

LARNE PORT



Advanced Local Knowledge Course
ISSUE 2

Authority’s Area of Jurisdiction

A straight line drawn from reference point 54°51’30” N. 005°46’44” W. (Barr’s Point) to reference point 54°51’34” N. 005°45’40” W. (Skernaghan Point)

A Straight line drawn from reference point 54°51’34” N. 005°45’40” W. (Skernaghan Point) to reference point 54°54’41” N. 005°45’13” W. (South Hunter Cardinal Buoy)

A straight line drawn from reference point 54°54’41” N. 005°45’13” W. (South Hunter Cardinal Buoy) to reference point 54°52’34” N. 005°49’19” W. (Black Cave Head)

A straight line drawn from reference point 54°50’24” N. 005°48’00” W. (Curran Point) to reference point 54°50’24” N. 005°46’40” W. (south-east Port of Larne and Pilotage Area)

Chartlet showing the Larne Harbour SHA, Pilotage Area, and Reporting Points.

The Harbour Master or nominated persons has the authority to issue Special Directions up to the limits of this area. Refer to Figure 1

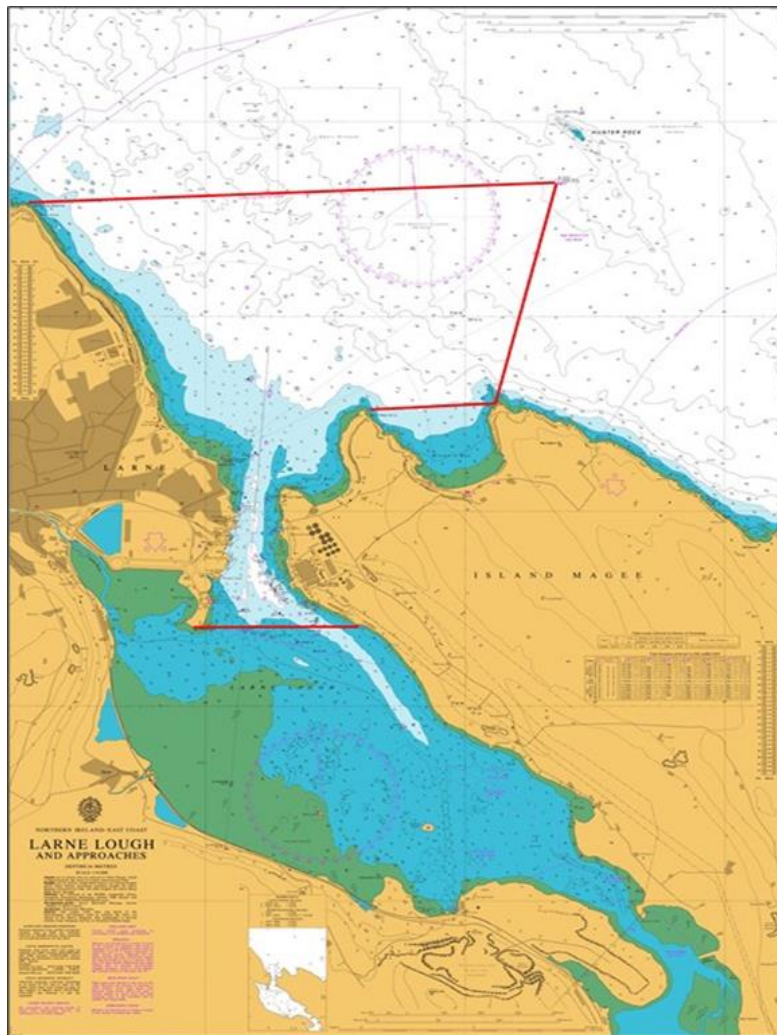


Figure 1 - Port Limits

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Section 1 General Navigation at The Port of Larne

1.1 Collision Regulations (COLREGS) relevant to Port of Larne

1.1.1 Safe Speed - Rule 6

Proceed at safe speed so that proper and effective action to avoid collision.

Factors: visibility, traffic, manoeuvrability, draft, sea, and weather conditions.

1.1.2 Risk of Collision - Rule 7

To use all available means to determine risk of collision exists. Assumption not made on scanty information.

1.1.3 Narrow Channel Rule 9

To keep to outer limit of channel. Vessel less than 20m or sailing vessel not to impede. Fishing vessel not to impede.

1.1.4 Conduct of Vessels in Restricted Visibility - Rule 19

Safe speed for conditions – altering course to port to be avoided or altering course towards a vessel. To take all way off.

1.1.5 Manoeuvring and Warning Signals – Rule 34

1 short blast – Altering course to Starboard.

2 short blasts – Altering course to port.

3 short blasts – I am operating astern propulsion.

5 short blasts - I am not sure of your intentions and am concerned we are going to collide.

1.1.6 Sound Signals in Restricted Visibility – Rule 35

Power driven underway shall sound at intervals of 2 minutes 1 prolonged blast

Power driven underway but stopped and making no way through the water shall sound at intervals of 2 minutes 2 prolonged blasts.

1.1.7 Approaches to Larne Harbour: conflicts with fishing vessels and yachts

Collision rules to be followed throughout the harbour area.

1.2 Sources of port related information on Pilotage

- Notices to Mariners, [Refer to Website](#)
- Marine Guidance Notes
- Marine Information Notices

1.3 Passage Planning; Prior Planning and Logging With LPC

Pilots should visit LPC (PEC holders inform LPC on approach), to receive Pilot Chit, discuss latest consider weather, tides, traffic, as well as confirm communication, berthing arrangements (tugs?) and abort position.

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1.4 *Principles of Ship Handling at Larne,*

Understand Flood / Ebb manoeuvres, as well as prioritization of ferries over other commercial and recreational boats.

1.5 *Be Aware of the Most Recent Hydrographical Surveys & Chart Datums*

Surveys published biannually on website and distributed to Pilots & ships – also copies available at HM/LPC.

1.6 *Berth and Quay Particulars*

Refer to: table 1 below

Refer to [Notice to Mariners](#) for current depths

1.6.1 *Power Station Jetties*

Not recently surveyed but contact Harbour Master for more information

1.7 *Under Keel Clearance at The Following Port Areas*

Vessels should maintain an under keel clearance of at least 1.0m when navigating within the port. Alongside a minimum of 0.25m should be maintained at all states of the tide.

- Table 1 Berths and quays particulars

Quay	Continental	Chaine	Mackean	Olderfleet	Curran
Max Vessel Length	135m	130m	180m	70m	185m
Solid Quay Length	90m	90m	130m	65	90m
Depth Alongside					
Height above Chart Datum	5.6	5.6	5.6	5.6	5.8
Cargo Handling	Suitable for bulk cargoes	Used for fuel transfers Passenger and Crew change	P&O Ferries	Used for fuel transfers, crew change and lifting operations	Suitable for bulk cargo operations Weight Limitations do apply 10t/m ²

1.8 *Transit and Clearing Bearings*

Discuss options in Larne (e.g., Chaine Tower)

1.9 *Restricted Visibility Procedures at Larne.*

No vessel shall enter or move within the Pilotage District if the visibility is less than 500m except:

- (a) Regular scheduled vessels, e.g. ferries, can move in any visibility conditions, at the discretion of the Master and the Harbour Master or his/her assigned deputy. The PEC holder however must be experienced in blind pilotage techniques involving the use of ECDIS and radar parallel indexing. Vessels must manoeuvre with great caution and at a speed appropriate for the conditions. The vessel should be manually steered at all times whilst within port limits by a dedicated and competent helmsman, having given close consideration to having sufficient resourcing of the bridge management team.
- (b) Any vessel's operation that requires to work with tugs within the harbour shall not normally take place if the prevailing visibility is less than 1000m. However, if the visibility is greater than 500m and the Master, Pilot and tug skipper are satisfied that it is safe to do so having assessed the vessel's manoeuvring capabilities, navigation systems, crew competence and familiarity in relation to any additional risk posed by the restricted visibility, they may be permitted to do so upon receipt of specific Harbour Master approval.
- (c) Leisure vessels and fishing vessels may move only with specific permission of the Harbour Master or his/her assigned deputy.

1.10 *Factors which may effect Ship-Handling Characteristics of Vessels*

Squat – reduction in draft or change of trim directly related to ship speed; potentially dangerous in shallow water

Bank cushion effect - When the ship is near to the bank, the water is forced between the narrowing gap between the ship's bow and the bank. This water tends to pile up on the starboard side of the ship, causing the ship to sheer away from the bank.

Interaction – suction effect that draws 2 hulls together whilst they are passing each other.

1.11 *Pilot Disembarkation Procedures.*

Vessels should be advised/reminded not to adjust course or speed whilst a pilot boat is alongside unless specifically asked by the coxswain to do so. They should alter speed and course only once it has been confirmed – preferably visually from the bridge – that the pilot boat has left the ship's side and is clear of the vessel. See: [Pilotage Manual – Section 3.10](#)

1.12 *Pilot's Actions to be Taken in the Event of the Vessel Grounding or Being in a Collision.*

Advise Larne Port Control immediately, requesting assistance from tugs and/or other vessels.

1.13 *Marine Accident Investigation Board (MAIB)*

Mariners are advised that it is an offence under The Merchant Shipping (Accident Reporting and Investigation) Regulations 2012, Regulation 19 not to report an accident or provide the information required without reasonable cause.

Additionally, all marine casualties and marine incidents must be notified to the MAIB as soon as practicable by the quickest means available (see 'MGN 564(M + F) on When and How to Report').

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1.14 *A PEC Holder Returning to a Vessel After a Period of Excess of 3 Months*

Any PEC holder, returning to a vessel for which he holds a PEC, after a period in excess of 3 months, must complete at least one arrival and departure under supervision of a Master who is a current Larne PEC holder, before being authorised to pilot the vessel. This is to ensure adequate familiarization with bridge team management, bridge procedures and the manoeuvring characteristics of the vessel. See: [Pilotage Manual 2.2.2](#)

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Section 2 Port of Larne Rules and Regulations

2.1 Larne Harbour Byelaws, Regulations and Directions for Navigating in LHL area of jurisdiction

[Larne Harbour Order \(N.I\) 1998](#)

[Port of Larne \(Pilotage Functions\) 2002](#)

[Port of Larne Pilotage Directions](#), including areas and ships to which they apply

[Dangerous Substances in Harbour Areas Regulations 1987](#),

2.1.1 Special Directions.

The Harbour Master or his assigned deputy have the power to issue a special direction in respect of a vessel within the port under Section 13 of the Larne Harbour Order (NI) 1998. [See Website](#)

2.1.2 General Directions

Larne Harbour Ltd may give directions under Section 12 of the Larne Harbour Order (NI) 1998 for the purpose of promoting or securing conditions conducive to the ease, convenience, or safety of navigation in the Port. [See Website](#)

2.2 Larne Harbour Limited as a Competent Harbour Authority

Larne Harbour Limited was confirmed as the Competent Harbour Authority, as defined by the Pilotage Act 1987, by [The Port of Larne \(Pilotage Functions\) Order 2002](#)

2.3 'Port Marine Safety Code' and associated 'Good Guide to Good Practice on Port Marine Operations'

The Port Marine Safety Code (“the Code”) sets out a national standard for every aspect of port marine safety. Its aim is to enhance safety for everyone who uses or works in the UK port marine environment. It’s Guide to Good Practice provides a fuller explanation of the code’s requirements as well as how they can be fulfilled by Ports.

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2.4 *Pilots and PEC Holders – reporting requirements to the Harbour Master/LPC*

Accident or damage happening or been caused by a vessel in his charge, including quays, dolphins, fenders, ramps, bollards, other vessels, tugs etc.

Alteration in any of the banks or channels, or that any buoys or beacons broken down, or out of place or any circumstance affecting the safety of navigation.

Any defect that is likely to affect a vessel’s manoeuvrability. Under such circumstances, any such vessel is not permitted to enter or leave the port until such time as the Harbour Master or Marine Officer has confirmed agreement.

Insofar as practicable, any intention or requirement, to use tugs for port entry or departure, should be notified to the HM or one of his Marine Officers.

2.5 *Validity of PEC Certificates*

5 years subject to annual renewal, which is conditional on performing at least 12 arrivals and 12 departures in the preceding year

2.6 *Qualifying and Renewal Trips for PEC Holder or Candidates?*

- (a) A minimum of 12 trips in and 12 trips out,
- (b) 50% during hours of darkness,
- (c) Attendance at Larne Port Control Centre.
- (d) Tug familiarisation trip

2.7 *PEC Holders re-examination*

PEC holders will be examined after 5 years, assuming their PEC has remained valid throughout.

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Section 3 Port of Larne Communications

3.1 *Level of Service Provided by Larne Port Control*

LPC now provides an LPS service only, although it continues to pro-actively manage, co-ordinate and schedule traffic movements, as well as other marine activities. It also provides the co-ordination and communications centre for the Port of Larne pilotage service, managing the pilot boarding and landing activities at the Pilot Station.

3.2 *Advice and Directions from Larne Port Control*

All vessels *should* comply with any advice and *must* comply with any directions issued by Larne Port Control in accordance with Section 13 of the [Larne Harbour Order \(NI\) 1998](#). Failure to do so may result in statutory prosecution under Section 15 of the same Order.

3.3 *Message Markers*

- Information
- Question
- Warning
- Request
- Advice
- Instruction
- Answer
- Intention

3.4 *Radio reporting procedures at Larne*

Calling points for Arriving vessels

- 15' notice
- Passing South Hunter
- Passing No. 1 Buoy inward
- All Fast

Calling points for Departing vessels

- 15 minutes prior to departure
- Singled up
- At No. 1 buoy Outward

3.5 *Communications for Bunker Ships.*

Refer to the port's Bunker Transfer Procedures ([see Notice to Mariners](#))

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Section 4 Geographical and Navigational

4.1 *Headlands to the East of the Port*

Ferris, Barr's, Skernaghan

4.2 *Headland to the Northwest.*

Black Cave Head

4.3 *Northerly Harbour Limits*

A line joining Barr's Point to Skernaghan 084° then 013° to South Hunter Rock Buoy then 267° to Black Cave Head

4.4 *Tides direction outside the Port*

Flooding they run South-easterly and Ebbing they run North-westerly; at a rate of 2-3kts

4.5 *Tidal Range*

Spring Range = 2.4 m

Neap Range = 1.7 m

4.6 *Depth of Main Channel, Berths, and Minimum Depths on Approach*

Refer to Larne Port website

4.7 *Type of Seabed*

Gravel, clay, silt. Some boulders

4.8 *Water Density*

1.025 kg / cm³

4.9 *Anchorage Areas*

There is no anchorage zone in LHL port limits, although advice regarding anchorage areas in the vicinity outside port limits may be requested from Larne Port Control.

The normal waiting anchorage for vessels is 1.2 nautical miles North of No. 1 buoy in depths of 20 metres. It has reasonable holding; however it is exposed to wind and swell from North to South-east (through North-east directions). Note should also be taken of the proximity of 2 cross channel subsea cables extending from North of Black Cave Head.

In strong North to South-east winds, anchorage may be found in Belfast Lough.

4.10 *Swell Effects*

During and after North-easterly gales, there may be a heavy swell running straight into the channel making steering and track-keeping difficult. Fast Craft Ferries are particularly prone to steering difficulties in these conditions and require maintaining speeds of up to 12 knots to maintain adequate steering. The swell effect can be encountered throughout the Harbour

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4.11 *Wind Restrictions*

- (a) Vessels shall not enter, leave or move within the port with an average wind in excess of 40 kts; however, exceptions may be made for regular scheduled ferry movements, at the discretion of the Master and the Harbour Master.
- (b) Irrespective of any general limits agreed between regular ferry master and the Harbour Master, nothing should be deemed to override the principles that:
- (c) Movement of regular ferries shall, at all times, be at the discretion of and under the authority of the Ship's Master
- (d) The Harbour Master has the authority to prohibit the movement of any and/or all vessels in the event that he/she deems that, due to the prevailing circumstances and/or conditions, they are unsafe.
- (e) As a consequence, there exists an obligation and expectation that a ferry's master and Harbour Master – or his/her assigned deputy - will consult with each other in the event that a movement or prohibition is anticipated outside any agreed general limits.
- (f) Bunker tankers shall not manoeuvre alongside receiving vessels in winds in excess of 30 knots, nor when swell conditions are in excess of 0.75metres. When winds are in excess of 25 knots or swell height in excess of 0.5m, such manoeuvres alongside, are permissible only with specific approval from the Harbour Master or his assigned deputy.

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Section 5 Lights and Buoys

5.1 IALA Maritime Buoyage System at Port of Larne

Commissioners of Irish Lights are the General Lighthouse Authority for Larne; Larne Harbour Limited are the Local Lighthouse Authority.

CIL own and maintain:

- North Hunter Cardinal Buoy
- South Hunter Cardinal Buoy
- No 1 Buoy
- Ferris Buoy
- No 3 Buoy
- No 5 Buoy
- No 7 Buoy

LHL however is charged by CIL for their provision and maintenance.

Larne Harbour Ltd however have a duty of care to maintain and also responsible for:

- No. 2 Beacon
- No. 4 Beacon
- Lead lights

As well as Quay Lights on the following quays

- Continental,
- Chaine,
- Mackean,
- Curran.

5.2 Types of Buoyage Systems

Cardinal and Lateral

5.3 Lateral Marks.

Generally used for well-defined channels

5.4 Cardinal Marks

Used in conjunction with the compass to indicate where the mariner may find the best navigable water

5.5 Other Marks or Buoys

Isolated Danger, Safe Water Mark, Special Marks.

5.6 Approaches to Larne

(a) East Maidens:

Fl (3) 15s 32m 18M

Light House, White Tower Black band

F1 R 5s 15 m 8 M Sector 142°- 182°
(Over Russell & Highland Rocks)
Racon 'M' (3 + 10cm)

- (b) Rocks to the SE : Bushes, Griddle, Sheafing Rock, Lough Mouth Bushes
- (c) Rocks to the NW : Allans Rocks, Russells Rock, Highlandman
- (d) North Hunter Rock buoy
N. Cardinal, Black over Yellow,
Topmark – 2 black cones point up,
Light – Q Fl.
Position – 1 cable 006° to north of rock,
Depth - 30 m
- (e) South Hunter Rock buoy
South Cardinal, Yellow over Black,
Topmark - 2 black cones down,
Light - VQ(6) L. F1 10 secs,
position - 3 cables 200° to south Hunter Rock.
Depth - 30 m

5.7 *South Hunters Rock Buoy to No.1 Buoy*

Distance 1.7M (Course 234° and/or 054°)

5.8 *No 1 Buoy*

Lateral, Starboard hand, Green Conical Fl QG, depth 8m

5.9 *Ferris Buoy*

Lateral, port hand, red, Fl (2) R 6s, depth 8m

5.10 *No 3 Buoy*

Lateral, starboard hand, green conical, F1 (2) G 6s, depth 8m

5.11 *Distance Between No. 1 and No. 3 Buoy*

750m

5.12 *Distance From No. 3 Buoy to Continental Quay*

500 m

5.13 *No 2 Beacon*

Piled structure, red beacon, F1 R. 3s, 4m, 4M, depth 5 m

5.14 *No 4 Beacon*

Piled structure, red beacon, F1 (2) R 6s, 4m, 4M, depth 5m

5.15 *Boat Harbour*

2 FR (Vertical) 4m 5 M, South Pier Head

5.16 *Jetty Lights*

2 FR (Vertical) NW & SE End (5M on B Jetty, 2M on A Jetty)

5.17 *Phoenix Gas Pipeline*

4 Yellow Special Marks, with top mark Yellow Cross, Light Fl.Y.

Shore Mark: yellow spar, pipeline direction 285°/105°x 1.0 M

5.18 *No. 5 Buoy*

Starboard Hard Lateral, Green, conical, light QG, Depth 8m

Distance between No. 5 & No. 7 = 300m

5.19 *No 7 Buoy*

Starboard Hard Lateral, Green, conical, light QG, depth 6m

5.20 *Chaine Tower*

Owned and maintained by local Council, Mid & East Antrim Borough Council

Grey Tower, ISO W.R. 5s 23m 16M

W = 230° - 240 °

R = 240° - shore

Obscured = 230° - North

5.21 *Leading Lights*

The transit line between both lights is on a bearing of 184° when viewed from sea

No. 11 (Front) Fl W 2.5s 6 m 12M

No. 12 (Rear) OCC W 5s 14m 12M

Sector of light is 179° - 189°

5.22 *Quay Lights*

- Continental
- Chaine
- Mackean
- Curran

All are 2 FG with 2 nm range

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Section 6 *Mooring Operations.*

6.1 *Safe manning for mooring operations*

Personnel engaged in mooring/unmooring of large vessels must never carry out such work on their own. For mooring/unmooring of large ferries, a mooring crew will consist of a minimum of 4 persons, at least 2 personnel at each end of the vessel, one of each pair carrying a VHF radio.

For smaller vessels (max of 100m LOA), such as coasters and bunker barges, a minimum of 2 persons, is acceptable, so long as they are both in close communication and sight of each other and both carrying portable VHF radios.

Temporary storm junk-lines, rigged from one quay to another, should always be handled by a minimum of 4 persons after an arriving ship has otherwise tied up or before all other lines when unmooring a departing vessel.

6.2 *Action in the event of a mooring contractor falling into water*

- 1) Immediately alert Larne Port Control on Channel 11 that a man has entered the water
- 2) Give accurate information of where the incident has occurred.
- 3) Stop engines and maintain a visual fix on the casualty insofar as possible, keeping Larne Port Control / On Scene commander advised of the casualty's position by giving constant information of the direction the casualty is travelling and at what speed.
See [Appendix G of Marine Services Manual](#)