			Parameter	# of bits
Standard Message Header			Message ID	6
			Repeat Indicator	2
			Source MMSI	30
			Spare	2
Binary Data			Designated Area Code	10
			Function Identifier	6
	Application Data	Sensor Report 1	Report Type	4
			UTC day	5
			UTC hour	5
			UTC minute	6
			Site ID	7
			Sensor Data: Longitude	28
			Sensor Data: Latitude	27
			Sensor Data: Precision	3
			Sensor Data: Altitude	11
			Sensor Data: Sensor Owner	4
			Sensor Data: Data Timeout	3
			Sensor Data: Spare	9
		Sensor Report 2	Report Type	4
			UTC day	5
			UTC hour	5
			UTC minute	6
			Site ID	7
			SD: Name	84
			SD: Spare	1
		Sensor Rep	Report Type	4
			UTC day	5
			UTC hour	5
			UTC minute	6
			Site ID	7
			Wind Speed	7
			Wind Gust	7
			Wind Direction	9
			Wind Gust Direction	9

	a	ort 3	Sensor Data	Sensor Data Description	3
				Forecast Wind Speed	7
				Forecast Wind Gust	7
				Forecast Wind Direction	9
				Forecast UTC day	5
				Forecast UTC hour	5
				Forecast UTC minute	6
				Duration of Forecast	8
				Spare	3
		Sensor Report 4		Report Type	4
				UTC day	5
				UTC hour	5
				UTC minute	6
				Site ID	7
			Sensor Data	Current Reading Bearing	9
				Vertical Reference Datum	5
				Current Reading 1 Distance	9
				Current 1 Speed	8
				Current 1 Direction	9
				Current 1 Measuring level	9
				Current Reading 2 Distance	9
				Current 2 Speed	8
				Current 2 Direction	9
				Current 2 Measuring Level	9
				Spare	1

!AIVDM,2,1,0,A,85M:Ih1K`@Tp`EcHVV1Pqb

!AIVDM,2,2,0,A,Cn@6Tp`D;F0`Oap12Q7FP4

Description
Identifier for Message 8
Used by the repeater to indicate how many times a message has been repeated. (See ITU-R M.1371-3, A § 4.6.1).
MMSI number of source station.
Not used
Designated area code (DAC). (See Rec. ITU-R M.1371-3 § 2.1, Annex 5).
Function identifier.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Longitude of the center in 1/10,000 minute (±180°).
Latitude of the center in 1/10,000 minute (±90°).
Precision of the Lat/Long.
Altitude of the sensor relative to MSL in 0.1 meter steps.
Owner of the sensor/responsible for the sensor data.
Length of time that data is valid (i.e., should not be used after timeout period).
Not used.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Agency reference number. Fourteen 6-bit ASCII characters, 6 bit ASCII characters as per Table 44 in ITU 1371-3.
Not used.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Average of wind speed values over the last 10 minutes in 1 knot increments.
Max wind speed reading during the last 10 minutes in 1 knot increments.
Direction of the average wind over the last 10 minutes in 1 degree increments.
Direction of the max wind over the last 10 minutes in 1 degree increments.

Type of data from Wind sensor.
Predicted average wind speed in 1 knot increments.
Predicted maximum wind speed in 1 knot increments.
Predicted direction of the average wind in 1 degree steps.
UTC day of the forecast.
UTC hour of the forecast.
UTC minute of the forecast.
Duration of the validity of the forecast from the time of the forecast, in one minute steps.
Not used.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Bearing of current readings from the sensor position, in 1 degree increments (all current readings are alo same bearing line from the sensor).
Defines type of datum used.
Distance of current 1 reading from sensor position, in 1 meter steps.
Speed of current 1 measured at a chosen level below the sea surface, in 0.1 knot steps.
Direction of current 1 in 1 degree steps.
Measurement level of current 1 in meters relative to specified datum.
Distance of current 2 reading from sensor position, in 1 meter steps.
Speed of current 2 measured at a chosen level below the sea surface in 0.1 knot steps.
Direction of current 2 in 1 degree steps.
Measurement level of current 1 in meters below sea surface in 1 meter steps.
Not used.

Data Value	Notes
8	broadcast binary message
0	no repeats
366123456	test MMSI
0	
366	US
33	EM
0	Type 0 = Sensor Site Location
18	day 18
14	14h
10	10m
10	Site number 10
225201456	-72 3.4'
25402000	42 20.2
4	No truncation
15	1.5m
1	U.S. NOAA (hydrographic office)
0	no timeout period = default;
0	
1	Type 1 = Station ID
18	day 18
14	14h
10	10m
10	Site number 10
[20 5 19 20 32 19 5 14 19 15 18 32 49]	TEST SENSOR 1
0	
2	Type 2 = Wind Report
18	day 18
14	14h
10	10m
10	Site number 10
10	10 kts
12	12 kts
182	fm 182 True
186	fm 186 True

2	2 = real time with Quality Control;
25	25 kts
30	30 kts
190	fm 190 True
19	day 19
18	18 hr
30	30 min
200	200 min
0	
6	Type 6 = Horizontal Current Report
18	day 18
14	14h
10	10m
10	Site number 10
45	45 deg
12	Pool
10	10m
31	3.1 kts
335	335 deg true
1	1m
20	20m
35	3.5 kts
346	346 deg true
2	2m
0	

				Parameter	# of bits
Standard Message Header				Message ID	6
				Repeat Indicator	2
				Source MMSI	30
				Spare	2
Binary Data				Designated Area Code	10
				Function Identifier	6
	Application Data	Sensor Report 1		Report Type	4
				UTC day	5
				UTC hour	5
				UTC minute	6
				Site ID	7
			Sensor Data	Longitude	28
				Latitude	27
				Precision	3
				Altitude	11
				Sensor Owner	4
				Data Timeout	3
				Spare	9
		Sensor Report 2		Report Type	4
				UTC day	5
				UTC hour	5
				UTC minute	6
				Site ID	7
			SD	Name	84
				Spare	1

!AIVDM,1,1,0,A,85M:Ih1K`@Tp`EcHVV1Pqb

Description
Identifier for Message 8
Used by the repeater to indicate how many times a message has been repeated. (See ITU-R M.1371-3, A § 4.6.1).
MMSI number of source station.
Not used
Designated area code (DAC). (See Rec. ITU-R M.1371-3 § 2.1, Annex 5).
Function identifier.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Longitude of the center in 1/10,000 minute (±180°).
Latitude of the center in 1/10,000 minute (±90°).
Precision of the Lat/Long.
Altitude of the sensor relative to MSL in 0.1 meter steps.
Owner of the sensor/responsible for the sensor data.
Length of time that data is valid (i.e., should not be used after timeout period).
Not used.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Agency reference number. Fourteen 6-bit ASCII characters, 6 bit ASCII characters as per Table 44 in ITU 1371-3.
Not used. Set to zero.

Data Value	Notes
8	broadcast binary message
0	no repeats
366123456	test MMSI
0	
366	US
33	EM
0	Type 0 = Sensor Site Location
18	day 18
14	14h
10	10m
10	Site number 10
225201456	-72 3.4'
25402000	42 20.2
4	No truncation
15	1.5m
1	U.S. NOAA (hydrographic office)
0	no timeout period = default;
0	
1	Type 1 = Station ID
18	day 18
14	14h
10	10m
10	Site number 10
[20 5 19 20 32 19 5 14 19 15 18 32 49]	TEST SENSOR 1
0	

Parameter			# of bits
Standard Message Header		Message ID	6
		Repeat Indicator	2
		Source MMSI	30
		Spare	2
	Designated Area Code		10
	Function Identifier		6
	Sensor Report 1	Report Type	4
		UTC day	5
		UTC hour	5
		UTC minute	6
		Site ID	7
		Sensor Data: Longitude	28
		Sensor Data: Latitude	27
		Sensor Data: Precision	3
		Sensor Data: Altitude	11
		Sensor Data: Sensor Owner	4
		Sensor Data: Data Timeout	3
		Sensor Data: Spare	9
	Sensor Report 2	Report Type	4
		UTC day	5
		UTC hour	5
		UTC minute	6
		Site ID	7
		SD: Name	84
		SD: Spare	1
	Sensor Rep	Report Type	4
		UTC day	5
		UTC hour	5
		UTC minute	6
		Site ID	7
		Wind Speed	7
		Wind Gust	7
		Wind Direction	9
		Wind Gust Direction	9

Binary Data	Application Data	ort 3	Sensor Data	Sensor Data Description	3
				Forecast Wind Speed	7
				Forecast Wind Gust	7
				Forecast Wind Direction	9
				Forecast UTC day	5
				Forecast UTC hour	5
				Forecast UTC minute	6
				Duration of Forecast	8
				Spare	3
		Sensor Report 4		Report Type	4
				UTC day	5
				UTC hour	5
				UTC minute	6
				Site ID	7
			Sensor Data	Water Level Type	1
				Water Level	16
				Water Level Trend	2
				Vertical Reference Datum	5
				Sensor Data Description	3
				Forecast Water Level Type	1
				Forecast Water Level	16
				Forecst UTC day	5
				UTC hour	5
				Forecast UTC minute	6
				Duration of Forecast	8
				Spare	17
		Sensor Rep		Report Type	4
				UTC day	5
				UTC hour	5
				UTC minute	6
				Site ID	7
				Current Speed 1	8
				Current Direction 1	9
				Current Measuring level 1	9

		ort 5	**Se nso r Dat a**	Current Speed 2	8
				Current Direction 2	9
				Current Measuring level 2	9
				Current Speed 3	8
				Current Direction 3	9
				Current Measuring Level 3	9
				Sensor Data Description	3
				Spare	4
		Sen sor Rep ort 4		Report Type	4
				UTC day	5
				UTC hour	5
				UTC minute	6
				Site ID	7
			Se nso r Dat a	Current Reading Bearing	9
				Vertical Reference Datum	5
				Current Reading 1 Distance	9
				Current 1 Speed	8
				Current 1 Direction	9
				Current 1 Measuring level	9
				Current Reading 2 Distance	9
				Current 2 Speed	8
				Current 2 Direction	9
				Current 2 Measuring Level	9
				Spare	1
		Sen sor Rep ort 4		Report Type	4
				UTC day	5
				UTC hour	5
				UTC minute	6
				Site ID	7
			Se	Current 1: vector component North	9
				Current 1: vector component East	9
				Current 1: vector component Up	9
				Current 1 measuring level	9

			nsor Data	Current 2: vector component North	9
				Current 2: vector component East	9
				Current 2: vector component Up	9
				Current measuring level 2	9
				Sensor Data Description	3
				Spare	10

!AIVDM,3,1,0,A,85M:Ih1K`@Tp`EcHVV1Pqb@P3i

!AIVDM,3,2,0,A,Cn@3Tp`D1=8>@:Pk`Dt000BCR(

!AIVDM,3,3,0,A,`D;F0`Oap12Q7FP4,0*06

Description
Identifier for Message 8
Used by the repeater to indicate how many times a message has been repeated. (See ITU-R M.1371-3, A § 4.6.1).
MMSI number of source station.
Not used
Designated area code (DAC). (See Rec. ITU-R M.1371-3 § 2.1, Annex 5).
Function identifier.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Longitude of the center in 1/10,000 minute (±180°).
Latitude of the center in 1/10,000 minute (±90°).
Precision of the Lat/Long.
Altitude of the sensor relative to MSL in 0.1 meter steps.
Owner of the sensor/responsible for the sensor data.
Length of time that data is valid (i.e., should not be used after timeout period).
Not used.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Agency reference number. Fourteen 6-bit ASCII characters, 6 bit ASCII characters as per Table 44 in ITU 1371-3.
Not used. Set to zero.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Average of wind speed values over the last 10 minutes in 1 knot increments.
Max wind speed reading during the last 10 minutes in 1 knot increments.
Direction of the average wind over the last 10 minutes in 1 degree increments.
Direction of the max wind over the last 10 minutes in 1 degree increments.

Type of data from Wind sensor.
Predicted average wind speed in 1 knot increments.
Predicted maximum wind speed in 1 knot increments.
Predicted direction of the average wind in 1 degree steps.
UTC day of the forecast.
UTC hour of the forecast.
UTC minute of the forecast.
Duration of the validity of the forecast from the time of the forecast, in one minute steps.
Not used.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Type of water level.
Water level in centimeters.
Trend in water level.
Defines type of datum used.
Type of data from Water Level sensor.
Type of water level for forecast.
Forecast water level in centimeters; range of -327.67 to +327.67 meters.
UTC day of the forecast.
UTC hour of the forecast.
UTC minute of the forecast.
Duration of the validity of the forecast from the time of the forecast, in one minute steps.
Not used.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Speed of current 1 measured at a chosen level below the sea surface in 0.1 knot increments.
Direction of current, in 1 degree increments.
Measurement level of current 1 below sea surface in 1 meter steps.

Speed of current 2 measured at a chosen level below the sea surface in 0.1 knot increments.
Direction of current 2 in 1 degree steps.
Measurement level of current 2 in meters below sea surface in 1 meter increments.
Speed of current 3 measured at a chosen level below the sea surface in 0.1 knot increments.
Direction of current 3 in 1 degree increments.
Measurement level of current 3 in meters below sea surface in 1 meter increments.
Type of data from Current Sensor.
Not used.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Bearing of current readings from the sensor position, in 1 degree increments (all current readings are alo same bearing line from the sensor).
Defines type of datum used.
Distance of current 1 reading from sensor position, in 1 meter steps.
Speed of current 1 measured at a chosen level below the sea surface, in 0.1 knot steps.
Direction of current 1 in 1 degree steps.
Measurement level of current 1 in meters relative to specified datum.
Distance of current 2 reading from sensor position, in 1 meter steps.
Speed of current 2 measured at a chosen level below the sea surface in 0.1 knot steps.
Direction of current 2 in 1 degree steps.
Measurement level of current 1 in meters below sea surface in 1 meter steps.
Not used.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Speed of North component of current 1 measured at a chosen level below the sea surface in 0.1 knot inc
Speed of East component of current 1 measured at a chosen level below the sea surface in 0.1 knot incr
Speed of Up component of current 1 measured at a chosen level below the sea surface in 0.1 knot increm negative values in 2’s complement.
Measurement level of current 1 in meters below sea surface in 1 meter increments.

Speed of North component of current 2 measured at a chosen level below the sea surface in 0.1 knot ste
Speed of East component of current 2 measured at a chosen level below the sea surface in 0.1 knot step
Speed of Up component of current 2 measured at a chosen level below the sea surface in 0.1 knot steps.
Measurement level of current 2 in meters below sea surface in 1 m steps.
Type of data from Current sensor.
Not used.

Data Value	Notes
8	broadcast binary message
0	no repeats
366123456	test MMSI
0	
366	US
33	EM
0	Type 0 = Sensor Site Location
18	day 18
14	14h
10	10m
10	Site number 10
225201456	-72 3.4'
25402000	42 20.2
4	No truncation
15	1.5m
1	U.S. NOAA (hydrographic office)
0	no timeout period = default;
0	
1	Type 1 = Station ID
18	day 18
14	14h
10	10m
10	Site number 10
[20 5 19 20 32 19 5 14 19 15 18 32 49]	TEST SENSOR 1
0	
2	Type 2 = Wind Report
18	day 18
14	14h
10	10m
10	Site number 10
10	10 kts
12	12 kts
182	fm 182 True
186	fm 186 True

2	2 = real time with Quality Control;
25	25 kts
30	30 kts
190	fm 190 True
19	day 19
18	18 hr
30	30 min
200	200 min
0	
3	Type 3 = Water Level Report
18	day 18
14	14h
10	10m
10	Site number 10
0	relative to datum
1234	12.34 m
0	increasing
7	MLW
1	raw real time
0	relative to datum
1345	13.45m
19	day 19
20	20 hr
10	10 min
120	120 min
0	
4	Type 4 = 2D Vertical Current Report
18	day 18
14	14h
10	10m
10	Site number 10
32	3.2 kts
270	270 deg true
50	50m

22	2.2 kts
275	275 deg true
100	100m
35	3.5 kts
280	280 deg true
150	150m
1	raw real time
0	
5	Type 5 = 3D Vertical Current Profile
18	day 18
14	14h
10	10m
10	Site number 10
45	45 deg
12	Pool
10	10m
31	3.1 kts
335	335 deg true
1	1m
20	20m
35	3.5 kts
346	346 deg true
2	2m
0	
6	Type 6 = Horizontal Current Report
18	day 18
14	14h
10	10m
10	Site number 10
32	3.2 kts N
12	1.2 kts E
492	-2.0 kts U
50	50m

12	1.2 kts N
14	1.4 kts E
500	-1.2 kts U
150	150m
1	raw real time
0	

				Parameter	# of bits
Standard Message Header				Message ID	6
				Repeat Indicator	2
				Source MMSI	30
				Spare	2
Binary Data				Designated Area Code	10
				Function Identifier	6
	Application Data			Report Type	4
		Sensor Report 1		UTC day	5
				UTC hour	5
				UTC minute	6
				Site ID	7
			Sensor Data	Longitude	28
				Latitude	27
				Precision	3
				Altitude	11
				Sensor Owner	4
				Data Timeout	3
				Spare	9

!AIVDM,1,1,0,A,85M:Ih1K`@Tp`EcHVV1Pqb@P3i

Description
Identifier for Message 8
Used by the repeater to indicate how many times a message has been repeated. (See ITU-R M.1371-3, A § 4.6.1).
MMSI number of source station.
Not used
Designated area code (DAC). (See Rec. ITU-R M.1371-3 § 2.1, Annex 5).
Function identifier.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Longitude of the center in 1/10,000 minute (±180°).
Latitude of the center in 1/10,000 minute (±90°).
Precision of the Lat/Long.
Altitude of the sensor relative to MSL in 0.1 meter steps.
Owner of the sensor/responsible for the sensor data.
Length of time that data is valid (i.e., should not be used after timeout period).
Not used.

Data Value	Notes
8	broadcast binary message
0	no repeats
366123456	test MMSI
0	
366	US
33	EM
0	Type 0 = Sensor Site Location
18	day 18
14	14h
10	10m
10	Site number 10
225201456	-72 3.4'
25402000	42 20.2
4	No truncation
15	1.5m
1	U.S. NOAA (hydrographic office)
0	no timeout period = default;
0	

					Parameter	# of bits	Description	Data Value
Standard Message Header					Message ID	6	Identifier for Message 8	8
					Repeat Indicator	2	Used by the repeater to indicate how many times a message has been repeated. (See ITU-R M.1371-3, Annex 2, § 4.6.1).	0
					Source MMSI	30	MMSI number of source station.	366123456
					Spare	2	Not used	0
Binary Data					Designated Area Code	10	Designated area code (DAC). (See Rec. ITU-R M.1371-3 § 2.1, Annex 5).	366
					Function Identifier	6	Function identifier.	33
		Sensor Report 2			Report Type	4	Environmental Report Type as per Table 15.	1
					UTC day	5	UTC day of the time of the data.	18
					UTC hour	5	UTC hour of the time of the data.	14
					UTC minute	6	UTC minute of the time of the data.	10
					Site ID	7	Binary identifier of sensor site–	10
			SD		Name	84	Agency reference number. Fourteen 6-bit ASCII characters, 6 bit ASCII characters as per Table 44 in ITU 1371-3.	[20 5 19 20 32 19 5 14 19 15 18 32 49]
					Spare	1	Not used. Set to zero.	0

!AIVDM,1,1,0,A,85M:Ih1K`ATp`D`:Va0V:LVNU1R0,0*75

		Function Identifier	6
	Sensor Report 3	Report Type	4
		UTC day	5
		UTC hour	5
		UTC minute	6
		Site ID	7
		Sensor Data: Wind Speed	7
		Sensor Data: Wind Gust	7
		Sensor Data: Wind Direction	9
		Sensor Data: Wind Gust Direction	9
		Sensor Data: Sensor Data Description	3
		Sensor Data: Forecast Wind Speed	7
		Sensor Data: Forecast Wind Gust	7
		Sensor Data: Forecast Wind Direction	9
		Sensor Data: Forecast UTC day	5
		Sensor Data: Forecast UTC hour	5
		Sensor Data: Forecast UTC minute	6
		Sensor Data: Duration of Forecast	8
		Sensor Data: Spare	3

!VDM,1,1,0,A,85M:Ih1K`BTp`D:6;IM8jNGlq?l0,0

Description
Identifier for Message 8
Used by the repeater to indicate how many times a message has been repeated. (See ITU-R M.1371-3, A § 4.6.1).
MMSI number of source station.
Not used
Designated area code (DAC). (See Rec. ITU-R M.1371-3 § 2.1, Annex 5).
Function identifier.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Average of wind speed values over the last 10 minutes in 1 knot increments.
Max wind speed reading during the last 10 minutes in 1 knot increments.
Direction of the average wind over the last 10 minutes in 1 degree increments.
Direction of the max wind over the last 10 minutes in 1 degree increments.
Type of data from Wind sensor.
Predicted average wind speed in 1 knot increments.
Predicted maximum wind speed in 1 knot increments.
Predicted direction of the average wind in 1 degree steps.
UTC day of the forecast.
UTC hour of the forecast.
UTC minute of the forecast.
Duration of the validity of the forecast from the time of the forecast, in one minute steps.
Not used.

Data Value	Notes
8	broadcast binary message
0	no repeats
366123456	test MMSI
0	
366	US
33	EM
2	Type 2 = Wind Report
18	day 18
14	14h
10	10m
10	Site number 10
10	10 kts
12	12 kts
182	fm 182 True
186	fm 186 True
2	2 = real time with Quality Control;
25	25 kts
30	30 kts
190	fm 190 True
19	day 19
18	18 hr
30	30 min
200	200 min
0	

				Parameter	# of bits
Standard Message Header				Message ID	6
				Repeat Indicator	2
				Source MMSI	30
				Spare	2
Binary Data				Designated Area Code	10
				Function Identifier	6
		Sensor Report 4		Report Type	4
				UTC day	5
				UTC hour	5
				UTC minute	6
				Site ID	7
			Sensor Data	Water Level Type	1
				Water Level	16
				Water Level Trend	2
				Vertical Reference Datum	5
				Sensor Data Description	3
				Forecast Water Level Type	1
				Forecast Water Level	16
				Forecst UTC day	5
				UTC hour	5
				Forecast UTC minute	6
				Duration of Forecast	8
				Spare	17

!AIVDM,1,1,0,A,85M:Ih1K`CTp`D1=8>@:Pk`Dt00(

Description
Identifier for Message 8
Used by the repeater to indicate how many times a message has been repeated. (See ITU-R M.1371-3, A § 4.6.1).
MMSI number of source station.
Not used
Designated area code (DAC). (See Rec. ITU-R M.1371-3 § 2.1, Annex 5).
Function identifier.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Type of water level.
Water level in centimeters.
Trend in water level.
Defines type of datum used.
Type of data from Water Level sensor.
Type of water level for forecast.
Forecast water level in centimeters; range of -327.67 to +327.67 meters.
UTC day of the forecast.
UTC hour of the forecast.
UTC minute of the forecast.
Duration of the validity of the forecast from the time of the forecast, in one minute steps.
Not used.

Data Value	Notes
8	broadcast binary message
0	no repeats
366123456	test MMSI
0	
366	US
33	EM
3	Type 3 = Water Level Report
18	day 18
14	14h
10	10m
10	Site number 10
0	relative to datum
1234	12.34 m
0	increasing
7	MLW
1	raw real time
0	relative to datum
1345	13.45m
19	day 19
20	20 hr
10	10 min
120	120 min
0	

Parameter					# of bits
Standard Message Header				Message ID	6
				Repeat Indicator	2
				Source MMSI	30
				Spare	2
Binary Data				Designated Area Code	10
				Function Identifier	6
		Sensor Report 5		Report Type	4
				UTC day	5
				UTC hour	5
				UTC minute	6
				Site ID	7
			Sensor Data	Current Speed 1	8
				Current Direction 1	9
				Current Measuring level 1	9
				Current Speed 2	8
				Current Direction 2	9
				Current Measuring level 2	9
				Current Speed 3	8
				Current Direction 3	9
				Current Measuring Level 3	9
				Sensor Data Description	3
				Spare	4

!AIVDM,1,1,0,A,85M:Ih1K`DTp`D@@pl2lC<Q764

Description
Identifier for Message 8
Used by the repeater to indicate how many times a message has been repeated. (See ITU-R M.1371-3, A § 4.6.1).
MMSI number of source station.
Not used
Designated area code (DAC). (See Rec. ITU-R M.1371-3 § 2.1, Annex 5).
Function identifier.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Speed of current 1 measured at a chosen level below the sea surface in 0.1 knot increments.
Direction of current, in 1 degree increments.
Measurement level of current 1 below sea surface in 1 meter steps.
Speed of current 2 measured at a chosen level below the sea surface in 0.1 knot increments.
Direction of current 2 in 1 degree steps.
Measurement level of current 2 in meters below sea surface in 1 meter increments.
Speed of current 3 measured at a chosen level below the sea surface in 0.1 knot increments.
Direction of current 3 in 1 degree increments.
Measurement level of current 3 in meters below sea surface in 1 meter increments.
Type of data from Current Sensor.
Not used.

Data Value	Notes
8	broadcast binary message
0	no repeats
366123456	test MMSI
0	
366	US
33	EM
4	Type 4 = 2D Vertical Current Report
18	day 18
14	14h
10	10m
10	Site number 10
32	3.2 kts
270	270 deg true
50	50m
22	2.2 kts
275	275 deg true
100	100m
35	3.5 kts
280	280 deg true
150	150m
1	raw real time
0	

				Parameter	# of bits
Standard Message Header				Message ID	6
				Repeat Indicator	2
				Source MMSI	30
				Spare	2
Binary Data				Designated Area Code	10
				Function Identifier	6
		Sensor Report 4		Report Type	4
				UTC day	5
				UTC hour	5
				UTC minute	6
				Site ID	7
			Sensor Data	Current 1: vector component North	9
				Current 1: vector component East	9
				Current 1: vector component Up	9
				Current 1 measuring level	9
				Current 2: vector component North	9
				Current 2: vector component East	9
				Current 2: vector component Up	9
				Current measuring level 2	9
				Sensor Data Description	3
				Spare	10

!AIVDM,1,1,0,A,85M:Ih1K`ETp`D80Is1T30Mu4d@

Description
Identifier for Message 8
Used by the repeater to indicate how many times a message has been repeated. (See ITU-R M.1371-3, A § 4.6.1).
MMSI number of source station.
Not used
Designated area code (DAC). (See Rec. ITU-R M.1371-3 § 2.1, Annex 5).
Function identifier.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Speed of North component of current 1 measured at a chosen level below the sea surface in 0.1 knot inc
Speed of East component of current 1 measured at a chosen level below the sea surface in 0.1 knot incre
Speed of Up component of current 1 measured at a chosen level below the sea surface in 0.1 knot increm negative values in 2's complement.
Measurement level of current 1 in meters below sea surface in 1 meter increments.
Speed of North component of current 2 measured at a chosen level below the sea surface in 0.1 knot ste
Speed of East component of current 2 measured at a chosen level below the sea surface in 0.1 knot step
Speed of Up component of current 2 measured at a chosen level below the sea surface in 0.1 knot steps.
Measurement level of current 2 in meters below sea surface in 1 m steps.
Type of data from Current sensor.
Not used.

Data Value	Notes
8	broadcast binary message
0	no repeats
366123456	test MMSI
0	
366	US
33	EM
5	Type 5 = Vertical Current Report (3D)
18	day 18
14	14h
10	10m
10	Site number 10
32	3.2 kts N
12	1.2 kts E
492	-2.0 kts U
50	50m
12	1.2 kts N
14	1.4 kts E
500	-1.2 kts U
150	150m
1	raw real time
0	

				Parameter	# of bits
Standard Message Header				Message ID	6
				Repeat Indicator	2
				Source MMSI	30
				Spare	2
Binary Data				Designated Area Code	10
				Function Identifier	6
		Sensor Report 4		Report Type	4
				UTC day	5
				UTC hour	5
				UTC minute	6
				Site ID	7
			Sensor Data	Current Reading Bearing	9
				Vertical Reference Datum	5
				Current Reading 1 Distance	9
				Current 1 Speed	8
				Current 1 Direction	9
				Current 1 Measuring level	9
				Current Reading 2 Distance	9
				Current 2 Speed	8
				Current 2 Direction	9
				Current 2 Measuring Level	9
				Spare	1
!AIVDM,1,1,0,A,85M:Ih1K`FTp`D;F0`Oap12Q7FP<					

Description
Identifier for Message 8
Used by the repeater to indicate how many times a message has been repeated. (See ITU-R M.1371-3, A § 4.6.1).
MMSI number of source station.
Not used
Designated area code (DAC). (See Rec. ITU-R M.1371-3 § 2.1, Annex 5).
Function identifier.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Bearing of current readings from the sensor position, in 1 degree increments (all current readings are alo same bearing line from the sensor).
Defines type of datum used.
Distance of current 1 reading from sensor position, in 1 meter steps.
Speed of current 1 measured at a chosen level below the sea surface, in 0.1 knot steps.
Direction of current 1 in 1 degree steps.
Measurement level of current 1 in meters relative to specified datum.
Distance of current 2 reading from sensor position, in 1 meter steps.
Speed of current 2 measured at a chosen level below the sea surface in 0.1 knot steps.
Direction of current 2 in 1 degree steps.
Measurement level of current 1 in meters below sea surface in 1 meter steps.
Not used. Set to 0.

Data Value	Notes
8	broadcast binary message
0	no repeats
366123456	test MMSI
0	
366	US
33	EM
6	Type 6 = Horizonta;l Current Profile
18	day 18
14	14h
10	10m
10	Site number 10
45	45 deg
12	Pool
10	10m
31	3.1 kts
335	335 deg true
1	1m
20	20m
35	3.5 kts
346	346 deg true
2	2m
0	

				Parameter	# of bits
Standard Message Header				Message ID	6
				Repeat Indicator	2
				Source MMSI	30
				Spare	2
Binary Data				Designated Area Code	10
				Function Identifier	6
	Sensor Report 4			Report Type	4
				UTC day	5
				UTC hour	5
				UTC minute	6
				Site ID	7
		Sensor Data		Swell height	8
				Swell period	6
				Swell direction	9
				Sea state	4
				Sensor Data Description	3
				Water temperature	10
				Water temperature depth	7
				Sensor Data Description	3
				Significant wave height	8
				Wave period	6
				Wave direction	9
				Sensor Data Description	3
				Salinity	9

!AIVDM,1,1,0,A,85M:Ih1K`GTp`DJncV4RHa5blDC

Description
Identifier for Message 8
Used by the repeater to indicate how many times a message has been repeated. (See ITU-R M.1371-3, A § 4.6.1).
MMSI number of source station.
Not used
Designated area code (DAC). (See Rec. ITU-R M.1371-3 § 2.1, Annex 5).
Function identifier.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Height of the swell, 0.1 meter increments.
Swell period in seconds, in 1 second increments.
Direction of swells, 1 degree increments.
Sea state according to Beaufort scale.
Type of data from Swell sensor.
Temperature of the water in degrees Celsius, in 0.1 degree increments: -10.0C to + 50.0C degrees Celsiu
Depth of water temperature sensor, 0.1 meter steps.
Type of data from Water Temperature sensor.
Height of the waves, 0.1 meter steps.
Wave period, 1 second steps
Direction of waves, 1 degree steps.
Type of data from Wave sensor.
Salinity in 0.1‰ (ppt) steps.

Data Value	Notes
8	broadcast binary message
0	no repeats
366123456	test MMSI
0	
366	US
33	EM
7	Type 7 = Sea State Report
18	day 18
14	14h
10	10m
10	Site number 10
53	5.3m
45	45 sec
185	185 deg true
8	Moderately high waves with breaking crests
2	real time with Quality Control
275	17.5 deg celsius
10	1.0m
2	real time with Quality Control
45	4.5m
22	22 sec
276	276 deg true
2	real time with Quality Control
502	not available

Parameter					# of bits
Standard Message Header				Message ID	6
				Repeat Indicator	2
				Source MMSI	30
				Spare	2
Binary Data				Designated Area Code	10
				Function Identifier	6
		Sensor Report 4		Report Type	4
				UTC day	5
				UTC hour	5
				UTC minute	6
				Site ID	7
			Sensor Data	Water temperature	10
				Conductivity	10
				Water pressure	16
				Salinity	9
				Salinity type	2
				Sensor Data Description	3
				Spare	35

!AIVDM,1,1,0,A,85M:Ih1K`HTp`DRpvnCN5PP000

Description
Identifier for Message 8
Used by the repeater to indicate how many times a message has been repeated. (See ITU-R M.1371-3, A § 4.6.1).
MMSI number of source station.
Not used
Designated area code (DAC). (See Rec. ITU-R M.1371-3 § 2.1, Annex 5).
Function identifier.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Temperature of water in degrees Celsius, 0.1 degree steps
Water conductivity in Siemens/meter, in steps of 0.01 S/m.
Pressure of water in decibars, in steps of 0.1 decibars.
Salinity in 0.1‰ (ppt) steps.
0 = measured; 1 = calculated using PSS-78;
Type of data from Salinity sensor.
Not used. Set to 0.

Data Value	Notes
8	broadcast binary message
0	no repeats
366123456	test MMSI
0	
366	US
33	EM
8	Type 8 = Salinity Report
18	day 18
14	14h
10	10m
10	Site number 10
279	17.9 deg celsius
125	1.25 Siemens/meter
45679	4567.9 decibars
22	2.2 ppt
0	measured
1	raw real time
0	

				Parameter	# of bits
Standard Message Header				Message ID	6
				Repeat Indicator	2
				Source MMSI	30
				Spare	2
Binary Data				Designated Area Code	10
				Function Identifier	6
		Sensor Report 4		Report Type	4
				UTC day	5
				UTC hour	5
				UTC minute	6
				Site ID	7
			Sensor Data	Air Temperature	11
				Sensor Data Description	3
				Precipitation (type)	2
				Horizontal visibility	8
				Dew point	10
				Sensor Data Description	3
				Air pressure	9
				Air pressure trend	2
				Sensor Data Description	3
				Salinity	9
				Spare	25

!AIVDM,1,1,0,A,85M:Ih1K`ITp`D<5K=GqNdBH000

Description
Identifier for Message 8
Used by the repeater to indicate how many times a message has been repeated. (See ITU-R M.1371-3, A § 4.6.1).
MMSI number of source station.
Not used
Designated area code (DAC). (See Rec. ITU-R M.1371-3 § 2.1, Annex 5).
Function identifier.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
Dry bulb temperature in degrees Celsius, in 0.1 degree steps.
Type of data from Air Temperature sensor.
According to WMO.
Visibility in Nautical Miles, 0.1 nautical mile (NM) steps.
Dew point temperature in degrees Celsius, in 0.1 degree steps.
Type of data from Dewpoint sensor.
Air pressure, defined as pressure reduced to sea level, in 1 hPa increments.
Air pressure trend.
Type of data from air pressure sensor.
Salinity in 0.1‰ (ppt) steps.
Not used. Set to 0.

Data Value	Notes
8	broadcast binary message
0	no repeats
366123456	test MMSI
0	
366	US
33	EM
9	Type 9 = Weather Report
18	day 18
14	14h
10	10m
10	Site number 10
193	19.3 deg celsius
2	real time with Quality Control
3	none
102	10.2 NM
701	data unavailable
7	sensor not available
245	1045 hPa
2	increasing
1	raw real time
76	7.6 ppt
0	

Parameter					# of bits
Standard Message Header				Message ID	6
				Repeat Indicator	2
				Source MMSI	30
				Spare	2
Binary Data				Designated Area Code	10
				Function Identifier	6
		Sensor Report 4		Report Type	4
				UTC day	5
				UTC hour	5
				UTC minute	6
				Site ID	7
			Sensor Data	Air Draught	13
				Air gap	13
				Air gap trend	2
				Forecast Air Gap	13
				UTC day	5
				UTC hour	5
				UTC minute	6
				Spare	28

!AIVDM,1,1,0,A,85M:Ih1K`JTp`D00tqg`:D3h0000,

Description
Identifier for Message 8
Used by the repeater to indicate how many times a message has been repeated. (See ITU-R M.1371-3, A § 4.6.1).
MMSI number of source station.
Not used
Designated area code (DAC). (See Rec. ITU-R M.1371-3 § 2.1, Annex 5).
Function identifier.
Environmental Report Type as per Table 15.
UTC day of the time of the data.
UTC hour of the time of the data.
UTC minute of the time of the data.
Binary identifier of sensor site–
The vertical distance measured from the ship's waterline to the highest point on the ship in 1-centimeter increments.
Air Gap is the vertical distance measured from the surface of the water to the sensor in 1-centimeter incre
Trend of the air gap measurement.
The forecast vertical distance measured from the surface of the water to the sensor in 1-centimeter steps the measurement for the time of the forecast.
UTC day of the forecast.
UTC hour of the forecast.
UTC minute of the forecast.
Not used. Set to zero.

Data Value	Notes
8	broadcast binary message
0	no repeats
366123456	test MMSI
0	
366	US
33	EM
9	Type 9 = Weather Report
18	day 18
14	14h
10	10m
10	Site number 10
0	data unavailable
7775	77.75 m
1	increasing
7810	78.10m
18	day 18
16	16 hr
15	15 min
0	