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NO.

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08 AUG, 2019

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EU MRV, IMO DCS □□ □□ □□ □

XML, BDN Summary, Collect data Summary

LAB021

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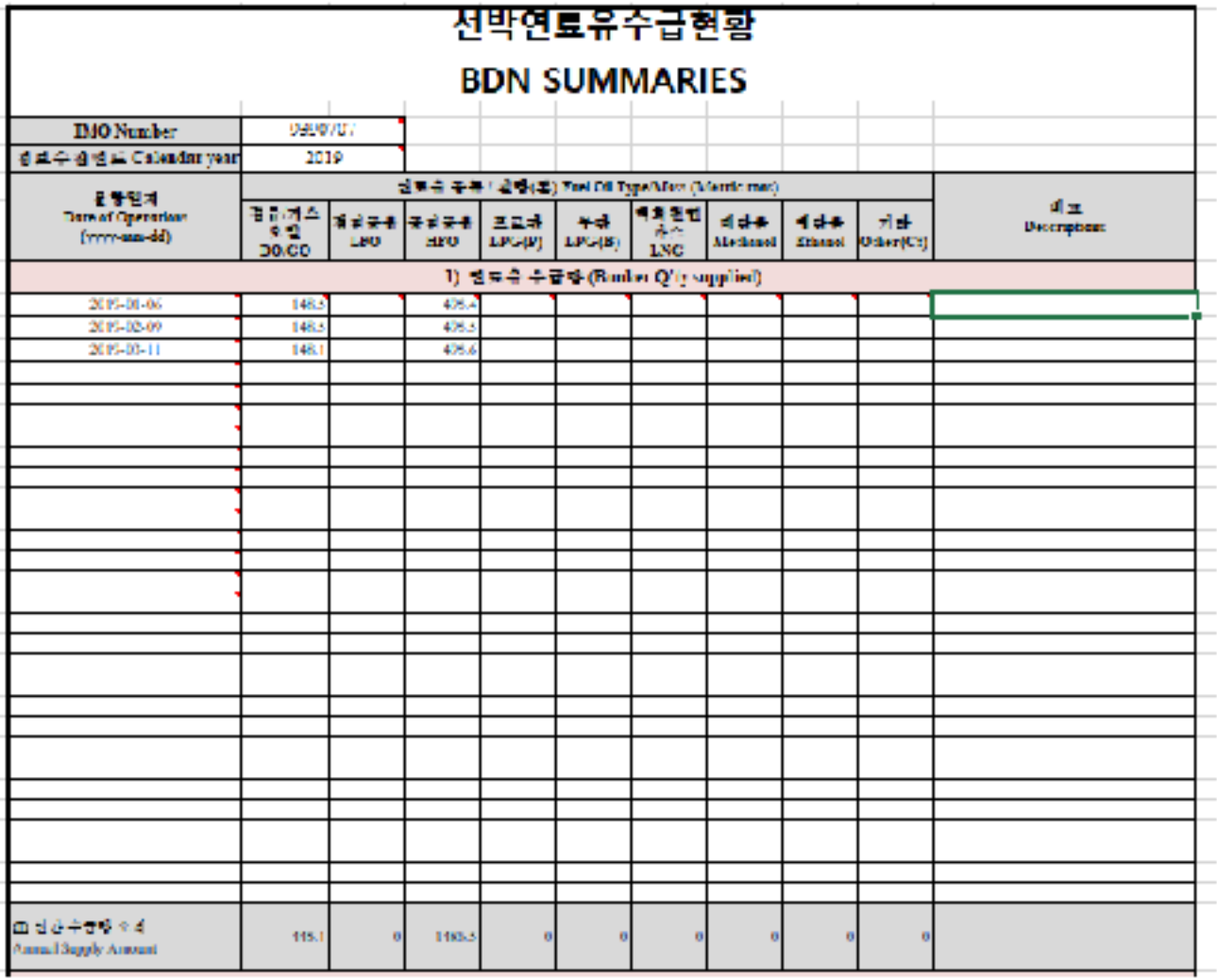
0.1	2019.08.08		□□□	

1. BDN Summary



선박연료유수급현황

BDN SUMMARIES

IMO Number	9809071									
검표수집년도 Calendar year	2019									
운항일자 Date of Operation (yyyy-mm-dd)	선박연료유 종류 / 공급량(톤) Fuel Oil Type/Mass (Metric ton)									비고 Description
	경유/가스오일 DO/GO	벙커중유 LSFO	중유중유 HFO	프로판 LPG(P)	부탄 LPG(B)	액화천연가스 LNG	메탄올 Methanol	에탄올 Ethanol	기타 Other(CT)	
1) 선박연료유 수급량(Bunker Q'ty supplied)										
2019-01-06	148.5		405.4							
2019-02-09	148.5		405.5							
2019-03-11	148.1		405.6							
년 공급수량 소계 Annual Supply Amount	115.1	0	1163.5	0	0	0	0	0	0	

1) IMO NO : General data □ □□ □

2) □□□□□□ : □□□가 Annual report □□ □ □□□ □□

3) □□□□ : Bunkering □□□ □□ □□

4) □□□ □□ : □□□□ □□□ □□

5) □□ □□□ □□ : □□ □

1. BDN Summary

3) [illegible] Correction for the tank oil remainings ([illegible])										
2020-01-01	700.3	0	2000.3	0	0	0	0	0		
2020-12-31	600.3	0	1000.1	0	0	0	0	0		
[illegible] Correction for the tank oil remainings	100	0	1000.4	0	0	0	0	0	0	The difference in the amount of the remaining tank oil at the beginning-end of the data collection period
2) [illegible] Other corrections ([illegible] (BOG) [illegible])										
2020-12-12	-10.3	0	-100.3	0	0	0	0	0		[illegible] : exp) Transfer Qty to offshore reception facility for tank inspection in dock
[illegible] Annual other corrections	-10.3	0	-100.3	0	0	0	0	0	0	
[illegible] Annual Fuel Consumption										
[illegible] Annual Fuel Consumption ([illegible]+[illegible]+[illegible])	331.6	0	2336.4	0	0	0	0	0	0	

2) □□□ □□□ □□

- □□ □□ □□□□ □□□
- Export □ □□□ □□

3) □□□ □□□□ □□

- □□ (de-bunkering □)
- □□□□ – (□□□□) □ □□□ .

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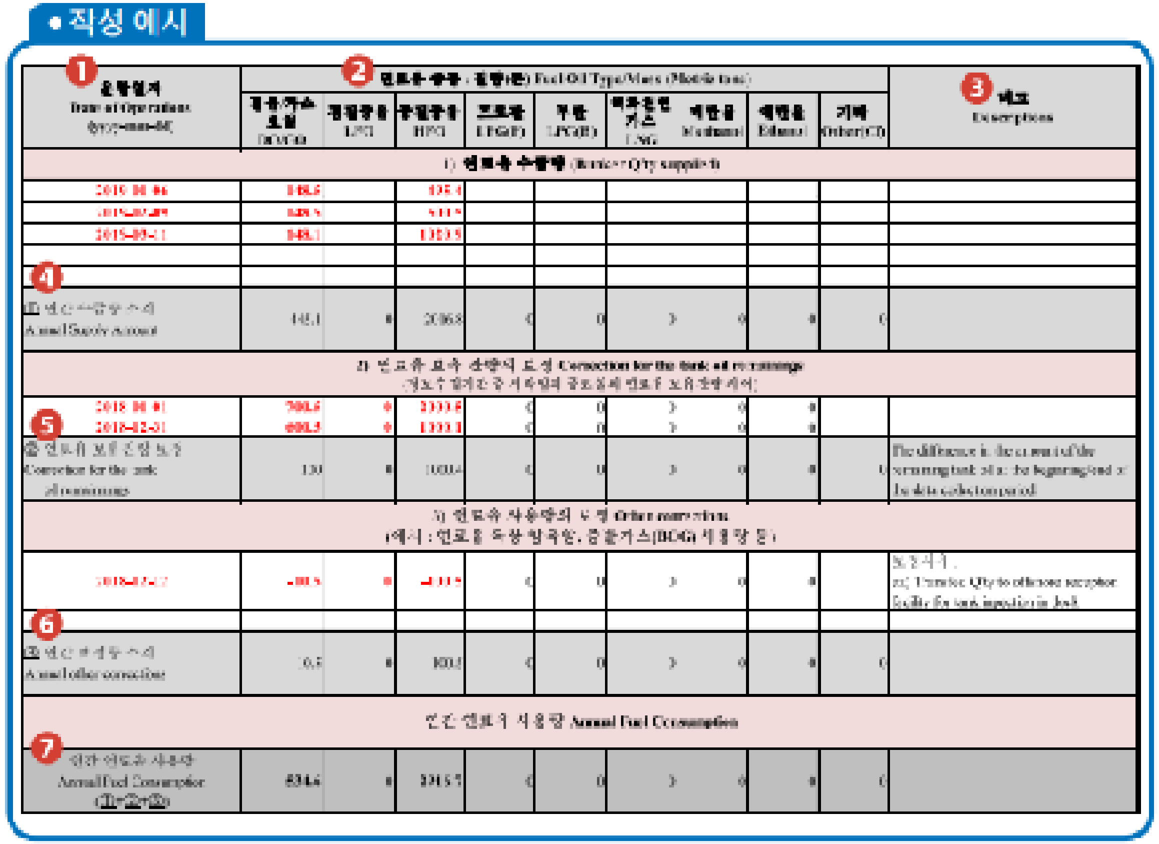
- 1+2+3 □

1. BDN Summary

● 작성 예시



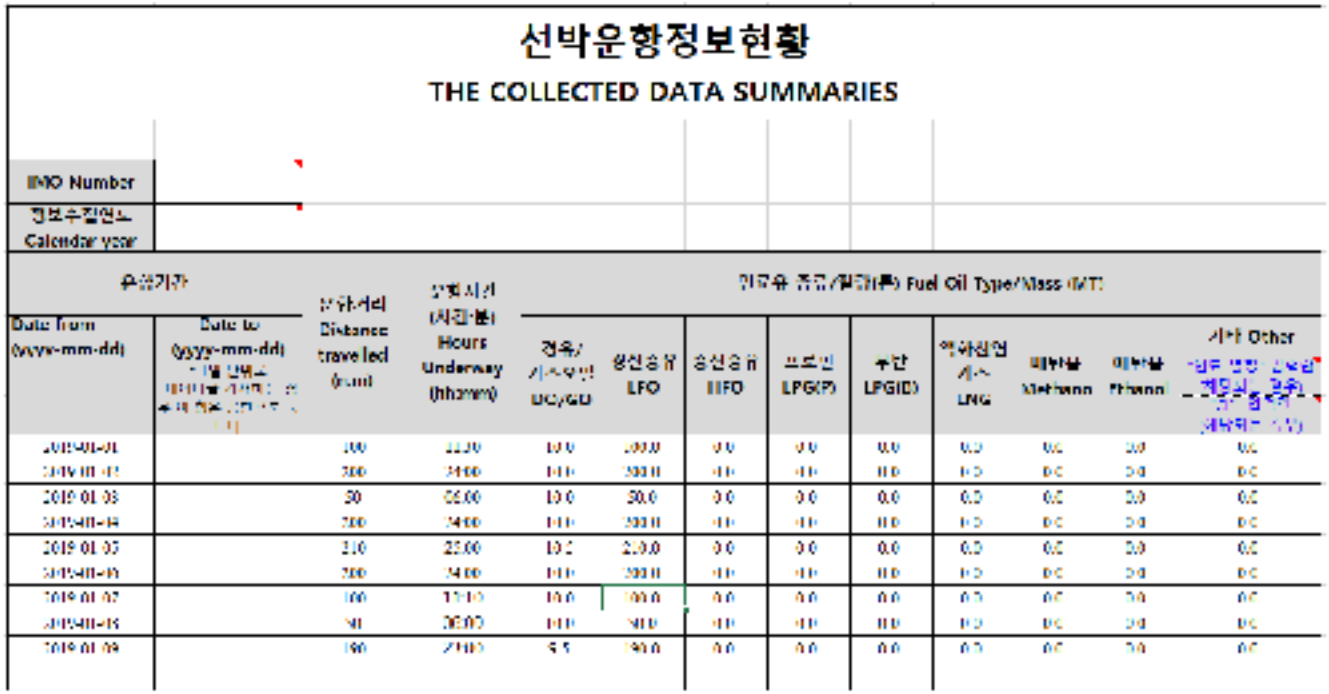
운항일자 Date of Operation (yyyy-mm-dd)	DO/GO	LFO	HFO	LPG(P)	LPG(B)	LNG	Methanol	Ethanol	Other(Cf)	비고 Descriptions
1) 연료유 수급량 (Bunker Q'ty supplied)										
2019-01-06	148.6		425.4							
2019-07-09	148.5		511.9							
2019-09-11	148.1		1323.5							
① 연간 수급량 소계 Annual Supply Amount	445.1	0	2068	0	0	0	0	0	0	
2) 연료유 보유 잔량의 보정 Correction for the tank of remainings										
2018-01-01	700.6	0	2333.6	0	0	0	0	0		
2018-12-31	600.5	0	1333.1	0	0	0	0	0		
② 연료유 보유 잔량 보정 Correction for the tank of remainings	100	0	1000.4	0	0	0	0	0	0	The difference in the amount of the remaining tank oil at the beginning/end of the data collection period
3) 연료유 사용량의 수정 Other corrections (예시 : 연료유 육상 양륙량, 증발가스(BOG) 사용량 등)										
2018-07-12	-10.5	0	-100.5	0	0	0	0	0		[illegible] ex) Transfer Q'ty to offshore reception facility for tank inspection in dock
③ 연간 수정량 소계 Annual other correction	10.5	0	100.5	0	0	0	0	0	0	
연간 연료유 사용량 Annual Fuel Consumption										
연간 연료유 사용량 Annual Fuel Consumption (①+②+③)	534.6	0	3315.7	0	0	0	0	0	0	

● 작성 방법

항 목	작성(입력) 방법
❶ 운항일자	"yyyy-mm-dd" 순으로 입력
❷ 연료유 종류/질량(톤)	숫자 입력(소수점 첫째자리까지)
❸ 비고	설명 입력(필요 시)
❹ 연간 수급량 소계	연료유공급지별 수급량 입력 시 자동계산
❺ 연료유 보유 잔량 보정	시작일과 종료일 잔량을 입력 시 자동계산
❻ 연간 보정량 소계	• 연료유 양륙 시 양륙량은 마이너스(-)값으로 입력 (소수점 첫째자리까지) • LNG 화물의 BOG 등을 연료로 사용하는 경우 해당 LNG 사용량을 플러스(+)값으로 입력
❼ 연간 연료유 사용량	자동 계산

"선박연료유 수급현황"에 포함되는 정보를 자체 전자보고시스템으로 관리하는 경우, 자체 전자 보고시스템에서 출력한 자료를 "업로드" 하는 것으로 대체 가능합니다.

2. THE COLLECTED DATA Summary



선박운항정보현황

THE COLLECTED DATA SUMMARIES

IMO Number	
정보수집연도 Calendar year	

수집기간		항해거리 Distance traveled (nm)	항해시간 (시간:분) Hours Underway (hh:mm)	연료유 종류/질량(톤) Fuel Oil Type/Mass (MT)							
Date from (yyyy-mm-dd)	Date to (yyyy-mm-dd)			경유/가스오일 DO/GO	중질중유 LFO	중질중유 HFO	프로판 LPG(P)	부탄 LPG(B)	액화천연가스 LNG	메탄올 Methanol	에탄올 Ethanol	기타 Other
2019-01-01		300	22:30	10.0	200.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2019-01-02		300	24:00	0.0	300.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2019-01-03		50	05:00	10.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2019-01-04		300	24:00	0.0	300.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2019-01-05		210	23:00	10.0	210.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2019-01-06		300	24:00	0.0	300.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2019-01-07		100	11:10	10.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2019-01-08		90	20:00	0.0	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2019-01-09		190	21:00	5.5	190.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1) IMO NO : General data □ □□ □

2) □□□□ : leg □□□ □□□□ □□□□ max □□ 999□□□ 1000 □□□ □□□ □□ leg □ □□□ □□□□ □ .

- **Noon at sea 가 30□ □□ □□□□ LEG가 □□□ 30□□ □□ □□, 31 □□□ – Dep. s/by □□ □□□ □□□□ □□□□ □□□□ □□ □□ □□□ □□ .**

2. THE COLLECTED DATA
Summary

• 작성 예시

❶ 운항기간 Date from (yyyy-mm-dd)	Date to (yyyy-mm-dd)	❷ 운항거리 Distance travelled (nm)	❸ 운항시간 (시간:분) Hours Underway (hh:mm)	❹ 연료유 종류/질량(톤) Fuel Oil Type/Mass (MT) 경유/가스오일 DO/GO	저유황중유 LFO	중유 HFO	프로판 LPG(P)	부탄 LPG(B)	액화천연가스 LNG	메탄올 Methanol	에탄올 Ethanol	기타 Other
2013-01-01		100	11:30	10.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2013-01-02		200	24:00	10.0	200.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2013-01-03		50	06:00	10.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2013-01-04		200	24:00	10.0	200.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2013-01-05		210	22:00	10.5	210.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2013-01-06		200	24:00	10.0	200.0	300.0	0.0	0.0	0.0	0.0	0.0	0.0
2013-01-07		100	11:00	10.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2013-01-08		50	06:00	10.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2013-01-09		190	23:00	9.5	190.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2013-01-10		100	09:00	10.0	200.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2013-01-11		150	11:30	10.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2013-01-12		130	12:00	10.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2013-01-13		145	15:40	9.8	150.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-		-	-	-	-	-	-	-	-	-	-	-
-		-	-	-	-	-	-	-	-	-	-	-
-		-	-	-	-	-	-	-	-	-	-	-
2013-12-30		540	24:00	0.0	250.0	250.0	0.0	0.0	0.0	0.0	0.0	0.0
2013-12-31		300	24:00	25.0	150.0	350.0	0.0	0.0	0.0	0.0	0.0	0.0
❺ 연간 합계 Annual Total		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

• 작성 방법

항 목	작성(입력) 방법
❶ 운행기간	반드시 "yyyy-mm-dd" 형태로 입력
❷ 운행거리	정수로 입력
❸ 운항시간	반드시 "hh:mm" 형태로 입력
❹ 연료유 종류/질량(톤)	숫자 입력(소수점 첫째자리까지)
❺ 연간 합계	자동계산

"선박운항정보현황"에 포함되는 정보를 자체 전자보고시스템으로 관리하는 경우, 자체 전자보고시스템에서 출력한 자료를 "업로드" 하는 것으로 대체 가능합니다.

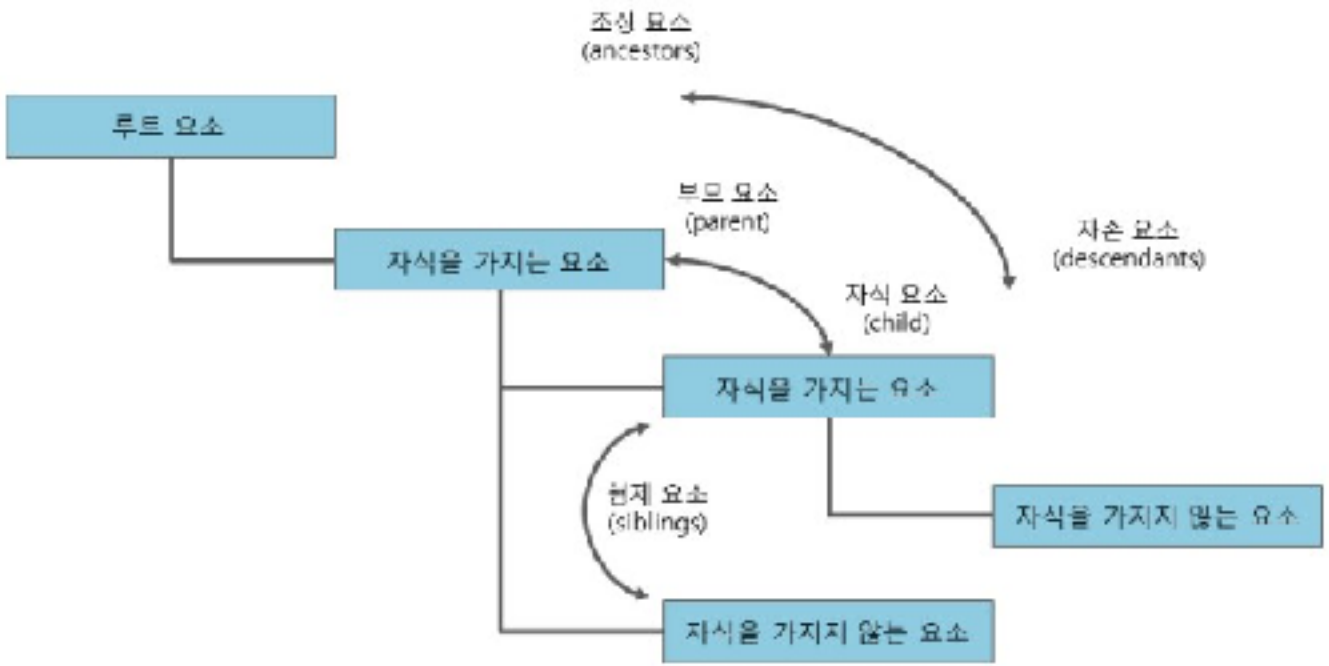
3. Data Report

● 작성 예시			● 작성 방법
❶ 시작일 Start date (yyyy-mm-dd)		2019-01-01	숫자를 직접 입력
❷ 종료일 End date (yyyy-mm-dd)		2019-12-31	숫자를 직접 입력
IMO number		9123043	7자리 숫자
❸ 선박용도 Ship type		Tanker	총 7종으로 구분됨 ship type중에서 선택
총톤수 Gross tonnage		5,970	숫자를 직접 입력 ("3000 이상 한글" 입력)
순톤수 NT		4,123	숫자를 직접 입력("정수" 입력)
재화중량톤수 DWT		10,119	숫자를 직접 입력("정수" 입력)
선박에너지효율설계지수 EEDI (if applicable) (gCO2/t.nm)		30.1234b	소수점 다섯자리까지 입력 가능
빙빙등급 Ice class (if applicable)		IA	A SUPER, IA, IB, IC 중 하나 선택
운항거리 Distance Travelled (n.mile)		999,999	숫자를 직접 입력("정수" 입력)
❹ 운항시간 Hours underway (hours)		7,300	숫자를 직접 입력 ("정수" 입력 분 단위에서 반올림)
선박연료유 사용량 계측방법 Method used to measure fuel oil consumption		1	1. BUN : method using BUNs 2. FlowMeter : method using flow meters 3. DunkerTankMonitoring : method using bunker fuel oil monitoring (3개 중 1개 선택)
기관출력 Power output (rated power) (kW)	주기관 합계출력 Main Propulsion Power	7,330	숫자를 직접 입력("정수" 입력)
	보조기관 합계출력 Auxiliary Engine(s)	901	숫자를 직접 입력("정수" 입력)
선박연료유 사용량 Fuel oil consumption (t)	경유/가스오일 Diesel/Gas Oil (C_f : 3.206)	500	숫자를 직접 입력("정수" 입력)
	경질중유 LFO (C_f: 3.151)	1,000	숫자를 직접 입력("정수" 입력)
	중질중유 HFO (C_f: 3.114)	12,003	숫자를 직접 입력("정수" 입력)
	액화석유가스(프로판) LPG(Propane) (C_f: 3.000)	0	숫자를 직접 입력("정수" 입력)
	액화석유가스(부탄) LPG (Butane) (C_f: 3.030)	0	숫자를 직접 입력("정수" 입력)
	액화천연가스 LNG (C_f: 2.750)	0	숫자를 직접 입력("정수" 입력)
	기타 Other(·····) (C_f :···)		연료명(영문) & C_f(소수점4자리)를 직접 입력

4. XML

XML
- XML □ □□□□ □□□□ □□□ □□□□ □□□□□□ , □□□□ □□□□ □□□ □□□□ □□ □□
- EXtensible Markup Language □ □□□ , □□□ □□ □□□□ □□□□ □□□□ □□□□ □□□ □□□ □□ □□

XML □□
- □□ (tree) □□□ □□ □□
- □□□□ □□ (root) □□□□ □□□□ , □□□ □□ (child) □□□ □□□□ □□□
- XML □□ □□□ □□□□ □□ □□□ □□□□ □□ (child) □□□ 가□ □ □□



4. XML

XML □□ □□ □□

```
<?xml version="1.0" encoding="UTF-8"?>
<shop city="□□ " type="□□ ">
    <food>
        <name> □ </name>
        <sort> □□ </sort>
        <cost>3000</cost>
    </food>
    <food>
        <name> □□ </name>
        <sort> □□ </sort>
        <cost>2000</cost>
    </food>
</shop>
```

C22 – Company uploads data through XML files

Emissions.xml (Voyage_Emissions.xml(a single ship) + Port_Emissions.xml(a single ship) + Annual emission)

- **shipEmissions – □□ 25□ ships**

□□	□	Type	Notes
shipImoNumber	5003734	string	□□
voyageEmission	□□		0~40□
PortEmission	□□		0~40□
annualEmission	□□		0~2□

```
<?xml version="1.0" encoding="UTF-8"?>
- <emissions>
  - <shipEmissions shipImoNumber="">
      + <voyageEmission>
      + <portEmission>
      + <annualEmission>
    </shipEmissions>
</emissions>
```

Emissions xml □□ □
Annual report □ □□

- **shipEmissions - voyageEmission**

□□	□	Type	Notes
departurePortName	Pisaeus	string	
arrivalPortName	Lisbon	string	
atd	01-01-2017 00:00:45	string	□□
ata	05-01-2017 00:00:45	string	□□
timeAtSeaNavigation	100	decimal	
timeAtSeaIce	20	decimal	
timeAtSeaAnchorage	500	decimal	
distanceTravelNavigation	1500	decimal	
distanceTravelIce	200	decimal	
additionalNotes	Additional Notes text	string	
departureCountryCode	GR	string	□□
departurePortCode	GRPIR	string	
arrivalCountryCode	PT	string	□□
arrivalPortCode	PTLIS	string	
voyageConsumption	□□		0~□□ □□ X
voyageCargoAndTransportWork	□□		0~□□ □□ X
voyageDirectMeasurement	□□		0~□□ □□ X

```
<voyageEmission>
    <departurePortName>Piraeus</departurePortName>
    <arrivalPortName>Lisbon</arrivalPortName>
    <atd>01-01-2017 00:00:45</atd>
    <ata>05-01-2017 00:00:45</ata>
    <timeAtSeaNavigation>100</timeAtSeaNavigation>
    <timeAtSeaIce>20</timeAtSeaIce>
    <timeAtSeaAnchorage>500</timeAtSeaAnchorage>
    <distanceTravelNavigation>1500</distanceTravelNavigation>
    <distanceTravelIce>200</distanceTravelIce>
    <additionalNotes>Additional Notes text Additional Notes text
        Additional Notes text Additional Notes text Additional Notes text
        Additional Notes text Additional Notes text Additional Notes text
        Additional Notes text</additionalNotes>
    <departureCountryCode>GR</departureCountryCode>
    <departurePortCode>GRPIR</departurePortCode>
    <arrivalCountryCode>PT</arrivalCountryCode>
    <arrivalPortCode>PTLIS</arrivalPortCode>
  - <voyageConsumptions>
    <voyageConsumptions>
  - <voyageCargoAndTransportWork>
</voyageEmission>
```

◆ □□□□ □□ ~ □□□□ □□, □□ □□□ 0~□□ 1□
◆ Country Code, Port Code □ (Bulk data picklists-v1.1.xlsx □□)

C22 – Company uploads data through XML files

Emissions.xml (Voyage_Emissions.xml + Port_Emissions.xml)

- **shipEmissions - annualEmission**

□□	□	Type	Notes	□□
reportingPeriod	2017	int	□□	□□□□□□
fromDate	01-01-2017	string	□□	□□□□
toDate	31-12-2017	string	□□	□□□□
discriminateThroughIce	false	Boolean	□□	□□□□, □□□□ : false
emissionsBetweenEuPort	1000	decimal		CO2 □□□
emissionsDepartEuPort	100	decimal		CO2 □□□
emissionsToEuPort	110	decimal		CO2 □□□
emissionsEuPortAtBerth	50	decimal		CO2 □□□
distanceRegularNav	500	decimal		□□□□
distanceThroughIce		decimal		□□□□□□□□□□
timeRegularNav	99	decimal		□□□□
timeThroughIce		decimal		□□□□□□□□□□
timeAtAnchorage		decimal		□□□□□
annualConsumption	□□		0~□□□□ X	
annualDirectMeasurement	□□		0~□□□□ X	
annualCargoAndTransportWork	□□		0~□□□□ X	

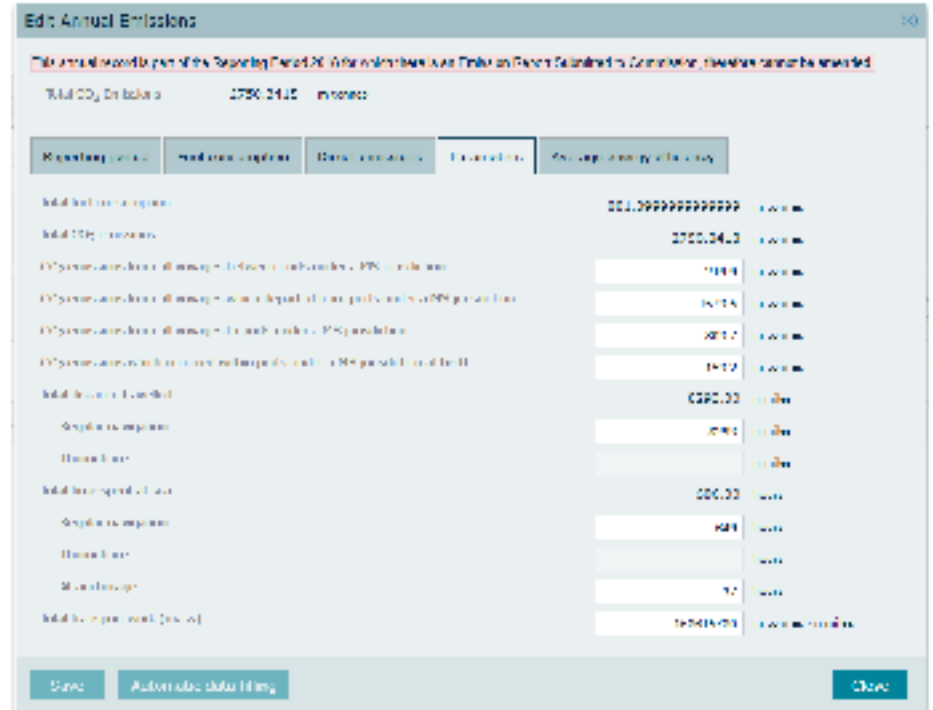
```
- <annualEmissions>
    <reportingPeriod>2017</reportingPeriod>
    <fromDate>01-01-2017</fromDate>
    <toDate>31-12-2017</toDate>
    <discriminateThroughIce>false</discriminateThroughIce>
    <emissionsBetweenEuPort>1000</emissionsBetweenEuPort>
    <emissionsDepartEuPort>100</emissionsDepartEuPort>
    <emissionsToEuPort>110</emissionsToEuPort>
    <emissionsEuPortAtBerth>50</emissionsEuPortAtBerth>
    <distanceRegularNav>500</distanceRegularNav>
    <timeRegularNav>65</timeRegularNav>
    <timeAtAnchorage>99</timeAtAnchorage>
    <annualConsumption>
  - <annualConsumption>
  - <annualConsumption>
  - <annualConsumption>
  - <annualConsumption>
    <annualConsumption>
  - <annualConsumption>
  - <annualConsumption>
  - <annualConsumption>
  - <annualConsumption>
  - <annualCargoAndTransportWork>
  </annualEmissions>
```

C22 – Company uploads data through XML files

Emissions.xml (Voyage_Emissions.xml + Port_Emissions.xml)

- **shipEmissions - annualEmission**

□□	□	Type	Notes	□□
reportingPeriod	2017	int	□□	□□□ □□□□
fromDate	01-01-2017	string	□□	□□ □□
toDate	31-12-2017	string	□□	□□ □□
discriminateThroughIce	false	Boolean	□□	□□□□ , □□□ □ : false
emissionsBetweenEuPort	1000	decimal		CO2 □□□
emissionsDepartEuPort	100	decimal		CO2 □□□
emissionsToEuPort	110	decimal		CO2 □□□
emissionsEuPortAtBerth	50	decimal		CO2 □□□
distanceRegularNav	500	decimal		□□ □□
distanceThroughIce		decimal		□□ □□□ □□□ □□ □□
timeRegularNav	99	decimal		□□ □□
timeThroughIce		decimal		□□ □□□ □□□ □□ □□
timeAtAnchorage		decimal		□□□ □□
annualConsumption	□□		0~□□ □□ X	
annualDirectMeasurement	□□		0~□□ □□ X	
annualCargoAndTransportWork	□□		0~□□ □□ X	



C22 – Company uploads data through XML files

Emissions.xml (Voyage_Emissions.xml + Port_Emissions.xml)

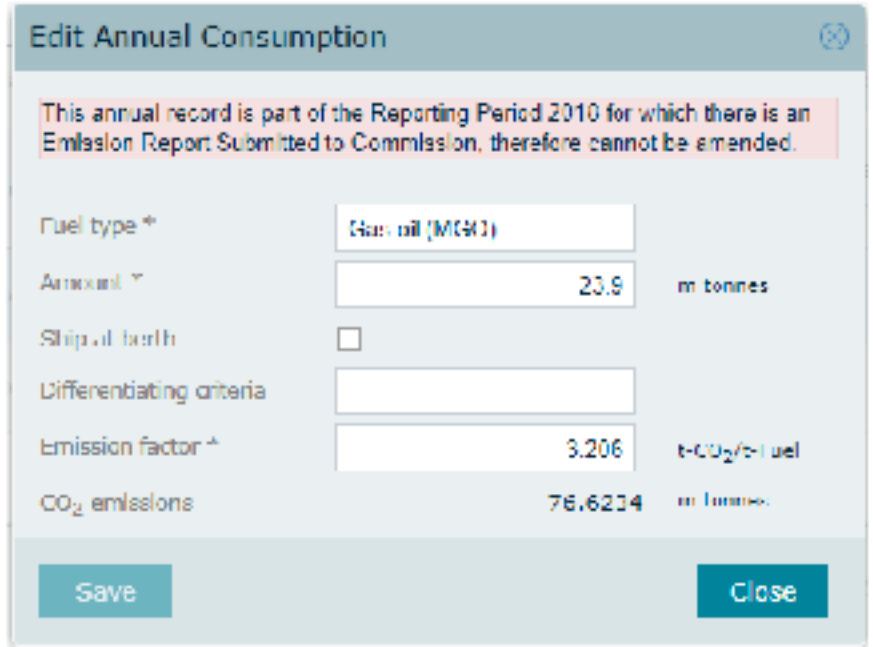
- **shipEmissions – annualEmission – annualConsumption (□□□□가□□□ □)**

□□	□	□□□□	Type	Notes	□□
fuelTypeCode	MDO	MDO ETHANOL MGO HFO LFO LNG LPG_BUTANE LPG_PROPANE METHANOL OTHER	string	□□	□□ □□
amount	10		decimal	□□	□□ □□ □□□
atBerth	true		Boolean	□□	□□ □ □□□ □□ . □□ □□□ TRUE
diffCriterionCode		ON_BALLAST ON_LADEN CARGO_HEATING DYNAMIC_POSITIONING PASSENGER_TRANSPORT FREIGHT_TRANSPORT	string	0~ □□ □□ X Managed, based on ship type.	Ballast, Laden □ □□□ □□ □□ □□ □ □□ □□□□ □□ □□
emmissionFactor	1		decimal	□□	□□□ □□ □□□ □□


```
- <annualConsumption>
    <fuelTypeCode>MDO</fuelTypeCode>
    <amount>10</amount>
    <atBerth>true</atBerth>
    <emmissionFactor>1</emmissionFactor>
  </annualConsumption>
- <annualConsumption>
    <fuelTypeCode>ETHANOL</fuelTypeCode>
    <amount>20</amount>
    <atBerth>false</atBerth>
    <emmissionFactor>2</emmissionFactor>
  </annualConsumption>
  <annualConsumption>
    <fuelTypeCode>MGO</fuelTypeCode>
    <amount>30</amount>
    <atBerth>true</atBerth>
    <emmissionFactor>3</emmissionFactor>
  </annualConsumption>
<annualConsumption>
    <fuelTypeCode>HFO</fuelTypeCode>
    <amount>40</amount>
    <atBerth>false</atBerth>
    <emmissionFactor>4</emmissionFactor>
</annualConsumption>
<annualConsumption>
    <fuelTypeCode>LFO</fuelTypeCode>
    <amount>50</amount>
    <atBerth>true</atBerth>
    <emmissionFactor>5</emmissionFactor>
</annualConsumption>
- <annualConsumption>
    <fuelTypeCode>LNG</fuelTypeCode>
    <amount>60</amount>
    <atBerth>false</atBerth>
    <emmissionFactor>6</emmissionFactor>
</annualConsumption>
<annualConsumption>
    <fuelTypeCode>LPG_BUTANE</fuelTypeCode>
    <amount>70</amount>
    <atBerth>true</atBerth>
    <emmissionFactor>7</emmissionFactor>
</annualConsumption>
- <annualConsumption>
    <fuelTypeCode>LPG_PROPANE</fuelTypeCode>
    <amount>80</amount>
    <atBerth>false</atBerth>
    <emmissionFactor>8</emmissionFactor>
</annualConsumption>
<annualConsumption>
    <fuelTypeCode>METHANOL</fuelTypeCode>
    <amount>90</amount>
    <atBerth>true</atBerth>
    <emmissionFactor>9</emmissionFactor>
</annualConsumption>
<annualConsumption>
    <fuelTypeCode>OTHER</fuelTypeCode>
    <amount>100</amount>
    <atBerth>false</atBerth>
    <diffCriterionCode>DYNAMIC_POSITIONING</diffCriterionCode>
    <emmissionFactor>10</emmissionFactor>
</annualConsumption>
```

C22 – Company uploads data through XML files

□□	□	□□□□	Type	Notes	□□
fuelTypeCode	MDO	MDO ETHANOL MGO HFO LFO LNG LPG_BUTANE LPG_PROPANE METHANOL OTHER	string	□□	□□ □□
amount	10		decimal	□□	□□ □□ □□□
atBerth	true		Boolean	□□	□□ □ □□□ □□ . □□ □□□ TRUE
diffCriterionCode		ON_BALLAST ON_LADEN CARGO_HEATING DYNAMIC_POSITIONING PASSENGER_TRANSPO RT FREIGHT_TRANSPORT	string	0~□□ □□ X Managed, based on ship type.	Ballast, Laden □ □□□ □□ □□ □□ □ □□ □□□□ □□ □□
emmissionFactor	1		decimal	□□	□□□ □□ □□□ □□



C22 – Company uploads data through XML files

Emissions.xml (Voyage_Emissions.xml + Port_Emissions.xml)

- **shipEmissions – annualEmission – annualDirectMeasurement(CO2 □□ □□□□ – □□)**

□□	□	Options/Rules	Type	Notes	□□
atBearth			boolean	□□	
diffCriterionCode		ON_BALLAST ON_LADEN CARGO_HEATING DYNAMIC_POSITIONING PASSENGER_TRANSPORT FREIGHT_TRANSPORT	string	0~□□ □□ X Managed, based on ship type.	
co2Emissions			decimal	□□	

- **shipEmissions – annualEmission – annualCargoAndTransportWork**

□□	□	Options/Rules	Type	Notes	□□
transportWork	10		decimal	□□	Transportwork □
cargoFieldCode	CARGO_MASS_TRANSPORT_WORK_MASS	CARGO_MASS_TRANSPORT_WORK_MASS CARGO_VOLUME_TRANSPORT_WORK_VOLUME CARGO_DWT_TRANSPORT_WORK_DWT NO_OF_PASSENGERS_TRANSPORT_WORK_PAX CARGO_MASS_TRANSPORT_WORK_FREIGHT	string	□□	□□□ □□ CARGO_MASS_TRANSPORT_WORK_MASS : MT CARGO_VOLUME_TRANSPORT_WORK_VOLUME : CBM CARGO_DWT_TRANSPORT_WORK_DWT : DWT NO_OF_PASSENGERS_TRANSPORT_WORK_PAX : PASSENGER

```
- <annualCargoAndTransportWork>
    <transportWork>10</transportWork>
    <cargoFieldCode>CARGO_MASS_TRANSPORT_WORK_MASS</cargoFieldCode>
  </annualCargoAndTransportWork>
```

C22 – Company uploads data through XML files

Emissions.xml (Voyage_Emissions.xml + Port_Emissions.xml)

- **shipEmissions – annualEmission – annualCargoAndTransportWork**

□□	□	Options/Rules	Type	Notes	□□
transportWork	10		decimal	□□	Transportwork □
cargoFieldCode	CARGO_MASS_TRANSPORT_WORK_MASS	CARGO_MASS_TRANSPORT_WORK_MASS CARGO_VOLUME_TRANSPORT_WORK_VOLUME CARGO_DWT_TRANSPORT_WORK_DWT NO_OF_PASSENGERS_TRANSPORT_WORK_PAX CARGO_MASS_TRANSPORT_WORK_FREIGHT	string	□□	□□□ □□ CARGO_MASS_TRANSPORT_WORK_MASS : MT CARGO_VOLUME_TRANSPORT_WORK_VOLUME : CBM CARGO_DWT_TRANSPORT_WORK_DWT : DWT NO_OF_PASSENGERS_TRANSPORT_WORK_PAX : PASSENGER

```
<annualCargoAndTransportWork>
    <transportWork>10</transportWork>
    <cargoFieldCode>CARGO_MASS_TRANSPORT_WORK_MASS</cargoFieldCode>
</annualCargoAndTransportWork>
```