Shipdex

the marine and maritime data exchange protocol

BShipdex

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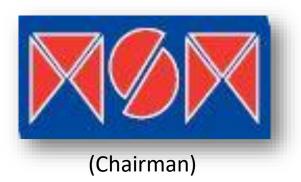
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The non-profit Shipdex organization's executive members







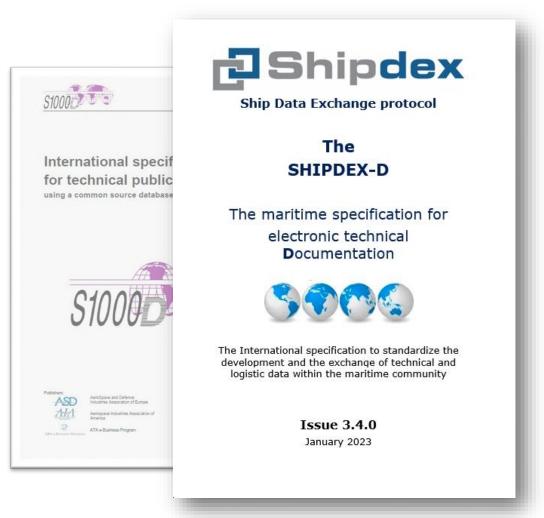




Shipdex Data Exchange protocol focuses to support maritime community in producing, exchanging and using equipment technical data in a structured and standardized electronic format.

Shipdex is based on ASD/AIA/ATA e-Business program S1000D and on ASD/AIA S5000F

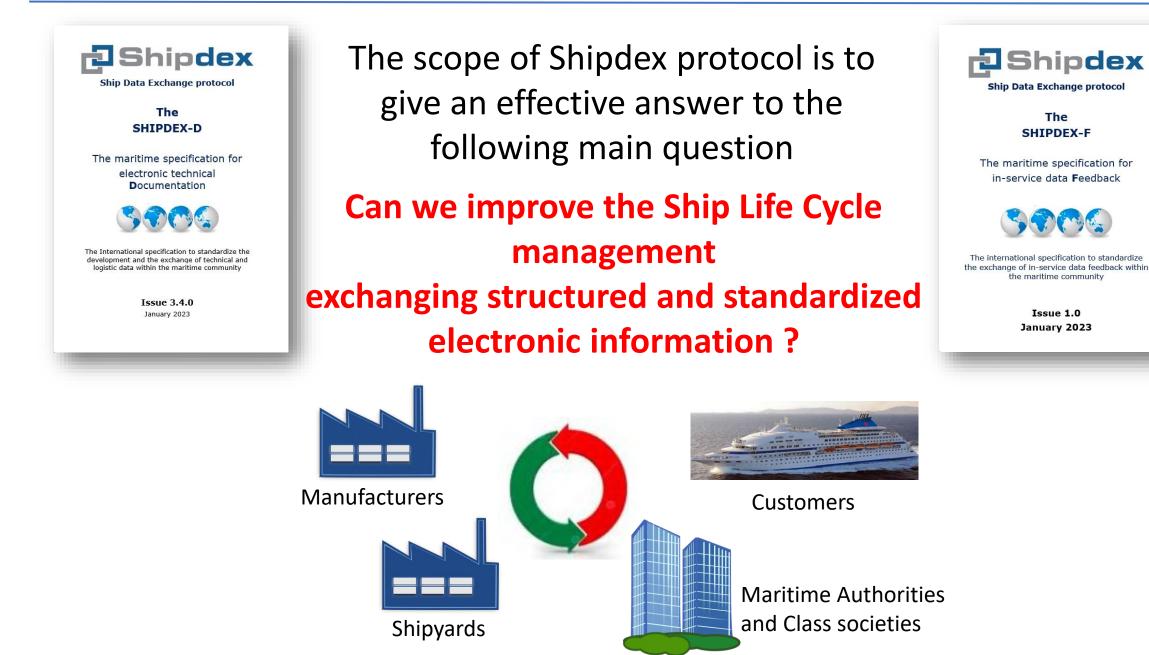
Today, Shipdex protocol is composed of:











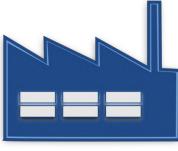




Some of the most important technical data from providers to customers



Manufacturers



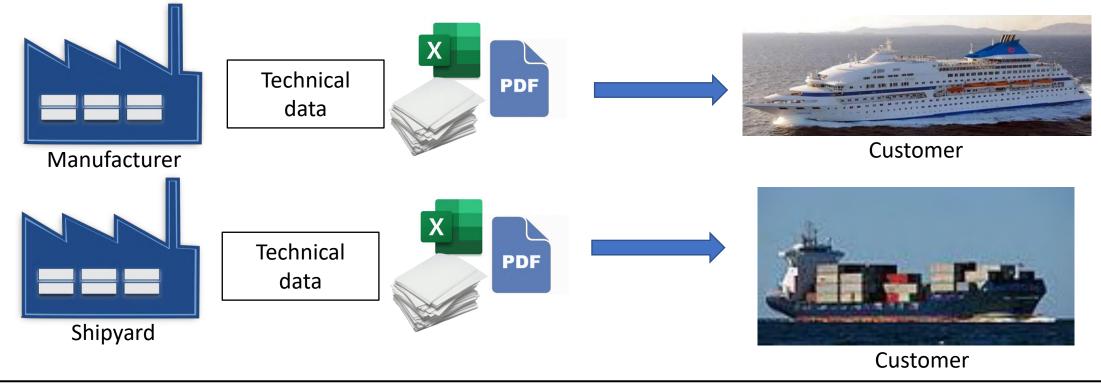
Shipyards

- **D**rawings
- Product (engine, pump, etc) composition (breakdown)
- How to operate the product
- How to maintain the whole product and its physical components:
 - Troubleshooting
 - Preventive maintenance
 - o Corrective maintenance
 - Required resources (personnel, spare parts, consumables, etc.)
 - Spare parts, support equipment and consumables catalogues
- □ Service Letter/Service Bulletin





The current way to provide technical data to customers



Criticalities:

- The data exchange is done providing "unstructured pages of information" instead of "structured electronic information".
- Every provider has different information structure and quality, different layouts and chapter structures
- Every customer cannot reuse or import the data automatically into company repositories/databases/IT systems

This is just DATA DIGITIZATION





Some of the most important technical data from customers to providers (in-service data feedback)



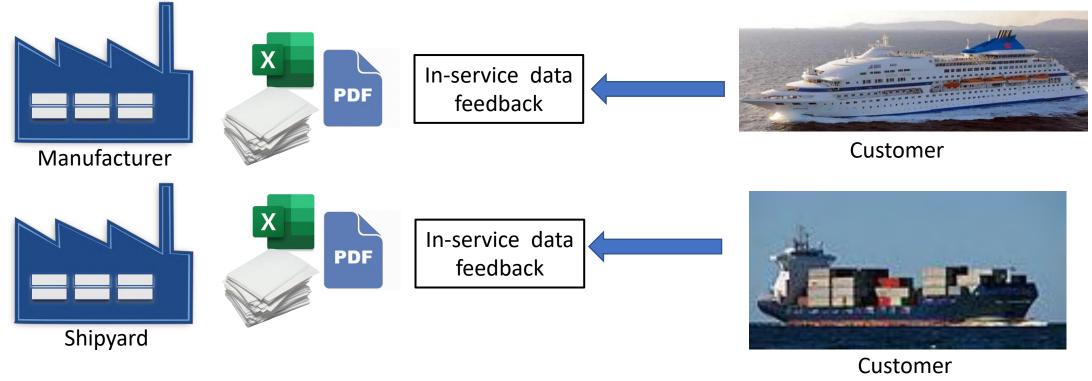


- Product failures
- Maintenance tasks performed
- Spare parts used
- Product performances in different scenarios
- **CO2** emissions
- **Gradients Suggestions to reduce CO2 emissions**





The current way to provide in-service data feedback to providers



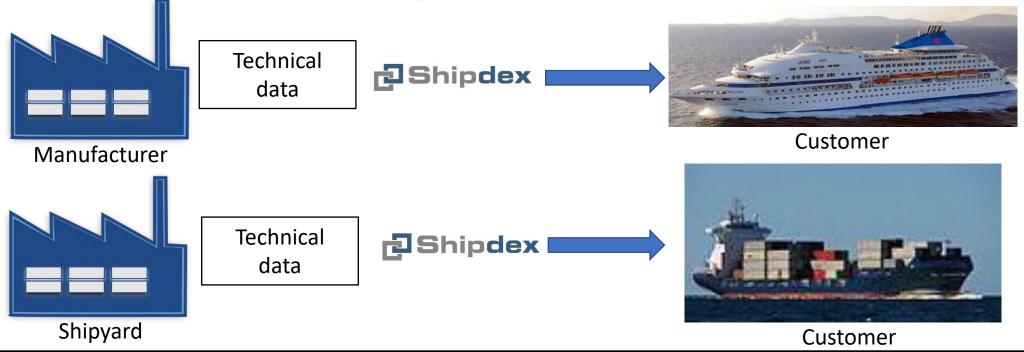
Criticalities:

- The data exchange is done providing "unstructured pages of information" instead of "structured electronic information".
- The data exchange is done using a provider/customer "proprietary" template
- Providers and Customers must develop their own way to produce/export/import data feedback

This is just DATA DIGITIZATION



The Shipdex solution



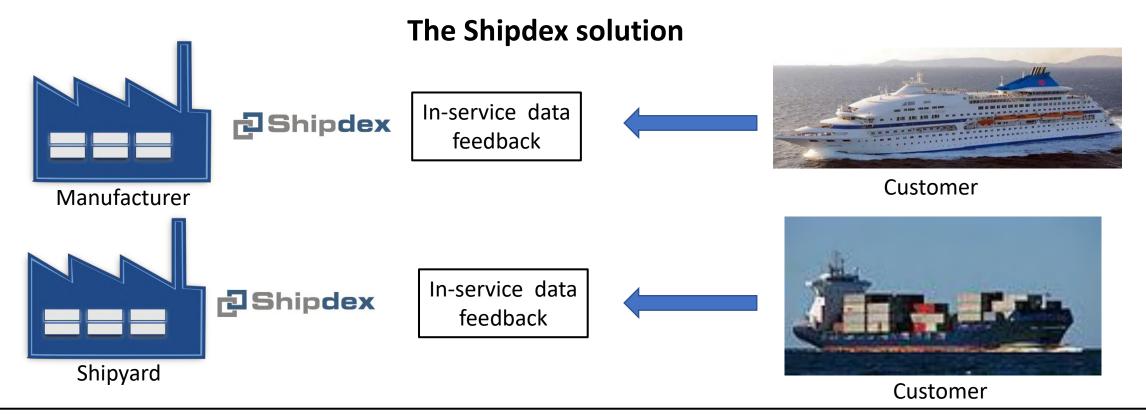
Advantages:

- The data exchange is done providing "<u>structured</u> and <u>standardized</u> electronic information" instead of "unstructured pages of information"
- Information is separated from layout that can be defined/changed later by every single user without affecting the data
- Same data structure and quality.
- NO need to retype the information into IT systems (ERP, CMMS, etc). Structured electronic information can be imported into any IT system instead of retyping the data

This is DATA DIGITALIZATION







Advantages:

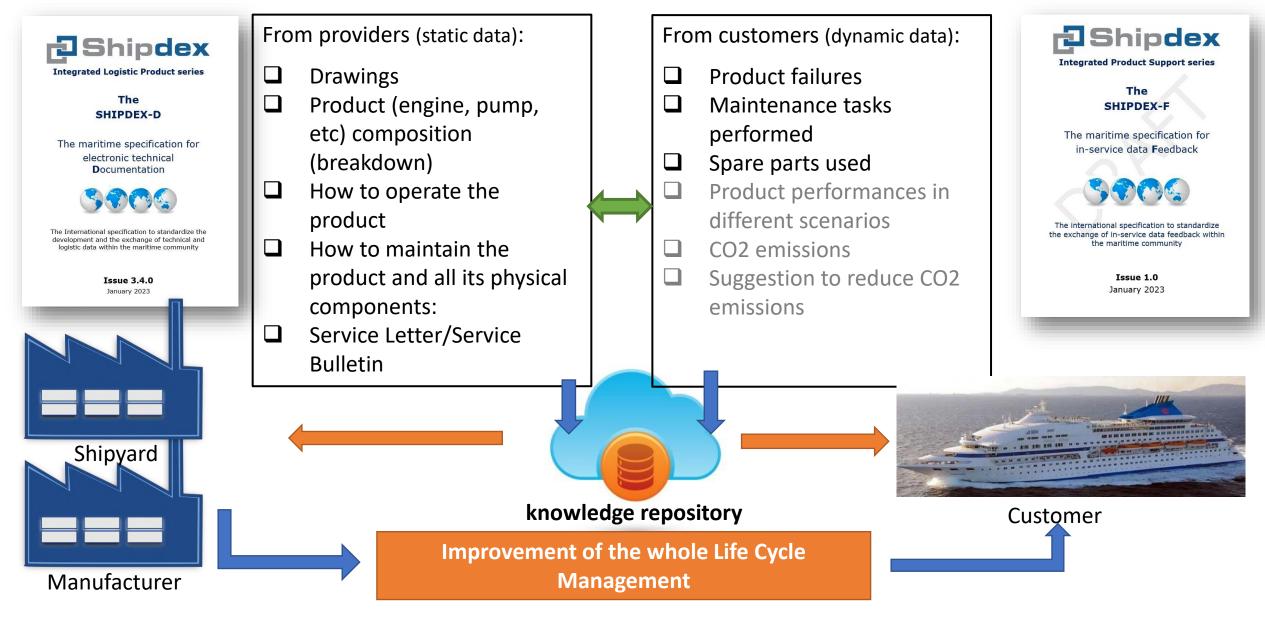
- Every customer provides its manufacturers with in-service data feedback in a <u>structured</u> and <u>standardized</u> electronic format
- Every provider can import in-service data feedback into its own IT systems
- Structured and standardized data can be exported/imported into any kind of IT system instead of retyping activities
- providers can use the information to improve equipment and maintenance plan quality

This is DATA DIGITALIZATION





Data exchange within maritime community in Shipdex format

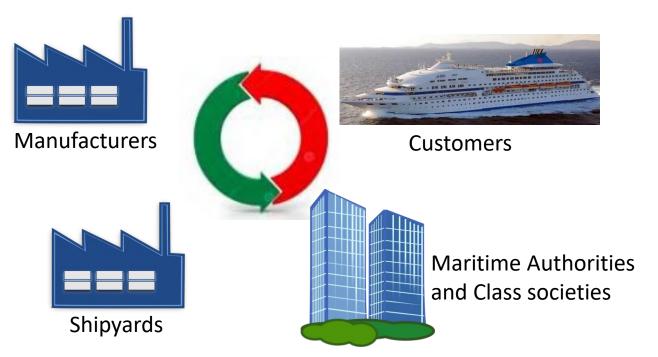






Improvement of the whole Life Cycle Management

- Improvement of the product by modifications and retrofit activities
- Enhancement of the maintenance and support concept
- Cheaper products and services
- Improved safety
- Environmental benefits
- Maritime Authorities wider involvement



PRODUCT LONGER AND CHEAPER LIFE



DOWNLOAD (from <u>www.shipdex.org</u>) the free-of-charge **Shipdex Viewer**

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Table of Content	MU 300-300 LDS LT Coolin	g FW Pump - PUMP - Preventive Maintenance (5000)			a	
	Periodicity					^
B PGARBARINO-AAA0	Description					*
PGARBARINO-AAAD	Working hours	5000				£0
INFOSET_MAINTENANCE_PROCEDURE	WORKING HOURS					40
BARBARINO-AAAD						
MU Pump - Grease	Support Equipmen	t				
MU Pump - Checks						
MU Pump - Checking Operation	Description		CAGE	Part Number/CSN	QTY	
MU Pump - Handling	None					70
MU 150-250 LE Emergency Bilge Pump - Lubrication	Itolic					
MU 150-250 LE Emergency Bilge Pump - MOTOR - Preventive Mainten	C					
MU 150-250 LE Emergency Bilge Pump - MOTOR - Preventive Mainten	Supplies					
MU 150-250 LE Emergency Bilge Pump - MOTOR - Preventive Mainten						2
MU 150-250 LE Emergency Bilge Pump - PUMP - Preventive Maintenan	Description		CAGE	Part Number/CSN	QTY	
MU 150-250 LE Emergency Bilge Pump - PUMP - Preventive Maintenan	Grease		A0984	00001	pc AR	~
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MU 150-250 LE Emergency Bilge Pump - PUMP - Preventive Maintenan	Creare Dorte					
- MU 150-250 LE Emergency Bilge Pump - PUMP - Preventive Maintenan	Spare Parts					
MU 150-250 LE Emergency Bilge Pump - PUMP - Preventive Maintenan						
→ MU 200-315 LE Ballast/bilge Pump - Lubrication	Description		CAGE	Part Number/CSN	QTY	
MU 200-315 LE Ballast/bilge Pump - MOTOR - Preventive Maintenance	None				1072	-
MU 200-315 LE Ballast/bilge Pump - MOTOR - Preventive Maintenance						
MU 200-315 LE Ballast/bilge Pump - MOTOR - Preventive Maintenance	SAFETY PRECAU	TIONS				
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MU 200-315 LE Ballast/bilge Pump - PUMP - Preventive Maintenance (3			WARNING			
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MU 200-315 LE Ballast/bilge Pump - PUMP - Preventive Maintenance (1						
MU 200-315 LE Ballast/bilge Pump - PUMP - Preventive Maintenance (2						
MU 300-300 LDS LT Cooling FW Pump - Lubrication						
MU 300-300 LDS LT Cooling FW Pump - MOTOR - Preventive Maintena						
MU 300-300 LDS LT Cooling FW Pump - MOTOR - Preventive Maintena						
→ MU 300-300 LDS LT Cooling FW Pump - MOTOR - Preventive Mainten:						
MU 300-300 LDS LT Cooling FW Pump - PUMP - Preventive Maintenan		AVOID GREASE CONTACT WITH SKIN AND EYES.				
→ MU 300-300 LDS LT Cooling FW Pump - PUMP - Preventive Maintenan						
MU 300-300 LDS LT Cooling FW Pump - PUMP - Preventive Maintenan						
MU 300-300 LDS LT Cooling FW Pump - PUMP - Preventive Maintenan			CAUTION			
MU 300-300 LDS LT Cooling FW Pump - PUMP - Preventive Maintenan						
MU 300-300 LDS LT Cooling FW Pump - PUMP - Preventive Maintenan		If bearing temperature is below 50 °C.				
		n boaring temperature is below ou o.				
MU 350-315 LDSH Main cooling SW Pump - Lubrication MU 350-315 LDSH Main cooling SW Pump - MOTOR - Preventive Maint		L.				
MUI 350-315 LDSH Main cooling SW Pump - MOTOR - Preventive Maint MUI 350-315 LDSH Main cooling SW Pump - MOTOR - Preventive Maint	~					
	PRELIMINARY OP	ERATIONS				~
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Table of Content		MU 200-315 LE Ballast/bilge Pump - MOTOR - Preventive Maintenance (2500)			oca + ×
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Selection					
Tasks Operations					
th01 Working hours; th03 Months; th98 One Time - after fin	st worki ~	MU 200-315 LE Ballast/k	bilge Pump - MOTOR -	Preventive Maintenance	(2500)
Task Frequency				Data Module Issu	e:001, Type:new,Date:28-08-2013
500 Working hours					
Component Name Task Name MU 150-250 LE Emergency Bilge Purn Preventive Maintenance (500)	Type Task	Periodicity			
MU 150-250 LE Emergency Bilge Pum Preventive Maintenance (500)	Task	1 onounity			
MU 200-315 LE Ballast/bilge Pump - M Preventive Maintenance (500)	Task				
MU 200-315 LE Ballast/bilge Pump - P Preventive Maintenance (500)	Task	Description			
MU 300-300 LDS LT Cooling FW Pump Preventive Maintenance (500) MU 300-300 LDS LT Cooling FW Pump Preventive Maintenance (500)	Task Task	Working hours 2500			
MU 350-315 LDSH Main cooling SW Pu Preventive Maintenance (500)	Task				
MU 350-315 LDSH Main cooling SW Pu Preventive Maintenance (500)	Task	Support Equipment			
MU 80-250 LP Emergency Fire Pump Preventive Maintenance (500)	Task	oupport Equipment			
MU 80-250 LP Emergency Fire Pump - Preventive Maintenance (500)	Task				
MU 125-250 L HT Cooling FW Pump Preventive Maintenance (500) MU 125-250 L HT Cooling FW Pump Preventive Maintenance (500)	Task Task	Description	CAGE	Part Number/CSN	QTY
MU 80-250 LE Main Fire/General servic Preventive Maintenance (500)	Task	Ohmmeter		00009	pc 1
MU 80-250 LE Main Fire/General servic Preventive Maintenance (500)	Task				
2500 Working hours		Supplies			
Component Name Task Name	Type	adhhura			
MU 150-250 LE Emergency Bilge Pum Preventive Maintenance (2500) MU 150-250 LE Emergency Bilge Pum Preventive Maintenance (2500)	Task Task				
MU 200-315 LE Ballas/bilge Pump - M. Preventive Maintenance (2500)	Task	Description	CAGE	Part Number/CSN	QTY
MU 200-315 LE Ballast/bilge Pump - P Preventive Maintenance (2500)	Task	None			
MU 300-300 LDS LT Cooling FW Pump Preventive Maintenance (2500)	Task				
MU 300-300 LDS LT Cooling FW Pump Preventive Maintenance (2500) MU 350-315 LDSH Main cooling SW Pu Preventive Maintenance (2500)	Task Task	Spare Parts			
MU 350-315 LDSH Main cooling SW Pu Preventive Maintenance (2500) MU 350-315 LDSH Main cooling SW Pu Preventive Maintenance (2500)	Task	oparo r alto			
MU 80-250 LP Emergency Fire Pump Preventive Maintenance (2500)	Task		0105	B. (N. J. (CON)	071
MU 80-250 LP Emergency Fire Pump Preventive Maintenance (2500)	Task	Description	CAGE	Part Number/CSN	QTY
MU 125-250 L HT Cooling FW Pump Preventive Maintenance (2500)	Task	None			
MU 125-250 L HT Cooling FW Pump Preventive Maintenance (2500) MU 80-250 LE Main Fire/General servic Preventive Maintenance (2500)	Task Task				
MU 80-250 LE Main Fire/General servic Preventive Maintenance (2500)	Task	SAFETY PRECAUTIONS			
1 3000 Working hours					
1 5000 Working hours			CALIFICAL.		
10000 Working hours			CAUTION		
1 20000 Working hours					
1 6 Months					
12 Months					
One Time - after first working hours 300					
1 0 Unscheduled					
		Stop the pump, switch off automatic start, inte	errunt motor feeding		
		Stop the pump, switch on automatic start, lite	shupt motor recoing.		
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For any other question contact me at <u>team@shipdex.org</u>