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GAP Study of the Cool Route



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Executive Summary

Based on the Cool Route stop-overs survey, the Gap Analysis has been undertaken to point out the existing gap elements of the route, both in spatial and capability terms. The highlights of this document can be summarised through the following figures:

- Distance GAPS identified: 6
- Facility GAPS identified: 54 (number of locations)
- Distance GAPS between countries identified: 2

The evidence provided through the study suggests opportunities for intervention and potential collaboration with local stakeholders in the specific locations acknowledged, nonetheless beyond these.

1. Introduction

Glasgow Caledonian University is the Scottish partner of the Cool Route responsible for the Work Package 3 related to the: Logistic Plan, Technical Design and Safety and Logistics.

Following the creation of the Cool Route database by cataloguing all of the route stopping points, the next step was hence undertaken by analysing the ‘gaps’ regarding both facilities and distance between the stops along the route. The details of this process, the methodology, and the proposed results will be exposed throughout this document. This second stage of the logistic study will be defined from now on as ‘GAP Analysis’ (GA).

Finally, we would like to acknowledge the contribution of the Cool Route partners throughout the consortium, who have supported this study by providing their valuable input.

1.1. Aim of the study

The GA builds on the logistical survey of the route that catalogued all the existing berthing and mooring locations, their location, as well as the nature of shore-based support facilities throughout the *Cool Route*.

The main purposes of the GA are:

- a. to identify by examining gaps in the provision of facilities (toilets and showers);
- b. to identify the existing gaps between stopovers in terms of distance, identified in 25 nautical miles;
- c. identify potential new locations/types of solution based on the first two findings

The GA connects with all other working packages of the project, such as the business, marketing and commercialization plans. The results of this analysis will include the range of existing and potential new locations for additional facilities to the Final Report. Finally, these results will also constitute the baseline to foster stakeholder engagement activities.

It must be noted that the Cool Route database is a ‘living’ catalogue and will, therefore, continue to develop throughout this project.

2. Methodology

It is worth reviewing a few key elements contained in the database file to fully understand the rationale behind the GA. The following definitions have been used to classify the stops of the route:

- a. **Marina:** is a step-ashore facility with substantial floating pontoons and, normally, berths alongside fingers. While most of the marinas offer a variety of services and amenities to their users, there is no requirement for marinas to be 'full serviced' in order to fall under this category.
- b. **Pontoon:** is a flat-bottomed boat or hollow metal cylinder used with others to support a bridge or floating landing stage. This category frequently includes harbours, quays, docks or any other sort of step-ashore pontoons.
- c. **Moorings:** are any permanent structures to which a vessel may be secured. While no distinction has been made regarding the number of berths available at the moorings locations, preference was given to those formed by 25 or more single-point moorings, where more mooring groups were found in the same area (25 NM radio). Finally, this category also includes stopovers with a landing jetty.

It is important to specify that natural harbours and anchorages have not been taken into consideration in this study.

Two types of gaps have been identified through the study:

- a. **Distance gap** - has been recognised, as when 'over 25' nautical miles separate any two stops within the same country. This has been further strengthened by the findings of the Cruising Preferences Survey carried out by CIT. All the stopping points' categories have been included in the distance gap. Distance gaps between countries have also been comprised in the study to assist in detecting issues of merging the different routes of the partner regions.
- b. **Facility gap** - has been identified when facilities such as toilets and showers were not found ashore, in the immediate proximity of the landing stop. Three are the scenarios that occur to create a facility gap:
 - i. A gap exists where NO toilet or showers are available
 - ii. A gap exists where there are NO showers but toilets are available
 - iii. A gap exists where NO toilets are available but showers are (this is merely a hypothetical situation although it has never been found in the study)

A facility gap has been also identified where, either one provision or the other, was available within one mile (the '>1-mile' description has been added to the corresponding database).

While **marina and pontoon** stopovers have been evaluated in regard the facility condition, **mooring** stopping points have not. Their inclusion in the countries' databases and, consequently in the GA, can be demarcated as both functional and strategic. Moorings can be seen in this study as focal points for their multiple function:

- 1) Firstly, they ‘fill the gaps’ of the route by providing safe alternative stops between 1 and 2 type of stopping points along the route;
- 2) Secondly, they add on variety to the route. Very frequently moorings are located in secluded and remote localities defined as ‘real jems’. The Cool Rooute certainly does not want to fail to benefit from such potential;
- 3) Ultimately, they may provide valid potential commercial opportunities in their respective areas, where sufficient evidence will be properly identified.

A variety of sources have been applied to produce this study. The initial databases were assembled through the use of secondary sources such as sailing guides, website listings, industry reports and the shared knowledge of the Cool Rooute consortium and its associate ones (for references see final chapter). Secondly, the current version of the study contains information and updates deriving from undertaking primary research through a survey distributed to the stopovers identified in the initial database. Therefore the results of the study are described in the following chapter.

3. Results

For the GA, the results are individually presented by country.

The following table summarises the chart symbols utilised in the mapping tool:





Symbol	Meaning
	Marinas and Pontoons
	Moorings
	Distance GAP (over 25 NM) btw stops
	Distance GAP (over 25 NM) btw Countries
	Facility GAP - Toilets
	Facility GAP - Showers

Table 1. Chart symbols used in the mapping tool

3.1 The Republic of Ireland

This region has been divided into three sections, as follows:

1. South Coast of Ireland – Youghal Harbour to Dingle Harbour
2. West Coast of Ireland – Dingle Harbour to Sligo Harbour
3. North Coast of Ireland - Sligo Harbour to Moville

1) South Coast of Ireland – Youghal Harbour to Dingle Harbour

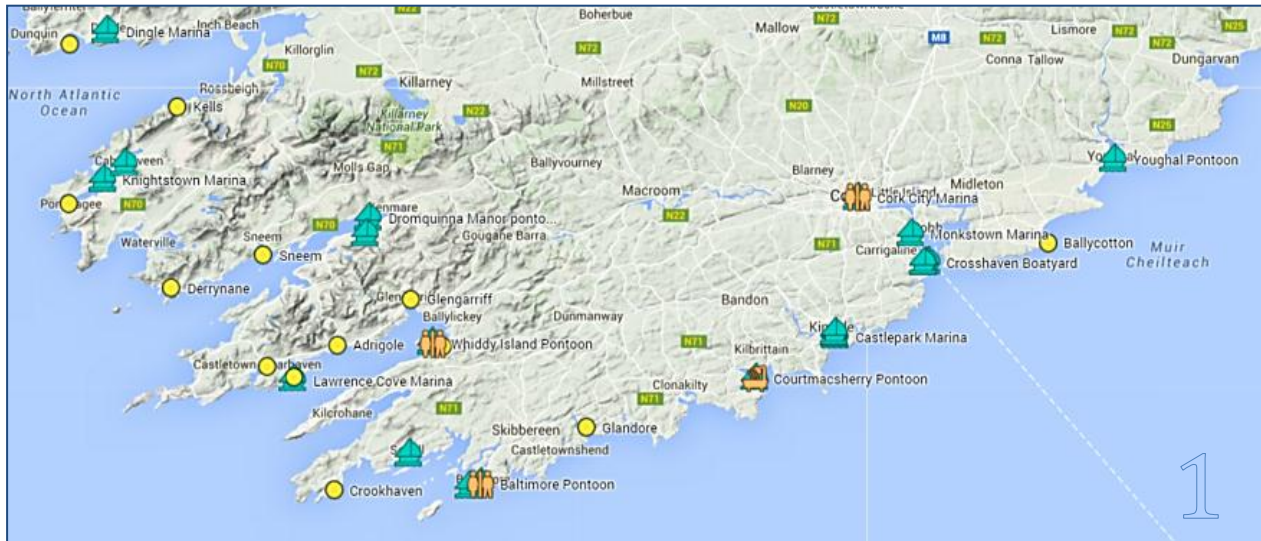


Figure 1. Map of the South Coast of Ireland: stop-overs and gaps

Figure 1 provides a visual outline of the area selected.

→ In this section of the route no distance gaps of 25 NM have been identified.

→ The following 4 facility gaps have been found, as shown in the table below:

Location	Marina=1 Pontoon=2 Mooring=3	GAP - Facility	Missing facility
Cork City Marina	1	GAP	Toilets and Showers
Courtmacsherry	2	GAP	Showers
Baltimore Pontoon	2	GAP	Toilets and Showers (although available at Baltimore Sailing Club)
Whiddy Island Pontoon	2	GAP	Toilets and Showers

Table 2. Facility Gaps in the South Coast of Ireland

2) West Coast of Ireland – Dingle Harbour to Sligo Harbour

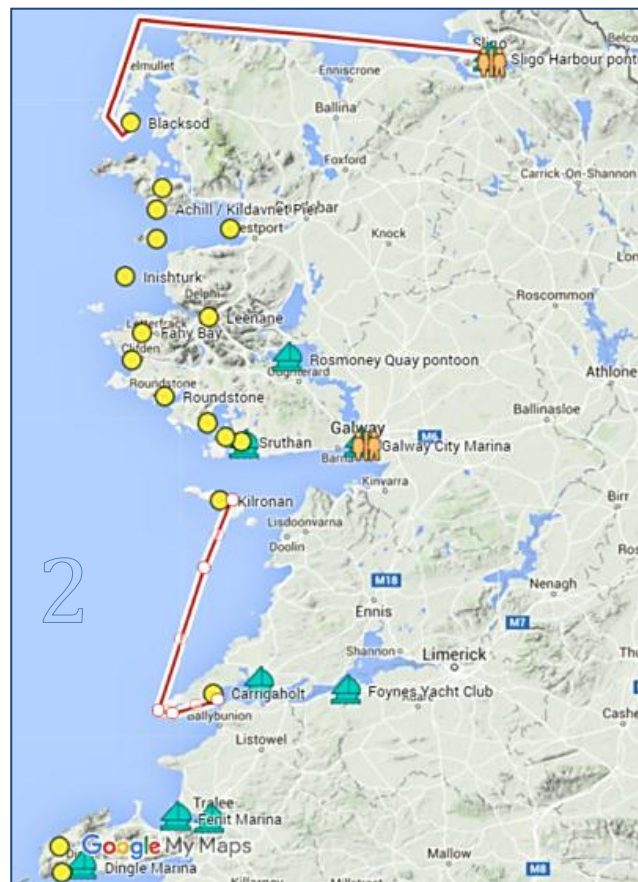


Figure 2. Map of the West Coast of Ireland: stop-overs and gaps

Figure 2 provides a visual outline of the area selected.

→ In this section of the route 2 distance gaps have been identified:

Segment GAP	NM approx.
Carrigaholt - Kilronan	46
Blacksod – Sligo Harbour	82

Table 3. Distance GAPS in the West Coast of Ireland

→ The following 2 facility gaps have been found, as shown in the table below:

Location	Marina=1 Pontoon=2 Mooring=3	GAP - Facility	Missing facility
Galway City Marina	2	GAP	Toilets and Showers
Sligo Harbour Pontoon	2	GAP	Toilets and Showers

Table 4. Facility Gaps in the West Coast of Ireland

3.2 Northern Ireland

The Northern Ireland section has been analysed as one individual segment. The reason for this is due to the features of the Northern Irish coastal length and the limited number of stopping points identified. Figure 4 provides the visual outline of this segment.

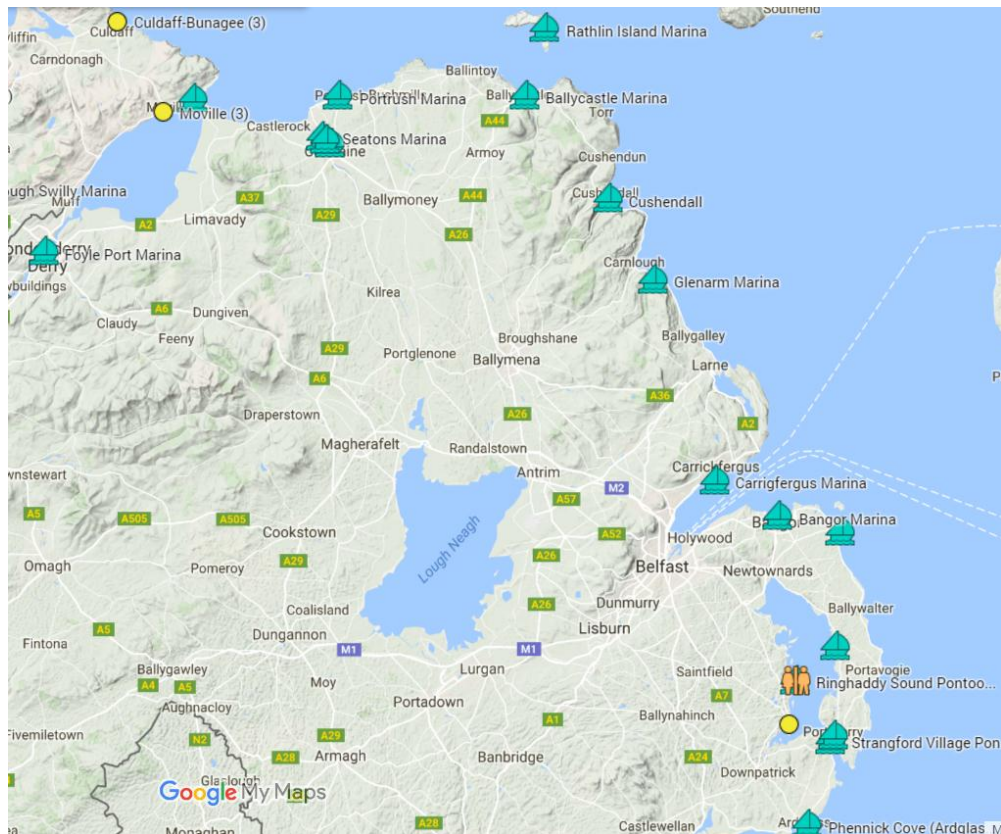


Figure 4. Map of the Northern Ireland: stop-overs and gaps

→ In this section of the route no distance gaps of 25 NM have been identified.

→ The following facility gap has been found, as shown in the table below:

Location	Marina=1 Pontoon=2 Mooring=3	GAP - Facility	Missing facility
Ringhaddy Sound Pontoon	2	GAP	Showers

Table 6. Facility Gaps in Northern Ireland

3.3 Scotland

For the purposes of the study, Scotland's region has been divided into three sections. The geographical sub-division employed in the report issued by Scottish Enterprise in 2010 – Sailing Tourism in Scotland ¹ has been adopted for the investigation.

As it can be seen in picture 5, four are the 'sailing grounds' identified as the main 'economic blocks' in the study cited. Given the geographical focus on the west and north coast of Scotland of the Cool Route, only three of those segments are considered in the study, namely the A- Clyde, B- West and C- North segments.

A – Clyde	1	Clyde Estuary
	2	Solway
B – West	3	Argyll
	4	Ardnamurchan to Gairloch
	5	Outer Hebrides
C – North	6	Gairloch – Helmsdale
	7	Orkney / Shetland
	8	Helmsdale – Peterhead

Table 7. Scotland's geographic segmentation. Source: Scottish Enterprise

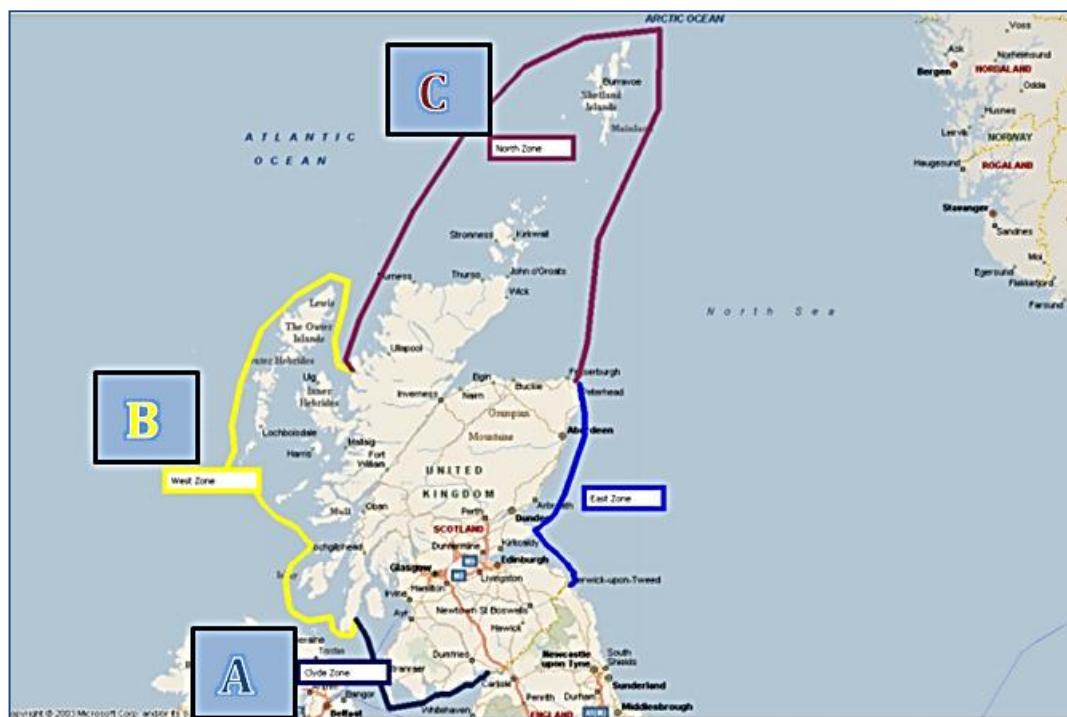


Figure 5. Segments of Scotland's region. Source: Scottish Enterprise

¹ SCOTTISH ENTERPRISE -SAILING TOURISM IN SCOTLAND. FINAL REPORT (February 2010). Available at <https://www.researchonline.org.uk/sds/search/download.do%3Bjsessionid=19276A3E822F4BAC6BF00CAF18C2D2E0?ref=B15606>

1) A segment- Clyde

Figure 6 provides a visual outline of the area selected.



Figure 6. Map of Scotland's A segment: stop-overs and gaps

→ In this section of the route no distance gaps have been identified

→ The following 7 facility gaps have been found, as shown in the table below:

Location	Marina=1 Pontoon=2 Mooring=3	GAP - Facility	Missing facility
Brodick Harbour	2	GAP	Toilets and Showers
BBC Pontoon	2	GAP	Toilets and Showers
Riverside Museum	2	GAP	Showers
Braehead	2	GAP	Showers
Clydebank Pontoon	2	GAP	Toilets and Showers
East India Harbour	2	GAP	Toilets and Showers
Kames	2	GAP	Showers

Table 8. Facility Gaps in the Clyde segment of Scotland

2) B segment- West

Figure 7 provides a visual outline of the area selected.

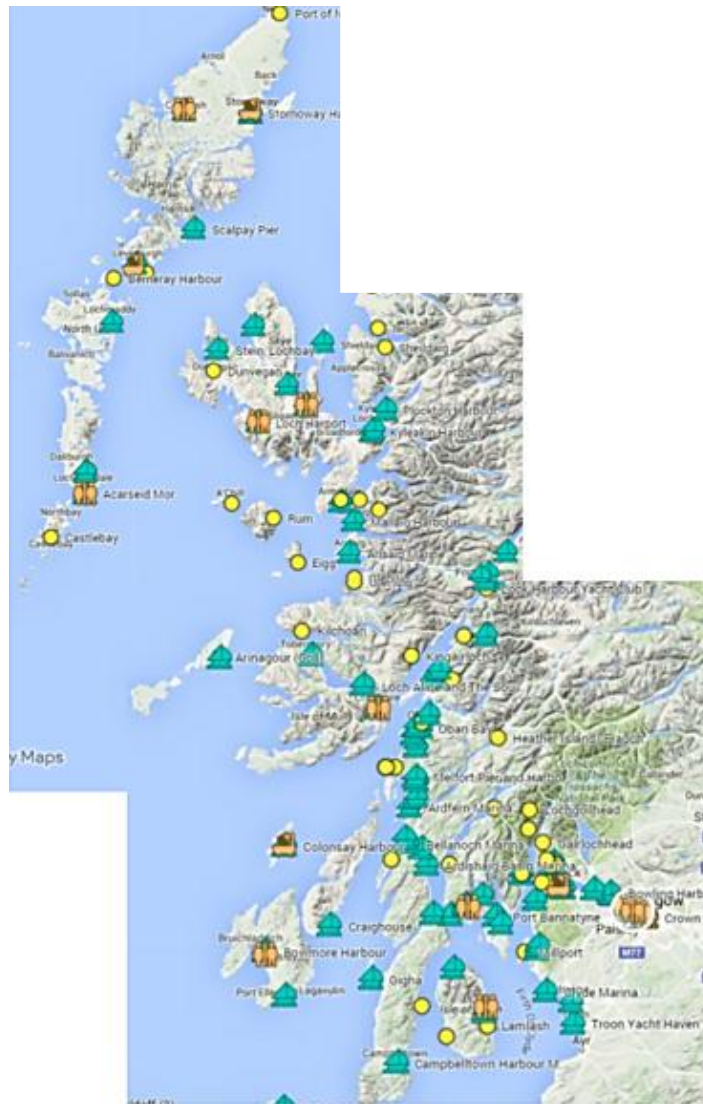


Figure 7. Map of Scotland B segment: stop-overs and gaps

→ In this section of the route NO distance gaps have been identified

→ The following 9 facility gaps have been found, as shown in the table below:

Location	Marina=1 Pontoon=2 Mooring=3	GAP - Facility	Missing facility
Bowmore Harbour	2	GAP	Toilets and Showers
Colonsay Harbour	2	GAP	Showers
Craignure Pier	2	GAP	Toilets and Showers

Acarseid Mor	2	GAP	Toilets and Showers
Loch Harport	2	GAP	Toilets and Showers
Isle of Raasay Jetty Marina	2	GAP	Toilets and Showers
Leverburgh Harbour	2	GAP	Showers
Breasclete Pier	2	GAP	Toilets and Showers
Serpen Yacht Club	2	GAP	Showers

Table 9. Facility Gaps in the West- segment of Scotland

3) C segment- North

Figure 8 provides a visual outline of the area selected.

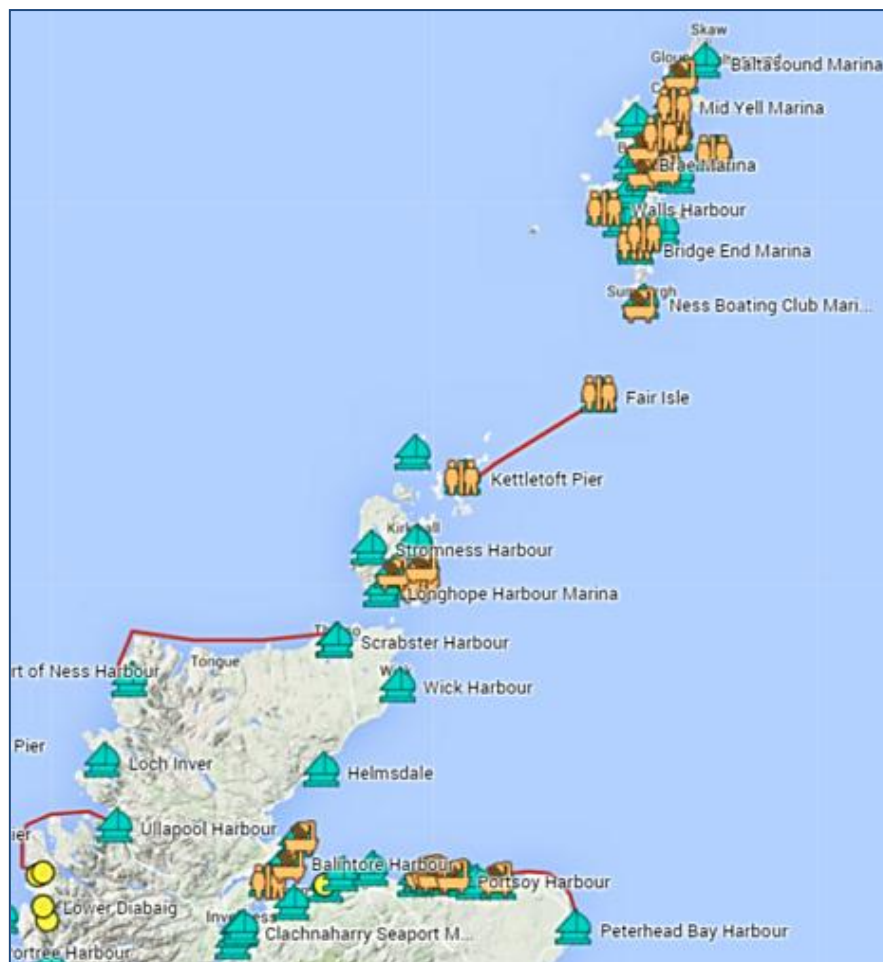


Figure 8. Map of Scotland C segment: stop-overs and gaps

→ In this section of the route 4 distance gaps have been identified:

Segment GAP	NM approx.
Badachro – Ullapool Harbour	36
Kinlochbervie -John O'Groats	62
Gardenstown-Peterhead	28
Kettletoft-Fair Isle	36

Table 10. Distance GAPS in the West Coast of Ireland

→ The following 27 facility gaps have been found, as shown in the table below:

Location	Marina=1 Pontoon=2 Mooring=3	GAP - Facility	Missing facility
Balintore Harbour	2	GAP	Showers
Portmahomack Harbour	2	GAP	Showers
Cromarty Harbour	2	GAP	Toilets and Showers
Findochty	2	GAP	Showers
Portknockie	2	GAP	Showers
Cullen Harbour	2	GAP	Showers
Portsoy Harbour	2	GAP	Showers
Gardenstown Harbour	2	GAP	Showers
St. Margaret's Hope Pier	2	GAP	Showers
Burray Village Pier	2	GAP	Toilets and Showers
Scapa Flow Harbour	2	GAP	Showers
Holm Pier	2	GAP	Showers
Kettletoft Pier	2	GAP	Toilets and Showers
Fair Isle	2	GAP	Toilets and Showers
Ness Boating Club Marina	2	GAP	Showers
Hamnavoe Harbour	2	GAP	Toilets and Showers
East Voe Marina\of Scalloway	2	GAP	Toilets and Showers
Walls Harbour	2	GAP	Toilets and Showers
Mid Yell Pier	2	GAP	Showers
Vidlin Marina	2	GAP	Showers
Out Skerries Pier	2	GAP	Toilets and Showers
Bressay Harbour	2	GAP	Showers
Burravoe Pier	2	GAP	Showers

Ulstá Marina	2	GAP	Toilets and Showers
Burravoe Marina	2	GAP	Showers
Mid Yell Marina	2	GAP	Toilets and Showers
Cullivoe Marina	2	GAP	Showers

Table 11. Facility Gaps in the North- segment of Scotland

As a final remark, both the Caledonian Canal the Crinan Canal have been comprised in the Scotland section. Both canals work for the project due to both their geographical location within the Cool Route compass and functionality as a safe passageway from west to east (and vice versa). Furthermore, for both canals, no gaps have been identified.

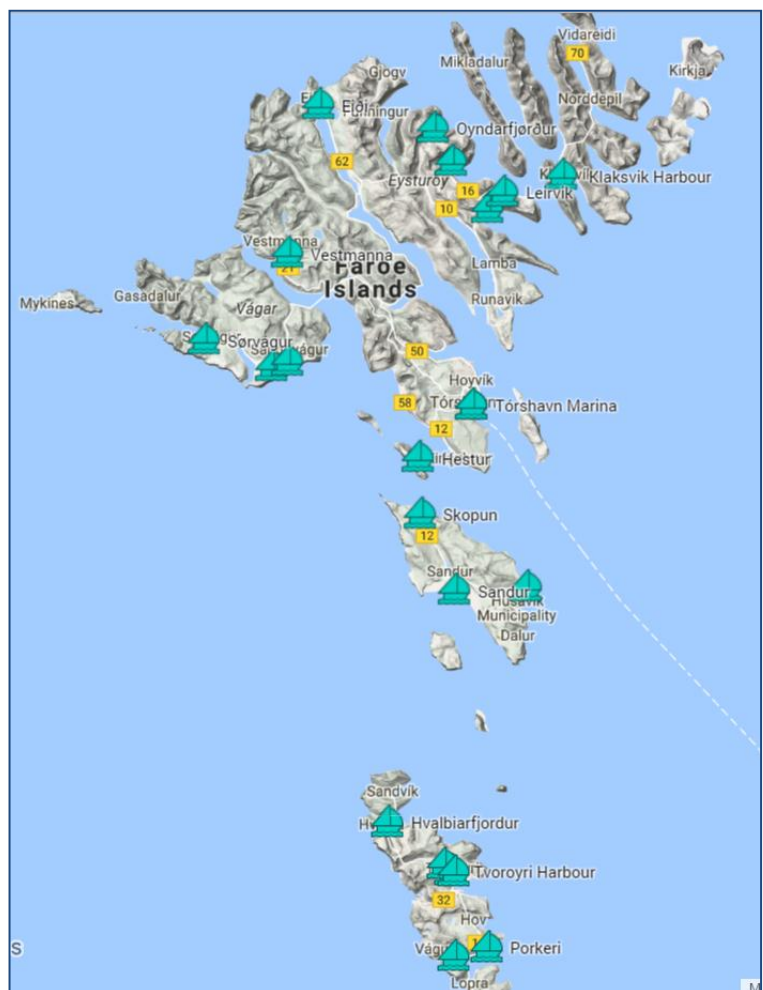
3.4 The Faroe Islands

The Port of Tórshavn represents the main point of landing for the region. Nevertheless, GCU has identified several supplementary locations consisting of 22 stopping points among marinas, ports and pontoon-type of stops.

→ In this section of the route NO distance gaps have been identified

Although the details on the identified stopovers are limited for this area, the map below provides a clear visual of the region and the stopover locations.

Figure 8. Map of the Faroe Islands: Stopovers



3.5 Norway

The Norwegian coast is renowned for the wide offer of facilities and stop overs for sailors. Sailing is an important activity of the region and a very well established element in the country's culture. Facilities are often free of charge and cover extensively the whole coast and archipelagos of the country.

Overall, 105 stops have been identified in the Norwegian area. For practical purposes, the areas has been divided in three sections, namely: South, Centre and North.

The maps below show the outline of the stopovers in the region stretching from Espevær, in the south of Norway, up to the northern stop of Tromsø.

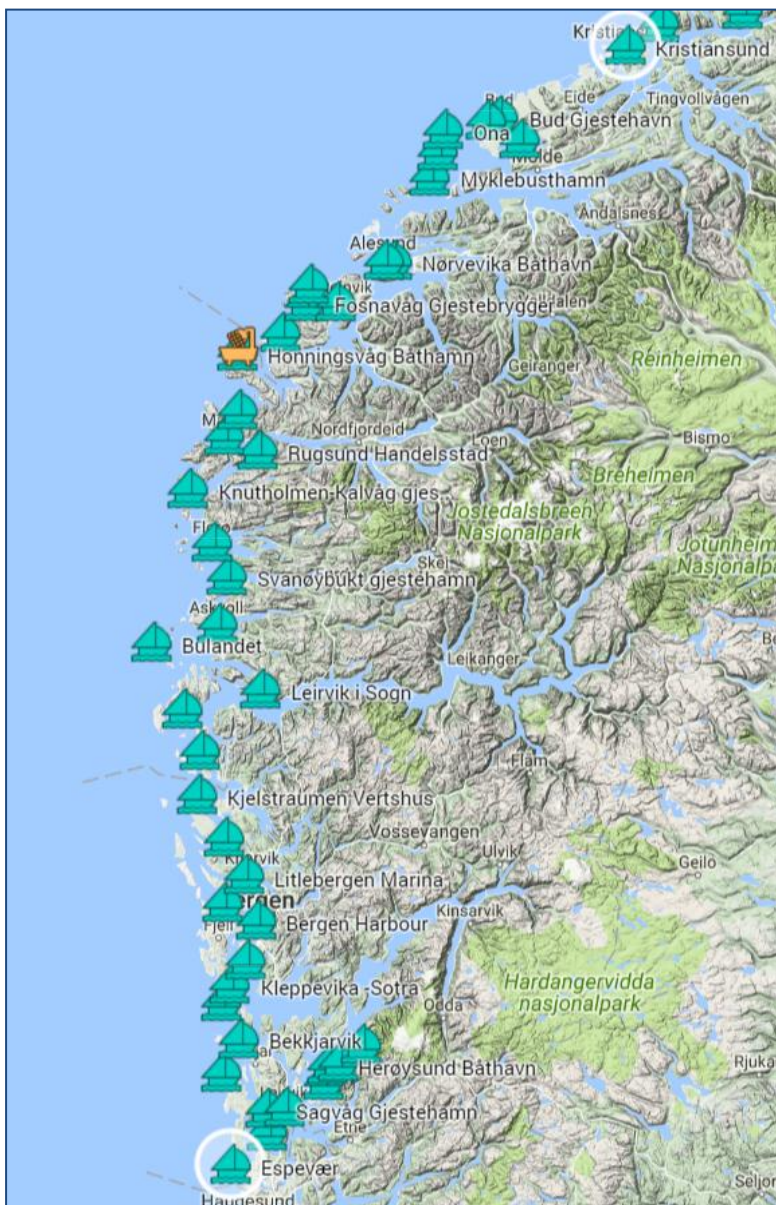


Figure 9. Map of Norway- South segment: Stopovers from Espevær to Kristiansund

Figure 10. Map of Norway- Central segment: from Veiholmen to Tonnes Marina

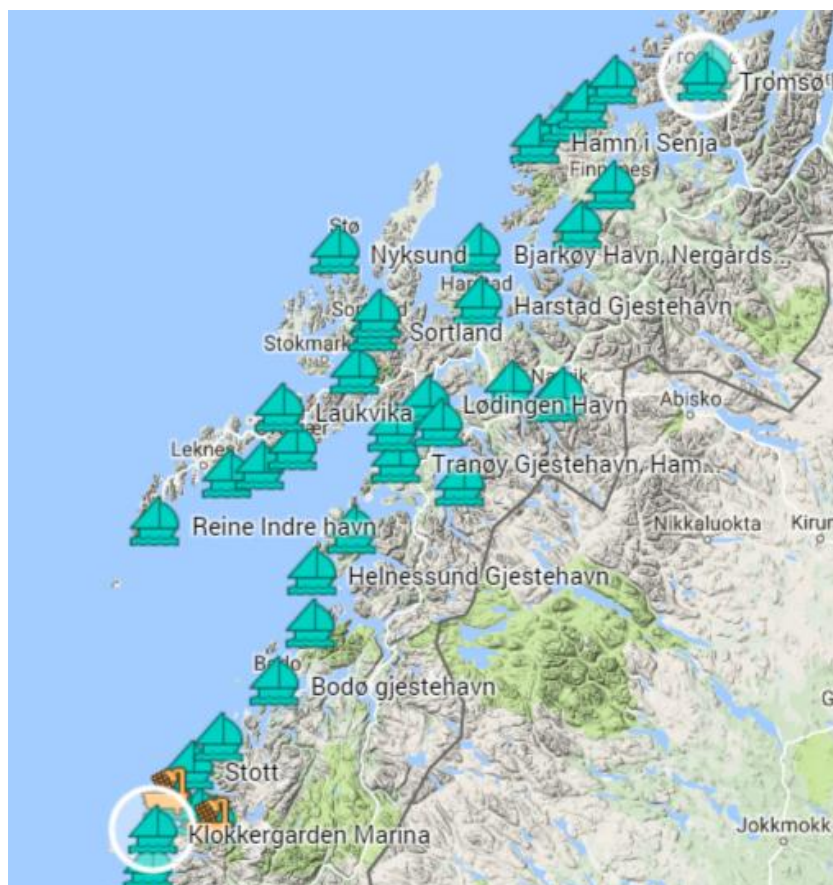
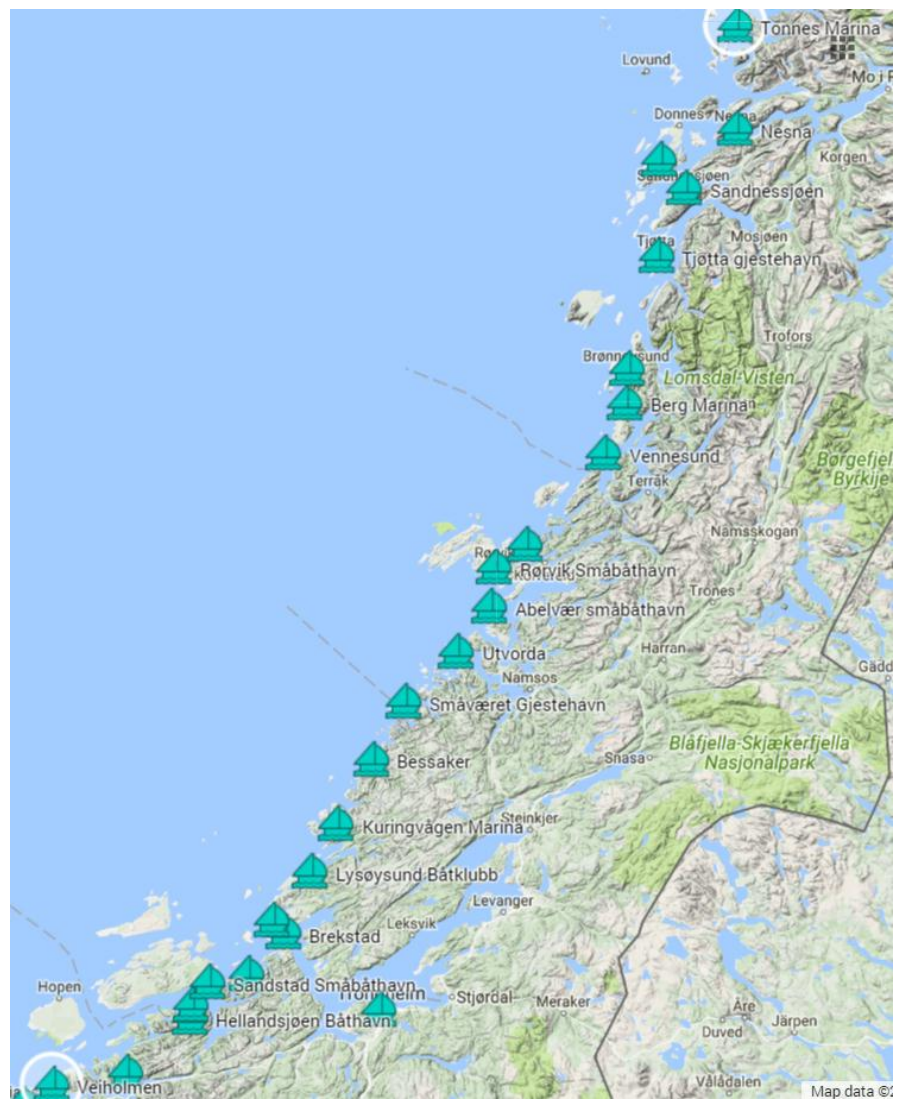


Figure 11. Map of Norway- North segment: from Klokkegården Marina to Tromsø

In many cases, towns, villages and municipality centres provide analogous services as marinas, directly in the proximity of the point of landing. For convenience, where several points of landing (pontoons, quays, floating pontoons, etc.) or facilities were found in the same location at reasonable distance from each other (1 Km), only the name of the main location (for instance the town or village) has been listed with the coordinates of the location. In this case, all details of the stopovers would comprise the highest level of facilities available within the specific location/confined area.

A number of stopovers have been marked as stopover category number 2 (pontoon, port or similar) although these are very well served and are comparable to the infrastructures and services found at marinas. Also, very often it has been found that private businesses, such as pubs and hotels, offer their services to visitors usually for a small fee (e.g. showers), sometimes even without any cost (toilets).

Unlike the listings of the other Cool Route regions, type 3 of stopovers (moorings) has not been necessary to be listed due to the high presence of stopovers of category 1 and 2 on the route. Lastly, due to the high number of stopovers in the region, a selection of the most suitable locations for the project has been completed in order to provide with the definitive list of stops.

→ In this section of the route NO distance gaps have been identified

→ The following 3 facility gaps have been found, as shown in the table below:

Location	Marina=1 Pontoon=2 Mooring=3	GAP - Facility	Missing facility
Honningsvåg Båthamn	2	GAP	Showers
Bolga	2	GAP	Showers
Svartisen Marina	2	GAP	Showers

Table 12. Facility Gaps in Norway

4. Discussion

The present study supports a basis for raising engagement and potential development opportunities in the locations where the gaps have been identified. With the introduction of additional moorings, especially for Scotland, the Republic of Ireland and Northern Ireland to the database, the majority of the distance gaps were thus eliminated. It could be said that all moorings groups are potential locations for development. It is suggested here that the moorings that might be the object of development will require being evaluated on an individual basis.

Based on the latest findings of the 'Cruising Preferences Survey' and elements of the 'Traffic Study', it is deemed necessary to expand the level of detail of the existing stops survey. The database will need to include further details such as draft requirements and other specific requisites for particular types of vessels (for instance, over 20 metres length). It will also be essential to contact private yacht clubs, in order to seek for permission and recognise the inclination of private operators for being part of the Cool Route project. Also, some of the information require being extended and refined regarding the services offered at the several locations. In order to achieve this, following the first version - issued in 2016- of this document, a survey aimed at the marine operators identified in the database was sent out at the end of summer 2016 receiving good results in terms of response rate and information collected for Scotland, Northern Ireland and the Republic of Ireland. The same survey will be repeated in the second part of 2017 to further reach operators and compare the results obtained with the first survey.

Norway, considering its vastity, the density of stopovers, quality and availability of information available represents the most comprehensive region of the Cool Route in terms of options and provision of services.

With respect to the Faroe Islands, the availability of information is regrettably limited. Therefore we have provided the locations of stopovers and their details in the best possible manner according to the sources available.

Two distance gaps have also been identified between the partners' countries, namely between Scotland and the Faroe Islands and Scotland and Norway.

It needs to be prompted that this study is not definitive as it is a living document subject to refining and improvements of details. All the databases are accessible to partners in the Cool Route group 'Dropbox' folder. The maps can also be retrieved by clicking on the following link: https://www.google.com/maps/d/edit?hl=en_US&app=mp&mid=z-UK6CRA_ozM.kbL_MKj40dfg. All the relative information is open for scrutiny and is publically being kept up-to-date as often as possible on shared platforms.

5. References

As described in the methodology chapter, a vast selection of secondary sources has been accessed for the production of the route database and for the final production of the GA. The main sources utilised were:

- Sailing guides

- Web-sites of both public organisations and industry private operators active in the marine sector
- Industry reports also have been used to obtain information and for benchmarking purposes.

The validity of the sources used has been checked and assessed with partners to deliver strength and reliability to the study. While selecting the sources, priority has been assigned to recognised organisations; highly regarded and popular industry sailing guides have been used for their rich and detailed existing databases and collection of data. Finally, valuable assistance has been provided by members of the consortium who shared their individual and precious knowledge of the sector. A full list of the sources used is provided:

Official websites:

www.malinwaters.com
www.sailing.ie/cruising/visitor-mooring/
www.cruisescotland.com/
www.rya.org.uk/
www.crownstates.co.uk/coastal
www.scottishcanals.co.uk
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www.visitmyharbour.com
www.inyourfootsteps.com
www.westboundadventures.co.uk
www.skyeychts.co.uk
www.isleofbarra.com/sailing
www.activecaptain.com

Mapping:

www.google.co.uk/maps
www.findlatitudeandlongitude.com
www.pbo.co.uk
www.afloat.ie
www.thomsonlocal.com/ports-docks-harbours
www.yell.co./ports-docks-harbours

Reports and studies:

SCOTTISH ENTERPRISE SAILING
TOURISM IN SCOTLAND (February 2010)

Sailing guides:

Marina infrastructure in County Donegal:
donegal.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=ef3ad3f595f340e6864160a584f74313

Various Clyde Cruising Club publications, Imray:

- Ardnamurchan to Cape Wrath
- Outer Hebrides
- Kintyre to Ardnamurchan
- Orkney to Shetland Islands
- Firth of Clyde

Ports of Scotland, Yearbook 2016. Maritime Publications Limited

Irish Cruising Club (ICC) publications:

- East and North Coasts of Ireland
- South and West Coasts of Ireland
-

Norwegian Cruising Guide (7th edition) Vol 2 and 3. By P. Mickel and J. Harries

RCC Pilotage Foundation (3rd edition) Norway, J. Lomax. Imray

Guide to Norwegian Ports, Norwegian Maritime Authority. Norwegian Government
Seamen's Service

Cruising Guide to Iceland and the Faroe Islands, M. Henderson. Cruising Association