

Cruise Council

2011/2012 REPORT

Making a real social and economic contribution to Europe's economy



Business or pleasure? You sit at a table in a conference centre on the top deck. You enjoy the maritime atmosphere combined with great facilities. The ship's state-of-the-art, reliable, wireless Internet and GSM connection suits you quite fine. And for a moment you wonder, is this business or pleasure? You agree with yourself, it's both.

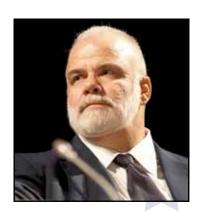
Your ships. Our service. Shared success.

Maritime Communications Partner

Together with major US and European based cruise brands, we provide passengers with 'just like home' reliable GSM, CDMA and WiFi services. MCP raises the bar for passenger and crew satisfaction by providing value-added onboard communication services.

For more information visit our website www.mcp.com or contact us at:+ 47 37 09 00 00.





Foreword

elcome to the European Cruise Council's 2011/2012 Report. Hopefully it will provide policymakers in Brussels as well as the wider world with an interesting insight into the many facets of the European cruise sector.

It is encouraging and indeed remarkable that in these highly uncertain times the cruise industry continues to grow steadily and make a real social and economic contribution to Europe's economy. The number of Europeans and non-Europeans who choose a cruise holiday in Europe has more than doubled in the past decade to over 5 million. The report shows the industry generated €35.2 billion of goods and services, and increased its European bookings by 9.3% over 2009 to command 30% of the global market. It generates employment for over 300,000 people across Europe, an increase of 55% since 2005.

It is also worth recalling that 99% of the world's cruise ships are currently built in European shipyards, which in turn buy 99% of all their supplies from European manufacturers. The investment of $\leqslant 10.3$ billion in new ships announced up to 2014 testifies to the fact that the cruise industry is a key driver in maintaining a European shipbuilding industry.

This report not only addresses in some detail the outlook for our sector in the global context against the background of recent geo-political events, but also considers the commercial factors and challenges affecting the industry in the different countries and regions of Europe.

At the ECC Conference in June, Commission Vice President Siim Kallas recognised that the cruise industry sets an example for the wider maritime sector by having "a very good environmental record, sophisticated, stateof-the-art ships that are safe, secure and equipped with competent crew".

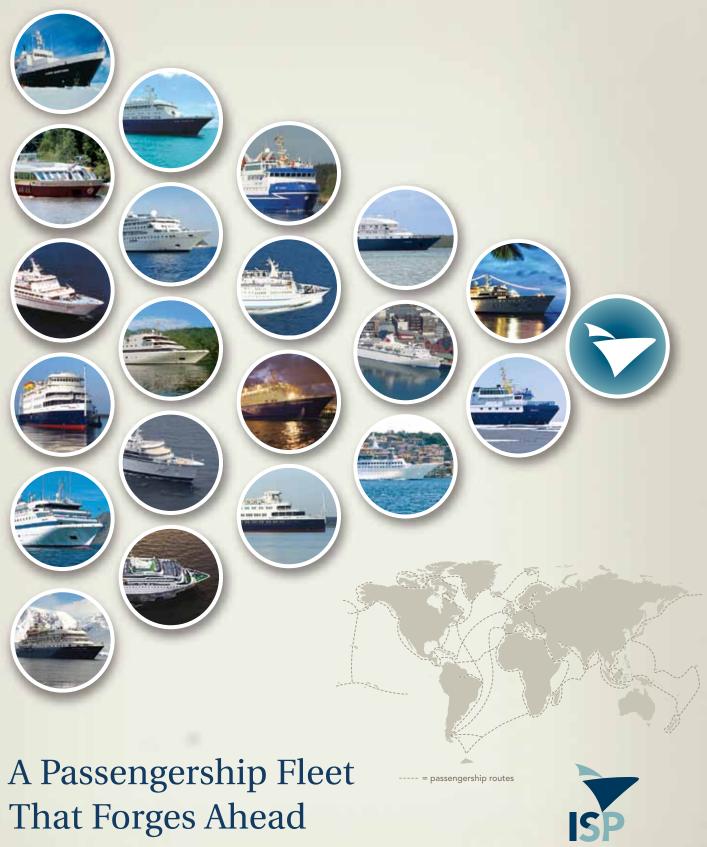
These are attributes of which the cruise industry is rightly proud and which the industry is determined to continue and, reflecting this, the report looks at the many initiatives at the forefront of innovative technology which are being pursued: the prospects for exhaust gas scrubbers, ship design, engine design and alternative fuel sources to name but a few.

Such initiatives are of course a reflection of the wider focus by both governments, NGOs and indeed the general public on environmental issues. In this regard cruise lines are fully aware at both company and industry level of their key role in ensuring that growth is sustainable. It is a challenge to ensure that environmental sustainability goes hand in hand with Europe remaining a good place for doing business, and the report addresses some of the factors relating to ship emissions and waste management, among others, in this context.

There is a clear need for an intensified dialogue between the industry and the regulators on environmental and safety issues, but the need for cooperation is equally evident as between ports and the cruise lines on a number of important matters relating to port operations and services. These are also discussed in the pages of the report.

I hope that this brief introduction will encourage you to explore a little further the many and complex elements of the cruise sector operating in Europe, and to appreciate the positive social and economic potential we can make to our part of the world.

Manfredi Lefebvre D'Ovidio, Chairman ECC and Chairman Silversea Cruises



ISP delivers both the expertise and the experience to handle every aspect of managing and operating your passengerships worldwide. For 20 years, we've been dedicated to providing the most reliable, professional, and cost-effective solutions for your business, from passenger service to maintenance to financials and anything else you or your clients may need.



passengership management

Ashcroft & Associates Ltd., the publishers of the ECC Report, would like to express their sincere thanks and gratitude to the many organisations that have helped in the production of the magazine by contributing to articles and reports, or supplying facts and figures, information and pictures, or provided help in other ways.

We have made every effort to ensure the accuracy of the information but changes occur incessantly. Readers are advised to check that any material facts are still current with the responsible authorities.

For information about future issues of the ECC Report please email: info@ ashcroftandassociates.com or tel:+44 20 8994 4123

The contents of this publication are protected by copyright.

Publisher and Editor

Chris Ashcroft

Contributors

Tony Peisley John McLaughlin

Design & Production

marcusmacaulay.co.uk

Administration and Finance

Gilly Ashcroft

Circulation

Kerstin Jones

Printed by

Warners Midlands



Published by Ashcroft & Associates Ltd

PO Box 57940, London W4 5RD, United Kingdom



Contents



3 Foreword

By Manfredi Lefebvre D'Ovidio, Chairman European Cruise Council and Chairman Silversea Cruises

9 A stable, secure and efficient operational environment is our common goal

By Pierfrancesco Vago, Vice-chairman of ECC and CEO of MSC Cruises

10 Structure and goals

By Tim Marking, Secretary General

- 12 The challenge of growth vs. Pricing
- 19 Can European shipyards win the race?
- 22 European economies boosted by cruising
- 24 Tough year for Europe but demand still grows
- 35 Are cruise calls a cost or a benefit?

- 39 Green issues dominate new ship design
- 43 Engines an evolving science
- 47 Derogation and fuel availability
- 48 Is LNG the solution?
- 50 Emissions technology
 - a race against time
- 52 The need to harmonise sulphur policy
- 54 Addressing the carbon issues
- 56 Consistency of standards required for ship and shore
- 58 Onboard recycling
 - a waste of time?
- 60 ECC favours global solutions
- 62 Will member states interpret passenger rights the same way?
- 64 Consistency across Europe the key health concern







66 ECC members profiles

- 68 AIDA Cruises
- 69 Azamara Club Cruises
- 70 Carnival Cruise Lines
- 71 Celebrity Cruises
- 72 Croisières de France
- 73 Compagnie du Ponant
- 74 Costa Cruises
- 75 Cunard Line
- 76 Disney Cruise Line
- 77 Fred. Olsen Cruise Lines
- 78 Hapag-Lloyd Cruises
- 79 Holland America Line
- 80 Hurtigruten
- 81 Iberocruceros
- 82 Louis Cruises
- 83 MSC Cruises
- 84 Norwegian Cruise Line
- 85 Oceania Cruises
- 86 P&O Cruises
- 87 Phoenix Reisen
- 88 Princess Cruises
- 89 Pullmantur
- 90 Regent Seven Seas Cruises
- 91 Royal Caribbean International
- 92 Saga Shipping
- 93 Seabourn Cruise Line





94 Silversea Cruises95 Star Clippers

96 TUI Cruises

98 Associate members

Up to 9% savings on your annual fuel bill*

Intersleek 900 is the latest generation foul release coating that offers proven savings of up to 9% on your annual fuel bill.

With over 400 vessels now coated, **Intersleek 900**'s proven performance offers significant reductions in greenhouse gas emissions and time in drydock.

Better for the environment, better for your business.

To find out more visit www.international-marine.com/intersleek900





Full speed ahead!

Discover a world of safe and hygienically clean professional dishwashing technology with MEIKO.



Jürgen-Iver Sell · Mobile: +49 175 5432817 · E-Mail: marine@meiko.de · www.meiko.de



"A stable, secure and efficient operational environment is our common goal"

urope is firmly established as the second largest cruise market, after North America, with a global market share currently of 30% with 5.5 million European passengers embarked from a European port in 2010.

The industry is strongly committed to continuous growth, offering guests the most innovative ships and great value for money. Through the European Cruise Council the industry explains to governments, European and international institutions, as well as the general public, how the cruise sector is becoming a key driver of Europe's economy and an effective catalyst for the development and promotion of tourism throughout Europe.

But there is no room for complacency, and the sector continuously monitors Europe's macro-economic situation because it weighs so heavily on business and consumer confidence. The global financial crisis; the eurozone crisis and its potential repercussions in the United States; the political turmoil sweeping Northern Africa and Europe; the occurrence of devastating natural disasters; the piracy that continues to threaten the Gulf of Aden and surrounding areas: all these factors will ultimately have an impact on travel and tourism demand at local and international level. It's our responsibility as a sector to rise to these challenges — which we have already done in many parts of the world over the past 18 months alone.

The cruise industry has shown exemplary resilience in the face of these formidable difficulties – through a flexibility and mobility that land-based resorts can only dream of, combined with a unique ability to give holidaymakers a sense of security that is particularly appreciated in unsettled times. These inner strengths have proven crucially helpful in this challenging phase of the industry's development.

But that's not all. Cruise companies are also skilfully manoeuvring around problems to optimise processes and choices. Taking advantage of their mobile assets they are, for instance, moving cruise ships to where demand seems strongest – namely Europe, where the great potential is still far from being fully exploited.

Cruise companies are also enriching their itineraries, constantly exploring new places to reach a larger audience.

They are increasingly diversifying their product offerings, not only providing an incredible array of choices for all ages throughout the year, but also building ships that are either focused on the itinerary or on the 'hardware', making them a destination in their own right.

Finally, the sector is doing its best to pragmatically contain operating costs (on which highly volatile fuel prices have a considerable effect), and it is able to do so mainly through economies of scale.

The ideal situation for the industry – our core common goal – is a stable, secure and efficient operational environment, complemented by modern structures and run by an appropriate regulatory framework that meets the understandable legislative ambitions of the European institutions without compromising the sector's competitiveness. With this in mind, we have fostered dialogues with all port authority and destination stakeholders, inviting them to play their part in helping to make a difference. The benefits of such a proactive partnership and 'pooling' approach could be real and tangible for everyone involved.

An important factor in bringing about this operational environment is for the industry – through the ECC – to be fully involved in the crucial debate around the European Commission's 2011 white paper entitled Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system.

The cruise industry cares deeply about the environment. It cares deeply about people, passenger rights and crew rights – the very issues raised in the white paper. Sustainable shipping, greenhouse emission cuts, the transition to low-sulphur fuel, waste management, safety packages, regulation and anti-piracy activities are other pressing issues to be concluded. The ECC firmly believes that the cruise sector can make a significant contribution to the debate, and through its pioneering position help to find the solutions to Europe's challenges.

Pierfrancesco Vago, Vice-chairman of ECC and CEO of MSC Cruises

Chairman

Manfredi Lefebvre,
Silversea Cruises



Vice-Chairman **Pierfrancesco Vago,** MSC Cruises



Michael Bayley, Royal Caribbean Cruises Ltd.



David Dingle, Carnival UK



Michael Thamm, AIDA Cruises



Andy Stuart, Norwegian Cruise Line From 15/12/11

Board members



Sebastian Ahrens, Hapag-Lloyd Cruises



Luis Avila, Pullmantur



Georges Azouze,



lain Cottam, Hurtigruten



James Duguid, Saga Shipping



Eric Krafft, Star Clippers



Antoine Lacarriere, Croisieres de France



Robin Lindsay, Oceania Cruises



Costakis Loizou, Louis Cruises



Richard Meadows, Seaborn Cruise Line



Lynn Narraway, Carnival Cruise Lines



Gianni Onorato, Costa Cruises



Mike Rodwell, Fred. Olsen Cruise Lines



Graham Sadler, Regent Seven Seas Cruises



Jean-Emmanuel Sauvee, Compagnie du Ponant



Alfredo Serrano, Iberocruceros



Joseph Slattery, Holland America Line



Richard J. Vogel, TUI Cruises



Tom Wolber, Disney Cruise Line



Johannes Zurnieden, Phoenix Reisen

Chairmen of Sub-Committees



Ports & Infrastructure **Neil Palomba,** MSC Cruises



Tourism & Consumer Affairs **Maria Pittordis,** Hill Dickinson



Environment, Safety & Security **Tom Strang,** Carnival Corporation



Public Relations **Fabrizia Greppi,** Costa Cruises



Health & Hygiene **Ruth Marshall,** RCL Cruises

NB David Dingle, Carnival UK is chairman of the Taxation Sub-Committee. The recently formed Labour Affairs Sub-Committee is due to make an appointment shortly.

ECC Secretariat



Secretary General **Tim Marking**



Director Technical, Environment & Operations Robert Ashdown



Administrative Support **Monica Ford**

10







Structure and goals

by its founding cruise company members in 2004 were essentially twofold. The first was a belief that the industry would experience a period of significant growth and that there was a general lack of awareness of the social and economic contribution of the industry to Europe at national, regional and local levels. Essential in this context has been the commissioning of independent economic impact studies, the results of which are addressed in this report.

The second key element was the increasing importance of Brussels as a regulatory centre, it being seen as vital that the industry actively should engage in discussions with the EU institutions and other stakeholders on the many and complex issues which may impact the potential for achieving sustainable growth in the future.

These dual objectives are set out in the ECC's mission statement, its goals being:

- to work for the elimination of trade barriers and for an EU regulatory environment that will foster the continued growth of the cruise sector in Europe;
- to strive for an EU regulatory environment that supports safe shipping operations and protection of the environment, and one that also recognises the international dimension of the sector and the roles played by the International Maritime Organisation and International Labour Organisation in particular;
- to raise the profile of the cruise sector with the EU institutions in relation to its economic and social contribution to Europe; and
- to co-operate with EU institutions and nongovernmental organisations in pursuit of these objectives while anticipating and responding to policies and actions which conflict with these objectives.

Now comprising the 30 leading cruise lines operating in Europe as well as having some 34 associate members from within the wider cruise industry, the ECC has since the beginning of 2011 moved from being under the umbrella of

the European Community Shipowners' Associations to being a fully independent organisation. In addition to a full time secretariat based on in Brussels, the ECC can draw on public affairs/public relations expertise provided by ADS Insight and Luther Pendragon.

A key component of the ECC's successful promotion of the European cruise industry is its close and important working relationship with the US-based Cruise Lines International Association – particularly on those issues with a global dimension. Such cooperation is regarded as especially relevant against the background of the increasingly coordinated and influential role of the EU in such bodies as the IMO.

As regards internal organisation, in addition to the Executive Committee and the Board which are responsible for the overall direction and decisions of the organisation, a number of specialised sub-committees have been established. Reflecting the growth of the industry and the increasing range of regulatory and other issues affecting the sector, these cover Environment, Safety and Security; Tourism and Consumer Affairs; Health and Hygiene; Taxation; Ports and Infrastructure; Public Relations; and Labour Issues.

Current issues of particular importance being addressed by the sub-committees include the revision of the sulphur directive, greenhouse gas emissions, waste reception facilities, piracy, passenger rights, tourism policy, the development of a European manual for hygiene standards and disease surveillance, and the review of the VAT system within the EU.

Under Chairman Manfredi Lefebvre D'Ovidio and Vice Chairman Pierfrancesco Vago, the ECC believes that it has developed into an independent organisation that effectively represents the interests of the European cruise industry in its goal of achieving sustainable growth in the coming years.

Tim Marking Secretary General



The challenges of growth vs. pricing

return to significant growth
– its best performance
in five years – in the
North America market,
combined with the continued rapid
increase in European sales, meant
another substantial rise in global cruise
passenger numbers in 2010.

The 7% hike was boosted by a quantum leap in Australasian numbers, which have now doubled in four years. It also ensured that the global market remained on course to approach 20 million this year (2011), which would represent an increase of about a third in just five years.

But – as Gianni Onorato, President of Costa Cruises –one of the fastest-growing brands – points out, there is a tendency within the industry to refer only to passenger numbers as the indicator of its growth, when it should also be monitoring what those passengers are paying for their cruises.

Sister brand AIDA Cruises President Michael Thamm agrees: "The number of passengers does not really mean anything. They have to be the right passengers, paying the right prices."

In most markets 2010 demand was stimulated by highly competitive pricing as cruise companies introduced extra capacity – 12 ships and 32,000 berths to follow the nine ships and 28,000 berths added in 2009 – at

a time when economies were still recovering from the downturn of late 2008.

As a result, revenues achieved per passenger and per passenger-night, although stabilising after double-digit drops in 2009, still fell – by just over 1% for Cruise Lines International Association (CLIA) member brands.

Eight new ships, with a combined

Global source markets (millions of passengers)

Region	2005	2006	2007	2008	2009	2010
North America	9.96	10.38	10.45	10.29	10.40	11.11
Europe (All)	3.15	3.44	4.05	4.46	5.00	5.54
Rest of World	1.21	1.29	1.37	1.45	2.18	2.25
Total	14.32	15.11	15.87	16.20	17.58	18.80

Source: G.P.Wild International Limited from PSA, CLIA, IRN and other sources.

ECC 2011/2012 Report

North American and European Source Markets

Year	North America Growth on year	Europe Growth on year
2001	1%	7%
2002	13%	7%
2003	7%	26%
2004	11%	6%
2005	9%	10%
2006	4%	9%
2007	3%	16%
2008	-2%	10%
2009	0.5%	12%
2010	6%	10%

Source: G.P.Wild International Limited from PSA, CLIA, IRN and other sources.

20,000 berths, were due to be introduced during 2011. This gradual slowdown in capacity growth, combined with an expected continued recovery in global economies, encouraged one leading US leisure analyst (Wm.Blair) to observe at the beginning of the year that the "stars appear increasingly aligned" for the cruise sector. It went on to predict a three-year recovery process, with individual company share prices rising accordingly.

Royal Caribbean Cruises Ltd. (RCCL) Chairman and CEO Richard Fain also predicted a "great" year of record return for his company in 2011. But in the event a combination of factors – economic and geo-political – conspired against those forecasts.

Although the global cruise industry has once again generally outperformed other leisure travel sectors, no records are likely to have been broken and it has been its global nature – with some markets performing significantly better than others – that has ensured results which, to date, are at least good if not great.

These results have been achieved in a marketplace where there has been continued pressure on prices and yields – notably within Europe where those economic issues were exacerbated by the so-called Arab Spring events in the "The number of extra passengers does not really mean anything. They have to be the right passengers, paying the right prices."

Middle East and North Africa (MENA). These meant last-minute changes in itineraries and deployments of cruise ships in the region.

It was a similar story in Asia, where the earthquake and tsunami in Japan inevitably caused disruptions to schedules and deployments.

As well as the administrative costs of such changes, there was a substantial downside for the cruise lines both from cancellations and from the price-cutting required to fill the new itineraries at short notice.

There was a period in January when Mediterranean bookings were reported to have ground to a halt and, although the sector was quick to modify itineraries and eventually had satisfactory winter as well as summer programmes, the disruption clearly had

European cruise market

Year	Passengers
2001	2,000,000
2002	2,100,000
2003	2,700,000
2004	2,800,000
2005	3,100,000
2006	3,400,000
2007	4,000,000
2008	4,400,000
2009	4,900,000
2010	5,500,000
	· ·

Source: ECC

an impact on the bottom line as the year progressed.

Fortunately, though, the North America market started more robustly, even if the debt crisis and related political wrangling hit demand and prices midway through the year.

Passenger numbers for 2011, though, will still have risen again after 2010's first significant growth for several years. This had been driven by the extra capacity deployed in the Caribbean, notably by the two new 'world's largest' Oasis-class ships of Royal Caribbean International and other large new ships of Carnival Cruise Lines (CCL) and Norwegian Cruise Line (NCL).

But – despite the MENA and economic issues – growth in the European cruise source markets is expected to have again outstripped that of North America, as it has done for eight out of the past ten years.

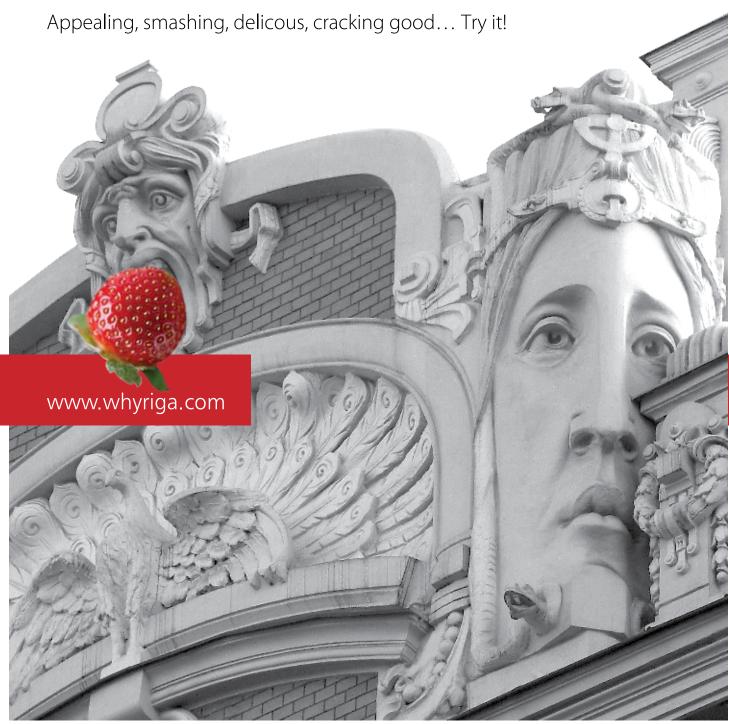
The size of the European cruise market has trebled over the same period, but Carnival Corporation & Plc Vice Chairman and Chief Operating Officer Howard Frank is quick to refute any suggestion that there is too much capacity in Europe, saying that the drop in 2011 ticket prices paid was "much less of a capacity issue than one of itinerary disruptions".

There has been a handful of redeployments of ships by North American brands away from Europe to other destinations, but the general capacity and sourcing trend remains upwards, although perhaps not at quite the growth rate of recent years.

In a similar way to 2011, Carnival will have just short of 50% of its capacity in Europe in 2012; but its



Riga – the Destination



CRUISE SHIP ACCOMODATION

Open: 24 hours a day Number of berths: 4 Total quay length: 900m Depth at quay: 8m Maximum vessel length: 310m Distances to the city centre: 1,4km, to the airport: 13km

CONTACT DETAILS

Freeport of Riga Authority
Inita Luna, Head of Cruise ships and passengers division
Address: 12 Kalpaka blvd. Riga LV-1050 LATVIA
Tel: + 371 670 30 822
Fax: +371 670 30 835
e-mail: info@whyriga.com



passenger sourcing (as with RCCL) is likely to produce a lower share of North Americans. Two of its North American brands – Princess Cruises and Holland America Line (HAL) – will have a passenger mix on Mediterranean cruises typically including less than 50% North Americans.

The fact is that if – as is likely – there continues to be a similar growth disparity between the two markets over the next ten years as in the past ten, Europe will overtake North America as the leading source for cruise passengers.

Most operators are certainly confident that the number of Europeans cruising will double to more than 10 million by 2020, and it simply depends on the comparative level of North American growth when that overtaking will happen.

That this European growth is largely being driven by the new deployment and brand expansion policies of CLIA member lines is clearly reflected in the marked change of their own sourcing, with the North American share of 90% in 2001 declining to 73% by 2010. In fact about half the passengers sourced and revenues earned globally by the two largest cruise companies — Carnival Corporation and RCCL — are now from outside North America.

The majority of these come from Europe, although South America, Australia and Asia are also significant contributors and – overall – the international share of passengers and revenue is set to continue to grow. Australia is targeting the 1 million passengers mark which South America and Asia have already reached.

"Cruise companies are moving their ships where the demand for cruises seems strongest," says MSC Cruises CEO Pierfrancesco Vago. "That is why North American lines have moved large-scale into European waters.

"With market penetration of just 1.3%, this is still a highly appealing market – despite the uncertain geopolitical conditions – and its potential is still far from being fully exploited.

"But it is also clear these companies are exploiting the Euro:Dollar exchange rate, which raises the question: What will happen if and when the Euro goes up again? Will the American ships be

CLIA passengers

	North American		Internationa	ıl
Year	Passengers	Share	Passengers	Share
2001	6,637,000	90%	862,000	10%
2002	7,472,000	86%	1,176,000	14%
2003	7,990,000	84%	1,536,000	16%
2004	8,870,000	85%	1,590,000	15%
2005	9,671,000	87%	1,509,000	13%
2006	10,078,000	84%	1,928,000	16%
2007	10,247,000	82%	2,316,000	18%
2008	10,093,000	78%	2,912,000	22%
2009	10,198,000	76%	3,244,000	24%
2010	10,781,000	73%	4,023,000	27%
2011 projected	11,680,000	73%	4,320,000	27%

Source: CLIA

redeployed to home waters – and will European companies follow them?"

But, speaking at the naming of Celebrity Cruises' latest Solstice-class ship Celebrity Silhouette, RCCI's Fain said: "Most of our new capacity is dedicated to go after new markets."

Even Carnival Cruise Lines is looking beyond the North American market which has always been its main, almost exclusive focus. It has returned to Europe this year, and is also planning its first year-round deployment of a ship outside North America, with Carnival Spirit going to Australia from October 2012.

"It is the first time we have deliberately gone out to source a programme primarily from outside North America," says CCL President and CEO Gerry Cahill.

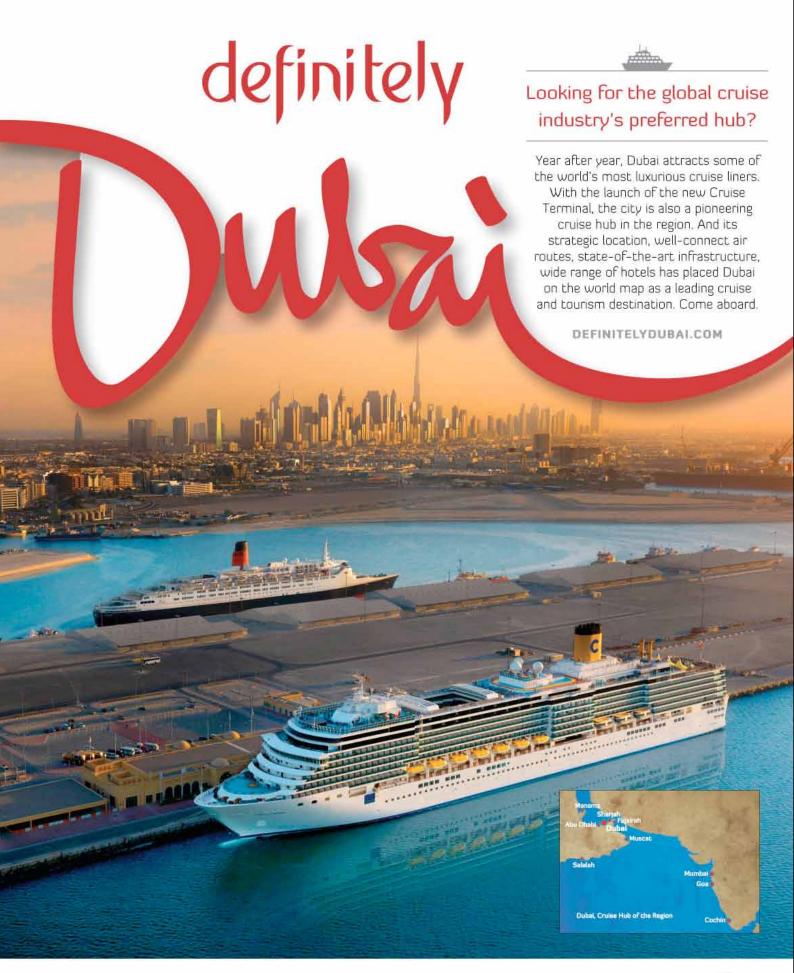
Regarding the brand's return to the Mediterranean this year, he says: "The high air ticket cost is an issue, as we did plan to source primarily from North America; but we have been sourcing nearly 50% of passengers from outside North America – from Europe (East as well as West) and also Australia."

But he agrees with Vago about the impact the mobility of fleets could have on destinations like Europe. "I do not get very excited about capacity going in or out of a particular market year on year," he says, "as ships can always

Member lines of ECC and CLIA

Cruise line*	ECC	CLIA
AIDA	•	
Azamara Cruises	•	•
Carnival Cruise Lines	•	•
Celebrity Cruises	•	•
Compagnie du Ponant	•	
Costa Cruises	•	•
Croisières de France	•	
Crystal Cruises		•
Cunard Line	•	•
Disney Cruise Line	•	•
Fred. Olsen Cruise Lines	•	
Hapag-Lloyd Cruises	•	
Holland America Line	•	•
Hurtigruten	•	•
Iberocruceros	•	
Louis Cruises	•	•
MSC Cruises	•	•
Norwegian Cruise Line	•	•
Oceania Cruises	•	•
P&O Cruises	•	
Paul Gaugin Cruises		•
Pearl Seas Cruises		•
Phoenix Reisen	•	
Princess Cruises	•	•
Pullmantur	•	
Regent Seven Seas Cruises	•	•
Royal Caribbean International	•	•
Saga	•	
Seabourn Cruise Line	•	•
SeaDream Yacht Club		•
Silversea Cruises	•	•
Star Clippers	•	
TUI Cruises	•	
Windstar Cruises		•
* Evaludos rivor cruiso compani	ioc	

* Excludes river cruise companies











be moved – and they are. So it can all change the following year.

"There is always a relationship between supply and demand, as we always fill our ships. If you do not put in capacity, the price goes up – which is exactly what you want, for a while. But you then do need extra capacity for the market to grow."

But one destination's gain can be another's loss.

This is currently the case for one of the longest-established cruise routes: the Mexican Riviera, where a combination of a poor economy in the main source market (California), real and consumer-perceived problems with crime in Mexico, and the higher fuel costs due to longer distances between ports has seen a shift in cruise capacity away to other destinations, including Europe.

The cost of fuel has risen sharply in 2011, and its pricing remains highly volatile

Cahill points out that fuel cost only 10% of what it is now when he joined CCL in 1996, and it is significant that Carnival Corporation, which – unlike RCCL – does not hedge its fuel purchases has been considering fuel risk mitigation, albeit through option collars rather than direct hedges.

Fuel cost has become a significant factor in deployment and itinerary decisions, and its impact will only increase with the introduction of low-sulphur fuel requirements, particularly in Emissions Control Areas (ECAs) which are currently in place in the Baltic and North Sea and will shortly be effective around the North American coastline

"Our goal has always been to get closer to our consumer, and there is no question that the North American ECA makes that more difficult," says Cahill. "It is causing us to re-evaluate every single itinerary."

AIDA President Thamm says: "The scheduled lowering of the allowable sulphur rates of the fuel we use in the Baltic and North Sea ECAs will change our world. The financial implications could be in the region of \$100–\$150 million, and there will be a lot of pressure on us to mitigate that cost.

"We will try to pass on part to our passengers, but we are not sure if we will be able to do so – although "The scheduled lowering of the allowable sulphur rates of the fuel we use in the Baltic and North Sea ECAs will change our world."

there is a strong public perception, in Germany at least, that we do need to use lower sulphur fuel and reduce our emissions. The question is whether we can save enough in other areas to offset the added cost, or will we just have to accept lower profitability?

"With each new class of ship we have reduced the consumption of fuel per passenger night so that it is now down by about 50% compared with 15 years ago. And our next ships will be even more fuel-efficient.

"This has been achieved without a paradigm change in the technology – there has been no significant utilisation of solar or wind power – so how much might we achieve if we can adopt some alternative fuel option?

"My expectation is that these challenges will stimulate such technological advances in our industry, so there is reason for optimism."

This optimism has, though, to be tempered with caution due to the prevailing economic situation, particularly within the Eurozone.

Hapag-Lloyd Managing Director Sebastian Ahrens warns of "some kind of financial crisis 2.0", which could start in the Eurozone but spread to the UK and North America.

"This would particularly affect upscale brands with clients dependent on stock earnings.

"But the positives are the economies of scale that we are creating in the sector. These will drive recovery to 2008 levels as we will be increasing the overall market by taking share from land holidays rather than from each other, and using the value of cruising as the key tool."

MSC Cruises CEO Vago also points out the upside of the lower prices that have been on offer. "With our large new ships," he says, "we are targeting a much wider range of passengers, and are spending a lot of money on advertising – much more than many other leisure sectors. But, if you want to enlarge the base by attracting new people into cruising, you have to offer fantastic prices.

"At the same time we have to invest in better yield management and to extend seasons in different destinations, so we reduce the number of flycruises where higher air fares mean they cost consumers so much more.

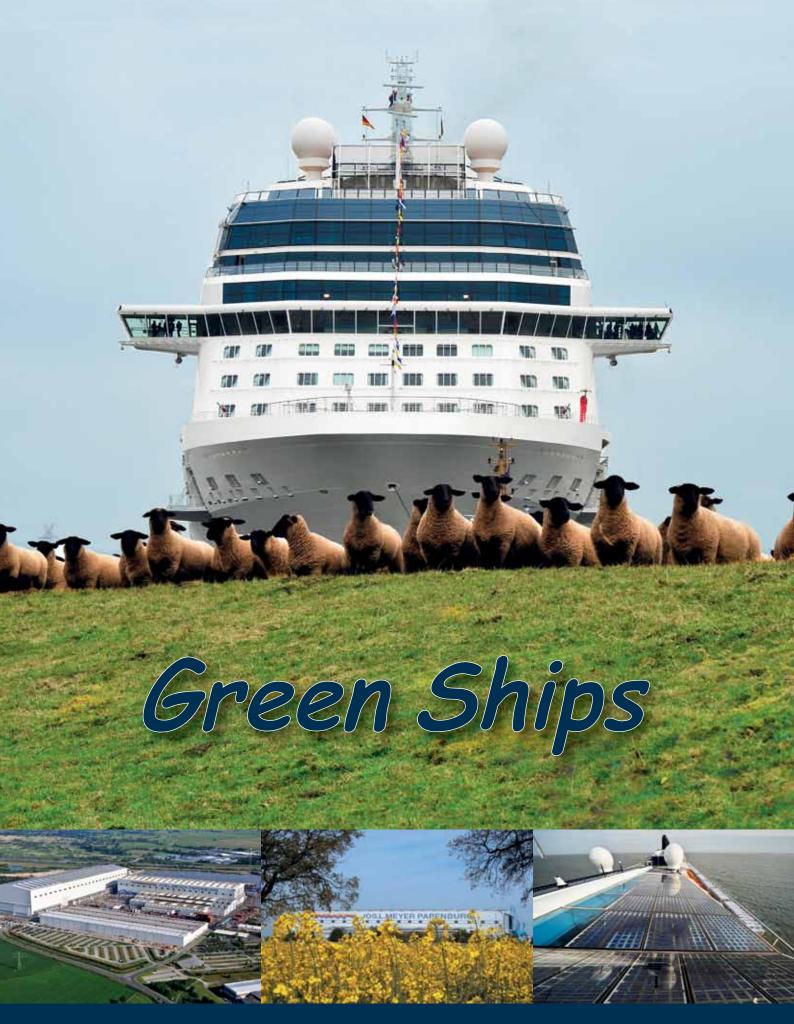
"They do not have the choice they once had in terms of the prices they are able to pay. So we all need to become more efficient in terms of fuel consumption and other costs."

Alongside this focus on operational efficiency, which is being driven equally by cost and by environmental concerns, the cruise companies share a general acceptance that future capacity growth should be slightly less ambitious than that which took place during the past five to ten years.

There will be fewer orders, but the ships will continue to be significantly larger than the average within the existing brand fleets. They will also be much more efficient – not just through the economies of scale but through evolving technologies and operational policies.

The increased size of these new ships will also mean the number of additional berths added each year will not fall far short of the peak years between 2005 and 2010. However, as a proportion of the overall fleet, the capacity growth will gradually drop from the recent 6–8% annually to 3–5%.

Nonetheless projections remain for global cruise passenger numbers to reach 30 million over the coming 15 years – an increase of 50% – and continue towards 40 million beyond that.





ECC 2011/2012 Report

Can European shipyards win the race?

New ships on order/optioned 2012–2016

ne of the highly significant features of the most recent new ship orders from the cruise sector has been the timing of their delivery dates.

Normally, the gap between order announcements and the scheduled delivery dates would be about two years. Yet the Costa Cruises and TUI Cruises ships ordered this year will not arrive until 2014, and those for P&O Cruises and AIDA Cruises not until 2015. In other words, a three- or four-year gap instead of the normal two.

Although – in most cases – the ship size will be the largest to date for each brand, this is not the main reason for the longer lead time which is, in fact, primarily a reflection of the more measured approach to capacity growth being taken by the major players.

With the recent rapid expansion of global cruise capacity, most cruise brands find themselves in the position of being able to wait to add more capacity until they secure the most advantageous price from the shipbuilder and also – where applicable – the most cost-effective financing vehicle.

With the slowdown in orders, shipbuilders have found the need to be more price-flexible than ever before in order to secure what orders they can. And this situation is being exacerbated for the established specialist shipbuilders in Europe by the emerging threat of competition from Asia.

The two new AIDA ships will cost about \$200,000 per berth, compared to more than \$260,000 for their last series of ships (built in Germany) – a drop that can only be partly explained by the 50% capacity rise per vessel. This lower cost is being offered by a Japanese yard – Mitsubishi – which last built cruise ships a decade ago, and its pricing policy has come under attack from the European shipbuilders.

They accuse it of 'unsustainable' pricing and suspect a loss-leading policy being employed as part of a

Brand	Ship	Tonnage/berths	Due	Cost (\$million)
Disney Cruise Line	Disney Fantasy	124,000/4,000	4/12	899
MSC Cruises	MSC Divina		4/12	742
Oceania Cruises	Riviera	140,000/4,087	,, -	
		65,000/1,260*	4/12	530
AIDA Cruises	AlDAmar	71,000/2,644	5/12	565
Carnival Cruise Lines	Carnival Breeze	130,000/4,631	5/12	738
Costa Cruises	Costa Fascinosa	114,200/3,780	6/12	726
Celebrity Cruises	Celebrity Reflection	122,000/3,150	10/12	768
Sea Cloud	Sea Cloud Hussar	see note 1	TBA	140
2013				
Princess Cruises	Royal Princess	139,000/3,600*	4/13	735
Norwegian Cruise Line	ТВА	143,500/4,000*	4/13	840
Hapag-Lloyd Cruises	Europa 2	39,500/516*	4/13	360
Ponant	TBA	10,700/264	6/13	140
AIDA Cruises	TBA	71,000/2,644	9/13	575
Note 2	TBA	140,000/4,087	12/12	711
2014				
Princess Cruises	TBA	139,000/3,600*	4/14	735
Norwegian Cruise Line	TBA	143,500/4,000	4/14	840
TUI Cruises	TBA	97,000/2,500	TBA/14	546
Royal Caribbean International	TBA	158,000/4,100	10/14	1,032
Costa Cruises	TBA	132,500/4,928	10/14	788
2015				
P&O Cruises	TBA	141,000/3,611*	3/15	804
AIDA Cruises	TBA	125,000/3,250*	3/15	650
Royal Caribbean International	TBA**	158,000/4,100*	4/15	1,032
TUI Cruises	TBA**	97,000/2,500	TBA/15	546
2016				
AIDA Cruises	ТВА	125,000/3,250*	3/16	650

^{*}double occupancy

^{*}option

¹ Sea Cloud Hussar will be a delayed delivery due to bankruptcy of shipyard.

² Shipbuilder is negotiating with MSC Cruises to take over the Libyan-ordered vessel on which the contract was cancelled following the outbreak of civil war.



Sika ®

When choosing Sika's visco elastic systems you get

- Significant vibration damping
- Levelling and sound-reducing properties

Over 40 years experience of acoustic and vibration dampening flooring systems **www.sika.com**

of the ship by attenuating the energy transmission from the steel structure.

Innovation & since Consistency 1910



long-term plan to undermine Europe's market-leading role in this sector.

When Mitsubishi announced its intention last year to re-enter cruise shipbuilding, an executive was quoted as saying "We won't aim just to survive... but to win the race."

Japanese shipbuilders are not just targeting European rivals but also their lower-cost competitors in Korea and China, which also have designs on the cruise sector. One Korean yard is already involved in a residential cruise ship project, and a Chinese yard is reportedly contracted for a cruise ship to be operated by a Chinese company.

Although the lower shipyard prices now on offer are playing a part in stimulating orders across the sector, there is still some way to go before the cruise industry returns to the days of 12–14 orders/deliveries a year, which were experienced during the second half of the last decade.

Excluding Sea Cloud Hussar and the Libyan order, there are 20 ships (plus two options for Royal Caribbean International and TUI) for delivery from 2012 through 2016.

The continuing economic downturn together with the unpredictable geopolitical situation in North Africa and the Middle East make it likely that this total will increase only to about 35 at best, which would fall short of the annual average of eight ships which was originally expected for the first half of this decade.

The sector market leader for most of the past decade, Italian shipbuilder Fincantieri, has been particularly well placed to monitor recent developments.

"Cruise lines are struggling with financial constraints and operating costs management so have softened their capital investment programmes," says Fincantieri Chairman Corrado Antonini. "At the moment the orders are not enough to feed all the specialist European cruise shipbuilders – there is simply a smaller cake to be divided among them."

But he does predict better times from 2020, "When it will be time for the replacement of ships built in the second half of the 1990s, and there could also be growth from emerging markets such as China." In the meantime he accepts the urgency for shipbuilders to "increase our product quality and efficiency".

STX France General Manager Jacques Hardelay agrees. "But," he says, "it is a pity that we needed a crisis to accelerate our plans for innovations and to change the way we work, and what we offer to the customer."

He also sees newbuild orders increasing by the end of the decade, particularly in the Luxury sector, but the urgency of this current situation is clear from Fincantieri's results – which show it is set for its third successive year of losses in 2011.

The 2009/10 losses followed seven years of profitability, which had been largely built on its leadership in the cruise shipbuilding sector during its peak ordering years. In the same way, its losses now are largely – but not entirely – due to the drop off in cruise orders.

It has continued to be thwarted in its desire for a full or partial government sell-off, and has also continued to be dogged by problems with the unions. These came to a head in May, when it wanted to downsize as its order book dwindled; but initial plans for the temporary closure of two of its eight yards, and the loss of 2,500 of its 8,500 workforce (and a major cutback in subcontractor staff), were rejected after heated protests from the workforce.

There are plans for a €70 million development at one of its yards (Sestri), but Fincantieri is clear that it also requires more investment in new technology and other production areas to improve its competitiveness.

Germany's privately owned Meyer Werft is now challenging Fincantieri for the number-one cruise shipbuilder spot. It has developed relationships with all the major players, so that it has built for both Carnival Corporation & Plc (Carnival Corp.) and Royal Caribbean Cruises Ltd. (RCCL) as well as for Norwegian Cruise Line (NCL) and other brands. In fact its current order book contains ship orders from AIDA (Carnival Corp.), NCL and Royal Caribbean International / Celebrity Cruises (RCCL).

Through its own investment, innovation and lobbying of regional government, it has overcome size

Current order book by shipbuilder

Shipbuilder	Ships
Meyer Werft	7 (plus 1 option)
Fincantieri	7
STX Europe	4 (plus 1)
Mitsubishi	2

Source: ECC, from lines/yards

limitation on the ships it can build at its Papenburg yard and also deliver along the river Ems. This success enabled it to win the latest NCL and Royal Caribbean International orders, for ships of more than 143,000 tonnes and 158,000 tonnes respectively.

The third major specialist cruise shipbuilder – STX Europe (which comprises yards in Finland and France) – is part of the South Korean STX Group. Its cruise order book was arguably the hardest hit when the global economic crisis hit in 2008, but has recently shown signs of recovery with orders from both TUI and Ponant Cruises last September.

Its largest customer of recent years, MSC Cruises, is considering not only taking over the order placed before the civil war by a Libyan shipping company but also orders for up to two more ships, plus two options.

However, although some of the specialist cruise shipbuilders are better placed than others to weather the impact of fewer cruise ship orders, none are immune.

There are going to be fewer orders over the next few years and the gross revenues available from the sector will probably remain flat at about 2013's level (currently \$3.4 billion) through to 2016 and possibly beyond.

The polarisation of the cruise industry into relatively few companies with the resources to order new ships does not give them a great deal of room for manoeuvre, which is why they are all looking to emerging markets in Asia, notably China, to supply new brands with the potential to place newbuild orders.

For the cruise shipbuilders to survive and prosper, there does need to be an increase in orders to go alongside their own increased productivity.

European economies boosted by cruising

he European cruise sector continued to buck economic trends in 2010 with another strong performance, increasing its contribution to Europe's economies by 3%.

Its total expenditure reached a record €35.2 billion, and a further 4% more jobs were created – bringing the total above 300,000. The cruise lines themselves employ 50,000 European nationals as officers and ratings on their ships and a further 5,000 in their various headquarters and administrative offices.

The top three countries to benefit remained Italy, the UK and Germany. Germany was the top performer year-on-year, with 20% growth in direct expenditure by the industry reflecting the significant increase in the number of Germans cruising and also the success of its specialist cruise shipbuilder – Meyer Werft.

Europe's pre-eminence in cruise shipbuilding continued, which is why manufacturing remains the industry to benefit most from the cruise sector; it accounted for nearly half of the direct expenditure, and more than a quarter of the jobs.

With cruise lines paying European travel agents €860 million in commission on sales, the transportation and utilities sector earned more than €2.7 billion from the industry. The other major sector to benefit was financial and business services, with nearly €2 billion.

There has been a slowdown recently in cruise ship orders, which is affecting that area of the sector's contribution. In 2010 the economic impact of cruising on cruise shipbuilding in Europe dropped by 8.5%; but the level of orders has begun to accelerate, so this trend could start to stabilise within a couple of years.

There are, though, some concerns about Asian yards – Korean and Chinese as well as Japanese – moving to dominate that sector of shipbuilding, as they now do most of the other non-passenger sectors.

On the upside, though, there is no sign of a slowdown in the growth of

the number of Europeans cruising, nor in the number of those passengers – both European and non-European – cruising within Europe. This should ensure increased economic benefits for the region over the next few years. Indeed there are projections that the number of Europeans cruising will double by the end of the decade – in fact overtaking the number from North America, which has long been the market leader.

It is reasonable, therefore, also to project a continued increase in the economic impact of the sector across Europe, especially as Europeans have already shown a clear preference for cruising within Europe.

The 9% increase in Europeans cruising in 2010 meant a similar increase in the number of passengers starting their cruises in Europe. Of the 5.3 million doing so, 4.2 million (77%) were European.

Also inevitably, these added numbers meant that the 250 European ports active in the cruise sector during 2010 attracted more cruise visitors – 6% more for a combined total of 25.2 million port visits.

Alongside those visits were 5.3 million (out of a potential 13.2 million) by cruise ship crew members. Only a proportion of crew are allowed to go ashore in each port.

Their total spend was €87 million for an average of €16 per shore visit. Between them, passengers and crew spent €3.1 billion ashore – an 8% increase on 2009.

Two-thirds of the 198 ships on which they travelled were operated

Economic impact of the European cruise industry

	2008	2009	2010
Direct expenditure	€14.2 billion	€14.1 billion	€14.5 billion
Total expenditure	€32.2 billion	€34.1 billion	€35.2 billion
Direct compensation	€4.6 billion	€4.3 billion	€4.4 billion
Total compensation	€10.0 billion	€9.0 billion	€9.3 billion
Direct jobs	150,369	143,235	150,401
Total jobs	311,512	296,288	307,526

Country	Direct spend (€ million)	Change on year	Jobs (€ million)	Compensa- tion
Italy	4,538	4.8%	99,057	2,952
UK	2,569	6.7%	58,604	2,120
Germany	2,306	20.2%	36,084	1,313
Spain	1,186	6.0%	25,219	766
France	972	-16.1%	13,012	577
Greece	580	-3.0%	11,612	227
Total(top six)	12,151	5.4%	243,588	7,955
Rest EU +3	2,325	-7.7%	63,938	1,323
Total	14,476	3.0%	307,526	9,278

Source: ECC (GP Wild/BREA)

by Europe-based brands, but there is an increasing number of vessels deployed in the region by North American brands. These tend to be larger, too, so their share of the overall capacity is slightly higher at 37%. This trend is continuing this year, with the largest-capacity ship yet to be deployed to Europe – the 4,100-passenger Norwegian Epic – operating in the Mediterranean for US brand Norwegian Cruise Line

The Mediterranean, which has become a year-round cruise destination in recent years, attracted 162 ships (52 of them from North American brands) in 2010. Their combined capacity for the year was 3.47 million passengers for 27.69 million passenger nights. Remarkably that figure has increased by 22% this year, and there will be growth again in 2012.

Exactly 100 ships cruised in Northern Europe, which is a seasonal destination for most brands. European brands accounted for three-quarters of the ships (but less than two-thirds of the capacity). This represented a slight

dip in capacity, after several years of substantial growth; but that upward curve has returned in 2011 with a 17% increase in passenger nights.

The leading cruise region within Northern Europe – the Baltic – expects to have seen cruise passenger port visits grow from 3.1 million in 2010 to 3.5 million this year.

Italy took over as the number one cruise destination – not just in Europe but in the world – during 2010. Its 5.4 million passenger visits represented 21% of the total, while Spain (4.9 million) moved up from third to second and the previous number one, Greece (4.5 million), slipped to third.

France (2 million) and Norway (1.8 million) were the other countries to top the million mark while Portugal, Denmark, Sweden, the UK and Malta completed the top ten.

Naples (1.1 million passengers), Dubrovnik (0.97 million) and Tunis (0.85 million) were the top three most popular ports of call, but Tunis will have slipped right back this year following its political upheaval. St Petersburg (0.43 million) remained the Baltic's leading port, with only Lisbon (0.45 million) heading it in Northern Europe.

Italy also topped the list when it came to homeports, with more than one in three passengers cruising in Europe beginning their voyage in one of its ports. Spain was second, with more than one in five passengers embarking cruises in its ports, and Barcelona retained its number one position among Europe's leading homeports, ahead of Italy's Civitavecchia.

An increase in interporting cruises – where passengers can start their cruise at a choice of several ports within a single itinerary – is helping both Italy and Spain dominate European homeporting. They can thus reap generally greater economic benefits, since passengers usually spend more at a homeport than at a port of call (mainly on pre- and post-cruise stays).

In 2010 the average spend by embarking passengers in a homeport city was nearly €70, compared with €61 spent at each port of call. They also spent an average of €215 on airfares if they flew to join the ship.

Between them the 5.3 million embarking passengers spent €1.5 billion on airfares and at the homeport (on accommodation, port fees, food and drink etc.). This total represented a 9.3% increase on 2009.

The UK accounted for one in every six homeporting passengers, with UK–UK cruises growing much faster in popularity, at the expense of flycruises.

Germany is currently a distant fourth, with less than 7% of homeporting passengers; but that gap is likely to close as German source market growth continues to outstrip the rest of Europe, and as more ships are deployed from German ports such as Hamburg and Kiel.

Cruise passengers embarking in Europe

Passengers 2007	Passengers 2008	Passengers 2009	Passengers 2010	Change 2010 vs 2009
4.29 million	4.69 million	4.84 million	5.28 million	9.1%

Source: ECC (GP Wild/BREA)

Cruise visitors to European countries

Passengers 2007	Passengers 2008	Passengers 2009	Passengers 2010	Change 2010 vs 2009
18.82 million	21.71 million	23.78 million	25.20 million	6.0%

Source: ECC (GP Wild/BREA)

Tough year for Europe but demand still grows

European ocean cruise passengers

Country	2008 (′000)	2009 (′000)	2010 (′000)	Change 2010/2009
UK	1,477	1,533	1,622	6%
Germany	907	1,027	1,219	19%
Italy	682	799	889	11%
Spain	497	587	645	10%
France	310	347	387	12%
Scandinavia	123	173	168	-3%
Benelux	92	110	126	15%
Austria	59	80	93	16%
Switzerland	65	76	91	17%
Portugal	28	30	41	37%
Others	183	182	171	-6%
Total	4,422	4,944	5,452	10%

Source: ECC

ales of cruises in Europe recorded their fourth year of double digit growth in 2010 and – despite serious economic issues within the Eurozone and the disruption caused by the events of the 'Arab Spring' - they are on course to achieve another substantial increase in

The 5.45 million 2010 total (which increases to more than 5.5 million when the emerging Eastern European markets are included) should rise to

about 6 million by the end of this year.

Since more than three-quarters of Europeans choose to cruise within Europe – 61% in the Mediterranean or Atlantic Islands; 16% in Northern Europe in 2010 – this is a welcome boost for European economies.

The impact from the activities of just one cruise line – Costa Cruises - reached €2.2 billion for the Italian economy that year, and again in 2011.

This is significant at time when as European Cruise Council (ECC) Chairman Manfredi Lefebvre points out - EU economies were seeing GDP growth at an average of just 1.7%.

"Cruising is helping Europe maintain its position as the world's number one tourism destination," says Lefebvre, "but we need it to remain a good place to do business and for all stakeholders - the industry, governments, NGOs and the public – to share the ultimate goal of sustainable growth."

The individual source markets within Europe are at different stages of development, but even the largest and most established - the UK and Germany - have low levels of penetration, leaving plenty of scope for growth. Growth, though, is across the board of Western Europe with emerging markets, too, in the Benelux countries and also Scandinavia as well as Eastern Europe.

UK market

After 6% growth in passenger numbers in 2010, a further rise of 5% to 1.71 million is estimated for 2011.

Within that total, there is increasing evidence of the new popularity of cruising out of UK ports, with a 16% rise to 760,000 passengers; but there is also evidence of a fall in the number of flycruise passengers - down from 969,000 to 950,000.

There are projections for a further fall to 895,000 in 2012, offset by another jump in the number of UK-UK passengers, so that the overall UK market grows again - to 1.73 million.

But it will also mean that the balance between the no-fly and the flycruises will have shifted from 2:1 in favour of flycruises to almost 50:50 in just eight years, with every possibility that UK-UK cruises will become the majority choice from 2013.

David Dingle, CEO of UK market leader Carnival UK, believes there is a variety of factors at work.

"Firstly," he says, "UK-UK port

European cruise market by destination

Destination	Passengers ('000)			Change
	2008	2009	2010	2010/2009
Mediterranean/ Atlantic Islands	2,649	2,825	3,303	17%
Northern Europe	737	884	907	3%
Caribbean and rest	1,036	1,235	1,242	1%
Total	4,422	4,944	5,452	10%

cruising is better value, as there is no flight cost included. As the size and facilities of the bigger ships grow, people are realising that a cruise is more about the onboard experience than the ports of call."

The turnaround is also due to commercial realities affecting cruise brands' deployment decisions. "Flying adds cost," says Dingle, "and that can only be reflected either in the fare or in the cruise line making less money: because it will be paying for the flights, not the passenger.

"There is no doubt that the UK's Air Passenger Duty has had an impact on Caribbean flycruises, because the flight cost is so much higher now.

"But the Mediterranean is the largest flycruise destination from the UK; and that has been affected by other issues, with the events earlier this year making parts of that region less attractive for cruise calls.

"This led to something of an overstatement of the Mediterranean flycruise product in the UK: brands reliant on international sourcing found some North Americans reluctant to come, while Southern Europeans were also less willing because the military movements [related to the Arab Spring] were much closer to home.

"The default market to turn to was the UK. So we saw a lot of very low-cost packages offered here. But



UK and Ireland ocean market

Year	Passengers	Change on year
2008	1,477,000	10.5%
2009	1,533,000	3.8%
2010	1,622,000	5.8%
2011	1,710,000	*5.4%
2012	1,730,000	*1.2%

*estimated

Source: UK Passenger Shipping Association/IRN

"There is increasing evidence of the new popularity of cruising out of UK ports but there is also evidence of a fall in the number of flycruise passengers."

DINGLE

since there has been a bit of capacity withdrawal from the Mediterranean for 2012, there will be less need for putting more flycruises on the UK market next year."

The growth of cruising's popularity, combined with consolidation within the inclusive tour sector, means one in every nine packages taken by a UK resident is now a cruise. Ten years ago only one in 25 packages was a cruise, so it is clear that cruising is now becoming part of the UK's mainstream holiday business.

Total cruise sales revenue reached £2.3 billion in 2010, with the average price increasing by 8% to £1,421 – although one in every seven cruises still costs less than £500.

More than three-quarters of passengers book their cruises through travel agents, and fierce competition between them for business in a sector which is growing when most other overseas holiday products are in decline has led to concerns about high levels of discounting. In recent years there have also been a couple of high-profile collapses of large travel agencies which sold high volumes of cruises at low prices.

This situation was one of the drivers behind this year's decision by Carnival UK to cut basic commission levels for retail agents, and so reduce the scope for them to rebate some or even all of that commission to consumers in order to secure sales.

CEO Dingle said at the time that the company "wanted to regain control of our pricing". He now says: "There will always be some detractors on the fringes, but generally it has been working well.

"Our core distributors, who did considerable amounts of business with us, are still doing so and – because our cut has removed their ability to rebate their commission so heavily – they now have more certainty in the prices they will be offering their customers.

"We have not had any travel agents telling us that they significantly reduced retained margins from bookings they do for us."

Dingle also points out that the globalisation of the industry means international cruise companies have the option of investing marketing money, and deploying ships, in a variety of competing markets and destinations.

"For the UK to get the future capacity growth and share of those marketing dollars," he says, "it needs to stand its ground on ticketed yields."

This has not been easy in 2011. "In the UK – and increasingly in Europe, too – consumer confidence has been declining, which is not surprising in the economic circumstances. This is affecting people's decisions as to when they should book. But the good news is that the desire to cruise continues to increase. It is just a question of when people book – and I do believe it is still 'when' and not 'if'.

"For 2012 we are achieving prices that are actually a little higher, but with the occupancy level a little lower because people are booking later.

"Immediately after the economic meltdown towards the end of 2008, there was a period of enormous consumer concern. But then, although nothing much changed economically, people realised it was not as bad as they had feared and they returned to more normal behaviour – including booking holidays. I expect to see a similar response during 2012."

That said, with the likes of Celebrity Cruises continuing to expand capacity out of UK ports, that growth could yet to prove to be more substantial.

"By 2015 I believe we will be seeing an upturn in the UK," Dingle

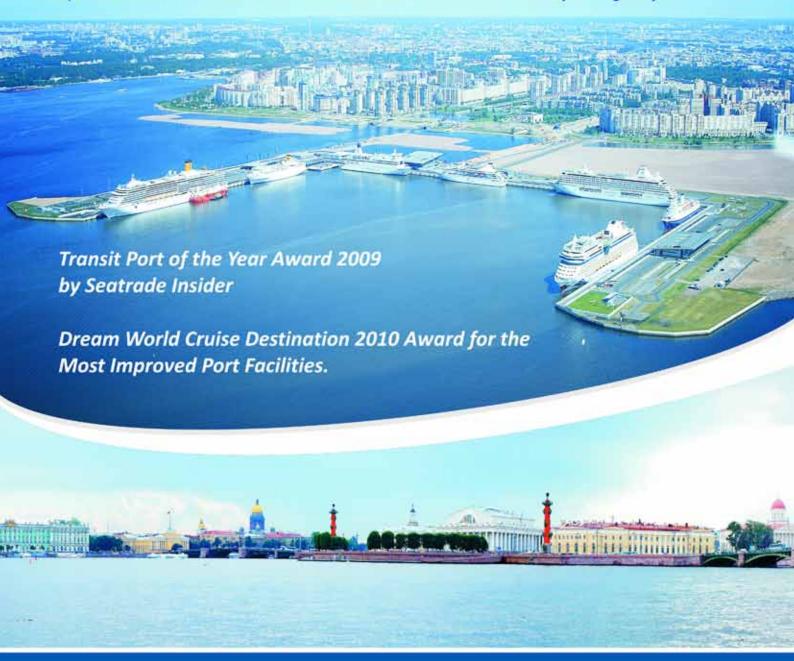


Passenger Port of St. Petersburg "Marine Façade"

The Cruise Gateway to Russia

The new "Marine Façade" port facility has hugely improved the overall cruise and ferry infrastructure at St. Petersburg, Russia – the Baltic's number one cruise destination.

With all of its seven planned berths operational for the 2011 season, Marine Facade was able to handle seven large ships and more than 15,000 passengers on a single day. As a result, its operation accounted for more than 90% of all cruise visitors to the city during the year.



www.portspb.ru info@passengerport-mf.spb.ru Tel +7 812 499 05 05 Fax +7 812 303 67 41 concludes. "The government here was faster to implement austerity measures than almost any other government in Europe and, as a result, there has already been a good deficit reduction. As the first country in, the UK could be the first one to start to come out of the downturn."

German market

The ambitious expansion of Carnivalowned AIDA Cruises having woken up a moribund German cruise market, other brands – both new and established – are now investing in the fastest-growing European source market for cruising.

The result is that, having taken more than four decades to reach 1 million passengers in 2009, Germany is now set to top the 2 million mark just six years later in 2015.

If this happens, it is likely that it will also overtake the UK market the following year. However, because of Germany's larger population, its penetration level would still be lower than that in the UK.

The same projections – made by TUI Cruises, the joint-venture cruise brand backed by Germany's TUI AG and Royal Caribbean Cruises Ltd. (RCCL) – suggest that the 3 million mark will be reached just five years after the 2 million.

Hapag-Lloyd Cruises Managing Director Sebastian Ahrens is slightly more conservative. "By the end of the decade I think Europe will have doubled to 10 million passengers and that Germany will account for 25%

German ocean cruise passengers

Year	Passengers
2009	1,027,000
2010	1,219,000
2011*	1,353,000
2012*	1,502,000
2015*	2,054,000
2017*	2,485,000
2020*	3,084,000

* TUI Cruises projections Source: ECC, BRD Kreuzfahrten, Deutsche Reiseburo und Reisebeeran Stalterverband



German ocean cruise market

	2009	2010	Change on year
Passenger nights	9,951,889	11,337,000	14%
Revenue (€ billion)	1.9	2.1	11%
Average price per cruise (€)	1,881	1,696	-10%
Average rate per day (€)	194	182	-6%
Average duration (days)	9.7	9.3	-4%

Source: ECC from DRV (Deutsche ReiseVerband)

- 2.5 million - of that total," he says. "But this does depend on all of us doing the right things."

TUI Cruises CEO Richard Vogel says: "The growth in the German market is tremendous, and the industry has a very strong relationship with the travel trade. It delivers 88% of the sales revenue, with national brands working mainly with agents while international brands are more likely to sell through tour operators.

"Direct sales – including those via the Internet – will grow, but I believe travel agents will remain our most effective distribution network."

Germany has one of the largest travel agency networks in the world, with more than 10,300 operating in 2010 – 9,600 of them selling leisure travel products. In 2010 and into 2011 their sales increased by nearly 6% as the industry continued to recover from the 2008 downturn.

As in the UK, though, there are concerns about cruise ticket prices and yields with the average price paid per cruise in 2010 falling 10% while the average duration of cruise fell only 4%.

AIDA Cruises President Michael Thamm warns that "by itself, the number of extra passengers does not mean anything – they have to be the right passengers paying the right prices."

But TUI's Vogel points out that just talking about the decrease in the per

diems does not tell the whole story.

"Because of the way that lines now operate the larger ships, average per diems were always going to come down compared with ten years ago, when German tour operators dominated along with a few international brands."

The DRV survey of the German cruise market also puts the sector into the context of the broader German tourism industry, evaluating its contribution to total tour operator revenues at 11.7%. This includes the river cruises sector, which saw a 9% increase in passengers to 433,000 in 2010, with revenues growing 11% to 0.000 to 0.000 rise in the average price to 0.000 rise in the average price to 0.000

With a second ship added this year and one newbuild on order (plus an option for a second), TUI Cruises is clearly optimistic about the future of the German cruise market – as is Costa, which operated programmes from three German ports this year.

The other TUI-owned brand, Hapag-Lloyd, has ordered a new Luxury ship for 2013, and is adding a Premium ship to its fleet next year. AIDA has added a new ship in each of the past five years, and has four more on order, including two which are almost twice the capacity of its largest ships to date.

MSC Cruises has targeted 200,000 German passengers, which will probably require the homeporting of its larger Fantasia class ships in one or



It's simply better with The Bahamas



OFFICES WORLDWIDE:

• LONDON T: +(44) 20 7562 1300 • NEW YORK T: +(1) 212 829 0221 • NASSAU T: +(1) 242 356 5772 • PIRAEUS T: +(30) 210 941 1603 • HONG KONG T: +(852) 2522 0095 • TOKYO T: +(81) 3 6400 8306 • LEER T: +(49) 0491 912 1787

- ✓ One of the World's Leading Registries
- ✓ A quality and respected flag
- ✓ Active participant at the IMO
- ✓ Active Shipowners Association
- ✓ Established Legal System
- ✓ Inspectors Worldwide
- ✓ On all Regional MOU Whitelists
- ✓ Stable Democratic Government

www.bahamasmaritime.com



Improving reception facilities to protect the sea

Port of Helsinki accepts, at no extra cost:

- oily waste from engine room (sludge), black/grey water and solid waste
- sorted waste (metal, glass, cardboard, energy)

The port should be notified in advance if these services will be required. For more information, please see Instructions for vessels at our website.



P.O. Box 800, Fl-00099 Helsinki, Finland Tel: +358 9 310 162 | Fax: +358 9 310 33802 E-mail: port.helsinki@hel.fi www.portofhelsinki.fi more of the country's ports.

Major German supermarkets and other mainstream retailers have already become involved in selling cruises and other travel, and it has been reported that one supermarket – Lidl – is about to launch some own-brand cruise and other travel products.

Italian market

The development of interporting allowing passengers to join a cruise at different ports within an itinerary rather than offering just a single homeport – has played a major part in driving the Italian market to more than double in six years, so that it is now approaching the 1 million passenger mark.

Originally developed by market leader Costa, the same template has been followed by the second-largest brand in the market - MSC Cruises - and now international brand Royal Caribbean International is moving in the same direction.

Although interporting complicates onboard operations, there are significant benefits as it brings the cruises closer to more passengers. It also spreads the enhanced fiscal benefits of homeporting compared to transit calls to more ports, regions and local economies. For example, Costa ships have visited 22 ports in Italian this year for a combined 9,000 calls



Italian cruise market

Year	Passengers
2007	640,000
2008	682,000
2009	799,000
2010	889,000
2010	645,000

and 4 million passenger movements -50% up on 2010.

Venice has been a major beneficiary of the increased deployments of brands like Costa, MSC and Royal Caribbean International, with passenger numbers topping 2 million for the first time this year and the terminal operator seeing revenues and operating profits up by 9–10%. Those revenues are ten times higher than they were ten years ago. Next year the latest new ship built for MSC – MSC Divina – will homeport from Venice.

New homeports are being developed elsewhere in Italy, notably Trieste and

Cruises are primarily sold through travel agents, a situation underlined by Costa's recent decision to take a 50% stake in the largest Italian travel agency - Welcome Travel (part of Alpitour World).

French market

Another record year for the French cruise sector is widely expected when the results for 2011 are known, and there are clear signs that it is on the road to becoming a major source for passengers in the future.

In an effort to further stimulate the rather slow growth of the French market RCCL has recently opened its own office in Paris. "Developing new markets does not happen overnight," says Executive VP International Michael Bayley. "It takes time for the travel trade and the consumer to understand how the product works.

"We are increasing our investment, but we also have to create relevant products for each market – particularly as regards itineraries. Markets develop at different rates, but it is always a multi-year project."

Hapag-Lloyd's Ahrens says: "It is also important not to look at equivalent populations and assume you can get the same penetration in each. It is far more relevant to look at the existing tourism market and how many travel domestically and internationally for their holidays. It is the share of that market which counts.

"France is a very different tourism market to almost everywhere else in Europe, and it certainly does not have the size of Germany's; so it was always going to be easier to attract more



French cruise market

Year	Passengers
2006	242,000
2007	280,000
2008	310,000
2009	347,000
2010	387,000

Source: FCC

Germans than French to cruising."

But the rate of growth in France has now accelerated, and there will be some 400,000 French cruise passengers this year. Optimism that this growth will continue was underlined by the most recent ship order which was placed by a French brand – Ponant Cruises This follows the successful introduction of two new sister ships in 2010 and 2011, which effectively moved the company - which operated three smaller ships (one sail-assisted) on soft adventure and expedition – into the five-star Luxury sector.

Philippe Mahouin recently joined Ponant as Executive Vice President Sales and Marketing, having previously worked for other French leisure travel companies including Club Med. "I sold most kinds of holiday in France, and the only product that I could see lagging behind was cruising," he says.

"The problem was in spreading the word of mouth. A cruise ship is a hotel, resort and destination all rolled into one, so it requires a new way of thinking about your holiday.

"But the more it grows, the more it creates its own growth through that word of mouth. This is now happening, but the market is very far from being saturated.

"Ponant was already well known for the small size of its ships, the offbeat itineraries and its distinctive French touch. So it was relatively easy to build on that platform with the new generation of ships, which are still relatively small with just 265 passengers.

"There was a lot of media attention and we also spent more on direct marketing, mainly in the print media. But crucial for us was our use of online media, which has now become an essential information source rather than a reservation tool for French cruise consumers.

"We used it to convey what we were doing with the new ships, and it generated plenty of interest in them. The unique design of the ships and their adventurous itineraries meant we were able to attract people who would normally go to luxury resorts for their holidays. About 25% of our passengers are now first-time cruisers, and 50% of the total are new to Ponant.

"The style of the ships also drew strong interest from lifestyle and design sections of magazines, which helped broaden the appeal beyond the regular cruisegoers.

"There was a slowdown in bookings across the market in August because of all the economic issues, but we just got the sense that people were waiting to see what happened. Stock markets were still volatile and levels picked up again in September.

"France is only at the beginning of its cruise growth. We see how Marseilles is investing in terminals and we know that drive(rail)-to business is becoming very important. And that France has one of the best infrastructures for that in Europe with good highways, high speed trains, coaches and accommodation.

"I look at the size of the Italian and now the Spanish market, and see no reason why France cannot match that."

Both market leader Costa Cruises and MSC Cruises carried more French passengers in 2011 and, with its new office in place, RCCL expects to double the carryings of its three brands Royal Caribbean International, Celebrity Cruises and Azamara Club Cruises to more than 40,000 in 2012.

This is in addition to the sales of Croisières de France, which is a subsidiary of RCCI's Spanish brand Pullmantur. Croisières de France expects to increase from 25,000 French passengers to 60,000 in 2012 when it introduces a larger ship.

Spanish market

There have been hiccups along the way due to short-term reductions in capacity, but the underlying trend in the Spanish cruise market has been strong growth for the past ten years.

Spanish travel group Pullmantur, a retail, tour and airline operator, bought its first ship and began operating cruises (as Pullmantur Cruises) out of Spain in 2001.

But Ignacio Aguilera Carmona, the brand's Vice President and General Manager International Markets, Strategy and Business Development, believes that Spain only became a fully fledged cruise market about four years ago.

"That was when it became a proper multibrand market," he says, "and its growth has since accelerated, despite the economic downturn which has hurt the Spanish economy very badly – and continues to do so.

"We have been attracting people who were previously taking other holiday products, because the competing brands have ensured that cruising is becoming much better known in the market.

"That competitiveness in a weak economy has also ensured that prices have been heavily discounted. Although we would rather that had not happened, it has meant that cruising has become affordable to new segments of the population who would previously have found it out of their reach.

"Our repeat business is about 10%, which means that many Spanish are first-time cruise passengers.

"Although our brand is not the cheapest, we do position ourselves as an entry point for the sector. This is because our all-inclusive pricing appeals to first-timers, as they know exactly what they will be spending before committing to this new kind of holiday."

Number two in the market is Ibero Cruceros, which – like Pullmantur – was set up by a Spanish company before one of cruising's big two (in this case, Carnival Corporation & Plc) stepped in to take it over.

There have been a few other small Spanish brand start-ups which have come and gone – Happy Cruises being the latest to pull out, earlier this year – in the face of the Pullmantur/ Ibero Cruceros dominance, so the



Spanish cruise market

Year	Passengers
2006	391,000
2007	518,000
2008	497,000
2009	587,000
2010	645,000

Source: ECC

main competition now comes from international brands such as Royal Caribbean International, Norwegian Cruise Line, Costa Cruises and MSC Cruises.

Distribution is mainly through travel agents, and Pullmantur recently set up a 200-shop chain called Nautalia which will sell all cruise brands, not just its own. "This is one way of opening up our consumer reach," says Carmona, "as well as giving us better margins on our sales, and more control over the agency training in our cruise product."

Although much of the growth in the market has come from the use of Barcelona, Málaga and Valencia as major homeports, Carmona says that sourcing is nationwide.

"Although the adjacency of homeports drives some of the sourcing, the fact is that we also do well out of the wealthier regions, even if they are well inland. Madrid is a major contributor because of its wealth, and also because of the country's infrastructure with its good high speed train, road and air links to the ports."

He also makes it clear that, while travel agents will remain a key distributor, they will not be the only channel used. "Earlier this year we opened up a direct selling online channel as we have to respond to today's consumer needs, and these are multi-channel.

ECC 2011/2012 Report

"In new cruise markets, the formation of a national brand is often key to significant growth."

BAYLEY

"In the same way we have learned that the social media have a strong influence on people's perceptions of products like ours, so we are using them as a major marketing tool. It is relatively cheap, and it means we have the time and space to convey what is a complex product.

"We still use other conventional marketing media, though, as things like TV are good for establishing brands and creating interest in the first place."

Unlike longer-established brands in more mature markets, there is not the same need for Pullmantur to keep innovating with new itineraries. "With just 1.2% penetration of the market, there are still many Spanish people who have not cruised in the Mediterranean or the Baltic so there is nothing obsolete about those mainstream itineraries for us," says Carmona.

"But we do need something new every couple of years for our repeaters, so in 2012 we are going to the Norwegian fjords for the first time.

"I am confident in the long-term potential of the Spanish market," he concludes, "so long as we can maintain the same relationship between the high quality of the product and the value of the prices.".

The rest of Europe

Elsewhere in Western Europe, local markets in Scandinavia are being stimulated by early and late season minicruises operated by international brands looking to extend their season. The emerging Netherlands market has been boosted by HAI's decision to homeport a ship in Rotterdam year-round.

Eastern Europe potential

Many brands operating in Europe are attracting more passengers from the east of the region, with markets like Russia slowly growing.

Carnival Cruise Lines was surprised at the large numbers of Russian passengers who booked on the early summer cruises of Carnival Magic on the brand's return to the Mediterranean, and Costa says that Russians and other Eastern Europeans will be the main source for its cruises out of Trieste in 2012.

Similar programmes had previously been tried between 2006 and 2008, but had not been very successful. However the brand now believes that the improved economies and increased purchasing power in Eastern Europe will make the cruises work this time.

The Greek port of Heraklion is positioning itself as a potential homeport for seven-day cruises to be sold in Eastern Europe markets.

"In new cruise markets, the formation of a national brand is often key to significant growth," says RCCI's Bayley. "It usually begins with large travel agents or niche tour operators chartering ships, which eventually evolves into the formation of a national brand.

"It is only a matter of time before there is a Russian brand from a corporation with good access to distribution, and the same could apply to other Eastern Europe markets.

Deployment and itinerary trends

The Middle East North Africa (MENA) situation remains potentially volatile,

with some brands having already returned to making calls in Tunis and Egypt while others are waiting a little longer before reinstating them.

When itineraries were changed at the beginning of the year, the Eastern Mediterranean – and Greece in particular – was the main beneficiary. This, though, only highlighted what the cruise sector believes is a missed opportunity.

Louis Cruises Executive Chairman Costakis Loizou says: "Greece is an ideal area for cruising, and it has always been a top destination but... the lack of a clear legal framework, the continuously changing strategy and the strength of the trade unions have all hampered the development of Greek cruising."

He believes that the recent changes to the cabotage rules will not have the desired effect of making it more viable for lines to homeport in Greece, an activity which would have a very positive impact on the local, regional and national economies.

"The new legislation is very blurred and unclear, and leads to all sorts of different interpretations. Although there have been more transit calls in Greece this year [because of the MENA switches], the number of passengers embarking their cruises there has fallen by 10%.

"Greece needs a very powerful Ministry of Shipping to propel its economy forward and benefit the whole country enormously. It faces a very difficult situation, but the cruise industry can substantially contribute to stimulating its economy."



MEDCRUISE BRINGING THE MED TOGETHER

The Association of Mediterranean Cruise Ports promotes the cruise industry and unites the ports of 'Mare Nostrum' and its adjoining seas.

WWW.MEDCRUISE.COM

Madeira Ports Málaga Marseille Messina Monaco Motril-Granada Naples North Sardinian Ports Odessa Palamos Palermo Patras De Barcelona Bari Batumi Burgas Cagliari Cartagena Castellón Ceuta Civitavecchia Constant oos Kursalasi JBoor.

Odessa Palamós Palermo Patras Jos Kursalasi JBoor.

Oos Kursalasi

Afrimar Tunisia Aloschi & Bassani **BC** Tours & Shipping Cambiaso & Risso Cemar

Donomis Cruise Services European Cruise Council F.A. Travel

Hugo Trumpy **Idu Shipping & Services** Inflot World Wide Intercruises Shoreside

& Port Services Karavanmar Cruise Services

Karpaten Turism Kvarner County Tourism Office

Livorno Port Authority Londonskaya

Mercantile Marine Shipping

MH Bland

Navigator Travel & Tourist Services

P&B Agencies

Plaisant & C. Ship Agency Salamis Organisation

Samer & Co Shipping

Select Black Sea

Transcoma Cruise & Travel

Tura Turizm

Turisme de Barcelona

Alanya Alicante Almería **Azores**

Balearic Islands

Barcelona

Bari Batumi Burgas

Cagliari

Cartagena Castellón

≥ Ceuta

Civitavecchia

Constantza

Cyprus Ports

Dubrovnik & Korcula

Egyptian Ports

French Riviera Ports

Genoa Gibraltar

Heraklion Igoumenitsa

Istanbul

Kavala Kefalonia Koper

Kos

Kusadasi/Bodrum

/Antalya La Spezia Lattakia

Lisbon Livorno

Madeira Ports

Málaga Marseille

Messina

Monaco Motril-Granada

Naples

North Sardinian

Ports Odessa Palamós Palermo

Patras

Piraeus

Portimão Portoferraio Ravenna

Rijeka Rize

Sète Sevastopol Sibenik

Sinop Sochi

Souda/Chania

Split Tarragona

Thessaloniki

Toulon Trieste

Tunisian Ports

Valencia Valletta Venice Volos Yalta

Zadar



Portimão Portoferraio Ravenna Rijeka Rize Sète Sevastopol Sibenik Sinop Sochi Souda/Chania Split Tarragona Thessaloniki Toulon Trieste Tunisian Ports Valencia
Crench Rivis Genoa Gibraltur Herakhoon legur

French Riviera Ports









Norway's long coastline of 1300 nautical miles provides immense possibilities for creative and interesting itineraries in all seasons. Today, cruise ships call at about 38 different Norwegian cruise ports, with 1678 cruise calls in 2011 and more than 2 million visitors. Norway is the leading nature-based cruise destination in Europe.

Check out our cruise calendar at www.cruise-norway.no





Are cruise calls a cost or a benefit?

he two key current trends within the European cruise industry – fast-rising passenger numbers and escalating fuel and other operational costs – both have important implications for existing and emerging cruise ports in the region.

The increasing number and capacity of cruise ships in the Mediterranean, in particular, is a potential cause of congestion, with simultaneous calls putting pressure not just on port infrastructure but also on the local transport and touristic services.

It is a situation exacerbated by the competition between the cruise lines to operate the most popular itineraries, and also by the individualistic approach to berth allocations by different ports in different countries. However the emergence of influential cruise port associations and networks is now helping to find solutions.

Noting the success of the more transparent berth allocation system introduced by Norwegian ports, members of the association of Mediterranean ports (MedCruise) recently voted to bring in a unified allocation system across the region under which ports maintain a listing of berth reservations which is designed to prevent double bookings.

Cruise lines would be required to make bookings about 14 months before the call-time, while ports commit to responding or confirming within one month of the request being received.

The ports would also indicate the category of the berth being allocated, a decision that the cruise line could then appeal within a set period. Currently policies vary between ports, with some only allocating specific berths just a few days or even hours before the call.

Cruise companies have generally welcomed the MedCruise plan (adopted initially on a voluntary basis by member ports from October 2011) although they disagree with the proposal from the ports that, once in place, the system could incorporate penalty fees both for late cancellation of bookings by the lines and for double-booking by ports.

This issue and the specifics of booking deadlines, criteria for berth allocation and communication lines between ports and cruise lines are currently under discussion by both cruise companies and MedCruise before the new system is put in place.

In the current economic climate cruise companies are particularly exercised by additional costs such as the proposed cancellation penalties. Rather than increased port charges, they are looking for reductions.

"We live in tough times, with many challenges such as the global economic crisis and the geopolitical situation in the Middle East and North Africa," says MSC Cruises Corporate Operating Officer Neil Palomba.

"There are serious implications for all the cruise sector stakeholders involved, including ports and destinations. A more pragmatic approach is vital if we are to remain as competitive as we are now.

"We are unable to pay more taxes, so cost has to be taken even more into account when deciding our deployment strategy.

"Ten years ago, when we were operating a 500-passenger ship, it cost us \$10 for each passenger – \$5,000 – when we called at a particular port. Today we send a 3,000-passenger ship to the same port.

"If the fee had stayed the same, it would cost us \$30,000 but in fact it has gone up to \$15 (\$45,000) when, if the port employed the same economies of scale as we do, it should have gone down to something like \$5 (\$15,000) – which would still mean the port was trebling its income from a single MSC call.

"Ten years ago, consumers were paying more for their cruises than they are today, while fuel prices and other elements are increasing our costs.

"Recently one major Northern European port raised tariffs for 2012 and its reason – that they had been frozen for the past three or four years – was just not good enough. Why should they inevitably go up?

"We cannot do much about bringing the fuel price down but we can – by working together – do something to control port costs, as we must do when we are having to reduce the consumer prices in order to sell the cruises.

"We also need to work together to extend seasons by creating seasonally based tariff schemes. We cannot be expected to pay the same prices in the low season when consumer prices for the cruise are totally different."

AIDA Cruises Vice President Yield Management and Flight Operations Felix Eichorn says: "We will have an extended season in Northern Europe next year, but revenues will not be the same in the shoulder as in the peak. So we will find it difficult to keep the ship there beyond 2012 if costs are the same.

"The positioning voyages to and from the Mediterranean are challenging, so we would like to have a longer season in Northern Europe; but the port costs are so much higher than in the Mediterranean. Thus if they want to extend their season, we are looking for 30% cuts in port costs."

Cruise Baltic Director Bo Larsen believes that its member ports are open to negotiation to lower their off-season charges. "It is very likely that they would introduce lower costs for late year calls," he says, "as we really want to grow the winter market."

But the overall port costs situation across Europe remains complex.

"We are already working very hard to understand the implications of new regulations such as those on sulphur emissions," says Palomba, "but have the ports thought about what the impact will be on them?

"Have they asked themselves whether the ships will reduce the number of times they come to the port and/or the amount of time they stay, or even whether they will still come at all if they start increasing their days at sea?

"We are doing our homework. Ports must do theirs."

Eichorn agrees. "Our world is changing," he says. "We have to decide whether we need to stay so long in ports. Do we need to be in every port at 8am? Or would 10am be OK, allowing us to sail more slowly and save fuel?

"This will have an impact on shore tour operators, who will need to develop more short tours – excluding lunch. Such a trend will affect not just tour operators but also the development of ports."

Palomba is concerned about the other cruise tourism stakeholders, too. "There is a general lack of support from tourism authorities," he says. "We work with ports and terminals, but very rarely with the local tourism authorities. Yet the ships bring tourists – and therefore money – to the region, and cruise lines are spending all the marketing Euros.

"We are effectively bringing them tourists for free; yet we are penalised by having to pay head taxes. There is no sense in this, so we need to bring all the stakeholders together to decide how to optimise the business.

"The cruise sector is a dynamic source of economic activity – in Europe and globally – not just in tourism but also in areas like ship maintenance and all the many related business sectors we support.

"Every year we generate billions of Euros in goods and services. Every week we bring thousands of tourists from all over the world to discover European cities and regions – and cruise tourists often come back for a land stay. All tourism authorities should become more proactive.

"In the future, competition between ports for cruise calls will become even tougher than it is now. If ports build new infrastructure which means it will cost us more to call, it is most likely we will not call any more.

"We cannot be expected to pay the same prices in the low season when consumer prices for the cruise are totally different."

PALOMBA

"So before making that kind of investment, they need to talk to us. We already partner in various developments – not because we want to become terminal operators, but because we want to keep our costs down.

"Ports should work to understand the economics of cruise tourism. 2015, when the new low-sulphur/high-cost fuel use requirement comes in, is only just around the corner."

Princess Cruises Director Market Planning, Development and Itineraries Crystal Morgan agrees. "We always look at whether higher port costs can be justified, and also compare that cost with nearby ports," he says.

"Ports need to know their own backyard and recognise their competition before coming to us with higher costs."

Carnival UK Head of Fleet Shore Operations David Pickett believes there is a need to establish "a solid dialogue" with local governments to make sure that local taxation does not reduce the economic benefits from cruise tourism for local communities.

Royal Caribbean Cruises Ltd. Vice President Commercial Development John Tercek points out that most ports in Europe are publicly owned by quasi-governmental entities. "Therefore their costs are regulated, and often not guided by tourism issues," he says. "As a result it is often neither the ports nor the tourism authorities that are the right people to talk to about lowering costs."

"In the Caribbean, where summer cruise traffic has been going down, some government agencies are coming up with programmes to encourage that traffic back," Tercek points out. "They are subsidising the fees – but this is not being driven by the ports but by the communities that depend on cruise tourism.

"Not very long ago there was no cruise tourism to Panama, even though many cruise ships were going through the canal, so the government decided to pay us \$30,000 to stop the ships for four hours. Now it has a thriving cruise tourism sector."

There are clear signs that established cruise ports appreciate what is at stake. Hamburg Cruise Centre Chairman Stefan Behn says: "As a terminal operator, we only get a small amount of money compared to the city from cruise ship calls. That is why we founded the HCC – to get the city involved. For example, we know the pilots are expensive but they have fixed tariffs which they are not allowed by law to reduce.

"At the end of the day, though, as much as ports do need cruise lines, the lines need ports. So we all need to work together on issues like these."

ECC 2011/2012 Report

More collaboration will aid growth

By Stavros Hatzakos, new president of MedCruise

This association has reached new levels of industry respect and relevance in recent times and it is my aim - as its new President - to ensure that this trend continues.

We will continue to collaborate with the ECC and it's member cruise lines and other industry stakeholders to ensure that we build upon the tremendous growth in cruise traffic that we have already seen in our region.

In the process, MedCruise members and associate members will find even more support and services being provided for them. Those member ports reached 100 for the first time this year and we also have nearly 30 associate members.

It has been through their support that we have been able to move forward so effectively with a new berth allocation system designed to alleviate some of the congestion issues that the rapid increase in cruise calls has brought for some ports.

The new system - called the Unified Mediterranean Cruise Ship Berth Booking and Confirmation process - was approved by the MedCruise General Assembly in Athens and then presented before the annual European Cruise Council meeting in Brussels in June.

There, it got consensus from cruise lines which did, though, argue against any future imposition of call cancellation penalties.

In fact, none of the member ports has yet introduced any such fees as MedCruise suggested there first be agreement on common regional policies and guidelines concerning any cancellation penalties before their implementation.

Although - on its own - the system will not solve all the congestion problems, it is an important step forward as it will ensure that ports and lines have an early warning of such problems in specific ports. This gives them ample time to be proactive in avoiding or lessening any potential negative impact on passengers, crew and the local communities.

Congestion is, of course, an environmental as well as a logistical issue and I believe that responding to the demands of a growing cruise market in the Mediterranean will be just one of a range of environmentally-related challenges facing the association as we move forward.

As part of this development, we have joined with Costa Cruises and other teams working within the EU's LIFE+ project. This wide-ranging funding programme to reach various environmental targets is only in its first phase with the inaugural meeting taking place at Costa's Genoa HQ in Genoa last October and MedCruise will be involved until March 2014.

We believe the project outcome will be beneficial to all our members and to cruise lines, too. It should help them all be



MedCruise elects new president and Board of Directors

Photo: left to right, Yuriy Vaskov, Marijan Petkovic, Livio Ungaro, Bojan Babic, Kristijan Pavic, Lotfi El Ajmi, Stavros Hatzakos, Carla Salvadó, María Cano, Bruno Freitas, Figen Ayan and Giampiero Costagli.

more proactive about implementing the necessary measures to ensure they are compliant with the new environmental requirements.

In response to requests from cruise lines at the Brussels meeting for earlier communication of port tariff increases and preferably a prior meeting between port and line to discuss any such proposed increases, MedCruise expressed its support of more timely communication from the ports but - as each has its own pricing policy - does not consider that a blanket recommendation for ports to hold tariff meetings with lines would be practical.

I am the first MedCruise president to be based in the Eastern instead of the Western Mediterranean but, rather than signalling any change of emphasis within the association, this reflects the growth in member ports coming from the Eastern sector and also the policy of the association in looking to represent the variety of different ports: small and large from across the Mediterranean – west to east and north to south.

It is this approach that will ensure that the Mediterranean assumes an even greater importance within global cruising.

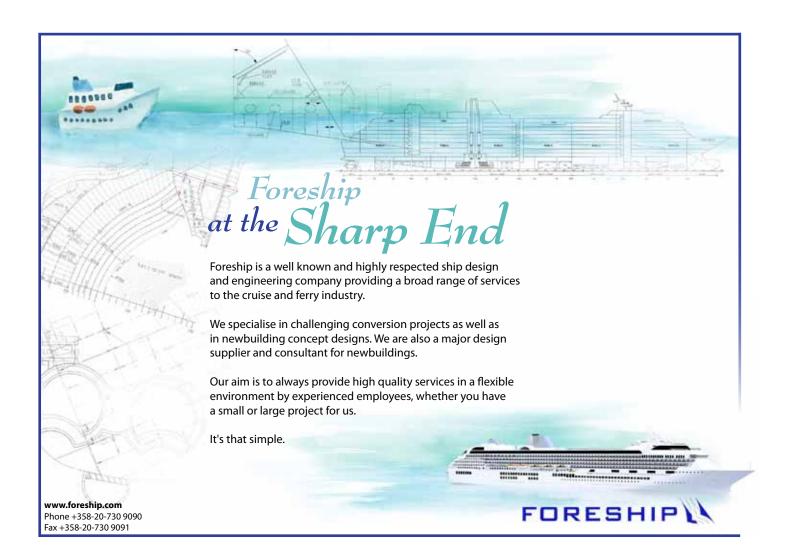
This association is a large family representing a variety of cultures and backgrounds so it is inevitable that each President and Board of Directors will leave a new legacy and I am looking forward to taking the association forward as positively as my predecessors in this role.

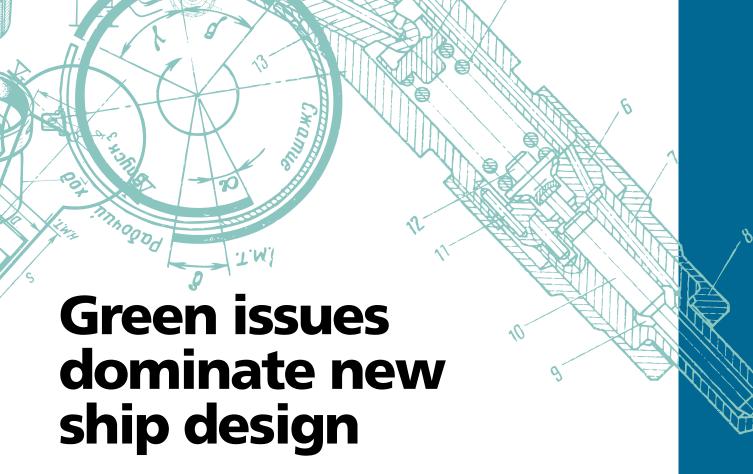


We're big on passenger safety

With the highest capacity, our top-of-the-line evacuation systems are chosen by the world's largest passenger ships. Whether you need marine safety equipment for big - or smaller - vessels, standard issue or custom-tailored, we've got your passenger safety needs well and truly covered. To find out more, visit www.VIKING-life.com or contact your local VIKING office today.







"The next generation of ships needs to be of flexible design, energy-efficient and economical to operate." This, according to Fincantieri Chairman Corrado Antonini, is the clear mission statement from the company's own design department.

"With diversification now the key for cruise brands," he says, "we need to tailor ships to meet size and passenger targets and to match different national lifestyles and expectations."

But safety and the environment represent the greatest challenges. "The real impact of the new 'green' rules and conventions are yet to be determined, as they are a revolution – not an evolution from past standards," Antonini says.

"Pending is the Energy Efficiency Design Index, for which the cruise ship standards have also yet to be defined and agreed upon. Its objective is clear, though: to contain greenhouse gas emissions."

But the shipbuilding sector has long appreciated that one of its major tasks is to deliver ships with much improved environmental performance. "We need to develop green products and energy-saving solutions within a broader innovation of product design and configuration, while advancing our technological edge to compete with the Far East.

"The industry has already had to incorporate new stability requirements and the Safe Return To Port concept in new designs," Antonini points out, "as well as the new ballast water, anti-fouling and recycling conventions that have been sequentially adopted by the IMO.

"There have been no great technological breakthroughs, but a lot of modifications and new solutions such as new hull shapes, waste recovery from heating, cooling and ventilation systems, more efficient lighting systems and the use of new insulation materials.

"As far as safety is concerned, the main challenge is the allocation of spaces to balance the need to maximise areas dedicated to cabins and entertainment with the obligation to respect new safety standards by introducing redundancies in technical plants."

STX France General Manager Jacques Hardelay says: "We are working a lot on new propulsion and energy-saving concepts. It is important to keep ahead as far as any new environmental regulations coming down the line are concerned."

To do this requires help from naval architects and marine engineers – which is where companies such as Finland's Foreship comes in. With offices in Helsinki and Turku, this ship design and engineering company has worked on a variety of newbuild and – increasingly – refurbishment projects for the cruise sector.

"We are all waiting to see exactly what all the environmental regulations will mean for ship design," says Managing Director Janne Lietzen. "But we have already been working on energy-saving solutions.

"There is a lot of scope for improvements within the hull and propulsion areas."

Recently Foreship developed a new type of central skeg – the sternward extension of the keel – for cruise ships and ferries. The Foreship Efficiency Skeg provides a 2% reduction in required propulsion power, and can be applied to both conventional shaft as well as podded propulsion – during refits as well as for newbuilds.

Lietzen acknowledges that his company has been affected



The single answer to all Ship Recycling questions

www.sea2cradle.com

Hassle-free, environmentally sound, efficient and above all safe. Ship Recycling in 2011 is as easy 1-2-3 with the help of the newly formed but higly experienced team from Sea2Cradle. Our services can be acquired as a **fully integrated solution** or as separate modules, specified to help you where you need it most.

Brokerage and legal assistance

With years of experience in the recycling industry we have a reliable network of brokers and vast legal knowledge to ensure quick action and prevent unwanted surprises.

IHM & Ship Recycling Plan

Be prepared for the future by knowing what you're dealing with in your own fleet. A full Inventory of Hazardous Materials will be required in the near future as will the Ship Recycling Plan.

Yard Assessment & HSE-Training

For new yards looking to become a top player in the ship recycling industry we can assess the facilities, recommend upgrades and train workers and staff to raise safety awareness and working efficiency and safety.

About Sea2Cradle

The industry's first professional ship recycling team now has a new name. As Sea2Cradle we are more flexible, more focussed and overall better prepared to meet your needs concerning the disposal of old tonnage. With new regulations just around the corner there is no better time to prepare your fleet with an up-to-date Inventory of Hazardous Materials. Feel free to contact us for any questions or to make an appointment.

address

Scheepmakershaven 59 3011 VD Rotterdam the Netherlands telephone: +31 (0) 6 5367 7232

e-mail:

blankestijn@sea2cradle.com



"By designing hulls for the most frequent speed, we can optimise the hull for that speed, so saving fuel and energy."

ANTONINI

by the slowdown in newbuild orders, and expects this situation to continue while the global economic problems continue; but he has seen a distinct upturn in business from refurbishments

"All the major players seem to have ongoing revitalisation programmes," he says. "And, although there can be stability and other issues with retrofitting some of the more ambitious new features on the newbuilds into the older, smaller ships, we can usually find solutions to make it possible."

STX's Hardelay also sees some compensation for the current orders slowdown in the simultaneous increase in refurbishment work. "There are a lot of things you can focus on to modernise a ship and avoid having to order a new one," he points out.

"As new ships are both larger and considerably more fuelefficient than the average ship in companies' fleets," agrees Fincantieri's Antonini, "their returns are quite a lot higher.

"Such a refit can mean life extension for a ship through the introduction of revenue-earning improvements, cost reductions from energy efficiency and an overall alignment with the brand's other ships.

"Add to this the necessary changes for compliance with new safety and green-related regulations and these become no ordinary refits in terms of complexity and cost. But European shipbuilders and their suppliers are well equipped to carry them out."

The total amount being spent on these projects is currently about \$1 billion a year, which is still just the equivalent of a one very large or two smaller newbuilds. So its contribution does fall well short of compensating for the revenue being lost through the reduced frequency of newbuild orders.

Nevertheless these ship makeovers are still a welcome

additional revenue stream for the shipbuilders, and are also just as illuminating about design trends as newbuilds.

"The test beds for new concepts are newbuildings," says Lloyd Werft Managing Director Rudiger Pallentin, "but, if these turn out to be successful, the owner will then see if his older ships can also be modified to meet the latest passenger demands.

"There is clearly a demand for more balcony cabins. In our recent conversions of Mein Schiff 2 for TUI Cruises and Artania for Phoenix Reisen, we added balcony structures to existing cabins and partly installed new cabins with balconies.

"Another trend is converting existing public areas, or adding new ones, in order to install health and spa areas with saunas, treatment and fitness rooms.

"We are also being asked to modify existing dining rooms for open-seating dining. The traditional two-seating dining with parallel entertaining of the other half of the passengers seems to have become history.

"Other trends include installation or upgrading of new digital equipment onboard – including interactive screens and Internet cafés – and the use of heavy-duty material like special floor coverings."

Pallentin says that the Lloyd Werft yard has not yet been asked to retrofit the more ambitious features of the new mega-ships – bowling alleys, ice rinks, climbing walls etc. – but the same environmental agenda that is driving much new ship design is also playing a part in refits and conversion work.

"Environmental factors will force some of the biggest changes with cutting emissions probably the number one challenge," he says. "Finding ways to optimise energy use onboard to reduce electrical consumption are regularly part of our brief. We are even fine-tuning the shape of the hulls, and using silicon paint on the underwater section in order to save on fuel."

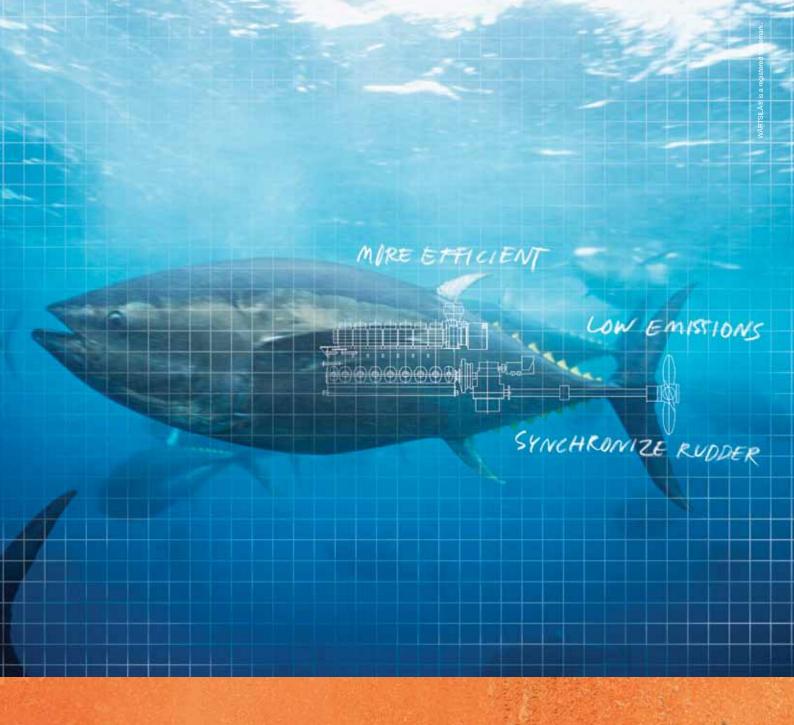
Antonini says: "More hydrodynamic hull forms require less propulsion power. The starting point is the speed as, by designing hulls for the most frequent speed, we can optimise the hull for that speed, so saving fuel and energy. A hull optimised for 20 knots will be different from one optimised for 22 knots.

"Looking ahead, some day e-guided vessels may become a reality, using technology to avoid collisions, groundings and other incidents. We do not have to concentrate on the consequences of flooding if collisions can be avoided."

Pallentin says: "Reducing exhaust gas sulphur emissions will have to be achieved either by burning low-sulphur fuel, or by investing in equipment to treat the gas, or converting the main engines to burn liquid and gas fuel in a dual arrangement."

STX Europe is building a ferry for Viking Line that is powered by liquefied natural gas (LNG), but the refuelling issues are quite different for cruise ships operating wideranging itineraries rather than a year-round A to B ferry route. Its potential application for the cruise sector therefore remains under review.

STX France has, however, produced a plan for an 'Eoseas' concept ship. The 3,000-passenger cruise ship would be powered both by LNG and by sails.



WHEN THE SOLUTION CALLS FOR IT, WE USE COMPONENTS OTHER THAN OUR OWN.

Wärtsilä now offers the marine industry total solutions that cover everything from design to lifecycle service. This makes our solutions uniquely efficient and environmentally sound. Read more about what we can do for you, wherever you are: wartsila.com.





WARTSILA.COM



Engines – an evolving science

mproving energy efficiency has always been a holy grail for the world's cruise lines, and that remains the case today. "It is driven by the need to reduce fuel consumption," points out Carnival Corporation & plc Vice President for Maritime Policy and Compliance Tom Strang, "the cost of which comes right off your bottom line."

And it's an even more pertinent consideration now, with fuel costs on the rise and environmental regulations aiming to cut emissions looking certain to drive them higher still.

The goal of environmental sustainability has also driven the search for greater engine efficiency in other ways. Talk to the engine developers and they will tell you that, as the environment has come to assume ever-greater importance, the way they approach their task has also changed.

The past five years have seen significant developments in improving engine performance, says Fred Danska, Director of Cruise Business at major engine provider Wartsila. "Whereas the focus many years back was almost solely on fuel consumption, it has now shifted to environmental values and lifecycle cost.

"The focus on lifecycle costs especially increases the potential for looking at solutions beyond fuel consumption. It has to be noted, though, that with the increase in fuel cost, efficiency is even more important than before."

This is an increasingly arduous process since, he remarks, "As you improve efficiency, every additional step requires more effort." Yet at the same time the new approach, and particularly the emphasis on total lifecycle cost, also creates opportunities.

"As a direct result we have been able to make use of

technologies that would not have been cost-effective earlier, such as common rail. Two-stage turbo-charging is another emerging technology that is now becoming cost-effective."

Duncan Duffy, Engineering Systems Subject Matter Team Leader at leading classification society Lloyd's Register, points out that the intensifying focus on the industry's environmental impact also poses problems that engine developers must deal with.

"Progress [in engine development] has been incremental rather than revolutionary over the past few years. At the same time we have seen an increasing focus on environmental performance. As we look to attain lower emission levels, it can create a direct trade-off with efficiency, particularly with diesel engines.

"When you look at the requirements of Marpol Annex VI, for instance, a lot of the developments that improve emissions performance also reduce efficiency. As a result, existing technologies like heat recovery are being looked at as a way to claw back some of that trade-off. Work is also going into exhaust gas recirculation systems, but that technology still has a bit of testing to do to ensure it can operate reliably."

Duffy also cites the Hercules Project – the major collaborative effort to develop high-efficiency, low-emission engine technology – which, he says, is looking at all kinds of emission abatement technology. "The next part is to integrate these technologies as a system, which will have a major impact on the overall efficiency of the ship. However, combining technologies brings systems risks for the designer and validator to consider – such as the impact on the



At Rolls-Royce we are working closely with our customers to develop innovative, value adding solutions that will fully meet their future requirements. To perfect our leading-edge technologies we are using the most advanced facilities and making substantial investments in research and development. By doing this, we are providing our customers with new products,

integrated systems and services that will enable them to realise the immense benefits of improved performance and optimised through-life costs. Rolls-Royce, delivering total satisfaction today and thinking ahead to deliver intelligent marine solutions for tomorrow.

Trusted to deliver excellence



"Combining technologies brings systems risks for the designer and validator to consider; such as the impact on the integrity of the propulsion system as a whole."

DUFFY

integrity of the propulsion system as a whole."

He says the increasing regulatory focus on goal-based solutions is critical to driving technological development at a time when the rules in many areas are still developing. And he argues that the breadth of work going on across the industry testifies to the correctness of that approach.

"Fuel cells for power generation are being tested, for instance, and liquefied natural gas has a lot of interest across the industry," says Duffy, though he notes that it must deliver a range of solutions – including safety and design challenges onboard ships, and the need to develop an effective distribution network – before they can pass muster as a realistic alternative for the industry.

Danska, too, champions the more catholic approach. "The combustion of gas produces very low emissions, and has a major positive impact on reducing environmental load," he says. "Wartsila has also been developing recovery systems through which excess heat energy can be converted to electricity. In this way we can both reduce emissions and save fuel."

Looking forward, Danska says he anticipates Wartsila continuing on this path, developing the combustion process and fuel-injection technology as well as turbo-charging. "We are also working on improving the efficiency of propulsion as a whole."

The company is also continuing its work on dual-fuel engines, which allow the same engine to be operated with gas or diesel fuel – a commitment that this summer saw it top three million running hours on dual-fuel engines. Wartsila's belief in liquefied natural gas as a core fuel for the cruise ships of the future continues to be as strong as ever.

As the industry continues to develop engines that are both more efficient and more sustainable, collaboration will be the order of the day – whether among companies with an existing business relationship, or the kind of consortium typified by the Hercules Project. No less than 43 entities are cooperating in this, backed by the European Union and the

Swiss government.

According to Strang, cruise lines have always had good relations with the engine manufacturers. "There has always been a good partnership, and necessarily so," he says, "since this is a piece of equipment that has to work 24 hours a day, 365 days a year."

As ship sizes and fleets have grown, and the need for greater engine efficiency and compliance with a changing regulatory landscape has become more urgent, the importance of that relationship has come into even closer focus. Supply and service agreements between cruise lines and engine manufacturers are also becoming increasingly complex and far-reaching.

Royal Caribbean Cruises Ltd. (RCCL), including its Azamara Club Cruises brand, has 118 diesel engines in operation, with totalled installed diesel power of 1,275MW, according to Marine Technical Services Associate Vice President Anders Aasen. A hefty 102 of those engines are from Wartsila – 78 of them the Wartsila 46, the guiding principles of which, he says, are "reliability and total economy".

Though RCCL handles its maintenance in-house, using four specialised travelling diesel maintenance teams, it also recently signed what it claims is a groundbreaking maintenance support agreement with Wartsila.

The five-year deal covers 29 ships and includes maintenance planning, spare parts logistics optimisation, engine component development and fuel consumption optimisation. It also covers the development of future remote engine monitoring systems and their associated software.

Royal Caribbean International Senior Vice President Marine Operations Capt. William Wright said in the joint statement which accompanied the announcement that it combines predictability with innovation, and provides a model for joint technical cooperation.

Yet if innovation and the drive to develop the engine of the future is a key part of the arrangement, it is also striking how early and how often the cruise lines' perennial concerns – 'improved fuel economy and the predictability of the customer's operational costs' – surface in that statement.

What the deal also underlines is the importance of maintenance to engine efficiency and environmental performance. This too is an evolving science, according to RCCI

The company is evaluating the effectiveness of a new programme of condition-based operation and maintenance (CBM). Some of its ships have installed a CBM system that constantly monitors critical parameters and information, and this information is sent ashore to the engine manufacturer for trends analysis. Combined with additional analysis – of lubricating oil, water treatment, overhaul reports and fuel oil – it will form the basis for decisions on engine adjustments. If successful the CBM programme will be extended to other vessels in the fleet.

RCCL is also looking beyond these innovations to future advances. Dynamic maintenance planning is the next step being developed; this is designed to change maintenance intervals from running hours to actual needs, as indicated by engine performance. In maintenance, as in every other area of engine development and utilisation, the future is always just around the corner.



Clarity Marine Lubricants

Environmental responsibility.

Despite a desire for action, the shipping industry has been slow to accept the traditional compromises — additional operating expenses or reduced performance — necessary to improve its environmental footprint.

But now, there is good reason to change course.

Chevron's Clarity® Marine Lubricants deliver the benefits of 'green' operation and dependable high performance — the perfect balance between environmental responsibility and operational cost.

Benefits:

- Non-toxic to aquatic species, as determined by LC50 testing
- Inherently biodegradable, minimizing long-term environmental concerns
- Exceptional oxidation stability, water separability, foam suppression, and protection against wear, rust & corrosion
- Ashless formulation facilitates reclaiming and recycling
- No corrosive active sulphur additives

Find Clarity® at Chevron's booth: Marintec China 2011, Hall W3, Stand 3L19, Nov. 29 – Dec. 2

Clarity Marine Lubricants

Environmentally responsible lubricants for fleet operators.

For more information, contact your Chevron account manager, or visit www.chevronmarineproducts.com.



"For 2015 there will probably be enough [low-sulphur fuel]. But will it be in the right place?"

STRANG

Derogation and fuel availability

ike many industries the cruise business has two major requirements of its regulators, and the rules they promulgate: reasonableness and clarity.

As concern rises over man's impact on his surroundings, and environmental regulation comes to assume a pivotal role in the daily life and future planning of the cruise industry, it is fair to say that, by and large, much of the emerging tapestry of rules answers positively on both counts

There are exceptions, however. One such is sulphur regulation which, for many in the industry, poses questions that are devilishly difficult to answer at a time when the deadline for implementation is looming ominously close.

Chief among the industry's concerns is the question of fuel availability. As the limits on the sulphur content of marine fuel become increasingly restrictive, the cruise industry fears that after 2015 there may be operational challenges with compliant fuels not being available at all berths in all ports. And after 2020 there simply will not be enough compliant fuel available to meet the shipping industry's needs.

These fears have been exacerbated by the European Commission's proposed amendments to the existing directive on the sulphur content of marine fuel, released in July. Before its release the EC suggested its language would mimic Marpol Annex VI, a compromise the industry can live with.

It was not to be: in particular, it omitted a derogation for the industry in the case of sufficient low-sulphur fuel being unavailable, whether the 0.1% fuel applicable to emission control areas in the Baltic Sea, the North Sea and the English Channel in 2015, or the 0.5% limits due to come into effect elsewhere in 2020.

The shipping industry as a whole is eager for change before the proposal becomes law. It wants a delay, or dilution of the proposed fuel restrictions. The European Cruise Council accepts that this is unlikely, but it does want a derogation should sufficient fuel not be available.

Judging the likelihood of that situation arising remains difficult. The cruise lines are debating the issue with the major oil companies in a bid to gauge their exposure but, as Carnival Corporation & plc Vice President Maritime Policy and Compliance Tom Strang notes, it is a sensitive discussion. "We are not at liberty to publicise our views at the moment. What I can say is that for 2015 there will probably be enough. But will it be in the right place?"

The supply situation in 2020, when there is set to be a dramatic increase in demand for low-sulphur fuel, is an altogether different matter. Indeed, many in the industry believe that after the experience of 2015, a delay of up to five years in implementing the 2020 limits is more likely than not.

"We've all reached out to the refiners," says Jamie Sweeting, RCCI's Global Chief Environmental Officer and Vice President Environmental Stewardship. "The overriding feeling is that they're not going to guarantee anything. It depends entirely on the market, and on the demand they have. For them it's pure economics. They will sell the kind of fuel that gets the best return." He too argues for a derogation, arguing that there is plenty of precedent for this in EU law. "I don't think it is an unreasonable request."

Trevor Harrison, Acting CEO at the International Bunker Industry Association, says it is unlikely that the rules will be watered down or their implementation postponed. "The political imperative for the EU and the member states is to see this happen and worry about the consequences after. I don't see any dilution or deferment coming."

A derogation on fuel is more likely, given the doubts over availability. "The short answer is, nobody knows if the fuel will be available," says Harrison, "but I would anticipate that 0.5% fuel oil is the really tricky hurdle to overcome. The 0.1% gasoil issue is more a question of economics, whereas 0.5% is about logistics and production capacity."

It is also about investment, and the comparatively high cost of desulphurisation. "My understanding is that the investment required to produce 0.5% sulphur fuel oil in sufficient quantities is not being made, and is unlikely to be made," Harrison notes. Sooner or later, that is a prospect that the cruise industry, and its regulators, may necessarily have to confront.

Is LNG the solution?

eining in ship emissions has become almost a holy grail within the cruise industry. The curbs imposed by regulation are now being matched by efforts across a range of sectors – from equipment makers to shipbuilders, cruise lines to classification societies – to come up with cost-effective new ways to reduce the impact of cruising on our environment.

Much of this broad-based effort has focused on making existing engines more efficient, thereby cutting consumption and hence ship-generated pollution. More efficient engines can only go so far in reducing emissions, however, so the industry is focusing increasingly on incorporating alternative fuels into cruise ship design and operation. On this score barely a month goes by without some new statement of intent.

This summer, for instance, Stirling Design International and the French shipbuilders of STX Europe unveiled Eoseas, a 105,000 dwt concept cruise ship powered by wind and sun, biogas recovered from waste treatment and liquefied natural gas (LNG).

LNG is a particular favourite in the search for environmentally friendly fuels, with everyone from engine maker Wartsila to shipbuilder Incat working on LNG-based designs. The regulators, necessarily, are also getting involved.

And even on the regulatory side it is becoming something of a scramble. Thus in November Japan's transport ministry was reported to be drawing up new safety rules for LNG-powered vessels in a bid to spur development, speed commercialisation and – not coincidentally – allow Japan's shipbuilders to steal a march on their competitors.

Royal Caribbean Cruises Ltd (RCCL) has been among the leaders in the alternative fuels arena for some years, and continues to focus on finding new ways to improve efficiency and reduce emissions. As Anders Aasen, Associate Vice President for Marine Technical Services at Royal Caribbean International and Azamara Club Cruises, puts it: "We are willing to try anything, as long as it has a positive effect."

That open-minded approach has led RCCL down the occasional blind alley. For almost two years it experimented

with biofuels on Radiance of the Seas and Celebrity's Millennium-class vessels. "But then," says Aasen, "we found that it was damaging the turbines to the extent that it was reducing their working life. We had to change them more frequently, so it was not cost-effective."

Not only that, but the production process for the biofuels meant they were not quite as green as they were billed. "At the end of the day, the total footprint was one of the reasons we stopped."

Other forays into alternative energy – such as solar power – are more promising. "We installed solar panels on Oasis of the Seas," says Aasen. "We have about 85kW, with panels covering almost the whole top of the ship. On a good day we would get an average of about 50–60kW over 12 hours."

Aasen quips that the cost of the system was about \$1 million, "So it probably won't be paid back in my lifetime." He also notes that "if you look at the power plant of Oasis, it is almost 110MW in total; so 85kW doesn't make too much difference." Nevertheless Royal Caribbean International will stick with solar as an auxiliary energy source, confident that its cost-effectiveness will continue to improve. "Its price is going down every year," Aasen says, "and it won't be long before its efficiency is doubled."

LNG has also been on RCCI's radar, though Aasen says distribution remains an issue, certainly in the US. "We really want to use LNG, but it's a challenge. We did a study on it a year ago. If you sail out of Boston or New York, you can get LNG; but not sailing out of Miami. You have to truck it down there, which defeats the object. In the US the lack of a distribution network is problematic."

In Europe, meanwhile, the cruise industry is concentrating increasingly on LNG as a sustainable alternative to marine fuel oil. Wartsila, for instance, combined with the then-Aker Yards as far back as 2007 to produce an LNG concept cruise ship that addressed the numerous challenges posed by the new fuel.

More recent discussions have focused on the Baltic Sea as an obvious first choice for LNG to take hold, at least for short-sea shipping. Even here, distribution remains a

"Our new generation of ships will be equipped with dual-fuel engines that are planned to run on LNG in port"

TESCHING

significant challenge; but, as for Europe as a whole, the long-term environmental benefits of a shift to LNG could well make the required investment worthwhile.

"From the point of view of environmental management," says AIDA Cruises Energy and Environment Manager Bastian Tesching, "the advantage of LNG is that it results in cuts in NOx and SOx emissions, as well as emissions of particulate matter. CO2 emissions may even be a little bit lower, but at the very least three of the four main emissions streams can . be reduced considerably."

On the cost front, he says, questions remain as to how LNG will compare with traditional marine fuel oil. It is not enough simply to compare spot prices in New York or Rotterdam. Among other considerations there are bunkering issues and transport costs, depending again on the supply situation and the need to move the LNG by pipeline or ship.

In terms of vessel design, the rules are still at a formative stage. "The most crucial point is the safety of the passengers," notes Tesching. "Some parties, such as [classification society] Germanische Lloyd, have looked into the detail of how to build a ship run on LNG, and have come up with preliminary guidelines. But it has not yet been defined in depth, and regulations in this area have not yet been adopted into SOLAS.

"Until they are," he continues, "it is not clear technically how such ships should be designed.

How to guarantee safety is a key issue, especially how to bunker and what that ship has to look like if you plan to run it on LNG when it is at sea. As a first step we are looking at running a ship on LNG when it is in port."

This a key consideration as the cruise industry looks to minimise the impact of vessel emissions on ports of call with high population densities. "Our new generation of ships will be equipped with dual-fuel engines that are planned to run on LNG in port," says Tesching. "We see this as the first step towards LNG-powered ships."

Numerous technical and regulatory challenges must be overcome on the way from here to there. "SOLAS says that, at least on passenger ships, no fuel is allowed with a flash point below 60°C," says Tesching. "Another point is fuel bunkering, which has to be as safe as possible.

"Space onboard is an issue, of course. LNG requires a huge amount of space – three times the volume that a heavy fuel oil tank would eat up. This is not entirely due to LNG's lower density, but the tanks have to be cylindrical." These space considerations also mean that there is almost no prospect of retrofitting ships for such a solution. "It will have to be just for newbuildings."

Tesching says AIDA is currently studying the possibilities for LNG use. It is also conveying its eagerness to move forward to the LNG suppliers and to ports looking to create the infrastructure that would transform the concept into a functioning system on the ground.

He says that while the infrastructure in major ports such as Hamburg or Rotterdam may not yet be developed, Northern Europe is well ahead of other European regions in preparing for the introduction and roll-out of a new LNG distribution system.

It may take a little time, but Tesching at least is confident it will come. "I am optimistic," he says. "It is difficult to talk about a time frame, but LNG is certainly the number-one solution [as an alternative to marine fuel oil] — maybe not in the next three years, but certainly in the next five to ten."

Emissions technology – a race against time

s the cruise industry looks towards the introduction of new limits on the sulphur content of marine fuel, strenuous efforts are under way to identify alternative methods of reducing emissions of SO2 into the atmosphere.

Prominent among these is work on exhaust gas cleaning systems, or 'scrubbers', that would strip out toxins such as sulphur from the exhaust gas stream. Scrubbers are permitted under Marpol Annex VI as an alternative to using low-sulphur fuel, provided they achieve the required results.

Of the cruise lines now working to incorporate scrubbers into their vessels, Holland America Line (HAL) has been among the leaders. Four years ago it launched a seawater scrubber pilot project with the backing of a wide range of partners including the US Environmental Protection Agency and Environment Canada, the Puget Sound Clean Air Agency and the Port of Seattle.

The test platform for the project, which aimed to test the efficiency of the Krystallon sea water scrubber developed by Hamworthy to remove SO2 and particulate matter, was the Zaandam, a 238m, 61,000 gt cruise ship with capacity for 1,500 passengers and 600 crew. The scrubber, piping and instrumentation was installed on one of the vessel's five Wartsila diesel engines in the early months of 2007 and monitoring – not just of engine emissions but also of wash water from the scrubber and the sludge resulting from the process and destined for onshore disposal – began in August of that year.

Hamworthy's design is an open-loop system, with seawater being pumped into a scrubber where it meets exhaust gases from the engine and converts much of the sulphur therein into benign calcium sulphate.

The wash water then proceeds through a multicyclone which strips out the sludge from the conversion process, including

petroleum hydrocarbons and metals, and then an acidity adjuster that raises the water's pH to near neutral before it is returned to the sea. The entire process is heavily monitored.

In early testing in 2007 and 2008 HAL found that the scrubber removed roughly 75% of the SO2 and 57% of the particulate matter, reductions it said were equivalent to using 0.5% sulphur content distillate oil.

More is needed, though, to bring emissions down to the 0.1% limit which is due to go into effect in 2015 in the European emission control areas of the Baltic Sea, the North Sea and the English Channel, as well as the North American ECA which extends 200 miles offshore.

Scrubbers do not yet appear to be an unalloyed boon for the industry. They are difficult and expensive to install, and it may not be viable to add scrubbers to all the main engines. And they can also introduce environmental issues of their own.

There have, for instance, been questions about the environmental safety of the wash water generated in the scrubbing process, which may in turn pose disposal problems. Some observers have suggested that wash water returned to the sea can generate enough CO2 to more than offset the gains on sulphur emissions. Hamworthy has strongly refuted such suggestions as regards its own technology, though other issues have surfaced since the pilot project began that have required attention

At the end of August 2008 HAL started operating the Zaandam's scrubber in port in Vancouver and in the Alaskan ports of Ketchikan and Skagway. A week later shipboard personnel in Ketchikan noticed soot particles in the washwater discharge and a light sheen on the water. The company duly halted the project in 2010 so that Hamworthy could deal with those wash-water filtration issues. The HAL pilot project is now understood to be up and running again.

Royal Caribbean Cruises Ltd. (RCCL) is another company

"There are major safety considerations when you're installing equipment with a large amount of electricity and significant amounts of water being pumped around the ship."

SWEETING

leading the charge on developing innovative responses to today's environmental challenges. Last year it opted to test a new system designed to remove not just SO2 but also NOX and CO2 from the exhaust stream, and without generating the harmful side effects that might in whole or in part negate the gains achieved.

CSNOX, a system developed by Singapore-based Ecospec Global Technology and already verified by the American Bureau of Shipping, operates without chemicals but using an ultra-low-frequency wave electrolysis treatment. Tested on an oil tanker it succeeded in stripping out 99% of SO2, 77% of CO2 and 66% of NOX from the exhaust flow, the company claims.

Its application to cruise ships remains a work in progress, however. RCCL had identified Independence of the Seas, a 154,407 gt vessel with capacity for 4,375 passengers and 1,360 crew, as its test vessel. "We've installed the technology onboard and did a rough trial for a few days in September," notes Jamie Sweeting, RCCL's Global Chief Environmental Officer and Vice President Environmental Stewardship. "The water was able to go through the system without significant flooding.

"We treat this as we do any major construction project," he explains. "There is a series of levels you have to get to. We are in the process of refining the design and installation process. There are major safety considerations when you're installing equipment with a large amount of electricity and significant amounts of water being pumped around the ship."

Sweeting believes that RCCIs long experience in retrofitting its ships with state-of-the-art technology aimed at securing environmental gains will serve it well in this case too. "Ten or 11 manufacturers and 25 different systems later, we've learned a lot about marinising leading-edge shoreside technology," he says of RCCI's work on advanced waste water treatment systems.

"We are extremely keen for [the CSNOX system] to be successful, but it is also extremely premature to say it is a solution. I certainly hope it will be part of our arsenal." He says the aim is to have Independence of the Seas up and running with the system by the end of this year. "Then we will look to do fit-for-purpose testing," the aim being to get these systems to work continuously for days on end while meeting the IMO equivalency standard.

Functionality is one issue, but of course cost-effectiveness is another; after all, one of the great driving rationales behind the development of scrubber technology is the cruise lines' ardent hope that they can thereby alleviate the financial pain of steepling low-sulphur fuel prices. "There are issues we face in terms of maintaining and servicing these systems," Sweeting says. "There are maintenance costs and operating costs, and the additional costs of specialised manpower."

Responding to the regulatory demands of the future will require a range of complementary responses, scrubbers being one of them, he stresses. Many of these solutions will require time to mature, given significant obstacles to early deployment. Cruise lines must answer safety, design and distribution questions, to name but three, before liquefied natural gas can be widely used as a core fuel, for instance.

"In terms of scrubbers," Sweeting says, "averaging would be very effective if you are looking at the business case. It allows you far more flexibility in terms of the fuel you burn in the other engines." He is clearly hoping for flexibility from the regulators at a time when the industry, along with the wider global economy, is under intense financial pressure.

Either way, he leaves no doubt that this will necessarily be a long-term project. "Even if we install this technology on Independence of the Seas, we have dozens of ships with four to six engines. It is going to take a long time to deploy this technology across an entire fleet."

The need to harmonise sulphur policy

urope is continuing to work to develop policies to further enhance the protection of the natural environment, and emissions from shipping are emerging as a key area of focus. In response, whether through the UN's International Maritime Organisation or through regional bodies such as the EU, regulators have begun tightening the limits on emissions of a range of pollutants.

Among the myriad stakeholders who have contributed to the policy debate, the cruise industry has been prominent in arguing for achievable emissions reductions that achieve scientifically justified objectives in as cost-efficient manner as possible – particularly in these times of rising economic uncertainty.

By and large the industry has been able to craft compromise solutions that it can live with. On some issues, however, concerns remain, and nowhere more so than in the developing EU regulatory approach to SO2 emissions.

The industry's focus has always been on securing global regulations administered on a global basis, as Carnival Corporation & plc Vice President for Maritime Policy and Compliance Tom Strang says. "We have always said that if we are going to have anything we want international regulation, not lots of variations on a theme, region by region. That would be very difficult to manage, and very challenging for us."

In terms of sulphur emissions, international regulation means Marpol Annex VI, which Strang characterises as "A package of measures that was pretty well thought out." Indeed, for many in the industry, the package hammered together at the IMO was a sound compromise – including some concessions, but not so many as to scupper the deal – and enough safeguards to provide reassurance.

Under Marpol Annex VI, the sulphur content of marine fuels is due to drop to 3.5% as of 1 January 2012, and then fall again to 0.5% on 1 January 2020 – subject to a fuel availability study which is due to be completed by 2018. Should that study conclude that there are problems with fuel availability, the 0.5% limit will be put back until 2025.

In the so-called emission control areas – areas of particular sensitivity comprising, in Europe, the Baltic Sea, the North Sea and the English Channel – the limit dropped to 1% on 1 July 2010 and is set to fall further, to 0.1%, as of 1 January 2015.

This summer's European proposal on sulphur emissions was supposed to mirror the IMO's approach and, sure enough, it is broadly in keeping with Marpol Annex VI. However gaps remain, and in some areas there are changes in language. And the differences are significant enough to have sent a shudder through the industry.

"We don't know what we are going to get as far as the EC Directive goes," says Strang. "We will know only towards the middle of next year. But we have concerns over gold-plating, with additional requirements over and above Marpol. There are also a number of areas where we would like to see amendments made, such as the way scrubbers are treated."

The treatment of equivalencies – such as fuel averaging, under which permissible emissions might be averaged out for a single ship over a specific voyage, or indeed a fleet of ships over a period of operation – are only mentioned in passing, with the focus of the Directive much more on alternative technologies; even though, as Strang points out, it could have a significant impact on the industry's costs as it strives to meet the new limits.

"We are working in the US in particular on this. It creates opportunities to deliver a better environmental benefit, with a financial upside as well." The more complex regulatory environment of Europe – with its rules still in flux, and a 27-member European Union to accommodate – would necessarily come later. "We want to get it sorted out in the US first," says Strang.

The European Commission, he says, is "obviously very eager" to see alternative emissions abatement mechanisms, such as scrubbers and the use of liquefied natural gas (LNG), incorporated into the industry's approach. But he argues that without other instruments such as averaging it will be difficult to achieve the results desired, and equivalency measures

"We have always said that if we are going to have anything we want international regulation, not lots of variations on a theme, region by region."

STRANG

should be seen as supportive of, rather than in competition with, the development of new technology.

"If you have scrubbers on one or two engines, you want to average out the emissions over the whole vessel," he notes. By the same token, cutting emissions sharply close to populated areas and less heavily out to sea, could well make sound environmental, as well as economic, sense. The European Commission has to "look at their whole toolbox" says Strang.

Jamie Sweeting, Global Chief Environmental Officer and Vice President Environmental Stewardship at Royal Caribbean Cruises Ltd., agrees. "As long as you can demonstrate that the emissions released into the atmosphere are in line with the regulations, it should be considered a win-win for everyone," he argues. And also, given the increasing severity of the economic downturn and the need to avoid penalising a productive industry and a major employer, he expects the regulators to be open-minded on how the industry achieves its targets.

"Unfortunately, some people jump to the conclusion that [the industry is] looking for loopholes, when what we are trying to do is minimise the financial burden for the companies and their stakeholders." He adds that "people's livelihoods are affected" — not just at the cruise companies but in the ports and far beyond.

Sweeting also warns that inflexibility in the framing and implementation of the new EU directive could have an impact on vessel itineraries, and thus on the economic prospects of the affected cruise destinations. He cites Alaska's introduction of a swingeing \$46 head tax, which he said savaged customer spending, slashed demand for Alaska cruises, and prompted cruise lines to deploy elsewhere. The cost impact of the new sulphur rules, he says, could be two to three times that of Alaska's head tax.

All these are significant issues, but perhaps the most troublesome element of the EU proposal is its failure to include a fuel availability clause that would exempt ships from the directive's provisions (on an individual voyage basis)

in the event of a fuel shortfall – either at a particular port or berth, or as part of a more fundamental failure in the supply of compliant fuels.

"We supported the EU in harmonising its policies with the IMO," says Sweeting, "and, as part of the global shipping industry, we believe that, regarding governance of environmental issues pertaining to large bodies of water in international settings, it is best to try to deal with those within the IMO." He admits, however, to "deep concerns" over the EU proposals, particularly on fuel availability.

"We are concerned that it won't be readily available in every port by 2015. It is very difficult to comply when you are not guaranteed adequate supply. There should be a clause included that allows for exemption in the case of non-availability, as per the IMO. We are just asking for reasonableness," he adds. "If you go to a port and you don't find fuel, how on earth can you comply?"

As MSC Cruises Environmental Coordinator Francesco Balbi notes, the fuel availability issue is particularly sensitive since so many alternative abatement mechanisms are a long way from being widely applicable across the industry – and will certainly not be ready for 2015.

"There are still some problems with the scrubber tests, they are not easy to install, and they are very expensive," he says. LNG lacks a distribution network – and appears more suitable for newbuildings rather than existing tonnage. And cold ironing faces a host of practical, technical and regulatory hurdles before it can be widely deployed.

As to the question of itinerary changes in response to tighter restrictions in some areas than others, Balbi too is concerned about what Tom Strang calls "distortions in the market". At the same time, he observes, "Our passengers receive the catalogues well in advance so we can't just change our plans." In the longer term, he concludes, "We have to offer what the passenger demands, so the cost of these changes will be on our shoulders."



Addressing the carbon issues

he environmental regulation of shipping is a notoriously sensitive, and at times incendiary, area. So it was reassuring this summer to see industry and regulators come together behind mandatory new measures to cut carbon dioxide emissions from ships.

Adopted at July's Marine Environment Protection Committee (MEPC) meeting in the form of a new chapter 4 to MARPOL Annex VI, the measures include most notably an Energy Efficiency Design Index (EEDI) that requires a minimum energy efficiency level for new ships. Aimed at spurring continuous improvement in the energy efficiency of newbuilds, and therefore reductions in emissions, it is due to come into force in 2013.

The IMO is unafraid to make bold predictions as to its likely success. It believes that it could help slash CO2 emissions from shipping, removing 45–50 million tonnes annually that would otherwise have entered the atmosphere by 2020, and 180–250 million tonnes annually by 2030.

In the wider context of European – and global – environmental improvement, no issue is more significant in its effects, more urgent in its amelioration, or more politically sensitive in its regulation, than emissions of greenhouse gas (GHG), the leading culprit in climate change.

For all the furore surrounding efforts to curb sulphur content in marine fuel, it is GHG emissions that might be

termed the gorilla in the room as far as regulation goes. Yet for all that, this is also an issue where, by and large and with the caveat that much work remains to be done, the maritime industry has been able to unite to good effect.

As Robert Ashdown, Director for Technical, Environment and Operations at the European Cruise Council, puts it: "In terms of the operating efficiency of vessels, it is designed to make sure that each generation of ships is more efficient than the last, and that design characteristics are ratcheted up with new technology and innovation; so that 20 or 30 years from now, ships are being built that are significantly more efficient than those that are being built today.

As it stands the EEDI covers only part, though a significant part, of the global fleet. As the IMO puts it, its first iteration "has been purposefully developed for the largest and most energy-intensive segments of the world merchant fleet, thus embracing 72% of emissions from new ships". Cruise ships, along with ro-ro vessels, are among those not yet covered by EEDI.

The fact that cruise ships are powered by diesel-electric engines, along with the power demands of their hotel load, means that the formula devised for other ship types, bulkers or tankers for instance, is inapplicable to cruising, says Ashdown. "There is not going to be a one-size-fits-all solution, so the cruise industry, in parallel with the IMO but

separately, is developing its own approach that will be taken back to the next session of the MEPC next year. It will take into account the particular characteristics of cruise ships, and build them into a new formula."

As Ashdown notes, and organisations representing commercial ship-owners such as BIMCO and Intertanko have also stressed, flexibility is everything. "The important thing in designing these indices is to allow flexibility of approach. We don't want to get to a situation where the only option we have [for achieving efficiency gains[is to reduce installed power.

"In the cruise industry we have significant safety considerations, and we want to feel comfortable with the power available to us. It is important that we have the installed power we need." It is a view that the IMO, which says explicitly that it "supports the view that a minimum installed power to maintain safe navigation in adverse weather conditions is of vital importance to ensure the safety and efficiency of international shipping", would seem to share.

The cruise segment has been among the shipping industry's most proactive over recent years in pushing the technological boundaries when it comes to building safety and environmental sustainability into its vessels. Public-spiritedness aside, there are sound reasons why this would be the case. "Cruising is essentially a consumer business model," says Ashdown. "There are no chartering relationships to get in the way. The cruise lines that own these vessels buy their own fuel and they see directly the impact of fuel cost savings, so there are always good commercial reasons for fuel efficiency."

Regulatory changes in other areas, such as in new rules on safe return to port, are also putting an increased focus on methods other than simply depowering to improve fuel efficiency – such as improved hull design or more effective propulsion systems.

This chimes too with the IMO's commitment to goal-based regulation, and with its explicit encouragement of efforts to seek out and follow alternative routes to the same end. The EEDI is, according to the IMO, a "non-prescriptive mechanism that leaves the choice of which technologies to use in ship design to the stakeholders, as long as the required energy-efficiency is attained, enabling the most cost-efficient solutions to be used".

Major questions remain over the practical implementation of the mechanism – not least how it will be calculated and monitored. In its current form, it also includes the possibility of a waiver – a measure inserted to placate opponents of the EEDI such as China – though a number of shipping organisations are advising their members to resist using it. As Ashdown says, a ship-owner whose new vessel does not meet the energy efficiency criteria may encounter difficulties in the charter market, not to mention in selling the ship on.

The EEDI is only part of the response to the GHG challenge. "It is one of three pillars in addressing carbon issues," Ashdown notes. "Operating efficiency in the global fleet is addressed through a Ship Energy Efficiency Management Plan and the operating efficiency of newly built ships through the EEDI. Then you have to look at the gap between the carbon cuts you achieve and what is needed to

"We don't want to get to a situation where the only option we have [for achieving efficiency gains] is to reduce installed power."

ASHDOWN

meet the demands of the regulator. Cruising is a high-growth industry, and that gap can be addressed through market-based measures.

"Our view," he says, along with that of the shipping industry as a whole, "is that it should be addressed through the IMO. But the United Nation's Framework Convention on Climate Change is also looking at imposing measures that deal with aviation and maritime. And if these two fail to deliver, the EU has indicated that it will take action."

A number of proposals are currently on the table at the IMO, and the cruise industry remains open to suggestions on the most effective way forward. Emissions trading schemes, for instance, which cause shudders in parts of the commercial shipping market, hold little fear for large cruise companies with well-staffed back offices. "We want to choose the solution that provides the largest carbon cuts at the least cost," Ashdown says.

"A lot of good groundwork has been done [at the IMO] already. Now they need to progress to action. But there are still significant political hurdles before they can deliver market-based measures." Among those hurdles is resistance among developing countries, who reason that they are under no obligation to cut emissions under the Kyoto protocol, and from countries like the US which may prove resistant to paying levies, which could be characterised as a taxes, to what it may see as an unelected, unaccountable body. And other countries are strongly opposed to the hypothecation of taxes.

The European cruise industry's concern is that the EU will make good on its promise to move forward with its own regional measures if no international proposal surfaces shortly. It is cruising's least favourite option, though Ashdown notes that even if this is a sub-optimal outcome, the industry will always engage with the regulator. "We will need to see a detailed proposal, and do a detailed analysis," he concludes, "to see whether an emissions trading scheme or a levy fits our sector best."

Consistency of standards required for ship and shore

he cruise industry has invested heavily over recent years in onboard waste treatment – a process that, as Deerberg Systems CEO Jochen Deerberg describes it, is only likely to continue as environmental regulations become ever tighter.

But if the ship has long been the fulcrum of efforts to improve waste treatment in the cruise industry, Deerberg also argues that future progress will depend considerably on the collaboration between ships and the ports where they discharge.

The cost of building and installing a state-of-the-art waste treatment plant on a modern cruise ship newbuilding is around €10 million, Deerberg notes – a considerable investment. "Owners are looking to get the best available technology for two main reasons," he says.

"First, onboard operation costs and environmental standards are known and can be influenced. Onboard treatment is much cheaper than disposing of the waste in port, with onshore treatment costs differing from port to port and from day to day, and so not plannable.

"Second, an operator cannot be sure how the waste will be treated ashore. Considering that the operators are 'liable to the end', it is important that they be sure that the waste is treated to the highest possible environmental standard. The only way to ensure this is to do it themselves as much as possible."

"Over the years," Deerberg says, "operators have invested a lot to comply with increasingly stringent waste water requirements, and indeed to go beyond the new effluent parameters. Helsinki Commission (HELCOM) requirements [for the Baltic Sea] are now under discussion, as technology to comply may be available on land but it must be marinised to be installed and used onboard.

"This raises initial investment costs, and owners and legislators are in discussion whether or not passenger ships, though representing the tiniest fraction of the nutrient stream into the Baltic, really need to reach these high values."

Increasingly stringent environmental requirements are also having an impact on the kind of processes that can be used for onboard waste treatment; incineration systems, for instance, are increasingly limited. In response, and at a time when the focus is on making ships as self sufficient as possible when it comes to waste treatment, the hunt is on for new or alternative technologies.

Deerberg cites converter technology as one advance helping to keep ships as independent as possible from shore facilities and flexible in operation. And, he notes, "Developments in connecting liquid and solid waste systems are worth mentioning. These modern interfaces ensure a perfect burn-out result for all biowaste, and ensure that all bacteria and viruses are eliminated onboard."

The Baltic Sea is the focal point of the current intense debate on waste treatment. Hamworthy Head of Research and Development Wei Chen says treating grey water separately could allow the industry to meet the proposed new Baltic nutrient removal standards.

In terms of regulations, he says, the Baltic Sea Action Plan crafted by HELCOM, which works to protect the Baltic Sea through intergovernmental cooperation between nine Baltic "When you compare land-based industries with cruise ships, the rules applying to cruise ships are far more stringent for like-for-like discharges."

CHEN

states and the European Union, is a very good reference point.

"It sets out the standards for all land-based water treatment plants," says Chen. "These are more stringent for big cities and more relaxed for small communities, which makes sense since it is linked to the environmental impact of their respective discharges." The action plan aims to restore the ecological health of the Baltic Sea by 2021.

When it comes to shipping, however, Chen says that the balance is somewhat distorted. "When you compare land-based industries with cruise ships, the rules applying to cruise ships are far more stringent for like-for-like discharges. The rules only require 30% nitrogen removal for smaller communities, for instance, but 70% for cruise ships. The industry also has to meet limits on discharges of metal and ammonia, which are not required of land-based industries."

Chen believes that the cruise industry is within its rights to call for more consistency in the standards required of marine and land-based discharges, and for rules that are not only grounded in science but that take a holistic view of the benefits – and drawbacks – of tighter restrictions on discharges.

"Over the past ten years," he says, "the industry has developed advanced waste water treatment technologies. We have done a good job with the cruise lines, and those technologies are compliant. At the same time, those stringent rules have to have a real scientific justification and produce a demonstrable benefit for the environment. We have to ask if we are developing something that is really required by the

industry and that does produce a tangible benefit.

"We have more and more regulation, pursuing tighter and tighter discharge limits," he notes. "But sometimes we forget, for instance, that removing more nutrients can incur more carbon emissions. It is a question of balance."

When it comes to balance, Alaska has been very much the industry's bête noir over recent years. Chen cites a limit of 3.1 micrograms of dissolved copper per litre of discharge from a cruise ship, compared with a limit for drinking water ashore of 1,000 micrograms per litre. "It means that if a passenger pours a glass of drinking water overboard, he is making a toxic discharge," quips Chen.

Predictability is almost as important as reasonableness. "Over the past five years Alaska has changed its discharge rules three times. The cruise lines can't operate, and we can't develop new technology, on the basis of a moving target." He argues that greater understanding between ship-side and shore-side must be the way of the future.

Deerberg concurs, noting that such is the sheer volume of waste generated by a cruise ship -28 tons a day for a vessel with 5,000 people onboard - that cooperation between ship and shoreside will be critical in dealing with it "in the environmentally optimum way".

"A functioning ship-shore interface is the only way to make the shipping industry really sustainable, when green ships and green ports work hand-in-hand to lower the environmental impact," he concludes. "Ships and ports can only exist together, therefore all parties must work on improving the relationship."

Port reception facilities fail the industry

here is no denying that the Baltic Sea is a threatened marine area. Over recent decades human activity both on land and at sea has put an increasing strain on the marine ecosystem – most notably through eutrophication, the build-up of algae caused by an excess of nutrients in the water.

Small wonder then that the Helsinki Commission (Helcom), the vehicle for intergovernmental cooperation on this issue in the Baltic area, has been working to allay the danger of ecological breakdown, notably through its Baltic Sea Action Plan. Indeed, the Helcom action plan is viewed as a potential model for similar efforts in other regional seas – not just in Europe but around the world.

Passenger shipping accounts for less than 0.1% of nutrient levels in the Baltic Sea, and so contributes a minuscule amount to eutrophication. Even so – and despite the ECC's voluntary commitment to discharge all waste water ashore wherever adequate facilities are available – as the efforts to clean up this precious sea gain ground, the cruising has come squarely into Helcom's sights.

For the industry, meanwhile, the Baltic Sea has become an increasingly important testing ground in the continuing debate over waste treatment, recycling and disposal. It is fair to say that while Helcom is intent on tighter restrictions on the discharge of nutrients from passenger ships into the Baltic, the cruise industry is less than impressed with port state efforts — not just in the Baltic but in Europe as a whole — to shoulder their part of the waste burden.

"Ideally," says TUI Cruises Environmental Manager Lucienne Damm, "port waste reception facilities should cover all waste types, from paper, glass, plastics, metal and incinerator ash to medical and chemical waste to grey and black water. Behind the waste reception should stand only certified companies that guarantee the safe and environmental processing and/or recycling of our waste."

But the reality falls somewhat short of this ideal. "In the

Baltic, we need port facilities that are far more efficient than today's status quo. In the Mediterranean, some ports are unable to treat our different waste categories in the way our own environmental standards require."

MSC Cruises Environmental Coordinator Francesco Balbi agree. "We are always trying to improve our onboard handling of waste," he says, "but to be perfect we need the help of the shore side. It would be possible for us to recycle 95% of our solid waste, for instance, but we need their cooperation. In some ports it's just not there.

"We have spent a lot to reach the state of the art onboard, buying compressors, compactors and so on. Everything is sorted and separated before discharge, but it is up to the port to get it to the recycling plant." He adds that it does nothing for crew morale to see carefully separated flows of waste being tipped into the same truck on reaching land.

Carnival Corporation & Plc Maritime Policy and Compliance Director Emilio Tombolesi says the cruise industry's drive to improve its environmental management began years ago, with ISO 14001. "Now, in the Mediterranean, we are 20 years ahead of the ports. We are able to process 95% of our recyclable material. Meanwhile – in Italy, for instance – we have inadequate service, and really exorbitant costs. We are penalised for the slightest thing.

"We train our captains on separating recyclables," he adds. "But when they arrive at a Mediterranean port they have a big problem. Not a single port is sustainable. They don't even think about recycling. In some ways our work onboard is completely wasted."

MSC's Balbi notes that there is a significant difference between northern and southern European ports, with the former considerably better equipped than the latter to deal with solid waste in particular. He believes some progress is being made, nonetheless.

"We are working with Civitavecchia to improve their facilities, especially for recycling, and they are building new

"We are 20 years ahead of the ports. We are able to process 95% of our recyclable material."

TOMBOLESI

structures according to our suggestions – just as Marpol says they should. If only more ports acted like Civitavecchia. Genoa is trying to improve, and so are some Spanish ports, but they are not yet at the level of northern Europe. It is partly a consequence of the current economic situation, as funds are short."

TUI's Damm agrees that in some areas at least northern ports are ahead of their southern neighbours. In the North Sea, for instance, she says garbage collection is efficient "though pricing is a bit high". In the Baltic too, she says, "All ports are recycling offloaded garbage, and some are accepting 'special waste' free of charge using the non-special fee system – a good way for ships to get rid of old paint and chemicals without affecting the budget for garbage offload."

The situation in the Mediterranean is worse. "In most cases we do not feel there is a serious approach to meeting our needs. Special or hazardous waste is a particular problem, or only possible at excessive cost. Most ships have very advanced waste treatment and are able to deliver segregated recyclable waste, but very few ports are able to handle it separately. Everything goes into one container, so that crew and even passengers onboard are asking 'Why segregate?'"

Progress is coming, however, at least on the sewage front. In July the International Maritime Organisation's Marine Environment Protection Committee adopted amendments to Annex IV of Marpol allowing for the designation of special areas for the prevention of sewage pollution from passenger ships. With the amendments due to come into effect on 1 January 2013, the Baltic Sea was specifically designated as a first Special Area.

In isolation this would hardly have been enough to satisfy an increasingly frustrated cruise industry. But as ECC Director for Technical, Environment and Operations Robert Ashdown said in the wake of the decision, the agreement "meets the environmental objectives of the Baltic Sea states in a manner that is both practicable and fair".

Most heartening from the cruise industry's point of view, the agreement explicitly acknowledges what Ashdown termed "the obligations of all Baltic Sea ports to upgrade their facilities to permit ships to discharge sewage into those facilities" as a prelude to the deal coming into effect.

Having achieved this compromise solution, Ashdown notes that the ports will have to be monitored to ensure they provide those adequate facilities. This means the capacity to handle a minimum of 200m3 of waste per hour, direct to a shore-side connection, ideally through the no-special-fee structure, and available to meet the needs of all the ships that may be in a given port on a given day.

The ports' acceptance of their duties in this area is critical for a cruise industry that has invested heavily, and continues to invest, in onboard waste treatment installations, but whose efforts have not been reciprocated in many ports. Going forward, embracing their role is likely to be just as important for the ports themselves.

"If you look at today's situation, the new requirements will probably be postponed," believes Balbi. "It is not sufficient to have just Stockholm and Helsinki in the Baltic with adequate waste reception."

He adds that MSC's vessels have two to three days of autonomy. "Until the ports have the facilities to handle our sewage, we can't commit not to discharge into the sea."

"Over the longer term," Damm argues, "port authorities have to acknowledge that advanced and modern port facilities and infrastructure will be 'the' competitive advantage in the competition for cruise ship visits in the future.

"The availability of efficient port facilities will influence itinerary planning decisions more and more," she concludes decisively. "If we can't get rid of our different accumulated wastes in certain ports along our routes, we will have to replan our tours."



ECC favours global solutions

s a fast-growing industry with a global presence, it is only natural that cruising seeks to be regulated as far as possible on a global basis. The very character of the business – enormous vessels manned by multinational crews serving an increasingly diverse mix of passengers sailing on multi-call journeys across the world's oceans – demands it. Patchwork regulation would mean chaos.

As a result, though the industry will seek to ensure that national or regional considerations are taken into account as it plots the construction and deployment of the world's most free-moving transport and tourism assets, it will always look to the International Maritime Organisation (IMO) as the rule maker of first resort.

Based in London and with responsibility for the safety, security and environmental sustainability of shipping, this UN agency (set up in 1948) has a specialised staff of around 300 and hosts representatives of 169 UN member states and three associate members. Technical experts from these member states and from non-governmental organisations – including the Cruise Lines International Association (CLIA), which represents the interests of the cruise industry – make up the technical committees and sub-committees which monitor and update the regulations governing international shipping.

And these committees have a very full workload, which is understandable at a time when increasing alarm over the damage caused by human activity to the natural environment is finally resulting in a regulatory response.

Cutting greenhouse gas (GHG) emissions from shipping is a prime area of focus at the IMO, and resulted this summer in the release of mandatory new mechanisms calculated to do just that.

According to CLIA Director of Environmental and Health Programmes Bud Darr the new mechanisms are an object lesson in how regulators and industry can come together to produce meaningful progress in protecting the environment without unduly penalising the business.

"The cruise industry welcomes and applauds the recent work concluded to put in place the first-ever energy efficiency design index on GHG reduction," says Darr, describing it as "a very successful process" that achieved its goals while surmounting significant political obstacles and recognising differing sensitivities in the continuing debate over how to combat climate change.

Though the Energy Efficiency Design Index (EEDI) currently focuses on conventionally powered ships such as oil tankers and bulk cargo carriers, the industry is now studying a formula for the very different needs of cruise ships – typically powered by diesel-electric engines and with very different load characteristics – through the Cruise Ship Safety Forum, which brings together ship-owners, shipbuilders and classification societies. It will go back to the IMO's Marine Environment Protection Committee with its proposals next year.

EEDI is only one element in the emerging response to GHG emissions in shipping, notes CLIA Executive Vice President

Michael Crye. If technical measures are not sufficient – and they are unlikely to be – market-based measures will also be on the agenda, and here difficulties in finding a consensus at the IMO may prompt action from the European Union. "One of the outstanding influences here is that the European Commission has already taken some rather bold steps in crafting an emissions trading system. It has included aviation its proposals, and has made no bones about saying that if shipping can't come to some kind of agreement it will include that too.

"It is the spectre motivating all of us to move forward," says Crye. "Regional regulation is anathema to shipping. Because of the compliance issues we want a global regulatory environment as far as possible. If the technical measures are not sufficient the next step is for the IMO and the global community to look at market-based measures. It is a very complex issue, and our sector has not yet expressed any preference [on a possible solution]."

As the GHG emissions debate continues, discussions on limiting sulphur emissions continue to generate as much heat as light. In August of next year the North American Emissions Control Area (ECA) comes into force, extending 200 miles out from the coast of the US and Canada. The introduction follows amendments within the IMO in March 2010 to the International Convention for the Prevention of Pollution from Ships (MARPOL).

Within this ECA the sulphur content of marine fuel is limited to 1%, dropping to 0.1% by 2015. "It will have a significant impact on cruise ships that spend some or all of their time within the boundaries of the ECA," says Darr. "But we are looking at all the possibilities that exist to reach this standard." These 'equivalencies' may include the use of scrubbers or alternative fuels, or the concept of vessel averaging, either over the itinerary of an individual ship or across a fleet.

Crye notes that this approach chimes with the IMO's pursuit of "outcome-based standards". He adds that developing a means of monitoring emissions, and of limiting those emissions where it really counts, such as close to populated areas, while permitting light emissions elsewhere, could prove more beneficial to public health than rigidly imposed fuel standards. He adds that some impacts of tight new sulphur limits have not been considered in submissions to the IMO, including the cost of transporting the lower sulphur fuels to the ships that need them.

"There is the potential through operational equivalencies to provide the same or improved benefits at a lower cost," says Darr. "We believe there is plenty of room for flag states that are so inclined to permit this approach. We will continue to work with the US and Canadian governments on this, and are quite encouraged with the discussions we have had."

In the European Union, meanwhile, with its ECAs in the Baltic Sea, the North Sea and the English Channel, the sulphur debate is proving considerably more combustible in the shipping industry as a whole. A proposed EU regulation designed to mirror the IMO's carefully crafted compromise does anything but, most obviously in the absence of a fuel availability clause permitting a derogation in the event that the required fuel is not available in sufficient quantities. Furthermore the sulphur limits are

CLIA is the cruise industry's international trade association and, as such, represents the industry at the International Maritime Organization. CLIA shares many of the same members as the ECC and works closely with the ECC on all regulatory matters to ensure that the positions it adopts and takes forwards at the IMO are those that truly reflect the needs of the global cruise sector. ECC staff and members routinely join the CLIA delegation at IMO and also work extensively with the EU before IMO meetings to try to establish and influence the likely coordinated positions of the 27 EU nations in the IMO. By influencing the EU before, during and after the international negotiations ECC and CLIA hope to ensure that the regulations adopted by the IMO are subsequently incorporated faithfully into EU law without further changes or additions.

due to drop to 0.5% in non-ECA waters from 2020, with a review of fuel availability in 2018 – a date many view as far too late to be meaningful. With alternative abatement solutions likely to be slow in the development, the fuel availability question is critical for the industry.

"Decisions must be based on science and statistical analysis and not political considerations," Crye stresses. "Our view is that it is preferable to do a preliminary [fuel availability] review, and build on it for 2018."

"There is a soft obligation on governments to take measures to ensure the fuel is available," Darr adds, "but no obligation on the fuel suppliers."

On a positive note, Crye says the industry secured another advance for its interests at the IMO earlier this year. This was the agreement on special requirements for the disposal of sewage in the Baltic, which is to be designated a special area for such discharges. "We felt it extremely important to have it specified that there is a burden on the port states to have adequate reception facilities," he says, adding that the industry had achieved its objectives on this issue despite some opposition.

The duty of vessels to treat such waste onboard is still being debated within the IMO, but Crye points out that there is no treatment plant available that can meet the level of nutrient reduction required reliably and consistently. "That leaves shoreside discharge and treatment as the most viable option," he says. At the same time, he notes, "We as an industry are responsible for less than 0.1% of the eutrophication problem in the Baltic. We are a minuscule part of the problem. But we are certainly willing to be part of the solution."

"The ballast water convention is also due to come into force soon," says Crye. "It is closely tied to the US vessel general permit, as well as to pending US regulations on ballast water discharges. Unfortunately, in the US the various states are not prohibited from going beyond IMO regulations or national legislation on ballast water." A number of states – New York in particular – are looking to impose more stringent requirements on vessels. "This is an issue we would like to resolve," Crye says, adding that, as on regulation in general, "We would like a global standard, applicable in the US."

Will member states interpret passenger rights the same way?

ruising is unusual in straddling the increasingly complex worlds of transport and tourism – two sectors of the European economy in which regulation is coming thick and fast.

On the transport side, and particularly in terms of ship construction and operation, environmental regulation has been to the fore. The industry's status as a fast-growing branch of the tourism business, on the other hand, has led to a focus on such areas as consumer affairs. In this context passenger rights have been at the core of the European Cruise Council's activities.

After intense negotiation, a new regulation on passenger rights is due to come into effect in December of next year. And, according to Maria Pittordis, who heads the ECC's Tourism and Consumer Affairs sub-committee, "What we have ended up with is valuable. Though it is not exactly what we wanted, [but] it is a lot better than the original proposal."

In particular the new provisions on transport conditions for disabled persons and persons with reduced mobility (PRM) took delicate negotiation, with the cruise industry eager to ensure a regime that was workable for cruise lines while continuing to ease the path to cruising for its many PRMs and disabled passengers.

As agreed, it bars discrimination against such passengers while safeguarding the right to refuse passage if a threat to safety might be created. In such cases carriers, travel agents and tour operators must make reasonable efforts to find alternative means of transport for the affected passenger. Meanwhile, passengers are expected to notify cruise lines or their agents of an existing condition in good time.

Pittordis says the problem for the industry is less passengers with wheelchairs, for instance, than invisible conditions that go unnotified. In the draft proposal, health and safety were included as valid reasons for denying passage; but health was subsequently removed, to the industry's concern. As Pittordis notes, the effectiveness of the directive, and the industry's ability to work with it, will depend on how member states interpret it. Other than that, she says, it will be about risk assessment, and

communicating rights and responsibilities to both business partners and passengers.

There remains a degree of uncertainty around the implementation of the directive, however. "Over the past three or four years, the European Union has put forward proposals that have been adopted in relation to all sorts of different transport modes," explains ECC Secretary General Tim Marking.

"Now we have a range of specific passenger rights directives, and the European Commission is considering coming forward with one covering all transport modes. We have had informal talks with the Commission and said 'Whatever you do, don't undermine what we have already built.'

Marking adds that, reassuringly, the EC seems intent on a document akin to a passenger' charter, rather than adopting more specific language that might cut across the existing agreement.

Another focus of activity for the ECC in this area is the Package Travel Directive, which was first introduced in 1990 to protect consumers of package holidays and is now being updated for the Internet age.

For the cruise industry there are several areas of concern here, though after a year in the doldrums while consideration is given to the possible inclusion of airlines in the directive it will be 2012 before it has the chance to further press its case.

Issues abound. The failure of the original Directive to establish commercial uniformity across Europe must be addressed, for instance, with the industry particularly eager to see action on security and bonding.

Marking argues that insolvency protection schemes in one member state should be accepted in others, thus avoiding a situation in which operators are forced to bond separately in a number of states for the same package.

In principle this makes sound practical sense, though he adds that, since a centralised bonding scheme would be difficult to put into practice, minimum standards for bonding around Europe would need to be established and adhered to for it to be effective.

"We have had informal talks with the Commission and said 'Whatever you do, don't undermine what we have already built.'

MARKING

Pricing is another area of debate, with the industry eager for greater flexibility – and a relaxation of the very tight rules on brochures, to allow them to be published without pricing. On liability, meanwhile, where except in very specific instances a carrier is liable for every aspect of a package – from cruise to flight, coach transfer to excursion – the industry would like to see suppliers also made liable, to both carrier and passenger.

So-called dynamic packaging is another issue of concern, with the industry eager to see entire individual bookings treated as a single package with the controls and protections to match – even where, as is so often the case, passengers assemble their own package on the Internet from multiple websites and multiple suppliers.

The ECC is also active on the tourism front. "Tourism can be a major stimulus for recovery in certain European countries," Marking notes. "In Greece, for instance, it is a recognised part of the economy, that could generate extra income for the country."

The cruise industry, he says, is enthusiastic about contributing to Greece's recovery and eager to help resolve some of the issues that make business difficult there. Those issues range from disruption to shore excursions due to protests and strikes, to the first-come, first-served model of berth allocation (long superseded in most major European cruise centres) that still prevails in Greece and that makes planning difficult. "A standard approach [to berth allocation] has been put forward by MedCruise," Marking observes, "and the industry is very supportive of that approach."

Value Added Tax is also becoming a major issue, with the European authorities looking at possible reforms and passenger transport as one area they might examine. "The aviation and passenger shipping sectors are exempt from VAT because they are international businesses, which makes it very complicated to administer," says Marking. "But there have been suggestions from the EC and the European Parliament that they might look at a harmonised VAT for passenger transport around Europe." The ECC considers a specific proposal unlikely, at least in the next

two years; "But we will monitor the situation closely," says Marking.

Tourism is now very much in the EU's sights as an industry for the future, and cruising is likely to benefit as a result. As Marking says, "At the European Tourism Forum in Krakow this October, tourism was recognised as a key element in stimulating growth and economic recovery in Europe."

At that meeting Antonio Tajani, EC Vice President responsible for industry and entrepreneurship, and Cecilia Malmstrom, who is responsible for home affairs, agreed to set up a task force to ease the granting of visas to citizens from certain countries.

They are talking particularly about encouraging Chinese tourists to come to Europe, and announced that they hope to release a joint statement with the Chinese National Tourist Administration later this year, exchanging ideas on tourism and trying to ease the visa situation. Other initiatives, including a strategy for sustainable marine tourism due in 2013, are also in the works.

Visas are not an issue solely for non-EU tourists. For some time crew members from countries such as India and the Philippines have also had great difficulty joining or leaving their ships in European ports.

A new visa code looks to resolve that question, introducing multiple-entry visas permitting a seafarer to enter Europe by a particular port, and to travel within Europe from that entry point if desired. The visas can be acquired at an embassy of the European country concerned. In turn, the old system whereby visas are issued at the border is sharply scaled back, and only permitted in rare circumstances.

"It is a very positive development," says Marking, though he concedes that practical issues are still to be resolved. "Not all member states are geared up to issue these multiple-entry visas, so crew members can have trouble getting them. At the same time they are implementing the restrictions at the borders. The law is fine," he adds, "but for the moment the application is a problem."

Consistency across Europe the key health concern

s an industry that sells dream holidays on the waters of the world and has customer satisfaction at its very core, cruising has a particular interest in ensuring that its standards of hygiene are as high as possible.

Over the years it has performed increasingly well on this score, with one cruise line after another introducing health and hygiene policies that have become more focused and complete with time and the lessons of experience.

That focus remains intense, in part because of the consequences of getting it wrong – not just in terms of the impact on guests or the knock-on effect on the brand, but also because of the scrutiny to which cruise ships are subjected. It is fair to say that the general interest media takes particular delight in the merest hint of a virus outbreak at sea.

"The cruise industry itself has a very good record dealing with viral outbreaks," says Ruth Marshall, International Legal Director at Royal Caribbean Cruises and Chair of the European Cruise Council's health and hygiene subcommittee.

"It is not the ships themselves that cause the problem," she notes. "It is how you manage and control viruses onboard that is important. That goes hand-in-hand with procedures developed over time." Government health departments, such as the UK's health protection agency, often have their own guidelines for managing such outbreaks.

"We work closely with the health organisations and the usual bodies, such as the European Centre for Disease Control," Marshall says. "It's important to have an open and honest relationship. The industry still takes these things extremely seriously, and we are always looking at new ways

to develop our knowledge and improve our practices."

As Marshall also points out, much depends on passengers being aware of their own responsibilities when it comes to communicating health problems. Though outbreaks of communicable diseases at sea are no different from those on land, she says, "It is true that we are much closer to our guests. We have to encourage them to follow general patterns of good behaviour, washing their hands if they have an illness for instance, or to contact a doctor, free of charge, if they feel ill." Again, it is about having procedures in place.

In an area such as health and hygiene, where swift, targeted action is often critical, there is a premium on having best practices, broadly applied. Where there is a clear gap between the industry's ideal and an imperfect reality is in the degree of uniformity in handling health problems that emerge onboard, whether cruise line to cruise line, country to country, or port to port.

Marshall says that what progress is now being made in this area "is tied in with Shipsan and all they are trying to achieve". Shipsan was set up by the European Commission in 2006, as its website describes, to "examine the prevention and control of public health threats to passengers and crew of cruise ships and ferries within the EU".

Assisted by a broad range of partners around Europe, from government health ministries to university medical departments to port and cruise industry associations, it also aims to provide the basis for the development of an integrated EU ship sanitation programme.

More specifically its objectives include assessing the need for developing a standardised methodology for health inspections on ships sailing European waters and for epidemiological surveillance and outbreak investigation.

"We probably do more [to address health issues] on cruise ships than in other everyday walks of life where people mix and mingle."

MARSHALL

Its Shipsan Trainet project is led by the Department of Medicine of the University of Thessaly in Greece. It focuses on everything from developing a manual for the prevention and control of communicable diseases and sanitation inspections to formalising guidelines for the issuance of ship sanitation certificates.

Training is particularly critical, as Shipsan points out, covering such areas as ship sanitation, outbreak management, surveillance and control of communicable diseases onboard cruise ships and ferries. Its work in this area includes creating and pilot-testing training material for seafarers and port health professionals, as well as designing programmes to "train the trainers".

A broad aim of all these efforts, Marshall says, is to ensure consistency at a high level. "One of the benefits of Shipsan is certainly that of having a consistent, balanced approach based on firm scientific evidence – rather than, say, the gut feeling of an inspector coming onboard." Shipsan has the backing of DG SANCO, the European Commission's Directorate General for Health and Safety, and DG MOVE, which covers mobility and transport.

The cruise industry is highly supportive of Shipsan's efforts, Marshall says, but it has also stressed to the organisation that "while these are very good ideas, we expect them to be delivered to a very high standard, and to be delivered consistently". There is no point having a programme, she stresses, if it is not consistent across Europe, managed by a coordinating body and with proper training for all inspectors.

"For all its good intentions and those of the multiple stakeholders involved," Marshall believes, "it will be quite a few years before it is up to the standard we would like. It is the way bureaucracy works," she says, adding that training people up to the required standard is necessarily laborious and time-consuming, while "trying to get everyone to sing from the same hymn sheet" may be even more of a trial.

Progress is coming, she says, but it is still early days, and it remains unclear in what form the results of the Shipsan project will eventually be conveyed to the industry. "We've said that we don't think legislation is necessarily the way forward, and we are not yet in a position to sign up to a memorandum of understanding because all the parts are not yet in place. In four or five years that may change and we may feel more comfortable signing up to it."

By the same token there appears to have been little movement over the past year on the idea of developing a European stamp of approval, in the form of a notation, for health and hygiene.

As it awaits progress, and eventually clarity, from the regulators, Marshall says the industry will continue on the path it has set, interacting with other stakeholders to drive the wider process of improvement and standardisation while working to enhance procedures for passenger protection and disease control wherever it has a degree of control.

It is an area where she says the industry will not relent, and it must also continue to be diligent in getting the message out that it is committed to the highest standards of health and hygiene on its ships.

"Because cruising is about people's holidays, when the slightest thing happens it tends to get blown up in the press. That's frustrating," Marshall says, "because we probably do more [to address health issues] on cruise ships than in other everyday walks of life where people mix and mingle."



Members profiles











▼ Fred.Olsen Cruise Lines

















SEABOURN®

































Aida Cruises

www.aida.de

AIDA, which began operating in 1996, is the leader and most recognized cruise brand in the German cruise market. AIDA operates 8 contemporary ships, with 4 additional vessels scheduled to enter service between 2012 and 2016. The vessels are noted for their innovative customer features, such as the "Brauhaus" micro-brewery and AIDA's hallmark "Theatrium".

AIDA offers an exceptionally relaxed, yet active, cruising experience with an emphasis on a healthy and youthful lifestyle, choice, informality, friendliness and activity. In addition, AIDA's ships include a variety of informal and formal dining options, including buffets, grills and exclusive restaurants. AIDA's product is especially tailored for the German-speaking market, including German-speaking crew as well as German-style food and entertainment.

AIDA vessels call on over 170 ports. During the summer, the AIDA ships sail in the North Sea, the Baltic Sea, the Mediterranean, the Black Sea and New England and Canada. During the winter, AIDA ships sail in the Caribbean, Central America, South America, the Atlantic Isles, the Western Mediterranean, the Far East, the Arabian Gulf and the Red Sea.

As the market leader in the German cruise market, AIDA takes its duty towards its guests, its employees and the environment extremely seriously. Accordingly, AIDA ships operate in compliance with the highest international quality, safety and environmental standards.

Headquarters

Am Strande 3d 18055 Rostock

Germany

+49 (0) 381/444-0 (reception)

+49 (0) 381/20270722 (service center)

info@aida.de

www.aida.de

Senior management

Michael Thamm – President

Paul Soulsby – Senior Vice President & CFO

Michael Ungerer – Senior Vice President & CFO

Michael Ungerer – Senior Vice President Operations



Sales & marketing office

Germany

AIDA Cruises

Am Strande 3d 18055 Rostock

Phone: +49 (0) 381/444-0 (reception)

Phone: +49 (0) 381/202 707 22 (service center)

info@aida.de www.aida.de

Ship Name	Capacity	Tonnage
AIDAsol	2,194	71,304
AIDAblu	2,192	71,304
AIDAdiva	2,050	69,203
AIDAbella	2,050	69,203
AIDAluna	2,050	69,203
AIDAvita	1,266	42,289
AIDAaura	1,266	42,289
AIDAcara	1,180	38,557
Under construction		
AIDAmar (May 2012)	2,194	71,304
Newbuilding (May 2013)	2,194	71,304







Azamara Club Cruises

www.azamaraclubcruises.com

Founded in 2007 and re-launched as Azamara Club Cruises in 2009, the cruise line caters to discerning, up-market travelers who love cruising and are interested in new and immersive ways to see the world. The cruise line's two European boutique-style, 694-guest ships each offer a sophisticated, yet relaxing ambiance to unique destinations, delivered uniquely.

Azamara Club Cruises sails around the globe, with more late-night departures and overnight stays at ports of calls in order to provide guests opportunities to fully experience a destination, by day and by night. The cruise line sails to European destinations, including the Baltic and Scandinavia, British Isles, Western Europe, French and Italian Rivieras, Greek Isles, Croatia, Holy Land and Black Sea.

Azamara Club Cruises' guests are active, experienced, and self-driven travelers who are searching for new and better ways to see the world. Travelers also can choose even more immersive experiences with Azamara cruisetours in many destinations, including Italy, Greece and Turkey.

Headquarters

Royal Caribbean Cruises Ltd 1050 Caribbean Way Miami, Florida USA

+1 305 539 6000

www.royalcaribbean.com

Senior management

Richard D. Fain, Chairman and Chief Executive Officer RCCL Lawrence Pimentel, President and Chief Executive Officer Brian J. Rice, Executive Vice President & Chief Financial Officer RCCL Michael Bayley, Executive Vice President, International RCCL Harri U. Kulovaara, Executive Vice President, Maritime RCCL

Sales Offices

France - RCL Cruises Ltd (France)
Frederic Martinez, Managing Director
www.AzamaraClubCruises.com

Germany - RCL Cruises Ltd (Germany) Tom Fecke, General Manager **www.AzamaraClubCruises.com**

Italy - RCL Cruises Ltd (Italy) Gianni Rotondo, Managing Director www.AzamaraClubCruises.com

Norway - RCL Cruises Ltd (Norway) Roar Meidal, General Manager **www.AzamaraClubCruises.com**

Spain - RCL Cruises Ltd (Spain) Belen Wanguemert, General Manager **www.AzamaraClubCruises.com**

United Kingdom - RCL Cruises Ltd (UK & Ireland) Dominic Paul, VP & Group Managing Director **www.azamaraclubcruises.co.uk**

Royal Caribbean Cruises Ltd. has an expansive network of 41 International Representatives (IRs).

EMEA IRs - RCL Cruises Ltd Helen Beck, Director of EMEA IRs **www.AzamaraClubCruises.com**

Ship Name	Capacity	Tonnage
Azamara Journey	700	30,000
Azamara Quest	700	30,000





Carnival Cruise Lines

www.carnivalcruise.co.uk www.carnival.com

As the world's largest cruise company, and one of the most innovative, Carnival Cruise Lines (a member of Carnival Corporation) broke the mould of traditional cruising with the launch of its modern 'Fun Ships' some years ago. It now operates 23 'SuperLiners' on more than 40 mainly 3–7-night itineraries cruising from most major Florida ports, New York and California to the Caribbean, Mexico, Canada & New England and Alaska (from Seattle).

For summer 2012 the company will return to Europe, operating a new 3,646-passenger Fun Ship Carnival Breeze on 12-night Mediterranean cruises from Barcelona and Venice throughout the summer season.

Carnival Fun Ships are known for their relaxed and informal atmosphere, and the ships boast extensive amenities and activities to suit passengers of all types and all ages – including the state-of-the-art Cloud 9 Spa and fitness centres. Activities include a huge choice of sports alongside alternative activities such as wine tasting and quizzes/pool games. Dining ranges from elegant restaurants to informal bistros, oriental or Mexican cuisine, and a 24-hour pizzeria and round-the-clock room service for snacks. Many ships even have a sophisticated reservations-only steakhouse. Night-time entertainment is headed by spectacular Broadway-style stage shows performed in the three-tier theatre; more intimate interludes can be enjoyed in the cosy piano bars.

Camp Carnival, one of the best kids' clubs afloat, offers a free programme of daytime activities for youngsters aged 2–15 in four separate age groups – and onboard the latest Fun Ships there are even spectacular waterparks and even ropes courses.

Headquarters

3655 N.W. 87th Ave Miami, FL 33178

Tel: +1 305 599 2600

Senior management UK

Lynn Narraway, Managing Director, UK and Ireland **Wendy Lahmich**, Director, Sales and Operations, UK and Ireland

Sales Office

United Kingdom

Reservations: **0845 351 0556** www.carnivalcruise.co.uk. Carnivaluk@carnival.com

Ship Name	Capacity	Tonnage
Carnival Magic	3,646	130,000
Carnival Dream	3,646	130,000
Carnival Splendor	3,006	113,000
Carnival Freedom	2,974	110,000
Carnival Liberty	2,974	110,000
Carnival Valor	2,974	110,000
Carnival Glory	2,974	110,000
Carnival Conquest	2,974	110,000
Carnival Victory	2,758	102,353
Carnival Triumph	2,758	102,353
Carnival Destiny	2,642	101,353
Carnival Miracle	2,124	88,500
Carnival Legend	2,124	88,500
Carnival Pride	2,124	88,500
Carnival Spirit	2,124	88,500
Elation	2,040	70,367
Paradise	2,040	70,367
Inspiration	2,040	70,367
Imagination	2,040	70,367
Fascination	2,040	70,367
Sensation	2,040	70,367
Ecstasy	2,040	70,367
Fantasy	2,040	70,367
Under construction		
Carnival Breeze	3,646	130,000







Celebrity Cruises

www.celebritycruises.com

Celebrity Cruises is the world's highest-rated premium cruise line, and has one of the youngest and most innovative fleets. Since Celebrity's first sailing in 1990, it has been recognised as an industry leader, praised for its personalized service, the exotic AquaSpaSM, gourmet cuisine, exciting entertainment, widely varied shore excursions and an overall atmosphere of easy elegance.

The successful introduction of Celebrity Cruises' Solstice class of ships in 2008, representing a US\$3.7 billion investment, has now led to the "Solsticizing" of its Millennium-class fleet – a programme that started in 2011 and will continue over the next several years. The last of the five Solstice class ships, Celebrity Reflection, joins the fleet in Fall 2012.

Celebrity Cruises' iconic 'X' is the mark of modern luxury, with its cool, contemporary design and warm spaces; dining experiences where the design of the venues is as important as the cuisine; and the amazing service, all created to provide an unmatchable experience for vacationers' precious time. The ultimate in premium cruising, Celebrity sails in Alaska, Bermuda, California, Canada/New England, the Caribbean, Europe, Hawaii, the Pacific Coast, Panama Canal and South America, and year-round in the Galapagos Islands. Celebrity also offers immersive cruisetour experiences in Alaska, Canada, Europe and South America.

Headquarters

Royal Caribbean Cruises Ltd 1050 Caribbean Way Miami, Florida USA +1 305 539 6000

www.royalcaribbean.com

Senior management

Richard D. Fain, Chairman and Chief Executive Officer RCCL Daniel Hanrahan, President and Chief Executive Officer Brian J. Rice, Executive Vice President & Chief Financial Officer RCCL Michael Bayley, Executive Vice President, International RCCL Harri U. Kulovaara, Executive Vice President, Maritime RCCL

Sales Offices

France - RCL Cruises Ltd (France) Frederic Martinez, Managing Director www.celebritycruises.com

Germany - RCL Cruises Ltd (Germany) Tom Fecke, General Manager **www.celebritycruises.de**

Italy - RCL Cruises Ltd (Italy) Gianni Rotondo, Managing Director www.celebritycruises.it

Norway - RCL Cruises Ltd (Norway) Roar Meidal, General Manager **www.celebritycruises.no**

Spain - RCL Cruises Ltd (Spain) Belen Wanguemert, General Manager **www.celebritycruises.es**

United Kingdom - RCL Cruises Ltd (UK & Ireland) Dominic Paul, VP & Group Managing Director **www.celebritycruises.co.uk**

Royal Caribbean Cruises Ltd. has an expansive network of 41 International Representatives (IRs).

EMEA IRs - RCL Cruises Ltd Helen Beck, Director of EMEA IRs **www.celebritycruises.com**

Ship Name	Capacity	Tonnage
Celebrity Reflection	2,850	126,000
Celebrity Silhouette	2,850	122,000
Celebrity Eclipse	2,850	122,000
Celebrity Equinox	2,850	122,000
Celebrity Solstice	2,850	122,000
Celebrity Constellation	2,050	91,000
Celebrity Summit	2,050	91,000
Celebrity Infinity	2,050	91,000
Celebrity Millennium	2,050	91,000
Celebrity Mercury	1,850	78,000
Celebrity Century	1,800	71,000
Celebrity Xpedition	100	2,000



Croisières de France www.cdfcroisieresdefrance.com



CDF Croisières de France offers an all inclusive and French 'art de vivre' cruise vacation. CDF Croisières de France is a French cruise line, owned by Royal Caribbean International and dedicated to the Francophone market. Its aim is to develop and increase the cruise market in France and French speaking countries with an original concept.

CDF Croisières de France is offering an 'all-inclusive' product, with French 'art de vivre' on board: French ambiance, French-speaking tour guides on shore excursions, high quality food, and the kind of stateroom decorations and amenities that the French like

The company began operations in May 2008 with Bleu de France, built in 1981 and totally remodelled in 2008 for a maximum 752 passengers.

The ship operates Mediterranean cruises from Marseille during spring, summer and autumn and repositions to Salvador de Bahia for Brazilian cruises in the winter.

Headquarters

8 rue du Dahomey 75011 Paris

+33 1 73 77 59 20

cdfinfo@cdfcroisieresdefrance.com

Senior management

Antoine Laccarière, General Manager
Olivier Boudard, Sales Director North
oboudard@cdfcroisieresdefrance.com
Rose-Marie Blomme, Sales Director South
rmblomme@cdfcroisieresdefrance.com
Anne Lederer, Marketing Manager & Press relations

Ship Name	Capacity	Tonnage
Bleu de France	748	37,301







La Compagnie du Ponant

www.ponant.com

The only French cruise ship line, Compagnie du Ponant, established in 1988, is an integral part of France's great shipping tradition.

Five ships of character, flying the French flag comprise our fleet today and symbolize the «Art of Cruising at Sea» as we have conceived it.

Legendary destinations and world's most secretive ports, only accessible to small capacity ships. Delights of a French-inspired cuisine in an intimate environment – a discreet service where no attention to detail is spared – and unforgettable moments of relaxation aboard elegant yachts.

This atmosphere made the signature of COMPAGNIE DU PONANT and its unique promise to those who love being at sea.

Headquarters

Compagnie du Ponant 408 Avenue du Prado 13008 Marseille

France

Booking Department: +33 4 88 66 64 00

or + **33 4 88 66 65 7** reservation@ponant.com **www.ponant.com**

Senior management

Jean Emmanuel Sauvee, CEO

Véronique Saade, Deputy Executive Vice President **Philippe Mahouin**, Executive Vice President of Sales and Marketing

Sales Office

Worldwide sales

Philippe Mahouin, EVP Sales and Marketing pmahouin@ponant.com

+33 (0) 4 88 66 64 32

Ship Name	Capacity	Tonnage
Le Boreal	264	10,944
L'Austral	264	10,944
Le Diamant	226	8282
Le Levant	90	3,504
Le Ponant	64	1,443
Under construction		
Delivery June 2014	264	10,944





Costa Cruises

www.costacruises.com

Costa Cruises is Europe's no.1 cruise company. For over 60 years its ships have plied the seas of the world, offering the best in Italian style, hospitality and cuisine and providing dream holidays with the utmost in terms of fun and relaxation.

Its fleet has a total of 15 ships, all flying the Italian flag, each with her own distinctive characteristics and unique style. Together they offer the chance to visit some 250 separate destinations in the Mediterranean, Northern Europe, the Baltic Sea, the Caribbean, South America, the United Arab Emirates, the Far East, the Indian Ocean and the Round-the-World cruise. Two more new ships have been ordered from Fincantieri and will be delivered in Spring 2012 and October 2014.

Costa Cruises has been certified by RINA (Italian Shipping Register) with the BEST4, an integrated system of voluntary certification of corporate compliance with the highest standards governing social accountability (SA 8000, issued in 2001), environment (UNI EN ISO 14001, 2004), safety (OHSAS 18001, 2007) and quality (UNI EN ISO 9001, 2008). Costa Cruises has been an official partner of WWF Italia for the protection of the Mediterranean Sea since 2005. All the ships in the Costa fleet have been assigned RINA's Green Star notation certifying that they are operated in compliance with the highest environmental protection standards. In the 'Global Reputation Pulse' 2010 international study, Costa Cruises is placed first among Italian 'service industry' companies. Pulse scores are a measure of the corporate reputation (in terms of trust, esteem etc.) of the 600 largest enterprises located in 32 countries worldwide. Costa Cruises was awarded the '2010 Leonardo Prize for Italian Quality' by the President of the Italian Republic Giorgio Napolitano, for promoting and enhancing Italian excellence around the world.

With revenues of 2.9 billion euros and 2.15 million Guests in 2010, Costa Crociere S.p.A. is the largest Italian travel group and comprises the brands Costa Cruises, AIDA Cruises and Iberocruceros. Costa Crociere S.p.A. is one of Italy's top 10 most profitable companies and ranks 49th in terms of sales in Mediobanca's 2010 survey of over 3700 Italian enterprises that recorded revenue of at least 50 million euros the previous fiscal year. Costa Crociere S.p.A. is a member of Carnival Corporation & plc (NYSE/LSE: CCL; NYSE: CUK), the world's largest cruise operator.

Headquarters

Piazza Piccapietra 46, 16121 Genova, Italia +39 010 5483.1 corporate@costa.it

www.costacruise.com

Senior management

Pier Luigi Foschi, Chairman and CEO

Gianni Onorato, President

Norbert Stiekema, Executive Vice President Sales & Marketing Manfred Ursprunger, Executive Vice President Fleet Operations Alessandro Centrone, Vice President Corporate Human Resources Giuseppe De laco, CIO & Vice President Corporate

Information Technology

Beniamino Maltese, Vice President and CFO Corporate Finance Administration and Control

Ernesto Gori, Vice President Quality Standards

Compliance & Auditing

Marco Diodà, Vice President Excellence & Continuous Improvement

Antonio De Rosa, Vice President Cruise Operations
Matti Heikkinen, Vice President Technical Operations
Fabrizia Greppi, Vice President Corporate Marketing &
Communication

Ship Name	Capacity	Tonnage
Costa Concordia	3,780	114,500
Costa Serena	3,780	114,500
Costa Pacifica	3,780	114,500
Costa Favolosa	3,780	114,500
Costa Fortuna	3,470	102,600
Costa Magica	3,470	102,600
Costa Luminosa	2,826	92,600
Costa Deliziosa	2,826	92,600
Costa Atlantica	2,680	85,700
Costa Mediterranea	2,680	85,700
Costa Victoria	2,394	75,200
Costa Romantica	1,697	53,000
Costa Classica	1,680	53,000
Costa Allegra	1,000	28,400
Costa Voyager	920	25,000
Under construction		
Costa Fascinosa Spring 2012	3,780	114,500
New Order Oct 2014	4,928	132,500







Cunard Line

www.cunard.com

Cunard Line was formed in 1839 principally to carry the Royal Mail between the UK and North America, and in doing so inaugurated in 1840 the first timetabled steamship service across the Atlantic. But today's fleet is the youngest and most famous in the cruise industry – supported by one of the oldest names in shipping.

The fleet currently consists of flagship Queen Mary 2, which operates the only regularly scheduled transatlantic service, Queen Victoria and Queen Elizabeth. Cunard voyages include transatlantic crossings, the Mediterranean, Northern Europe, the Caribbean, Canada and New England as well as World Cruises – Cunard being the first to offer a World Cruise in 1922.

Headquarters

Carnival House 100 Harbour Parade Southampton SO15 1FT.

+44 2380 655 000

Reservations: **0845 071 0300**

Senior management

David Dingle, Chief Executive Officer Carnival, UK **Peter Shanks**, President and Managing Director **Richard Curtis**, Head of Marketing

International Sales Offices

North America

Cunard Line 24303 Town Center Drive Suite 200 Valencia, CA 91355

+661 753 1000

Jan Swartz, Executive Director, Sales, Marketing and Customer Service

Germany

Cunard Line Brandsende 6-10 20095 Hamburg

+(49) 40 41 533 143

Anja Tabarelli, Director Sales & Marketing

Ship Name	Capacity	Tonnage
Queen Mary 2	2,620	148,500
Queen Elizabeth	2,092	92,000
Queen Victoria	2,014	90,000



Disney Cruise Line

www.disney cruises.com

Disney Cruise Line offers a unique family vacation that every member of the family believes was created just for them – from pint-sized cruisers to sea-savvy veterans. The focus is on providing a setting in which families can reconnect, adults can recharge and kids can immerse themselves in worlds of fantasy only Disney can create.

Disney's success in cruising has been built upon the legacy and heritage of The Walt Disney Company's best known assets – master storytelling, world-class entertainment and legendary guest service. Guests enjoy some of the most spacious accommodations afloat, more original entertainment than any other ship, truly unforgettable dining experiences and much more.

Disney Cruise Line is continuing to expand its blueprint for family cruising with two new ships, Disney Dream and Disney Fantasy. This expansion allows for more variety of itineraries, including the repositioning of Disney Wonder to the US West Coast (sailing the Mexican Riviera and Alaskan itineraries in 2012). Also in 2012, the Disney Magic will sail from two new ports, Galveston, Texas and New York.

Headquarters

PO Box 10299

Lake Buena Vista, FL 32830-0299

+1 800 951 3532

DCL.Guest.Communications@disneycruise.com

Senior management

Karl Holz, President, Disney Cruise Line

Celebration, Florida

Tom Wolber, Chief Operating Officer

London, England



Sales offices

USA

Disney Cruise Line
PO Box 10000

Lake Buena Vista, FL 32830

+1 407 566 3691

Jeff James, Vice President, Sales Jeff.James@Disney.com

United Kingdom

Walt Disney Parks & Resorts 3 Queen Caroline Street Hammersmith, London W69PE United Kingdom

+44 20 8222 1073

Jackie Morris, Head of Commercial – UK Jackie.Morris@Disney.com

Ship Name	Capacity	Tonnage
Disney Dream	4,000	128,000
Disney Magic	2,700	83,000
Disney Wonder	2,700	83,000
Under construction		
Disney Fantasy (2012)	4,000	128,000





▼ Fred.Olsen Cruise Lines

Fred. Olsen Cruise Lines

www.fredolsencruises.com

Fred. Olsen Cruise Lines' four ships – Balmoral, Braemar, Black Watch and Boudicca – are all small by today's standards, with the largest carrying only 1,350 guests. They offer a warm welcome with a friendly and relaxed atmosphere on board, and many guests cruise with the company time and time again.

These ships and cruises have great appeal to the 50-plus UK market, as the language on board is English and prices are in Sterling. Cruises depart mostly from a variety of convenient regional UK ports.

Itineraries range from popular European areas, such as the Mediterranean, Baltic and Norway, to the long-voyage routes – 'Indian Ocean' and 'Around the World'. The compact size of Fred. Olsen ships makes them ideal for exploring some of nature's most wondrous sights, such as the scenery of the fjords and the Arctic, and tiny islands in the Pacific and Caribbean.

Onboard activities include Vistas, Fred. Olsen's award-winning programme of special-interest cruises which allows guests to dip in and out of subjects, such as 'Wine-tasting' and 'Photography', as they choose. Fred. Olsen's popular Music & Laughter programme provides guests with an exciting variety of live entertainment throughout their cruise, from some of the best music and comedy acts around.

Headquarters

Fred. Olsen House White House Road Ipswich, Suffolk IP1 5LL

UK

Tel: **+44 (0) 1473 292200**

Reservations: **+44 (0) 1473 742424** Email: internet@fredolsen.co.uk www.fredolsencruises.com www.fredolsencruises-vistas.com

Senior management

Mike Rodwell, Managing Director
Nathan Philpot, Sales and Marketing Director
Matt Grimes, Director of Planning and Logistics
Susana Entrena, Director of Hotel Operations
Peter Deer, Commercial Director
Richard Chilvers, Director of IT and Facilities
Rachael Jackson, Public Relations Manager
Kate Wooldridge, International Sales Manager

Ship Name	Capacity	Tonnage
Balmoral	1,350	43,537
Braemar	929	24,344
Boudicca	880	28,388
Black Watch	804	28,613



Hapag-Lloyd Cruises

www.hl-cruises.com

Hapag-Lloyd Cruises is one of Germany's foremost providers of premium, luxury and expedition cruises. Today Hapag-Lloyd is a wholly owned subsidiary of TUI AG within the group's cruise ship division, but is functionally fully independent. TUI is Europe's leading travel group.

Hapag-Lloyd Cruises offers four ships with their own unique character, hundreds of destinations, onboard and land programmes and attractive travel combinations.

MS Europa, the flagship, is the only cruise liner to have been awarded the coveted 5-star plus distinction by the Berlitz Cruise Guide since its commissioning in 1999. MS Hanseatic (the only 5-star expedition ship) and MS Bremen (four stars plus) are both designed for travel in polar regions and for destinations 'off the beaten track', such as Antarctica, the Northwest Passage, the Amazon and the South Seas. MS Columbus, a 3-star plus ship with a relaxed onboard atmosphere, is leaving the fleet in May 2012.

Additionally Hapag-Lloyd Cruises will strategically extend its product offering by 2013: For the first time ever, a second ship of the same name will be positioned in the luxury segment of the Hapag-Lloyd Cruises fleet alongside the Europa. The Europa 2 will offer a modern and casual 5-star alternative to the existing Europa.

The premium segment will be enhanced by the two-year bareboat charter of Oceania Cruises' Insignia.

As of April 2012, the ship will be integrated into the Hapag-Lloyd Cruises fleet as the successor of the Columbus, and will be named 'Columbus 2'.

Since 2004 Hapag-Lloyd has increased its number of international cruises (German/English), which ensure that English-speaking passengers feel comfortable from the moment they step onboard. Travel documents as well as information, announcements, lectures and safety drills onboard are provided in both languages, and the entire crew is fluent in English.



Headquarters

Ballindamm 25 D-20095 Hamburg Germany

+49 (0)40 3001-4600

info@hlkf.de

Booking information:

+49 (0)40 3001-4580

salesteam@hlkf.de

Senior management

Sebastian Ahrens, Managing Director and Management spokesman

Dr. Wolfgang Flaegel, Managing Director **Negar Etminan**, Head of PR and spokeswoman press@hlkf.de

Ship Name	Capacity	Tonnage
MS Columbus 2	698	30,277
MS Columbus	420	15,000
MS Europa	408	28,890
MS Hanseatic	184	8,378
MS Bremen	164	6,752





Holland America Line

www.hollandamerica.com

Holland America Line's fleet of 15 ships offers nearly 500 cruises to 320 ports in more than 100 countries, territories or dependencies; its two- to 108-day itineraries visit all seven continents. Highlights include Antarctica, South America, Australia/New Zealand and Asia voyages, a Grand World Voyage and popular sailings to ports in the Caribbean, Alaska, Mexico, Canada/New England, Europe and Panama Canal.

The company features Signature of Excellence enhancements across its fleet – a commitment totalling more than US\$525 million. It showcases the Culinary Arts Center, presented by Food & Wine magazine, a state-of-the-art onboard show kitchen in which more than 60 celebrated guest chefs and culinary experts provide cooking demonstrations and classes; Explorations Café powered by The New York Times; teens-only activity areas; and all-new stateroom amenities highlighted by flat-panel TVs and plush 'Mariner's Dream' beds.

The highest-rated premium cruise line in the world, Holland America Line is a member of the exclusive World's Leading Cruise Lines alliance, which includes Carnival Cruise Lines, Princess Cruises, Cunard Line, Seabourn Cruise Line and Costa Cruises. Sharing a passion to please each guest and a commitment to quality and value, these lines appeal to a wide range of lifestyles and budgets. The World's Leading Cruise Lines offer exciting and enriching cruise vacations to the world's most desirable destinations.

Headquarters

300 Elliott Ave. West, Seattle, WA 98119

Tel: **+1 206 281 3535**Fax: **+1** 206 281 7110
Reservations: **+1 877 724 5425**

Senior management

Stein Kruse, President and CEO

Rick Meadows, Executive Vice President, Marketing, Sales, Guest Programs

Dan Grausz, Executive Vice President, Fleet Operations **Paul Goodwin**, Executive Vice President, On Board Revenue Services/ Port Operations/Planning/Tour Operations

Larry Calkins, Senior Vice President of Finance & Information Technology

Joe Slattery, Vice President, International Sales & Marketing



Sales offices

Australia

Holland America Line

www.hollandamerica.com.au

Netherlands

Holland America Line

Tel: 0900-SAILHAL (0900-7245425)

United Kingdom

Holland America Line UK

+44 845 351 0557 (Reservations)

uksales@hollandamerica.com

Ship Name	Capacity	Tonnage
Nieuw Amsterdam	2,106	86,700
Eurodam	2,104	86,273
Noordam	1,918	82,318
Westerdam	1,916	82,348
Oosterdam	1,916	82,305
Zuiderdam	1,916	82,305
Zaandam	1,432	61,396
Volendam	1,432	61,214
Rotterdam	1,404	61,859
Amsterdam	1,380	62,735
Veendam	1,350	57,092
Statendam	1,260	55,819
Maasdam	1,258	55,575
Ryndam	1,206	55,819
Prinsendam	835	37,983





Hurtigruten

www.hurtigruten.com

Hurtigruten is renowned for its comprehensive and adventurous voyages to some of the most beautiful, remote and dramatic coastlines on the planet. With 117 years of maritime experience and a fleet of 13 ships it offers voyages that go beyond the realms of other cruise lines, providing an opportunity to encounter incredible environments, wildlife and people.

Hurtigruten's ships have been an integral part of Norwegian coastal life for generations. They call at remote ports almost never visited by commercial liners, delivering goods and passengers to isolated communities lying amidst a backdrop of breathtaking scenery. Also offered are explorer cruises in the Antarctic and around Greenland and Spitsbergen.

Hurtigruten's other business activities include bus transportation, freight and ship chartering, and it has a limited portfolio of properties related to its operations.

Headquarters

Hurtigruten ASA Havnegata 2, PO Box 43, 8514 Narvik Norway

+47 810 03 030

booking@hurtigruten.com

Senior management

Olav Fjell, Chief Executive Officer.

Torkild Torkildsen, Deputy Chief Executive Officer.

Glen Peter Hartridge, Head of Pricing & Revenue Management

Ole Frederik Hienn, Director Legal Affairs

Anders Olstad, Chief Financial Officer

Hans Rood, Sales Director

Dag Arne Wensel, Director Maritime & Technical Operations

Trond Overas, Product, Marketing & PR Director

Sales Offices

Germany

Hurtigruten GMBH

Kaspar Berens, Managing Director

United Kingdom

Hurtigruten Limited

Kathryn Beadle, Managing Director

Ship Name	Capacity	Tonnage
MV Midnatsol	1,000	16,151
MV Finnmarken	1,000	15,000
MV Trollfjord	822	16,140
MV Polarlys	737	11,341
MV Nordnorge	691	11,386
MV Nordkapp	691	11,386
MV Richard With	691	11,205
MV Nordlys	691	11,204
MV Kong Harald	691	11,204
MV Vesteraalen	560	6,261
MV Fram	500	12,700
MV Lofoten	400	2,621
MV Nordstjernen	400	2,191





Ibercruceros

www.iberocruceros.es

The cruise company, owned by Costa Crociere SpA, specializes in offering a product with a distinctive Spanish style. Iberocruceros operates three modern vessels of medium size, its largest offering a maximum capacity of 1.900 Guests.

The company has a team of 2,000 highly qualified professionals who are continuously working to provide Guests the highest level of comfort and satisfaction during their stay on board.

As novelties for 2012, besides the transatlantic cruises, lberocruceros also offers a selection of longer cruises with durations of 11 or 12 days.

Iberocruceros strives to accommodate every Guest needs, hence its decision to continue offering the successful Todo Incluido de Marca®

Moreover Iberocruceros offers the best stand-up comedy at sea with the prestigious company 'El Club de la Comedia' presently showing on all vessels.

Headquarters

Avenida de Burgos, 89. Planta 4ª. Edificio 3- Las Tablas (Ciudad Empresarial Adequa), 28050 Madrid, Spain

Tel: **+34 91 334 93 50**Reservations: **902 282221**Email: cruceros@iberocruceros.es

Senior management

Alfredo Serrano, General Manager **Luis Grau**, Deputy General Manager



Sales Offices

Avenida de Burgos, 89. Planta 4ª. Edificio 3- Las Tablas (Ciudad empresarial Adequa), 28050 Madrid, Spain

Sofía Amar, Marketing & Communication Director +34 91 334 93 50

sofia.amar@iberocruceros.es

Pedro Costa, Sales Manager +34 913349350 pedro.costa@iberocruceros.es

Ship Name	Capacity	Tonnage
Grand Celebration	1,910	47,626
Grand Holiday	1,848	46,052
Grand Mistral	1,807	48,200







Louis Cruises

www.louiscruises.com

With an array of destinations and 26 years of experience in international cruising, Louis Cruises meticulously prepares exciting and unique itineraries offering great value for money. Louis Cruises welcomes its passengers to its home waters in the Eastern Mediterranean for a truly enjoyable onboard experience, sumptuous cuisine and warm service with a genuine smile, leaving them enriched with a... Sea of Memories!

A member of the Louis group, founded in 1935, Louis Cruises started operating short cruises out of Limassol, Cyprus to the Eastern Mediterranean from the early '70s. Louis Cruises has over the years evolved and expanded its cruise programmes, becoming the specialist cruise operator in the Eastern Mediterranean.

Today, with a fleet of nine cruise ships, Louis Cruises operates cruises from various East Med ports, such as Piraeus, Istanbul, Limassol etc, to destinations all over the Mediterranean.

Headquarters

Louis Cruises (HQ Cyprus) Louis House, 20, Amphipoleos street 2025 Strovolos, Nicosia

+357 22 588000

Louis Cruises (HQ Greece) Louis Building, 8 Ampatielou street, 185 36 Piraeus Greece

Tel: +30 210 4583400

Senior management

Costakis Loizou, Executive Chairman Louis Loizou, Deputy Managing Director George Paschalis, CFO Captain George Koumpenas, Operations Director Charis Papacharalambous, Sales & Marketing Director Chris Theophilides, Business Development Director

Sales offices

Greece

Louis Cruises Greece

+30 210 4583400

info@louiscruises.gr

United Kingdom

Louis Cruises UK 0800 0183883 info@louiscruises.co.uk

Italy

Louis Cruises Italy

+39 010 574 0043

info@louiscruises.it

France

Louis Cruises France

+33 142669725

louiscruises@croisifrance.fr

Ship Name	Capacity	Tonnage
Louis Majesty	1,462	40,876
Thomson Destiny	1,444	37,773
Thomson Spirit	1,254	33,930
Emerald	1,000	26,428
Louis Cristal	960	25,611
Coral	748	14,194
Orient Queen	728	15,781
Sapphire	576	12,263
Calypso	486	11,162







MSC Cruises

www.msccruises.com

Following several years of unprecedented growth, MSC Cruises is a market leading cruise company in the Mediterranean, South Africa and Brazil. The 11 ships comprising its ultra-modern fleet carry 1.3 million passengers. MSC Cruises sails throughout the year in the Mediterranean and offers a wide range of seasonal itineraries in Northern Europe, the Atlantic Ocean, the Caribbean, North America and Canada, South America, the Indian Ocean and South and West Africa, Abu Dhabi and the Emirates. The entirely familyowned company employs 12,000 staff around the world, and is present in 45 countries.

MSC believes that global leadership brings increased responsibility towards the physical and human environments in which the company operates. Its commitment to safeguarding the marine ecosystem, as well as protecting the health and safety of its passengers and staff, has earned numerous awards and certifications.

Embracing the philosophy of Corporate Social Responsibility still further, in July 2009 MSC Cruises launched an important partnership with UNICEF. The 'Get on board for children' project benefits disadvantaged children and adolescents in 126 vulnerable urban communities in Brazil by helping to ensure they receive a proper education. In its second year, the partnership raised 1,000,000 euros for this cause.

MSC Cruises is proud of its Italian heritage, which is reflected in the company's reputation for sophisticated design and outstanding hospitality.

Headquarters

MSC Cruises - HQ Chemin Rieu, 12-14 1208 Geneva (Switzerland)

+41 22 703 89 37

Senior management

Pierfrancesco Vago, CEO Giacomo Costa Ardissone, CFO

Sales Offices

MSC Crociere - Naples, Italy

MSC Cruceros - Madrid, Spain

MSC Croisières – Paris, France

MSC Kreuzfahrten - Munich, Germany

MSC Cruzeros – Lisbon, Portugal

MSC Croisière/MSC Kreuzfahrten – Basel, Switzerland

MSC Kreuzfahrten – Wien, Austria

MSC Croisières/MSC Cruises Belux - Bruxelles, Belgium

MSC Cruises - Amsterdam, Netherland

MSC Cruises UK &Ireland- London, UK

MSC Cruises Sweden/Norway/Denmark – Stockholm, Sweden

MSC Krstarenja – Dubrovnik, Croatia

MSC Cruises – Istanbul, Turkey

Achille Staiano, MSC Cruises Commercial Manager International Market

Achille.Staiano@msccruises.com

Fleet

Ship Name	Capacity	Tonnage
MSC Fantasia	4,363	137,936
MSC Splendida	3,952	137,936
MSC Magnifica	3,013	93,330
MSC Poesia	3,013	92,627
MSC Orchestra	3,013	92,409
MSC Musica	3,013	92,409
MSC Armonia	2,087	59,058
MSC Sinfonia	2,087	59,058
MSC Armonia	2,087	59,058
MSC Lirica	2,069	59,058
MSC Opera	2,055	59,058

Under construction

MSC Divina



Norwegian Cruise Line

www.ncl.com

Norwegian Cruise Line is the innovator in cruise travel with a 44-year history of breaking the boundaries of traditional cruising, most notably with the introduction of Freestyle Cruising which has revolutionized the industry by allowing quests more freedom and flexibility.

Today, Norwegian has 11 purpose-built Freestyle Cruising ships, providing guests the opportunity to enjoy a relaxed cruise vacation on some of the newest and most contemporary ships at sea. The Company has two 4,000-passenger vessels, Norwegian Breakaway and Norwegian Getaway, on order for delivery in spring 2013 and spring 2014.

Norwegian's largest and most innovative Freestyle Cruising ship, Norwegian Epic, debuted in June 2010. Norwegian Cruise Line is the official cruise line of Blue Man Group, appearing for the first time at sea on Norwegian Epic, as well as the official cruise line of Legends in Concert, Howl at the Moon Dueling Pianos, Gibson Guitar, and Nickelodeon, the number-one entertainment brand for kids. Cirque Dreams® & Dinner is also featured on board Norwegian Epic as the first show of its kind at sea under a big top.

Headquarters

7665 Corporate Center Drive, Miami, FL 33126

- +1 305 436 4000
- +1 866 234 7350
- www.ncl.com

Senior management

Kevin Sheehan, Chief Executive Officer

Andy Stuart, Executive Vice President of Global Sales and Passenger Services

Wendy Beck, Executive Vice President and Chief Financial Officer **Bob Becker**, Senior Vice President, Consumer Research

George Chesney, Senior Vice President, Human Resources

Vincent Cirel, Senior Vice President & Chief Information Officer

- - -

Dan Farkas, Senior Vice President & General Counsel

Howard Flanders, Senior Vice President of Finance and Treasurer **Michael Flesch**, Senior Vice President, Hotel Operations

Crane Gladding, Senior Vice President, Revenue Management & Passenger Services

Maria Miller, Senior Vice President, Marketing

Captain Svein Sleipnes, Senior Vice President, Marine Operations

Dave Sprechman, Senior Vice President and Chief Accounting Officer

Brian Swensen, Senior Vice President, Technical Operations and Refurbishment



Sales offices

Miami Headquarters

7665 Corporate Center Drive, Miami, FL 33126 Kevin Sheehan, Chief Executive Officer

United Kingdom (London)

Horatio House, 77-85 Fulham Palace Road Hammersmith, London, UK W68JA

Francis Riley, Vice President and General Manager Europe

Continental Europe (Germany)

Kreuzberger Ring 68

Wieshbaden, Hessen, Germany 65205

Ship Name	Capacity	Tonnage
Norwegian Epic	4,100	153,000
Norwegian Gem	2,392	93,530
Norwegian Jade	2,392	93,558
Norwegian Pearl	2,384	93,530
Norwegian Jewel	2,374	93,502
Norwegian Star	2,348	91,740
Norwegian Dawn	2,338	92,250
Pride of America	2,120	80,439
Norwegian Spirit	2,000	75,338
Norwegian Sky	2,000	77,104
Norwegian Sun	1,928	78,309
Under construction		
Norwegian Breakaway (2013)	4,000	
Norwegian Getaway (2014)	4,000	





Oceania Cruises

www.oceaniacruises.com

Oceania Cruises offers unrivalled cuisine, stylish accommodations, gracious service and extraordinary value. Award-winning itineraries visit more than 330 ports in Europe, Asia, Australia, New Zealand, and the Americas aboard the 684-guest Regatta, Insignia and Nautica. The line's 1,250-guest Marina joined the fleet in January 2011 and will be followed by Riviera – a sister ship – in April 2012.

The culinary experience takes centre stage at Oceania Cruises with creations from the renowned Jacques Pépin being served in a wide choice of open dining venues, including speciality restaurants at no extra charge. Private Dining venues are also available on the new O-Class ships, Marina and Riviera - as is the Culinary Studio, sponsored by Bon Appétit Magazine.

In 2011, Oceania Cruises completed a multi-million-dollar enhancement of Regatta, Insignia and Nautica as part of its ongoing Pillars of Distinction initiative. Staterooms and Penthouse Suites were enhanced with custom, tufted headboards with nail-head trim mounted on floor-to-ceiling Wenge walnut panels; refrigerated mini bars; wall sconces and bedside reading lamps.

All accommodations were also outfitted with the line's proprietary Prestige Tranquility Beds composed of 400 encapsulated springs in seven zones covered by two inches of memory foam; a two-inch thick cushion filled with gel and wrapped in Chamomile-infused fibre tops the mattress. In addition, all beds received 1,000-thread-count, Egyptian cotton linens and duvets and a plush down comforter.

An expanded menu of Jacques Pépin signature items were added to menus in the Grand Dining Room; the Terrace Café now features more regional specialties; espresso and cappuccino are now made from Illy coffee of Italy; free shuttles from the pier to the port city centre are offered in more than 90 places worldwide; production shows debuted on all ships; bath amenities were updated in all accommodations, including Bulgari for Concierge-level and suite guests; and laptops were added to Penthouse Suites.



Senior management

Kunal Kamlani, President

Headquarters

USA

Oceania Cruises 8300 NW 33rd Street, Suite 100 Miami, FL 33122, USA

+1 305 514 2300

www.oceaniacruises.com

Sales offices

UK and Europe

Oceania Cruises Suite ABC, Beresford House, Town Quay,

Southampton. SO14 2AQ

+44 845 505 1920

www.oceaniacruises.com

Bernard Carter, Managing Director

Ship Name	Capacity	Tonnage
Marina	1,250	66,084
Regatta	684	30,277
Insignia	684	30,277
Nautica	684	30,277
Under construction		
Riviera (April 2012)	1,250	66,084





P&O Cruises

www.pocruises.co.uk

P&O Cruises can trace its roots back to 1837 and 2012 will mark the 175th anniversary of when the Peninsular Steam Navigation Company was awarded the lucrative Admiralty contract to carry mail to the Iberian Peninsula and beyond. Not long afterwards the concept of cruising was born and since then has evolved into a popular holiday choice and now P&O Cruises carries more British cruisers than any other line. Today, as trusted cruise experts, P&O Cruises has a fleet of seven ships offering holidays tailored to British tastes combining genuine service, a sense of occasion and attention to detail, ensuring passengers have the holiday of a lifetime, every time. Azura was launched in April 2010 - officially named by Godmother Darcey Bussell CBE. Small ship Adonia was added to the fleet in May 2011, named by Dame Shirley Bassey, DBE, and a new 141,000 ton as yet unnamed ship will be added to the fleet in spring 2015.

Headquarters

P&O Cruises

Carnival UK

Carnival House, 100 Harbour Parade, Southampton, Hampshire, SO15 1ST, United Kingdom

0843 374 0111

poreservations@pocruises.com

Senior management

David Dingle, Chief Executive Officer, Carnival UK **Carol Marlow**, Managing Director P& O Cruises



Ship Name	Capacity	Tonnage
Azura	3,100	115,000
Ventura	3,078	115,000
Oceana	2,016	77,000
Oriana	1,828	69,000
Aurora	1,870	76,000
Arcadia	2,016	83,700
Adonia	710	30,200



Phoenix Reisen

www.PhoenixReisen.com

Phoenix is a privately owned and managed company, founded in 1973 in Bonn, the former German capital. Although cruise holidays are the company's main business – it is the German market leader in Nile cruises – the company also offers beach vacations, roundtrips and special oriental programmes.

Phoenix is one of Germany's leading classic cruise operators/ charterers. It has three seagoing vessels and 46 river cruise ships around the world. In 1988 Phoenix began operating the unforgettable TS Maxim Gorki to offer German style cruising throughout the world. From this one ship the fleet has gradually grown and now consists of an Albatros ship

(TS Albatros from 1993 to 2004, MV Albatros from 2004), MV Amadea and MV Artania (ex MVArtemis).

Cruising with Phoenix means classic manageable cruise ships, not mass market megaliners. Only German is spoken onboard. Cruises feature a very personal, familiar and casual atmosphere; modern balcony cabins, spa & wellness areas, production shows, open seating restaurants, excellent kitchen etc.; and a traditional cruise style with Captain's handshakes, Captain's Gala Dinner, lectures etc. A Phoenix sea or river cruise offers excellent value for money with a variety of ship types and products for different demands and budgets. There are a high number of repeaters. The vessels are classic ships with a modern touch which operate worldwide including round-the-world-cruises each winter season. Phoenix means a traditional but casual cruise style combined with a large variety of itineraries – many off the beaten track.



Headquarters

Phoenix Reisen GmbH Pfaelzer Str. 14 D-53111 Bonn Germany +49 (0228) 9260-55

Senior management

Johannes Zurnieden, CEO
Jörg Kramer, CFO
Benjamin Krumpen, COO
Michael Schulze, Director of Cruising

Ship Name	Capacity	Tonnage
MV Artania	1,200	44,500
MV Albatros	830	28,000
MV Amadea	600	29,000

^{*46} river & coastal cruise ships under Phoenix Charter



Princess Cruises

www.princes.com

One of the best-known names in cruising, Princess Cruises is a global cruise and tour company operating a fleet of 16 modern ships. They are renowned for their American-style luxury and innovative features including Movies under the Stars. The Sanctuary (an adults-only retreat) and a wide array of choices in dining, entertainment and amenities – all provided in an environment of exceptional customer service.

A recognised leader in worldwide cruising, Princess offers its passengers the opportunity to escape to more than 330 destinations around the globe – more than any other cruise line.

Headquarters

Princess Cruises 24305 Town Center Drive Valencia CA 91355-4999 United States

+1-800-PRINCESS (+1 800 774 6237)

Senior management

Alan Buckelew, president and chief executive officer **Paul Ludlow**, UK director

Sales Office

United Kingdom

Princess Cruises Carnival UK

Carnival House, 100 Harbour Parade, Southampton, Hampshire, SO15 1ST, United Kingdom

0845 3 555 800

enquiry@princesscruises.co.uk



Fleet

Ship Name	Capacity	Tonnage
Caribbean Princess	3,110	113,000
Ruby Princess	3,080	113,000
Crown Princess	3,080	113,000
Emerald Princess	3,080	113,000
Diamond Princess	2,600	116,000
Sapphire Princess	2,600	116,000
Grand Princess	2,590	109,000
Golden Princess	2,590	109,000
Star Princess	2,590	109,000
Coral Princess	1,970	92,000
Island Princess	1,970	92,000
Sea Princess	1,950	77,000
Sun Princess	1,950	77,000
Dawn Princess	1,950	77,000
Pacific Princess	680	30,200
Ocean Princess	680	30,200
Under construction		
Spring 2013	3,600	
Spring 2014	3,600	

Contracts to build two 3,600-passenger ships for Princess Cruises are scheduled to enter service in spring 2013 and spring 2014.





pullmantur

Pullmantur

www.pullmantur.es

Pullmantur is a leading Spanish Tour Operator & Cruise Company, founded in 1971, and famous for introducing the 'All Inclusive' concept to cruising. Pullmantur is the leader of the cruise market in Spain with close to 45% market share, currently operating a modern fleet of 5 vessels, with a daily passenger capacity of 10,000, cruising worldwide, and calling on approximately 100 destinations.

The company offers a unique door-to-door flight service, operated by its in-house air travel division with a fleet of 4 Boeing 747-400. Pullmantur Air provides charter flights to the European Cruise Port Embarkations and long-haul flights between Spain and the Caribbean Sea for the company's tour-operation division.

Spain based Pullmantur, operates through satellite offices in Brasil, Mexico and Portugal. Within its evolving Latin American growth strategy, Pullmantur deploys 5 vessels with local embarkations in Brazil, Mexico, Colombia, Venezuela and Panama, and the company aims to be the most widely recognized brand in the Latin American region. Pullmantur became a Royal Caribbean International brand in 2006. The company offers a tremendous value proposition and it's ships deliver amazing vacations, offering award winning service to almost 1,000,000 guests per year.

Headquarters

Edificio Pórtico

Pullmantur Group C/ Mahonia, N° 2, Planta 5^a

Campo de Las Naciones

28043 Madrid, Spain

+34 91 418 8700

Reservations: +34 902 24 00 70

pullmantur@pullmantur.es

www.pullmantur.es

Senior management (Group Management Executive Board)

Gonzalo Chico Barbier, President & CEO

Ignacio Aguilera, VP & General Manager, International

Markets, Strategy, Business Development

Rafael Fernández-Álava, VP & General Manager, Sales & Marketing

Carlos Pedercini, VP Marine Operations

Antonio Diez Muro, VP Chief Financial Officer

Eric Davaille, VP Hotel Operations

Eduardo López-Puertas, VP Land Operations

Luis Ávila, Director Legal Affairs & Secretary of the Board

José Luis de Arcenegui, Director Human Resources & CSR

Sonia Prieto, Director Revenue Management,

Product & Deployment

José Luis Fernández, Director Information Technology

& Business Processes

Montserrat Barriga, Director Internal Control

& Corporate Services

Maria José Yélamos, Director Customer Service & Web

Enrique Bretos, Director & General Manager Pullmantur Air

Sales Offices

Mexico

Pullmantur México

+52.55.54.49.77.00

www.pullmantur.com.mx

Brazil

Pullmantur Cruzeiros do Brasil LTDA

+55 11 3958 4800

www.pullmantur.com.br

Agency Reservations: +55 11 3958 4800

Purtugal

Pullmantur Portugal

+351.21.350.92.50

portugal@pullmantur.pt

www.pullmantur.pt

Agency Reservations: +351.21.350.92.50

Malta

Pullmantur Malta

+35.621.224.796

Ship Name	Capacity	Tonnage
Sovereign	2,322	73,529
Empress	1,607	48,563
Pacific Dream	1,442	47,427
Zenith	1,441	47,413
Ocean Dream	1,000	35,265



Regent Seven Seas Cruises

www.rssc.com

Regent Seven Seas Cruises is the world's most inclusive luxury cruise line. Fares include all-suite accommodations, round-trip air, highly personalised service, acclaimed cuisine, fine wines and spirits, sightseeing excursions in every port, a pre-cruise luxury hotel package and gratuities. Three award-winning all-suite vessels visit more than 300 destinations around the globe. Recently, Regent has raised the bar on their all-inclusive offering by adding a 1-night pre-cruise hotel package on all of its 2013 cruises.

With some of the highest space-per-guest ratios in the cruise industry, accommodations onboard the line's intimate Seven Seas Mariner, Seven Seas Voyager and Seven Seas Navigator are considered among the most luxurious afloat. Suites include amenities such as down comforters, Egyptian cotton linens, flat-screen televisions, DVD players and Wi-Fi access. Top suites have iPod music systems with Bose speakers and iPads.

In 2008/09 RSSC completed a multi-million dollar fleet-wide refurbishment programme. Almost every area was updated and some public rooms were substantially redesigned.

In 2010, RSSC partnered with world-famous Canyon Ranch, a leading US operator of destination health resorts, to operate the wellness and fitness facilities onboard all three vessels. The ships' Canyon Ranch SpaClub offers many of the most desirable spa amenities: massage, gym with cardio and weight-training equipment, juice bar, men's and women's locker rooms, thalassotherapy, sauna and steam rooms as well as a full-service beauty salon. Canyon Ranch-certified fitness instructors conduct daily group and private fitness, yoga and tai chi classes.



Headquarters

8300 NW 33rd Street, Suite 100 Miami, FL 33122, USA +1 954 940 6700

Senior management

Mark Conroy, President

Sales Offices

UK and Europe

Regent Seven Seas Cruises Beresford House, Town Quay, Southampton, SO14 2AQ

+44 2380 682 280

www.rssc.com

Graham Sadler, Managing Director

Ship Name	Capacity	Tonnage
Seven Seas Mariner	700	48,075
Seven Seas Voyager	700	42,363
Seven Seas Navigator	490	28,550





Royal Caribbean International

www.royalcaribbean.com

Royal Caribbean International is positioned at the upper end of the contemporary segment of the global cruise vacation industry, though its quality enables it to attract consumers from the premium segment as well. This allows the company to achieve one of the broadest market positions of any of the major cruise brands in the vacation industry.

Royal Caribbean International operates 22 ships with some 62,600 berths, offering cruise itineraries that range from two to 18 nights. Royal Caribbean International offers a variety of itineraries to worldwide destinations including Alaska, Asia, Australia, Bermuda, Canada, the Caribbean, Europe, Hawaii, Latin America, the Middle East, the Panama Canal and New Zealand.

Royal Caribbean International's goal is to attract an array of global vacationing consumers by providing a wide variety of itineraries and cruise lengths with multiple innovative options for onboard dining, entertainment and other activities. The company has introduced many product innovations such as surf simulators, an interactive water park called the H2O Zone, 'Royal Promenades' which are boulevards with shopping, dining and entertainment venues, ice skating rinks, bungee jumping trampolines and rock climbing walls.

Onboard its Oasis-class ships Royal Caribbean International has introduced the new neighbourhood concept which consists of seven distinct themed areas including Central Park, a park open to the sky, and Boardwalk, an outdoor family-friendly area featuring a handcrafted carousel and an amphitheatre at sea known as AquaTheater.

Royal Caribbean International is also renowned for innovative partnership deals, such as working exclusively with DreamWorks Animation to offer the DreamWorks Experience on five of its ships around the world, including 3D theatres showing DreamWorks films, entertainment shows and parades with renowned characters like: Shrek, Fiona, Puss in Boots, Kung Fu Panda's Po and others.

Headquarters

Royal Caribbean Cruises Ltd 1050 Caribbean Way Miami, Florida USA +1 305 539 6000

www.royalcaribbean.com

Senior management

Richard D. Fain, Chairman and Chief Executive Officer RCCL
Adam M. Goldstein, President and Chief Executive Officer
Brian J. Rice, Executive Vice President and Chief Financial Officer RCCL
Michael Bayley, Executive Vice President, International RCCL
Harri U. Kulovaara, Executive Vice President, Maritime RCCL

Sales Offices

France - RCL Cruises Ltd (France) Frederic Martinez, Managing Director **www.royalcaribbean.fr**

Germany - RCL Cruises Ltd (Germany) Tom Fecke, General Manager **www.royalcaribbean.de**

Italy - RCL Cruises Ltd (Italy) Gianni Rotondo, Managing Director **www.royalcaribbean.it**

Norway - RCL Cruises Ltd (Norway) Roar Meidal, General Manager **www.royalcaribbean.no**

Spain - RCL Cruises Ltd (Spain) Belen Wanguemert, General Manager **www.royalcaribbean.es**

United Kingdom - RCL Cruises Ltd (UK & Ireland) Dominic Paul, VP & Group Managing Director **www.royalcaribbean.co.uk**

Royal Caribbean Cruises Ltd. has an expansive network of 41 International Representatives (IRs).

EMEA IRs - RCL Cruises Ltd Helen Beck, Director of EMEA IRs

www.royalcaribbean.com

Flee

TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT		Fleet
Ship Name	Capacity	Tonnage
Allure of the Seas	5,400	220,000
Oasis of the Seas	5,400	220,000
Freedom of the Seas	3,600	158,000
Independence of the Seas	3,600	158,000
Liberty of the Seas	3,600	158,000
Adventure of the Seas	3,100	142,000
Explorer of the Seas	3,100	142,000
Mariner of the Seas	3,100	142,000
Navigator of the Seas	3,100	142,000
Voyager of the Seas	3,100	142,000
Majesty of the Seas	2,350	74,000
Monarch of the Seas	2,350	74,000
Enchantment of the Seas	2,250	74,000
Brilliance of the Seas	2,100	90,000
Jewel of the Seas	2,100	90,000
Radiance of the Seas	2,100	90,000
Serenade of the Seas	2,100	90,000
Rhapsody of the Seas	2,000	78,000
Vision of the Seas	2,000	78,000
Grandeur of the Seas	1,950	74,000
Legend of the Seas	1,800	69,000
Splendour of the Seas	1,800	69,000



Saga Shipping

www.saga.co.uk/cruises

Saga has been operating its own fleet of cruise ships since 1997, and is unique in offering cruises exclusive to people aged 50 and over (although a travelling companion may be aged 40 and over). Saga currently has two ships – Saga Ruby (661 passengers) and Saga Sapphire (701 Passengers).

Saga Ruby and Saga Sapphire are elegant ships which offer a traditional cruise experience enhanced by spacious cabins and public rooms, single-sitting dining and a high crew-to-passenger ratio.

Saga Sapphire join's the fleet in March 2012 after a multimillion pound refurbishment. She offers the same stylish surroundings and superb service that cruise goers have come to expect from our elegant ships, but with a contemporary new style.

Spirit of Adventure

Spirit of Adventure offers a range of discovery cruises to interesting destinations aboard MV Quest for Adventure (446 passengers) and is open to adult's aged 21 and over providing one member of the party is over 50.

The small size of Quest for Adventure means she can reach destinations that are inaccessible to larger ships.

Spirit of Adventure and Saga Shipping are divisions of the Acromas Group.



Headquarters

Saga Shipping Enbrook Park Sandgate Folkestone Kent CT20 3SE

Senior management

Susan Hooper, Chief Executive, Acromas Travel **Robin Shaw**, Chief Executive, Cruise Division of Acromas Travel

Ship Name	Capacity	Tonnage
Saga Sapphire	701	37,301
Saga Ruby	661	24,492
Quest for Adventure	446	18,591







SEABOURN®

Seabourn Cruise Line

www.seabourn.com

Seabourn is a pioneer of ultra-luxury cruising that has earned unanimous accolades from cruising guidebooks, travel critics and traveler polls since its launch in 1987. With six intimate, all-suite vessels roaming the globe, Seabourn has earned a reputation for extraordinary levels of personalized service, with nearly one staff member per guest; sumptuous accommodations in spacious ocean-view suites, many with balconies; exceptional shoreside experiences in the world's most desirable destinations and award-winning cuisine served in open-seating restaurants.

Carrying just 208 fortunate guests each, the three original Seabourn ships – Seabourn Pride, Spirit and Legend – offer a wealth of onboard touches and luxuries to assure smooth sailing whatever the destination. Guests can look forward to spacious accommodations of 277 square feet or more, 40 percent with balconies; complimentary wines and spirits throughout each cruise; superb dining in open-seating venues; innovative Massage Moments on deck; festive Caviar in the Surf beach parties; designer soaps, Molton Brown toiletries and Pure Pampering therapeutic bath menu - and all of the above with no tipping required or expected. Seabourn Odyssey, the 450-guest ship launched in June 2009, has been hailed as "a game-changer" for the luxury segment. Along with its sister-ships Seabourn Sojourn in 2010, and Seabourn Quest in 2011, it enables guests to enjoy the exceptional levels of service that distinguish Seabourn, with added amenities and features made

accommodations, over 90 percent of which have private verandas, more alternative dining options, generous areas of open deck and the largest spa on any luxury ship are just a few of the advantages that have made these the most admired vessels in the world's leisure cruising fleet. They consistently dominate the highest rankings for small ships in polls conducted by consumer travel publications, and all six of the Seabourn ships occupy spots among the ten highest-rated ships in the world in the 2012 Berlitz Guide to Cruises and Cruising.

possible by a larger vessel. A wider variety of luxurious suite

Headquarters

Seabourn Cruise Line

300 Elliott Avenue West Seattle, WA 98119

Phone: (+1) 206-626-9100 www.seabourn.com

Sales Offices

UK

100 Harbour Parade Southampton SO15 1ST

Phone: 0845 0700 500

Australia:

15 Mount Street

North Sydney, NSW 2060 Phone: **(61) 2 9126 6901**

Senior management

Richard D. Meadows – President John Delaney – SVP, Sales & Marketing

Press contact:

Bruce Good – Director of Public Relations

Email: bgood@seabourn.com

Ship Name	Capacity	Tonnage
Seabourn Odyssey	450	32,000
Seabourn Sojourn	450	32,000
Seabourn Quest	450	32,000
Seabourn Pride	208	10,000
Seabourn Spirit	208	10,000
Seabourn Legend	208	10,000



Silversea Cruises

www.silversea.com

Silversea is a cruise company that reflects generations of maritime and travel experience. In the early 1990s the Lefebvre family of Rome, former owners of Sitmar Cruises, conceived and organised a unique cruise company with a pledge to build and operate the highest quality ships in the ultra-luxury segment. The name 'Silversea' was chosen because it connotes quality and luxury as well as capturing the romance and special sensations of the sea.

Silversea Cruises is recognised as an innovator in the luxury segment, offering guests large-ship amenities onboard its intimate, all-suite vessels: Silver Cloud, Silver Wind, Silver Shadow, Silver Whisper and Silver Spirit – all designed to offer an atmosphere of conviviality and casual elegance. And with the inclusion of the regal expedition ship Silver Explorer the company's itineraries encompass all seven continents.

Distinctive European styling is reflected in every detail, from uncompromising service to exquisite gourmet dining. Intimate spaces and well-travelled, international guests foster a welcoming onboard ambience in an all-inclusive environment. And in each fascinating destination Silversea provides access to exclusive explorations and enriching cultural connections.

Silversea caters to the cosmopolitan world traveller and maintains branch offices in the US, UK, Germany, Australia and Singapore. The company's headquarters are in Monaco.

Headquarters

Gildo Pastor Center 7, Rue du Gabian 98000 Monte Carlo +377 9770 2424

Senior management

Manfredi Lefebvre D'Ovidio, Chairman Enzo Visone, Chief Executive Officer Kenneth Watson, Chief Operating Officer Christian Sauleau, Executive Vice President, Fleet Operations Alvarino Biasotti, Senior Vice President, Worldwide Financial Controller

\$SILVERSEA

Sales Offices

The Americas

110 East Broward Blvd Fort Lauderdale, FL 33301

+1 877 760 9052 or +1 954 522 2299 Kenneth Watson, Chief Operating Officer

UK, Ireland and Middle East London

+44 844 770 9030

Mike Bonner

Director Sales & Marketing and General Manager

Germany, Switzerland and Austria

Jerome Danglidis, Vice President Sales & Marketing

Australia and New Zealand

Sydney

+61 2 9255 0600

Karen Christensen, Regional Sales manager

Asia

Singapore

+62 6223 7066

Yap Melvyn, Regional Sales Director

Ship Name	Capacity	Tonnage
M/V Silver Spirit	540	36,000
M/V Silver Shadow	382	28,258
M/V Silver Whisper	382	28,258
M/V Silver Wind	298	17,400
M/V Silver Cloud	296	16,800
M/V Silver Explorer	132	6,072







Star Clippers

www.starclippers.com

In 1989 Swedish entrepreneur Mikael Krafft turned his boyhood dream into a reality when he founded Star Clippers, the only modern-day cruise line dedicated to re-creating the golden age of the tall sailing ships while providing passengers with a mega-yacht experience.

Meticulously researched down to the last detail, Star Flyer and Star Clipper entered service in the early 1990s as the tallest clipper ships ever built, with main masts rising 226ft and a maximum sailing speed of 17 knots. In July 2000 the twin sister-ships were joined by Royal Clipper, the line's flagship and the first fully rigged five-masted square-rigger since Preussen in 1902.

Visiting ports untouched by larger cruise ships and offering passengers the activities, amenities and atmosphere of a private yacht, Star Clippers is recognised as one of the premier speciality cruise lines. Guests enjoy delectable cuisine in one unhurried sitting, and are pampered by services in a casually elegant atmosphere. Whether climbing the mast for a better view or relaxing in the net off the bow, guests step into a world where unique experiences abound and new adventures await.

During the winter and spring months, Royal Clipper sails throughout the Caribbean. The ship repositions to the Mediterranean for the summer and fall seasons. Star Clipper spends the winter and spring in the Caribbean, repositioning to the Mediterranean for the summer and fall seasons. And Star Flyer sails up the Pacific Coast of Costa Rica in the winter and repositions to the Mediterranean for the summer and fall seasons.

Headquarters

Clipper Palace 4, rue de la Turbie 98000 Monaco

+377 97 97 84 00

info.monaco@starclippers.com Brochure Request +377 97 97 84 00 or

www.starclippers.com

Senior Management

Mikael Krafft, president & owner **Eric Krafft**, vice-president

Jack Chatham, vice-president sales & marketing

Larry Haugh, vice-president sales

Capt. Farhat Shamim, vice-president marine operations

Sales Offices

Germany - SC Kreuzfahrten Helmut Kutzner

Helmut.kutzner@starclippers.com

UK - Fred Olsen Travel Alison Repoulios

alison.repoulios@fredolsentravel.co.uk

Austria - Klaus Holzmann

klaus.holzmann@starclippers.com

Benelux - Star Clippers Olivia Van der Ghinst

olivia.vanderghinst@starclippers.com

Italy, Spain & Portugal Star Clippers Laurence Ellena

laurence.elena@starclippers.com

France - Star Clippers

Beatrice Frantz

beatrice.frantz@starclippers.com

Greece - Nereus Cruises

Mr Teris Tsafos

mail@nereusgroup.gr

Japan- Meridian

Mr Asao Ohji

ohji@meridian-jp.com

Australia - Creative Cruising

Diana Siderova – sales manager Diana.siderova@starclippers.com

USA

Star Clippers

Jack Chatham

Ship Name	Capacity	Tonnage
Royal Clipper	227	5,000
Star Clipper	170	2,298
Star Flyer	170	2,298



TUI Cruises

www.tuicruises.com

TUI Cruises, formed in April 2008 and based in Hamburg, is a joint venture of TUI AG and the globally operating cruise company Royal Caribbean Cruises Ltd. The cruise brand targets the German-speaking market and stands for contemporary well-being holidays at sea.

TUI Cruises' first ship is Mein Schiff 1 and focuses, like all the ships of the Mein Schiff fleet, from bow to stern on relaxation and the well-being factor. The architectural concept behind the well-being ship is characterized by the ample room on the decks and the generously dimensioned cabins with balconies or verandas. In particular, the personalized and attentive service ensures that seasoned and quality-conscious travelers experience a fulfilling cruise that meets their personal taste. For this reason, TUI Cruises offers its guests the Premium All Inclusive concept. From Italian delicacies in the Bistro La Vela through specialties in the Gosch Sylt fish restaurant to cocktails in the TUI Bar almost all drinks and meals in most restaurants, bars and bistros are included in the cruise price. The Premium All Inclusive concept is aimed above all at couples and families who value room to move, generous surroundings, high quality and individual service.

Mein Schiff 2 is the second ship of the Mein Schiff fleet. It is a well-being vessel with a focus on limitless pandering, relaxed discovery and contemporary travel like its structurally identical sister ship. In addition to the tried-and-tested well-being features passengers enjoy on Mein Schiff 1, travelers on Mein Schiff 2 will discover many more, for instance, the innovative Meerleben lounge area. This area is dedicated to knowledge, games and fun. In addition, this is where passengers have access to the Meeresmaler studio as well as to a library for taking out books or iPads.

Another new feature on Mein Schiff 2 is the Thalasso Center in the Spa & Sea area. For the Thalasso therapies the staff in the center uses genuine seawater, specially prepared on board for the relaxing and invigorating treatments. The adult-free-zone 'Teenslounge' is another innovation on board Mein Schiff 2. This area only for young passengers is



equipped with the newest generation of Xbox Kinect and gaming consoles.

The many restaurants, the 1,700 sqm spa area, the personal Nespresso coffee machine in each cabin, spacious balconies with hammocks and relaxation isles on the deck ensure that holidays with TUI Cruises have a great effect on body and soul.

Headquarters

Anckelmannsplatz 1 20537 Hamburg Germany

+49 (40) 28 66 77 - 0

Reservations: +49 (40) 28 66 77 - 111

kontakt@tuicruises.com www.tuicruises.com

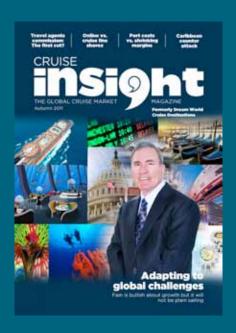
Senior management

Richard J. Vogel, CEO Frank Kuhlmann, CFO

Alexa Hüner, Director Communications

Capacity	Tonnage
1,924	76,998 GRT
1.912	77,302 GRT
2,500	97,000 GRT
	1,924 1.912

ENSI9ht



If you don't just want to know what is happening in the cruise industry – but also why and what it means for you, read Cruise Insight - the magazine that asks all the right questions.

Published by



www.ashcroftandassociates.com

+ 44 20 899 44 123











Conference and Ports Summit Brussels, 25 & 26 June 2012



25 June 2012 Ports Summit 26 June 2012 Conference

Organised by





www.ashcroftandassociates.com

+ 44 20 899 44 123



Associate Members























































Leaders in sustainable environmental solutions







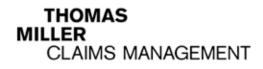




Travel & Tourist Services Ltd.



















European Cruise Council

Rue Ducale 67/2 – 1000 Brussels Tel: +32 2 510 61 33 www.europeancruisecouncil.com

Tim Marking

Secretary General
Tim.Marking@cruisecouncil.eu
Tel.: +32 2 510 61 27

Rob Ashdown

Director – Technical, Environment & Operations Robert.Ashdown@cruisecouncil.eu

Tel.: +32 2 510 61 34

Monica Ford

PA

info@cruisecouncil.eu

Tel.: **+32 2 510 61 33** Fax: **+32** 2 511 80 92