New Cruise Ground

Discussion Paper

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Maritime NW

New Cruise Ground for Irish Sea / WC Scotland / Celtic Sea

Discussion Paper (Draft 4)

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This document is an independent report prepared for North West Development Agency by Fisher Associates in support of development of the strategy for Maritime NW. It does not necessarily represent the views or policy of NWDA.



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1 Introduction

This paper has been prepared on behalf of NWDA by Fisher Associates in support of the implementation of the Maritime NW Strategy. The strategy identifies a number of key initiatives as core to its development. One of these is the "creation" of a new cruise ground based broadly in the region of the Irish Sea / West Coast of Scotland ("New Cruise Ground").

The strategy proposes to achieve this through a programme of collective action involving key funders and strategic bodies engaged in economic development and tourism. A start has been made, and a group meeting of key stakeholders plus cruise industry marketing representatives is set for late November 2003.

In preparation for this, several participants requested a discussion paper to pump prime the meeting. This paper aims to do this, but does not deal with operational issues and the detail of the concept. It is a hypothesis designed to stimulate discussion. The objectives are:

- To benchmark the New Cruise Ground against other relevant cruise grounds. We have chosen The Baltic, the Norwegian Fjords and Alaska as cruise grounds with comparable features.
- ❖ To hypothesise scenarios on how the New Cruise Ground could develop, given investment and marketing.
- ❖ To carry out a simple economic evaluation of the potential impact of a coordinated action to create the New Cruise Ground, and the likely quantum of justified investment implied by a target economic internal rate of return (EIRR).

These are covered in Sections 2, 3 and 4. The conclusions are discussed in Section 5.

A detailed analysis and strategy to be tendered jointly by key stakeholders is an anticipated outcome of the group meeting. Section 6 proposes a draft Terms of Reference.



2 Benchmarking

The purpose of the benchmarking exercise is to put the New Cruise Ground in context. To compare and contrast the size of the markets, the facilities available, the scope for port calls and tours, and accessibility from key areas of demand. Some of the benchmark criteria (such as shopping) are naturally subjective, but together give a feel for what is on offer, how the New Cruise Ground compares, and for its strengths and shortcomings.

We have benchmarked the New Cruise Ground against cruise areas with similar characteristics, but at different stages of development, namely: Alaska, the Norwegian Fjords and the Baltic. We have not looked at the Mediterranean or the Caribbean, both of which are extremely popular, as they appeal to tourists who would not necessarily be interested in cruises in Irish / British waters. In particular the weather may be an important factor.

Defining the cruise grounds is not straightforward, with the exception of Alaska, which is fairly self-contained. The cruise operators, in a bid to offer new products, do not stick to homogenous itineraries; for example there are cruises that visit both the Black Sea and the Fjords, and British cruises that extend to Iceland. We have therefore picked out those ports that typify a cruise in that area, whilst acknowledging the scope to vary the product offered. There follows a description of each of the cruise grounds and then a comparison on selected criteria.

2.1 Alaska

There has been an enormous growth in the number of cruise ships and passengers visiting Alaska (Figure 1) in recent years; in 2001 there was a capacity of 4.7 million passenger nights, making it the fourth largest cruise ground in the world.

A typical Alaskan cruise has the following features:

- 7 nights duration (over 95%).
- Flying to Vancouver or Seattle and then cruising to Seward for a return flight from Anchorage, or the same itinerary in reverse.
- Or embarking and disembarking in Vancouver or Seattle.



Figure 1: Alaska cruise ports



- Calling at 4 ports: nearly always Ketchikan and Juneau, also Skagway and to a lesser extent Sitka. Cruises may also call at Haines, Seward, Whittier, Prince Rupert or Victoria.
- Glacier visit.
- Tours: "flight-seeing", fishing, terrestrial wildlife, marine wildlife, local culture and activities such as kayaking, hiking and mountain-biking.
- Season is May to September.

The ports of Ketchikan, Juneau and Skagway are the most popular with 681,000, 718,600 and 650,000 passengers respectively in 2002.

Figure 2: Growth of cruises to Ketchikan

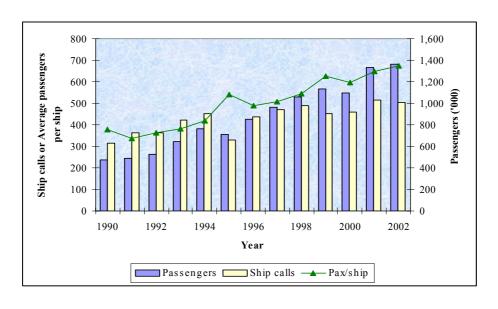


Figure 2 shows the growth in passengers and ship calls in Ketchikan over the last twelve years. Over the period, the number of passengers has increased on average by 9.2% per annum, and this has been accompanied by an increase in the size of number of passengers per call from 750 to 1,300.

2.2 The Baltic

Cruises to the Baltic area nearly all call at the cities of Copenhagen, Stockholm, Helsinki, St Petersburg and Tallinn (Figure 3). Many cruises also call at Oslo, Warneműnde (for Berlin), Gdansk/Gdynia and Visby (Sweden). Baltic cruises may also incorporate a leg to the southern fjords, or call into Germany, France, Belgium or the Netherlands.



Figure 3: Baltic Sea cruise ports

The key characteristics of a Baltic Sea cruise are:

- Usually longer than those in Alaska, ranging from 10 to 14 nights although there are some 7-night cruises on offer.
- Visiting 6-10 ports of call, of which five are the capital cities listed above.
- Generally embark and disembark at the same European port: Southampton, Dover, Harwich, Copenhagen, Amsterdam, although some offer one-way cruises e.g. Copenhagen to Harwich.
- Offer sightseeing tours based on culture and heritage, e.g. castles, museums, city tours.
- Season is May to September.



The number of cruise passengers to the Baltic ports was increasing rapidly at the rate of about 17% per annum from 1996 to 2001, but in 2002 numbers fell as a reaction to the terrorist attacks of September 11th because North Americans were reluctant to fly (Figure 4). However, passenger numbers are thought to have recovered in 2003 with Stockholm and Tallinn expecting all time highs of over 200,000 cruise passengers. Figures for Copenhagen are higher than for those of the other Baltic ports because Copenhagen is also a port of call and home port for cruises to other destinations such as the Norwegian fjords.

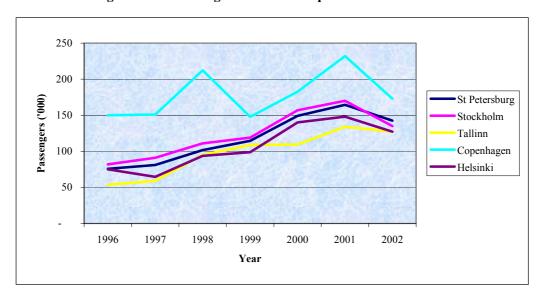


Figure 4: Passengers at Baltic ports 1996 to 2002

2.3 The Norwegian Fjords

Norway apparently has 35 cruise ports (Figure 5) – second only to the US, and has been experiencing strong growth. Bergen is the port most frequented, and it saw passenger numbers increase by an average of 10% per annum between 1996 and 2002 from 68,000 to 123, 000.



Figure 5: Norwegian cruise ports

Typical features of a Fjord cruise include:

- Greater choice of cruise length: mostly 10 to 15 nights although a significant number of 7/8 night cruises are on offer.
- Visiting 4 to 6 ports on a short cruise and 7 to 10 on a longer one.
- Sail from/to Southampton, Dover, London, Copenhagen and Amsterdam.
 There are also some cruises which involve flying back from Copenhagen,
 and a couple which operate out of Greenock and Leith.
- Tours include scenic rides, Viking history, galleries and museums in the cities, local culture.
- Season is May to September with the odd cruise outside this period.

Between 1996 and 2002, Bergen experienced growth averaging 10% per annum (Figure 6). Oslo's cruise passenger numbers only increased by 5% per annum, but it also features on cruises for the Baltic and was hit by the drop in US visitors after September 11th. US residents make up a smaller proportion of cruise passengers to the Fjords than to other areas, thus the Fjords were less affected. Flåm cruise harbour opened in 1999, and has had growth of 16% per annum in the years since then.



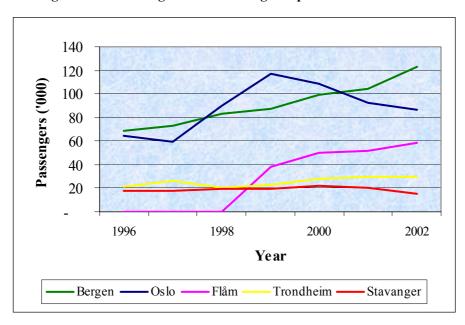


Figure 6: Passengers at Norwegian ports 1996 to 2002

2.4 New Cruise Ground

There is a wide range of cruises currently passing through the Irish Sea / West Coast Scotland region and making at least one port call in Ireland and/or Northern Ireland, NW England, Wales, Scotland, or the Isle of Man (Figure 7):

- Around the British Isles
- Around British Isles, Guernsey and France
- Around Ireland, calling at Scotland and Liverpool
- England, Ireland, Scotland, Greenland/Iceland
- England, Ireland, Scotland, Scandinavia

In addition, repositioning voyages between America and Europe may include a stop at a UK port: often the East Coast of Scotland.





Figure 7: Map of New Cruise Ground

The main ports of call in the Irish Sea are Dublin (29,700 passengers expected in 2003), Cork (31,000), Waterford (8,600), Belfast (4,400), Liverpool (3,300) and Douglas, Isle of Man, (2,400). On the West Coast of Scotland, Greenock (Glasgow) expected 17,000 passengers in 2003 and further north, Oban expected nearly 11,000 in 2003.

The characteristics of a cruise currently incorporating New Cruise Ground ports are:

- About a quarter are short cruises (7-9 days), the remainder range from 10 nights to 19 nights but average 12 nights.
- Short cruises visit 4 to 6 ports, longer cruises 6 to 12 ports but average 9 ports of call.
- Port of embarkation/disembarkation: Southampton, Harwich, London, Dover, Liverpool, Amsterdam, Kiel, Bremerhaven and Copenhagen. Oneway cruises also operate with flights back from Copenhagen and Greenland.
- Tours incorporate heritage, culture and natural features.
- Season is May to September with the occasional cruise in the autumn.



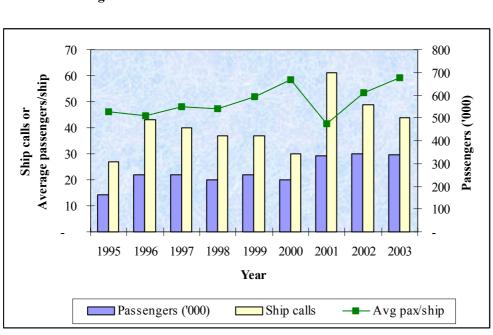


Figure 8: Dublin cruise traffic 1995-2003

Growth in cruise passenger numbers between 1995 and 2002 has been high for Greenock, Dublin and Cork, averaging between 9% and 11% per annum, but more modest for the others at 3%-5% per annum (Figure 8). Liverpool saw a decline over the period, but the cruise passenger numbers are so small that one ship can have a disproportionate impact on the figures.

2.5 Cruise Ground Comparison

2.5.1 Passengers, ship calls and ship capacity

It is clear from Figure 9 that Alaska is way ahead of all the other cruise grounds in terms of passenger numbers with around 700,000 at key ports in 2002. The Baltic figures are slightly higher than the Fjords, although the large choice of cruise ports in the Fjords means that the visits are spread out more. The New Cruise Ground barely registers.



800 Alaska 700 600 Passengers ('000) 500 400 300 **Baltic** 200 **Fjords New Cruise** 100 Ground Tallinn St Petersbg Douglas Ketchikan Stockholm Copenhagen Helsinki Dublin Waterford Liverpoo Port

Figure 9: Passenger numbers 2002

As a result of the large number of passengers, Alaska also has substantially more ship calls than any of the other cruise ground (Figure 10): there may be several cruise ships in a port at any one time in the height of the season. In addition, the cruise operators put their largest ships on these routes; 83% of Alaskan international cruises in 2002 were on ships with capacity of over 1200 passengers. The Baltic and Fjords have more of a range of ship size, as does the Irish Sea. Cork is able to berth ships such as the Carnival Legend carrying up to 2680 passengers, whereas the West Coast Scotland based Hebridean Princess carrying up to 50 passengers also visits. Maximum vessel size at other ports is constrained by their infrastructure.

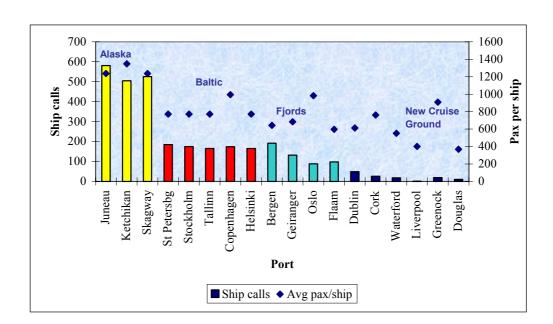


Figure 10: Port calls and average passengers per ship 2002

2.5.2 Growth potential

Alaska

The Alaskan cruise market appears to remain strong and confidence is high. It is regarded as lucrative and cost-effective for the operators and has well-developed land-based customer orientation, designed to maximise economic capture.

The sheer numbers of cruise ships, however, cause berthing problems in ports. Ketchikan port is planning significant expansion to allow it to accommodate six cruise ships at once rather than the current two. Cruise operators' itineraries are coordinated, and they are also beginning to take advantage of long daylight hours to offer more flexible timings on shore-based excursions, which in turn increases capacity in port.

The Alaskan market apparently has a low repeat factor; people want to "see it before it disappears", but then do not feel the need to return. In response to this, operators are providing land-based extensions to their cruises, such as overland touring into the Alaskan and Canadian interiors and are considering mini-cruises to increase customer choice.

The 'Port and Harbours Facility Development Plan, December 2002', prepared for the City of Ketchikan, projected growth in passenger numbers of between 4.3% per annum and 6.7% per annum to 2015. It was considered that with capital investment, operational, marketing and other strategies, a growth rate between 6.4% and 6.7% per annum is achievable.

The Baltic

Northern Europe in general is considered a good area for growth. However, some industry analysts apparently consider that the Baltic is showing signs of fatigue. This is not yet borne out in the passenger numbers as Stockholm and Tallinn - both expect to have received over 200,000 cruise passengers in 2003, an increase of 23% and 49% respectively over the previous peak year in 2001. Nevertheless, like any cruise ground it needs to keep offering new products, and new destinations are being included in itineraries such as Riga, Aarhus and the Norwegian fjords.



The Fjords

Norway has so many potential cruise ports of call that it has enormous scope to offer new itineraries, even if not all have easy access. Cruises up to the Artic Circle are growing in popularity: Longyearbyen had 17 cruise ship calls in 1995 and 29 in 2002. However, the attraction of cruises to Norway seems to be predominantly the fjords themselves, as the choice of shore excursions in the remoter areas is limited (passengers may even prefer to remain on board and admire the view than go ashore in a launch). Bergen is marketing itself extensively as an international turnaround port and has seen its traffic increase as a result.

The New Cruise Ground

The Irish Sea / West Coast Scotland cruise ground is in its infancy, and is thought to have good potential for growth. Growth averaged 9% per annum between 1995 and 2003 for the ports of Cork, Dublin, Waterford, Londonderry, Liverpool and Douglas. This was given a boost by the upgrading of cruise facilities at Cork. From 26 ship calls in 2002, Cork expected to handle 33 in 2003 and 37 in 2004; an increase of 27% and 12% respectively.



2.5.3 Passenger nationality



US passengers spend the most and dominate the cruise market, although German and UK passengers are significant for European cruises. The current figures for European destinations will probably show a lower proportion of US nationals due to the impact of September 11th on North Americans' willingness to fly. The Alaska cruises particularly appeal to North Americans because they are 'nearby', American, and a 7-day cruise fits in with their vacation patterns (a breakdown by non-US nationality is not available for Ketchikan).

St Petersburg is similarly dominated by US residents, but the Fjords seem to have more appeal to the European market, in particular the Germans and the British. This would suggest that the New Cruise Ground, from a low passenger base, has scope to attract more passengers from both the US and from Germany.



2.5.4 Accessibility for passengers

The number of British people taking cruises departing from home ports has increased over the last decade from 47,000 in 1990 to 213,000 in 2002. This is partly driven by the provision of services from Dover, Southampton, Harwich and London, but also through increased popularity of cruises. (The NW of England accounted for 12% of demand for cruises in 2001.)

The analysis shows however, that the key source markets for the New Cruise Ground are the US and Germany. For these nationals, it is possible that longer cruises could be served from established turn round ports such as Dover and Southampton, but these would be less suitable for shorter cruises.

It is important that people from these countries can fly to an airport near to one of the ports in the New Cruise Ground. In terms of links to scheduled air services, the two main candidates are the Ports of Dublin and Liverpool.

Dublin is an international airport with extensive connections worldwide and to the London airports. It currently offers direct scheduled services to three German airports and eight North American ones, although it has around 20 German and over 50 US destinations listed as connected to Dublin (through other hubs).

The Port of Liverpool is located only 45 minutes drive from Manchester Airport. This is the UK's third airport with an increasingly comprehensive network of scheduled services. It currently has flights to eight destinations in the US and Canada as well as nine in Germany. It also has frequent services to the London airports.

Current schedules from Liverpool Airport do not offer connections to the US nor to Germany, but they do fly to some other European countries. There is perhaps potential for Liverpool and other airports such as Belfast, Cork, and Glasgow to host charter flights into key areas of demand, although cruise passengers may prefer scheduled services.

2.5.5 Port accessibility

Ship operators prefer not to anchor off and tender in passengers; it puts a port call at risk of cancellation through bad weather; it risks injury to elderly or disabled passengers; and it may be difficult to cope with the sheer numbers of passengers who may wish to go ashore from the very large ships.



It seems to be regarded by the cruise operators as acceptable to have no more than one tender port per cruise, although this may depend on the size of ship and the nature of the cruise. A summary of port accessibility follows.

Area	Accessibility	Comments
Alaska	Very high	All ports except Sitka have berthing for (Post-Panamax) mega-cruise ships. Sitka passengers have to tender in.
Baltic	High	Stockholm, St Petersburg and Helsinki have no limit. Other ports can handle large cruise ships.
Fjords	Medium High	Main ports of Bergen, Oslo, Flåm have no limit, many other ports can handle large cruise ships. Some of smaller ports e.g. Hellesylt require tendering. Very wide choice of ports gives good flexibility in itineraries.
Irish Sea	High and low	The Irish and N Irish ports can handle large ships, as can Greenock. Ports in NW England have limited access: berths only for smaller ships, otherwise passengers have to be tendered in; also tidal access may be a constraint.

2.5.6 Tours

The scope for shore tours is an important factor in the choice of ports of call. Shore excursions are highly profitable for cruise operators and a key selling point for the cruise. GP Wild have estimated that the net revenue to the cruise operators from on-board services e.g. bar, shops, beauty treatments, laundry, room service and from shore excursions can amount to US\$18 to US\$30 per person per day, depending on the type of cruise. Shore excursions amount to a third of this, hence on a 2,000-berth ship, the cruise operator could receive net revenue of between US\$12,000 and US\$20,000 per day from excursions.



The table below reflects the tours that are currently on offer, not the scope to expand the range of tours (the darker the box the more choice).

Tours	Alaska	Baltic	Fjords	NCG
Natural features	Glaciers, flights	Waterways	Scenic train, valley tours, glaciers, fjords	Countryside tours, Lakes of Killarney, Giant's Causeway, Lake District, Snowdon, national parks, coast
Activities	Canoeing, mountain biking, fishing, hiking, golf, jeep rides, also tied in with land excursions	Walking and cycle tours	Walking, golf	Cycle tours, walking heritage trails, water adventure, golf
Culture & Heritage	Native culture, Totem village, gold mines	City tours, palaces, museums, cathedrals, fortress	City tours, concert, churches, museums and art galleries	City tours, Castles etc, Celtic, Churches & Cathedrals, museums & galleries, whiskey, Beatles, literature



Tours	Alaska	Baltic	Fjords	NCG
Wildlife	Whale and bear watching, raptors, nature walks		Nature walks	Walks, Flora or fauna theme
Shopping & Entertainment	Good choice local artefacts and crafts	Jazz clubs, opera, china, knitwear, rugs, local goods, jewellery, street markets, restaurants and bars	Local goats cheese, glass works	Pubs, Irish / Scottish handicrafts, Waterford crystal, whiskies

This is a subjective exercise, however, it is clear that the New Cruise Ground can offer shore excursions comparable to other more developed cruise grounds.

It has sufficient variety to enable themed cruises such as heritage, wildlife, and local flora and fauna. Activity cruises are becoming increasingly popular, partly as the average age of cruise passengers falls, and the New Cruise Ground could develop in this area.



3 Scenarios

We have developed hypotheses for the New Cruise Ground based upon three cases:

• Low Case: European growth

• Base Case: Enhanced marketing

• Best Case: Facilities step change

In each case, we have posited plausible scenarios for the development of the New Cruise Ground in terms of passenger numbers and ship calls etc.

3.1 Low Case: European growth

There is substantial optimism in the future of cruises. GP Wild have estimated the total market for cruises will grow at about 4.5% per annum between 2003 and 2012, and that the Northern European market will increase market share to grow at 5% per annum in the same period. This is dependent on no further incidents such as September 11 and on the provision of sufficient capacity. Capacity overall is set to increase as there are 39 cruise ships on order for delivery by 2006, although these will be deployed predominantly in the Caribbean and Mediterranean.

In this case, we assume that the Irish Sea / West Coast Scotland cruise market grows at 5% per annum over the next 10 years. As discussed above, growth in the Irish Sea market has been around 9% per annum over the last 8 years. However the recent upgrading of cruise facilities at Cork may well have caused a step change in that port's traffic. A growth rate of 5% per annum may be on the low side given recent experience, but should be readily achievable.

This scenario assumes no change in the mix of vessel sizes visiting the area; hence average vessel size remains the same at about 620 passengers. Ports such as Liverpool and Douglas can therefore continue to receive cruise ship calls on the same basis as at present.

There is a problem with this assumption in the longer run, as the smaller cruise ships tend to be older, and the new orders are for large ships - of the ships on order, the smallest is 1,600 passengers.



As a result, accessibility of ports could become even more of an issue in the future if operators place more of the large ships on European routes. However, there may continue to be a demand for small ships at the luxury end of the market, which could be attracted if the port facilities meet their high expectations.

Under this scenario, total port calls in the Irish Sea would increase from 145 in 2003 to 260 in 2015. A port like Cork, assuming that its share of visits remains the same as now, would experience an increase in ship calls from 33 to 59. Passenger nights overall would increase from just under 90,000 in 2003 to over 160,000 in 2015, and Cork would handle about 55,000.

3.2 Base Case: Enhanced marketing

As with the Low Case, this scenario assumes no change in the physical infrastructure, or in the mix of vessels. It posits generating value added through collaboration. Cruise Ireland has already made progress by bringing together stakeholders from the Republic and Northern Ireland including ports, councils, tourist boards and local businesses such as a woollen mill and a pottery.

Under this scenario, the cruise marketing organisations would better collaborate or integrate, and further develop marketing efforts to attract cruise ships under considerably greater support from the key economic and tourism agencies. Some of these agencies also have a direct role, as they are tasked with one of the key *strategic sales*. These are:

- Primary Business-to-Business (B2B): By the New Cruise Ground marketing collaboration / organisation to the major cruise lines and tour operators that charter cruise vessels.
- ❖ Secondary B2B: By the New Cruise Ground marketing organisation / collaboration to the key tour operators who sell cruises operated by lines and charter operators.
- ❖ Business to Consumer (B2C): By public sector tourism organisations (e.g. Visit Scotland etc.) to US and German consumers, to create general demand for cruise products based around the New Cruise Ground.



The marketing effort needs to be backed up by high quality service onshore. This includes luxurious, air-conditioned coaches; knowledgeable tour guides with foreign languages; shops and restaurants that are open when the ship calls, selling quality goods; and attractions which appeal also to the independent traveller who does not want to join an organised tour.

As operators typically plan itineraries at least 2 years in advance, the impact of the marketing would not be felt for the first 3 years, but it is then assumed to increase passenger nights and ship calls by 10% per annum for five years before returning to 5% growth.

A growth rate of 10% per annum is in line with the growth rates that have been experienced in Cork and Dublin over recent years. The Port of Cork began seriously to market itself in the cruise sector in the 1990s and has seen its annual ship calls increase from 8 to 33 since then.

The basic Enhanced Marketing scenario (2a) would result in total port calls increasing from 145 in 2003 to 330 in 2015. For a port like Cork, assuming its market share remains the same, it would mean 75 ship calls or 3.4 a week. Passenger nights would rise from just under 90,000 in 2003 to 203,000 in 2015, and Cork would handle about 70,000.

With this scenario, the level of cruise traffic at, say, Cork would still be less than half that currently attracted to Bergen (192 ship calls and 129,000 passengers in 2002) and to Stockholm (175 ship calls and 135,000 passengers).

We also considered a variation on this scenario to take account of the marketing that has already taken place and to build on the growth already experienced. In Scenario 2b, growth is set at 10% per annum from 2003 until 2012 when it reverts to 5% per annum. Ship calls increased to 378 by 2015 and passenger nights to 233,500.

Taking Cork as an illustration again, the number of ship calls would be 86 or nearly 4 per week, and passenger numbers could rise to 80,000. This is still well below Bergen in 2002.



3.3 Best Case: Step change

The New Cruise Ground is effectively constrained by the quality of port facilities overall. Irish ports and Greenock in Scotland can handle larger cruise ships, but other ports cannot - at least not with the level of service the cruise operators expect e.g. not having to tender in, or being restricted to a small tidal window. The Step Change scenario envisages building / upgrading cruise facilities.

The New Cruise Ground is an area that is well placed for:

- Offering a port of call on longer itineraries, such as to Iceland, transatlantic cruises, and tied in with Scandinavia and the Fjords, as is currently happening.
- Round Ireland and round Britain cruises: again as currently happens.
- Cruises in the Irish Sea / West Coast Scotland area.
- Operating a home port for cruises either within the Irish Sea, around the British Isles, or to Iceland / Greenland.

The distances between ports in the Irish Sea are short enough to enable a 7-day cruise to call at 4 to 6 ports, which would be attractive to those cruisers who regard the ratio of port calls to nights as important. At present large cruise ships are constrained to Cork, Dublin, Waterford, Belfast and Greenock. This gives limited scope for different itineraries, resulting in failure to offer a cruise ground with critical mass. This constrains growth potential of all stakeholders – including the current market leaders.

In the Step Change scenario we assume that there is investment in world-class terminals, which will put the New Cruise Ground on a par with the other cruise grounds. Such investment would make the area more attractive to the larger, predominantly US ships, and could attract more US visitors (on 7-day or longer itineraries) providing that comfort and level of service match expectations. Investment locations might include Liverpool, a port in Cumbria, the Isle of Man, a Scottish Isles and Welsh Port(s), plus quality and capacity upgrades to other ports as appropriate. All of these locations have quite individual offers that add value to the New Cruise Ground.



Under the first Step Change scenario (3a), we have assumed that passenger growth follows the Enhanced Marketing scenario until 2008 when the new cruise terminal facilities come into operation. Passenger numbers then increase by 20% per annum for the next five years after which they gradually tail off and revert to 5% per annum in 2017. We have again considered a variation due to success from current marketing (scenario 3b).

In the Step Change scenario the average size of ship is assumed to increase once the facilities are operational: we have used a 15% step change in 2008 and 5% increase per annum thereafter. These assumptions are purely arbitrary and would result in the average passengers per call in 2015 being 1000, which is similar to the average size in the Baltic and Fjords at present.

However, it is probable that the average size in these areas will also have increased by then, and given that ships are not dedicated to a particular cruise ground, the effect will be felt in the New Cruise Ground as well.

These assumptions would result in an increase in the number of passenger nights to nearly 420,000 in 2015 (483,000 under scenario 3b) and in port calls to 420 (483). As an illustration, assuming no change in market share, Cork would have 145,000 passengers (167,000) in 2015, and ship calls would be around 96 or 4.3 per week (110 or 5.0 per week) taking account of change in fleet deployed. This would place it on a similar level to St Petersburg in 2002.

The increase in passenger numbers required to place the New Cruise Ground on the same footing as Alaska today is enormous; numbers would have to increase by 65%-75% per annum over the five years of step change. We do not consider that this is feasible, nor necessarily desirable. The increase in passengers would not have an entirely positive impact, and may reduce the attractiveness of the features that attract cruisers in the first place e.g. the peacefulness. This is a problem that the Alaskan authorities are also facing, although cruise passengers, if they believe that the scenery may be "gone tomorrow", may be prepared to put up with it.

Figures 10 and 11 show the results of the three scenarios (and variations) for passenger numbers and ship calls.

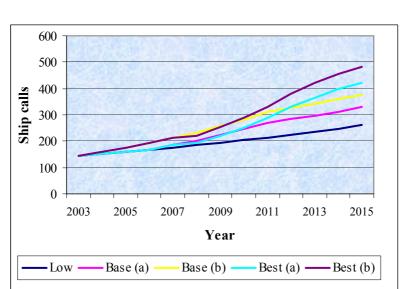
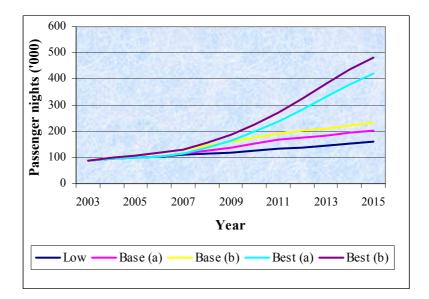


Figure 10: Ship calls







4 Economic Analysis

4.1 Approach

The economic analysis attempts to quantify the economic benefits that might result from increased cruise passenger numbers under each of the scenarios. There are several possible approaches to this.

UK funding regimes tend to focus on "outputs" in terms of number of jobs created, and benchmarking the "cost per job" against other projects to determine opportunity cost. Whilst an understandable methodology, it relies critically on identifying how many jobs will be created directly / indirectly by an investment – a tricky exercise which may also miss the wider impacts on issues such as image etc.

Most international funding agencies (e.g. World Bank) rely on a more intuitive methodology that establishes the Economic Internal Rate of Return (EIRR) of a Project. If this meets a certain target, it means that investment is generating a return that will increase GDP – thereby improving wealth and creating jobs. We have used this approach.

Target EIRRs are typically in the region of 6% to 8%. We have determined the level of investment in principle that would be justified given the economic benefits expected against a target return of 10%.

We have used *expenditure* as a simple proxy for economic value added. This is not a true measure of the economic benefits. Ideally we would use measures of value added; we would also take account of port charges, expenditure on fuel and supplies, and the additional benefits for a home port of increased air travel, expenditure on hotel accommodation, restaurants, car hire and sightseeing and so on. In addition there are indirect benefits generated through multiplier effects on the economy.

To assemble and analyse all this is beyond the scope of this paper and we have used expenditure to give an initial view on the viability of the concept. The benefits mentioned above are to a large extent an upside risk which will tend to counter the over estimate that expenditure represents over value added.



4.2 Values

Various pieces of research have been carried out into the economic value of cruises, although they have focussed on estimating average *spend* per passenger in port. GP Wild¹ looked at the findings of different ports and their estimates varied from expenditure of £10 per person in local shops in Penzance to £53-£72 per person in Lerwick. Based on this, they assumed that, in 2001, on average each passenger spent £40 in port. Each crew member would spend a similar amount and half the crew would be allowed shore leave in each port.

In July 2003 a study into the economic impact of cruise traffic in $Cork^2$ estimated the direct value of expenditure (i.e. the purchase of goods and services by cruise liner passengers and crew) at ϵ 312 (£197) per passenger and ϵ 140 per crew member in Cork in 2002. It also estimated the indirect benefit (i.e. the multiplier effects as those in receipt of expenditure in turn spend on goods and services, and this stimulates employment and production) as ϵ 246 per passenger and ϵ 126 per crew member. Based on 19,800 passengers and 10,197 crew members, the total average direct expenditure was therefore ϵ 7.61m in 2002 and the indirect expenditure was ϵ 6.16m.

Research in Alaska suggests that passengers spend an average of \$100 per person in Alaskan ports. However, the amount spent in port will obviously depend on what is available.

For our analysis we have assumed an average spend per passenger of £50 per port and in addition that the cruise companies will spend on average £30 per passenger for excursions, making a total of £80 per passenger. We also assumed that each crew member would spend £50 per head in port; that there are 2.5 passengers to each crew (based on GP Wild's assumption) and that half the crew go ashore at each port.

The results are presented in the table overleaf.

² 'Tourist Expenditure – A study of the Economic Impact of the Port of Cork's Cruise Traffic' by Dr Richard Moloney, July 2003





¹GP Wild: 'BTA Study, Economic Benefits of Cruise', March 2001

4.3 Results

New Cruise Ground Scenarios for 2015 Benchmarked against Baltic and Norway (2002 and 2015) New Cruise Typical Key Port Implied Investment **Ground Total 10% EIRR** Ship calls Pax Ship calls Pax Low Case 161,000 59 Scenario 1 260 55,700 Base Case Scenario 2a 329 203,000 75 70,300 £24m Scenario 2b 378 234,000 86 80,800 £47m Best Case Scenario 3a 420,000 96 145,400 420 £134m Scenario 3b 483 483,400 110 £173m 167,200 Benchmarks (2002) Baltic 1,335 (est) 175 135,000 1,030,200 750 (est) 453,530 123,400 192 Norway Benchmarks (2015) Baltic 2,500 1,943,000 330 255,000 1,400 855,000 362 233,000 Norway



Using these very simplified assumptions, the methodology requires us to compare the value added in scenarios 2 and 3 against what would have happened anyway – defined in scenario 1: Northern European growth of 5% per annum.

The Enhanced Marketing Scenario (2a) shows additional expenditure of £2.3m per annum in 2010 rising to £3.8m in 2015. Working on a 20-year revenue stream (to 2023), but assuming passenger growth falls to 1% per annum after 2020, investment of £6m per annum for the first four years would generate an EIRR of 10%.

Scenario 3a: the Step Change, under the same assumptions on passenger spend and growth in numbers, shows additional expenditure of over £6.4m in 2010 rising to £23m after 20 years. Investment of £134m over the next four years would generate an EIRR of 10%. As a sensitivity, a 25% increase in passenger spend would allow an increase in capital expenditure to £173m at 10% EIRR.

The total number of ship calls in the New Cruise Ground in 2027 would, under the Step Change, be 920 (Ketchikan alone currently has 505). If we assume that there are 22 weeks in the season, then that means there are 42 ship calls per week. If there were 6 ports then that works out at 7 calls per port per week, and obviously with 8 ports it would be 5-6 calls per week. To offer a 7-day itinerary solely within the New Cruise Ground, with say 5 or 6 port calls, then 8 to 10 key ports would give room for variety, backed up by supporting ports which could include some tender ports.

There are number of proposals for cruise terminal developments at various stages in the North West of England and elsewhere. Assuming that there is at least some existing infrastructure and assets to work with, we can assume that terminals will cost in the region of £5 million to £10 million for first phase developments. A collection of these look well justifiable when set against the total implied investment of £134 to £175 million at a 10% EIRR.



5 Conclusions

We propose that a network of terminals would enable the Step Change scenario and that this it is an economically viable concept. We also propose that the value added from cooperation, especially through well-funded and coordinated marketing, could have substantial benefits for all stakeholders.

The key findings from this discussion paper are:

- The New Cruise Ground is low on the cruise growth curve, and has good potential to increase its share of a growing market, particularly attracting US passengers through the key airports.
- It has a good range of opportunities for shore excursions in comparison with other cruise grounds, and more that could be developed.
- It is well placed to feature in different itineraries, of varying lengths, as well as the development of the New Cruise Ground in its own right.
- The growing trend towards larger ships has implications for terminal development.
- Enhanced marketing will have a positive impact on passenger numbers.
- A step change to investment in world class cruise terminals will benefit all cruise ground ports, despite the ports being in competition with each other, as it will enable the development of the New Cruise Ground.
- It is estimated that the New Cruise Ground needs 8 to 10 key ports offering high levels of marine access, and that these would be backed by supporting ports offering niche attractions to supplement these.
- The initial findings on value added look very encouraging, but need to be worked through properly.



6 Draft Terms of Reference for Detailed Study

6.1 Objective

To prove or disprove the "Fisher hypothesis" with modification as required.

6.2 Key Tasks

- 1. Market analysis that adds value to existing reports, partly in terms of depth, but primarily in terms of providing actionable management information.
- 2. Detailed identification of target markets, considering industry trends, and subsequent definition of relevant operational requirements both marine and landside.
- 3. Model cruise itineraries based on target markets (general, ancestry, heritage, culture, environment, culture etc).
- 4. Baskets of prioritised individual land based itineraries categorised and cross-referenced to target markets.
- 5. Branding analysis and recommendations tailored for key markets.
- 6. Market testing 1 to 5 with relevant representative views, from lines, tour operators, ports, tourism organisations, and others as appropriate.
- 7. Based on visits to all relevant ports and consultations with regional stakeholders, develop a staged and flexible terminal and related facilities development strategy that balances value added (bringing to the overall cruise ground key value adding elements) against cost of facilities development. Consider strategies such as:
 - o Based on what we have now minor investment
 - o Based on upgrading modest investment
 - Significant terminal development major investment
 - o Other lateral thinking



- 8. Assess the overall economic justification for each strategy against quantified projections against a methodology and indicators to be agreed with key public and private sector funders.
- 9. A co-ordinated collaborative marketing plan that identifies costs and value added from a collective approach.
- 10. A fully worked and costed action plan for the next 5 years.

6.3 Milestones

- Inception Workshop
- Interim Report on 1 to 6
- Interim presentation
- Draft Final Report to comprise the suite of deliverables
- Presentation on DFR
- Final Report

