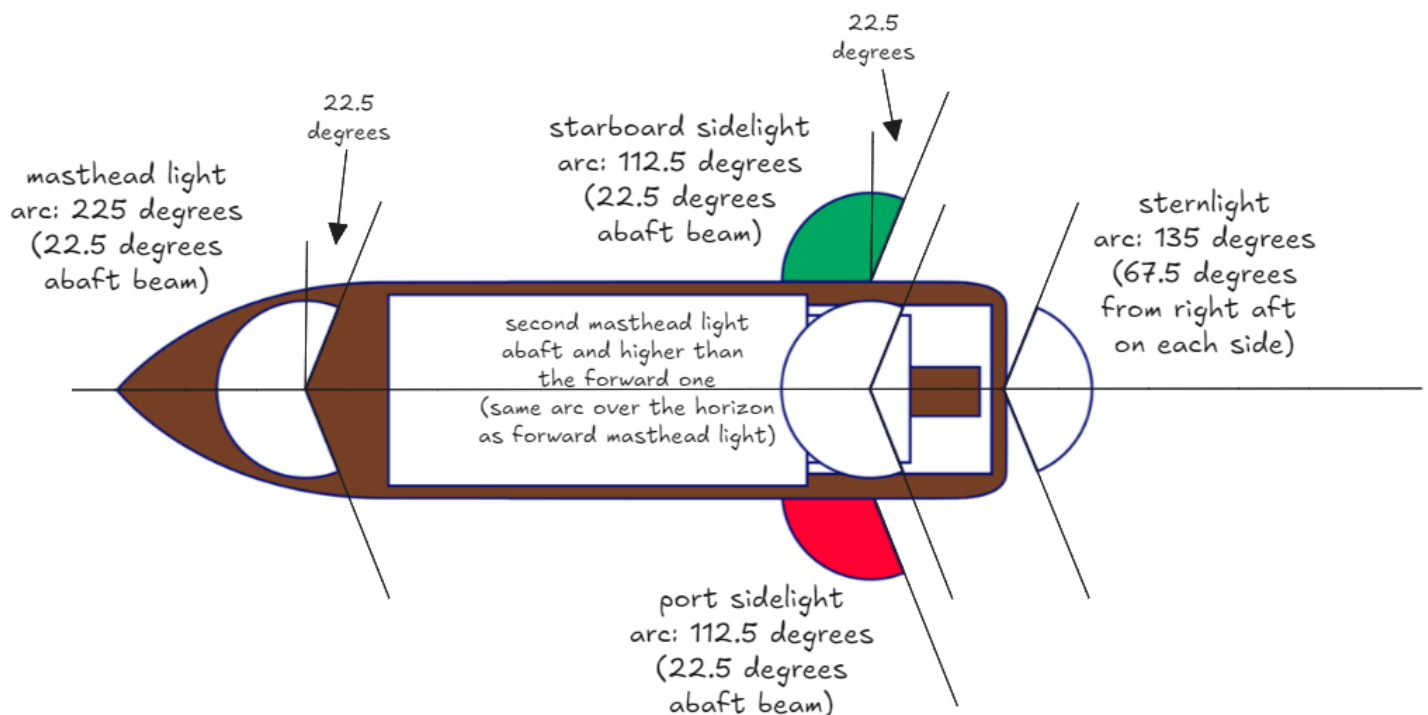


This guide offers a detailed explanation of the COLREGs, with a particular emphasis on vessel lights, day shapes, and sound and light signals. Unfortunately, many books and publications on this subject lack depth and overlook critical details. As a result, it is always advisable to consult the original COLREGs text for accuracy. However, interpreting the regulations directly can often be challenging.

## Vessel Lights and Day Shapes

### Lights definitions and arcs or visibility

- Masthead light: white light showing an unbroken light over an arc of the horizon of  $225^{\circ}$  fixed as to show the light from right ahead to  $22.5^{\circ}$  on either side of the vessel
- Sidelights: green light on the starboard side and a red light on the port side showing an unbroken light over an arc of the horizon of  $112.5^{\circ}$  and so fixed as to show the light from the right ahead to  $22.5^{\circ}$  abaft the beam on its respective side. In a vessel of less than 20 m in length the sidelights may be combined in one lantern
- Sternlight: white light placed as nearly as practicable at the stern showing an unbroken light over an arc of the horizon of  $135^{\circ}$  and so fixed as to show the light  $67.5^{\circ}$  from right aft on each side of the vessel
- All-round light: shows an unbroken light over an arc over the horizon of  $360^{\circ}$
- Towing light: yellow light having the same characteristics as the sternlight
- Flashing light: light flashing at regular intervals at a frequency of 120 flashes or more per minute
- Blue light: carried by Policy and Customs vessels on duty



## Visibility of lights

In vessels of 50 metres or more in length

Light type	Light visibility in nautical miles
masthead	6
sidelight	3
stern	3
towing	3
white, red, green or yellow all-round	3

In vessels of 12 metres or more in length but less than 50 metres in length

Light type	Light visibility in nautical miles
masthead	5 3 (for vessel < 20 m)
sidelight	2
stern	2
towing	2
white, red, green or yellow all-round	2

In vessels of less than 12 metres in length

Light type	Light visibility in nautical miles
masthead	2
sidelight	1
stern	2
towing	2
white, red, green or yellow all-round	2

In inconspicuous, partly submerged vessels or objects being towed:
















- white all-round light: 3 miles.









































## Identification of vessels based on lights and day shapes






































































Full identification of a vessel should contain the following information:

1. Type
2. Length (Load Line Length - LL)
3. Aspect
4. Special circumstances, if any
5. Whether Underway
6. Whether Making Way


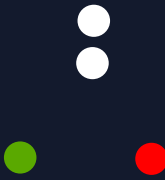


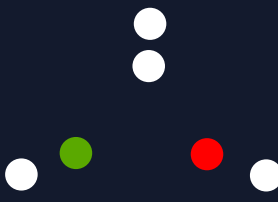
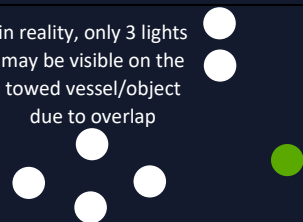

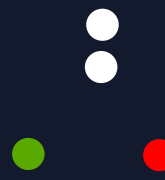
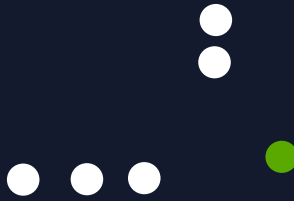

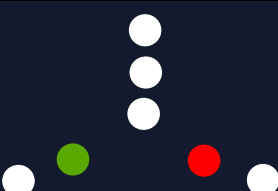
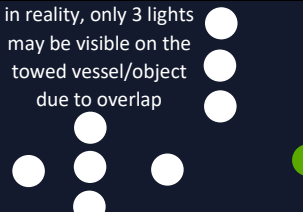








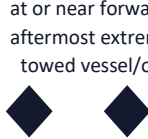
Below you can find lights identification of all possible vessels. Useful animations can also be found [here](#).







Sailing Vessels underway (under sails and not being propelled by engines) and vessels under oars			
Aft	Forward	Starboard	Identification
			<ol style="list-style-type: none"> <li>1. Sailing vessel (or vessel under oars)</li> <li>2. Length unknown (cannot generally tell for a sailing vessel)</li> <li>3. Aft/Forward/Starboard aspect</li> <li>4. (no special circumstances)</li> <li>5. Underway</li> <li>6. Possibly Making way (cannot tell for sailing vessel if stopped in the water or moving)</li> </ol>
			Optional 2 all-round lights at or near the top of the mast, where it can be best seen.
			<p>Lights combined in one lantern (aka tri-color) carried at or near the top of the mast, where it can be best seen.</p> <p>It can only be used on <b>sailing vessels less than 20 m in lengths</b>. Cannot be combined with other lights.</p> <p>Provides better visibility and can save energy as only one bulb is used.</p>
			<b>Sailing vessel less than 7 m in length or vessel under oars</b> may exhibit lights presented above or shall have ready at hand an electric torch or lighted lantern showing a white light.
			<b>Sailing vessel under sail when also being propelled by her engines</b> shall exhibit forward where it can be best seen a <b>conical shape, apex downward</b> .


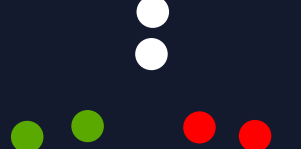



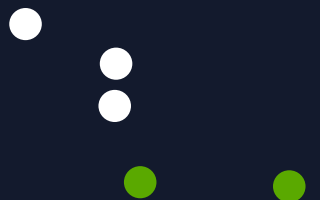



Power-Driven Vessels underway			
Aft	Forward	Starboard	Identification
	 	 	1. Power-driven vessel 2. Length less than 50 m 3. Aft/Forward/Starboard aspect 4. (no special circumstance) 5. Underway 6. Possibly Making way (cannot tell)
	  could also be a towing vessel < 50m with a tow <= 200 m	  	Length <b>*probably 50 m or more</b> . Second masthead light abaft of and higher than the forward one.  *Vessels less than 50 m may optionally display a second masthead light.
optional all-round white light instead of sternlight and masthead light on vessels < 12 m 	masthead or all-round white light on vessels < 12 m may be displaced from the centre line  On vessel < 20 m the sidelights may be combined in one lantern 	 	<b>Length less than 12 m:</b> may show all-round white light instead of a masthead light and a sternlight.  Vessel < 12 m may also display masthead light or all-round light displaced from the centre line, provided sidelights are combined in one lantern.
all-round (not sternlight), (vessels < 7 m, speed < 7 kt) 			Length less than 7 m and speed not exceeding 7 kt: all-round white light instead of other lights (if practicable, should also exhibit sidelights).
all-round flashing yellow light  	  	  	Special circumstances: <b>Air-cushion vessel (hovercraft) operating in the non-displacement mode.</b> Lights of regular power-driven vessel when operating in displacement mode.
	masthead light may be unusually low on a seaplane  	 	Special circumstances: <b>Seaplane.</b>  Should be as closely similar to characteristics and position of regular power-driven vessels if possible.
 	  	  	Special circumstances: <b>WIG craft when taking off, landing and in flight near the surface (non-displacement mode)</b> shall in addition display a high intensity all-round flashing red light.

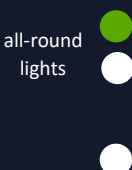



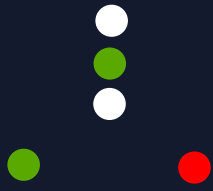






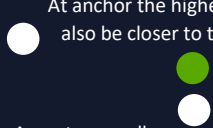



Power-driven Vessels Towing astern vessel(s) or object(s)			
Aft	Forward	Starboard	Identification
<p>If you see these lights, it means you are between the tow and towing vessel!</p> <p>towing light </p> <p>sternlight </p> <p>sternlight on the tow </p>	<p>masthead lights (length of tow not exceeding 200 m)   impossible to distinguish from power-driven vessel not towing</p> <p>Sidelights of the towing vessel  </p>	<p> </p> <p>sidelights of the tow </p> <p>sidelights of the towing vessel </p>	<ol style="list-style-type: none"> <li>1. Power-driven vessel engaged in towing</li> <li>2. Length of towing vessel less than 50 m</li> <li>3. Aft/Forward/Starboard aspect</li> <li>4. Towing astern, length of tow up to 200 m</li> <li>5. Underway</li> <li>6. Possibly making way</li> </ol> <p>Vessel or object being towed shall exhibit sidelights and sternlight regardless of its length and length of the tow.</p> <p>The actual visibility of lights on the tow and towing vessel / object in aft and forward aspect may depend on the size of the vessels / objects.</p>
  	<p>Impossible to distinguish from towing vessel &lt; 50 m and tow &gt; 200 m     </p>	    	<p>Towing vessel probably 50 m or more. Length of tow up to 200 m.</p>
<p>Depending on the size of the tow, the towing light and sternlight may not be visible on the towing vessel   </p>	<p>three masthead lights     </p>	    	<p>Towing vessel under 50 m. Length of tow exceeds 200 m.</p>
  	     	     	<p>Towing vessel probably 50 m or more. Length of tow exceeds 200 m.</p>
<p>Diamond consists of two cones having common base, diameter of not less than 0.6 m and height equal to diameter  </p>	 	<p>at the tow  </p>	<p>When the length of the tow exceeds 200 m a diamond shape shall be exhibited on the tow and the towing vessel / object.</p> <p>If the length of the tow is 200 m or less, no day shapes are displayed.</p>
<p>note that lights on the towing vessel may be obscured by the tow    sternlight of the towed vessel/object </p>	<p>lights on towed vessel/object likely to be obscured    </p>	<p>one all-around white light forward and one near the end of the towed vessel/object   </p>	<p>Towing vessel under 50 m, tow up to 200 m (only as example).</p> <p>Towing an inconspicuous, partly submerged vessel or object, less than 25m in breadth and less than 100 m in length. Note that the length of tow and towed objects are two different things having independent and specific lights.</p>

## Power-driven vessel Towing astern inconspicuous, partly submerged vessel(s) or object(s)

Aft	Forward	Starboard	Identification
			<p>Towing vessel under 50 m, tow up to 200 m (only as example).</p> <p>Towing dracones. Second all-round light at or near the forward end is optional).</p>
		<p>in reality, only 3 lights may be visible on the towed vessel/object due to overlap</p> 	<p>Towing vessel under 50 m, tow up to 200 m (only as example).</p> <p>Towing an inconspicuous, partly submerged vessel or object of 25 m or more in breadth. Two additional all-round white lights at or near the extremities of its breadth. In total 4 all-round white lights on the towed vessel.</p>
			<p>Towing vessel under 50 m, tow up to 200m (only as example).</p> <p>Towing an inconspicuous, partly submerged vessel or object, less than 25 m in breadth and more than 100 m in length. In total 3 all-round white lights on the towed vessel/object.</p>
		<p>in reality, only 3 lights may be visible on the towed vessel/object due to overlap</p> 	<p>Towing vessel under 50 m, tow exceeds 200m (only as example).</p> <p>Towing an inconspicuous, partly submerged vessel or object, 25 m or more in breadth and more than 100 m in length. In total 5 all-round white lights on the towed vessel/object.</p>
 <p>lighting the vessel or object being towed</p>			<p>Towing vessel under 50 m, tow exceeds 200m (only as example).</p> <p>Lighting the vessel or object being towed (e.g. with a searchlight) when it is impracticable to exhibit any lights (as above).</p>
		<p>at or near the aftermost extremity of the last vessel/object being towed</p> 	<p>Towing an inconspicuous, partly submerged vessel or object. Tow up to 200 m.</p> <p>No day shaped displayed on the towing vessel.</p>
	<p>at the towing vessel</p> 	<p>at or near forward and aftermost extremity of towed vessel/object</p> 	<p>Towing an inconspicuous, partly submerged vessel or object. The lengths of tow exceed 200 m.</p> <p>One diamond on the towing vessel and two diamonds on the towed vessel / objects.</p>

Power-driven vessel Towing alongside a vessel or multiple vessel			
Aft	Forward	Starboard	Identification
<p>Sternlight on the towing vessel</p>  <p>Sternlight on the tow</p>	<p>When towing alongside, always two masthead lights</p>  <p>If multiple vessels are being towed alongside only the outer vessel is lit</p>	 <p>May be mistaken with pushing</p>	<ol style="list-style-type: none"> <li>1. Power-driven vessel engaged in towing alongside</li> <li>2. Length of towing vessel less than 50 m</li> <li>3. Aft/Forward/Starboard aspect</li> <li>4. Towing alongside</li> <li>5. Underway</li> <li>6. Possibly making way</li> </ol>
		 <p>May be mistaken with pushing</p>	<p>Length of the towing vessel probably 50 m or more.</p>


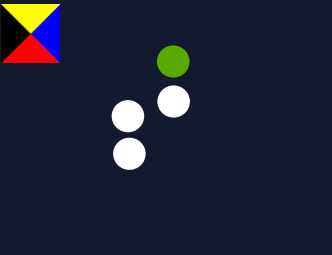
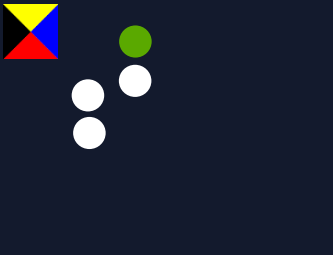
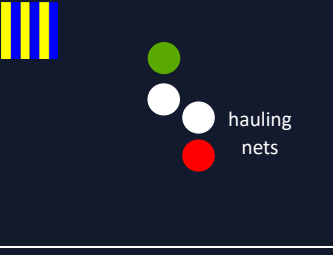
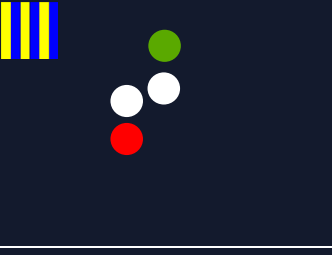
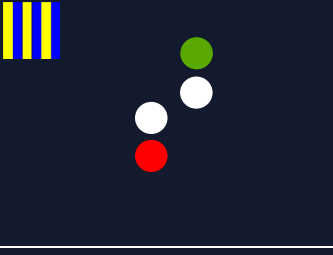
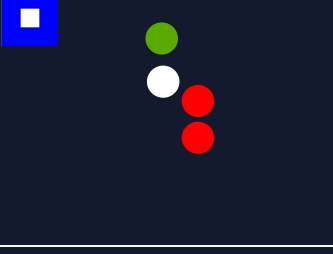
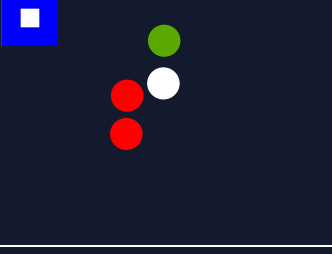
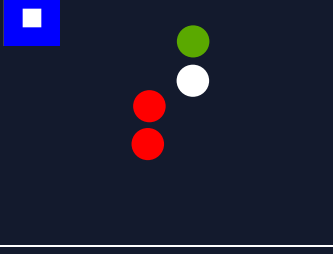
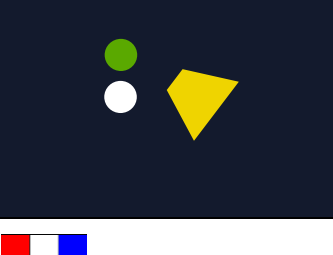
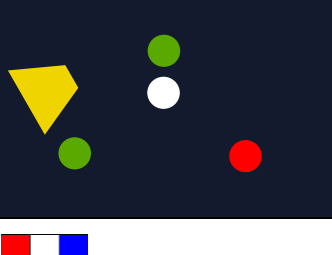
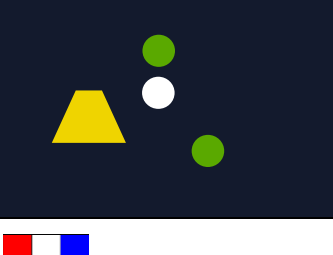



Power-driven vessel Pushing ahead a vessel or multiple vessels			
Aft	Forward	Starboard	Identification
<p>Vessel being pushed does not display sternlight as it would be obstructed anyway by the towing vessel</p> 	 <p>If multiple vessels are being pushed, they are lighted as one</p>		<ol style="list-style-type: none"> <li>1. Power-driven vessel pushing ahead</li> <li>2. Length of towing vessel less than 50 m</li> <li>3. Aft/Forward/Starboard aspect</li> <li>4. Pushing ahead</li> <li>5. Underway</li> <li>6. Possibly making way</li> </ol>
			<p>Power-driven vessel pushing ahead. Length of the towing vessel probably 50 m or more.</p> <p>When a pushing vessel and a vessel being pushed ahead are rigidly connected in a composite unit they shall be regarded as one power-driven vessel (not additional lights for a towing vessel).</p>
			<p>Towing vessel may be restricted in her ability (RAM) to maneuver and exhibit appropriate lights. But she will remain a towing vessel (in this case pushing ahead) and so she will always be possibly making way when underway.</p>


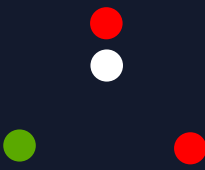



















Fishing Vessels engaged in Trawling			
Aft	Forward	Starboard	Identification
			<ol style="list-style-type: none"> <li>1. Fishing vessel engaged in trawling</li> <li>2. Length less than 50 m</li> <li>3. Aft/Forward/Starboard aspect</li> <li>4. Trawling</li> <li>5. Underway</li> <li>6. Making way</li> </ol>
			<p>Fishing vessel engaged in trawling. Length probably 50 m or more.</p> <p>When not engaged in fishing should not exhibit the additional lights for the fishing vessel.</p>
			<ol style="list-style-type: none"> <li>1. Fishing vessel engaged in trawling</li> <li>2. Length less than 50 m</li> <li>3. Aspect unknown</li> <li>4. Trawling</li> <li>5. Underway</li> <li>6. Not making way (stopped in the water)</li> </ol> <p>Or at anchor (not underway and not making way).</p>
	<p>masthead light</p> 	<p>At anchor the higher light will also be closer to the stern.</p>  <p>Aspect generally unknown but probably starboard also when at anchor</p>	<p>Fishing vessel engaged in trawling not making way or at anchor (not underway and not making way).</p> <p>Length 50 m or more.</p>
<p>Day shape (tow cones with their apexes together in a vertical line one above the other)</p> 			<p>Vessel engaged in fishing. May also be at anchor. A vessel engaged in fishing, whether underway or at anchor, shall exhibit only the lights and shapes prescribed in Rule 26. Not showing anchor lights when at anchor!</p>

















Vessel engaged in fishing must show the same lights whether it is underway or at anchor! When making way it shall exhibit navigation lights.




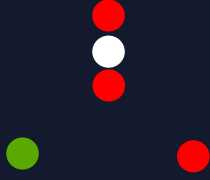


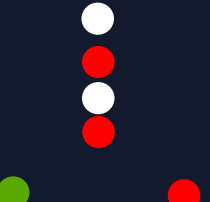



















## Additional signals for vessels engaged in Trawling and fishing in close proximity

Aft	Forward	Starboard	Identification
 <p>all-round lights, visibility at least 1NM, placed at least 0.9 m apart but lower than green over white.</p> <p>shooting nets</p>			<ol style="list-style-type: none"> <li>1. Fishing vessel engaged in trawling in close proximity</li> <li>2. Length less than 50 m and probably 20 m or more</li> <li>3. Aft/Forward/Starboard aspect</li> <li>4. Shooting nets in close proximity to other fishing vessels</li> <li>5. Underway</li> <li>6. Not making way or at anchor</li> </ol> <p><b>Z</b> flag during the day.</p>
 <p>hauling nets</p>			<p>Fishing vessel engaged in trawling in close proximity to other fishing vessels, when hauling their nets.</p> <p>Length less than 50m and probably 20 m or more.</p> <p><b>G</b> flag during the day.</p>
			<p>Fishing vessel engaged in trawling in close proximity to other fishing vessel, when net has come fast upon an obstruction (not making way since made fast to the seabed). Expecting to see other vessels nearby. Length less than 50m and probably 20 m or more.</p> <p><b>P</b> flag during the day.</p>
			<p>Fishing vessel engaged in trawling in close proximity to other fishing vessels with searchlight directed forward and in the direction of the other vessel of the pair.</p> <p>Length less than 50m and probably 20 m or more.</p>
			<p>Vessel engaged in pair trawling may display <b>T</b> flag meaning "Keep clear of me. I am engaged in pair trawling".</p>

Vessels engaged in Fishing other than trawling			
Aft	Forward	Starboard	Identification
all-round lights 			1. Vessel engaged in fishing other than trawling 2. Length unknown 3. Aft/Forward/Starboard aspect 4. Fishing 5. Underway 6. Making way
			1. Vessel engaged in fishing other than trawling 2. Length unknown 3. Aspect unknown 4. Fishing 5. Underway 6. Not making way Or at Anchor
Day shape 			Vessel engaged in fishing. May also be at anchor. A vessel engaged in fishing, whether underway or at anchor, shall exhibit only the lights and shapes prescribed in Rule 26. Not showing anchor lights when at anchor!
 all-round light			1. Vessel engaged in fishing other than trawling 2. Length unknown 3. Aft/Forward/Starboard aspect 4. Outlying gear extending more than 150 m horizontally from the vessel in the direction of white light 5. Underway 6. Making way
			1. Vessel engaged in fishing other than trawling 2. Length unknown 3. Aspect unknown 4. Outlying gear extending more than 150 m horizontally from the vessel in the direction of white light 5. Underway 6. Not making way or at Anchor
Day shape 			Vessel engaged in fishing other than trawling with outlying gear extending more than 150 m horizontally from the vessel in the direction of white light. May also be at anchor. Not showing anchor lights when at anchor!
optional 2 all-round yellow lights, flashing alternately, every second, occulting 			Vessel engaged in fishing with purse seine gear in close, when the vessel is hampered by its fishing gear. Likely not having navigation lights turned on since made fast to the seabed. As any other fishing vessel other than trawling, can have outlying gear and make way or be stopped in the water (see above).

Vessel Not Under Command (NUC)			
Aft	Forward	Starboard	Identification
all-round lights  	  	 	1. Vessel not under command ("balls-up") 2. Length unknown 3. Aft/Forward/Starboard aspect 4. - 5. Underway 6. Making way NUC indicates inability to manoeuvre not distress.
			1. Vessel not under command 2. Length unknown 3. Aspect unknown 4. - 5. Underway 6. Not making way
Day shape 			Vessel not under command underway, possibly making way.
			If vessel not under command is at anchor, it will display standard lights of vessel at anchor and not the 2 red NUC lights. This is for a simple reason that her inability to manoeuvre would not be an issue if she was at anchor.  Lights shown here are for vessel at anchor under 50 m.

Vessel Not Under Command (NUC) means a vessel which through some exceptional circumstances is unable to manoeuvre and comply with ColRegs rules therefore unable to keep out of the way of another vessel.

Vessel Restricted in her Ability to Manoeuvre (RAM)			
Aft	Forward	Starboard	Identification
all-round lights 			1. Vessel restricted in ability to manoeuvre under (RAM) 2. Length less than 50 m 3. Aft/Forward/Starboard aspect 4. - 5. Underway 6. Making way
			1. RAM 2. Length probably 50 m or more 3. Aft/Forward/Starboard aspect 4. - 5. Underway 6. Making way
			1. RAM 2. Length unknown 3. Aspect unknown 4. - 5. Underway 6. No making way
			1. RAM 2. Length less than 50 m 3. Aspect unknown 4. At anchor 5. - 6. -
		all-round white light at the fore part 	1. RAM 2. Length probably 50 m or more 3. Aspect unknown but probably starboard side 4. At anchor 5. - 6. -
RAM day shape 			1. RAM 2. Length unknown 3. Aspect unknown 4. - 5. Underway 6. Probably making way-
Day shape when at anchor  RAM day shape 	 	 	1. RAM 2. Length unknown 3. Aspect unknown 4. At anchor 5. - 6. -

			<ol style="list-style-type: none"> <li>1. RAM</li> <li>2. Length of towing vessel less than 50 m</li> <li>3. Aft/Forward/Starboard aspect</li> <li>4. Towing astern, length of tow up to 200 m</li> <li>5. Underway</li> <li>6. Making way</li> </ol>
--	--	--	---

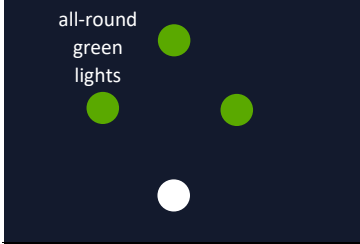
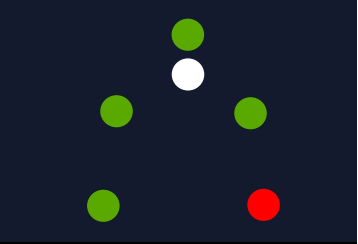

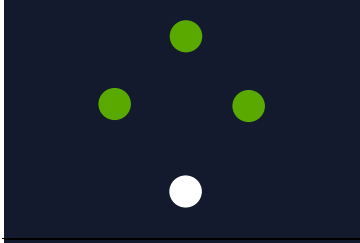
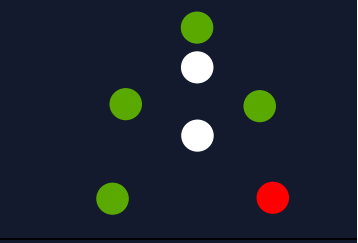

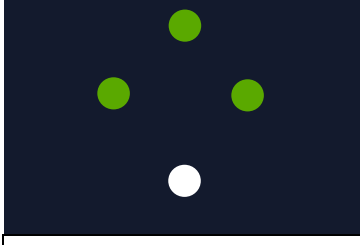
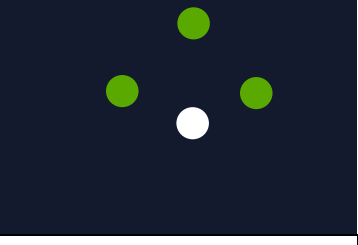
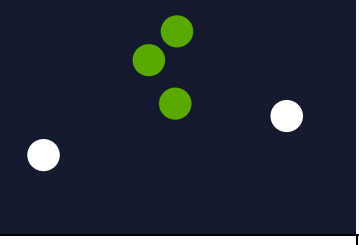
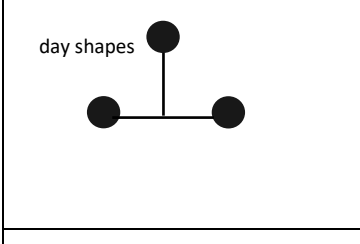
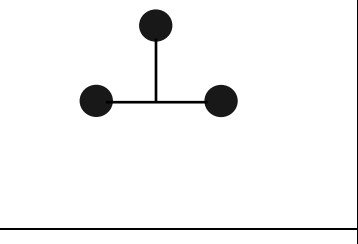
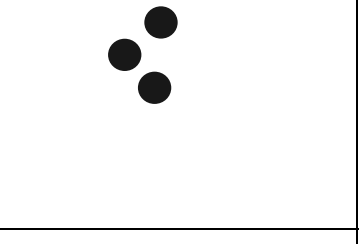
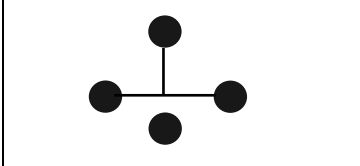
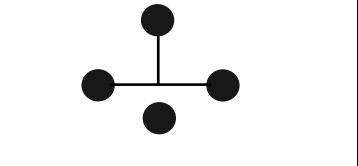
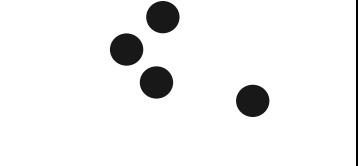
Vessel engaged in dredging or underwater operation when Restricted in her Ability to Manoeuvre (RAM)			
Aft	Forward	Starboard	Identification
<p>go on green side      stop on red side</p>			<ol style="list-style-type: none"> <li>1. RAM</li> <li>2. Length less than 50 m</li> <li>3. Aft/Forward/Starboard aspect</li> <li>4. Engaged in dredging or underwater operations, safe to pass on the port side (on the side where the two all-round green lights are located)</li> <li>5. Underway</li> <li>6. Making way</li> </ol>
			As above, length probably 50 m or more.
			<ol style="list-style-type: none"> <li>1. RAM</li> <li>2. Length unknown</li> <li>3. Aspect not necessarily known</li> <li>4. Engaged in dredging or underwater operations, clear to pass on port side</li> <li>5. Underway</li> <li>6. Not making way or at anchor (obstructed on her starboard side). Not showing anchor lights when at anchor!</li> </ol>
			<ol style="list-style-type: none"> <li>1. RAM</li> <li>2. Length unknown</li> <li>3. Aspect not necessarily known</li> <li>4. Engaged in dredging or underwater operations, clear to pass on port side</li> <li>5. Underway</li> <li>6. May be making way, not making way or at anchor (obstructed on her starboard side).</li> </ol>

Vessel Restricted in her Ability to Manoeuvre (RAM) means a vessel which from the nature of her work is restricted in her ability to manoeuvre therefore unable to keep out of the way of another vessel. The term vessel restricted in her ability to manoeuvre shall include but not limited to:

- a) Vessel engaged in laying, servicing, or picking up a Navigational mark, submarine cable or pipeline
- b) Vessel engaged in dredging, surveying or Underwater operations
- c) Vessel engaged in Replenishment or transferring persons, provisions or cargo while underway
- d) Vessel engaged in launching or recovery of Aircraft
- e) Vessel engaged in Mine clearance operations



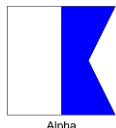
- f) Vessel engaged in a Towing operation such as severely restricts the towing vessel and her tow in their ability to deviate from their course

Vessels of less than 12 metres in length, except those engaged in diving operations, shall not be required to exhibit the RAM lights and shapes.

Vessel engaged in mine-clearance operations			
Aft	Forward	Starboard	Identification
 <p>all-round green lights</p>			<ol style="list-style-type: none"> <li>1. RAM</li> <li>2. Length less than 50 m</li> <li>3. Aft/Forward/Starboard aspect</li> <li>4. Engaged in mine-clearance operation</li> <li>5. Underway</li> <li>6. Possibly making way</li> </ol>
			<p>Vessel engaged in mine-clearance operation. Length probably 50 m or more.</p> <p>When seen from the side the far all-round green light may be obscured by rigging or by the near all-round green light (as seen in the starboard view).</p>
			<p>Vessel engaged in mine-clearance operation at anchor. Length probably 50 m or more, and less than 100 m (no illumination of deck).</p>
 <p>day shapes</p>			<ol style="list-style-type: none"> <li>1. RAM</li> <li>2. Length unknown</li> <li>3. Aft/Forward/Starboard aspect</li> <li>4. Engaged in mine-clearance operation</li> <li>5. Underway</li> <li>6. Possibly making way</li> </ol>
			<p>Vessel engaged in mine-clearance operation at anchor. Length unknown.</p>

Actions to take when in proximity to mine-clearance operation vessel:

- Stay away within at least 1000 metres, keep clear
- Call the vessel on VHF to consult where it is clear to pass
- APEM to safety

Vessel engaged in diving operation			
Aft	Forward	Starboard	Identification
			Day shape.

Vessel engaged in diving operation is required to exhibit shapes and lights for a RAM and engaged in dredging or underwater operations unless it makes it impracticable, in which case it must display RAM lights and rigid replica of International Code Flag A.

Which vessels you can tell are making way:

- Not Under Command (NUC)
- Restricted in Ability to Manoeuvre (RAM) other than vessel engaged in mine clearance operation or towing / pushing
- Fishing