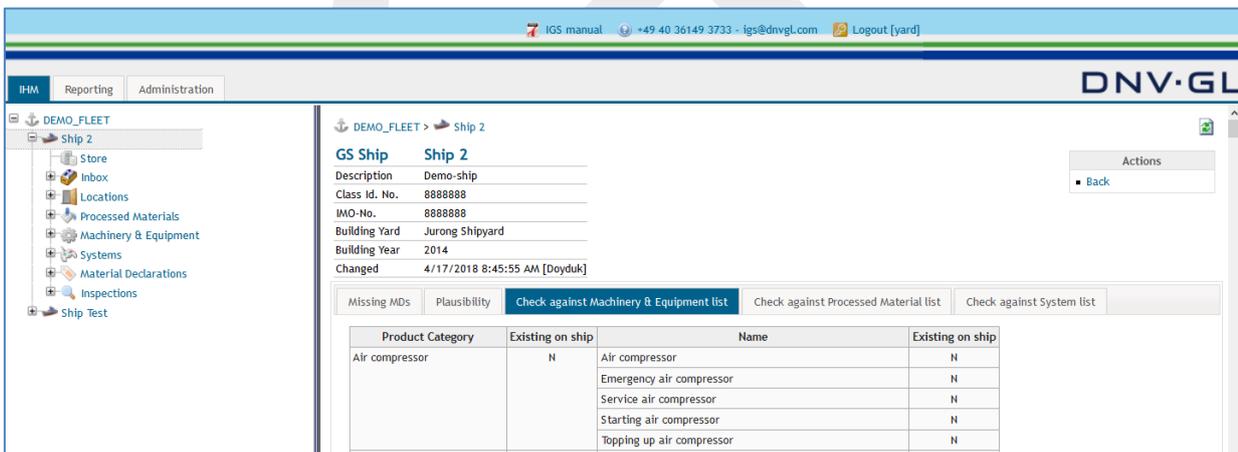


After inspection is accepted, inspection based material declarations will be created and “Plausibility” will list only the MDs that have nonconformities with the project.



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.



IGS manual +49 40 36149 3733 - igs@dnvgl.com Logout [yard] DNV-GL

IHM Reporting Administration

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]

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
		Electric cable	N

Actions
 ■ Back

IGS manual +49 40 36149 3733 - igs@dnvgl.com Logout [yard] DNV-GL

IHM Reporting Administration

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]

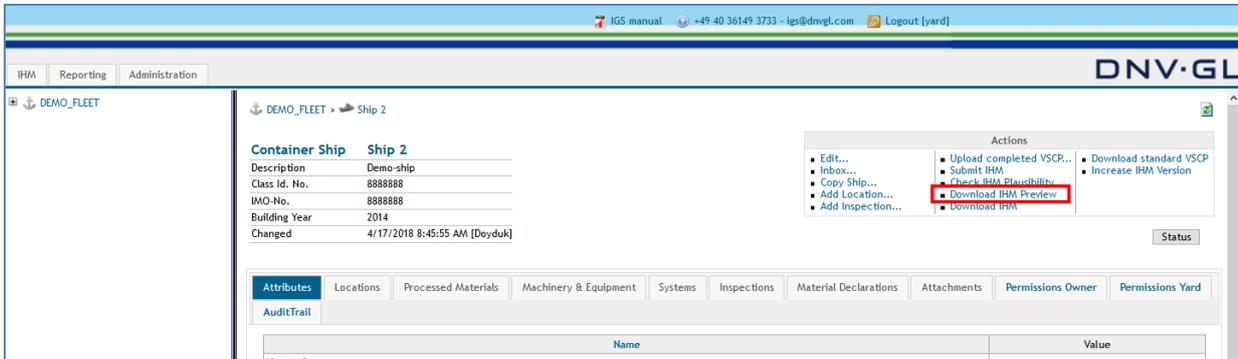
Missing MDs Plausibility Check against Machinery & Equipment list **Check against System list** Check against Processed Material list

Product Category	Existing on ship	Name	Existing on ship
AIS	N	AIS - Automatic identification system	N
Alarm System	N	Blige 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

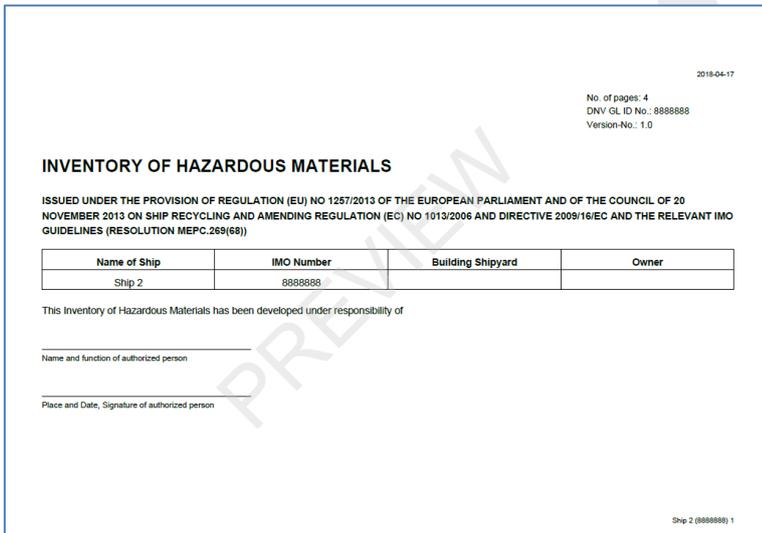
Actions
 ■ Back

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.

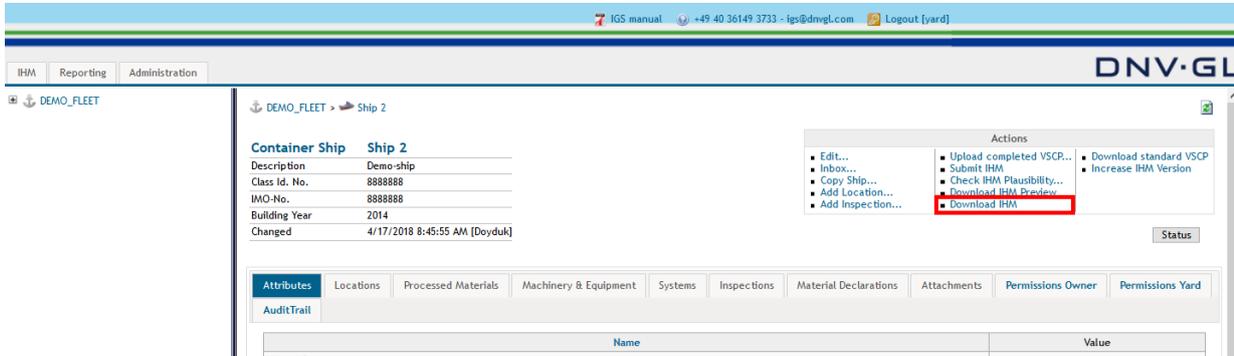


Note: Even before clicking “Request confirmation” link in the inbox, IHM preview can be generated so that users can clearly see and have an overview on the IHM, to check the correctness of the project.

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

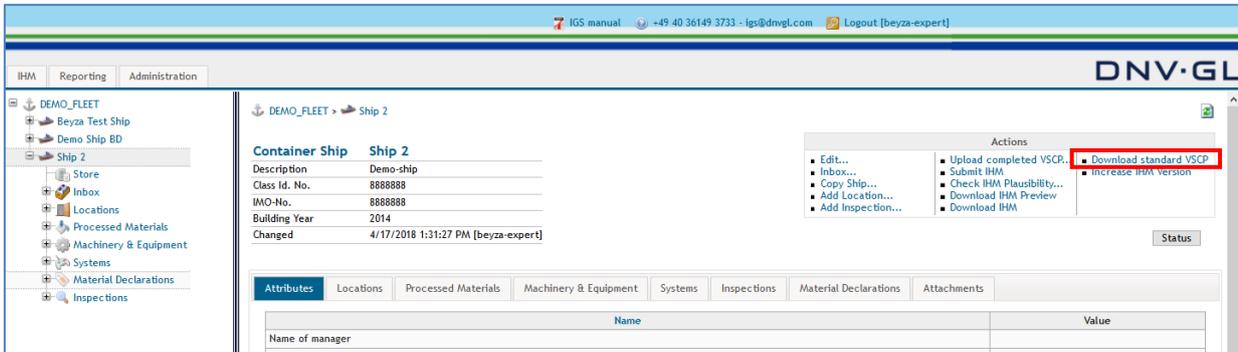
To view the prepared final IHM, the user must select the “Download IHM...” link in the actions box in the ship project view.



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

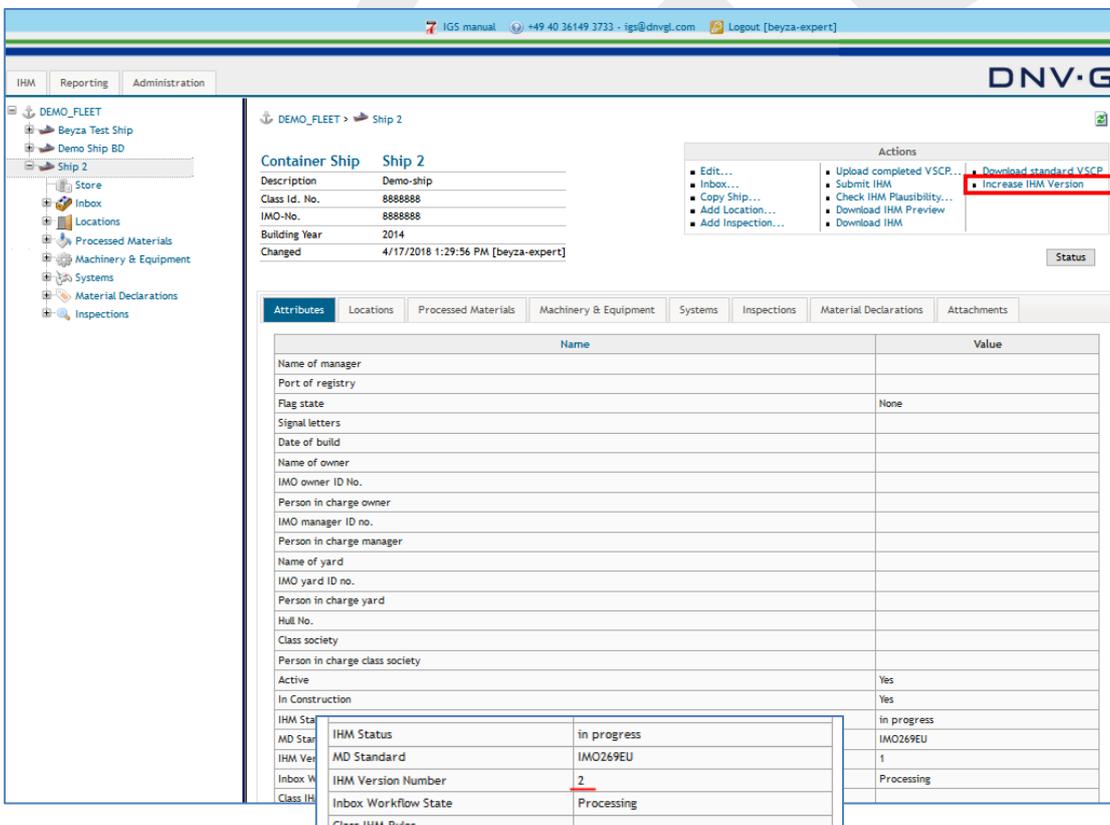
DNV GL has worked on and prepared a standard VSCP for the users of IGS. The standard VSCP is based on the check items listed in the indicative list provided in MEPC269(68) and can be downloaded in excel format by clicking "Download standard VSCP" link in the actions box.



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

3.13 Increase IHM version

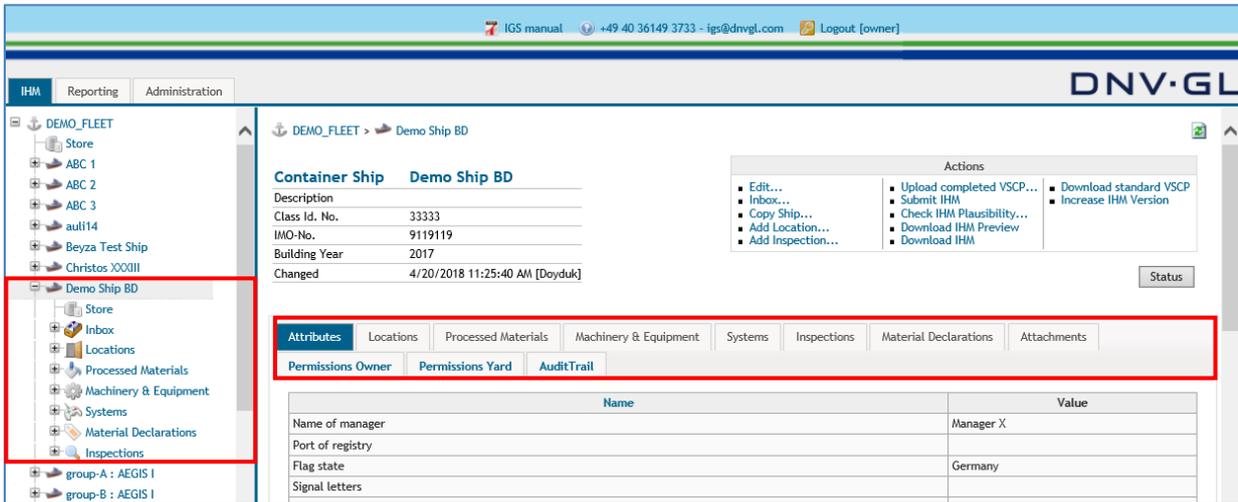
For administrative purposes the user has the opportunity to Increase IHM version. Select the "Increase IHM Version" link in the actions box in the ship project view to increase the IHM version numbering.



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

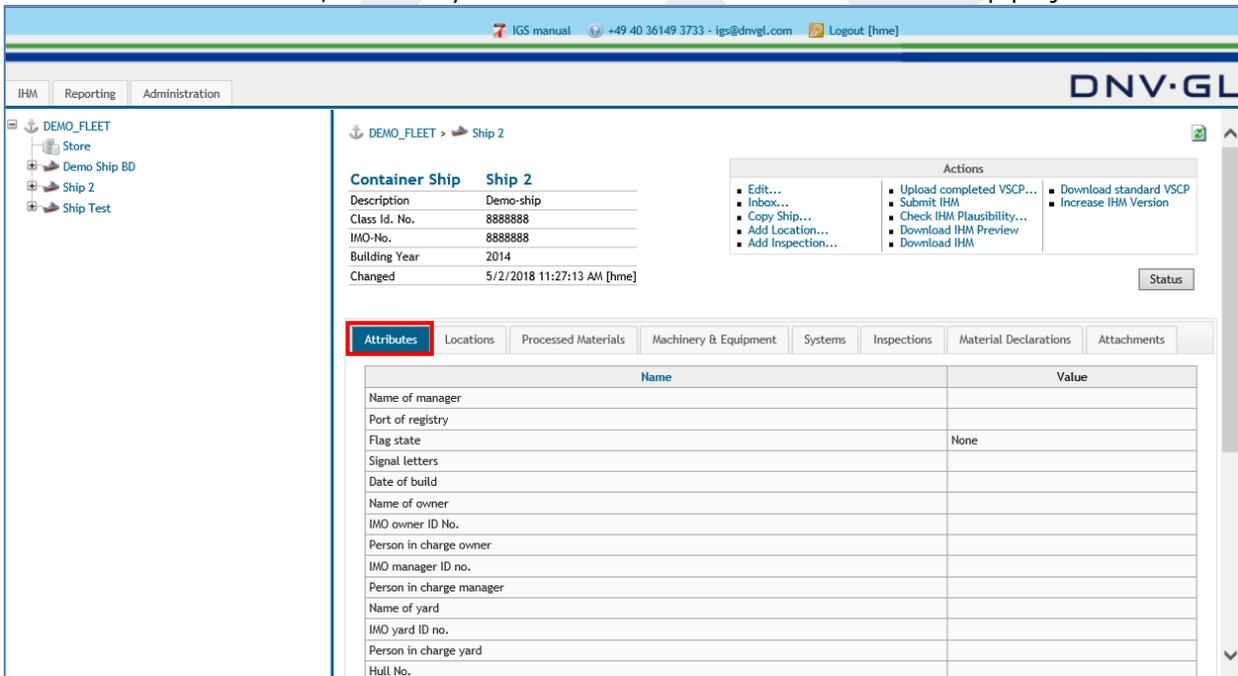
3.14 Navigation bar in ship view

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.



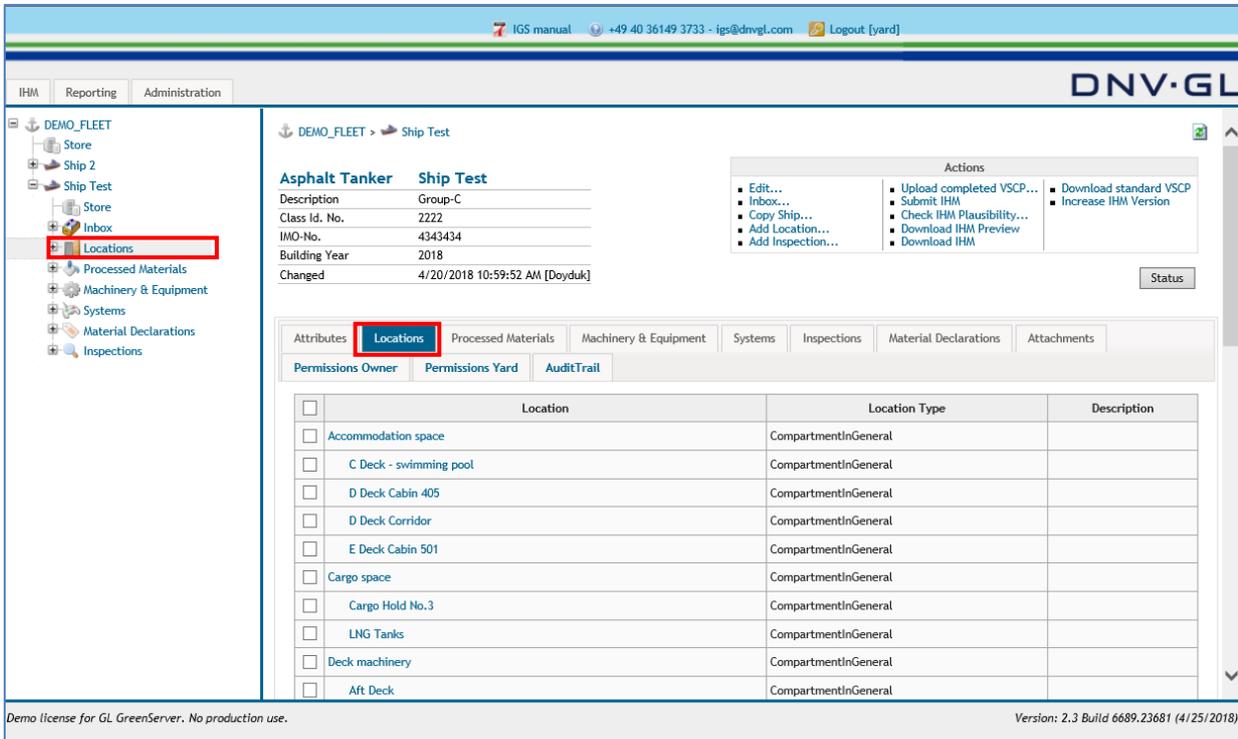
3.14.1 Attributes tab

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.

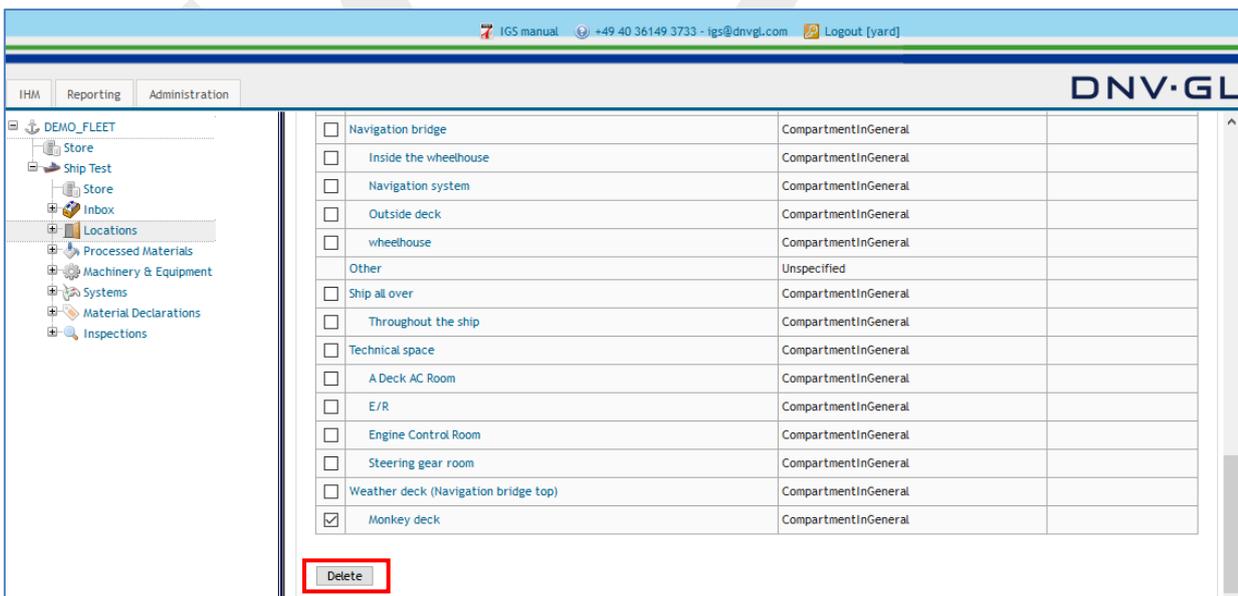


3.14.2 Locations tab

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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IHM Reporting Administration **DNV-GL**

DEMO_FLEET > Ship Test

Asphalt Tanker Ship Test

Description Group-C
 Class Id. No. 2222
 IMO-No. 4343434
 Building Year 2018
 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

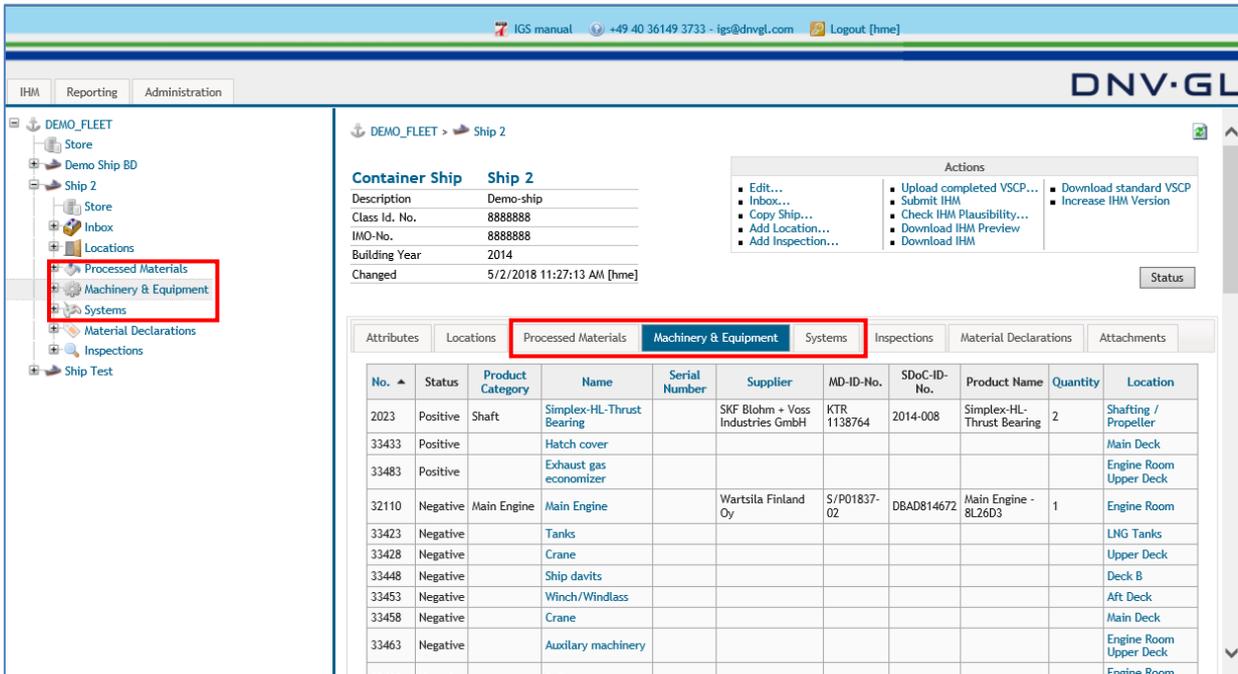
Attributes: Locations | Processed Materials | Machinery & Equipment | Systems | Inspections | Material Declarations | Attachments

Permissions Owner | Permissions Yard | AuditTrail

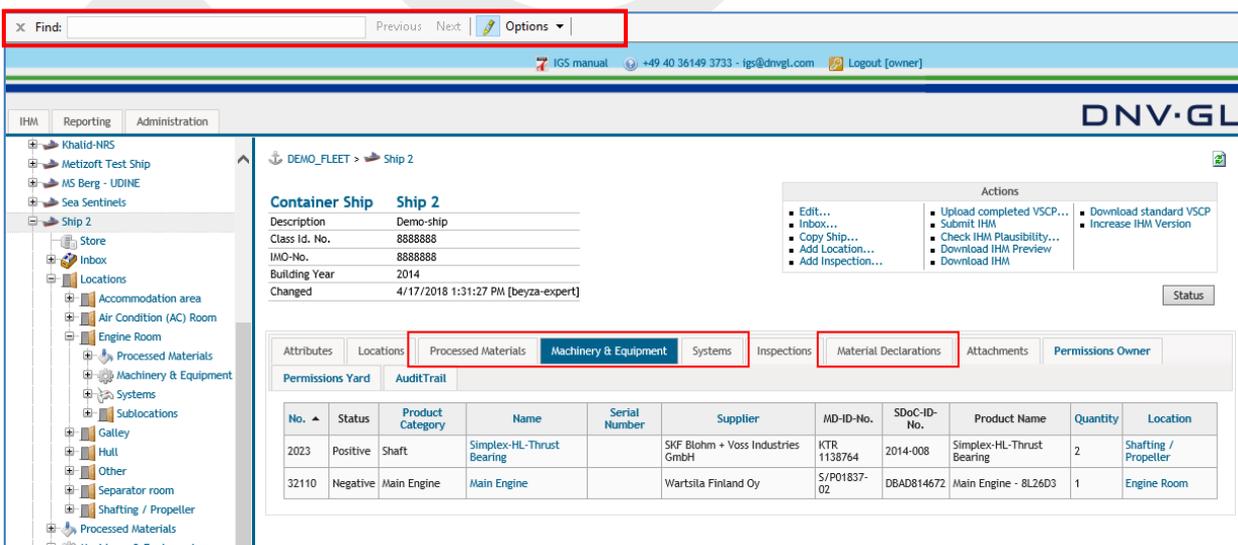
<input type="checkbox"/>	Location	Location Type	Description
<input type="checkbox"/>	Accommodation space	CompartmentInGeneral	
<input type="checkbox"/>	C Deck - swimming pool	CompartmentInGeneral	
<input type="checkbox"/>	D Deck Cabin 405	CompartmentInGeneral	

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."



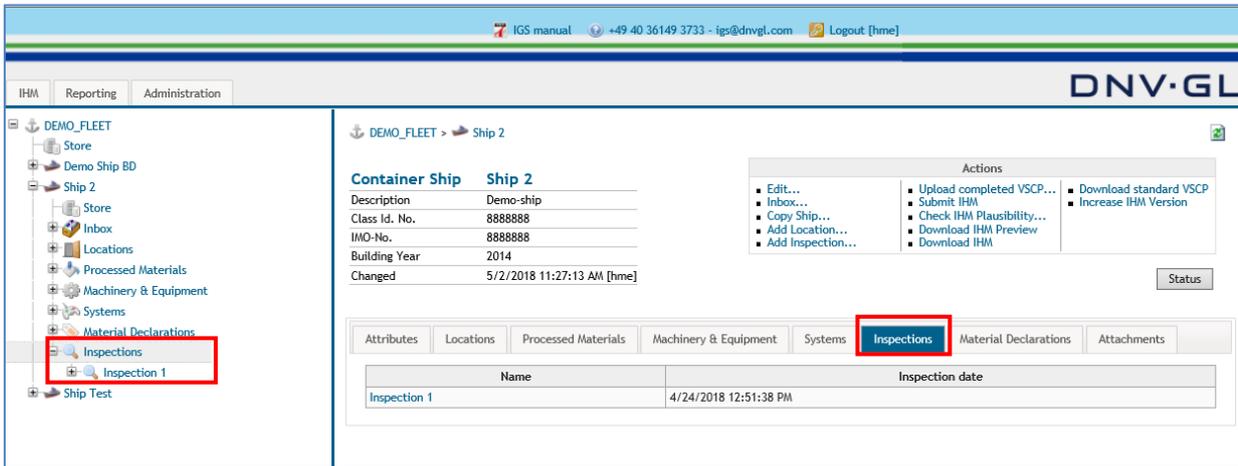
To search for a specific component or material, select either the Processed Material, Machinery & Equipment, System or "Material Declarations" tab of the navigation bar in the main view of the ship project. Use the search function of your browser. Insert search name into the search field of the browser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



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

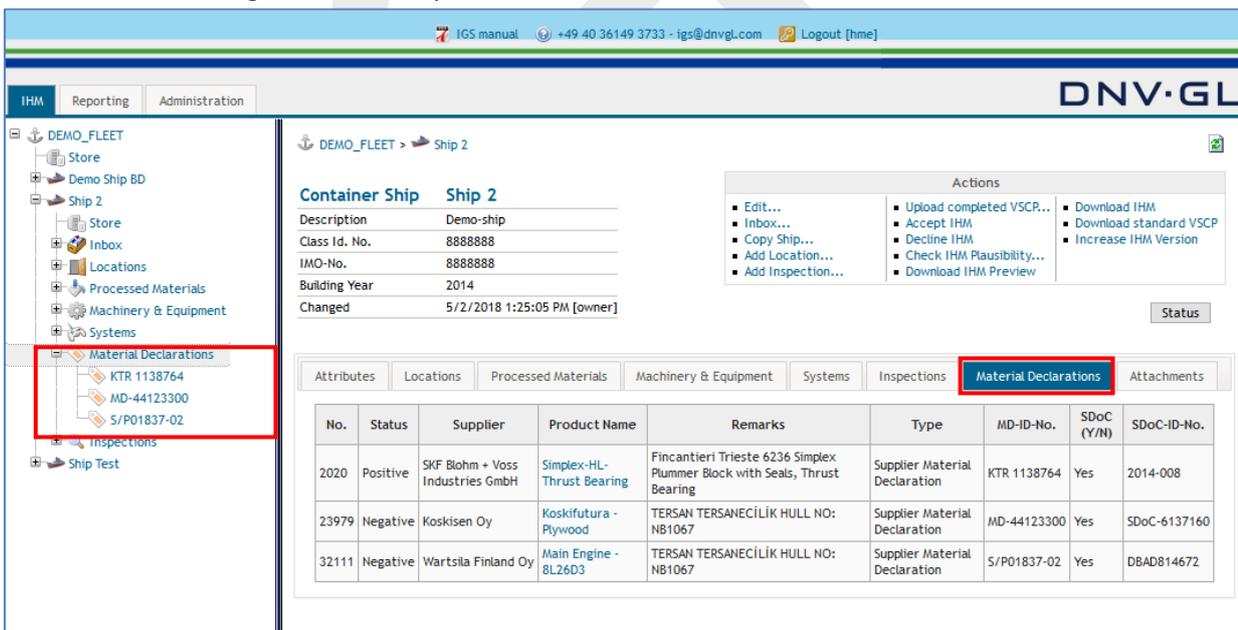
3.14.4 Inspections tab

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

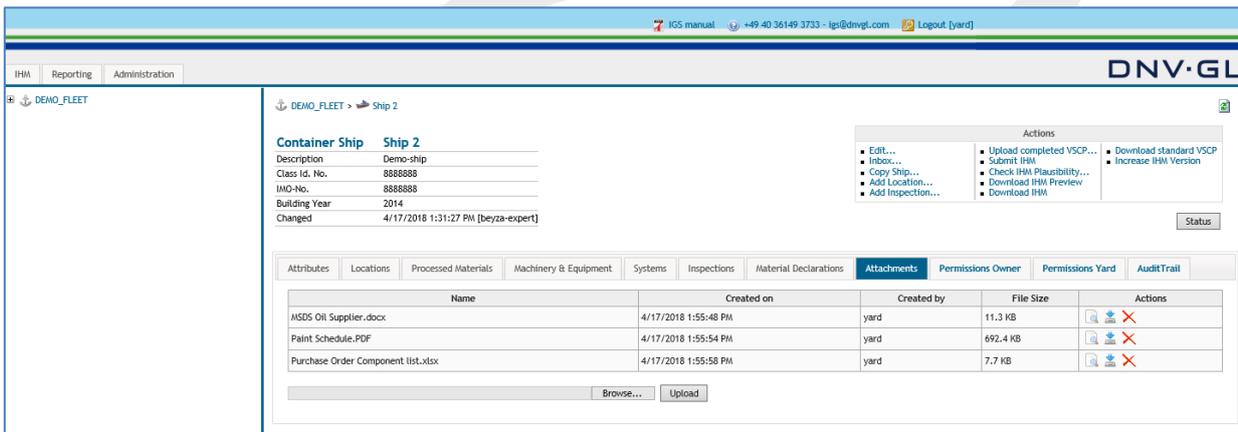
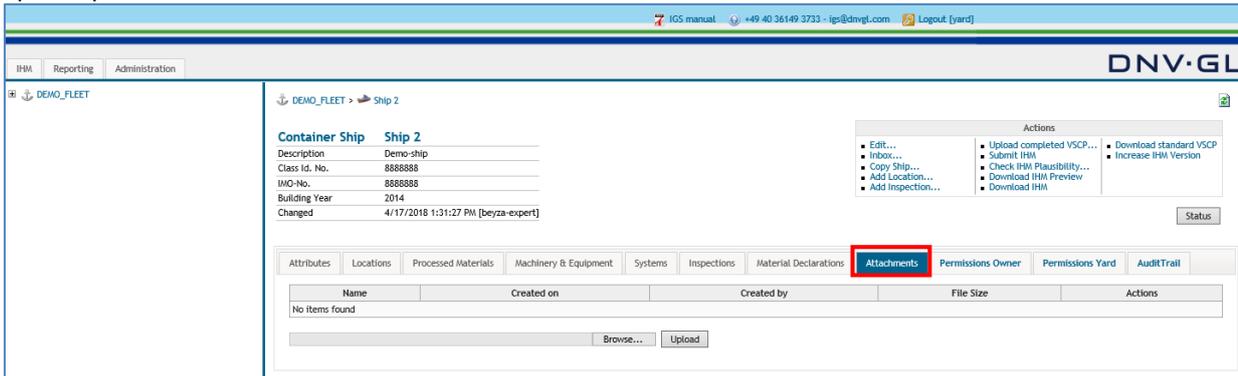
By clicking on the “Material Declarations” tab of the navigation bar, the uploaded MDs prepared by suppliers are listed in a table. The user can reach this screen, when they click on “Material Declarations” tab in the main navigation tree. Inspection based MDs will not be shown under this tab.



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.



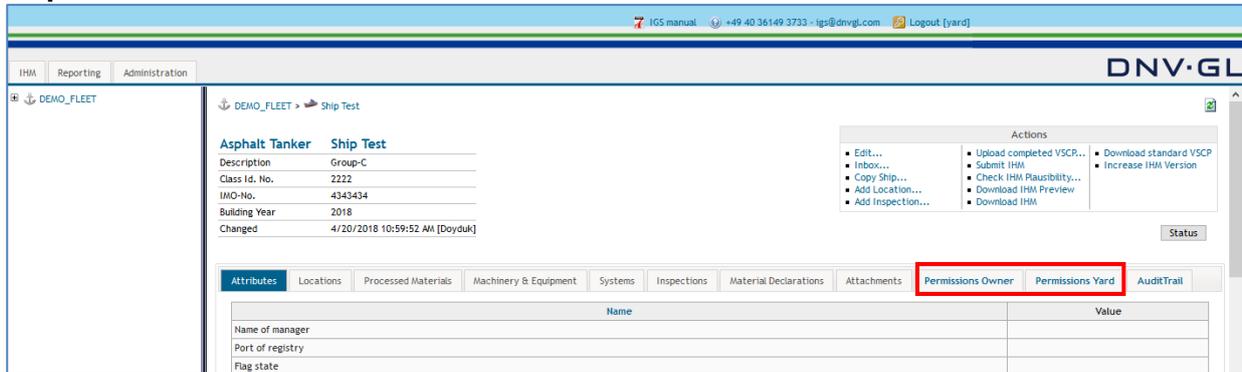
Note: The additional documents upload function is not meant as alternative to upload SDoC and MD for the preparation of the IHM.

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.

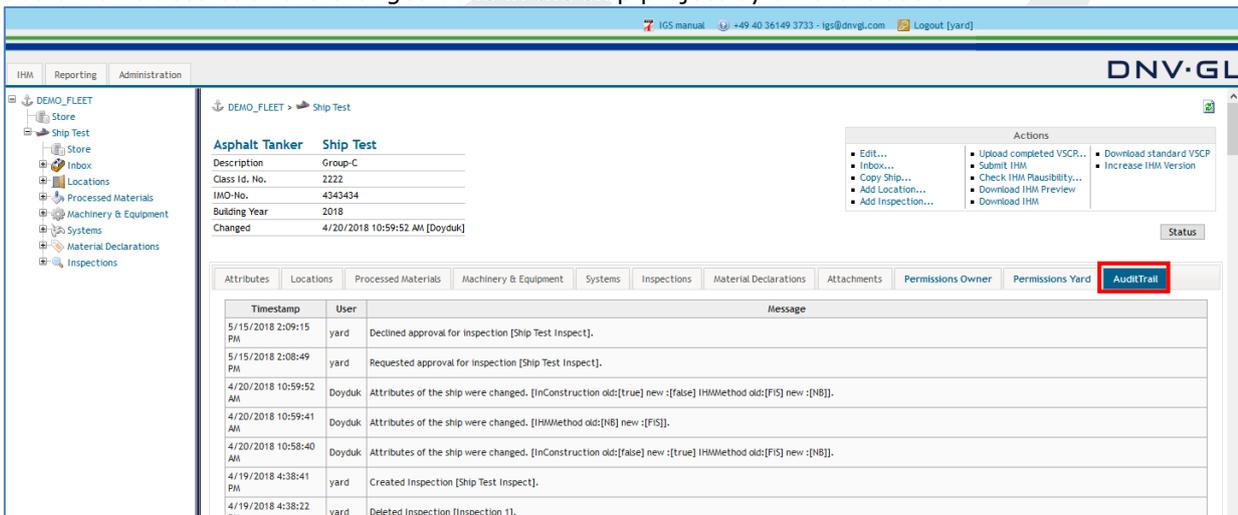
3.14.7 Permissions owner and permissions yard

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.

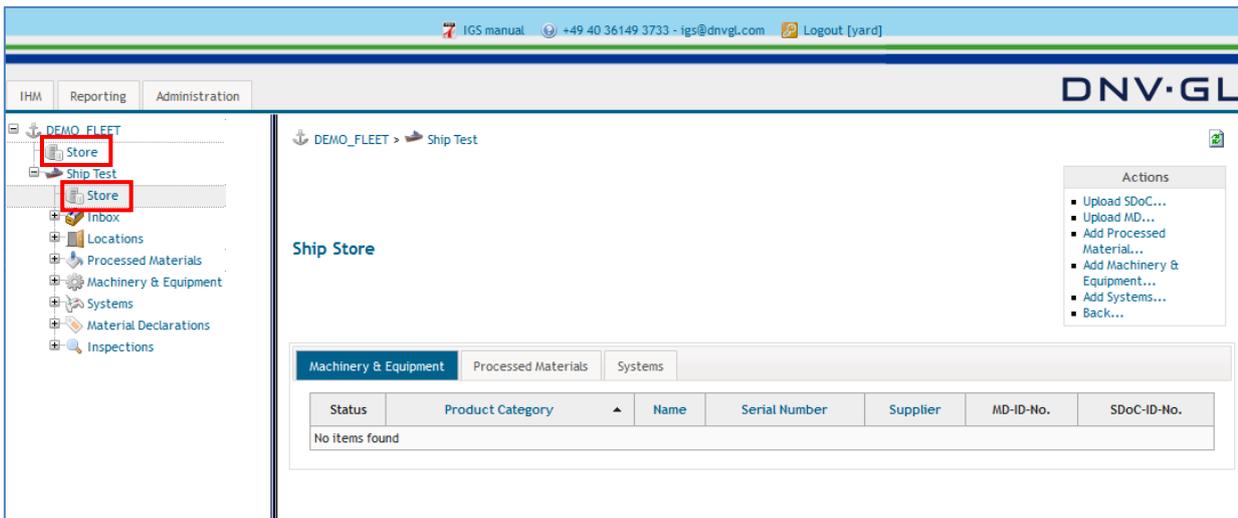


Audit Trail under ship project view displays the following actions done by a specific user;

- 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.

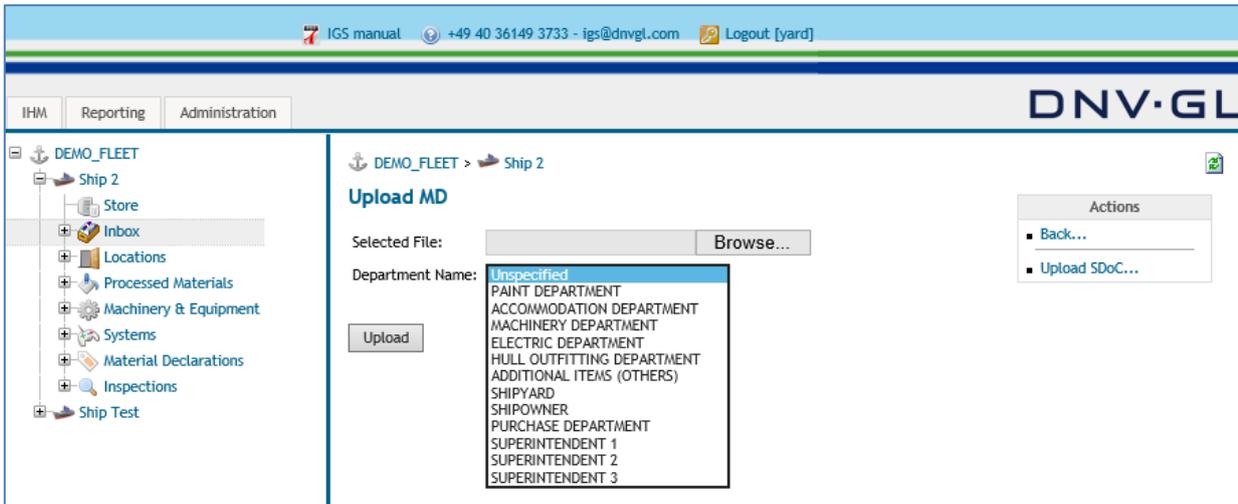
The screenshot shows the DNV-GL software interface. The top navigation bar includes 'IHM', 'Reporting', and 'Administration'. The left navigation tree is expanded to 'Inbox'. The main content area is titled 'Ship Inbox' and displays details for 'Ship 2'. The details include:

- GS Ship:** Ship 2
- Description:** Demo-ship
- IMO-No.:** 8888888
- Signal letters:**
- Building Year:** 2014
- Date of build:**
- Person in charge owner:**
- Person in charge manager:**
- Person in charge yard:**
- Class society:**
- In Construction:** Yes
- IHM Status:** in progress
- MD Standard:** IMO269EU
- Inbox Workflow State:** Processing
- Class IHM Rules:**
- IHM Method:** NB

Below the details is a 'Filter Department Name' dropdown set to 'All'. A table with columns 'No.', 'Status', 'MD-ID-No.', 'Supplier', 'Product Name', 'HM', 'SDoC (Y/N)', and 'SDoC-ID-No.' is shown with the message 'No items found'. At the bottom, there are buttons for 'Request Confirmation', 'Confirm all inbox items', and 'Reject Confirmation'. An 'Actions' box on the right contains 'Upload SDoC...', 'Upload MD...', and 'Back...' options, along with a 'Status' button.

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.

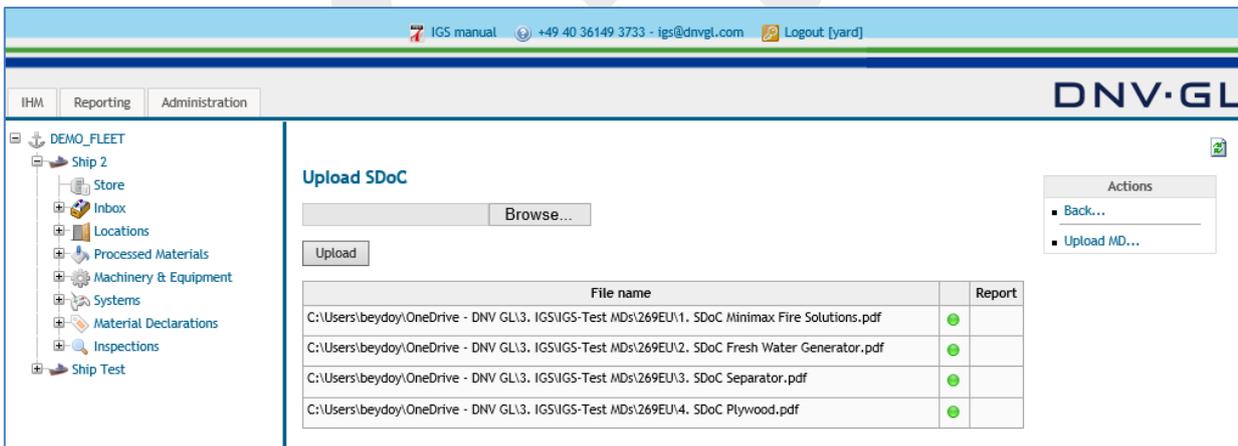
The screenshot shows the DNV-GL software interface. The top navigation bar includes 'IHM', 'Reporting', and 'Administration'. The left navigation tree is expanded to 'Inbox'. The main content area is titled 'Upload SDoC' and features a 'Browse...' button and an 'Upload' button. An 'Actions' box on the right contains 'Back...' and 'Upload MD...' options.

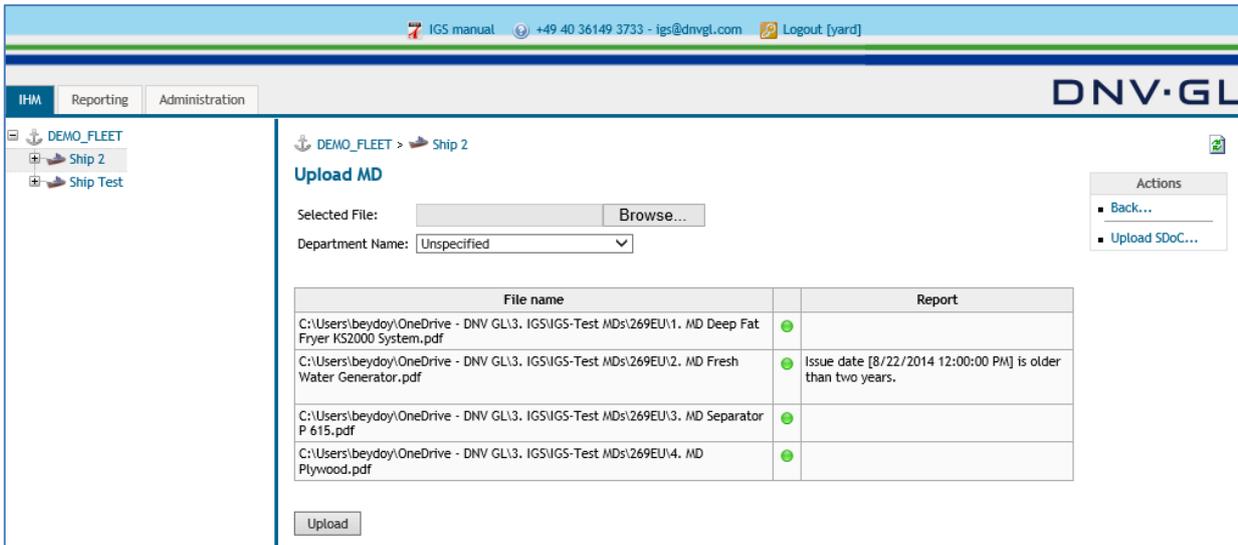


While uploading MD, the responsible department's name within the shipyard or shipowner for the uploaded MD can be selected from the drop-down menu. In case MDs are not required to be clustered and there is only 1 responsible employee working for the whole IHM preparation, selection can be left as "unspecified".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

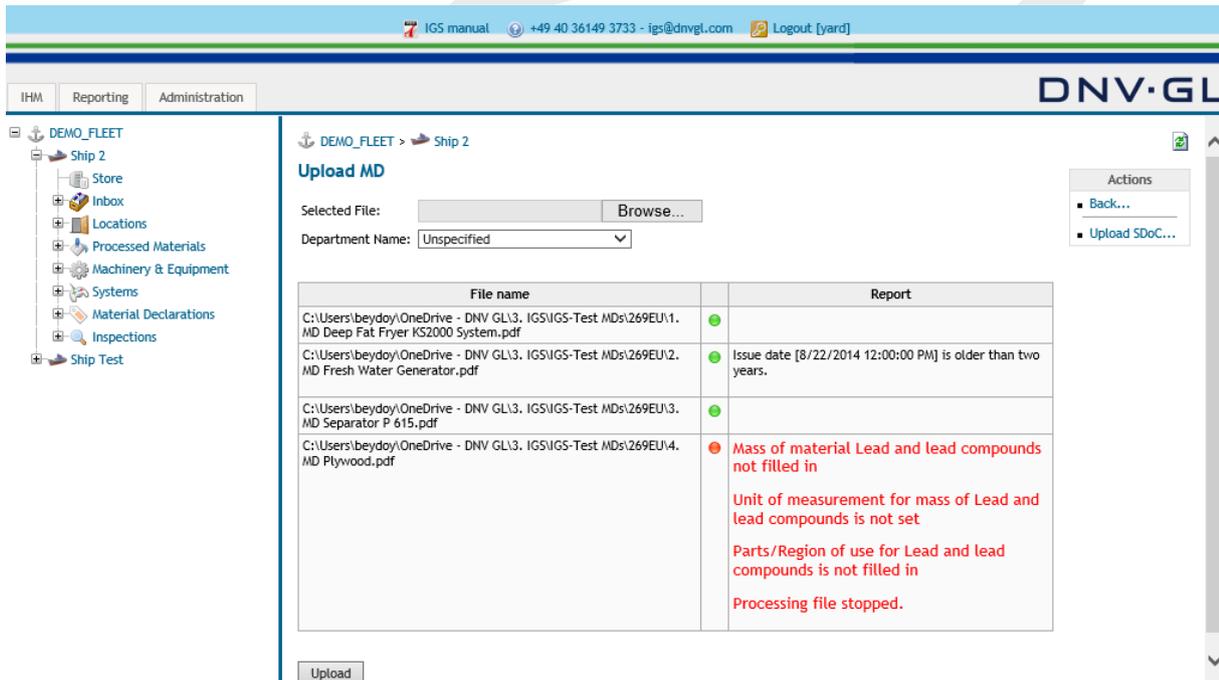
Note: According to uploading sequence the SDoC must be uploaded first. When uploading a MD without a corresponding SDoC available in the system an error message pops up and the MD will not be uploaded.

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 described 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.

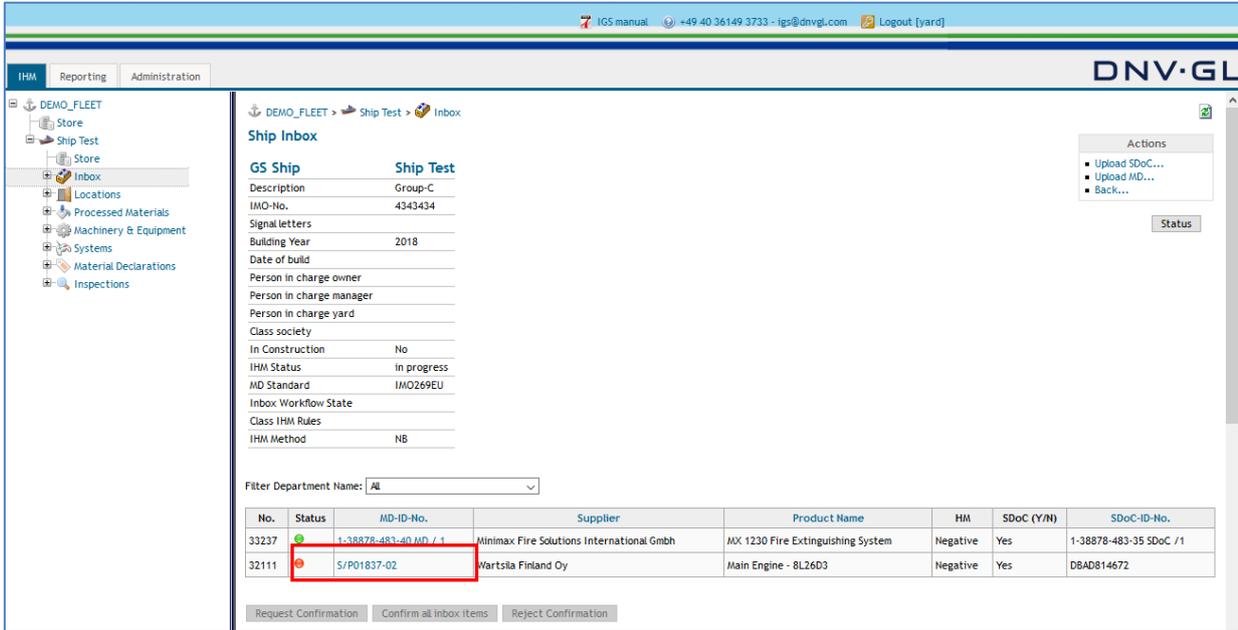
The screenshot shows the DNV-GL software interface. The top navigation bar includes 'IHM', 'Reporting', and 'Administration'. The main content area is titled 'Ship Inbox' for 'Ship 1'. It displays a table of Material Declarations (MDs) with columns for Status, MD-ID-No., Supplier, Product Name, HM, SDoC (Y/N), and SDoC-ID-No. The status indicators are: yellow for MD-HIAIR-A01-20121106, green for MD-JMC-12N-094, and red for MD-KR-PA-20130322-01. An 'Actions' menu is visible on the right, and a 'Confirm all inbox items' button is at the bottom.

Status	MD-ID-No.	Supplier	Product Name	HM	SDoC (Y/N)	SDoC-ID-No.
●	MD-HIAIR-A01-20121106	HI AIR KOREA Co., Ltd	AIR CONDITIONING PLANT	Negative	No	SDOC-HIAIR- A01-20121106
●	MD-JMC-12N-094	JONGHAP MACHINERY CO.,LTD	SEWAGE TREATMENT PLANT	Negative	Yes	SD-JMC-12N-094
●	MD-KR-PA-20130322-01	Kangrim Heavy Industries Co., Ltd.	Auxiliary Boiler	Negative	Yes	SD-KR-PA-20130322-01

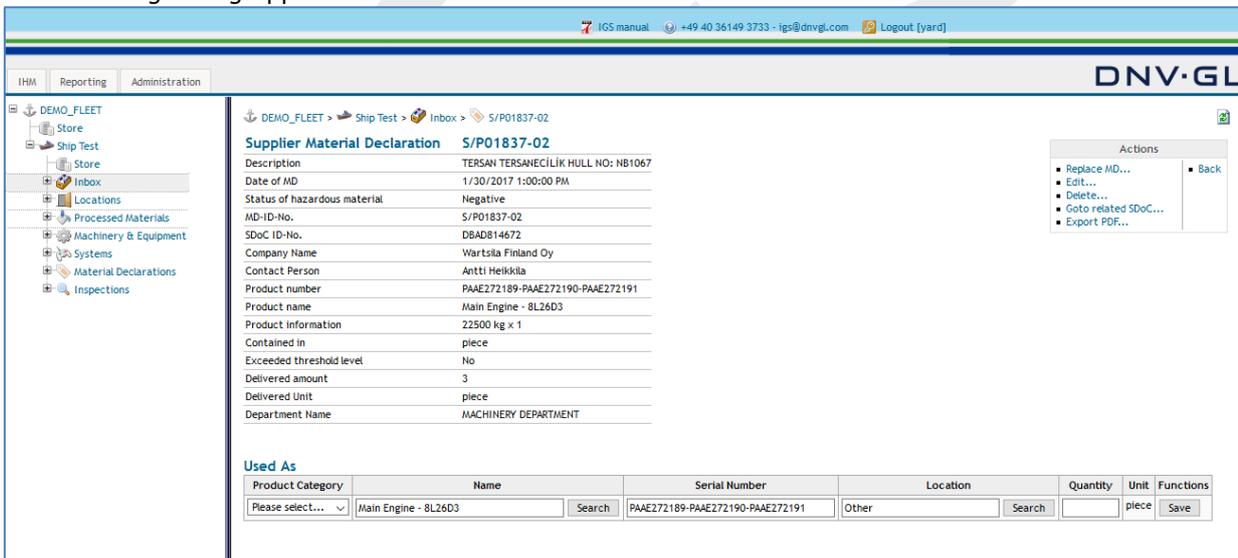
Note: The status of the MD will only go to green when all required information is entered.

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.

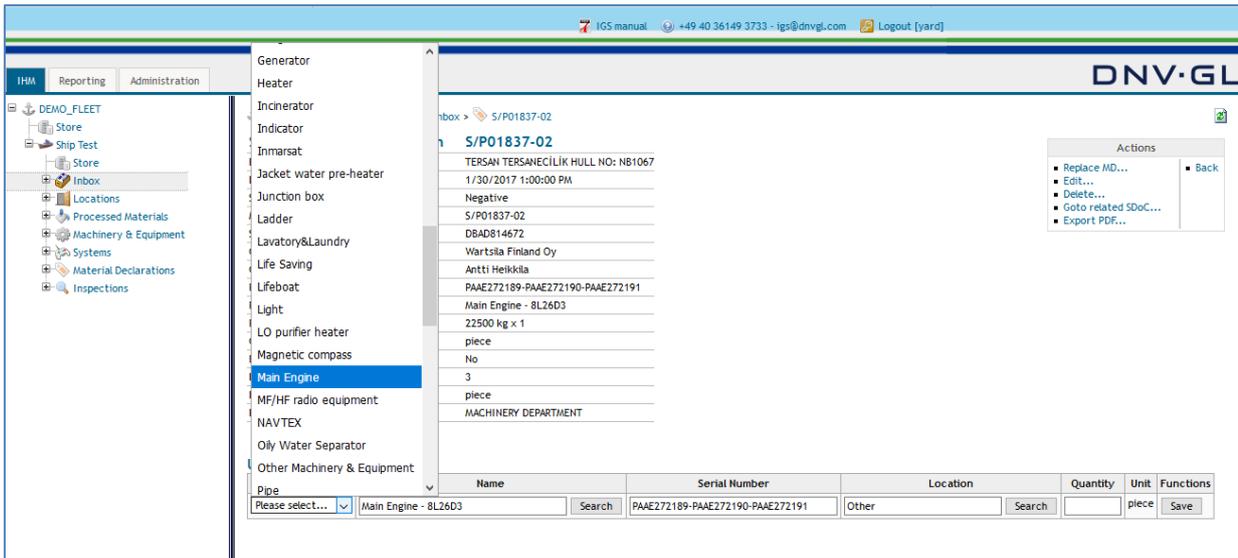


Enter all MD information (attributes) under the table "Used As", such as Product Category, Name, Serial Number/Batch Number, Location and Approximate Quantity.

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**.

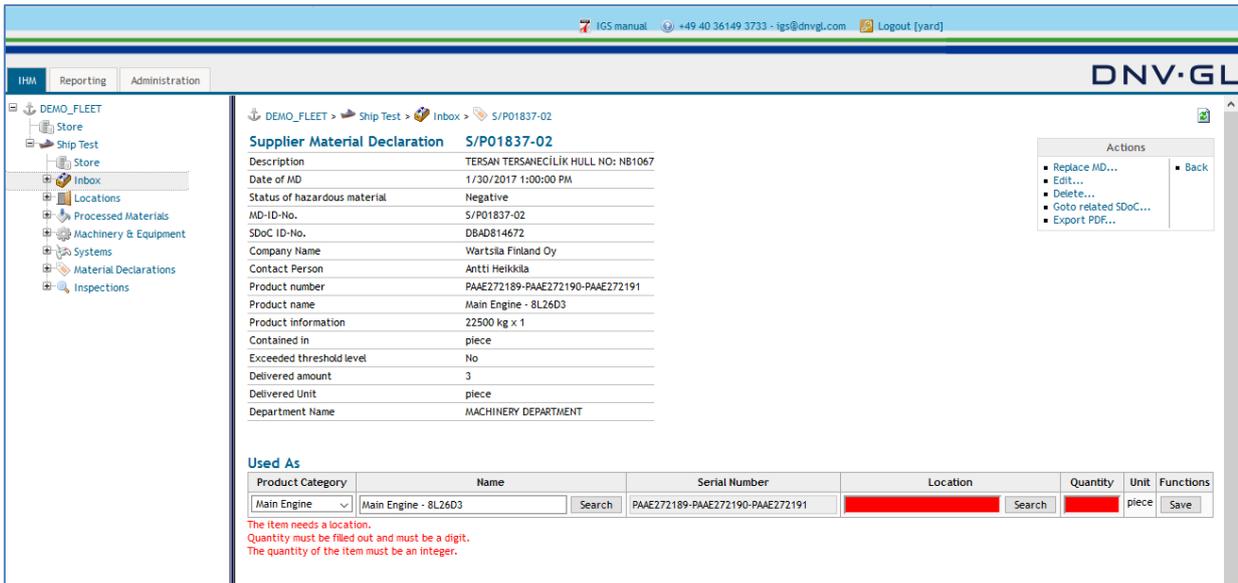
Serial No / Batch number:

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:

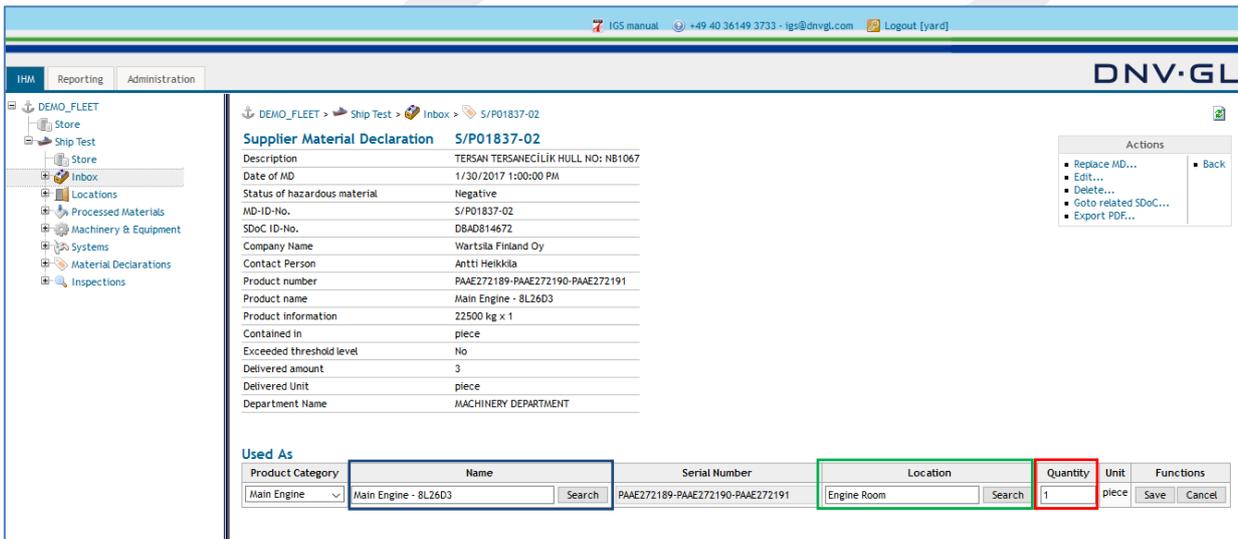
Filling in "Location" for products that do not contain hazardous materials is voluntary. It is only mandatory for products that contain hazardous materials. For negative MDs location is set as "Other" by default, but the user can type in the correct location if more specific information is available



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".

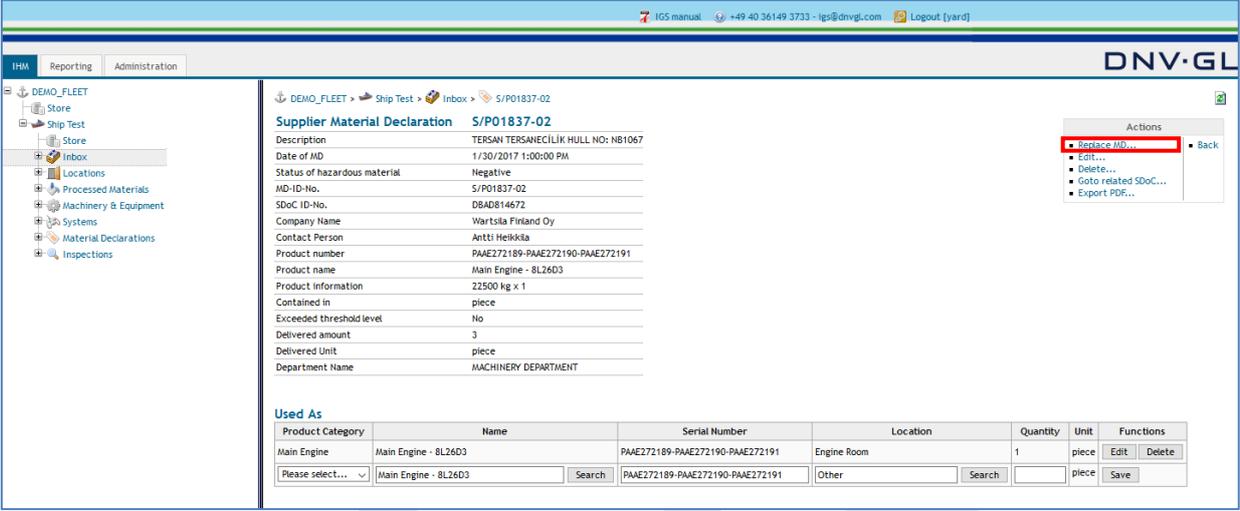
From the "Actions", MD can be deleted by clicking "Delete" link. By clicking "Go to related SDoC", the linked SDoC can be viewed in IGS view. Uploaded MD can be regenerated in pdf mode by IGS, by clicking "Export PDF" link. "Back" link would lead you back to the inbox view of IGS.

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.



The screenshot displays the DNV-GL IGS manual interface. The main content area shows the 'Supplier Material Declaration' for MD S/P01837-02. The 'Actions' box on the right is highlighted, showing the 'Replace MD...' link in red. Below the declaration details is a table titled 'Used As'.

Product Category	Name	Serial Number	Location	Quantity	Unit	Functions
Main Engine	Main Engine - 8L26D3	PAAE272189-PAAE272190-PAAE272191	Engine Room	1	piece	Edit Delete
Please select....	Main Engine - 8L26D3	PAAE272189-PAAE272190-PAAE272191	Other		piece	Save

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.

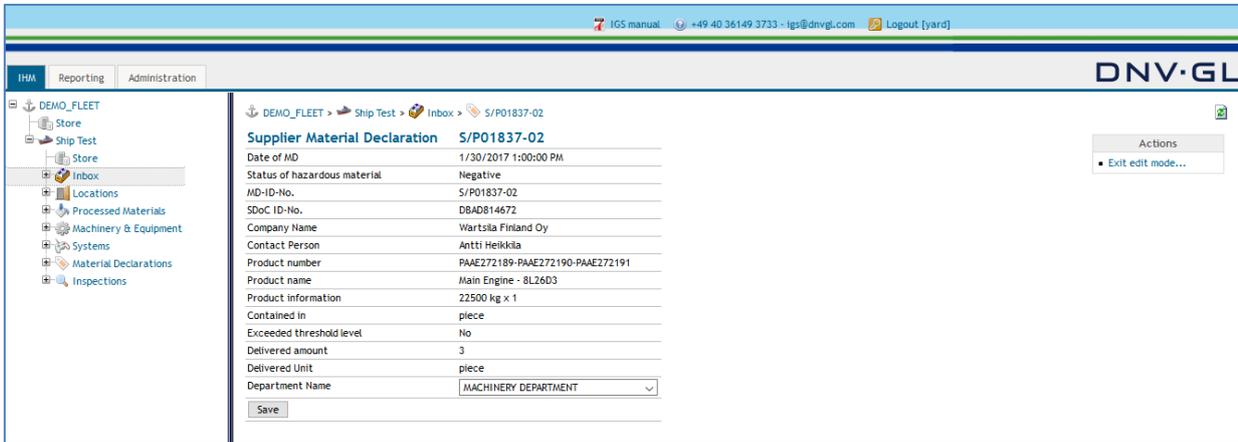
Note: The "Replace MD" link should only be used to replace MDs because the MD will be replaced in all components or materials in the ship project of the customer fleet.

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 to 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

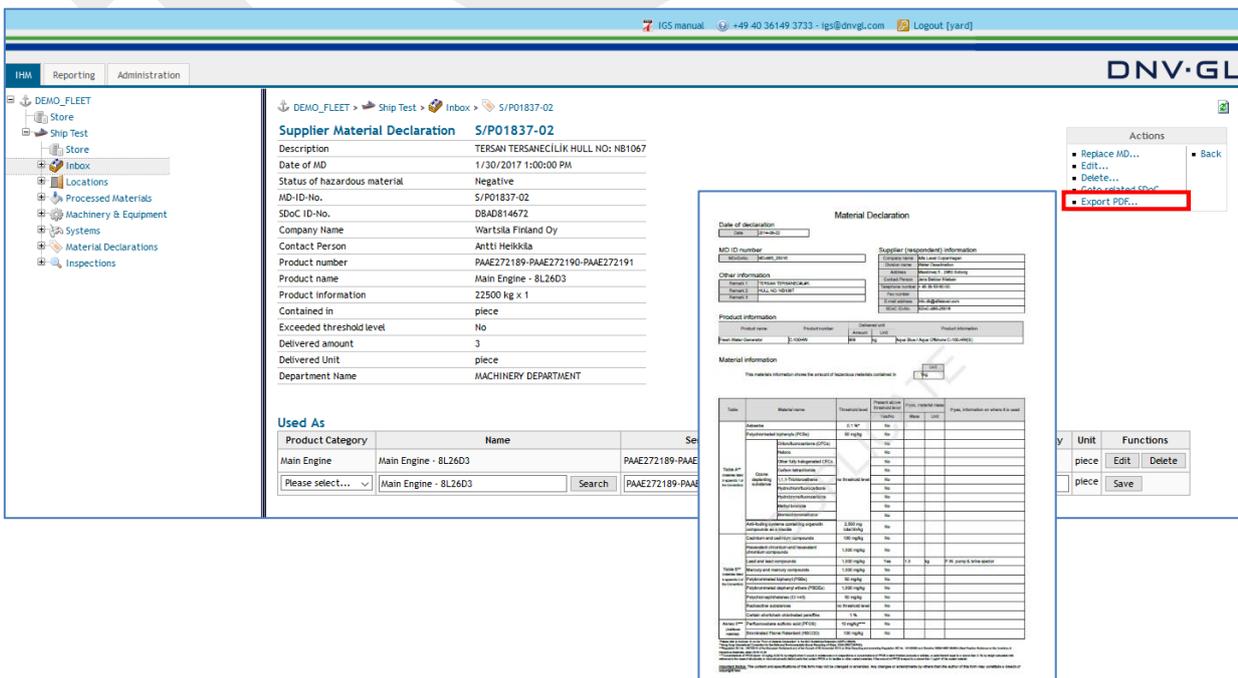
While the MD is still in the inbox and still not confirmed, the user can delete the MD if necessary by clicking on the “Delete” link in the actions box.

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.

IGS

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).

DEMO_FLEET > Ship 2 > Inbox

Ship 2

Description Demo-ship
 IMO-No. 8888888
 Signal letters
 Building Year 2014
 Date of build
 Person in charge owner
 Person in charge manager
 Person in charge yard
 Class society
 In Construction Yes
 IHM Status in progress
 MD Standard IMO26REU
 Inbox Workflow State Processing
 Class IHM Rules
 IHM Method NB

Filter Department Name: All

No.	Status	MD-ID-No.	Supplier	Product Name	HM	SDoC (Y/N)	SDoC-ID-No.
23976	●	1-38878-483-40 MD / 3	Minimax Fire Solutions International GmbH	Deep Fat Fryer KS2000 System	Positive	Yes	1-38878-483-35 SDoC /1
23977	●	MD-985_25016	Afa Laval Copenhagen	Fresh Water Generator	Positive	Yes	SDoC-985-25016
23978	●	MD-AL-SEP-0032023258-30	Afa Laval Krakow Sp. z.o.o.	Separator P 615	Positive	Yes	SDoC-0032023258-30
23979	●	MD-44123300	Koskisen Oy	Koskifutura - Plywood	Negative	Yes	SDoC-6137160
23985	●	MD-AL-SEP-P626-20160303	Afa Laval Krakow Sp. z.o.o.	Separator P 626	Negative	Yes	SDoC-0032023258-30

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

The following dialog appears.

DEMO_FLEET > Ship Test > Inbox > S/P01837-02

Supplier Material Declaration S/P01837-02

Description TERSAN TERSANECILIK HULL NO: NB1067
 Date of MD 1/30/2017 1:00:00 PM
 Status of hazardous material Negative
 MD-ID-No. S/P01837-02
 SDoC ID-No. DBA8B14672
 Company Name Wartsila Finland Oy
 Contact Person Antti Heikkila
 Product number PAAE272189-PAAE272190-PAAE272191
 Product name Main Engine - 8L26D3
 Product information 22500 kg x 1
 Contained in piece
 Exceeded threshold level No
 Delivered amount 3
 Delivered Unit piece
 Department Name MACHINERY DEPARTMENT

Used As

Product Category	Name	Serial Number	Location	Quantity	Unit	Functions
Main Engine	Main Engine - 8L26D3	PAAE272189-PAAE272190-PAAE272191	Engine Room	1	piece	Edit Delete
Please select...	Main Engine - 8L26D3	Search PAAE272189-PAAE272190-PAAE272191	Other Search		piece	Save

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.

IGS manual +49 40 36149 3733 - igs@dnvgl.com Logout [yard]

IHM Reporting Administration DNV-GL

DEMO_FLEET > Ship Test > Inbox > S/P01837-02

Supplier Material Declaration S/P01837-02

Description TERSAN TERSANECILIK HULL NO: NB1067
Date of MD 1/30/2017 1:00:00 PM
Status of hazardous material Negative
MD-ID-No. S/P01837-02
SDoC ID-No. DBAD814672
Company Name Wartsila Finland Oy
Contact Person Antti Heikkila
Product number PAAE272189-PAAE272190-PAAE272191
Product name Main Engine - 8L26D3
Product information 22500 kg x 1
Contained in piece
Exceeded threshold level No
Delivered amount 3
Delivered Unit piece
Department Name MACHINERY DEPARTMENT

Actions

- Replace MD...
- Edit...
- Delete...
- Goto related SDoC...
- Export PDF...
- Back

Used As

Product Category	Name	Serial Number	Location	Quantity	Unit	Functions
Main Engine	Main Engine - 8L26D3	PAAE272189-PAAE272190-PAAE272191	Engine Room	1	piece	Save Cancel

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.

The screenshot shows the 'Ship Inboxes' view for 'Ship 2'. The 'Filter Department Name' dropdown is set to 'All'. The table below lists the items in the inbox.

No.	Status	MD-ID-No.	Supplier	Product Name	HM	SDoC (Y/N)	SDoC-ID-No.
23977	●	MD-985_25016	Alfa Laval Copenhagen	Fresh Water Generator	Positive	Yes	SDoC-985-25016
23978	●	MD-AL-SEP-0032023258-30	Alfa Laval Krakow Sp. z.o.o.	Separator P 615	Positive	Yes	SDoC-0032023258-30
23976	●	1-38878-483-40 MD / 3	Minimax Fire Solutions International GmbH	Deep Fat Fryer KS2000 System	Positive	Yes	1-38878-483-35 SDoC /1
23979	●	MD-44123300	Koskisen Oy	Koskifutura - Plywood	Negative	Yes	SDoC-6137160
23985	●	MD-AL-SEP-P626-20160303	Alfa Laval Krakow Sp. z.o.o.	Separator P 626	Negative	Yes	SDoC-0032023258-30

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.

The screenshot shows the 'Ship Inboxes' view with the 'Filter Department Name' dropdown set to 'MACHINERY DEPARTMENT'. The table below shows the filtered results.

No.	Status	MD-ID-No.	Supplier	Product Name	HM	SDoC (Y/N)	SDoC-ID-No.
23977	●	MD-985_25016	Alfa Laval Copenhagen	Fresh Water Generator	Positive	Yes	SDoC-985-25016
23978	●	MD-AL-SEP-0032023258-30	Alfa Laval Krakow Sp. z.o.o.	Separator P 615	Positive	Yes	SDoC-0032023258-30
23985	●	MD-AL-SEP-P626-20160303	Alfa Laval Krakow Sp. z.o.o.	Separator P 626	Negative	Yes	SDoC-0032023258-30

Inbox actions are disabled. Enable inbox actions by setting filter to 'All'.

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.

The screenshot shows the DNV-GL IGS manual interface. The top navigation bar includes 'IHM', 'Reporting', and 'Administration'. The left sidebar shows a tree view with 'DEMO_FLEET' expanded to 'Ship 2', then 'Inbox'. The main content area displays a table of items with columns: No., Status, MD-ID-No., Supplier, Product Name, HM, SDoC (Y/N), and SDoC-ID-No. Below the table are buttons for 'Request Confirmation', 'Confirm all Inbox Items', and 'Reject Confirmation'. A red-bordered box highlights the 'Invite Supplier' form, which includes a description, an email address field, a time limit field (set to 3), a language dropdown (set to English), and fields for sender contact email address and name, with an 'Invite' button at the bottom.

No.	Status	MD-ID-No.	Supplier	Product Name	HM	SDoC (Y/N)	SDoC-ID-No.
23977	●	MD-985_25016	Afa Laval Copenhagen	Fresh Water Generator	Positive	Yes	SDoC-985-25016
23978	●	MD-AL-SEP-0032023258-30	Afa Laval Krakow Sp. z.o.o.	Separator P 615	Positive	Yes	SDoC-0032023258-30
23976	●	1-38878-483-40 MD / 3	Minimax Fire Solutions International GmbH	Deep Fat Fryer KS2000 System	Positive	Yes	1-38878-483-35 SDoC / 1
23979	●	MD-44123300	Koskisen Oy	Koskifutura - Plywood	Negative	Yes	SDoC-6137160
23985	●	MD-AL-SEP-P626-20160303	Afa Laval Krakow Sp. z.o.o.	Separator P 626	Negative	Yes	SDoC-0032023258-30

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.

This is a detailed view of the 'Invite Supplier' form. It contains the following fields and options:

- Invite Supplier**: Invite Supplier to upload MDs and SDoCs into ship inbox. The email recipient will be able to upload MDs and SDoCs into the system for a period specified by Sender.
- Email address (multiple addresses separated by semicolon):** test1@test1.com; test2@test2.com; test3@test3.com
- Time limit (days after the invitation expires):** 3
- Language (of the invitation to be send):** English
- Sender contact email address:** [Empty field]
- Sender contact name:** [Empty field]
- Invite**: Button to submit the invitation.

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.

The screenshot shows the DNV-GL software interface. On the left is a navigation tree with 'Inbox' selected. The main area displays 'Ship Inbox' details for 'Ship 2'. Below the details is a table of MDs with columns: No., Status, MD-ID-No., Supplier, Product Name, HM, SDoC (Y/N), and SDoC-ID-No. The 'Request Confirmation' button at the bottom left is highlighted with a red box.

No.	Status	MD-ID-No.	Supplier	Product Name	HM	SDoC (Y/N)	SDoC-ID-No.
23977	●	MD-985_25016	Alfa Laval Copenhagen	Fresh Water Generator	Positive	Yes	SDoC-985-25016
23978	●	MD-AL-SEP-0032023258-30	Alfa Laval Krakow Sp. z.o.o.	Separator P 615	Positive	Yes	SDoC-0032023258-30
23976	●	1-38878-483-40 MD / 3	Minimax Fire Solutions International GmbH	Deep Fat Fryer KS2000 System	Positive	Yes	1-38878-483-35 SDoC / 1
23979	●	MD-44123300	Koskisen Oy	Koskifutura - Plywood	Negative	Yes	SDoC-6137160
23985	●	MD-AL-SEP-P626-20160303	Alfa Laval Krakow Sp. z.o.o.	Separator P 626	Negative	Yes	SDoC-0032023258-30

The screenshot shows the DNV-GL software interface. The 'Request Confirmation' button is no longer visible, and the 'Confirm all inbox items' button at the bottom center is highlighted with a red box. The MD table below shows that the 'Status' for all MDs is now green (●).

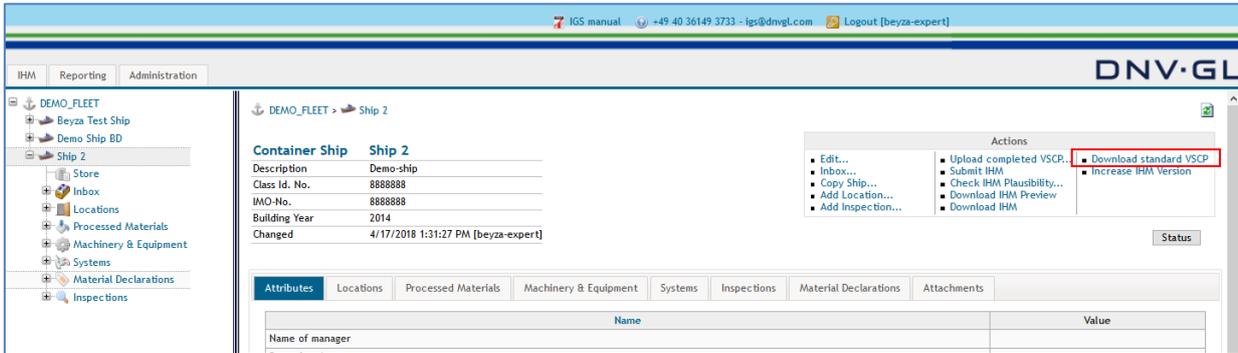
No.	Status	MD-ID-No.	Supplier	Product Name	HM	SDoC (Y/N)	SDoC-ID-No.
23977	●	MD-985_25016	Alfa Laval Copenhagen	Fresh Water Generator	Positive	Yes	SDoC-985-25016
23978	●	MD-AL-SEP-0032023258-30	Alfa Laval Krakow Sp. z.o.o.	Separator P 615	Positive	Yes	SDoC-0032023258-30
23976	●	1-38878-483-40 MD / 3	Minimax Fire Solutions International GmbH	Deep Fat Fryer KS2000 System	Positive	Yes	1-38878-483-35 SDoC / 1
23979	●	MD-44123300	Koskisen Oy	Koskifutura - Plywood	Negative	Yes	SDoC-6137160
23985	●	MD-AL-SEP-P626-20160303	Alfa Laval Krakow Sp. z.o.o.	Separator P 626	Negative	Yes	SDoC-0032023258-30

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
Cp. ID No.	Main Location	Sub Location	Equipment type	Equipment	Object to Check	Material	Document Analysis Result	Check procedure	Sample No.
1	Accommodation space		Processed Material	Ceiling	insulation inner and outer wall	Asbestos	Unknown	Sampling	
2	Accommodation space		Processed Material	Ceiling	insulation inner and outer wall	PBB	Unknown	Sampling	
3	Accommodation space		Processed Material	Ceiling	insulation inner and outer wall	PBDE	Unknown	Sampling	
4	Accommodation space		Processed Material	Ceiling	insulation inner and outer wall	HBCDD	Unknown	Sampling	
5	Accommodation space		Processed Material	Ceiling	structure material	Asbestos	Unknown	Sampling	
6	Accommodation space		Processed Material	Ceiling	structure material	PCN	Unknown	Sampling	
7	Accommodation space		Processed Material	Ceiling	panel	Asbestos	Unknown	Sampling	
8	Accommodation space		Processed Material	Ceiling	sealing and packing for covers, d	Asbestos	Unknown	Sampling	
9	Accommodation space		Processed Material	Ceiling	paint	Asbestos	Unknown	Sampling	
10	Accommodation space		Processed Material	Ceiling	paint	PCB	Unknown	Sampling	
11	Accommodation space		Processed Material	Ceiling	paint	PFOS	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.

A	B	C
Cp. ID No.	Main Location	Sub Location
1		
2	Accommodation space	
3	Accommodation space	
4	Cargo space	
5	Deck machinery	
6	Engine room (extended)	
7	Hull	
8	Navigation bridge	
9	Ship all over	
10	Technical 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.

C	D	E
Sub Location	Equipment type	Equipm
	Processed Material	hiling
	Processed Material	hiling
	Machinery & Equipment	hiling
	System	hiling
	Processed Material	fff
	Processed Material	Ceiling

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.

Check	G	H
	Material	Document Analysis Result
nd outer wall	Asbestos	Unknown San
nd outer	Asbestos	Unknown San
nd outer	ODS	Unknown San
nd outer	PCB	Unknown San
nd outer	Anti Fouling Comp.	Unknown San
l	PFOs	Unknown San
l	Cadmium	Unknown San
l	Chrom-6	Unknown San
l	Lead and Lead compounds	Unknown San
ng for covers, o	ASBESTOS	Unknown San
	Asbestos	Unknown San

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.

	H	I	
	Document Analysis Result	Check procedure	Sample No.
	Unknown	Sampling	
	Contained	Sampling	
	Not contained	Sampling	
	Unknown	Sampling	
	Unknown	Sampling	
	Unknown	Sampling	

- **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

	H	I	J	
	Document Analysis Result	Check procedure	Sample No.	Pic
	Unknown	Sampling		
	Unknown	Assumption		
	Unknown	Visual		
	Unknown	Sampling		
	Unknown	Sampling		
	Unknown	Sampling		

- **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
	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
1	Unknown	Sampling									
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.

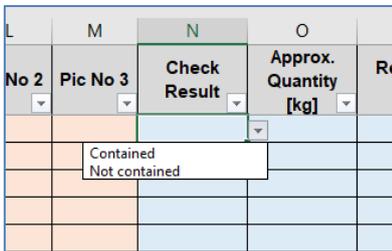
Sample numbers should be entered by the HazMat Expert into the standard VSCP based on the on-board sampling work.

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.



L	M	N	O	Re
No 2	Pic No 3	Check Result	Approx. Quantity [kg]	
		Contained Not contained		

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.

The screenshot shows the DNV-GL IGS manual interface. The top navigation bar includes 'IHM', 'Reporting', and 'Administration'. The main view displays the ship project 'Demo Ship BD' with the following details:

- Description: Container Ship
- Class Id. No.: 33333
- IMO-No.: 9119119
- Building Year: 2017
- Changed: 4/17/2018 3:22:10 PM [Doyduk]

The actions box on the right contains the following options:

- 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

The 'Attributes' tab is active, showing the following data:

Name	Value
Name of manager	Manager X
Port of registry	
Flag state	Germany
Signal letters	
Date of build	

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.

DEMO_FLEET > Ship 2

Create Inspection

Name* → Name of Inspection.

Description → Additional description, e.g. scope of

Person in charge class society → Name of the person in charge

Status of inspection → In progress / submitted /

Inspection Date → Date(s) of inspection on board

Inspection Location → Location of inspection on

Inspection ID

Person in charge HazMat expert → Name of the HazMat Expert in

Address of HazMat expert company → Address of the HazMat Expert

Name of HazMat expert company → Name of HazMat company

Email address of HazMat expert → Contact of the HazMat Expert

Lab company name → Contracted Laboratory's name

Save

When finished, click on “Save”. Following dialog appears;

IGS manual +49 40 36149 3733 - igs@dnvgl.com Logout [hme]

IHM Reporting Administration **DNV·GL**

DEMO_FLEET > Demo Ship BD > IHM inspection 1

GS Inspection IHM inspection 1

Description

Person in charge class society

Status of inspection in progress

Inspection Date

Inspection Location

Inspection ID 32121

Person in charge HazMat expert

Address of HazMat expert company

Name of HazMat expert company

Email address of HazMat expert

Lab company name

Changed 4/18/2018 2:56:59 PM [hme]

Actions

- Edit...
- Copy existing inspection...
- Add Location...
- Edit VSCP...
- Edit Checkpoints...
- Generate VSCP...
- Generate Excel VSCP...
- Submit Inspection
- Sort items by location...
- Delete Inspection...

Inspection Items Attachments

Component	Location

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.

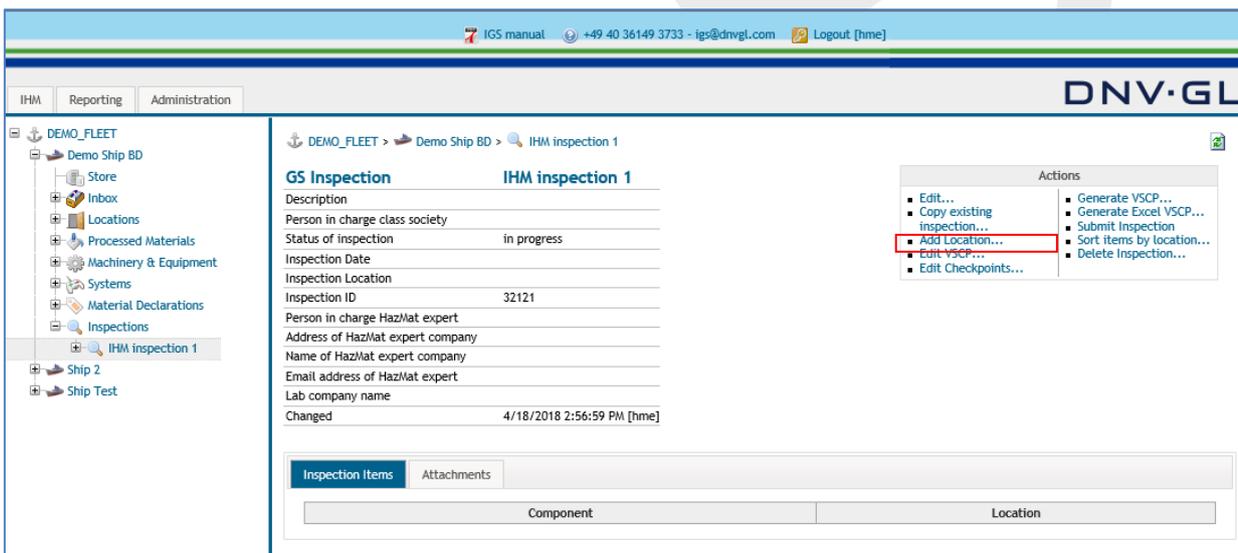
To further work on the inspection, the user needs to prepare a VSCP. If not created before, the user first shall make sure that locations and sublocation of the ship are created, before starting the VSCP preparation.

6.1.2 Add location to ship inspection

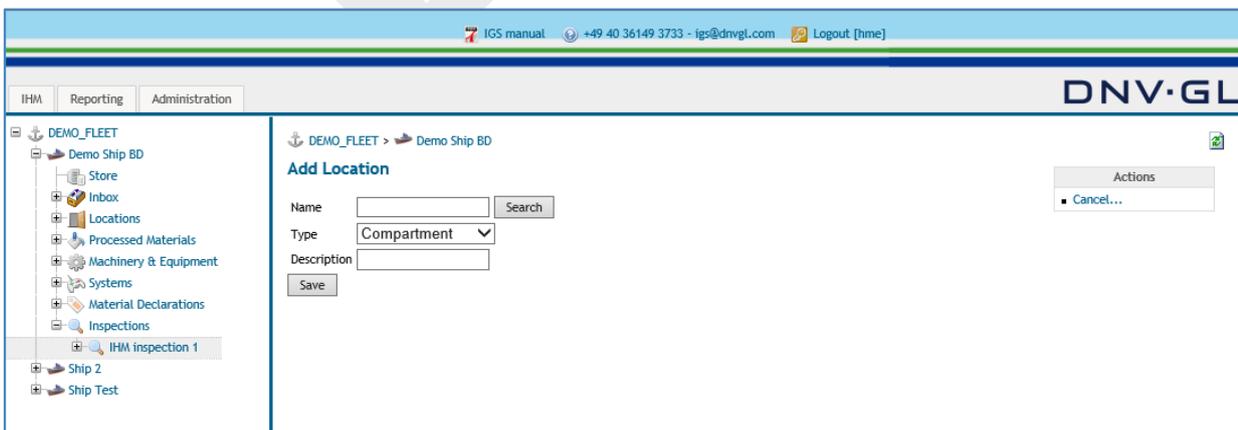
Note: There are two ways to add locations to the ship. The first method is described under **Chapter 3.5**. It is recommended to use the method described under **Chapter 3.5** due to the fact that sublocations cannot be created under add location to inspections.

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.



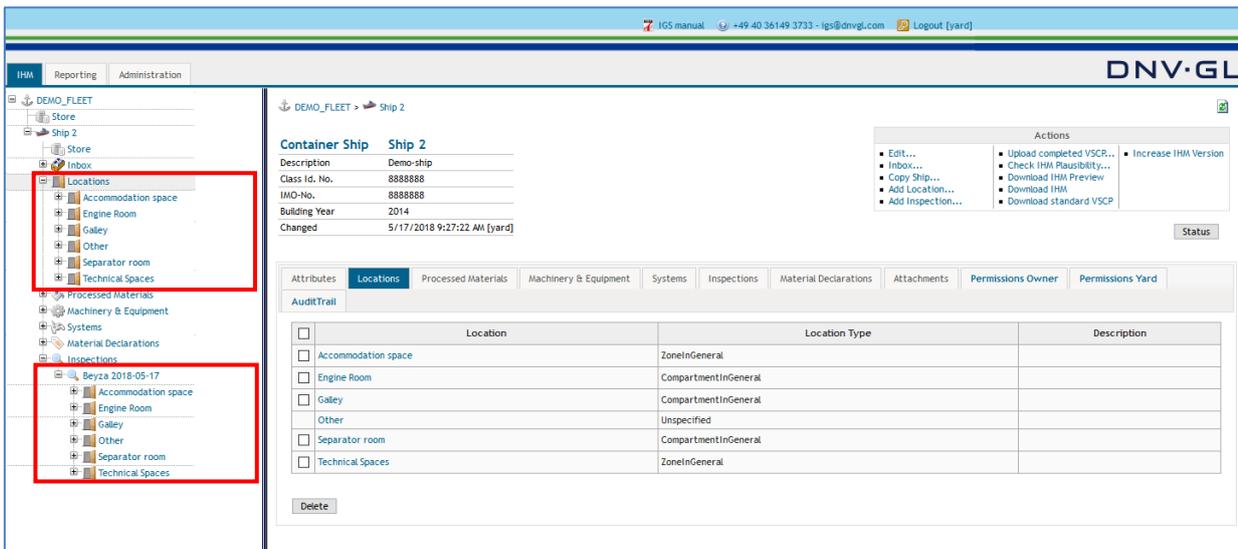
The following dialog appears.



Then enter the required information under "Add Location" to add the new location to the Ship Inspection. Finally click on "Save".

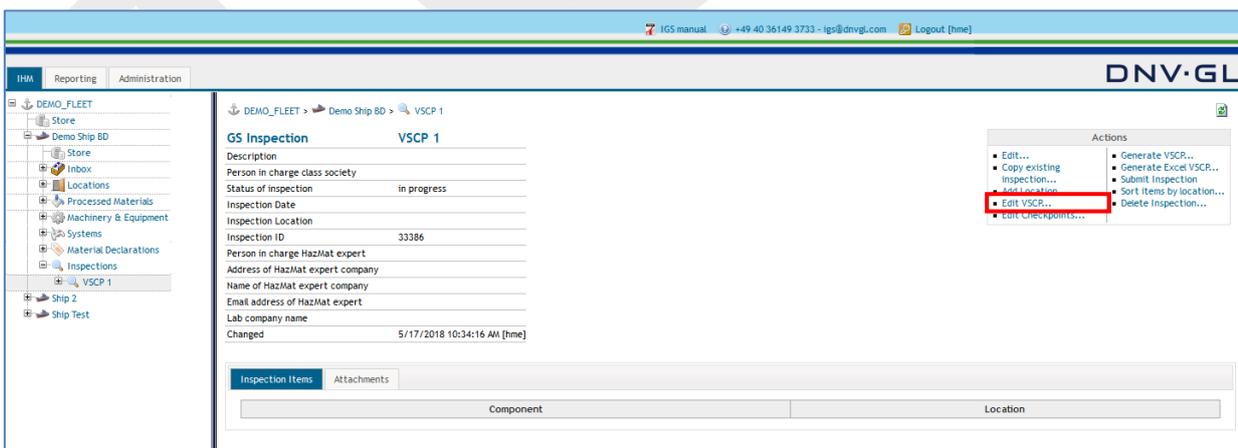
Note: This procedure can only create main locations, but not any sub-locations. Please use "add location" link in the ship view to make sure that sublocations can be created. You would need sublocations to prepare the VSCP.

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



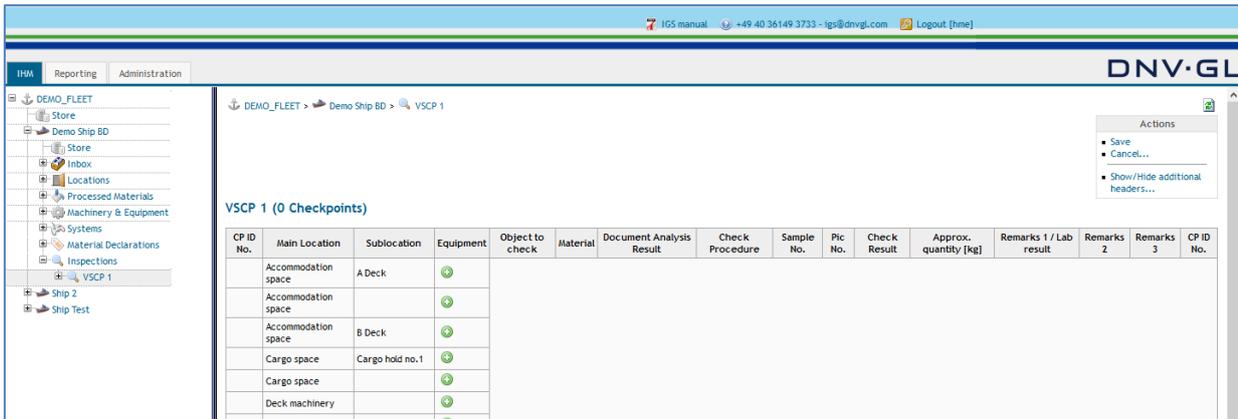
6.1.3 Preparation of the VSCP by "Edit VSCP" link

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.

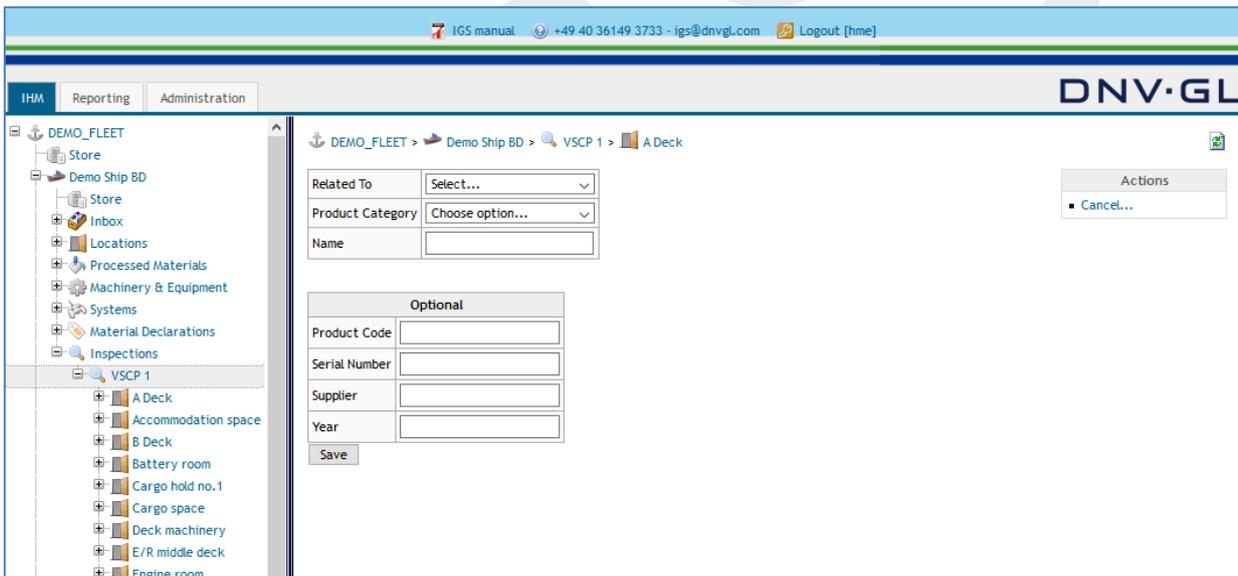
The following dialog appears.



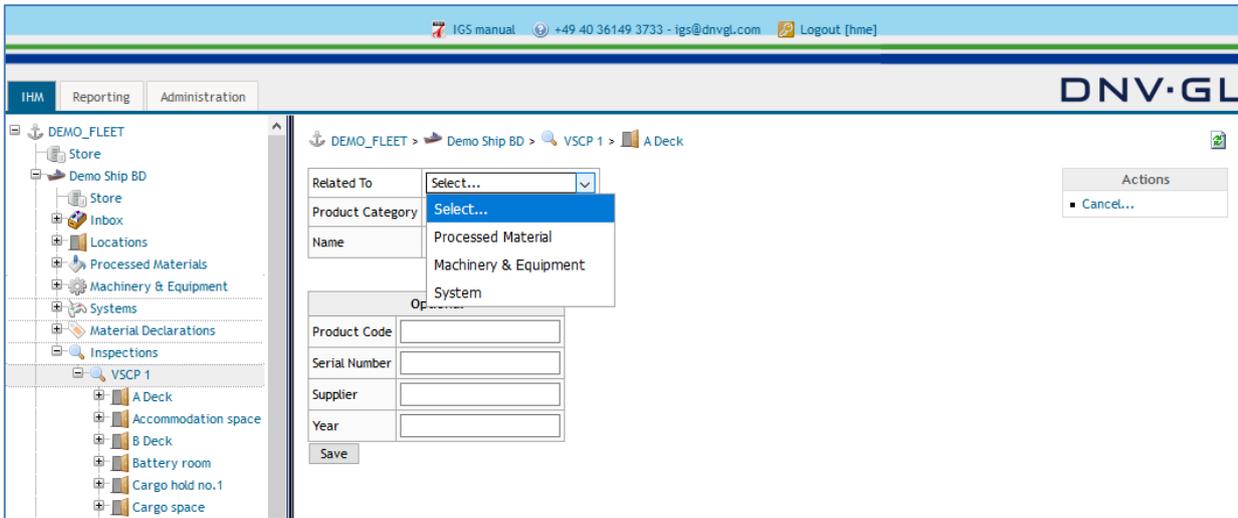
Then fill in the required information for each inspection Item (on board check) according to the knowledge gained for preparation of VSCP during the DNV GL Approved HazMat Expert course.

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

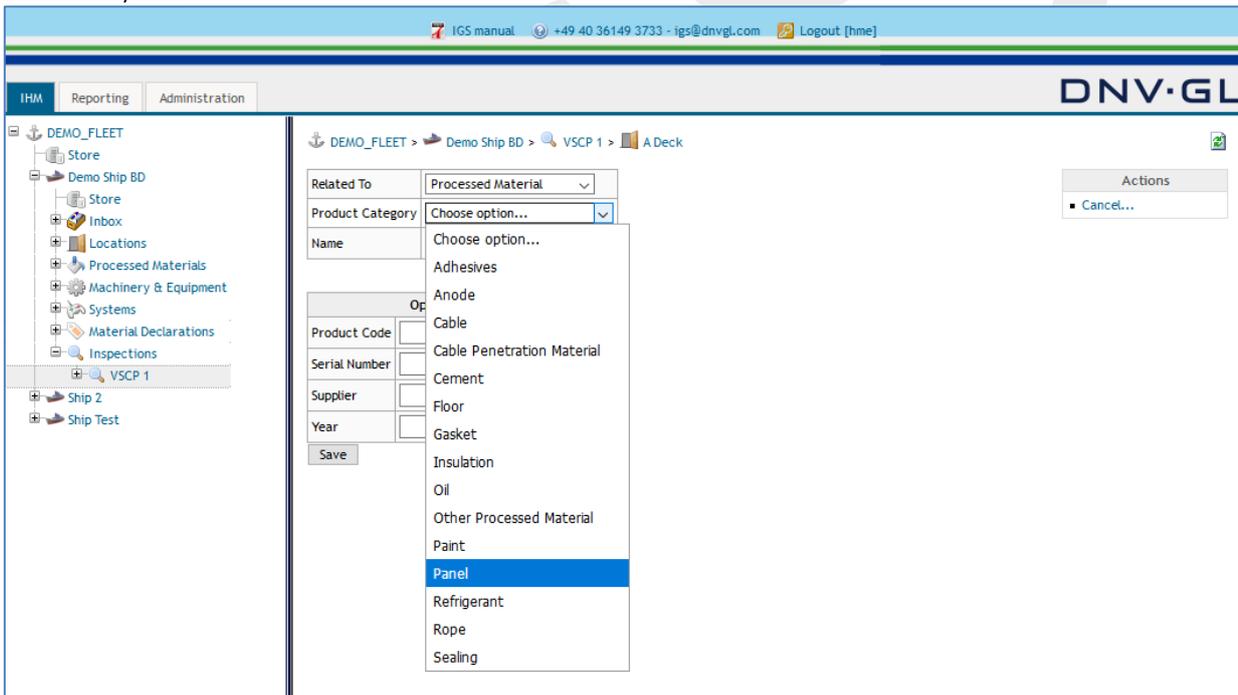
The following dialog appears.



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

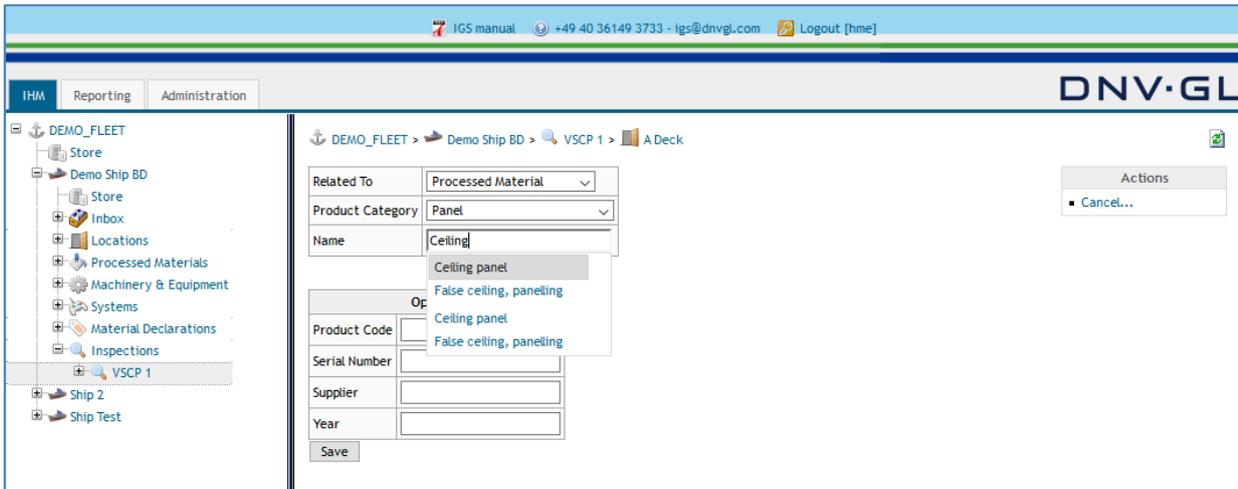


Then select the Item "Product Category" to define the specific use of equipment, e.g. Floor, Gasket, Insulation, etc.



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.

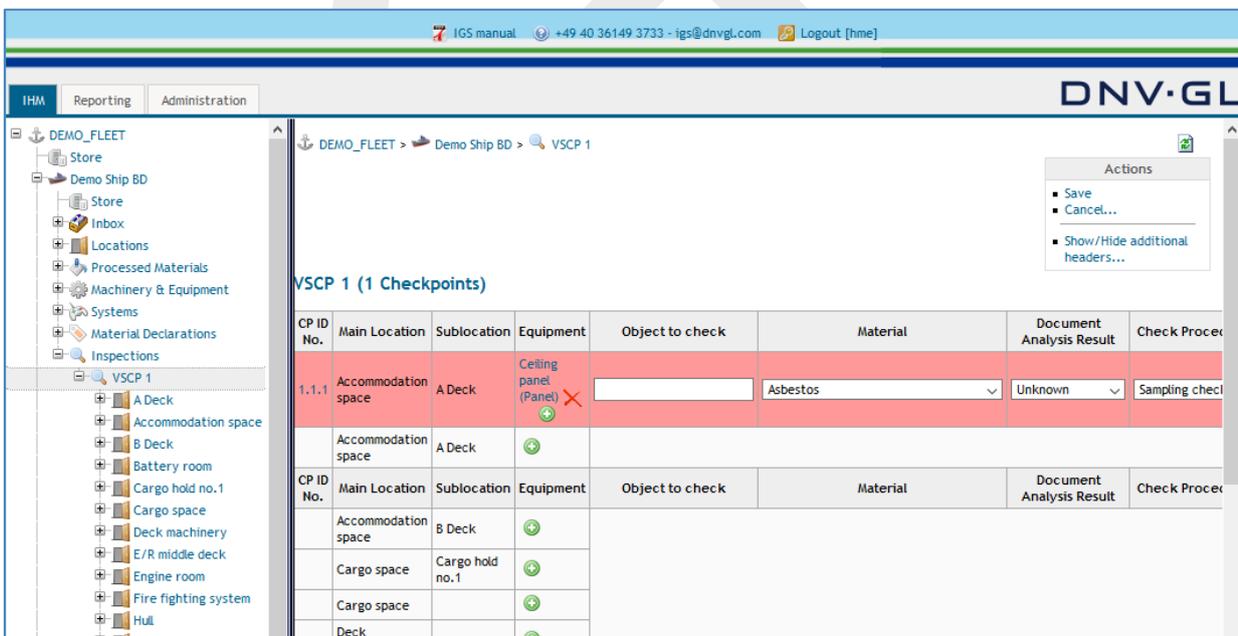


Finally click on "Save".

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.

CP ID No.	Main Location	Sublocation	Equipment	Object to check	Material	Document Analysis Result	Check Procedure	Sample No.	Pic No.	Check Result	Approx. quantity [kg]	Remarks 1 / Lab result
1.1.1	Accommodation space	A Deck	Ceiling panel (Panel)	Panel	Asbestos	Unknown	Sampling check			?	0	
	Accommodation space	A Deck										
	Accommodation space	B Deck										
	Cargo space	Cargo hold no.1										
	Cargo space											
	Deck											

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

CP ID No.	Main Location	Sublocation	Equipment	Object to check	Material	Document Analysis Result	Check Procedure	Sample No.	Pic No.	Check Result	Approx. quantity [kg]	Remarks 1 / Lab result
1.1.1	Accommodation space	A Deck	Ceiling panel (Panel)	Panel	Asbestos	Unknown	Sampling check			?	0	
	Accommodation space	A Deck			?							
	Accommodation space	A Deck			1,1,1-Trichloroethane							
	Accommodation space	A Deck			Anti-fouling systems containin...							
	Accommodation space	A Deck			Asbestos							
	Accommodation space	B Deck			Brominated Flame Retardant (HB...							
	Cargo space	Cargo hold no.1			Bromochloromethane							
	Cargo space				Cadmium and cadmium compounds							
	Cargo space				Carbon tetrachloride							
	Deck											

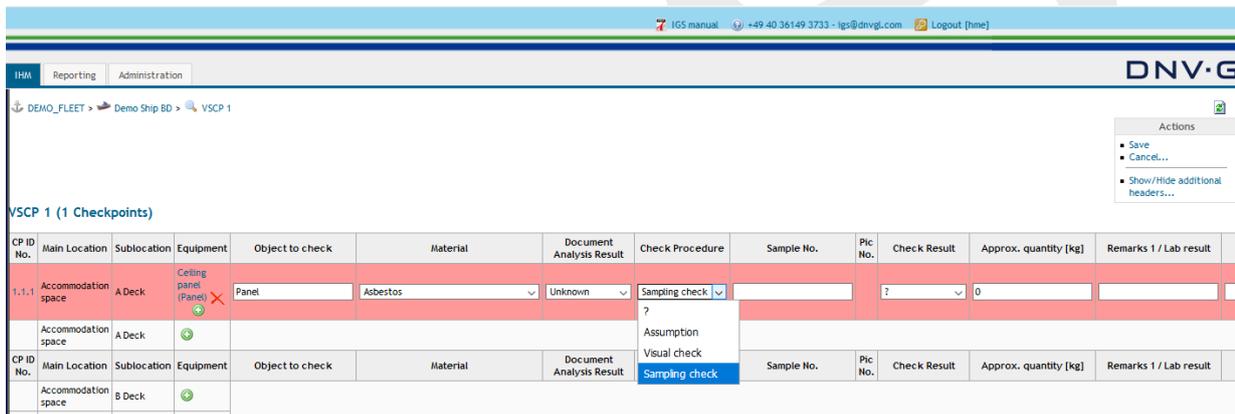
Then select the "Document Analysis Result" made according to the documentation analysis. Document Analysis Result is the result of users document check. It is a pre-defined field with, Contained, Not contained and Unknown entries. Unknown is defined by default in the VSCP.

- **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

CP ID No.	Main Location	Sublocation	Equipment	Object to check	Material	Document Analysis Result	Check Procedure	Sample No.	Pic No.	Check Result	Approx. quantity [kg]	Remarks 1 / Lab result
1.1.1	Accommodation space	A Deck	Ceiling panel (Panel)	Panel	Asbestos	Unknown	Sampling check			?	0	
	Accommodation space	A Deck				?						
	Accommodation space	A Deck				Contained						
	Accommodation space	A Deck				Not contained						
	Accommodation space	B Deck				Unknown						
	Cargo space	Cargo hold no.1										
	Cargo space											
	Deck											

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.

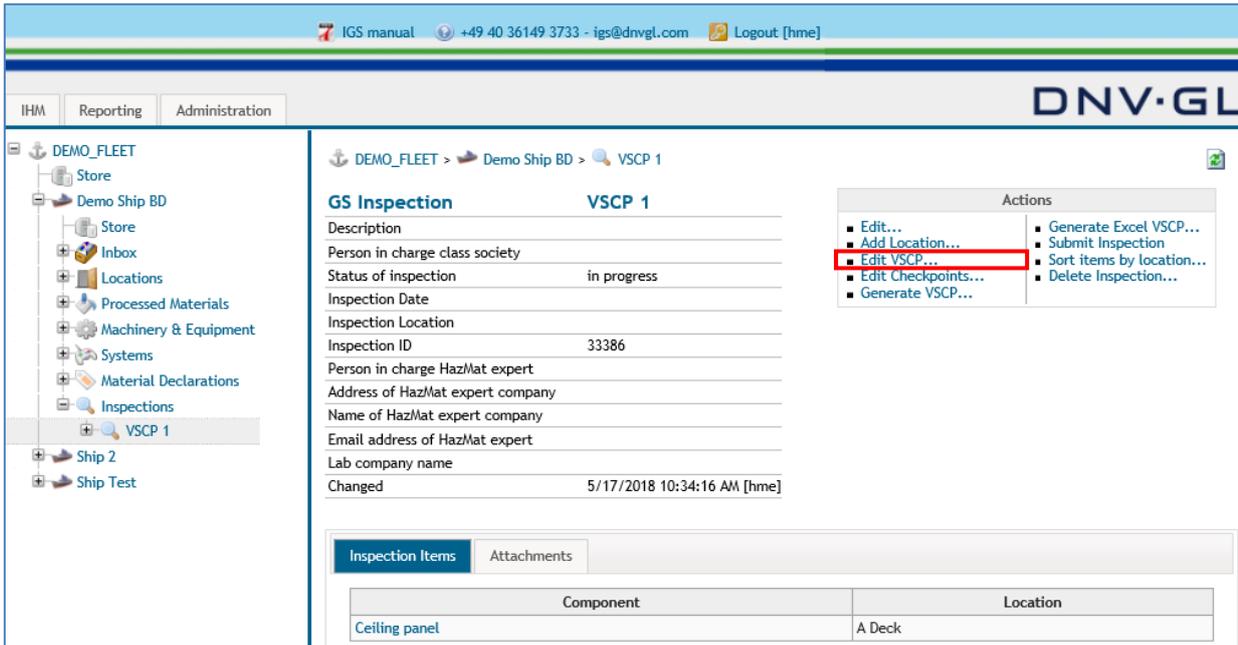
Note: The "Save" function in the actions box should be used more frequently to avoid a loss of already inserted data.

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

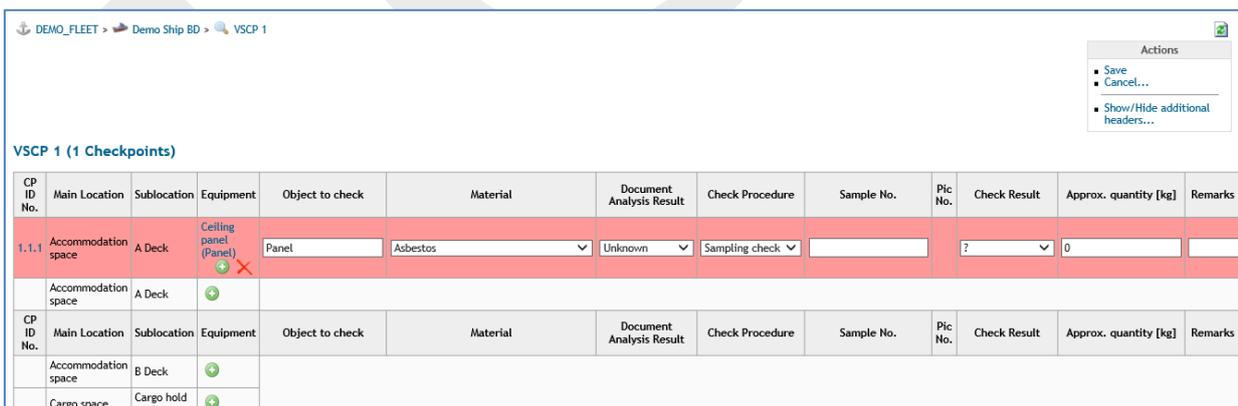
6.1.4 Completion of the VSCP by "Edit VSCP" link

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.



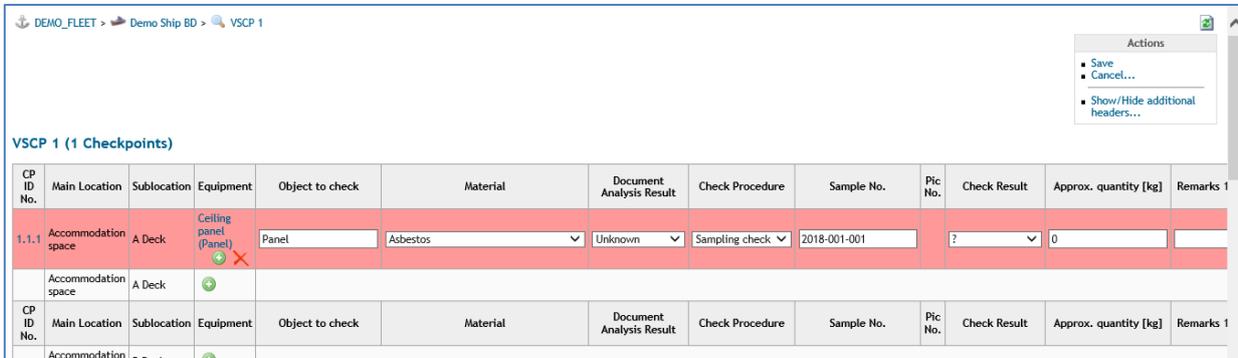
Complete all the missing entries based on the laboratory results to accomplish the VSCP for the IHM preparation.

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.



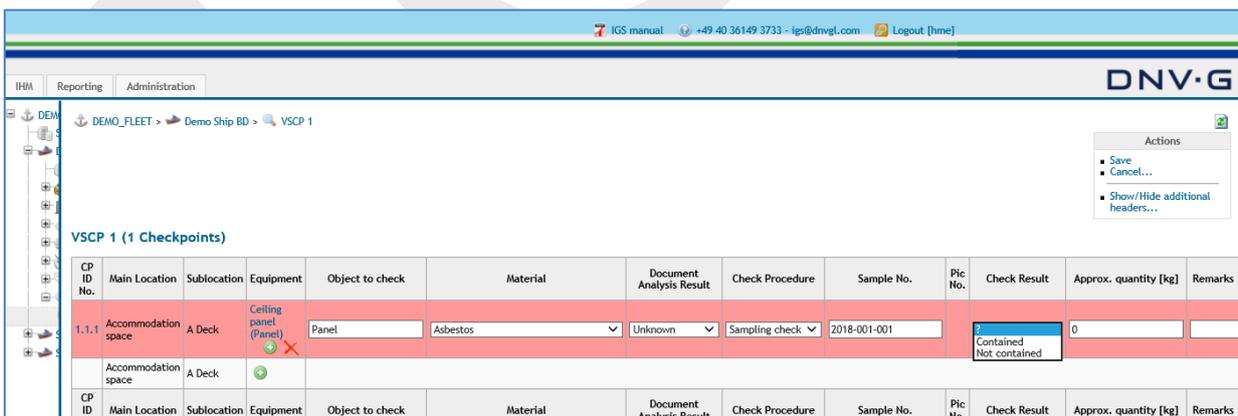
CP ID No.	Main Location	Sublocation	Equipment	Object to check	Material	Document Analysis Result	Check Procedure	Sample No.	Pic No.	Check Result	Approx. quantity [kg]	Remarks
1.1.1	Accommodation space	A Deck	Ceiling panel (Panel)	Panel	Asbestos	Unknown	Sampling check	2018-001-001	?		0	
	Accommodation space	A Deck										

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.



CP ID No.	Main Location	Sublocation	Equipment	Object to check	Material	Document Analysis Result	Check Procedure	Sample No.	Pic No.	Check Result	Approx. quantity [kg]	Remarks
1.1.1	Accommodation space	A Deck	Ceiling panel (Panel)	Panel	Asbestos	Unknown	Sampling check	2018-001-001		Contained	0	
	Accommodation space	A Deck										

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".

DEMO_FLEET > Demo Ship BD > VSCP 1

VSCP 1 (1 Checkpoints)

CP ID No.	Main Location	Sublocation	Equipment	Object to check	Material	Document Analysis Result	Check Procedure	Sample No.	Pic No.	Check Result	Approx. quantity [kg]	Remarks 1
1.1.1	Accommodation space	A Deck	Ceiling panel (Panel)	Panel	Asbestos	Unknown	Sampling check	2018-001-001		Contained	150	
	Accommodation space	A Deck										
CP						Document			Pic			

Actions: Save, Cancel..., Show/Hide additional headers...

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

DEMO_FLEET > Demo Ship BD > VSCP 1

VSCP 1 (1 Checkpoints)

CP ID No.	Main Location	Sublocation	Equipment	Object to check	Material	Document Analysis Result	Check Procedure	Sample No.	Pic No.	Check Result	Approx. quantity [kg]	Remarks 1 / Lab result	Ri
1.1.1	Accommodation space	A Deck	Ceiling panel (Panel)	Panel	Asbestos	Unknown	Sampling check	2018-001-001		Contained	150	asbestos content 5%<<	
	Accommodation space	A Deck											
CP						Document			Pic				

Actions: Save, Cancel..., Show/Hide additional headers...

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

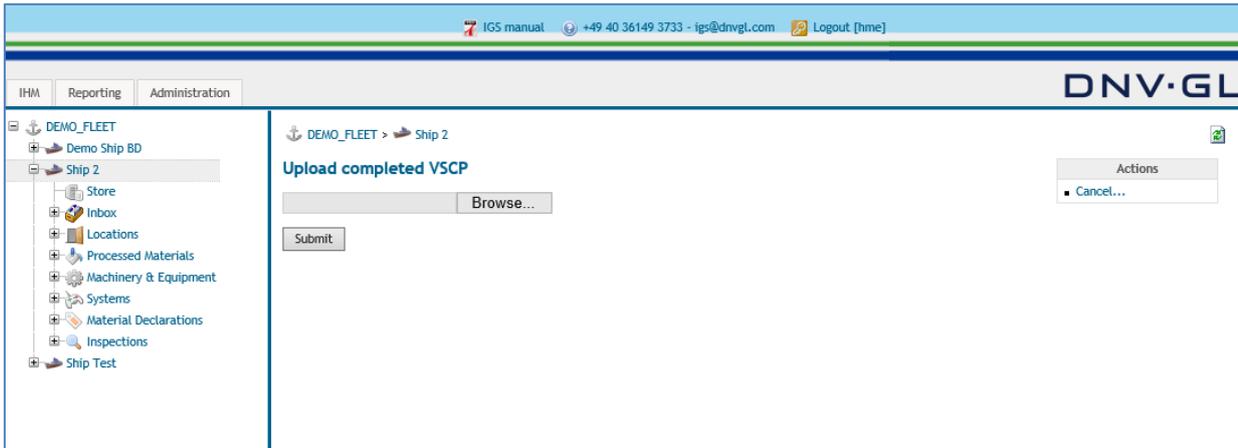
Note: The "Save" function in the actions box should be used more frequently to avoid a loss of already inserted data.

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

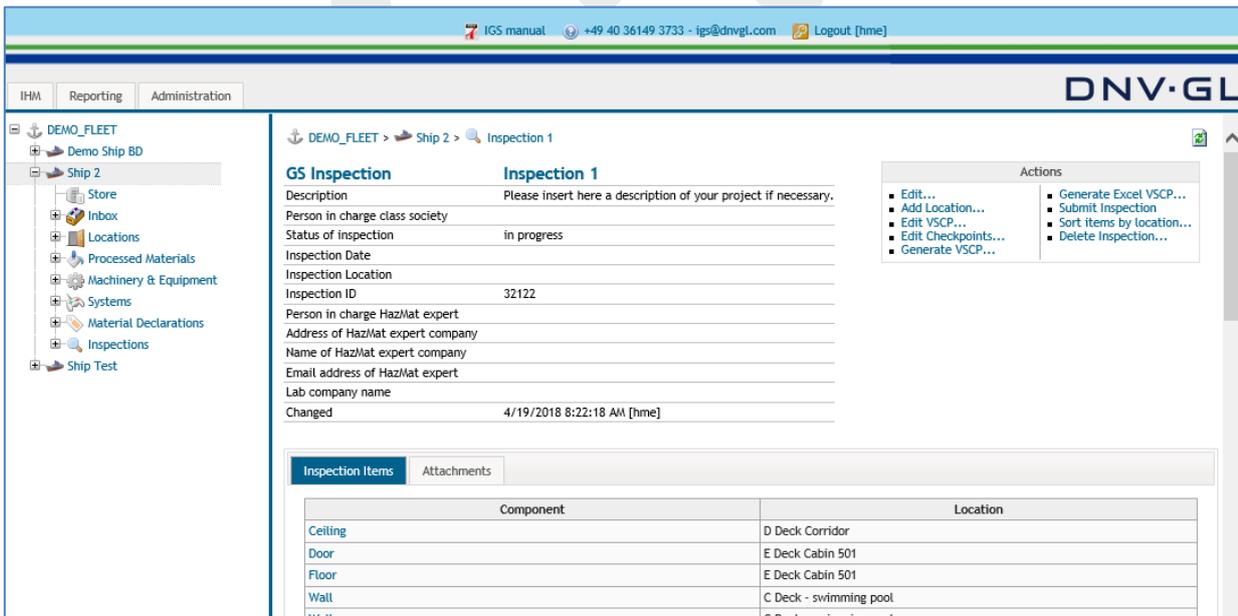
Users of IGS can work with a standard VSCP provided by DNV GL. The standard VSCP can be downloaded by clicking the "Download standard VSCP" link in the actions box of the ship view. Standard VSCP is designed in excel and users can work in excel standard VSCP during the whole IHM preparation process.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

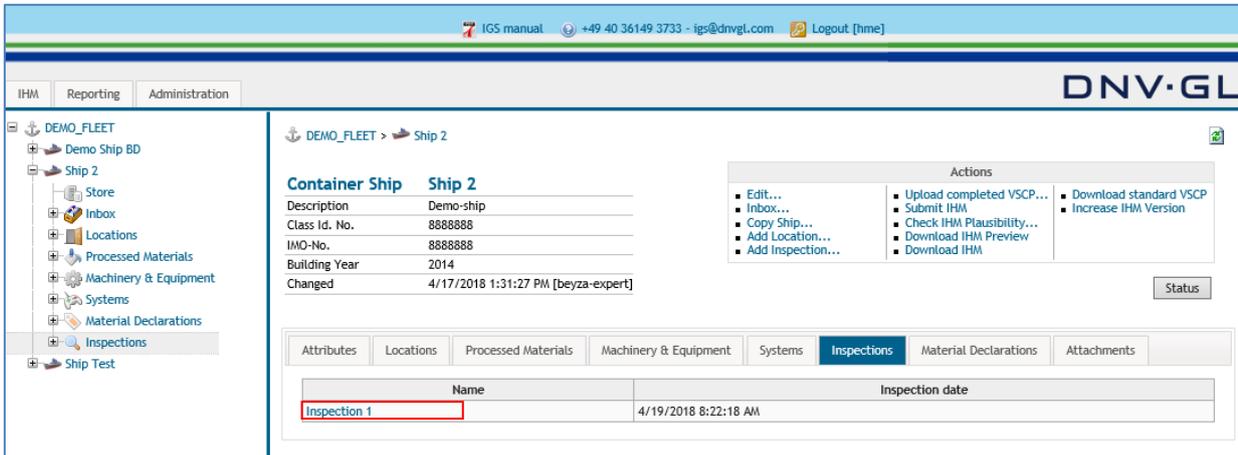
Following dialog box appears;



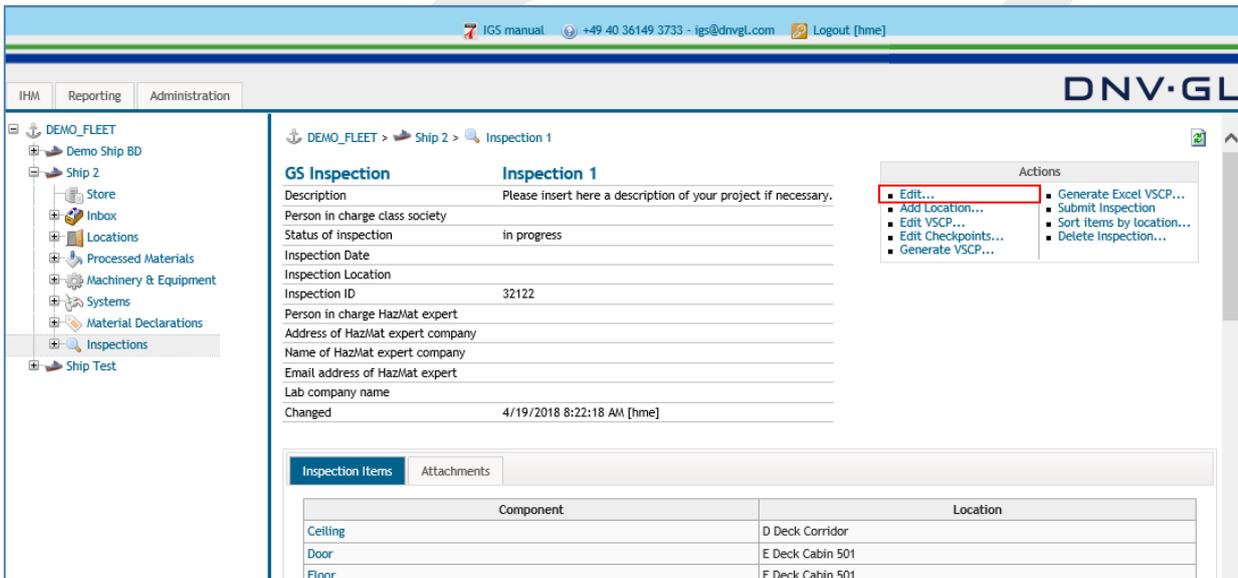
VSCP is uploaded and an inspection is automatically created in the name given by the user. Now the users can edit the inspection data and can further edit and work on the VSCP through IGS by "Edit Checkpoints" link in the actions box. Details of this function are provided in **Chapter 6.4**.

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.

GS Inspection		Inspection 1	
Name*	<input type="text" value="Inspection 1"/>	←	Name of Inspection.
Description	<div style="border: 1px solid gray; padding: 5px; min-height: 100px;">Please insert here a description of your project if necessary.</div>	←	Additional description, e.g. scope of inspection
Person in charge class society	<input type="text"/>	←	Name of the person in charge
Status of inspection	<input type="text" value="in progress"/>	←	In progress / submitted / accepted.
Inspection Date	<input type="text"/> 	←	Date(s) of the inspection
Inspection Location	<input type="text"/>	←	Location of inspection on
Inspection ID	<input type="text" value="32122"/>	←	Assigned automatically by IGS
Person in charge HazMat expert	<input type="text"/>	←	Name of the HazMat Expert in
Address of HazMat expert company	<div style="border: 1px solid gray; padding: 5px; min-height: 100px;"></div>	←	Address of the HazMat Expert
Name of HazMat expert company	<input type="text"/>	←	Name of HazMat company
Email address of HazMat expert	<input type="text"/>	←	Contact of the HazMat Expert
Lab company name	<input type="text"/>	←	Contracted Laboratory's name
Changed	<input type="text" value="4/19/2018 8:22:18 AM [hme]"/>		
<input type="button" value="Save"/>			

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.

The screenshot shows the 'Edit Checkpoint' GUI in the IGS system. The interface is titled 'DEMO_FLEET > Demo Ship BD > VSCP 1'. The main form area is highlighted in pink, indicating a plausibility check. The form contains the following fields:

- CP ID No.: 1.1.1
- Main Location: Accommodation space
- Sublocation: A Deck
- Equipment: Ceiling panel
- Material: [Empty]
- Object to check: [Empty]
- Document Analysis Result: Unknown
- Check Procedure: Sampling check
- Sample No.: [Empty]
- Check Result: ?
- Approx. quantity [kg]: 0
- Remarks 1 / lab result: [Empty]
- Remarks 2: [Empty]
- Remarks 3: [Empty]

Below the main form, there are sections for 'Add Location Plan' and 'Add Photo', both with 'Browse...' and 'Save' buttons. The 'Add Location Plan' section shows 'No Location Plan available.' and the 'Add Photo' section shows 'No Images available.'

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 screenshot shows the 'Edit Checkpoint' GUI in the IGS system with filled-in data. The interface is titled 'DEMO_FLEET > Demo Ship BD > VSCP 1'. The main form area is highlighted in pink, indicating a plausibility check. The form contains the following fields:

- CP ID No.: 1.1.1
- Main Location: Accommodation space
- Sublocation: A Deck
- Equipment: Ceiling panel
- Material: Asbestos
- Object to check: Panel
- Document Analysis Result: Unknown
- Check Procedure: Sampling check
- Sample No.: 2018-001-001
- Check Result: Contained
- Approx. quantity [kg]: 150
- Remarks 1 / lab result: asbestos content 5%<x<50%
- Remarks 2: [Empty]
- Remarks 3: [Empty]

Below the main form, there are sections for 'Add Location Plan' and 'Add Photo', both with 'Browse...' and 'Save' buttons. The 'Add Location Plan' section shows 'No Location Plan available.' and the 'Add Photo' section shows 'No Images available.'

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.

The screenshot displays the DNV-GL software interface. The top navigation bar includes 'IHM', 'Reporting', and 'Administration'. The main content area shows the 'GS Inspection' details for 'Inspection 1'. The 'Actions' menu is open, showing options like 'Edit...', 'Add Location...', 'Edit VSCP...', 'Edit Checkpoints...', 'Generate VSCP...', 'Generate Excel VSCP...', 'Submit Inspection', 'Sort items by location...', and 'Delete Inspection...'. The 'Generate VSCP...' and 'Generate Excel VSCP...' options are highlighted with red boxes. Below the inspection details, a 'Visual Sampling Check Plan for Inspection 1' table is shown, listing various inspection points and their results.

Inspection No.	Material	Object to check	Document analysis result	Check procedure	Sample No.	Pic No.	Check Result	Approx. Quantity (kg)	Remarks 1 / Lab result	Remarks 2	Remarks 3
1.1.1	Asbestos	insulation inner and outer wall	Unknown	Sampling check	501		Not contained				
1.1.2	Asbestos	structure material	Unknown	Sampling check	502		Not contained				
1.1.3	Asbestos	structure material	Unknown	Sampling check	502		Not contained				
1.1.4	Asbestos	panel	Unknown	Sampling check	503		Not contained				
1.1.5	Asbestos	sealing and packing for doors	Unknown	Sampling check	504		Not contained				

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.

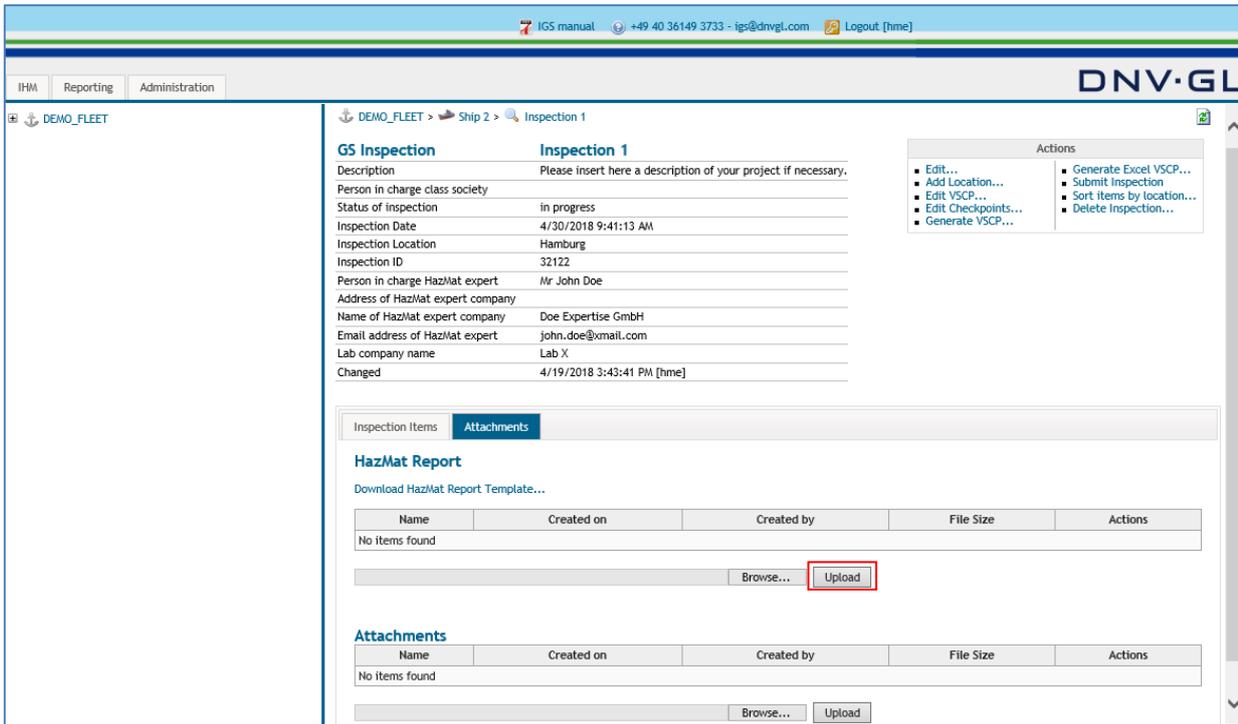
To prepare the HazMat Inspection Report, users of IGS can use the template HazMat Inspection Report provided by DNV GL. The template HazMat Inspection Report can be found under the Attachments tab of the Inspection.

The screenshot displays the DNV GL IGS manual interface. The main content area shows the 'GS Inspection' details for 'VSCP 1'. The 'Attachments' tab is active, showing a 'HazMat Report' attachment. Below the attachment title, there is a 'Download HazMat Report Template...' link. A table with columns 'Name' and 'Created on' is shown, indicating 'No items found'. There are 'Browse...' and 'Upload' buttons. On the right, a preview of the 'Hazardous Materials Inspection Report Part-1' template is visible, featuring a form with various fields and their data types.

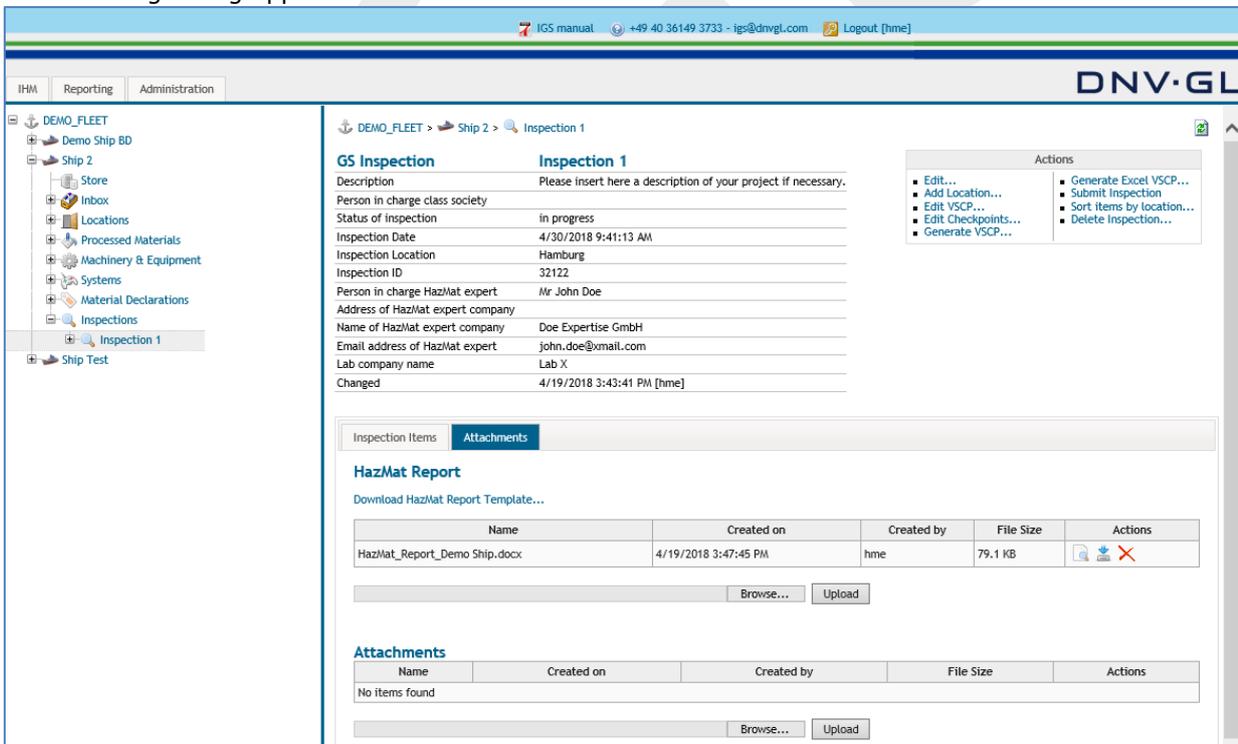
Field	Data Type
Vessel-name	name
IMO-No.	xxxxxxxx
Class-Id	no
Shipyard	text
Shipowner	text
Flag	flag
Type of vessel	text
Gross-Tonnage	text
Report-generator	text
HazMat-Report-No.	text
Version	text

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.



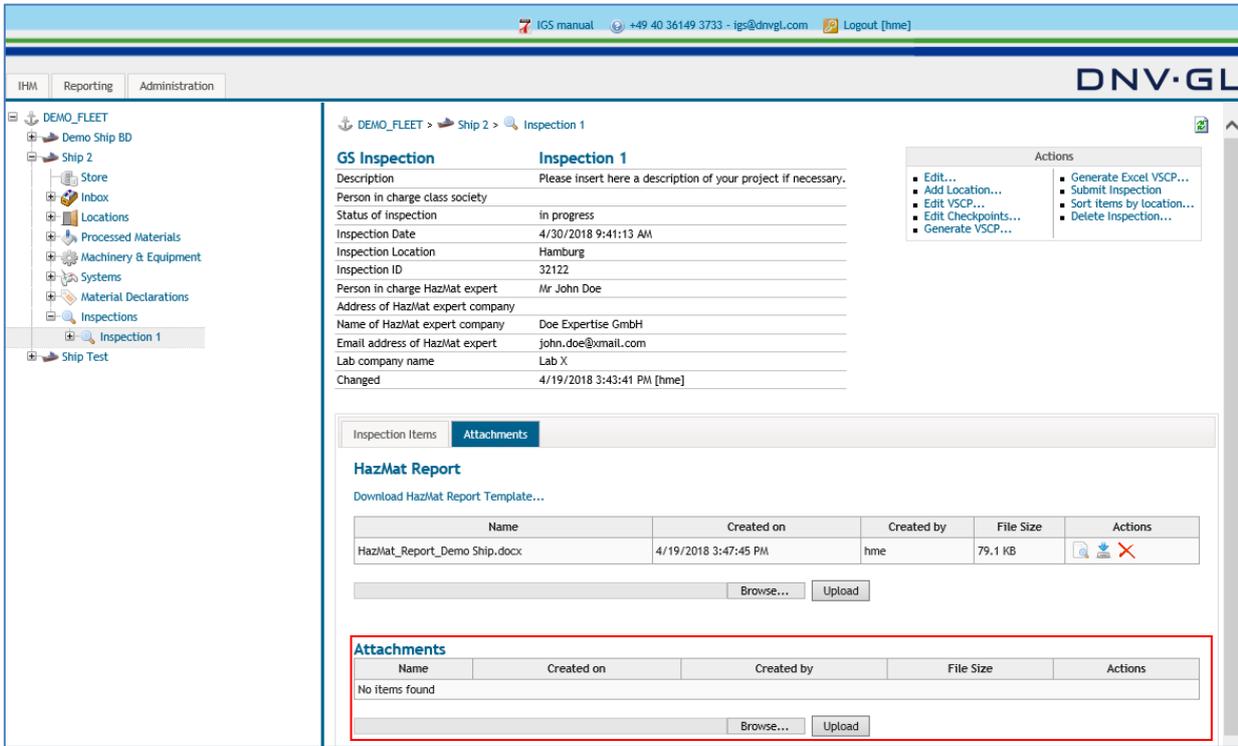
The following dialog appears.



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.

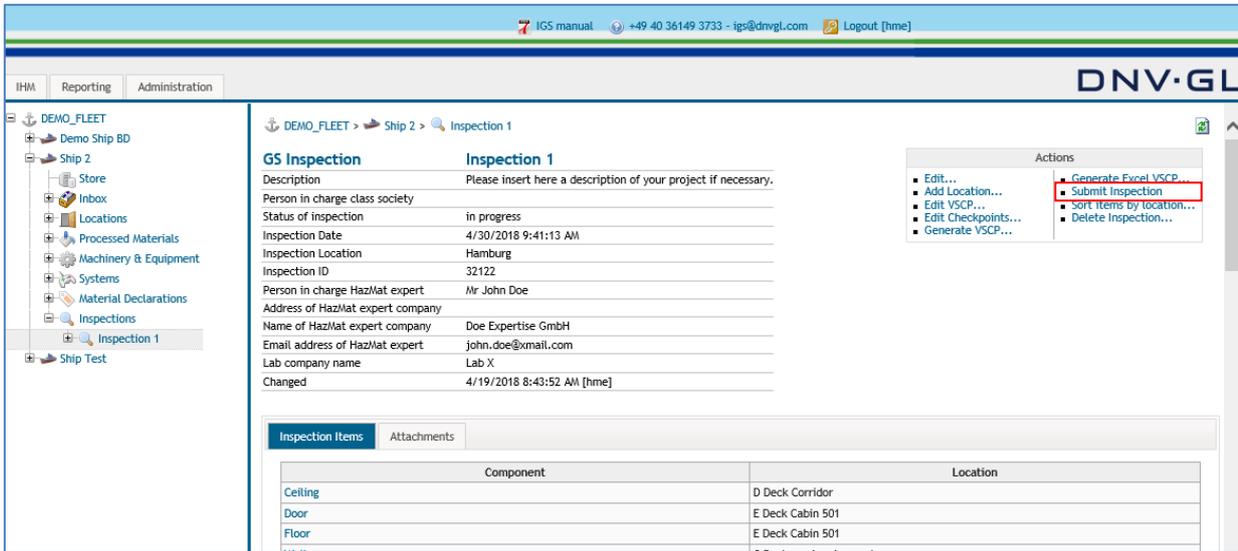


Note: The additional documents upload function under Attachments is not meant as option to upload SDoC and MD documentation or other documentation such as VSCP for the preparation of the IHM.

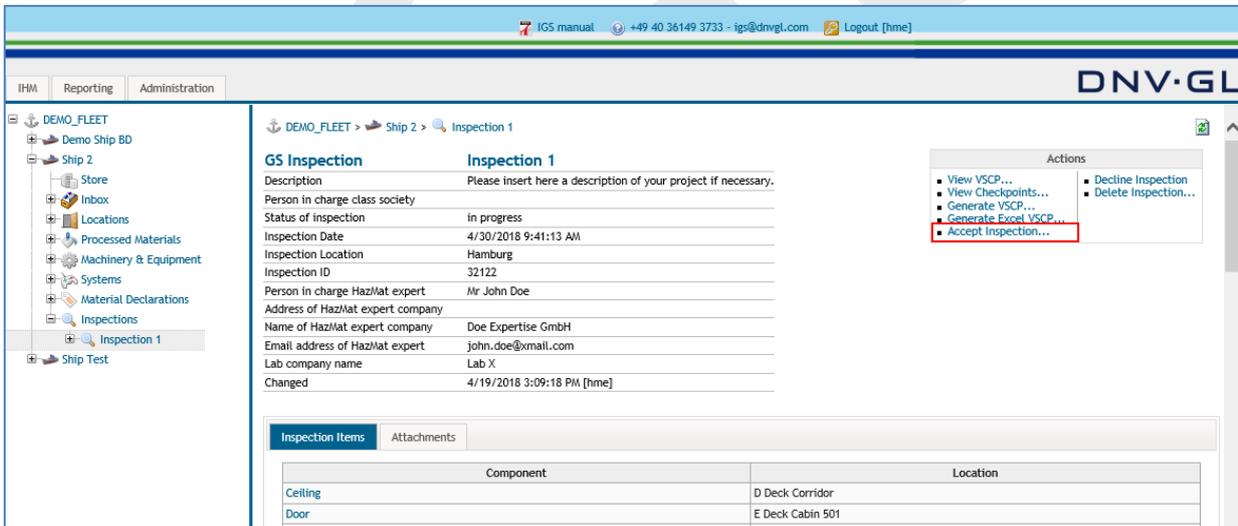
Note: The capacity of the upload volume of Attachments tab is limited and should only be used to upload necessary information.

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.

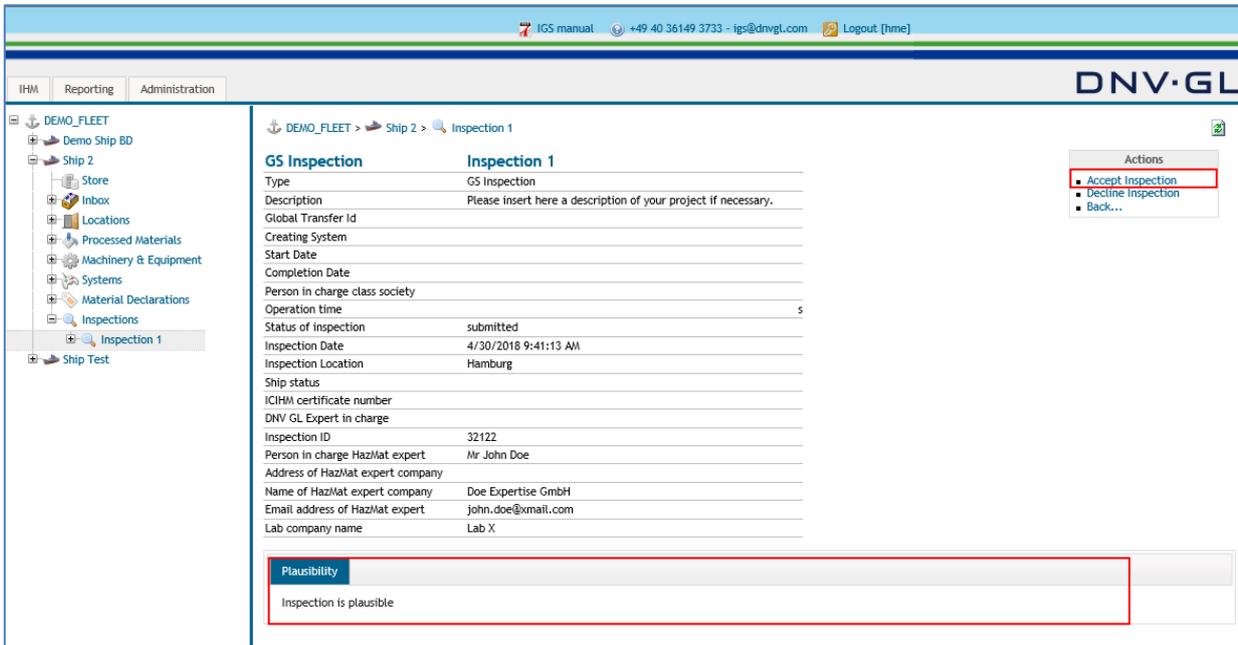


After "Submit Inspection" is clicked, following dialog appears;



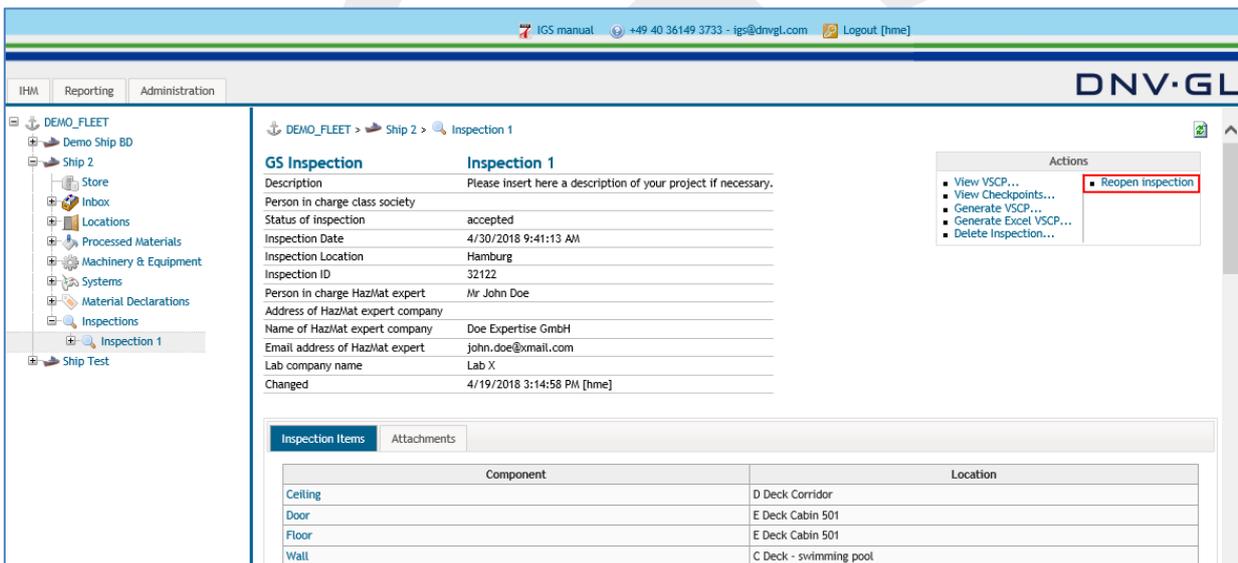
If users want to accept the inspection, the user click on "Accept Inspection" link. If the user wants to go back to the edit inspection, "Decline Inspection" link needs to be clicked.

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



“Submit Inspection” is the self-check of the user of its own work. At the acceptance 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.

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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 _____
ICIM certificate number _____
DNV GL Expert in charge _____
Inspection ID 32122
Person in charge Haz/Mat expert Mr John Doe
Address of Haz/Mat expert company _____
Name of Haz/Mat expert company Doe Expertise GmbH
Email address of Haz/Mat expert john.doe@mail.com
Lab company name Lab X

Actions
Back...

Delete

6.8 Plausibility of the VSCP

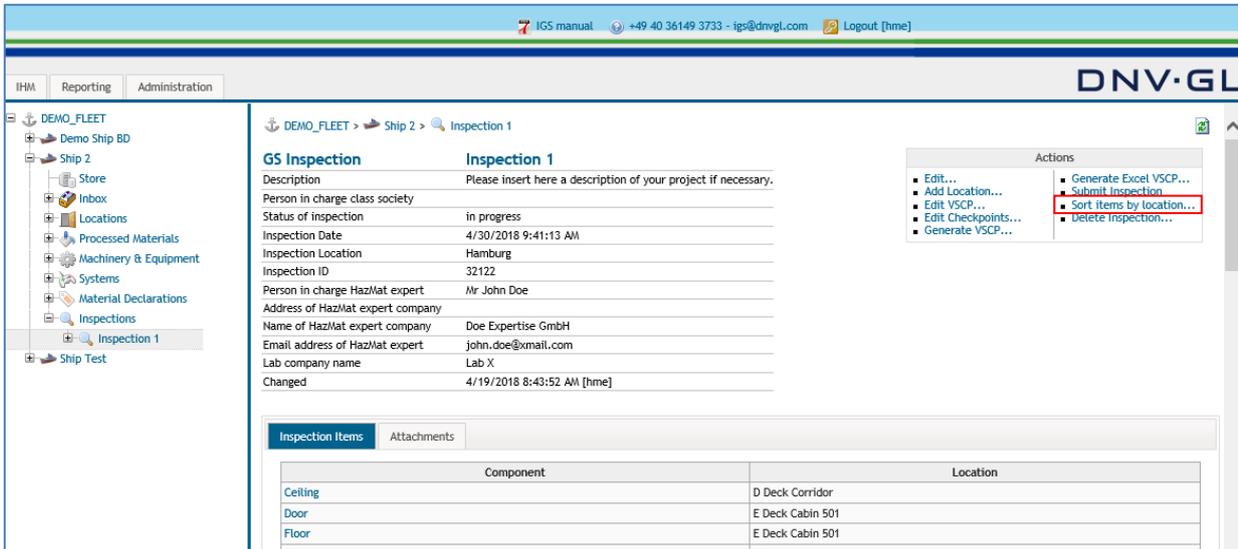
The plausibility check of the VSCP cross checks the logical data among Document analysis, Check procedure and Check result. Following checks are conducted:

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

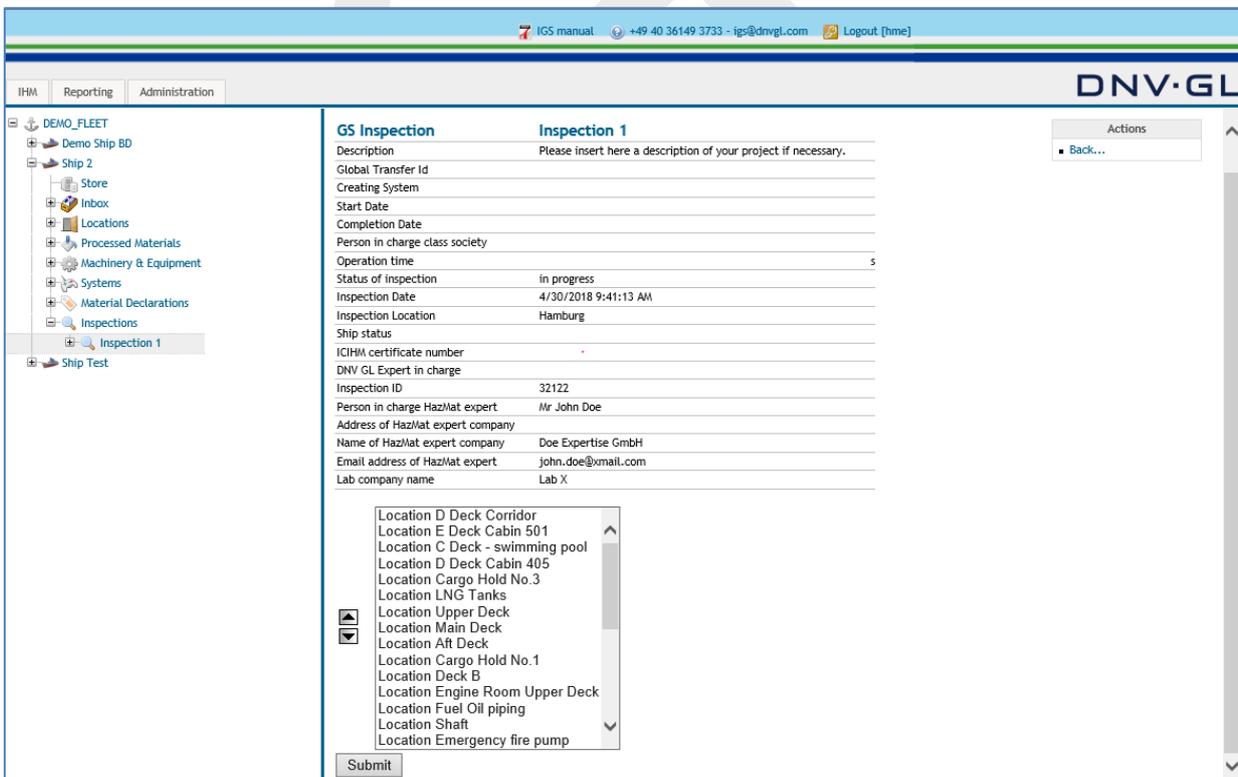
In addition to the above-mentioned checks, IGS checks the logical data between the Check Result and approximate quantity columns. If "contained" selected as the check result, approximate quantity must be filled in with a figure bigger than zero. If "not contained" selected as the check result, approximate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

The screenshot shows the DNV-GL software interface. The breadcrumb navigation is 'DEMO_FLEET > Ship 2 > Inspection 1'. The main content area displays 'GS Inspection' details for 'Inspection 1'. The 'Inspection Items' tab is active, showing a table with the following data:

Component	Location
Ceiling	D Deck Corridor
Door	E Deck Cabin 501
Floor	E Deck Cabin 501

The 'Ceiling' row is highlighted with a red box. The 'Actions' menu is open, showing the following options:

- Edit...
- Add Location...
- Edit VSCP...
- Edit Checkpoints...
- Generate VSCP...
- Generate Excel VSCP...
- Submit Inspection
- Sort Items by location...
- Delete Inspection...

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

The screenshot shows the DNV-GL software interface. The breadcrumb navigation is 'DEMO_FLEET > Ship 2 > Inspection 1 > wheelhouse > Ceiling'. The main content area displays 'Processed Material' details for 'Ceiling'. The 'Actions' menu is open, showing the following options:

- Edit...
- Delete...
- Back...

The 'Edit...' option is highlighted with a red box. Below the details, there is a table with the following data:

Material	Object to check	Document Analysis Results	Check Procedure	Approx. quantity [kg]	Check result	Sample No.	Remarks 1 / Lab result	Remarks 2	Remarks 3
Polybrominated diphenyl ethers (PBDEs)	paint	Unknown	Sampling check	kg	Not contained	S81			
Polychloronaphthalenes (Cl >= 3)	paint	Unknown	Sampling check	kg	Not contained	S81			
Certain shortchain chlorinated paraffins	paint	Unknown	Sampling check	kg	Not contained	S81			

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

The screenshot shows the 'Processed Material' form for 'Ceiling'. The form includes fields for Name, Description, Batch number, Supplier, Manufacturer, Year of manufacture, Installed quantity, Installation Date, and Product used as. Below the form is a 'Product Category' dropdown menu. At the bottom, there is a table with the following data:

Material	Object to check	Document Analysis Results	Check Procedure	Approx. quantity [kg]	Check result	Sample No.	Remarks 1 / Lab result	Remarks 2	Remarks 3
Polybrominated dephenyl ethers (PBDEs)	paint	Unknown	Sampling check	kg	Not contained	S81			
Polychloronaphthalenes (Cl >= 3)	paint	Unknown	Sampling check	kg	Not contained	S81			
Certain shortchain chlorinated paraffins	paint	Unknown	Sampling check	kg	Not contained	S81			

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.

The screenshot shows the 'Processed Material' form for 'Ceiling' with the 'Delete...' link highlighted in the actions box. The table below the form is identical to the one in the previous screenshot:

Material	Object to check	Document Analysis Results	Check Procedure	Approx. quantity [kg]	Check result	Sample No.	Remarks 1 / Lab result	Remarks 2	Remarks 3
Polybrominated dephenyl ethers (PBDEs)	paint	Unknown	Sampling check	kg	Not contained	S81			
Polychloronaphthalenes (Cl >= 3)	paint	Unknown	Sampling check	kg	Not contained	S81			
Certain shortchain chlorinated paraffins	paint	Unknown	Sampling check	kg	Not contained	S81			

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

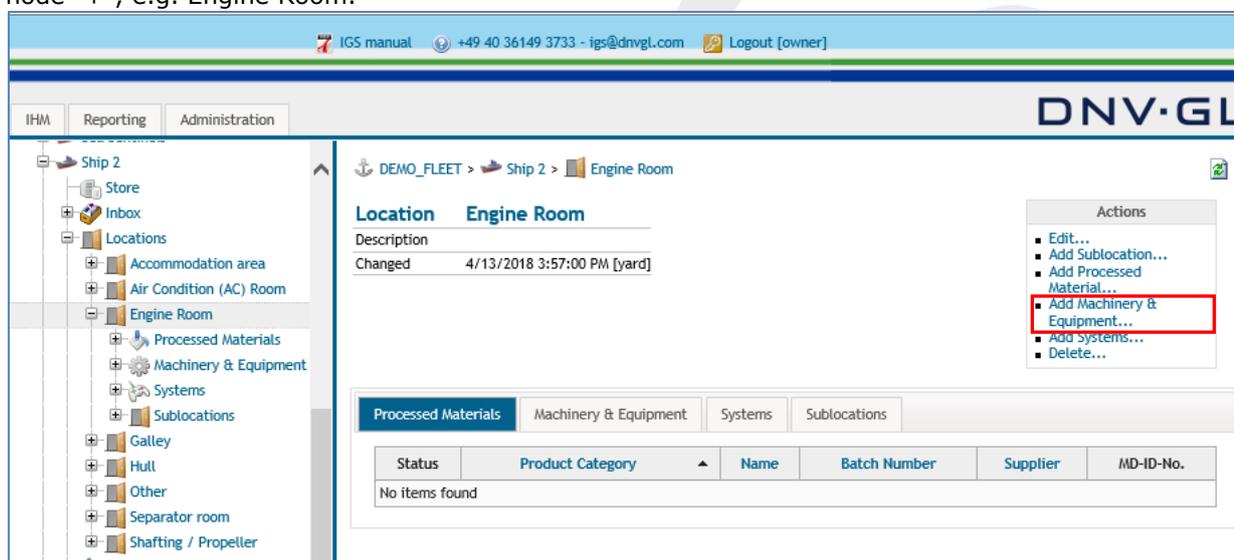
7 MAINTENANCE OF IHM

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

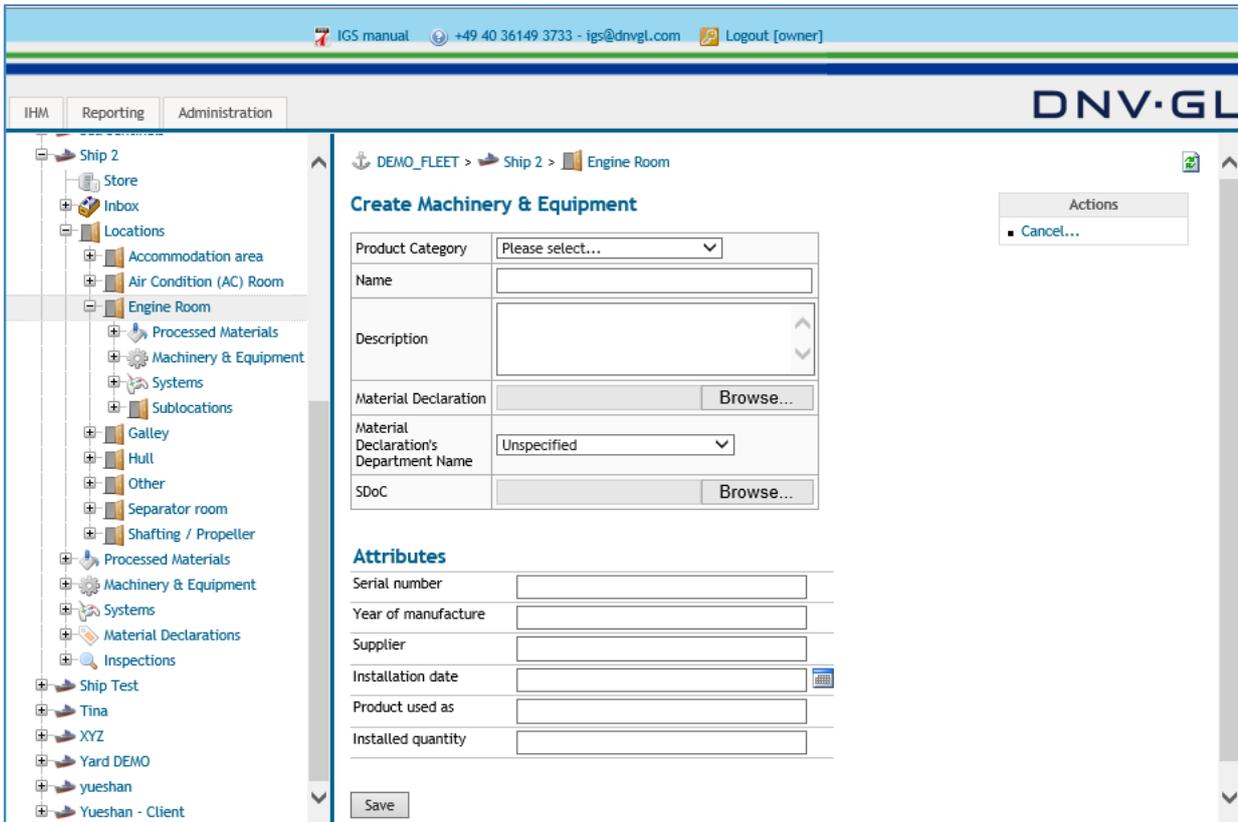
To add a new component or material (SDoC and MD) to the ship project the user must select from the navigation tree on the left side the respective location under the "Locations" tab, e.g. Engine Room.

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



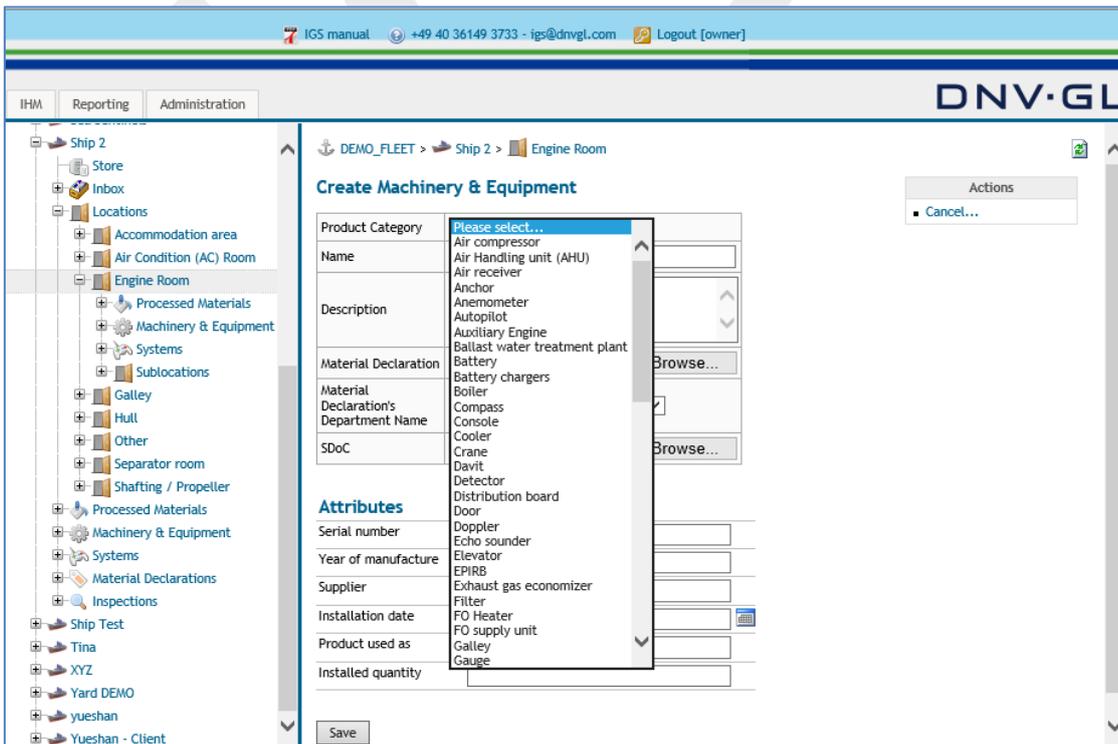
Then the user must pre-define the specific use of the new component or material (SDoC and MD), e.g. Processed Material, Machinery & Equipment or System.

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.

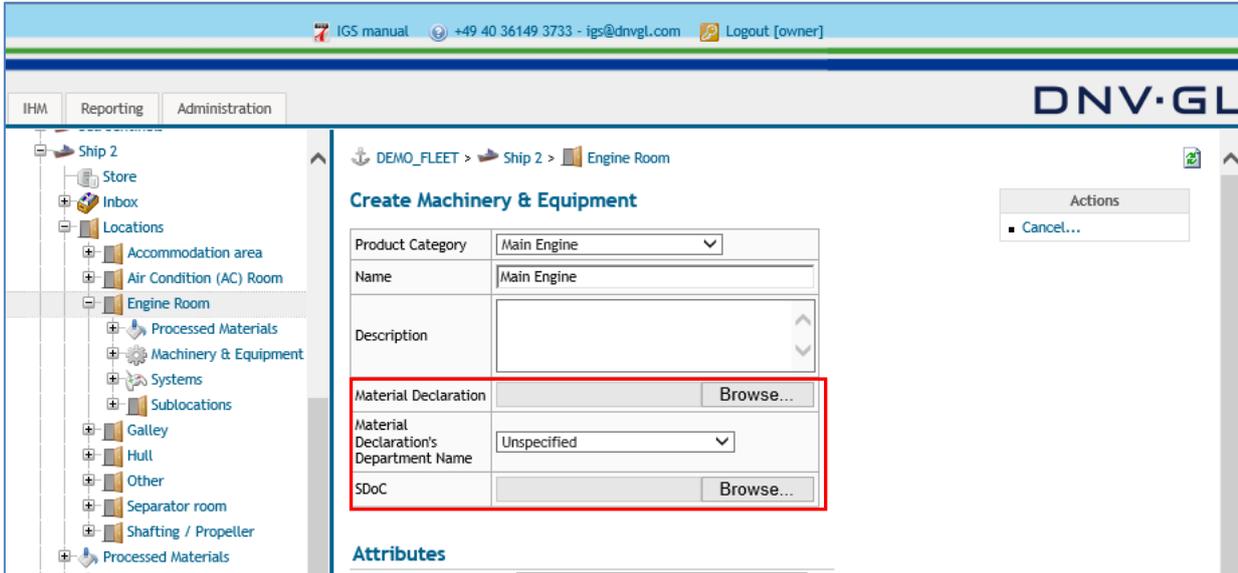


First select the Item "Product Category" to define the specific use of equipment, e.g. Gasket, Insulation, Main Engine, Control ..., etc.

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.

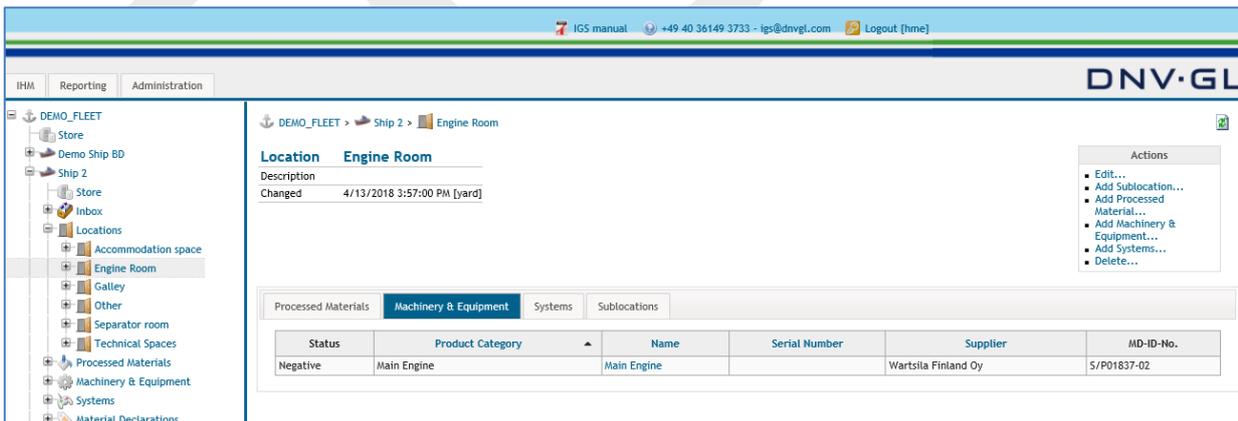


Note: The text for the "Name" field can be entered either as free text or selected from the suggestion list. The suggestion list behind the "Name" field is customisable. Customers are free to ask for exchange with own name lists.

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.

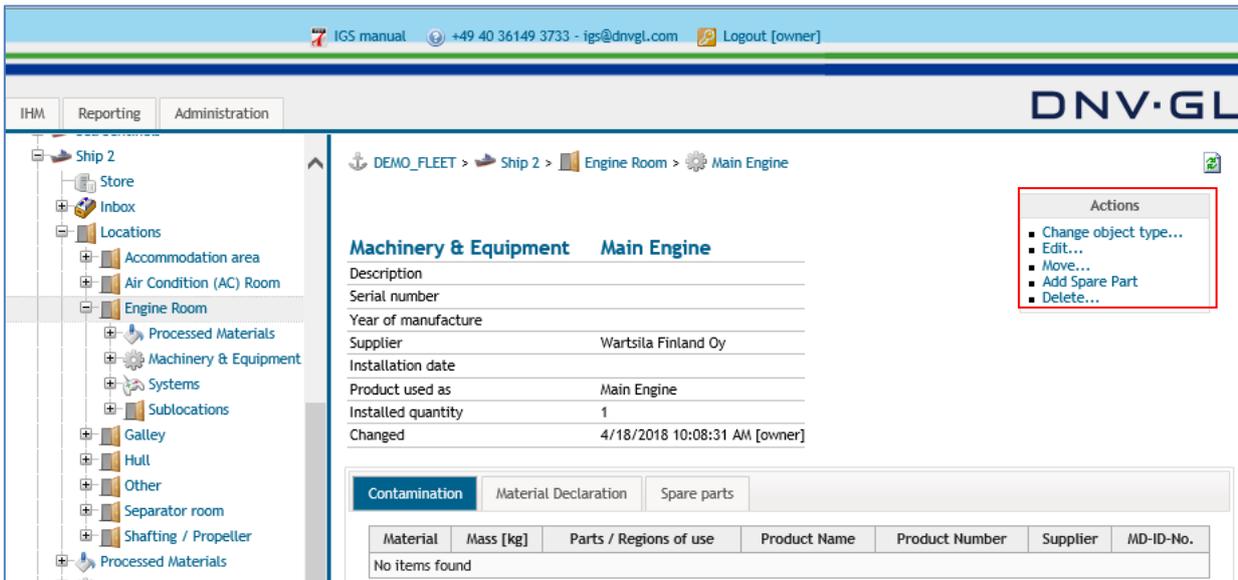
Finally click on "Save". Following dialog box appears.



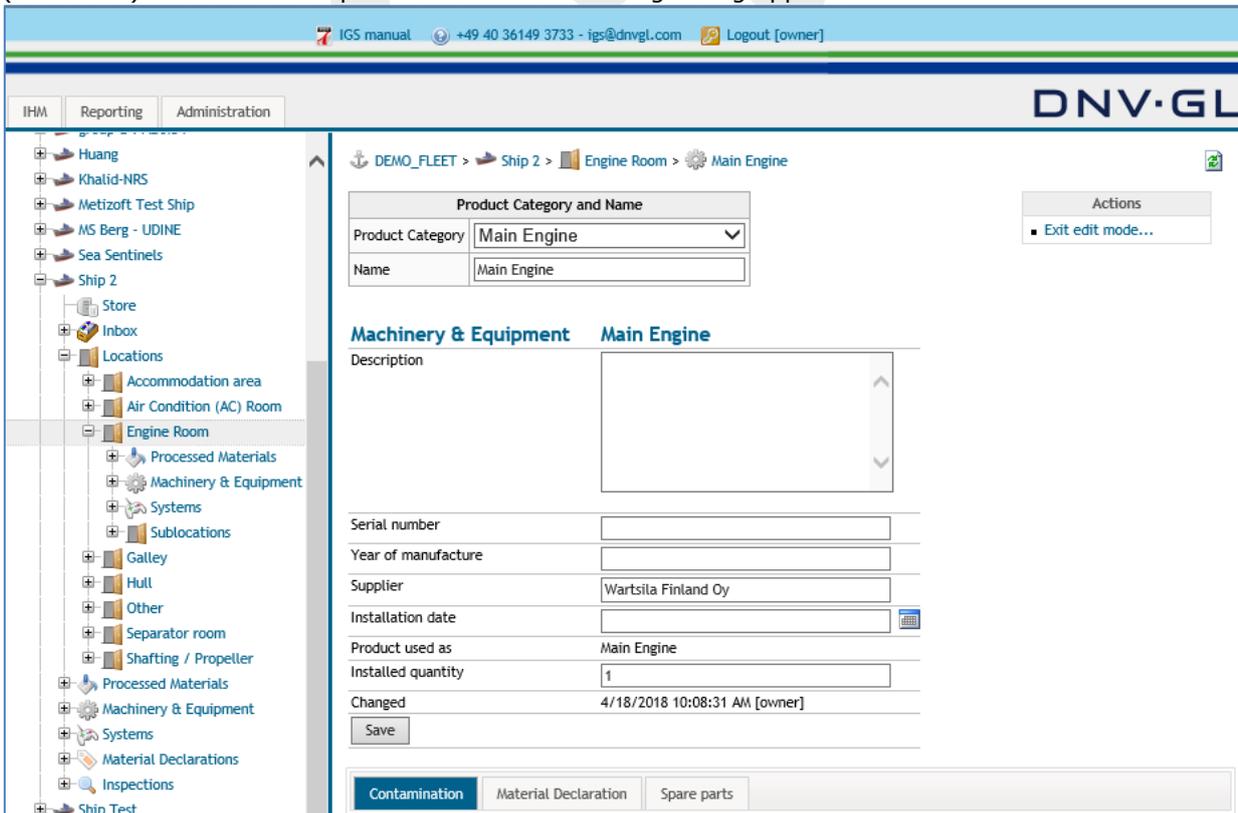
Note: The requested information under "Attributes" are not mandatory but nonetheless very important for the traceability of the origin of the material or component (SDoC and MD). **Please, at least insert the serial or batch number for the new component or material!**

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.

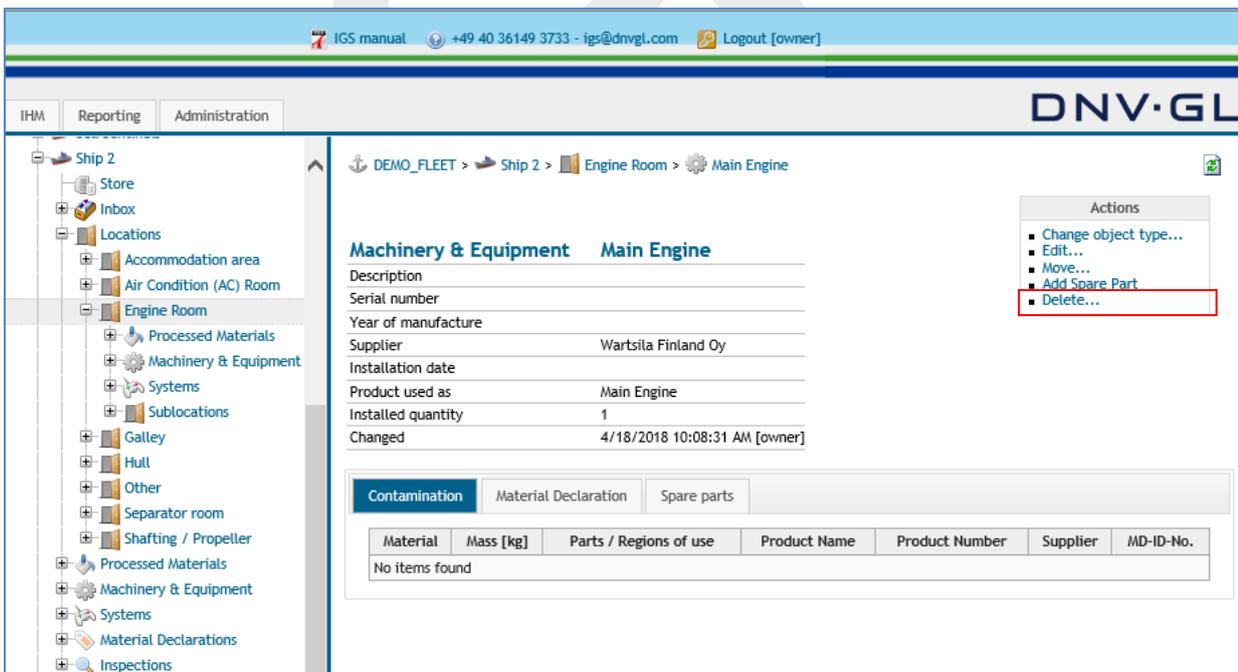
Note: The MD itself will not be deleted by deleting a component or material because it might be associated to other components or materials in other ships in the customer fleet.

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.

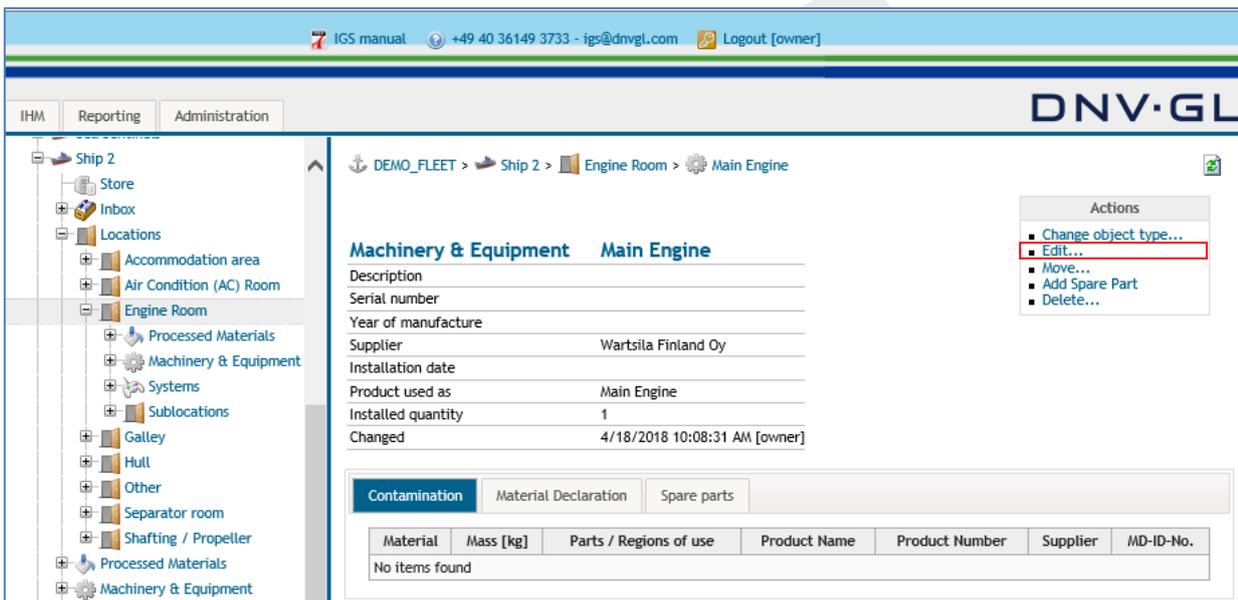


Note: To add a new component or material (SDoC and MD) to the respective location of the ship project use the "Add a new component or material (SDoC and MD)" option (Chapter 7.1).

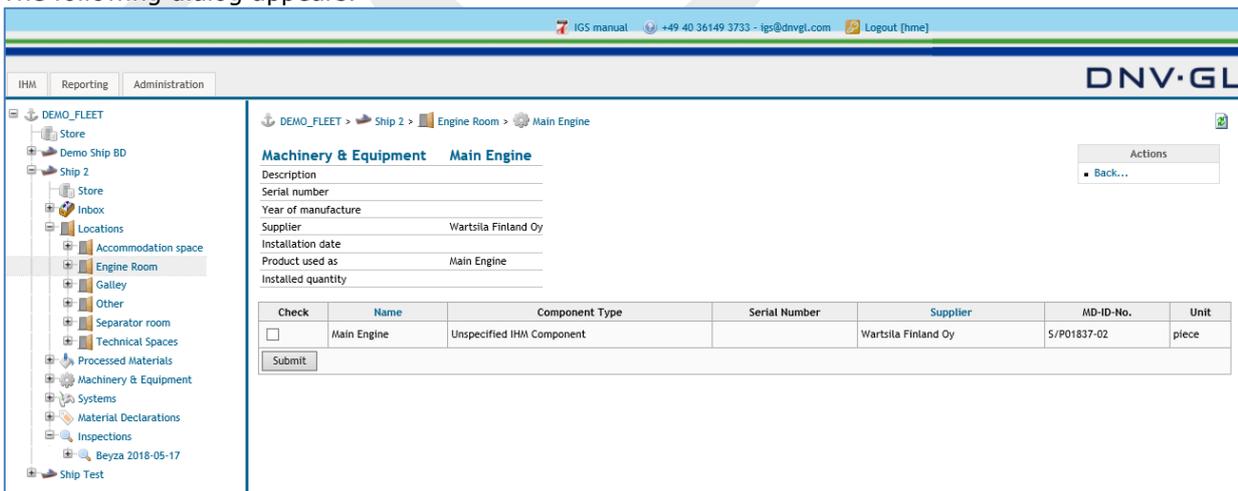
Note: Do not delete MDs from a component or material. MDs might be associated to different ship projects and cause fatal error when deleted intentionally. Always delete component or material only.

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.

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IHM Reporting Administration DNV·GL

DEMO_FLEET > Ship 2 > Engine Room > Main Engine

- DEMO_FLEET
- Store
- Demo Ship BD
- Ship 2
 - Store
 - Inbox
 - Locations
 - Accommodation space
 - Engine Room
 - Galley
 - Other
 - Separator room
 - Technical Spaces
 - Processed Materials
 - Machinery & Equipment
 - Systems
 - Material Declarations
 - Inspections
 - Beyza 2018-05-17
 - Ship Test

Machinery & Equipment Main Engine

Description _____

Serial number _____

Year of manufacture _____

Supplier Wartsila Finland Oy

Installation date _____

Product used as Main Engine

Installed quantity _____

Changed 5/17/2018 3:18:32 PM [hme]

Contamination Material Declaration **Spare parts**

Status	Product Category	Serial Number	Supplier	Product Name	MD-ID-No.	SDoC-ID-No.
Negative	Main Engine		Wartsila Finland Oy	Main Engine - 8L26D3	S/P01837-02	DBAD814672

Actions

- Change object type...
- Edit...
- Move...
- Add Spare Part
- Delete...

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

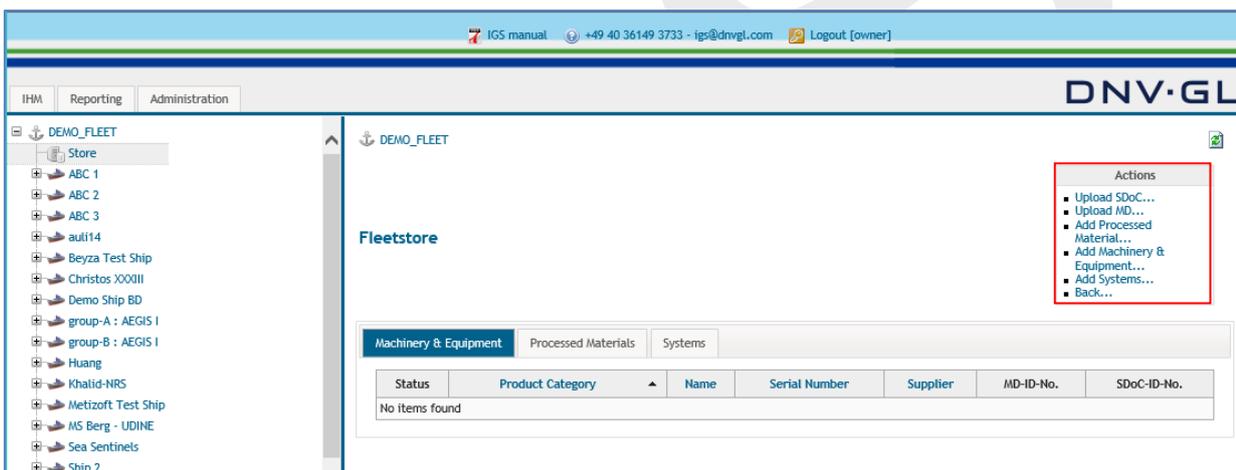
7.3 Store concept for administration of SDoC and MD documentation

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

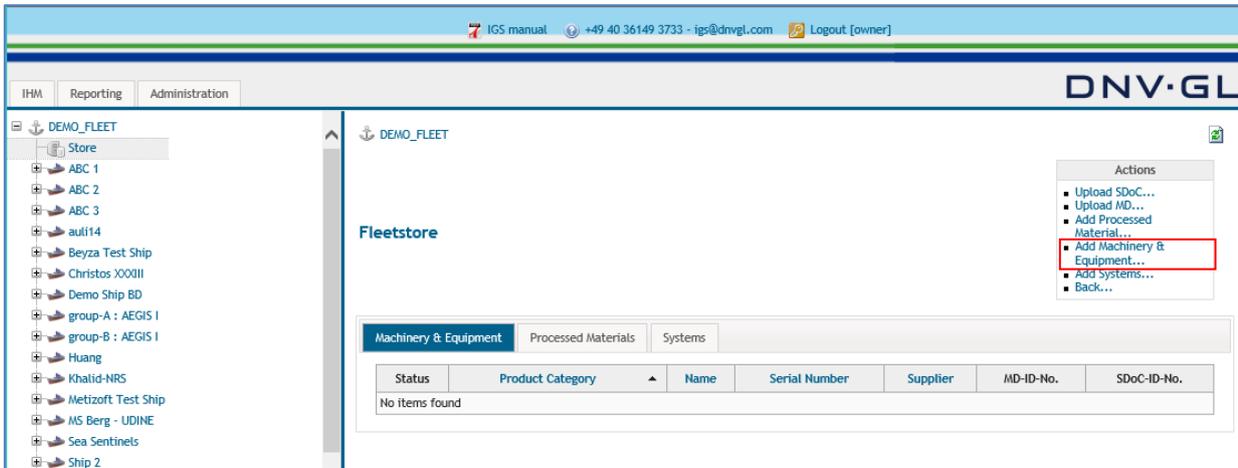
To upload SDoCs and MDs into the fleet store the user must open the fleet node “+” in the navigation tree on the left side and then select the sub-item “Store” to see the fleet store view on the right side. The user has the same option within the ship projects to open the ship store.

The following dialog appears.

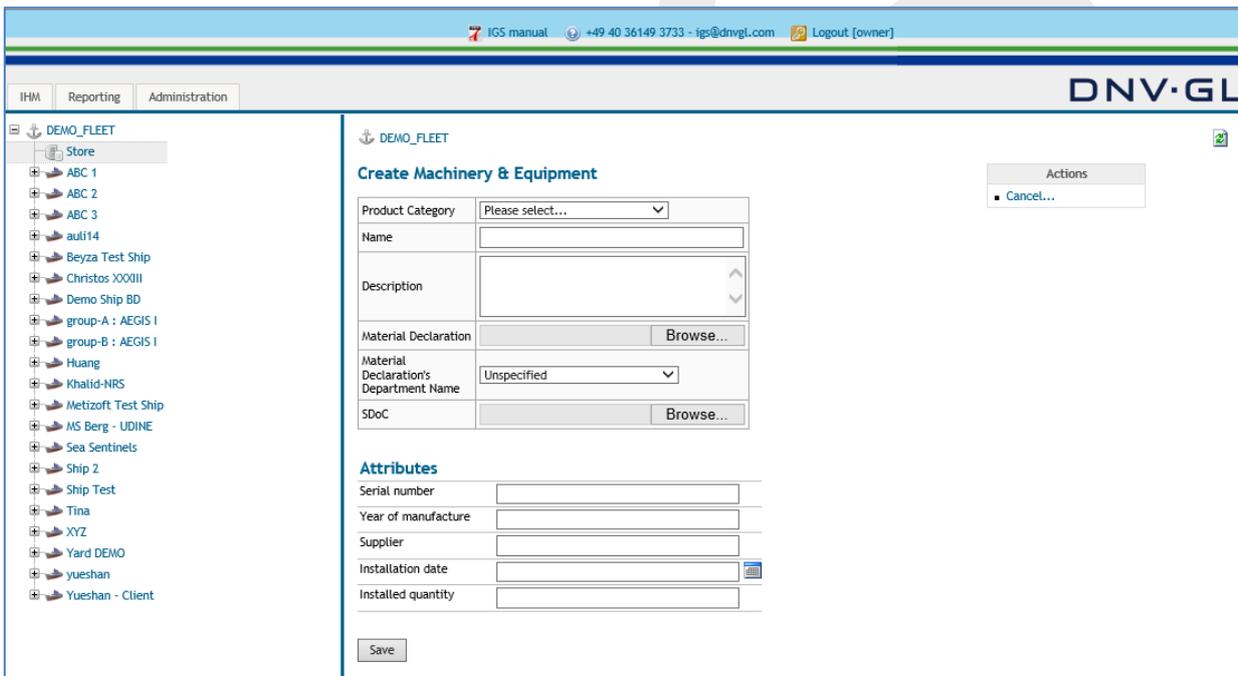


To upload the SDoCs and MDs into a Store the user has two upload options. Either to define first the specific use of the SDoC and MD, e.g. Processed Material, Machinery & Equipment, System or to upload the SDoC and MD first and afterwards define the specific use of the SDoC and MD.

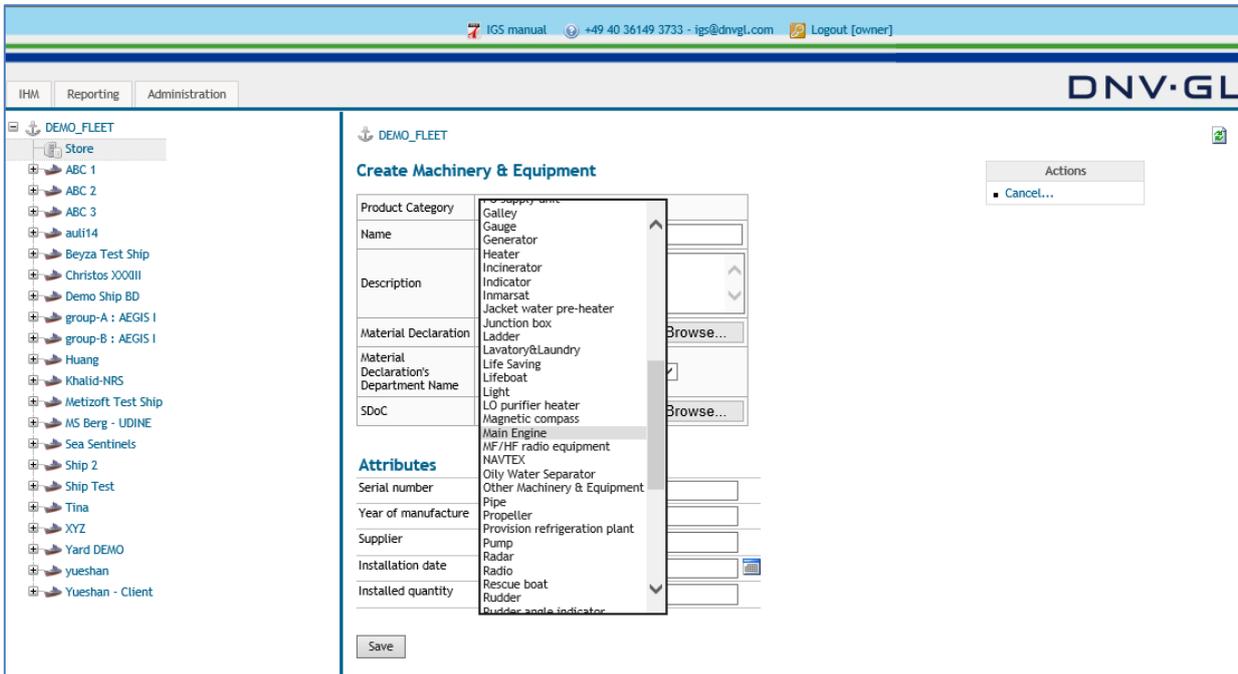
Option 1: Define first the specific use: Select “Add Processed Material...” or “Add Machinery & Equipment...” or „Add Systems...” link in the Action Box to upload the MD and the SDoC.



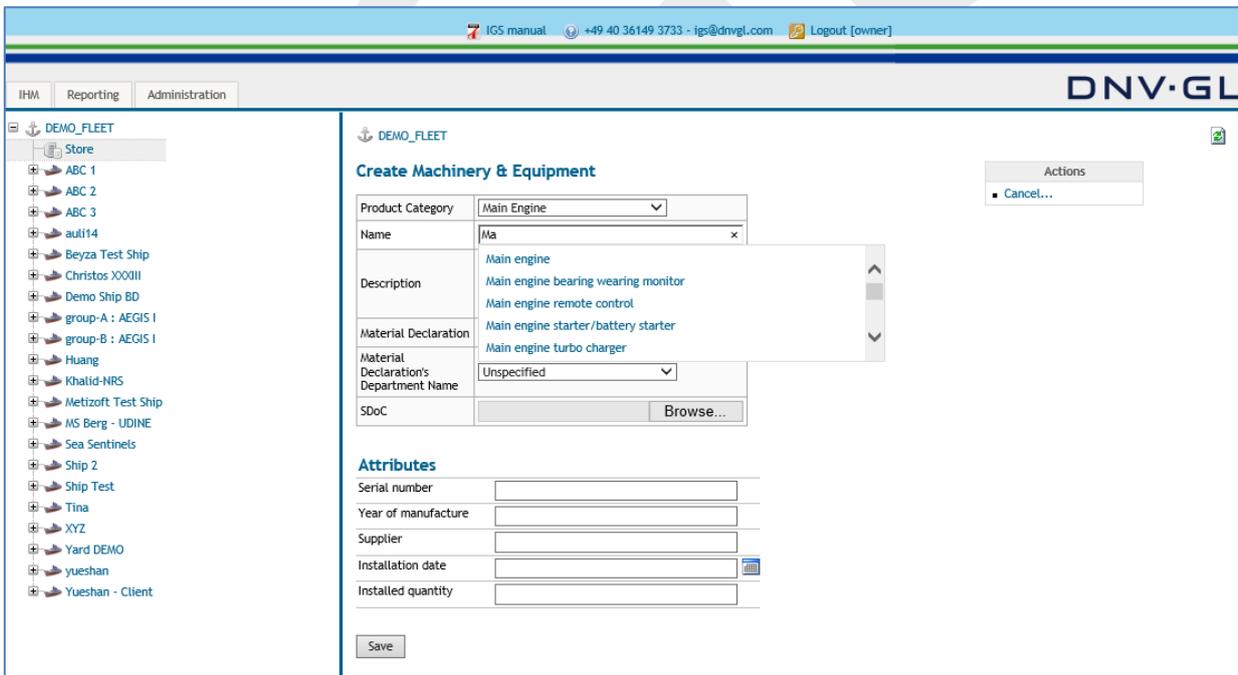
The following dialog appears.



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.

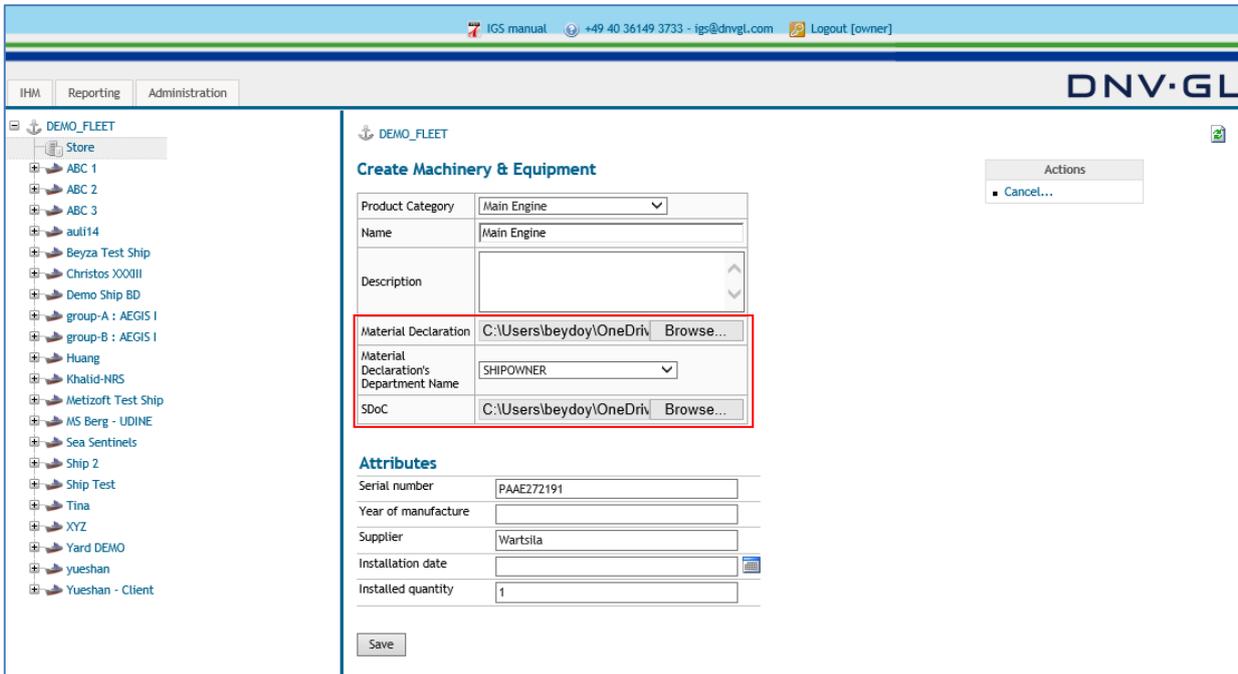


Then select the Item "Name" to define the name used by the shipowner / shipyard for the equipment, e.g. ceiling insulation, exhaust pipe packing, floor carpet, Engine 1-A1, Aux. Generator, GPS, etc.



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.

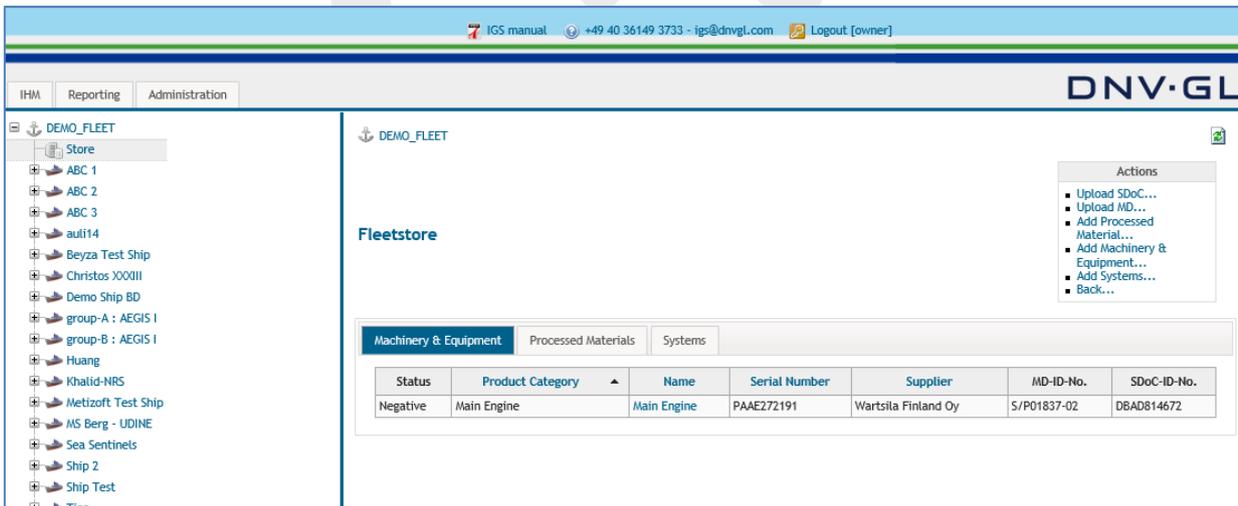
Afterwards upload the SDoC and MD under "Material Declaration" and "SDoC". Select the "Browse" link to upload the project related SDoC and MD.



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”.

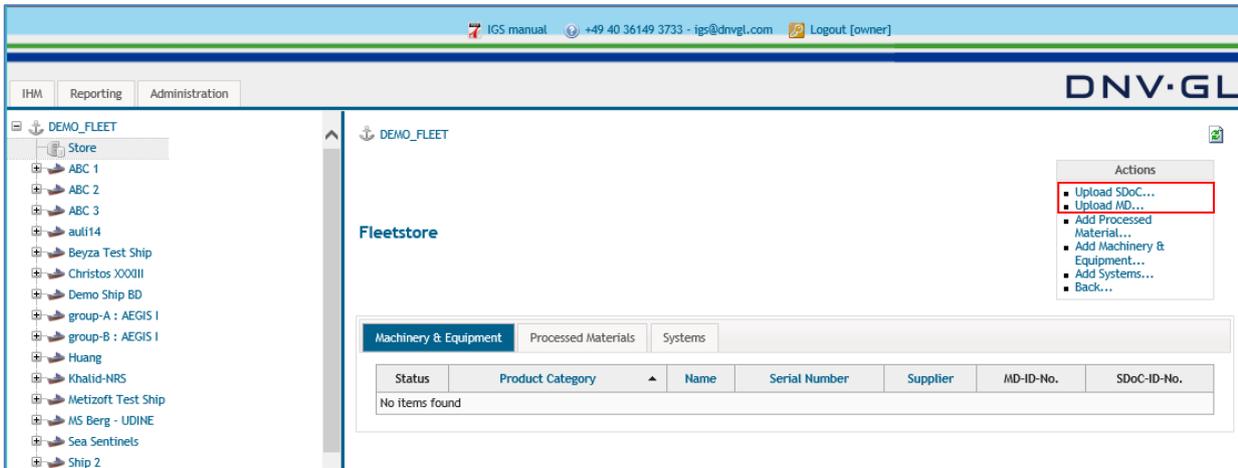
The following dialog appears.



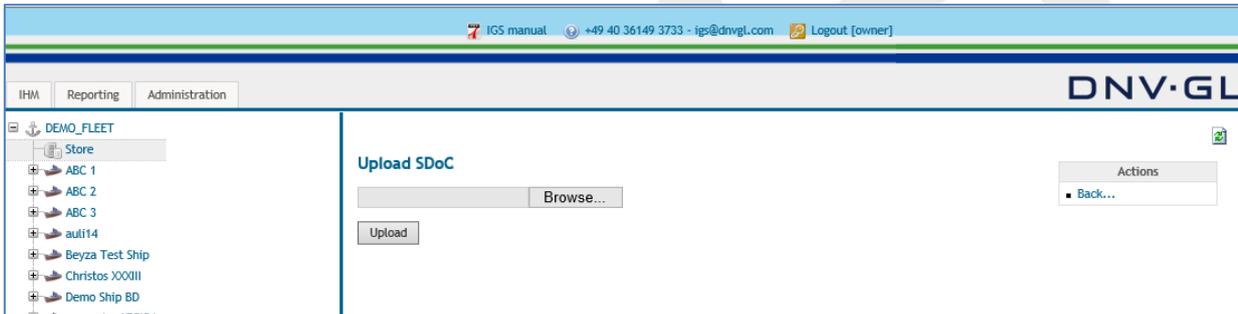
All MDs and related SDoCs uploaded into the Stores can be used by the shipowner for the maintenance of the IHMs of their entire fleet.

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.



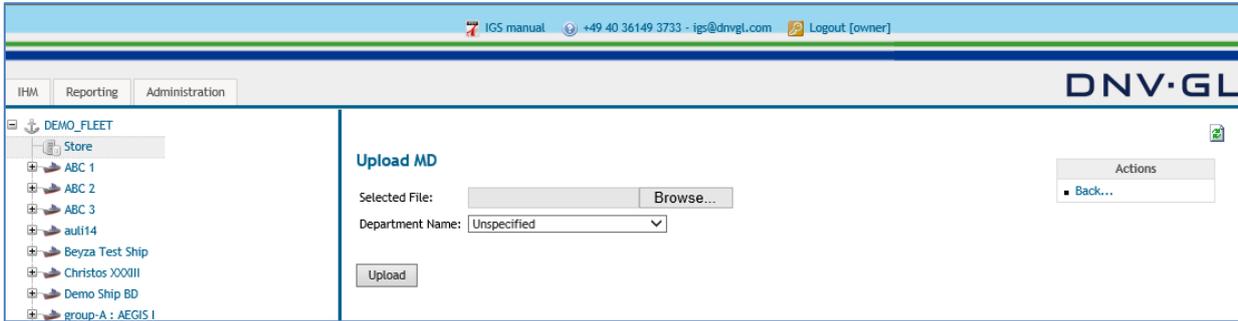
The following dialog appears.



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



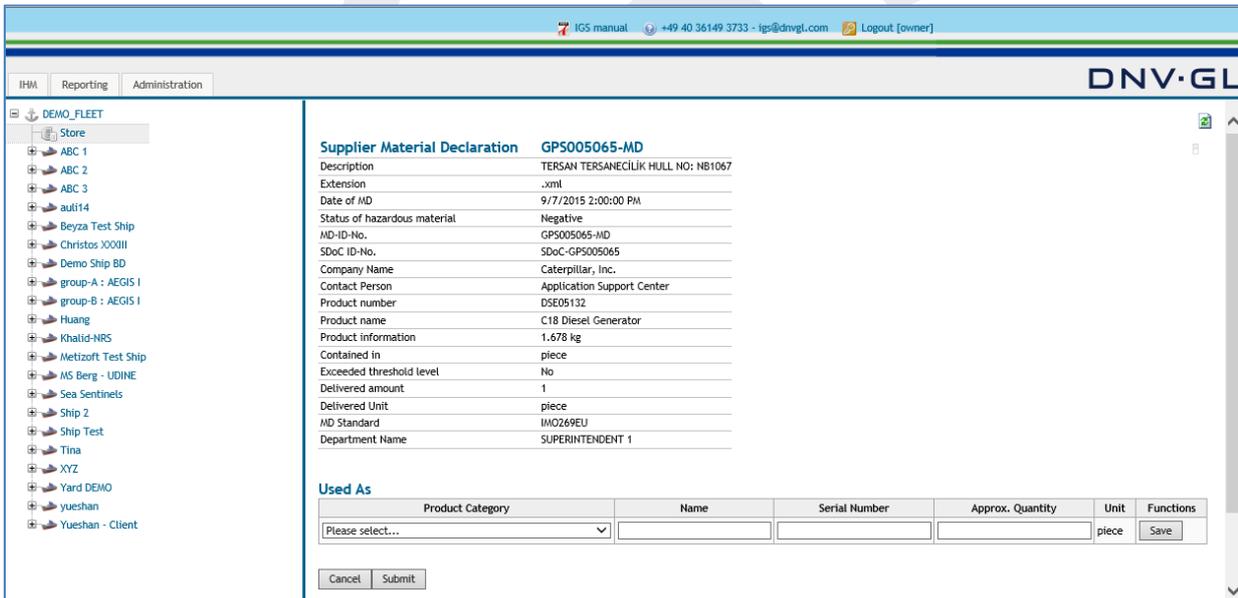
After successfully uploading the SDoC, click on the "Back" link to go back to the main view of the fleet store. There select "Upload MD" link from the actions box.



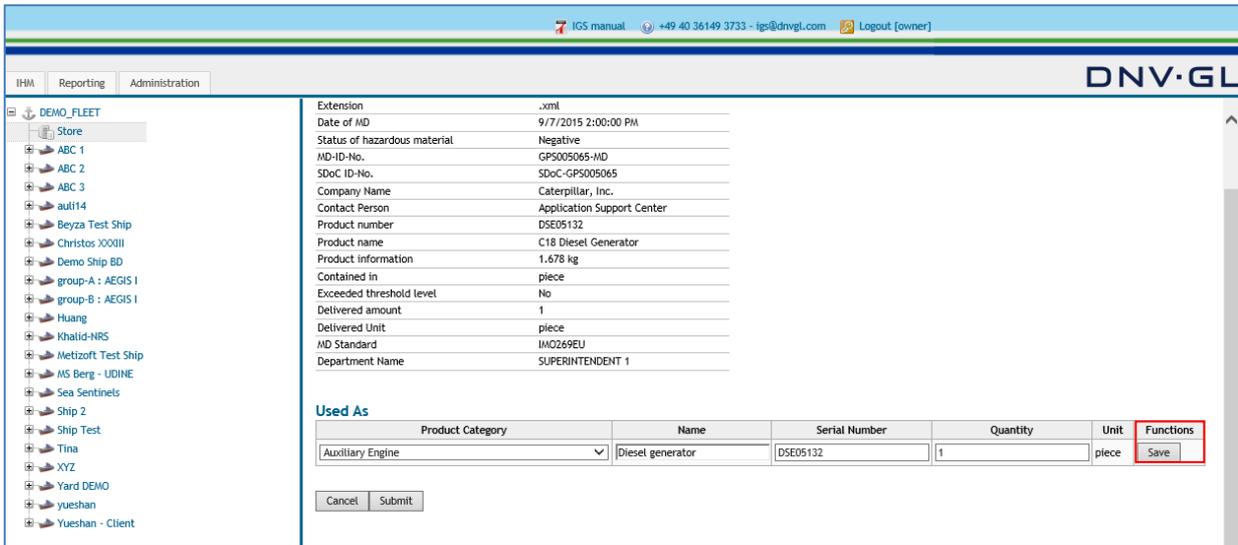
Select the MD file from your computer and select the relevant department name for that specific MD, if there are more than one department who is responsible for uploading MDs.



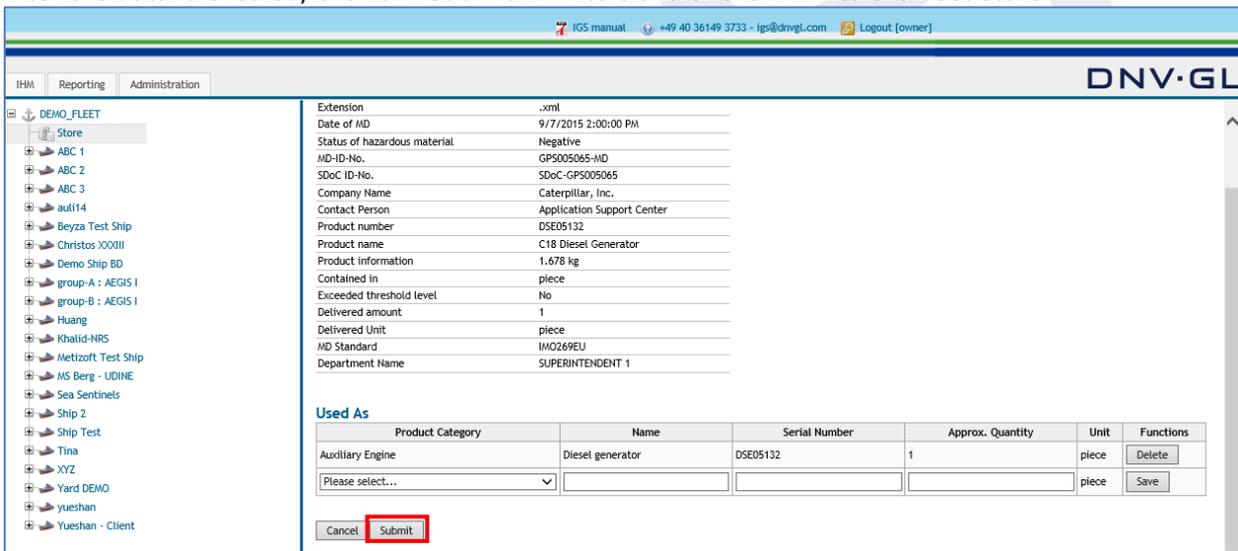
Click on "Upload" link. Following dialog box appears:



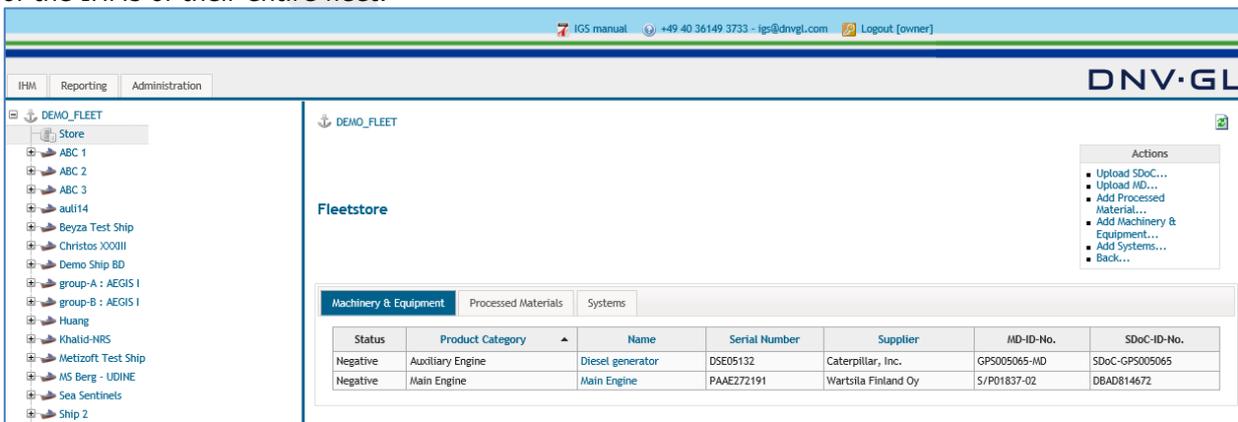
Select the relevant product category, name, serial no and approximate quantity information and click on "Save".



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

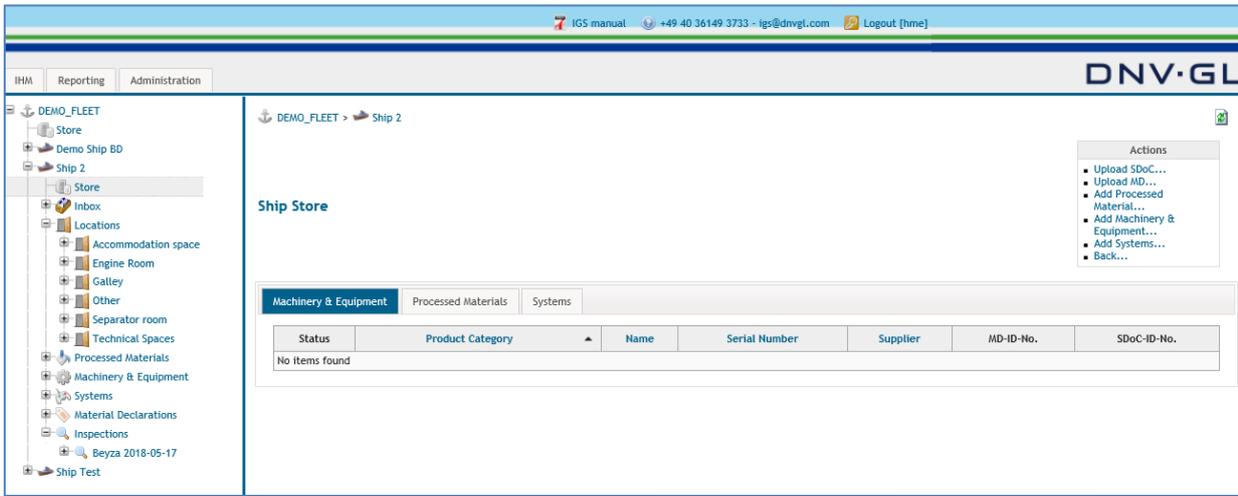


All MDs and related SDOcs uploaded into the stores can be used by the shipowner for the maintenance of the IHMs of their entire fleet.



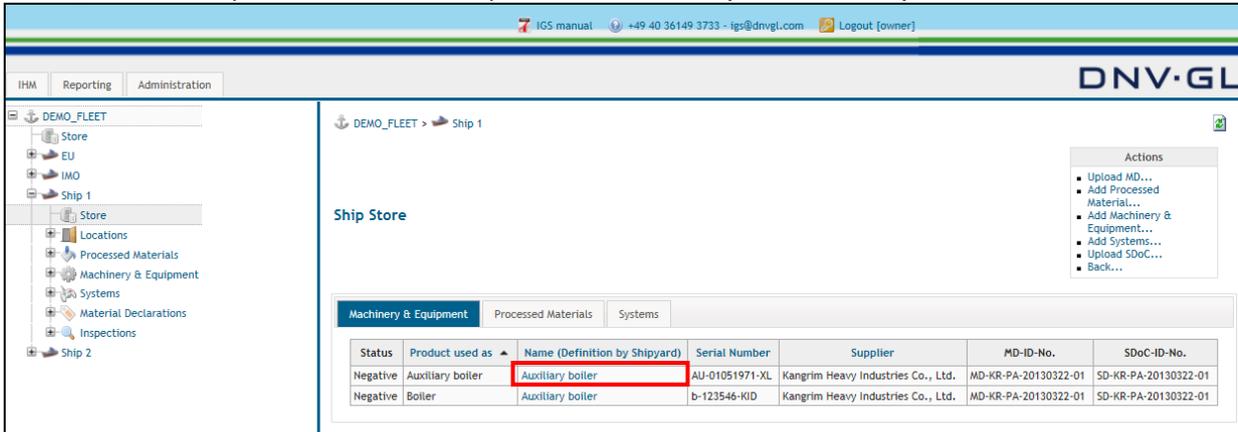
Note: The procedure of uploading SDOcs and MDs into the Stores should be used to administer the huge amount of incoming SDOcs and MDs.

Same process applies for creating components in ship store.



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

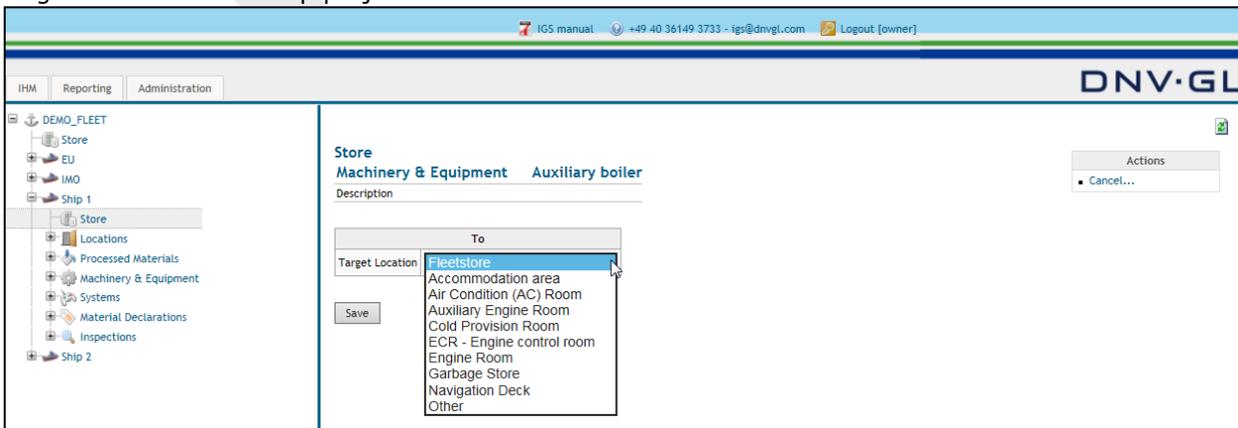
To move a component or material from the fleet store or the ship store to a location or between the stores, select the specific Store the component or material (SDoC and MD) to be moved.



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.

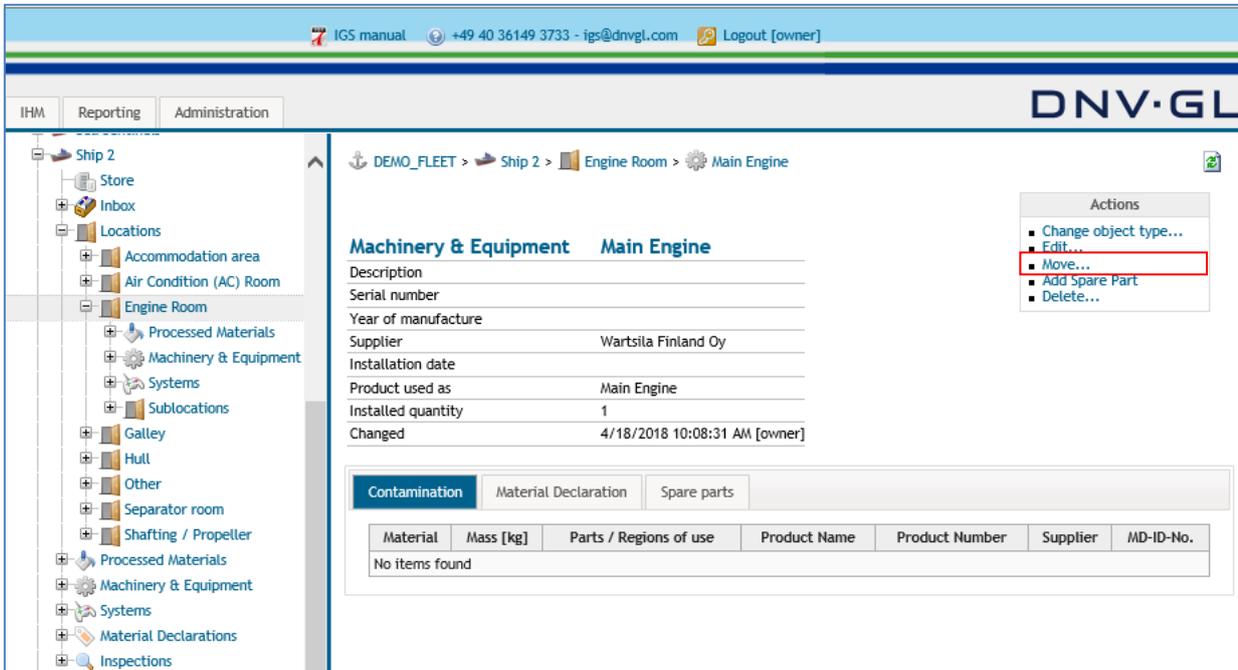


Select the respective target location from the "Move to" table to move the component or material from the fleet store or the ship store to a target location or between the stores. Finally click on "Save".

7.3.3 Move component MDs from a location to another location

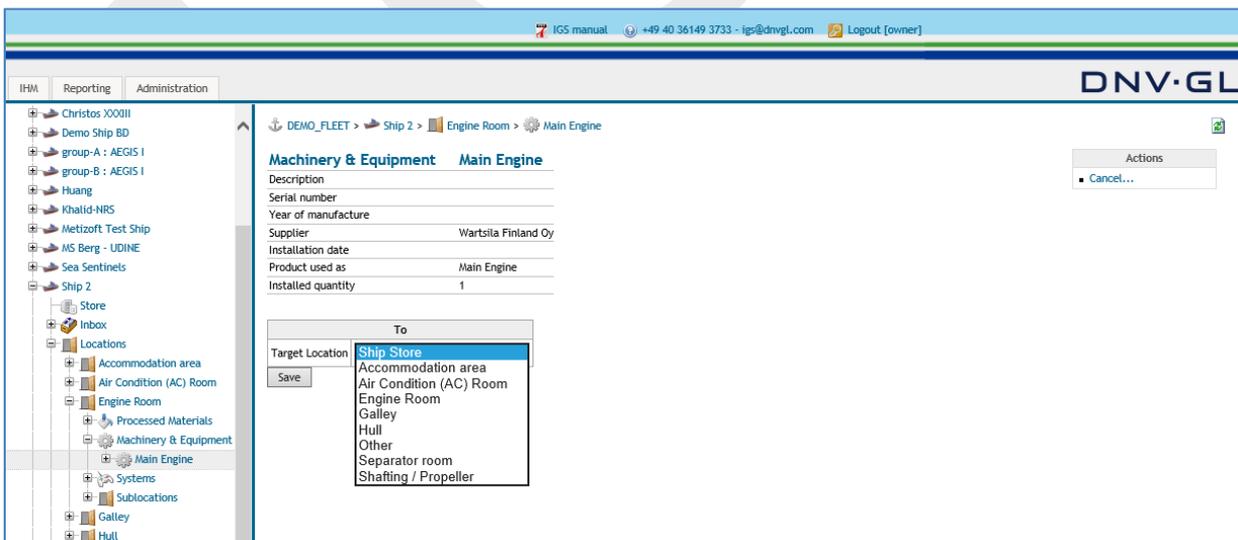
To move a component or material from a location to another location or back to the ship store select the component or material either from the "Locations" tab or the component type tab (Processed Material, Machinery & Equipment or System).

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.

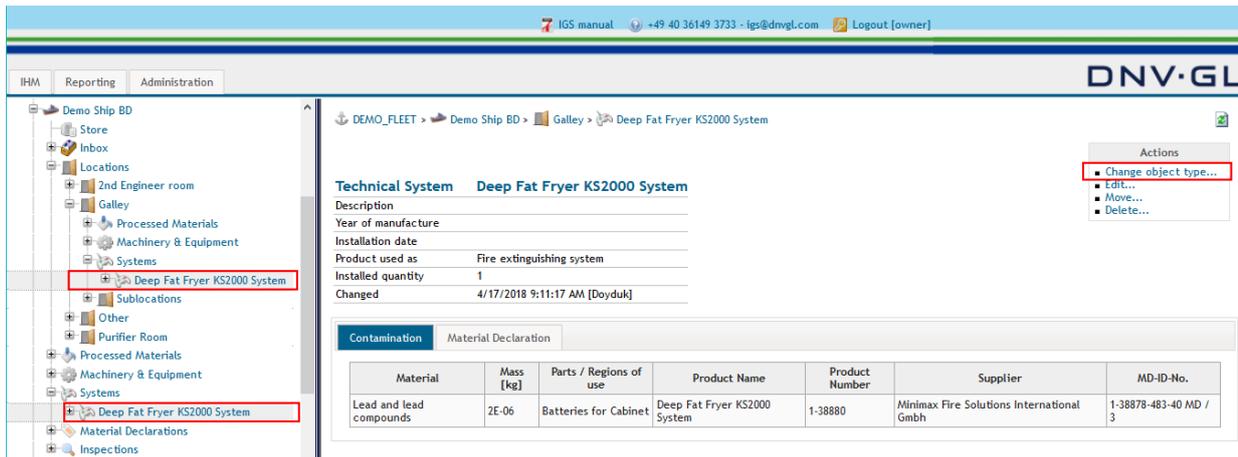


Select the respective target location from the "Move to" table to move the component or material (SDoC and MD) from one location to another location or to the Ship Store. Finally click on "Save".

7.4 Change object type of components or materials

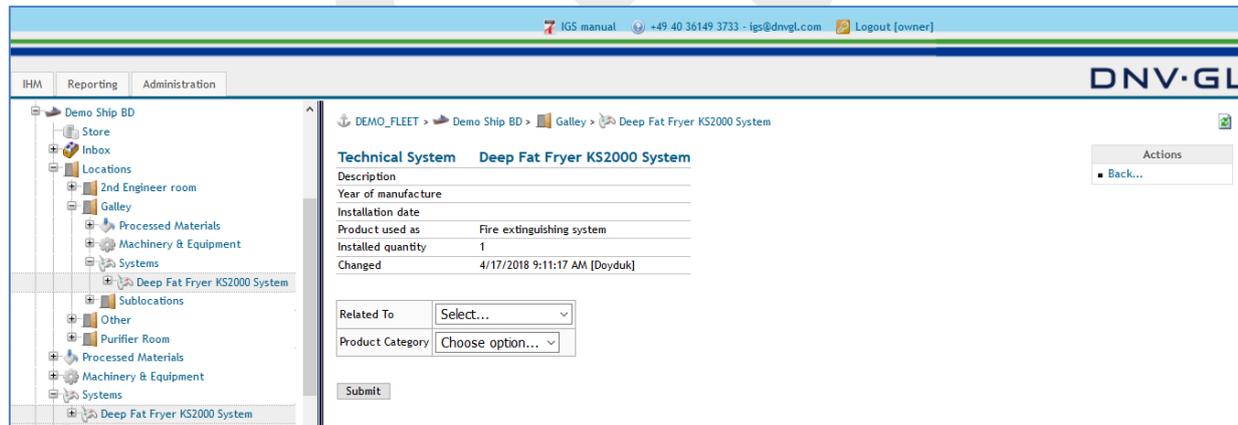
Object type means allocation of a product as either Processed Material, Machinery & Equipment or System. To change the object type of a product, MDs must have been confirmed in the inbox.

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.



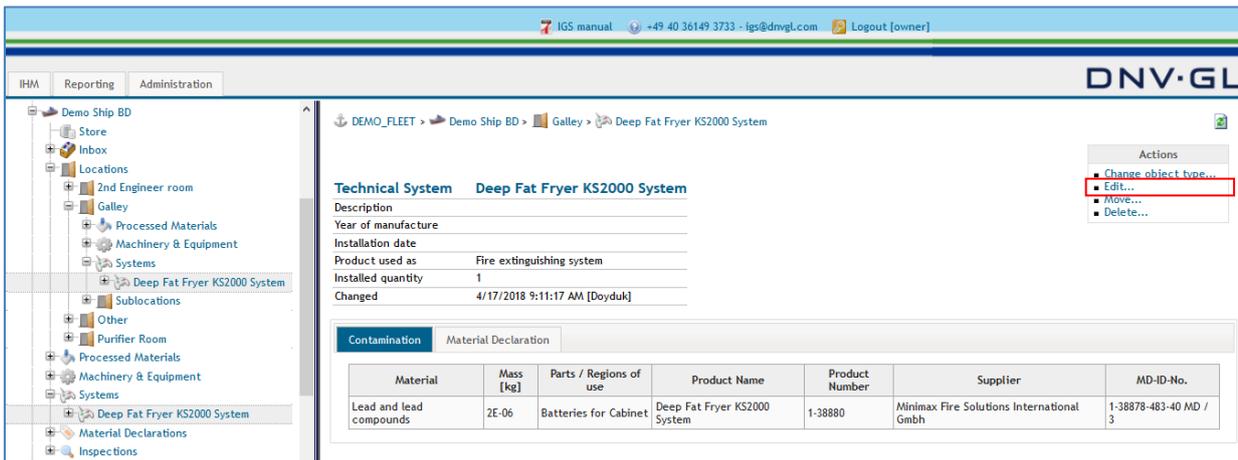
Select the new component type (Processed Material, Machinery & Equipment or System) under "Related to" in the main view and enter the new "Product Category".

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

Finally click on "Submit".

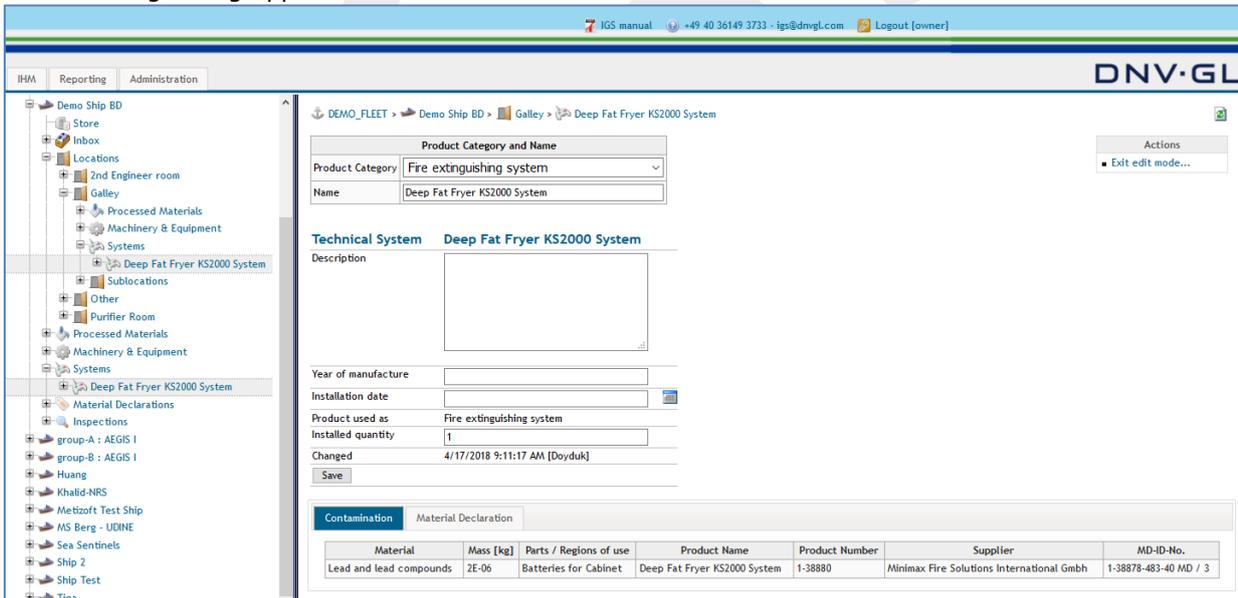
7.5 Edit specific MD information in components and materials

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.

The screenshot displays the DNV-GL IGS manual interface. The top navigation bar includes 'IHM', 'Reporting', and 'Administration'. The main content area is titled 'Supplier Material Declaration MD-JMC-12N-094'. It contains a table with the following data:

Type	Supplier Material Declaration
Description	
Date of MD	6/19/2015 2:00:00 PM
Status of hazardous material	Negative
MD-ID-No.	MD-JMC-12N-094
SDoC ID-No.	SD-JMC-12N-094
Company Name	JONGHAP MACHINERY CO.,LTD
Contact Person	JI-HOON KANG
Product number	AEROB-12N
Product name	SEWAGE TREATMENT PLANT
Product information	SEWAGE TREATMENT SYSTEM
Contained in	kg
Exceeded threshold level	No
Delivered amount	1100
Delivered Unit	kg
Changed	6/19/2015 10:49:53 AM [yard]

Below the table, there are tabs for 'Material Information', 'Referenced SDOc', and 'Related Objects'. The 'Material Information' tab is active, showing a table with the following columns: Substance Group, Mass of substance [kg], Parts of use, and Exceeded threshold level of substance. The table content is 'No items found'.

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.

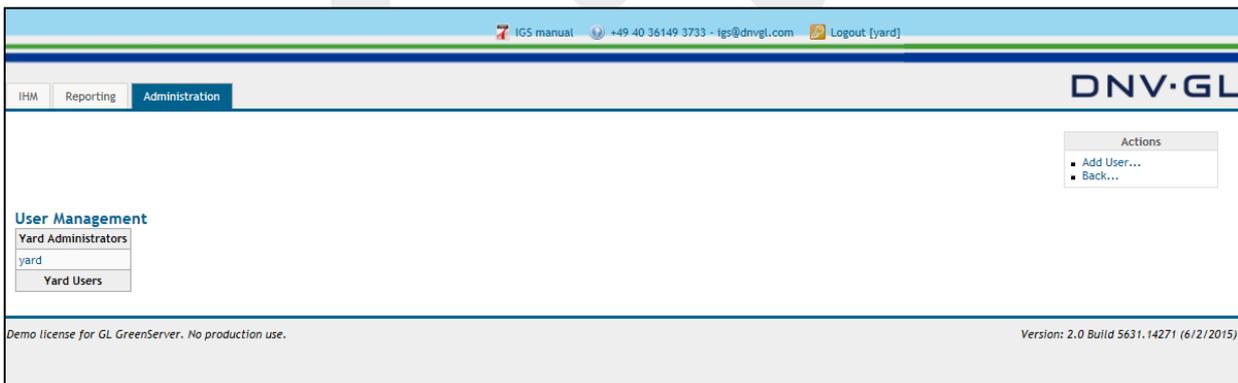
The following dialog appears.



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.

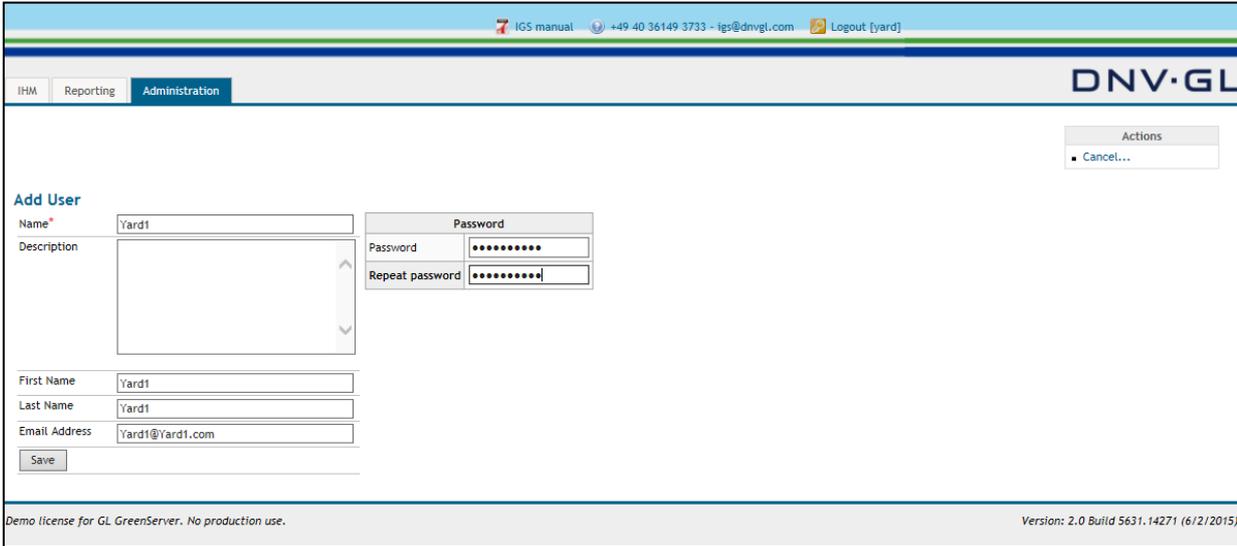
The following dialog box appears by using the "Manage Yard Users..." link.



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.

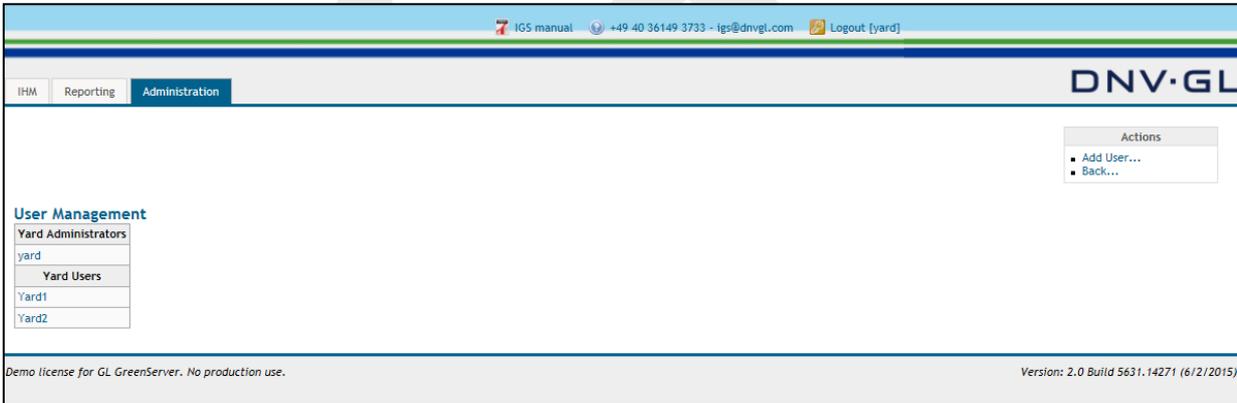
The following dialog appears.



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.

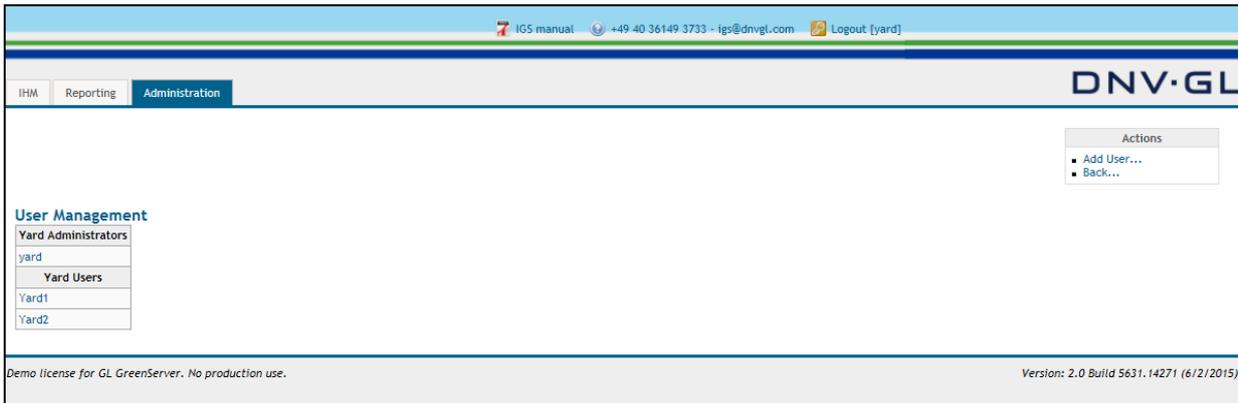
Finally click on "Save".

The following dialog appears.



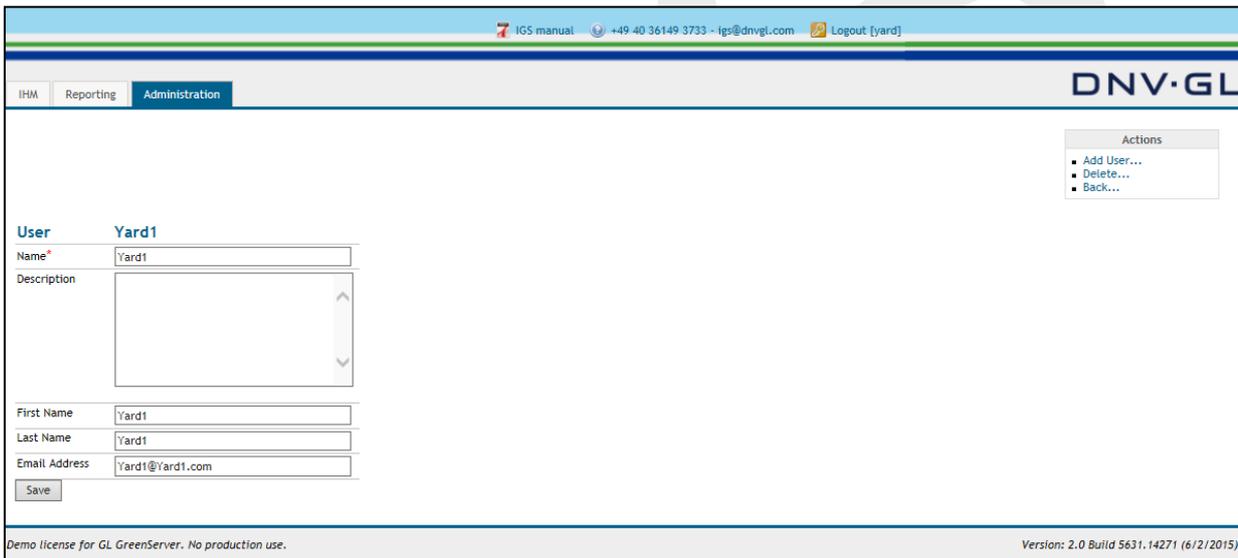
Note: This procedure must be repeated for each shipyard user who is meant to work on ship projects of the respective fleet.

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.

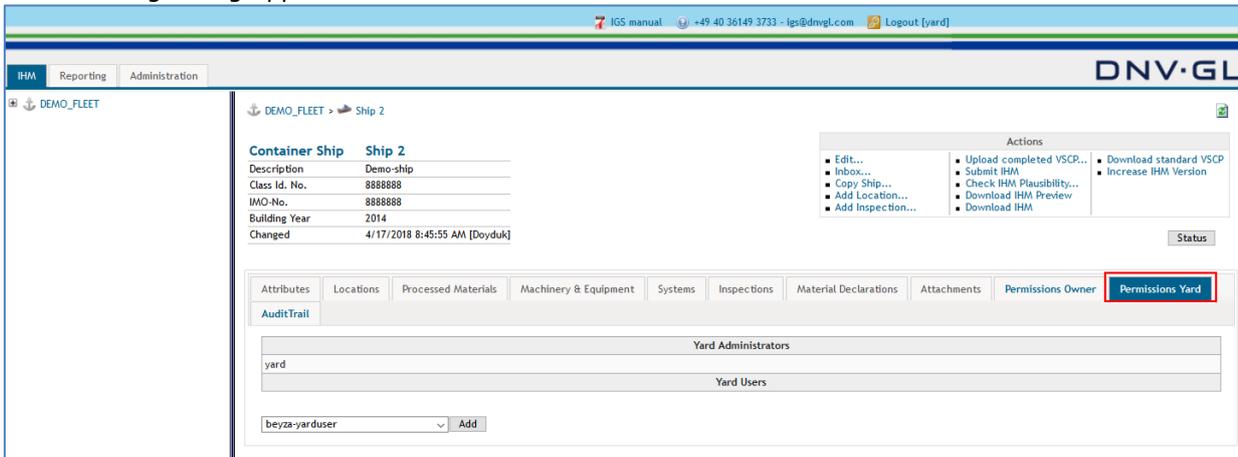
After the shipyard admin has established several shipyard users it is possible to distribute the work load to the different ship projects of the fleet.

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.

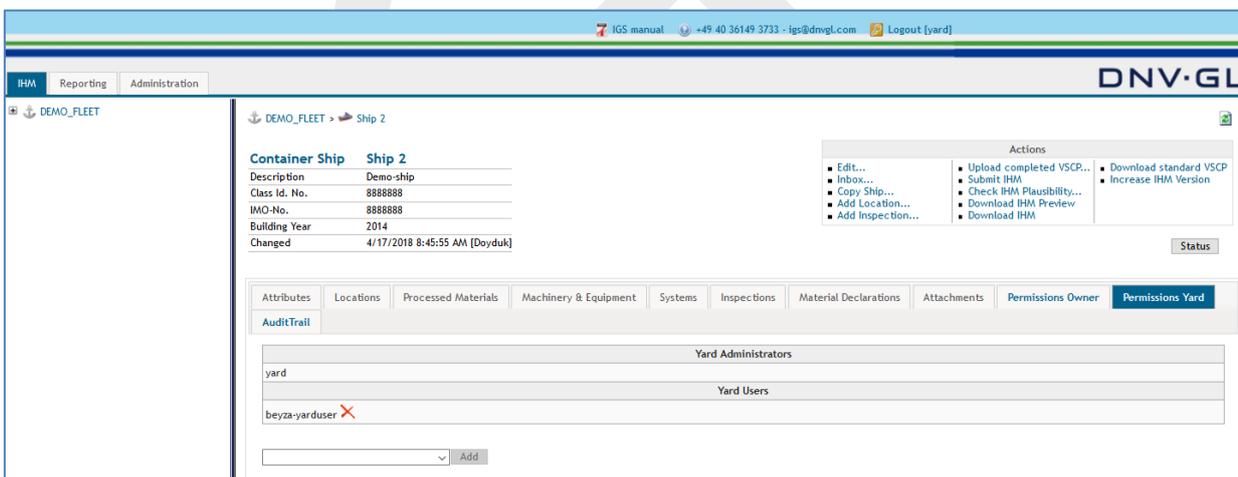


To assign a shipyard users to a specific ship project the shipyard admin must choose the respective shipyard user from the pull-down menu under the "Permission Yard" tab. After the selection of the respective shipyard user select the "Add" tab for verification.

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.

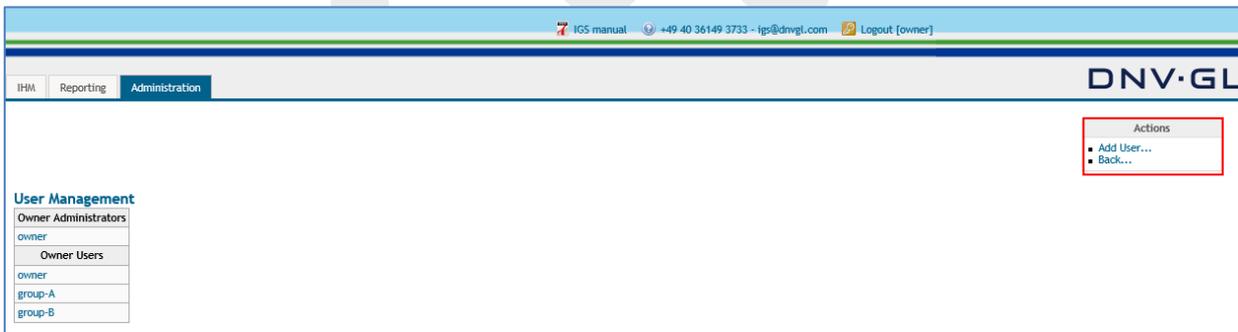
The following dialog appears.



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.

IGS manual +49 40 36149 3733 - igs@dnvgl.com Logout [owner]

IHM Reporting Administration **DNV-GL**

Actions
Cancel...

Add User

Name* b-owneruser

Description

Password
Password *****
Repeat password *****

First Name John

Last Name Doe

Email Address john.doe@gmail.com

Save

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.

IGS manual +49 40 36149 3733 - igs@dnvgl.com Logout [owner]

IHM Reporting Administration **DNV-GL**

Actions
Add User...
Back...

User Management

Owner Administrators
owner
Owner Users
owner
group-A
group-B
b-owneruser

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”.

IGS manual +49 40 36149 3733 - igs@dnvgl.com Logout [owner]

IHM Reporting Administration **DNV-GL**

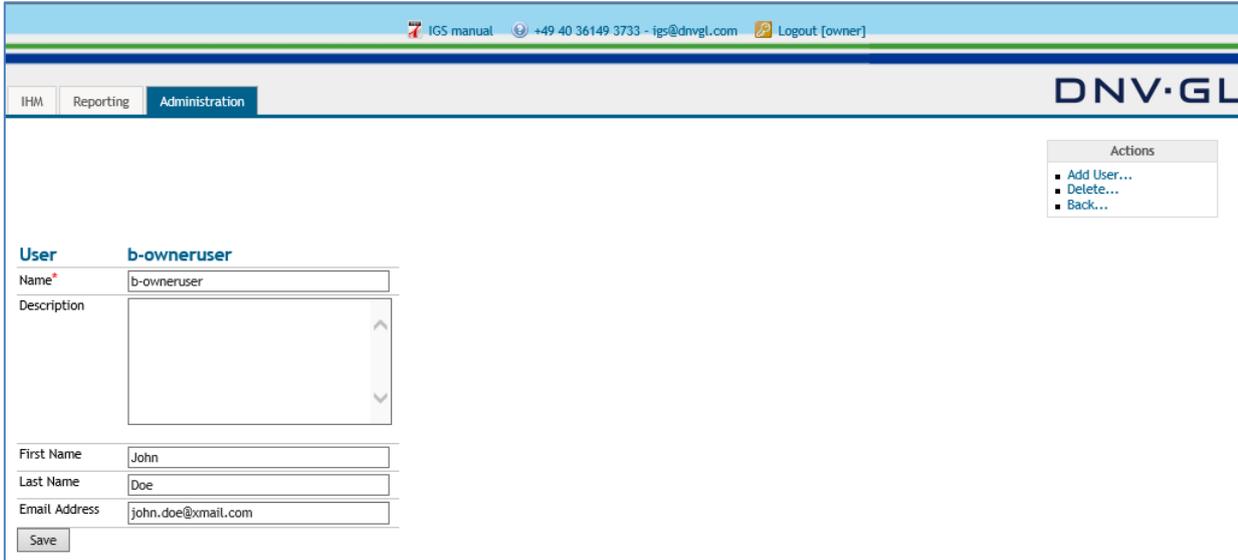
Actions
Add User...
Back...

User Management

Owner Administrators
owner
Owner Users
owner1
owner2

Demo license for GL GreenServer. No production use. Version: 2.0 Build 5631.14271 (6/2/2015)

The following dialog appears.



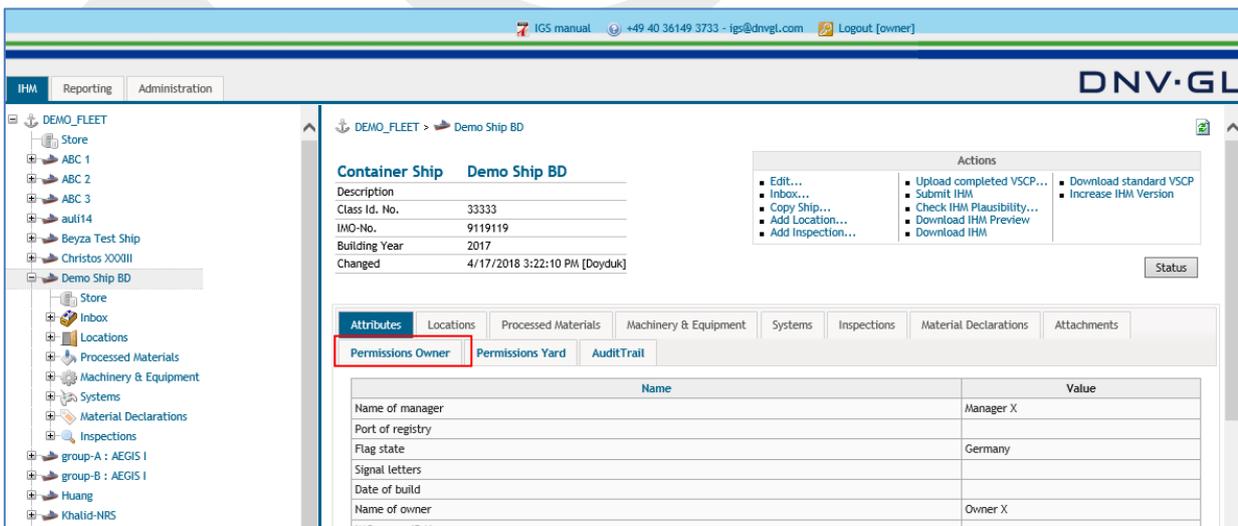
In the appearing view the shipowner admin has the option to change the attributes of the respective shipowner user if changes are required.

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.

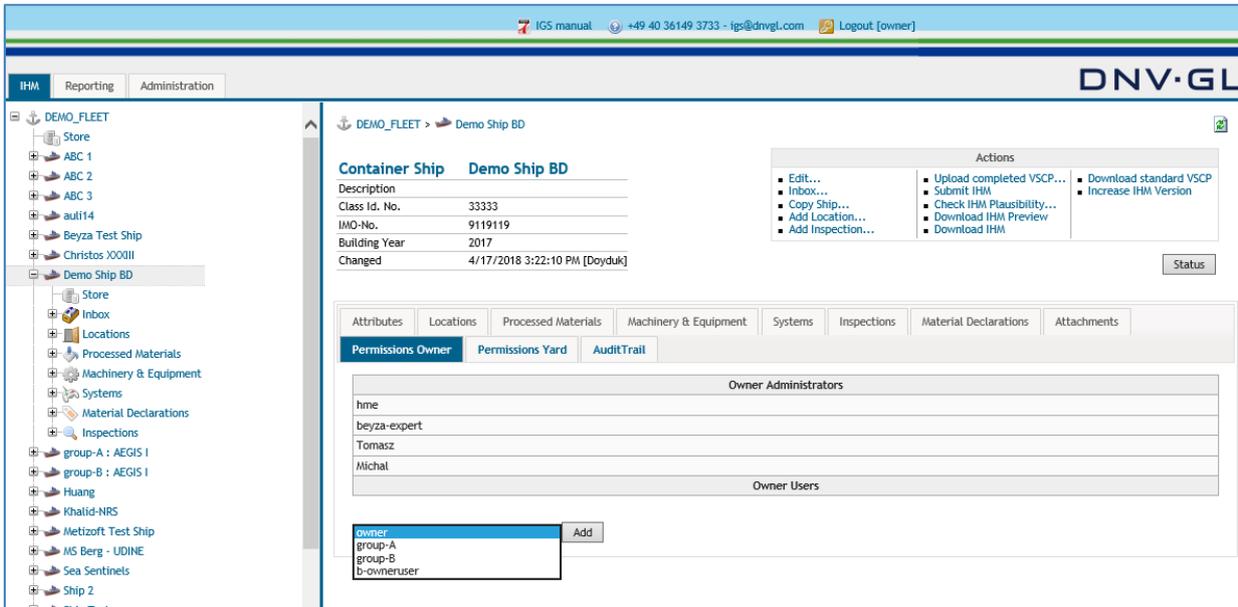
To apply the shipowner users to the different ship projects the shipowner admin must change the main navigation view back to the IHM view and select the ship applicable for the respective shipowner user.



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.

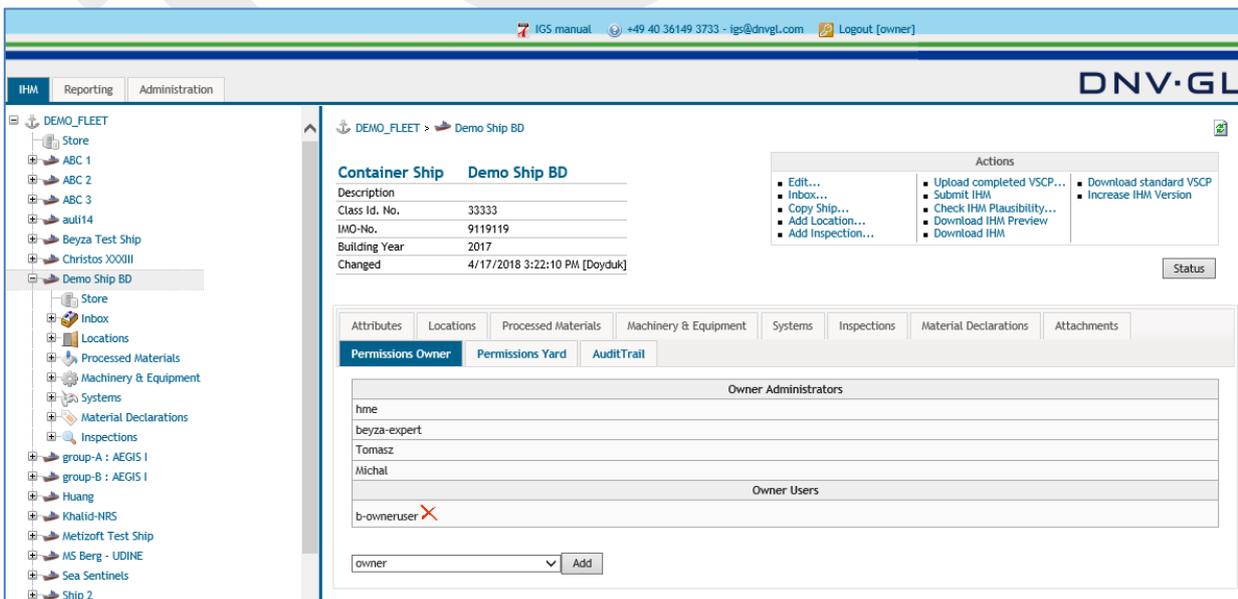


To assign the respective shipowner user to the specific ship project the shipowner admin must choose the respective shipowner user from the pull-down menu under the "Permission Owner" tab. After the selection of the shipowner user select the "Add" tab for verification.

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

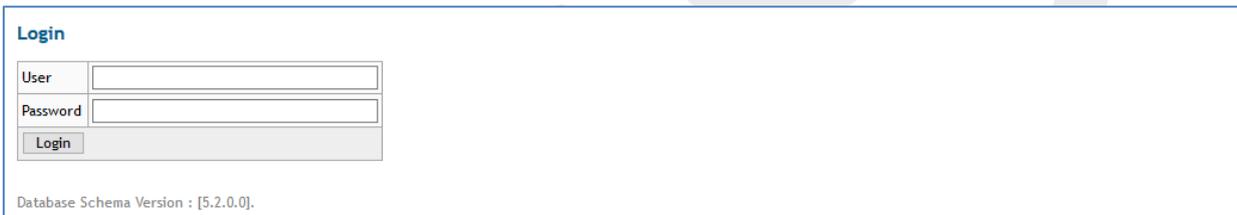
The SSO Launch Pad is a working platform for the administration of the user accounts in the IGS database. It gives the DNV GL Admins different options to administer the user accounts.

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.

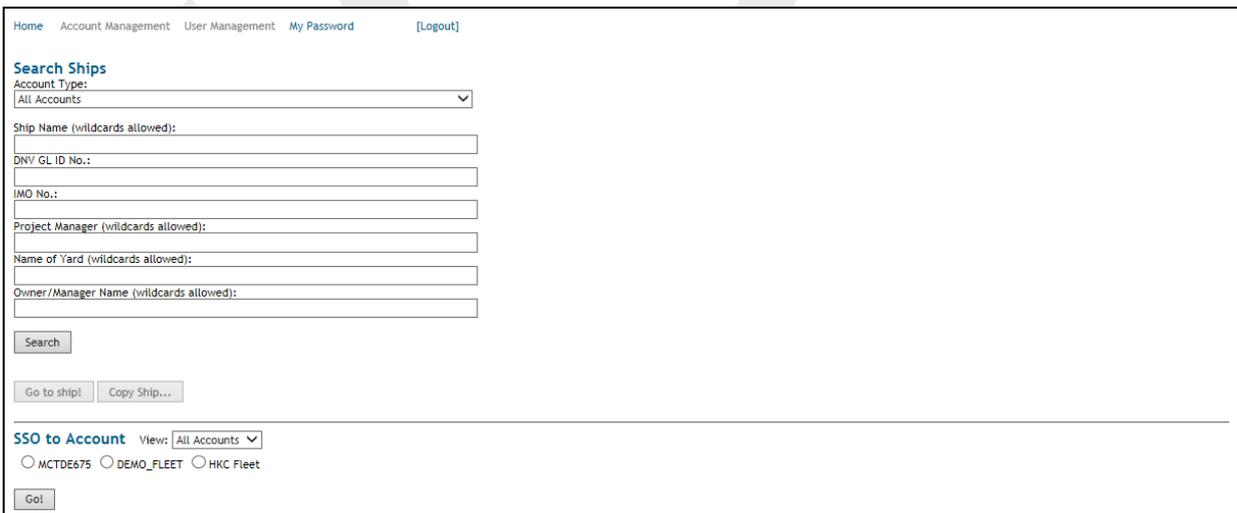
After receiving the IGS log-in information the DNV GL Admin can log-in to IGS directly via the URL: <https://nigs.dnvgl.com/qsadmin>

The following log-in page of IGS appears.



The screenshot shows a simple login form titled "Login". It contains two input fields: "User" and "Password". Below these fields is a "Login" button. At the bottom of the form, it displays "Database Schema Version : [5.2.0.0]."

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.



The screenshot shows the "Account Management" page. At the top, there are navigation links: "Home", "Account Management", "User Management", "My Password", and "[Logout]". The main section is titled "Search Ships" and includes a dropdown menu for "Account Type" (set to "All Accounts"). Below this are several search criteria fields: "Ship Name (wildcards allowed)", "DNV GL ID No.", "IMO No.", "Project Manager (wildcards allowed)", "Name of Yard (wildcards allowed)", and "Owner/Manager Name (wildcards allowed)". There is a "Search" button and two buttons: "Go to ship!" and "Copy Ship...". Below the search section is the "SSO to Account" section, which has a "View" dropdown (set to "All Accounts") and three radio buttons: "MCTDE675", "DEMO_FLEET", and "HKC Fleet". A "Go!" button is located at the bottom of this section.

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.

Home Account Management User Management **My Password** [Logout]

Search Ships

Account Type:
All Accounts

Ship Name (wildcards allowed):

DNV GL ID No.:

IMO No.:

Project Manager (wildcards allowed):

Name of Yard (wildcards allowed):

Owner/Manager Name (wildcards allowed):

Search

Go to ship! Copy Ship...

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.

Home Account Management User Management My Password [Logout]

Change Password

Old Password:

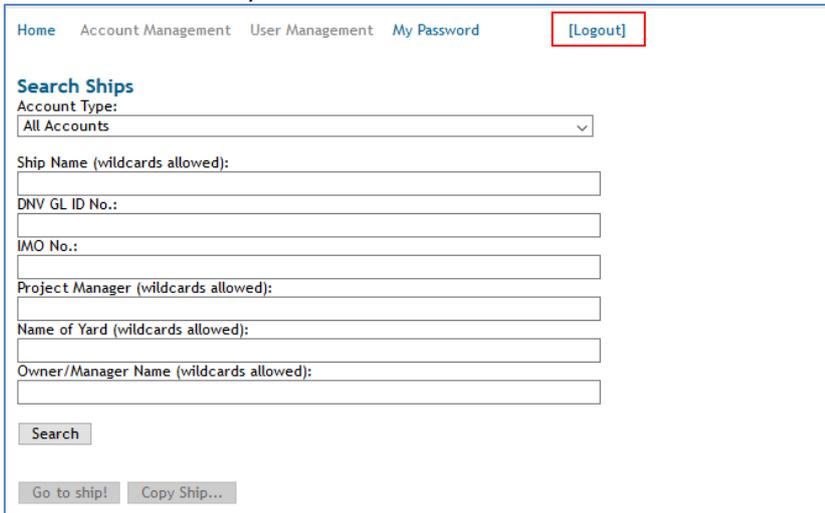
New Password:

New Password (repeat):

Save

9.1.3 Logout of SSO launch pad

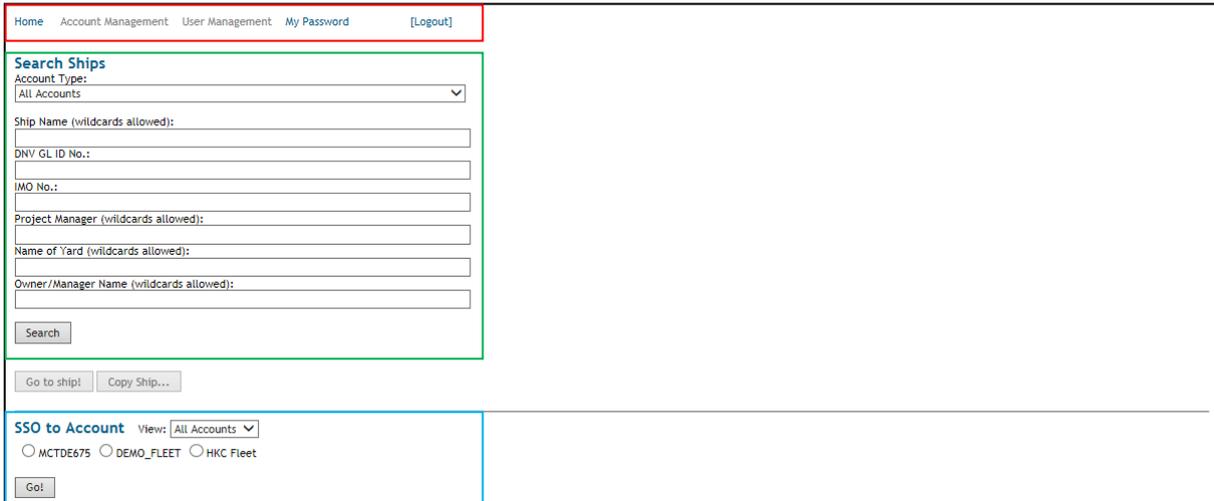
To logout of IGS system select the "[Logout]" link located in the right top corner of the header. Furthermore, automatically log out will be by closing the browser or after the account has been inactive for more than twenty minutes.



The screenshot shows the top navigation bar of the IGS system. The navigation items are: Home, Account Management, User Management, My Password, and [Logout]. The [Logout] link is highlighted with a red rectangular box. Below the navigation bar is a section titled "Search Ships". Under this title, there is a dropdown menu for "Account Type" currently set to "All Accounts". Below the dropdown are several text input fields for search criteria: "Ship Name (wildcards allowed)", "DNV GL ID No.", "IMO No.", "Project Manager (wildcards allowed)", "Name of Yard (wildcards allowed)", and "Owner/Manager Name (wildcards allowed)". At the bottom of the search form, there is a "Search" button and two smaller buttons: "Go to ship!" and "Copy Ship...".

9.1.4 Layout of SSO launch pad

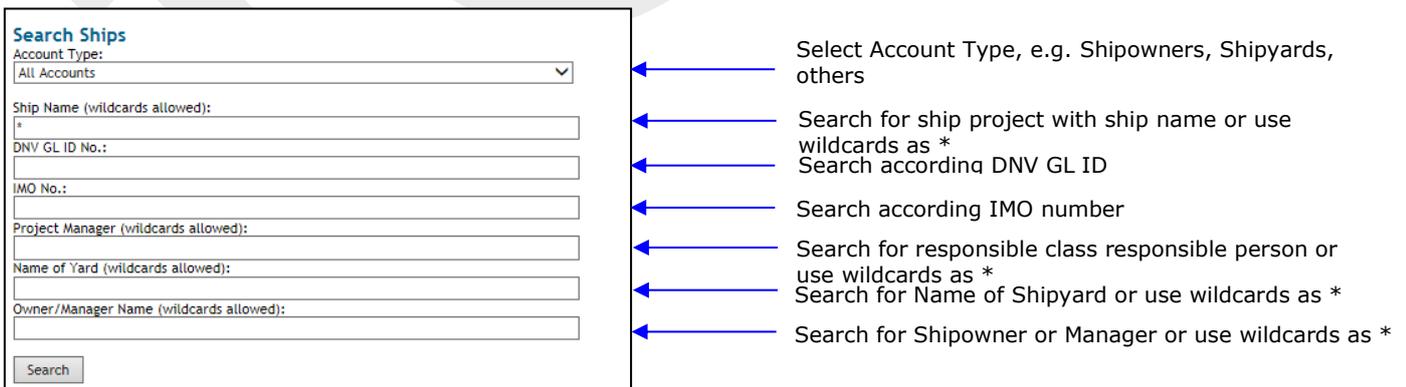
After successful log in the layout of the SSO Launch pad is shown. The SSO Launch pad is subdivided into three parts. On top (red marked) is the header which provides access to several features. In the middle (green marked) is the search tool "Search Ships" for searching ship projects in the IGS system. 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.

Status	Name	IMO number	Register Number
●	EU	3333333	333333
●	IMO	2222222	222222
●	Ship 1	0000001	1
●	Ship 2	0101011	10101

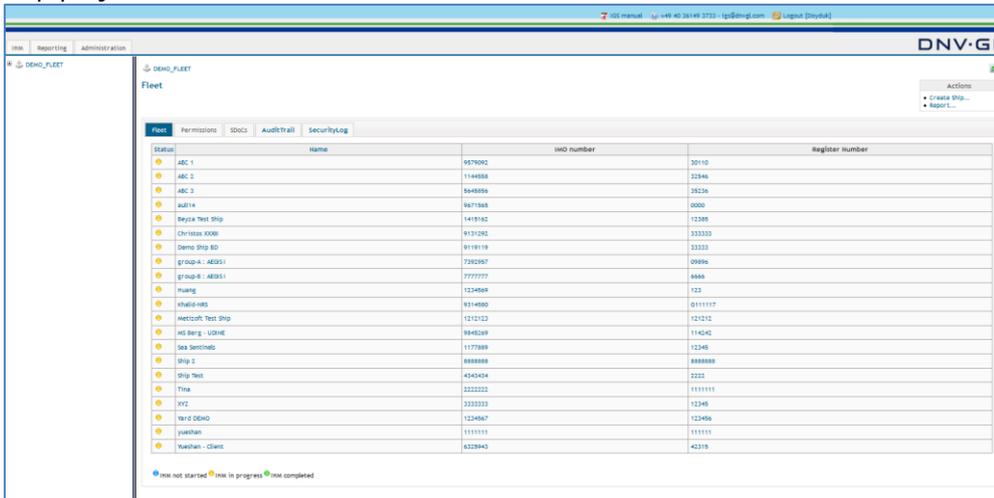
After accessing the customer account the DNV GL Admin can administer the ship projects.

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

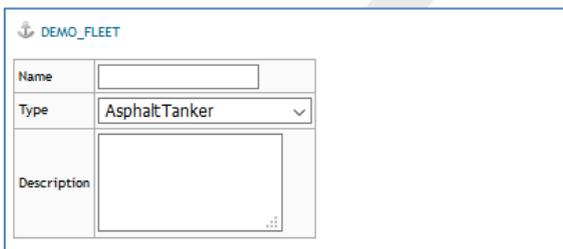
9.2.1 Create a ship project

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.



Status	Name	IMO number	Register number
ABC 1	9579092	30110	
ABC 2	1144888	32346	
ABC 3	5648886	35236	
au14	9671865	0000	
Deyra Test Ship	1418162	12385	
Christos X008	9131292	333333	
Demo Ship 00	9118919	33233	
Group 1 - ABS1	7702957	00006	
Group 1 - ABS2	7777777	0000	
Huang	1234567	123	
Khalid-085	9314880	0111117	
Westcoast Test Ship	1212123	121212	
MS Berg - LINDH	9845269	114242	
Sea Sentinel	1177889	12345	
Ship 1	8888888	8888888	
Ship Test	2040404	202	
Test	3333333	1111111	
XYZ	3333333	12345	
Yard DEMO	1234567	123456	
Yuanhan	1111111	111111	
Yuanhan - Client	6328943	42315	

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



DEMO_FLEET

Name:

Type:

Description:

- ← Current name of the ship.
- ← Type of the ship.
- ← Additional description, e.g. cargo capacity in

Attributes	
Class Id. No.*	<input type="text"/>
IMO-No.*	<input type="text"/>
Name of manager	<input type="text"/>
Port of registry	<input type="text"/>
Flag state	<input type="text" value="?"/>
Signal letters	<input type="text"/>
Building Year*	<input type="text"/>
Date of build	<input type="text"/>
Name of owner	<input type="text"/>
Person in charge owner	<input type="text"/>
Person in charge manager	<input type="text"/>
Name of yard	<input type="text"/>
Person in charge yard	<input type="text"/>
Class society	<input type="text"/>
Person in charge class society	<input type="text"/>
In Construction	<input type="text" value="?"/>
IHM Status	<input type="text" value="?"/>
MD Standard	<input type="text" value="?"/>
IHM Version Number	<input type="text"/>
Class IHM Rules	<input type="text"/>
IHM Method	<input type="text" value="?"/>
Technical Attributes	
Gross Tonnage	<input type="text"/>
<input type="button" value="Save"/>	

- ← Unique class ID of the ship.
- ← Unique IMO No of the ship
- ← Name of the current Ship Manager
- ← Name of Port of Registry
- ← Name of Flaa state
- ← Call Sign or distinctive number
- ← Building Year
- ← Completion Date
- ← Name of the current Ship owner
- ← Name of the responsible person at
- ← Name of the responsible person in at
- ← Name of shipyard, which has/is
- ← Name of person in charge of shipyard, which is
- ← Name of the ship's classification society
- ← Name of responsible project manager at class
- ← Construction Status (Yes/No - FiS)
- ← IHM Status (started, in progress, MD Standard (HKC/EU)
- ← IHM version number
- ← Applicable rules of the class
- ← IHM Method (NB or FiS)

- ← Gross tonnage of the vessel

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.

The screenshot shows the DNV-GL web interface. At the top, there is a navigation bar with 'IHM', 'Reporting', and 'Administration' tabs. The main content area is titled 'Container Ship Demo Ship BD'. On the left, there is a tree view showing a hierarchy of 'DEMO_FLEET' with sub-items like 'Store', 'ABC 1', 'ABC 2', 'ABC 3', 'au114', 'Beyza Test Ship', 'Christos XXXIII', 'Demo Ship BD', 'group-A : AEGIS I', 'group-B : AEGIS I', 'Huang', 'Khalid-NRS', 'Metzsoft Test Ship', 'MS Berg - UDINE', 'Sea Sentinels', 'Ship 2', 'Ship Test', 'Tina', and 'XYZ'. The main view displays details for 'Demo Ship BD', including 'Description', 'Class Id. No. 33333', 'IMO-No. 9119119', 'Building Year 2017', and 'Changed 4/20/2018 11:09:56 AM [Doyduk]'. Below the details, there is a table with columns 'Name' and 'Value'. The table contains the following data:

Name	Value
Name of manager	Manager X
Port of registry	
Flag state	Germany
Signal letters	
Date of build	

On the right side, there is an 'Actions' menu with several options. The 'Move ship to owner...' option is highlighted in red. Other options include 'Edit...', 'Inbox...', 'Copy Ship...', 'Delete Ship...', 'Add Location...', 'Add Inspection...', 'Upload completed VSCP...', 'Submit IHM', 'Check IHM Plausibility...', 'Download IHM Preview', 'Download IHM', 'Download IHMX', 'Download standard VSCP', 'Increase IHM Version', and 'Upload List...'. There is also a 'Status' button.

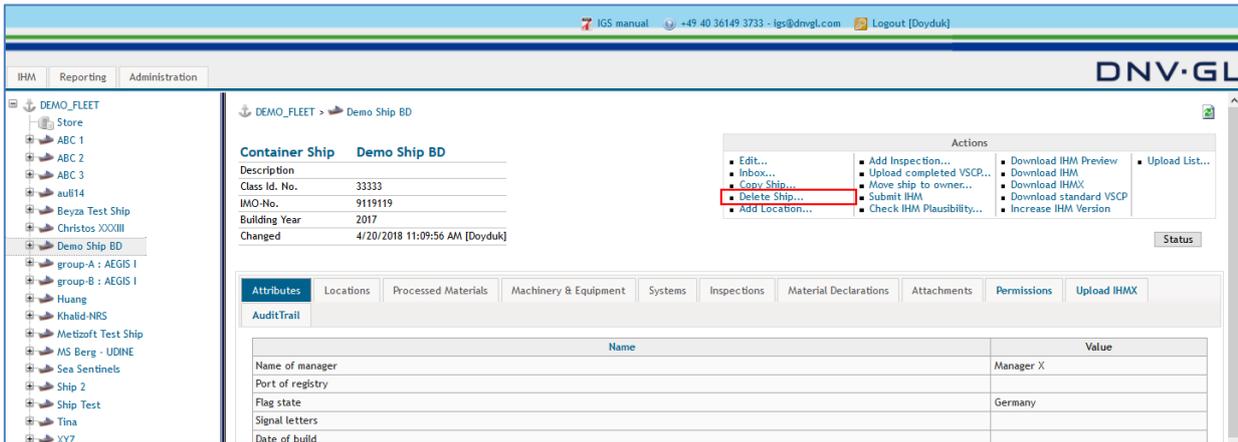
Then select on the following page the "Move ship to owner" link to confirm.

The screenshot shows the DNV-GL web interface. At the top, there is a navigation bar with 'IHM', 'Reporting', and 'Administration' tabs. The main content area is titled 'GS Ship Demo Ship BD'. On the left, there is a tree view showing a hierarchy of 'DEMO_FLEET' with sub-items like 'Store', 'ABC 1', 'ABC 2', 'ABC 3', 'au114', 'Beyza Test Ship', 'Christos XXXIII', 'Demo Ship BD', 'group-A : AEGIS I', and 'group-B : AEGIS I'. The main view displays details for 'Demo Ship BD', including 'Description'. Below the details, there is a 'Move ship to owner' button. On the right side, there is an 'Actions' menu with a 'Back...' option.

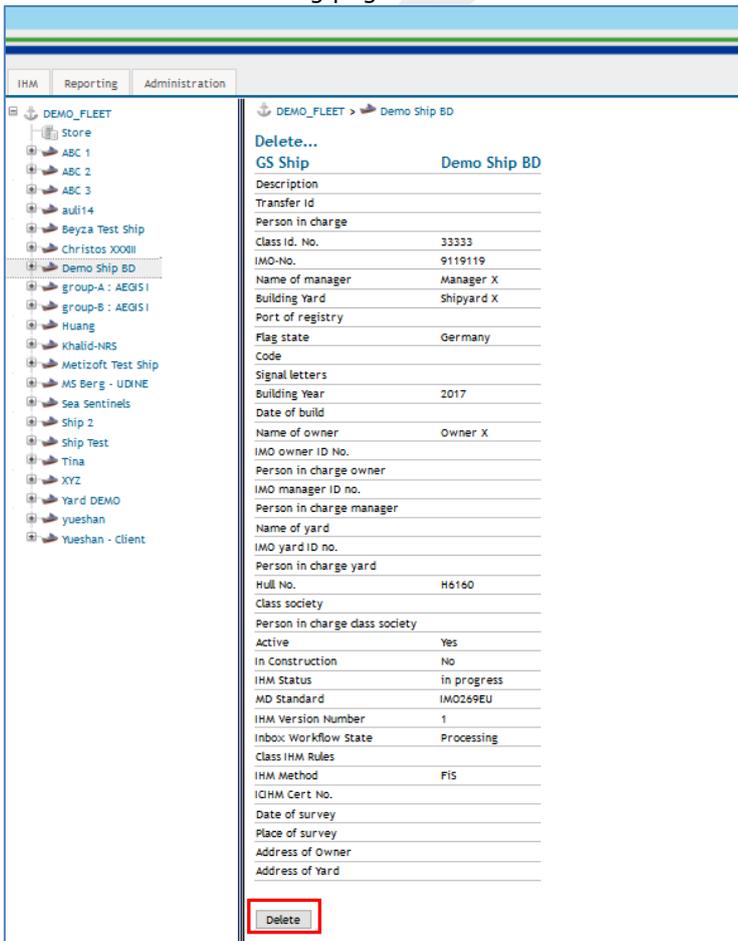
9.3.2 Delete ship

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 screenshot shows the Administration tab in the IGS manual. The 'System Administration' menu item is highlighted with a red box. Below it are sections for Owner Administration, Yard Administration, and Data Administration. At the bottom, a configuration table lists settings for Fleet Display Name, mandatory name fields, and approval email addresses.

Configuration item	Value	Action
Fleet Display Name:	DEMO_FLEET	Save
Set Name field in Inbox mandatory	<input checked="" type="checkbox"/>	Save
Preset Name and Serial/Batch Number field in Inbox with MD value	<input checked="" type="checkbox"/>	Save
Request for approval emails are sent to	beyza.doyduk@dnvgl.com	Save

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...

Owner Administration

- Manage Owner Users...

Yard Administration

- Manage Yard Users...

Data Administration

- Remove not connected SDOs...
- Remove not connected MDs...

Personal Administration

- Change password...

Configuration item	Value	Action
Fleet Display Name:	DEMO_FLEET	Save
Set Name field in Inbox mandatory	<input checked="" type="checkbox"/>	Save
Preset Name and Serial/Batch Number field in Inbox with MD value	<input checked="" type="checkbox"/>	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.

The screenshot shows the 'Account Management' tab selected in the navigation bar. Below it is a 'Search Ships' section with several input fields: 'Account Type' (set to 'All Accounts'), 'Ship Name (wildcards allowed)', 'DNV GL ID No.', 'IMO No.', 'Project Manager (wildcards allowed)', 'Name of Yard (wildcards allowed)', and 'Owner / Manager Name (wildcards allowed)'. A 'Search' button is located at the bottom left of the search area.

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

Taizhou Sanfu Ship Engineering	ShipYard	https://greenserver.gi-ente
TERSAN SHIPYARD	ShipYard	https://greenserver.gi-ente
WSM	Others	https://greenserver.gi-ente
Yangzhou Dayang Shipbuilding Co., Ltd.	ShipYard	https://greenserver.gi-ente
Zhejiang Ouhua Shipbuilding	ShipYard	https://greenserver.gi-ente
1		
Create Account...		

Following dialog box appears;

The 'Create Account' dialog box contains the following fields: 'Name*' (text input), 'Description' (text area), 'URL' (text input), 'DB Connection String' (text input), and 'Account Type' (dropdown menu with a question mark icon). A 'Save' button is located at the bottom left.

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 Administrators

	[User]	[FirstName]	[LastName]
<input type="checkbox"/>	Admin		
<input type="checkbox"/>	Administrator		
<input type="checkbox"/>	Aulbert	Gerhard Aulbert	Gerhard Aulbert
<input type="checkbox"/>	Doyduk	Beyza Doyduk	Beyza Doyduk
<input type="checkbox"/>	ehrlir	Alex	Ehrlir
<input type="checkbox"/>	Franke	Christian	Franke
<input type="checkbox"/>	Geng	Sarah Yueshan Geng	Sarah Yueshan Geng
<input type="checkbox"/>	Grafe	Wiegand	Grafe
<input type="checkbox"/>	Hamid	Hamid	Hemasi Maleki
<input type="checkbox"/>	Huang	Huang, Chenping	Huang, Chenping

1 2 > 10 ▾

Test

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.

Test

SUCCESS:

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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