

The Association of Mediterranean Cruise Ports



STATISTICS 2016



A MedCruise Report

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PREFACE



I am proud to introduce to the cruise world the 2017 edition of the MedCruise statistical report "Cruise Activities in MedCruise ports".

This annual report is among the flagship publications of the Association. It details the actual picture of cruise activities in the Mediterranean and its adjoining seas over the past year and reveals the trends, enabling an understanding of the present challenges. It also facilitates the adjustment of MedCruise ports and their associates to contemporary market structures and challenges.

With cruise being a dynamic industry that demonstrates a remarkable capacity for growth and change, this report provides an authoritative and most useful database and analysis of the trends in the second biggest region of the world, the Med and its adjoining seas.

"Cruise Activities in MedCruise ports" forms part of a series of studies conducted or commissioned by MedCruise that examine issues relevant to the cruise industry in the region.

In 2016, MedCruise membership welcomed 27,4 million cruise passenger movements and 13.467 cruise calls. The report makes available detailed information of this traffic per port and per region, examining in detail the trends of cruise activities in West Med, Adriatic, East Med and Black Sea ports. It also contains an analysis per size of the port, information about seasonality, major variations from previous years and market concentration. Comparisons with data recorded the immediate previous year extract the short-term trends, whereas comparisons of the last five years enable an understanding of medium-term trends.

The last section of the report includes a 'new' feature that enriches the publication: a statistical analysis of ferry traffic in MedCruise ports, offering some valuable information to those interested in the evolution of passenger ports, but also to those interested in planning, developing, managing and administering cruise ports.

The statistics of 2016 reveal the positive features in several parts of the Med and the adjoining seas. We all work to facilitate these MedCruise members to enhance the observed growth. The report also details the challenges experienced in some other regions. These challenges were the outcome of puzzling non-port related conditions observed in the respective countries, well beyond the managing and operational capacity of the people running Med ports, or the interest of people to cruise the region. MedCruise also works to create the background conditions that would allow all these members to reverse this trend and return to growth.

Published in March 2017, and first presented to the cruise world during its annual meeting in Fort Lauderdale, US, the publication provides to the industry a point of reference to understand the past, present and future cruise industry – all of them useful to make the desired growth in the Mediterranean Sea a sustainable one.

Honoured to be the President of such a vibrant Association of ports, I would like to thank all members that contributed in making this publication possible. With the present report produced internally, I would also like to congratulate the MedCruise Secretariat for their excellent contribution in advancing the work of our Association.

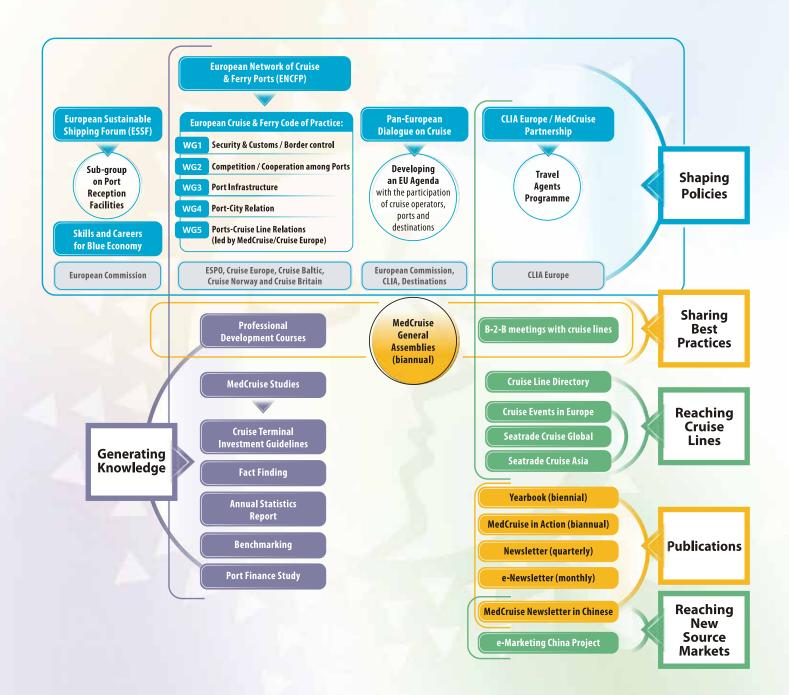
I am confident that, like MedCruise, this report works towards the further development of cruise activities in the Med and its adjoining seas.

Enjoy the reading!!!

Kristijan Pavic, MedCruise President



Activities map



Blue: Shaping policies | Green: Promoting the cruise industry in the Med | Yellow: Sharing best practices and information | Purple: Generating knowledge



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MedCruise Statistics

1.1 MedCruise is the Association of cruise ports in the Mediterranean and its adjoining seas.

The Association was established in Rome in 1996. Since then it assists its member ports and their partners, who have enrolled in the MedCruise associate members program, in benefiting from the growth of the cruise industry. MedCruise provides networking, promotional and professional development tools and opportunities.

Beyond facilitating the interaction of its member ports with cruise lines and creating awareness about the magic of cruising the Med in existing and potential source markets, MedCruise formulates common cruise ports positions on questions of common interest on cruise-related policies. It also represents the interests of its membership in international fora. Since 2014, MedCruise is a member of the established within the European Sea Port Organisation (ESPO) Network of Cruise and Ferry Ports.

Map 1.1 provides an illustration of the geography of the members of the Association and browses the extent that MedCruise membership spreads in the Mediterranean and its adjoining seas.

The Association serves ports of different sizes from diverse regions, countries and cultures in one of the most dynamic cruise regions in the world – a region that offers multiple opportunities for cruising.

1.2 The Report

The annual MedCruise statistical report "Cruise activities in MedCruise ports" is among the flagship publications of the Association. The report details the actual picture of cruise activities in the Mediterranean and its adjoining seas over the past year, reveals the trends and enables the understanding of the present challenges.

This report facilitates the adjustment of MedCruise ports and associate members to contemporary market structures. With cruise being a dynamic industry that demonstrates a remarkable capacity for growth and change, it also provides an authoritative and most useful database and analysis of the trends in the second biggest cruise region of the world, the Med and its adjoining seas.

The report is part of a series of studies conducted or commissioned by MedCruise that examine issues relevant to cruise ports.

These studies increase the efficiency of member ports and associate members, by advancing information exchanges on industry developments, organisation, administration and management and, thus, promoting best practices.

Benchmarking and sharing of knowledge on several topics, including operational, regulatory and financial issues, are core parts of the life of the Association.

These studies are also discussed jointly with cruise lines during the MedCruise General Assemblies - allowing MedCruise membership to better understand the findings, identify the responses and enjoy the most benefits possible.

1.3 MedCruise Membership

MedCruise membership continues to grow in numbers, while it also expands geographically. Today, it spreads in 18 countries and three different continents, namely Africa, Asia and Europe.

3 continents 18 countries

BULGARIA, CROATIA, CYPRUS, EGYPT, FRANCE, GILBRATAR, GREECE, ITALY, MALTA, MONACO, MONTENEGRO, PORTUGAL, ROMANIA, RUSSIA, SLOVENIA, SPAIN, TUNISIA, TURKEY, UKRAINE

At the end of 2016, the Association has 72 port members, representing more than 100 ports in the Mediterranean region, including the Black Sea, the Red Sea and the Near Atlantic, while a decade ago (2007) this membership was standing at only 50 ports. Four distinctive regions are identified within the broader region. These are West Med, Adriatic Sea, East Med and Black Sea.

4 regions + 100 ports

WEST MED ADRIATIC SEA

Alicante	Gioia Tauro	Palamos	Ancona
Azores	Huelva	Palermo	Bari
Balearic Islands	La Spezia	Portimao	Brindisi
Barcelona	Lisbon	Portoferraio	Corfu
Bastia/North Corsica	Livorno	Portofino	Dubrovnik
Cagliari	Madeira Ports	Savona	Koper
Cartagena	Malaga	Sete	Kotor
Castellon	Marseille	Tarragona	Rijeka
Ceuta	Messina	Tenerife Ports	Sibenik
Civitavecchia	Monaco	Toulon-Var Provence	Split
French Riviera Ports	Motril-Granada	Tunisian Ports	Taranto
Genoa	Naples	Valencia	Venice
Gibraltar	North Sardinian Ports	Valletta	Zadar

EAST MED

Alanya	Kusadasi/Bodrum/Antalya
Cyprus Ports	Mersin

Egyptian Ports Patras Heraklion Piraeus Souda/Chania Igoumenitsa Thessaloniki Istanbul Volos Kavala

BLACK SEA

Burgas Constantza Odessa Sochi Trabzon Varna

34 associate members

Reflecting the organisational heterogeneity of port governance and organisation, members in several cases are entities that represent and are responsible for more than one port in the same geographical area. The total of ports that have joined the Med-Cruise family are well above 100.

Moreover, 34 associate members represent-

ing, tourist boards, ship agents, port agents, as well as other local cruise related activities, also share the benefits of being part of the MedCruise family. MedCruise is in the process of a major upgrade of its associate members program, aiming to increase the prospect of the respective destinations. The list of the Associate members at the end of 2016 is detailed as follows.

Patronat de Turisme Costa Brava

An active program for cruise ports partners

ASSOCIATE MEMBERS

Inflot World Wide Alfaship Allegra Montenegro Intercruises Aloschi & Bassani Karavanmar **B&A Europe** Cemar Cruise Services Monaco Council of Sant Carles de la Rapita D'Alessandro Travel **Donomis Cruise Services** Medov S.r.l MH Bland Dubrovnik County Port Authority Hugo Trumpy Iberoservice Navigator Travel & Tourist Services

Kvarner County Tourism Office Kyriakakis Travel La Goulette Cruise Terminal Livorno Port Authority Mediterranean Unique Experience

Perez v Cia Salamis Shipping Samer & Co Shipping SNEAL Transcoma Tura Turizm Turisme de Barcelona Var Provence Cruise Club World Synergy Travel

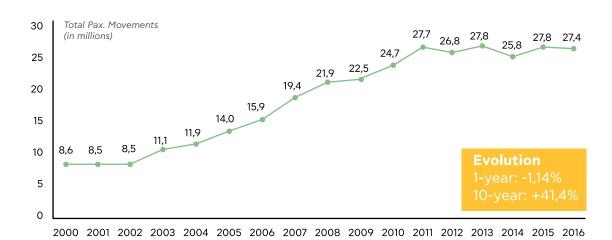
1.4 Evolution of Cruise Activity in MedCruise ports

In 2016, the total number of cruise passenger visits at MedCruise ports reached 27,4 million. Comparing to the previous year, this number is 1,1% lower - the cruise passenger movements that had taken place in 2015 at the very same ports were 27,8 million (Figure 1.1).

The long-term trends make evident that

cruise activities in the Mediterranean and its adjoining seas are performing remarkably well in a demanding economic context and in some, yet rare, cases uncertain political climate. The last 10 years (2007-2016) cruising around the Med experienced growth and resilience in the face of several social, economic and political challenges. The recorded statistical data reflect this resilience. Cruise passenger movements of 2016 total 800 thousand more than those that had taken place in 2012 and 8 million more than those that had happened in 2006.

Figure 1.1: Cruise Passenger Movements in MedCruise ports (2000-2016)



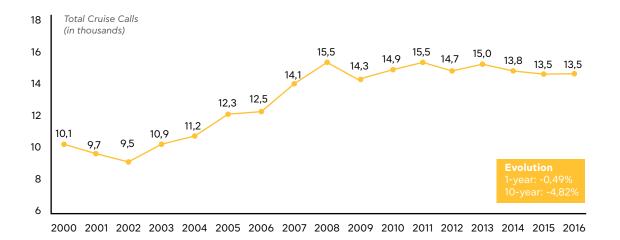
27,4 million pax

The total of cruise ship calls in MedCruise ports in 2016 reached 13.467 (Figure 1.2). This total is marginally lower (0,5%) to the 13.533 cruise calls recorded in 2015. The number of cruise calls recorded in 2016 was also 2.035 calls shy of the calls of 2008, the latter standing as the all times record year in terms of cruise ship calls in the Med and its adjoining seas.

The trend of cruise vessels becoming bigger in size – as cruise lines jockey to enjoy

economies of scale – has been deterministic insofar as the number of cruise calls is concerned even when comparing long-term trend. Recalling that since the turn of the century the average size of cruise vessels increased by more than 1.000 passengers per vessel (more information in Section 2 of this report), it is evident that the fundamentals of the industry lead to a continuous slowing down of the number of cruise ship calls per year, even in cases that passenger movements per year increase.

Figure 1.2: Cruise Calls in MedCruise ports (2000-2016)



13.467 cruise calls

MedCruise ports host 80% of total pax in the region Consulting external data, it is estimated that MedCruise membership represents a share of approximately 80% of the total cruise passenger movements registered in 226 ports of any size in the Med and its adjoining seas (i.e. even one cruise call per year), and approximately 78% of the cruise calls that took place in 2016.

The changing structures of the cruise industry are further illustrated when comparing the annual total number of cruise calls in MedCruise members with the total passenger movements of the very same year (**Figure 1.3**). The hosting of more passenger visits per each cruise call has taken place almost every single year.

Year 2016 was the second successive year that the average number of passengers per cruise call in the Med and its adjoining seas was higher than 2.000. The average number of passengers per call remained at the same level as in 2015, yet the 48,5% growth of the last decade is quite remarkable: 2.038 passenger movements per cruise call

were recorded in 2016, comparing to 1.372 passenger movements per call in 2007. This trend demonstrates the commendable adaptability that MedCruise port members showed since the turn of the century.

In the beginning of the 21st century, a hosting cruise port had to provide operations to welcome on average 848 passengers per cruise call, while it was only in 2003 that this average exceeded for the first time the 1.000 passenger milestone. Year 2015 was the first year that this average exceeded 2.000 pax/call.

Port infrastructure projects are costly. They demand a long-term planning, equally long construction period, and have a long life span. Cruise ports in the Mead and its adjoining seas have managed to proceed to such projects wherever needed. They have done so collaborating with destination institutions and all relevant stakeholders, and adjusting their business models to the needs of the cruise lines. Thus, they are currently able to host operations of a different scale in an efficient and effective way.

Figure 1.3: Average Pax/Call in MedCruise ports (2000-2016)

2.038 cruise pax per call

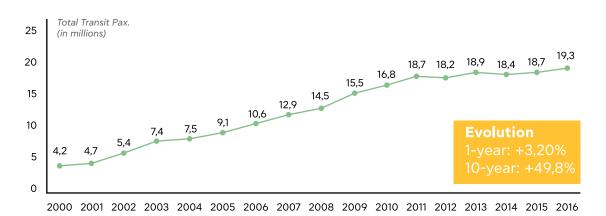


The total number of transit passengers hosted by MedCruise ports in 2016 was 19,3 million. This equals to 3,2% more cruise passenger movements than the previous year, making 2016 a record year as regards the transit passenger movements in the region (**Figure 1.4**).

A substantial growth of passenger movements happened within the last

decade: the 10-year growth stands at almost 50%, as 'only' 12,9 million transit passengers cruised the Mediterranean and its adjoining seas in 2007. In the beginning of the century this number was standing at 4,2 million passenger movements, a fact that confirms the dynamic and impressive growth that cruise activities in the Med have experienced in the first 16 years of the 21st century.

Figure 1.4: Transit Cruise Passengers in MedCruise ports (2000-2016)



19,3 million transit pax

The ratio of transit passengers to passengers home-porting from MedCruise member ports stands at 72/28. This ratio remains stable over time, as it is precisely the same throughout the last 10 years.

1.5 Cruise passenger movements in MedCruise Ports in 2016

Table 1.1 presents an overview of cruise traffic recorded at each MedCruise member port in 2016 comparing to 2015. In 32 MedCruise port members, the recorded cruise passenger visits increased over the past year. Nine other member ports retained the levels of cruise passengers that they had recorded the year before, whereas 34 members faced challenges in retaining in 2016 the numbers of cruise passenger movements hosted in 2015.

Table 1.2 details the data recorded at each MedCruise member port as regards cruise traffic hosted in 2016. These data refer to

passenger movements, classification of passengers in either home in, home out or transit, as well as cruise calls. In the Appendix, the reader might find a complete listing of the evolution of these data since 2012.

In line with the MedCruise constitution, a MedCruise member port might administer or operate multiple ports of the same geographical region. This might occasionally affect to a certain extent specific results of the statistical analysis, for instance rankings or averages.

32			9		34		
_							
0	10	20	30	40	50	60	70

- Growing in numbers
- Retaining traffic
- Facing challenges

MedCruise ports cruise traffic overview in 2016

Alanya	Alicante	Ancona	Antalya	Azores	Balearic Islands
Turkey	Spain	Italy	Turkey	Portugal	Spain
9.272	89.197	54.901	45.405	125.904	1.957.429
(- 58,5%)	(+8,4%)	(+39,8%)	(-73,5%)	(-11,2%)	(- 2,0%)
Barcelona Spain	Bari Italy	Bastia/ North Corsica France	Bodrum Turkey	Brindisi Italy	Burgas Bulgaria
2.683.594	400.875	18.533	61.261	5.270	5.833
(+5,6%)	(+8,9%)	(- 65,0%)	(-12,5%)	(- 96,5%)	(- 23,0%)
Cagliari	Cartagena	Castellon	Ceuta	Civitavecchia	Constantza
Italy	Spain	Spain	Spain	Italy	Romania
255.873	187.843	1.095	19.251	2.339.676	6.912
(- 2,8%)	(+24,2%)	(+199,2%)	(+1.093,5%)	(+3,0%)	(- 78,3%)
Corfu Greece	Cyprus Ports Cyprus	Dubrovnik Croatia	Egyptian Ports Egypt	French Riviera Ports France	Genoa Italy
748.916	141.358	831.730	411.626	562.929	1.017.368
(+15,7%)	(-18,4%)	(+0,1%)	(- 20,1%)	(+3,1%)	(+19,9%)
Gibraltar	Gioia Tauro	Heraklion	Huelva	Igoumenitsa	Istanbul
	Italy	Greece	Spain	Greece	Turkey
404.005	13.758	238.780	20.071	7.623	36.708
(+17,4%)	(- 0,8%)	(+8,6%)	(+319,2%)	(+146,7%)	(- 93,8%)
Kavala	Koper	Kotor	Kusadasi	La Spezia	Lisbon
Greece	Slovenia	Montenegro	Turkey	Italy	Portugal
6.042	78.923	536.644	347.232	507.531	522.497
(- 52,7%)	(+36,3%)	(+21,4%)	(- 38,8%)	(- 24,0%)	(+2,0%)
Livorno	Madeira Ports	Malaga	Marseille	Mersin	Messina
Italy	Portugal	Spain	France	Turkey	Italy
807.935	522.483	442.931	1.597.213	-	373.199
(+15,8%)	(-10,0%)	(+5,7%)	(+10,1%)	(-100%)	(+13,9%)

Monaco	Motril-Granada Spain	Naples Italy	N. Sardinian Ports Italy	Odessa Ukraine	Palamos Spain
185.392	4.570	1.306.151	210.386	1.242	25.505
(- 28,5%)	(- 29,5%)	(+2,9%)	(-11,7%)	(- 81,1%)	(-37,5%)
Palermo	Patras	Piraeus	Portimao	Portoferraio	Portofino
Italy	Greece	Greece	Portugal	Italy	Italy
510.078	743	1.094.135	19.520	42.752	19.894
(- 6,7%)	(- 31,8%)	(+11,6%)	(+32,0%)	(+14,0%)	(- 35,2%)
Ravenna	Rijeka	Savona	Sete	Sibenik	Sochi
Italy	Croatia	Italy	France	Croatia	Russia
45.582	13.874	910.244	23.791	12.276	1.194
(+14,1%)	(+52,8%)	(-7,3%)	(+15,7%)	(- 30,1%)	(- 93,9%)
Souda/ Chania Greece	Split Croatia	Taranto Italy	Tarragona Spain	Tenerife Ports Spain	Thessaloniki Greece
147.915	275.651	-	14.013	884.173	18.876
(+53,1%)	(+1,5%)	(-100,0%)	(+20,8%)	(-5,2%)	(- 28,4%)
Toulon-Var Provence France	Trabzon Turkey	Tunisian Ports Tunisia	Valencia Spain	Valletta Malta	Varna Bulgaria
362.479	452	757	404.783	682.970	1.109
(+50,5%)	(- 80,2%)	(- 98,6%)	(+9,0%)	(+2,2%)	(-64,9%)
Venice Italy	Volos Greece	Zadar Croatia			
1.605.660 (+1,5%)	37.445 (- 44,2%)	136.462 (+82,8%)			

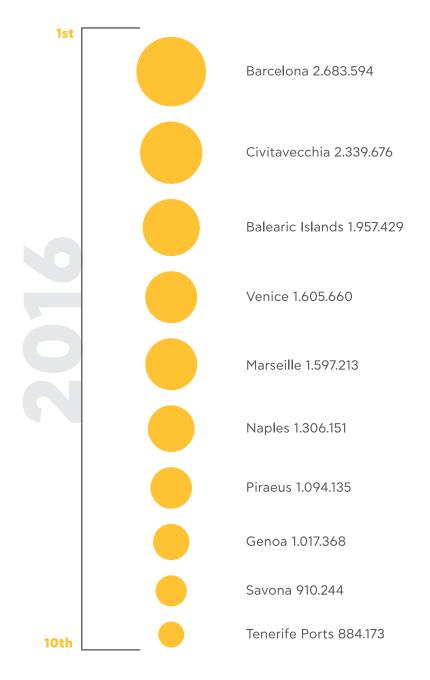
MedCruise Ports in total hosted 27,4 million cruise pax (-1,14%)

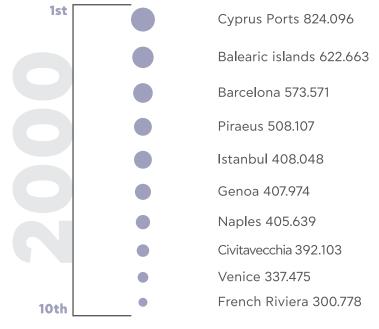
MedCruise Ports Cruise Traffic data 2016

No	Port	MedCruise Region	Total Pax.	Total Calls	Home in Pax.	Home out Pax.	Transit Pax.
1	Alanya	East Med	9.272	13	0	0	9.272
2	Alicante	West Med	89.197	53	n.a.	n.a.	n.a.
3	Ancona	Adriatic	54.901	34	5.784	5.112	44.005
4	Antalya	East Med	45.405	16	22.251	22.225	929
5	Azores	West Med	125.904	121	565	617	124.722
6	Balearic Islands	West Med	1.957.429	742	60	0.181	1.357.248
7	Barcelona	West Med	2.683.594	758	782.196	773.623	1.127.775
8	Bari	Adriatic	400.875	145	52.367	56.770	291.738
9	Bastia/N.Corsica	West Med	18.533	23	0	0	18.533
10	Bodrum	East Med	61.261	44	51	21	61.189
11	Brindisi	Adriatic	5.270	14	6	1	5.263
12	Burgas	Black Sea	5.833	4	0	0	5.833
13	Cagliari	West Med	255.873	110	8	.456	247.417
14	Cartagena	West Med	187.843	120	186	0	187.657
15	Castellon	West Med	1.095	2	0	0	1.095
16	Ceuta	West Med	19.251	13	0	0	19.251
17	Civitavecchia	West Med	2.339.676	833	425.038	421.971	1.492.667
18	Constantza	Black Sea	6.912	8	0	0	6.912
19	Corfu	Adriatic	748.914	481	35.890	34.974	678.050
20	Cyprus Ports*	East Med	141.358	135	28.378	29.785	83.195
21	Dubrovnik	Adriatic	831.730	639	33.473	34.696	763.561
22	Egyptian Ports	East Med	411.626	361	n.a.	n.a.	n.a.
23	French Riviera	West Med	562.929	325	41	.967	520.962
24	Genoa	West Med	1.017.368	248	282.652	323.626	375.711
25	Gibraltar	West Med	404.005	224	90	0	403.915
26	Gioia Tauro	West Med	13.758	13	1	20	13.737
27	Heraklion	East Med	238.780	165	3.739	3.563	231.478
28	Huelva	West Med	20.071	17	0	0	20.071
29	Igoumenitsa	East Med	7.623	7	0	0	7.623
30	Istanbul	East Med	36.708	42	7.872	8.380	20.456
31	Kavala	East Med	6.042	18	0	0	6.042
32	Koper	Adriatic	78.923	69	9	42	78.872
33	Kotor	Adriatic	536.644	487	663	749	535.232
34	Kusadasi	East Med	347.232	278	7.593	10.453	329.186

No	Port	MedCruise Region	Total Pax.	Total Calls	Home in Pax.	Home out Pax.	Transit Pax.
35	La Spezia	West Med	507.531	211	4.036	3.366	500.129
36	Lisbon	West Med	522.497	311	23.525	24.107	474.865
37	Livorno	West Med	807.935	403	4.755	4.519	798.661
38	Madeira Ports	West Med	522.483	297	824	1.951	519.708
39	Malaga	West Med	442.931	253	45.014	47.232	350.685
40	Marseille	West Med	1.597.213	490	244.580	242.384	1.110.249
41	Mersin	East Med	0	0	0	0	0
42	Messina	West Med	373.199	223	9.190	8.837	337.512
43	Monaco	West Med	185.392	181	12.536	13.689	159.167
44	Motril-Granada	West Med	4.570	21	0	0	4.570
45	Naples	West Med	1.306.151	493	70.745	71.392	1.164.041
46	North Sardinian	West Med	210.386	130	0	0	210.386
47	Odessa	Black Sea	1.242	5	7	2	1.233
48	Palamos/Roses	West Med	25.505	37	0	0	25.505
49	Palermo	West Med	510.078	174	36.607	35.427	438.044
50	Patras	East Med	743	2	0	0	743
51	Piraeus	East Med	1.094.135	625	176.303	176.360	741.472
52	Portimao	West Med	19.520	43	20	24	19.476
53	Portoferraio	West Med	42.752	118	0	0	42.752
54	Portofino	West Med	19.894	57	0	0	19.894
55	Ravenna	Adriatic	45.582	42	341	332	44.922
56	Rijeka	Adriatic	13.874	15	0	0	13.874
57	Savona	West Med	910.244	213	286.365	290.780	333.099
58	Sete	West Med	23.791	36	11	17	23.763
59	Sibenik	Adriatic	12.276	106	0	0	12.276
60	Sochi	Black Sea	1.194	4	0	0	1.194
61	Souda/Chania**	East Med	147.915	86	0	0	147.915
62	Split	Adriatic	275.651	286	367	512	274.772
63	Taranto	Adriatic	0	0	0	0	0
64	Tarragona	West Med	14.013	22	921	921	12.171
65	Tenerife Ports	West Med	884.173	524	37.640	36.484	810.049
66	Thessaloniki	East Med	18.876	23	310	464	18.102
67	Toulon-Var Provence	West Med	362.479	278	6.338	5.848	350.293
68	Trabzon	Black Sea	452	3	226	226	0
69	Tunisian Ports	West Med	757	2	0	0	757
70	Valencia*	West Med	404.783	181	30.498	30.465	343.820
71	Valletta	West Med	682.970	317	58.410	56.321	568.239
72	Varna	Black Sea	1.109	4	0	2	1.107
73	Venice	Adriatic	1.605.660	529	708.000	700.066	197.594
74	Volos	East Med	37.445	46	0	0	37.445
75	Zadar	Adriatic	136.462	114	452	425	135.584

^{*} Provisional data for Cyprus Ports and Port of Valencia. ** Chania harbour welcomed an additional number of cruise calls (11) carrying 4.777 transit pax.





Major Ports 2016

Major Ports 2000

#PortsTogether

CRUISE ACTIVITY TRENDS

2.1 Trends in the Global Cruise Market

Within the first 16 years of the 21st century cruise activities around the globe recorded an admirable growth. The growth rate of the has been enduring and stable, in spite of global, regional or local economic cycles of growth and recession.

The cruise sector continued to strengthen in 2016 for yet another year. The number of single passengers that took a cruise vacation within the calendar year increased to 22,9 million, a total that is 3,1% higher than the 22,2 million people cruisers of 2015.

The annual pace of growth within 2016 was similar to the one observed in 2015. Yet, when examining the trend in the first decade in 2006. of the century, it seems that a specific development partner, slower than the one that happened in 2000s, is in place.

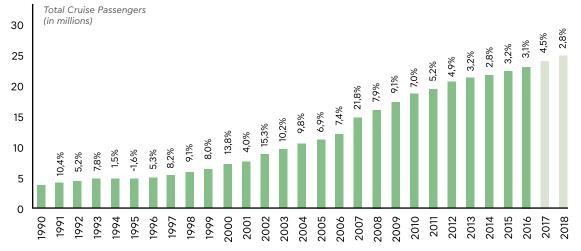
Figure 2.1 visualises the global cruise political, or any other crises t passenger growth since 1990. For most other challenge the tourism sector.

industries both the short-term picture and the long-term one of sustainable growth every single year would be an achievement.

Year 1997 was the first year ever that more than 5 million people took a cruise. 2004 was the first year that more than 10 million people decided to take a cruise. The number of people that cruised at the turn of the century (2000) stood at just one third of today's cruisers. The number of single cruise passengers in 2016 was 12,8% higher than the number of passengers that cruised five years before (2012) and almost double comparing to the one recorded a decade ago; 12 million passengers cruised in 2006.

These trends confirm the remarkable dynamics of the cruise industry and its resilience in the face of the economic, social, political, or any other crises that regularly challenge the tourism sector.

Figure 2.1: Global Cruise Passenger Growth (1990-2018)



4 decades of continuous growth

Source: Cruise Market Watch

According to the latest UNWTO World Tourism Barometer (January 2017), demand for international tourism remained robust in 2016 despite challenges. International tourist arrivals grew by 3,9% compared to 2015 to reach a total of 1.235 million. This was the seventh consecutive year of sustained growth following the 2009 global economic and financial crisis. A comparable sequence of uninterrupted solid growth has not been recorded since the 1960s.

Millennials embrace cruising In the three continents where MedCruise members are located, Asia (+8%) led growth in international tourist arrivals in 2016, fuelled by strong demand from both intra- and interregional source markets. Africa (+8%) enjoyed a strong rebound after two weaker years, while a gradual recovery started in North Africa (+3%). Europe (+2%) showed rather mixed results, with double-digit growth in some destinations offset by decreases in others, with Mediterranean Europe arrivals growing by 1%.

25 million individuals to cruise in 2018

Given the strong consumer interest in cruising, the embracement of cruising by younger generations – including Millennials and Generation X – the increase of travel agents interest in being the matchmakers between travellers and cruise lines, the expansion of destinations and itineraries, and not least the further modernisation of the cruise fleet and cruise product, stakeholders look forward to an additional positive year of growth.

Cruise Lines International Association (CLIA), in its annual State of the Cruise Industry Report that was revealed in December 2016, is projecting stronger growth for the cruise industry in 2017. With eight out of ten member travel agents

stating that they are expecting an increase in cruise sales, CLIA expects 25 million passengers to cruise within 2017, while even those making comparatively moderate estimates; i.e. Cruise Market Watch (Figure 2.1), project stronger growth for the cruise industry in 2017.

Looking at longer-term projections, the same factors are expected to contribute in sustaining growth. In his report 'End of the Beginning for Cruising' published by Seatrade Communications Ltd, T. Peisly estimated in 2014 that in 2018 global passengers will exceed 25 millions for the first time in cruise history, whereas it will take six more years to surpass, in 2024, the 30 million unique cruise passengers milestone.

This is associated with a renewal of the cruise vessels, and thus the berths offered, with the latter increasing to 790.000 berths in 2024. It is also associated with the resumption of the American market, the continuation of growth in Europe and Australia, and the rapid growth in China and the rest of the Asian market. If the latter is associated with local brands, the 40 million cruise passengers target seems to be genuinely feasible. Three years later, there seems to be no reason to challenge these forecasts.

2.2 Global Cruise fleet

315 cruise ships

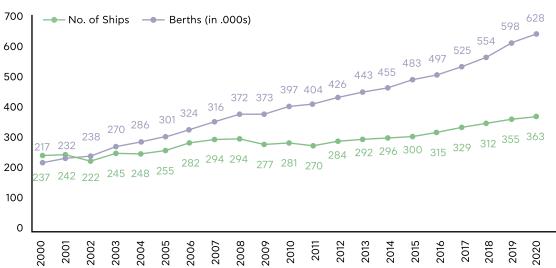
500.000 cruise berths A fleet of 315 cruise vessels was deployed worldwide in 2016, having a passenger capacity of almost half million thousand berths (**Figure 2.2**).

Fleet renewal has been a core foundation of the continuous growth of the cruise industry. The order book suggests that 2017 will be among the busiest years for cruise ship introduction in at least 10 years, with ship sizes ranging from

300-passenger vessels to 4.500-passengers.

The number of vessels is expected to continue growing, surpassing the 350 by 2019, 40 more than those sailing in 2016. The total of berths deployed is expected to surpass for the first time in history the 500 million milestone in 2017 with the pace of growth accelerating over the coming years. The size of the cruise industry increases in all respects.

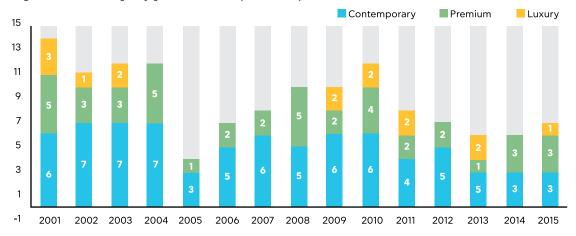
Figure 2.2: Global Cruise Fleet 2000-2020 (Ships & Berths)



The growth of cruising continues to lead to market segmentation. Different types of vessels, associated with different amenities on board and ashore, define types of cruises offered having as target different groups of potential cruisers. In an attempt to broaden the group of potential customers, cruise lines, or specific brands of the bigger

corporations, provide and market their presence in one -or in some case more- of the major segments, namely contemporary, premium and luxury cruises, or speciality cruises. An estimation of the different types of newly built cruise ships delivered within the first 15 years of the 21st century is provided in **Figure 2.3**.

Figure 2.3: New Ships by product sector (2001-2015)



Source: Peisley T. (2014). End of the Beginning for Cruising. Seatrade Communications Ltd

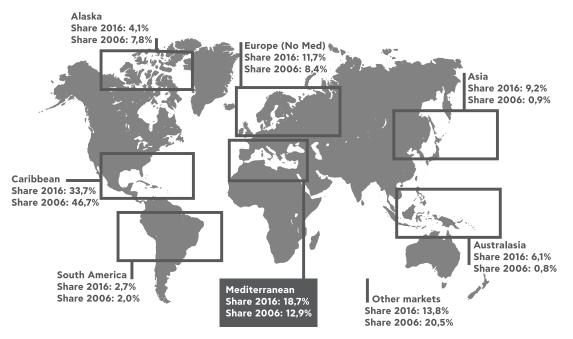
2.3 Deployment of Cruise Fleet

The Mediterranean and its adjoining seas has been one of the most dynamic cruise regions of the world. The patterns of cruise fleet deployment around the globe within the last decade (**Figure 2.4**), indicate that the share of the Med increased from 12,9% of the total cruise fleet deployed in 2006 to 18,7% in 2016. As a result, the Med stands today as the second biggest cruising region of the world, following Caribbean. When combined, the two major cruise regions, Caribbean and the Med, host 52% of the global cruise fleet capacity.

The more distributed geography, comparing to a decade before, is a true sign of the globalisation of the cruise activities – and the respective globalisation of source markets – and is more evidently demonstrated in the rise of regions, such as Asia and Australasia.

The Med: Second biggest cruise region in the world

Figure 2.4: Global Deployment Shares 2016/2006



18,7% of the global cruise fleet is deployed in the Med As regards the share of cruise activities in the Med, the positive long-term trends are combined, however, with a less encouraging short-term trend. As demonstrated by the trends in the two cruise regions that experienced a continuous growth over that period (Asia, Australasia), deployment patterns are shifting speedily. Within the past years, Asia and Australasia gained shares. The decision of cruise lines to deploy more vessels in Far East, in search for a new dynamic cruise region, and not least a new source market, led to a strong growth in a market that till the recent past was only a minor one.

The actual size of the Mediterranean cruise market has not decreased; it is only the size of the global market that has grown. Yet, these short-term trends indicate that the coupling of increased demand and effective

Company

work by Med ports, destinations and other stakeholders to promote cruise activities have satisfactorily served the increasing demand and need to continue in order for this growth to sustain.

According to data collected by Cruise Industry News, a total of 46 different cruise lines out of the less than 60 existing brands, offered cruises in the Med in 2016. The number of vessels deployed by each of them and the respective deployed capacity are illustrated in **Table 2.1**. Costa, MSC and Royal Caribbean are the leading brands in these two specific categories, yet the list indicates that the Mediterranean is a cruise destination where all types of cruise lines identify opportunities and, thus, have developed a strong interest to plan itineraries and offer cruises in the region.

% Market

Canacity

Table 2.1: 2016 Cruise Passenger Capacity in the Mediterranean

Shine

136 cruise ships deployed in the Med

3,8 million berths

Company	Ships	Capacity	% Market
Costa	11	721.404	19,0%
MSC	10	706.352	18,6%
Royal Caribbean	9	326.794	8,6%
Norwegian	4	238.200	6,3%
AIDA	6	233.144	6,1%
Thomson	5	189.496	5,0%
Celestyal	3	162.290	4,3%
P&O	7	157.320	4,1%
Celebrity	5	151.698	4,0%
TUI	5	120.768	3,2%
Princess	3	102.804	2,7%
Holland America	5	88.742	2,3%
Mano	2	87.000	2,3%
Pullmantur	1	72.832	1,9%
Carnival	1	70.848	1,9%
CDF	2	69.774	1,8%
Oceania	5	52.056	1,4%
Cunard	2	50.552	1,3%
Windstar	5	22.608	0,6%
Seabourn	3	20.700	0,5%
Silversea	3	19.924	0,5%
Viking	2	19.530	0,5%
	3	18.700	0,5%
Regent Crystal	2	12.388	0,3%
Azamara	2	12.300	0,3%
	1		
Disney	<u>_</u>	10.500	0,3%
Abou Merhi	2	9.000	0,2%
Star Clippers	3	7.898	0,2%
Phoenix Reisen	3 4	6.864	0,2%
Fred Olsen	2	5.779	0,2%
Swan Hellenic	2	5.540	0,1%
Ponant	1	5.091	0,1%
FTI		4.700	0,1%
SeaDream	2	4.400	0,1%
V/Antiquity	1	4.348	0,1%
Saga	2	3.924	0,1%
Hapag-Lloyd	2	3.912	0,1%
Plantours	1	1.600	0,1%
Sea Cloud	2	1.204	0,1%
Lindblad	2	930	0,0%
Cruise Maritime	1	550	0,0%
Paul Gaugin	1	440	0,0%
Total	136	3.804.402	100%

Source: Cruise Industry News 2016-2017 Annual Report

MedCruise port members and their cruise partners that participate at the MedCruise associate membership programme enjoy privileged access to the regularly updated Cruise Lines Directory containing key decision-makers in each of these cruise lines, as well as personal interactions with representatives of these cruise lines that participated at the two MedCruise General Assemblies that take place every year.

2.4 Cruise Passenger Sourcing

North America remains the dominant source for cruise passengers, with 52,2% of the total passenger source share in 2015. Other source markets are also demonstrating accelerated passenger demand for cruising; for the record, the share of North Americans stood at 57,6% in 2010. The significant growth of internationally sourced passengers includes Europeans (**Figure 2.5**). Since 2011, more than six million citizens depart from a European country on an annual basis to enjoy a cruise.

In 2015, the latest year for which data are available, cruise operators around the globe hosted 6,6 million. European cruise passengers, a total that equals 28,5% of the passengers that cruised the specific year. The 3,1% annual increase is of a scale matching the overall growth of cruising, even though cruise continues expanding in new source markets, in particular the Asian one, and the traditional North American source markets have in recent times

enjoyed better economic conditions than the European economy.

The growing markets in Asia in general and China in particular have been the centre of attention for the cruise lines that are banking on a potential million passengers market. Given the size of the population, and the potential numbers of passengers that small numbers of penetration would result in, it is also targeted by other stakeholders, including cruise ports, as a future source market.

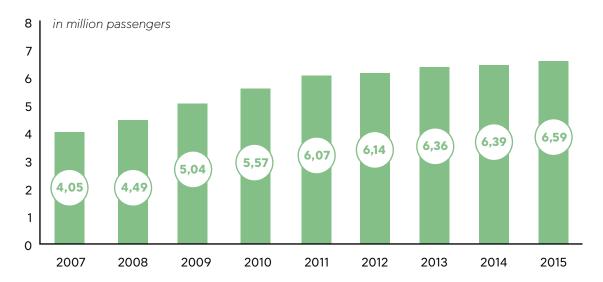
MedCruise has already embarked on making its member ports known, campaigning to generate interest of Asian people for cruising in the respective regions (for more information: www.medcruise.cn). At the same time MedCruise has embarked in a strategic partnership with the European branch of the Association of Cruise Lines – CLIA Europe – aiming to educate travel agents in promoting cruising in Europe and the Mediterranean and its adjoining seas in particular (for more information: www.cruiseexperts.org).

28,5% of global cruise pax come from Europe (6,6 million in 2015)

52,2% of global cruise pax come from North America

MedCruise works to turn Asia into a major source market for cruising the Med

Figure 2.5: European-sourced Passenger Growth (2007-2015)



Source: CLIA (2016): Contribution of Cruise Tourism to the Economies of Europe, 2016 Edition; CLIA (2014). The Global contribution of Cruise Tourism 2013. September 2014.

2.5 Contribution to the European Economy

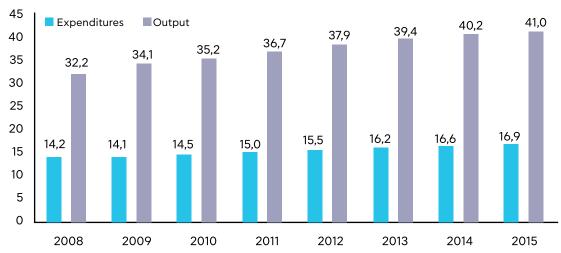
Global Cruise industry:

Expenditures ~ €16,9 billion

Output ~ €41 billion

The cruise industry generated an estimated 16,9 billion euros in direct expenditures throughout Europe in 2015 (**Figure 2.6**). These expenditures were derived by four sources. The first source is cruise passenger expenditures. The second is cruise line purchases in support of their operations. The third is the compensation of cruise line administrative staff and crew in Europe. The fourth one is the construction and maintenance of cruise ships. Shipbuilding alone is estimated to stand at around 15% of the direct economic contribution of the cruise industry in Europe, with the other 85% being the result of the other three sources.

Figure 2.6: Cruise Industry Expenditures and Output in Europe (2008-2015)



Source: CLIA Europe, Contribution of Cruise Tourism to the Economies of Europe, Various editions

Being the leading shipbuilder in cruise vessels in Europe, and the largest home-porting country, Italy enjoys the biggest share of these expenditures (**Table 2.2**). The second major benefiter is the UK, the largest source market in Europe. The other European Mediterranean countries that enjoy a substantial share of this direct expenditure are Spain, France, Greece, Portugal and Croatia.

In the case of the two countries that follow this ranking - Malta and Gibraltar - the

absolute size of the cruise industry direct expenditure is lower. Yet, given the size of these small economies, the significance of the contribution of cruise activities to the respective gross domestic product of each country should not be underestimated. While the mentioned eight Mediterranean countries are included in the list of the top-15 countries where these expenditures are taking place, all the countries in the Mediterranean and its adjoining seas enjoy the benefits of increased cruise activities in the region.

Table 2.2: Direct Cruise Expenditures by Country (in million euros)

Italy comes first in terms of direct cruise expenditures

Country	2015	Share of Total in 2015	2014	Variation 2015/2014
Italy	4.554	27,0%	4.601	-1,0%
Spain	1.323	7,8%	1.208	9,5%
France	1.238	7,3%	1.117	10,8%
Greece	489	2,9%	506	-3,4%
Portugal	239	1,4%	193	23,8%
Croatia	110	0,7%	102	7,8%
Malta	86	0,5%	86	0,0%
Gibraltar	72	0,4%	66	9,1%

TRENDS IN THE MEDITERRANEAN AND ITS ADJOINING SEAS

3.1 Evolution of Cruise Traffic (2012-2016)

This section provides a statistical analysis of cruise passenger movements and cruise ship calls in ports in the Mediterranean and its adjoining seas.

This is an analysis of the data recorded in MedCruise port members, a sample representing an estimated 80% of cruise calls and 78% of passengers that cruise the region per year. It therefore provides an accurate understanding of developments in the specific cruise ports, while illustrating the overall trends of cruise activities in the second biggest cruise region of the world.

The full list of the ports included in this analysis, along with the raw material for passenger movements and cruise calls in 2016 and for the four previous years (2012-2016) can be found in the **Appendix** of the report.

In total, 27.445.698 cruise passenger movements were registered in MedCruise ports in 2016 (**Table 3.1**). This total represents a moderate -1,14% decrease of passenger movements comparing to the ones that had happened in 2015.

The variation of **cruise passenger movements** is positive when one relates the numbers recorded in 2016 with the ones that had taken place five years ago (2012), or at the beginning of the decade. In 2016, cruise ports in the Med and its adjoining seas hosted 11% more passenger movements than in 2012.

The scale of cruise passengers has exceeded 27 million movements per year the last two years and four out of the last six. Notably, 2011 was the first time ever that this total exceeded the 25 million movements.

Despite the emphasis that cruise lines put on the growth of other regions of the world, i.e. the Asian market, the Med and its adjoining seas is a region that continues to generate increased interest of cruise passengers. The challenge for Med ports, destinations and all other stakeholders is to provide all those conditions that will transform this growth to a sustainable one and allow further expansion of cruise activities.

27.445.698 cruise pax visit MedCruise ports

632.738 more pax than in 2012 (+2,4%)

18.845.805 more pax than in 2000 (+219%)

Table 3.1: Evolution of cruise traffic in MedCruise ports (2012-2016)

Year	Total Pax	Annual Growth	Total Calls	Annual Growth	Pax/ Call	Annual Growth
2016	27.445.698	-1,14%	13.467	-0,49%	2.038	-0,65%
2015	27.761.864	7,43%	13.533	-1,61%	2.051	10,64%
2014	25.842.579	-7,14%	13.754	-8,12%	1.879	1,02%
2013	27.828.315	3,79%	14.969	2,09%	1.859	1,53%
2012	26.812.960	-3,32%	14.662	-5,17%	1.829	2,29%
2011	27.734.599		15.462		1.794	
Variation 2016/2012		2,36%		-8,15%		11,44%

3.2 Major MedCruise Ports

Barcelona hosts more than 2,6m cruise pax

> Two ports host more than 2,5m cruise pax

A single Med port hosts more than 2m pax

A single Med port hosts more than 1m pax

The 10th busiest port (Venice) hosts 337.000 pax. It would rank as the 30th busiest port in 2016.

The 10 major ports in the Med and its adjoining seas -in terms of cruise passengers- hosted in 2016 a total of 3,6% more passenger movements than those they had hosted a year before (**Table 3.2**).

The picture for the individual ports that are included in the specific major-10 list is positive in the case of seven ports. These ports recorded a growth of cruise passengers in 2016, with Genoa recording the biggest of all (19,9%). Genoa that had returned to the top-10 in 2015 climbed to the 8th position of the biggest port ranks. In the case of two more ports passenger movements increased by double digit percentages. These were Piraeus (11,6%), thus its rise to the 7th overall position, and Marseille (+10,0%).

One year before, in 2015, Balearic Islands had recorded the biggest growth of all (25,8% on an annual basis), thus the marginal decrease of 2016 is insignificant. A decline of passenger movements took place in two other of the major ports included in the top-10; Savona (-7,3%) and Tenerife Ports (-5,2%).

The major two ports in terms of passenger movements retained their ranking for another year. Barcelona remains the top port in the Mediterranean Sea. Hosting 2,68 million passenger movements in 2016, Barcelona recorded an annual growth of 5,6%. In the last five years, Barcelona experienced a rise of cruise passengers by 11,4%.

Civitavecchia remained the only other cruise port in the Med that hosts more than two million cruise passenger movements. The short-term annual variation suggests a rise of the hosted passengers by 3,0%. When focusing on the 2012-2016 variation, Civitavecchia has experienced a slight decline of 2,2%. Yet, it has to be noted that the base year was a particular strong year for the port – as in 2010 it was hosting 'just' 1,94 million passengers.

For a second successive year, the third biggest cruise port in the Med was Balearic Islands, where the change of the cruise passenger movements was marginal, following a remarkable growth in 2015. The 5-year growth is even more remarkable, as it stands at 45,9%. The trend suggests that there might soon be a third port surpassing the two million passenger movements threshold.

Venice stands as the fourth major cruise port in terms of total passenger movements. The passengers that moved via this port in 2016 increased following two years of decline, even by the rather marginal 1,5%. The important development though is that

the major marquee port has managed to halt the reverse effect that had been created by some local tensions in the recent past. As the city has experienced a heated discussion on restrictions on the sailing of big in size cruise vessels down the Giudecca canal, it is worth monitoring the long-term effect that related decisions might have on the specific port, and not least on the broader region of the Adriatic and the Ionian Sea.

Marseille registered a most dynamic growth within the last year and the most dynamic of all within the last five years. The port managed to more than double its annual cruise passenger traffic since 2010, and increase it by 79,5% since 2012. As a result, it sustains the fifth position in the rankings of major ports.

Naples, which stands as the sixth biggest port in the Med, had returned to growth in 2015 and continued in 2016 to be among the dynamic ports (2,9% growth). Piraeus returned in 2016 to a growth that exceeded the recovery of the losses of the immediate past year. By recording a 11,6% increase of passenger movements, the major Greek port returned over the one million passenger movements threshold and to the 7th overall position. The traffic in the major Greek cruise port remains -8,7% lower than that of 2012, however, the recent privatisation indicates that it is worth monitoring future developments at the port.

The port of Genoa, which re-joined the major-10 list in 2015, continued to rise in the rankings in 2016 as it registered a most impressive increase of passenger movement by 19,9%. At the same time, within 2016, the neighbouring port of Savona, which in 2013 was the new entry in the major-10 ports list, dropped lower by 72 thousand passenger movements. Importantly the two ports are distanced just few kilometres and represent a region that within a 5-years time-span, has registered a remarkable increase in popularity. Genoa was visited in 2016 by 27,6% more cruises than in 2012, and Savona by 12,4% more. It has to be noted that following a reform of the organisation of ports in Italy, the two port authorities were merged in early 2017, with the impact of this merging on their future operations remaining to be seen.

Tenerife concludes the list of the major MedCruise ports. Tenerife ports experienced in 2016 a decline of passengers by 5,2%. Comparing to its all-record year of 2015. With the mid-term trend of five years suggesting a stable growth, it remains to be seen how a number of initiatives undertaken by the port – including the completion of the new cruise terminal – will increase cruise activities in the particular ports.

Table 3.2: Major MedCruise Port Members (Cruise Pax Movements, 2016)

Rank 2016	(Rank 2015)	Port	Total Pax 2016	Total Pax 2015	2016/ 2015	Total Pax 2012	2016/ 2012
1	(1)	Barcelona	2.683.594	2.540.302	5,64%	2.408.634	11,42%
2	(2)	Civitavecchia	2.339.676	2.271.652	2,99%	2.393.570	-2,25%
3	(3)	Balearic Islands	1.957.429	1.996.533	-1,96%	1.341.510	45,91%
4	(4)	Venice	1.605.660	1.582.481	1,46%	1.775.944	-9,59%
5	(5)	Marseille	1.597.213	1.451.059	10,07%	890.020	79,46%
6	(6)	Naples	1.306.151	1.269.571	2,88%	1.297.233	0,69%
7	(8)	Piraeus	1.094.135	980.149	11,63%	1.198.047	-8,67%
8	(10)	Genoa	1.017.368	848.227	19,94%	797.239	27,61%
9	(7)	Savona	910.244	982.226	-7,33%	810.097	12,36%
10	(9)	Tenerife Ports	884.173	933.154	-5,25%	885.623	-0,16%
	Tota	l (Major -10)	15.395.643	14.855.354	3,64%	13.797.917	11,58%

Focusing on the 10 major ports in terms of cruise calls per year (**Table 3.3**), these ports hosted in 2016 6.120 cruise calls. This total is 368 calls more than the number of calls recorded in 2015. Following this 6,4% annual increase the total is almost matching the 6.138 recorded in 2014, yet shy by 2,7% when compared with the 6.287 cruise calls that had been recorded in 2012. To a major extent, this is because the increase of cruise passenger movements is associated in too many cases with calls from bigger vessels, rather than with an increased number of calls.

Nine out of 10 ports listed in Table 3.3 saw the number of cruise calls increasing within 2016 comparing to 2015. While the percentage of growth was double-digit in four of them, it was almost marginal in three other cases (less than 10 calls variation). There is only one port of this list (Balearic Islands) that in 2015 had managed a higher number of calls compared to 2016.

Civitavecchia retains the top position of this ranking with 833 calls in 2016. This equals to a rise by 39 calls, or 4,9% comparing to 2015, and higher by two comparing to 2014. Barcelona follows in the list, following an increase by 9 calls (1,2%). Following a decline of 5,8% Balearic Islands have dropped to third place in this ranking, standing only sixteen calls shy (742 calls) of the calls hosted in Barcelona. The four ports that registered double digit percentage growth are Dubrovnik which registered 166 more calls than those hosted in 2015 (a notable 34,5% growth), Kotor (18,5%), Marseille (10,9%) and Naples (10,8%).

Tenerife Ports (3,6%) and Venice (1,5%) also received in 2016 more calls than in 2015.

while in Piraeus the significant increase of the numbers of hosted passengers was associated with a marginal increase of calls by just four.

Notably the list of the 10 major ports as regards cruise calls has changed due to the different methodology followed when reporting the trends in Kusadasi/Bodrum/Antalya. As the same operator operates these three ports, the previous editions of the MedCruise statistical report had reported their data in aggregate. This year we start recording developments at each of these ports independently, in order to provide a more accurate reporting. Thus, the list includes one new entry, which is the cruise port of Kotor.

The mid-term perspective gives a rather different picture. Comparing the cruise vessel calls of 2016 with those that had happened five years before (2012), the aggregate number of calls in these 10 ports is lower by 167 calls, or 2,7%. Kotor, Marseille and Balearic Islands are the only three ports of the specific ranking where the number of cruise calls raised; in fact this increase equals the remarkable 42% in the case of Kotor, the similarly impressive 39% in the case of Marseille, and the most significant 17,4% in the case of the Balearic Islands. All other ports experienced a modest (Barcelona, Dubrovnik, Tenerife Ports, Naples) or considerable (Piraeus, Venice, Civitavecchia) decline in the number of calls.

It has to be reminded though that while the number of calls has implications in the operations of the hosting cruise ports, it does not necessarily imply a negative trend in the number of hosted cruise passengers and cruise activities

Table 3.3: Major MedCruise Port Members (Cruise Calls, 2016)

	(Rank 2015)		Total Calls 2016	Total Calls 2015	2016/ 2015	Total Calls 2012	
1	(1)	Civitavecchia	833	794	4,91%	1.040	-19,90%
2	(3)	Barcelona	758	749	1,20%	774	-2,07%
3	(2)	Balearic Islan	ds 742	788	-5,84%	632	17,41%
4	(8)	Dubrovnik	639	475	34,53%	659	-3,03%
5	(4)	Piraeus	625	621	0,64%	763	-18,09%
6	(5)	Venice	529	521	1,54%	661	-19,97%
7	(7)	Tenerife Port	s 524	506	3,56%	534	-1,87%
8	(9)	Naples	493	445	10,79%	527	-6,45%
9	(10)	Marseille	490	442	10,86%	354	38,42%
10	(12)	Kotor	487	411	18,49%	343	41,98%
Tota	al (Major	-10)	6.120	5.752	6,40%	6.287	-2,66%

2016: Two ports host more than 1,4m home in/out pax In total, 53 cruise ports recorded home-porting activities in 2016. The 10 biggest of them hosted in aggregate a total of 6,69 million home in/out passengers, a number that stands 4,3% higher than the 6,41 million hosted in 2015 (**Table 3.4**).

Barcelona re-emerged in 2016 as the most popular home-port in the Med, following one year at the second position of the particular ranking. This was the outcome of a most impressive 14,1% growth of home in/out passengers. This is the second time ever that a cruise port in the Med hosted more than 1,5 million home in/out passengers.

Venice had surpassed this threshold by approximately 9.000 passengers in 2014; thus the 1,56 million record of 2016 represents the most home in/out passengers hosted by any Med port within a calendar year.

Venice, was the second major port in the region in 2016, even though the number of cruise passengers that used it as the embarking or disembarking port of their cruise in 2016 increased by 3,2%. The positive news is that Venice returned in 2016 to growth, following a challenging 2015.

The third major port, Civitavecchia, recorded a minor decline in 2016 (2,4%), yet it needs to be recalled that 2015 had been a remarkably good year. The 2016 traffic is still higher of that registered in 2014 by 147.000 home in/out passengers.

The most positive situation as regards home-porting was observed in Piraeus, which registered a 24,1% annual growth. This impressive growth reversed a decline that had been experienced the immediate past years. Naples was the third major home-port

that experienced double digit growth in 2016, as the home in/out passengers increased by almost 200.000 (12,2%), thus now included in the major 10 home-ports of the region. The positive trend also includes Genoa (7,2%) and Balearic Islands (8,4%).

Lower numbers of passengers embarking to a cruise or disembarking from it were observed in 2016 in Valetta, which recorded approximately 26.000 less home in/out passenger than the year before (-18,4%), Savona (-10,9%), a case were developments seem to mirror those happening in neighbouring Genoa, and to a lesser extent in Marseille (-3,3%).

The challenging social conditions and the non-port related security incidents observed in Turkey affected cruise activities in all Turkish ports, including the major home-port in the country which is Istanbul. Consequently, Istanbul dropped out of the list of the 10 most popular home-ports in the Med and its adjoining seas (was 9th in 2015) as did Kusadasi/Bodrum/Antalya.

Comparing with five years earlier, the picture is marginally more positive. The 6,69 million passengers that used the 10 major homeporting ports in the Med and its adjoining seas in 2016 were 5,6% more comparing to the 6,33 million passengers of 2012; with the latter year being the first that home in/out passengers in the Med exceeded the 6 million threshold. The most remarkable growth the last five years was recorded in Marseille (55,4%), Balearic Islands (28,7%), Valetta (20,9%) and Genoa (14,2%). A single digit growth happened in Barcelona (8,2%), and Piraeus (7,1%), whereas Naples (-11,3%), Savona (-9,6%) Civitavecchia (-8,0%) and Venice (-2,5%) experienced a decline.

	(Rank 2015)		me In/Out Pax 2016	Home In/Out Pax 2015	2016/ 2015	Home In/Out Pax 2012	2016/ 2012
1	(2)	Barcelona	1.555.819	1.363.754	14,08%	1.438.383	8,16%
2	(1)	Venice	1.408.066	1.364.044	3,23%	1.444.100	-2,50%
3	(3)	Civitavecchia	a 847.009	868.143	-2,43%	920.612	-8,00%
4	(5)	Genoa	606.278	565.687	7,18%	530.872	14,20%
5	(6)	Balearic Island	ds 600.181	553.928	8,35%	466.385	28,69%
6	(4)	Savona	577.145	647.364	-10,85%	638.706	-9,64%
7	(7)	Marseille	486.964	503.325	-3,25%	313.322	55,42%
8	(8)	Piraeus	352.663	284.241	24,07%	329.168	7,14%
9	(12)	Naples	142.137	126.672	12,21%	160.219	-11,29%
10	(11)	Valletta	114.731	140.512	-18,35%	94.880	20,92%
Tot	al (Major	-10)	6.690.993	6.417.670	4,26%	6.336.647	5,59%

The listing of the major ports in terms of transit cruise passengers (**Table 3.5**) details an even bigger rise in the case of the major ports in the Med and its adjoining seas. The aggregate in this case increased at a pace that is far more dynamic than the overall picture throughout the Med, and this is both as regards the annual and mid-term volatility.

Civitavecchia returned to the top of the list of the major cruise ports in terms of transit passengers after one year, as recorded a most considerable growth of 6,4%. The number of visiting cruise passengers in Civitavecchia was less than 8.000 passengers shy of the 1,5 million transit passengers per year, indicating that before long a Med cruise port will surpass this threshold. Comparing to five years before (2012), Civitavecchia hosted in 2016, 1,6%, or 20.000 more transit passengers.

Following a 5,9% decrease comparing to 2015, call. Balearic Islands hosted in 2016 1,36 million transit passengers, standing as the second most popular cruise port in this category. This total equals to an outstanding 55,1%, or approximately 580.000 more passengers than those that had cruised transit Balearic Islands five years ago.

Naples registered in 2016 20.000 more transit passengers comparing to 2015 and as a result it surpassed Barcelona, which registered a 50.000 transit passengers (or 4,1%) decline. Notably, when the focus turns on the 5-year trend, in Naples the increase has been moderate (2,4%), while in the case of Barcelona the respective increase has been a double digit one (16,2%).

Three more among the most popular ports in the Med experienced in 2016 a rise of transit passengers by double-digit percentages. These ports are Marseille (17,2%) for a second successive year (the increase in 2015 had been an equally significant 17,8%), Livorno (15,1%) also for a second successive year (the respective increase in 2015 had also been a double digit one, i.e. 11,1%), and Corfu (17,4%).

The growth was significant, even though of a single digit scale, in Piraeus as well (6,6%), while in Dubrovnik the respective change has been unimportant (-0,7%).

In 2016, the 10 major Med ports in terms of transit passengers hosted 10,04 passenger movements, significantly more than those hosted five years earlier. This has been the result of the increase in the major ports of call.

Marseille is the port that tops the list in terms of percentage growth within these five years, as the numbers of 2016 are almost double comparing to those of 2012. It is followed by Balearic Islands that recorded a 55,1% increase. Barcelona (16,2%), Naples (2,4%) and Civitavecchia (1,3%) also contributed to this increase. Instead, Livorno, Dubrovnik and the two Greek ports of the list (Piraeus and Corfu), have seen the number of transit passengers lowering over the same period by double-digit percentages. A comparison of aggregates is not available, for Tenerife Ports as the records of pre-2016 years are not available.

5 ports host more than 1.000.000 transit pax

A single Med port hosts more than 1.000.000 transit pax

The busiest port (Balearic Islands) hosts 355.566 transit pax. It would rank as the 20th busiest port in 2016.

Table 3.5: Major MedCruise Port Members (Transit Pax, 2016)

Rank 2016	(Rank 2015)	Port	Total Pax 2016	Total Pax 2015	2016/ 2015	Total Pax 2012	2016/ 2012
1	(2)	Civitavecchia	1.492.667	1.403.509	6,35%	1.472.958	1,34%
2	(1)	Balearic Islands	1.357.248	1.442.605	-5,92%	875.125	55,09%
3	(4)	Naples	1.164.041	1.142.899	1,85%	1.137.014	2,38%
4	(3)	Barcelona	1.127.775	1.176.548	-4,15%	970.251	16,24%
5	(5)	Marseille	1.110.249	947.734	17,15%	576.698	92,52%
6	(n.a.)	Tenerife Ports	810.049	n.a.	-	n.a.	-
7	(8)	Livorno	798.661	693.774	15,12%	967.324	-17,44%
8	(6)	Dubrovnik	763.561	768.887	-0,69%	956.816	-20,20%
9	(7)	Piraeus	741.472	695.908	6,55%	868.879	-14,66%
10	(9)	Corfu	678.050	577.420	17,43%	591.599	14,61%
	Total (N	1ajor -10)	10.043.773	n.a.	-	n.a.	

3.3 Major Variations in MedCruise Ports

The following tables portray the major positive variations when comparing cruise traffic, in terms of total cruise passenger movements (**Table 3.6**), cruise calls (**Table 3.7**), home in/out (**Table 3.8**) and transit (**Table 3.9**) passengers.

These tables provide both a short-term view by comparing data of 2016 with those of 2015, as well as a medium term perspective by comparing cruise passengers and cruise call statistics of 2016 with those of 2012.

Aiming to give substance to the analysis (i.e. avoiding to present massive percentage growth or decline when changes of a single vessel and/or a handful difference of hosted passengers number occurs), the analysis of variations refers to only MedCruise ports having a minimum of 20 cruise calls and/or 10.000 cruise passengers in 2016 have been included in the matrices below.

The ports that have not reached any of these thresholds and have been excluded from the analysis of variations are Burgas, Castellon, Constantza, Igoumenitsa, Mersin, Odessa, Patras, Sochi, Taranto, Trabzon, Tunisian Ports and Varna. One of the ports that did not reach any threshold to be included in the analysis of variations, Varna (4 calls and 1.109 passenger movements) joined MedCruise in 2016, as part of a strategy to advance their presence in cruise market. Ceuta and Huelva were in this list a year ago, but have succeeded to generate cruise traffic, and are thus 'delisted'.

Constantza, Sochi and Tunisian Ports, had not been in the list of ports with few cruise

calls and hosted passengers a year earlier, i.e. in 2015. The former two ports experienced a decline as a result of the difficulties that all cruise ports in the Black Sea experience the last years. Tunisian ports experienced the cancellation of all calls following security related incidents in the country. However, the signs at least in the Tunisian case indicate that the trend is eventually reversing and Tunisian ports started at the end of 2016 receiving again calls from cruise vessels. As regards Black Sea ports, where activities suffered by puzzling geopolitical tensions, MedCruise has developed efforts to support the growth of cruise in the region. In 2016, this strategy included the hosting of the 48th MedCruise General Assembly in Odessa and the visits of several cruise line representatives who discussed ways to re-establish cruise activities in the region.

Remarkable variations of the total passenger movements hosted by each port in the Med were observed within just one year (Table 3.6). In 2016, three of the smaller ports, namely Ceuta, Huelva and Rijeka, enjoyed growth of cruise passenger visits at impressive extends. The same is true in the case of Zadar and Souda/Chania, while in the latter case the growth is impressive for a second successive year. On the other hand, the ports that experienced a major decline in 2016 were the Turkish ports of Alanya (-58,5%), Antalya (-65,1%) and Istanbul (-93,8%) – an outcome of the challenging times that the country experienced within the year - Bastia/North Corsica (-65,1%), and the Italian port of Brindisi (-96,5%), that lost all traffic it had gained in 2015 and the immediate past years.

Examining the trend of the last five years (2012-2016), the list of ports that experienced major growth includes three ports which emerged as cruise ports during these particular years, Tarragona, Huelva and Gioia Tauro, as well as La Spezia and Zadar that have enjoyed a continuous uptrend since 2012. Evidently, with the attention being on variations, rather than absolute numbers, the volatility is higher in small ports and extreme cases rather than else.

At the other end of the spectrum, the list of those ports that have experienced a major

decrease of cruise activities the last five years include Motril-Granada and Brindisi, which are both small cruise ports that host just over 15.000 passengers per year and three Turkish ports, i.e. Alanya, Antalya and Istanbul. The decline happened only the very last year of the period (2016) and given the adverse non-cruise related events observed in Turkey it is evident that the causes are well beyond the managing and operational capacity of the people running these ports, or the interest of people to cruise the region.

Table 3.6: Total Cruise Passengers - Major Variations 2016/2015 and 2016/2012

	uise Passe riations 201		
Port	2016	2015	Var. 2016/ 2015
Ceuta	19.251	1.613	1.093,5%
Huelva	20.071	4.788	319,2%
Zadar	136.462	74.660	82,8%
Souda/ Chania	147.915	96.612	53,1%
Rijeka	13.874	9.082	52,8%

Table 3.7 presents the major variations observed in 2016 as regards the number of cruise calls per year. The list is quite similar with the one referring to passenger trends. Ceuta and Huelva top the list of ports that enjoyed the biggest positive variations when comparing with the previous year. Rijeka is also included in this list. All three ports have few calls; given that the emphasis is on variations the volatility is higher in ports of this size than in the bigger ones. These ports are ioined by Toulon-Var Provence, which in 2016 hosted 278 calls, that is more than double of the calls hosted in 2015, and Tarragona that in 2016 doubled the 11 calls it had hosted a year before. On the contrary, in 2016 the number of calls was substantially lower comparing to 2015 in Bastia/North Corsica, Brindisi and the Turkish ports of Alanya, Antalya and Istanbul.

Total Cruise Passengers Major variations 2016/2012

			Var. 2016/
Port	2016	2012	2012
Tarragona	14.013	153	9.058,8%
La Spezia	507.531	50.239	910,2%
Huelva	20.071	2.090	860,3%
Gioia Tauro	13.758	1.600	759,9%
Zadar	136.462	20.640	561,2%

When examining the longer period trends, two of the 'small' cruise ports that were the success stories of 2016, Tarragona and Huelva, also top the rankings of ports that hosted substantial more calls in 2016 than those hosted back in 2012. The other three ports that recorded a remarkable growth since 2012 are La Spezia (211 calls in 2016), and the Greek ports of Volos (46 calls) and Thessaloniki (23 calls). The list of ports that experienced considerable decline in terms of cruise calls in 2016 comparing to the records of 2012, include Istanbul, Antalya and Brindisi, -three ports that experienced a major decline of calls in 2016-, Bodrum and Rijeka. It remains to see to what extent the number of total calls in the Med will continue to decline, as a result of increase in the vessels size and deployment patterns, or maybe the trend will at some point reverse.

Table 3.7: Total Cruise Calls - Major Variations 2016/2015 and 2016/2012

Major variat	Var. 2016/		
Port	2016	2015	2015
Ceuta	13	4	225,0%
Huelva	17	6	183,3%
Toulon-Var Provence	278	124	124,2%
Rijeka	15	7	114,3%
Tarragona	22	11	100,0%

Total Cruise Passengers

Total Cruise Passengers Major variations 2016/2012

Port	2016	2012	Var. 2016/ 2012
Tarragona	22	1	2.100,0%
Huelva	17	3	466,7%
La Spezia	211	72	193,1%
Volos	46	21	119,1%
Thessaloniki	23	11	109,1%

Table 3.8 illustrates the major variations of home in/out passengers in MedCruise ports.

In this case, Malaga that tripled its homeporting activities in 2016, and Livorno continued to re-establish home-port activities for a second successive year and after a difficult period earlier in the decade, top the list. Heraklion is also present in the list of those ports that doubled homeporting activities in 2016, yet in order to have the overall picture one needs to consider that in 2014 Heraklion had recorded approximately 24.000 home in/out passengers and back in 2010 it had hosted 46.000 home in/out passengers. Two Italian ports located in the Adriatic recorded in 2016 a significant increase of home-porting traffic. These are Ancona and Bari, with Bari hosting more than 100.000 home in/out cruise passengers. The list of ports that in 2016 experienced a major negative variation includes three Turkish ports, i.e. Kusadasi (-52,1%), Antalya (-72,5%) and Istanbul (-92,0%). It also includes the comparatively recently established home-ports of La Spezia and Cagliari. The former had hosted almost 100.000 home-porting passengers in 2015, yet in 2014 it had 40.000 home in/ out passengers and five years before it was hosting no home-porting activities at all. The latter is another cruise port in the Med that had no home in/out activities five years before (2012).

Only MedCruise ports having a minimum of 3.000 home in/out cruise passengers in 2016 have been included in the matrix below;

passengers in 2016 (see Appendix), while another 19 ports (Azores; Bodrum; Brindisi; Cartagena; Gibraltar; Gioia Tauro; Koper; Kotor; Madeira Ports; Odessa; Portimao; Ravenna; Sete; Split; Tarragona; Thessaloniki; Trabzon; Varna; and Zadar) hosted less than 3.000 passengers. A year earlier this total had been 15 ports (Azores; Bodrum; Burgas; Constantza; Gibraltar; Gioia Tauro; Koper; Odessa; Portimao; Ravenna; Sète; Tarragona; Thessaloniki; Varna; and Zadar).

Comparing the records of 2016 with the data that had been recorded in 2012, the picture is quite different. This time Dubrovnik stands as the port where the major increase of home in/out passengers happened, while such traffic was also doubled in Palermo (+94,1%). Marseille is the port that has also registered a most substantial growth, i.e. 55,4%, or approximately 170.000 passengers, within a five-year period. Two other ports that were not listed among the Med homeports in 2012, managed to accommodate in 2016 mentionable home-porting traffic. These are La Spezia and Cagliari, which are deservedly included in the list of ports with major positive variations of home-port visits when the mid-term perspective is concerned yet both experienced substantial decline within 2016. On the other hand, despite topping the list of ports that registered a growth in 2016, Livorno, Heraklion and Ancona are three ports that experienced major decline in home in/out passengers during the last five years. The other two ports that faced similar decline are Istanbul and Antalya, a phenomenon attributed to the negative situation of 2016 only.

25 ports hosted no home in/out cruise the nega

Table 3.8: Total Home In/Out Passengers - Major Variations 2016/2015 and 2016/2012

Total Cruise Passengers Major variations 2016/2015						
Port	2016	2015	Var. 2016/ 2015			
Malaga	92.246	32.492	183,9%			
Livorno	9.274	4.181	121,8%			
Heraklion	7.302	3.344	118,4%			
Ancona	10.896	6.676	63,2%			
Bari	109.137	85.314	27,9%			

As for the growth in transit passenger movements, which is detailed in **Table 3.9**, Ceuta tops the list of major positive annual variation. It is followed by Huelva, Zadar, Toulon-Var Provence and Souda/Chania, which is included in the specific list for a second successive year (in 2014 Souda/Chania was hosting just over 33.000 cruise passengers). Tarragona, Huelva and Gioia Tauro are also in the list of major positive

Total Cruise Passengers Major variations 2016/2012

			Var. 2016/
Port	2016	2012	2 2012
Dubrovnik	68.169	24.632	2 176,8%
Palermo	72.034	37.109	94,1%
Marseille	486.964	313.322	2 55,4%
Cagliari	8.456	(n/d
La Spezia	7.402	C	n/d

variations with reference to the mediumterm trends in the number of transit passengers. In terms of scale though the growth was far more substantial in terms of absolute numbers in the case of the two other ports of the list; within the last five years La Spezia recorded a major growth of 450.000 passengers, while in Zadar the approximately 20.000 transit passengers increased to over 135.000. The list of ports that in 2016 experienced major decline in the annual transit passenger movements includes Alanya (-58,5%), Bastia/North Corsica (-65,1%), Antalya (-90,3%), Istanbul (-94,7%) and Brindisi (-96,0%). As regards the mediumterm trend (2012-2016) the list of ports that experienced the major negative variation includes mostly ports with small absolute

numbers of traffic - thus a few thousands passengers change equals to substantial percentages. These are the ports of Motril-Granada (-56,9%), Brindisi (-60,6%) and Antalya (-93,4%). It also includes two other Turkish ports, i.e. Alanya (-74,7%) and Istanbul (-95,7%), however these records are the result of the notably turbulent times that Turkey experienced in 2016.

Total Cruise Passengers

Table 3.9: Total Transit Passengers - Major Variations 2016/2015 and 2016/2012

Total Cruis Major varia			
			ar. 2016/
Port	2016	2015	2015
Ceuta	19.251	1.613	1.093,5%
Huelva	20.071	4.788	319,2%
Zadar	135.584	73.596	84,2%
Toulon-Var Provence	350.293	219.576	59,5%
Souda/ Chania	147.915	96.612	53,1%

Major varia	/2012		
			Var. 2016/
Port	2016	2012	2012
Tarragona	12.171	153	7.854,9%
La Spezia	500.129	50.239	895,5%
Huelva	20.071	2.090	860,3%
Gioia Tauro	13.737	1.600	758,6%
Zadar	135.584	19.87	582,3%

3.4 Passengers per Call

The deployment of bigger vessels in the Mediterranean and the adjoining seas is evident by the continuous increase of the average number of cruise passengers that reach a destination via one call alone.

In 2016, the average number of hosted cruise passengers per cruise call was 2.038. A year before, in 2015, this average had surpassed for the first time in history 2.000 passengers, standing at 2.051 passengers. Even though the standard deviation from this average is significant, thus a note of caution essential, this is a milestone in all respects. In 2014, this average was standing at 1.880 passengers per call.

The increase within the last decade is even more impressive. In 2006 each cruise call in the Med was resulting in 1.275 passenger movements on average, or 663 less passengers than those associated with a call in 2016. Within 10 years, the average number of passengers per call increased by 48,5% (Figure 3.1).

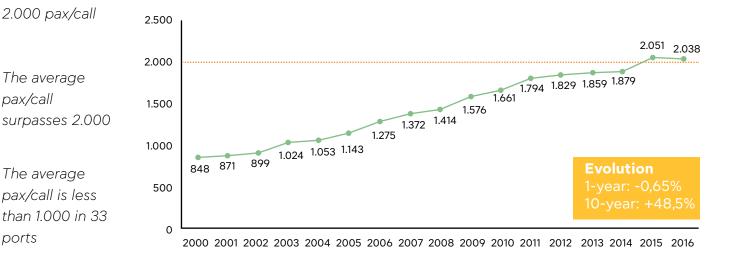
The trends observed in the shipbuilding order book are expected to affect the specific numbers and sustain the overall trend of growing numbers of cruise passengers per visit. Larger cruise ships tend to have lower average labour costs than smaller ships - for example, a 5.000 plus-cruise vessel has one crew member for every 2,6 passengers, while a 2.000 passenger one has one crew member for every 2,1 passengers.

Economies of scale, the search for increased amenities and economies of scope insofar entertainment of passengers is concerned, along with technological and shipbuilding advancement are expected to lead to the continuation of the increase of cruise ships size. This trend is already confirmed by the order book and, as has been announced or reported, several of the bigger vessels will be deployed in the Med.

more than 2.000 pax/call

The average pax/call

16 ports host Figure 3.1: Average Pax/Call in MedCruise ports (2000-2016)



The average pax/call is less than 1.000 in 33 ports

The average pax/call exceeds 1.000 for the first time

This average is not similar in all ports in the Med and its adjoining seas (Figure 3.2). In five cruise ports the average number of passengers per call exceeds 3.000. In 11 more ports the average is higher than 2.000, i.e. exceeds the average pax/call observed in the Med. In 32 more ports this average stands between 1.000 and 2.000 pax/call, and in the rest 25 ports this average is less than 1.000 pax/call. 58,9% of all ports of the sample host more than 1.500 passengers per cruise call.

Figure 3.2: Cruise Pax per Call: MedCruise Port Classification Overview 2016

>3000 pax/call

Marseille

41.10% >1500 Pax/Call

58.90% <1500 Pax/Call

< 1000 pax/call

Alanya, Bastia/North Corsica, Brindisi, Castellon, Constantza, Istanbul, Kavala, Motril-Granada, Odessa, Palamos, Patras, Portimao, Portoferraio, Portofino, Rijeka, Sete, Sibenik, Sochi, Split, Varna, Vo<mark>l</mark>os

1000 - 2000 pax/call

Alicante, Ancona, Azores, Bodrum, Burgas, Cartagena, Ceuta, Corfu, Cyprus Ports, Dubrovnik, Egyptian Ports, French Riviera Ports, Gibraltar, Gioia Tauro, Heraklion, Huelva, Igoumenitsa, Koper, Kotor, Kusadasi, Lisbon, Madeira Ports, Malaga, Messina, Monaco, North Sardinian Ports, Piraeus, Ravenna, Souda/Chania, Tenerife Ports,

Focusing on the growth of passengers per call in the 20 MedCruise ports that maintain the highest passengers/call ratio (**Table 3.10**). For the first time in history the average size of call in any port in the Med had exceeded the 4.000 passengers average in 2015. In fact, this had happened to the ports of Genoa and the neighboring Savona. This was the case also in 2016, though the respective averages where marginally larger in Savona (by 19 passengers) and slightly smaller in Genoa (by 182 passengers).

In total, five ports hosted more than 3.000 passengers/call in 2016; this number is less by two when compared with 2015 (i.e. Antalya and La Spezia) but equals that of 2014. The total of 16 ports that hosted more than 2.000 passengers/call, is one less than the number of ports that had done so in 2015, but five higher than in 2014.

Savona tops the list with 4.273 pax/call following a marginal annual increase of passengers/call, or 9,2% when the focus is on the variation between vessels calling at the port in 2016 comparing to five years earlier. As mentioned, Genoa is the only other port where the average number of visiting passengers per call exceeds 4.000, following a 9,6% growth within the last five years.

As regards the overall picture on an annual basis, 2016 has not been a year that major

changes were recorded – the exceptions in the list being Bari and Piraeus that registered growth by double digit percentages (11,1% and 10,9% respectively), and La Spezia and Cagliari that registered decline by double digit percentages (-36,9% and -14,3% respectively). The annual variation of the average number of pax/call in the major-10 in the list changed marginally (0,13%) and was standing at 3.180 passengers in 2015, as did that of the major-20 (-0,3%), which was standing at 2.693 passengers one year ago.

Looking at the five-year variation, the increase in the case of the major-10 ports equals to the notable 16,2%, or 413 pax/call. Expanding the sample to the major-20 port of the list, the growth was equally significant, though the pace of growth has been slower, i.e. 12,5%, or 298 pax/call. The most impressive growth has happened in the ports of La Spezia and Cagliari, which established home-porting activities within that period, whereas the average passengers/call increased by doubledigit percentages in Barcelona, Marseille, Venice, Palermo, Civitavecchia, Balearic Islands, Valletta and Piraeus. In four ports of the list though the average pax/call declined; these are Valencia and Malaga where the decline was 23.9% and 21.2% respectively, in Livorno, where the pax/call declined by 10,2% and Bari, where the decline was by 8,0%. The 2016 data suggest that in three of these cases, i.e. Bari, Valencia, Livorno, this decline has started to reverse.

Table 3.10: Cruise Pax/Cruise Call - Major 20

		Pax Calls	Pax/Calls	Variation	Pax/Calls	Variation
No	Port	2016	2015	2016/2015	2012	2016/2012
1	Savona	4.273	4.252	0,50%	3.914	9,20%
2	Genoa	4.102	4.284	-4,24%	3.743	9,60%
3	Barcelona	3.540	3.392	4,39%	3.112	13,77%
4	Marseille	3.260	3.283	-0,71%	2.514	29,65%
5	Venice	3.035	3.037	-0,07%	2.687	12,97%
6	Palermo	2.931	2.734	7,21%	2.272	29,00%
7	Antalya	2.838	3.111	-8,79%	2.663	6,58%
8	Civitavecchia	2.809	2.861	-1,83%	2.302	22,04%
9	Bari	2.765	2.488	11,10%	3.004	-7,98%
10	Naples	2.649	2.853	-7,14%	2.462	7,63%
Total (M	ajor -10)	3.184	3.180	0,13%	2.741	16,19%
11	Balearic Islands	2.638	2.534	4,12%	2.123	24,28%
12	La Spezia	2.405	3.814	-36,93%	698	244,72%
13	Cagliari	2.326	2.714	-14,29%	1.119	107,91%
14	Valencia	2.236	2.134	4,78%	2.937	-23,85%
15	Valletta	2.154	2.184	-1,35%	1.936	11,29%
16	Livorno	2.005	1.891	5,99%	2.232	-10,18%
17	Gibraltar	1.804	1.687	6,91%	1.686	7,00%
18	Madeira Ports	1.759	1.860	-5,42%	1.751	0,47%
19	Malaga	1.751	1.799	-2,67%	2.223	-21,25%
20	Piraeus	1.751	1.578	10,92%	1.570	11,49%
Total (M	ajor -20)	2.685	2.693	-0,32%	2.387	12,49%

3.4 Cruise Traffic Concentration

Examining the shares of the top-20 MedCruise ports (**Table 3.11**) provides useful insights on the extent that cruise passenger traffic is concentrated in few MedCruise ports only, or the trend for any concentration to increase.

Eight ports hosted in 2016 passenger traffic that exceeds one million passenger movements per year, that is two more ports than 2015. In 2014, this total also stood at eight ports. The two major of them, Barcelona and Civitavecchia, hosted more than two million passengers for another year. The third one, Balearic Islands is approaching the two million passengers per year milestone. There are also 12 more ports that hosted more than 500.000 passenger movements within 2016, i.e. all those listed in Table 3.11: two less than in 2015.

Evidently the growth of cruise is reaching a number of different ports in all different regions and countries of the Mediterranean and its adjoining seas. In aggregate, the major-5 ports in terms of passenger movements had in 2016 a share standing at 37,1% of the total passenger movements in the Med and its adjoining seas. This is 1,6% higher than the share of the major-5 cruise ports a year before and the notable 4,3% higher than in 2012.

The same trend is observed when focusing on the major-20 ports. This group of ports increased in 2016 their share by 3,2% since in 2016 they hosted 78,8% of the total cruise passengers movements in the region (comparing to the 75,6% of the respective total in 2015). The growth of cruising observed in the Med within the 21st century has spread proportionally in all ports of different size. When one concentrates in developments over the last five years though, it is evident that major cruise ports have grown their share of the total traffic, i.e. the major 20 ports hosted in 2012 72,9% of the traffic, while in 2016 they hosted 78,8%.

Table 3.11: Major 20 MedCruise Ports - Cruise Pax. Concentration

		Total Pax	Cruise Pax Shares					
No	Port	2016	2016	2015	2014	2013	2012	
1	Barcelona	2.683.594	9,78%	9,15%	9,15%	9,34%	8,98%	
2	Civitavecchia	2.339.676	8,52%	8,18%	8,28%	9,12%	8,93%	
3	Balearic Islands	1.957.429	7,13%	7,19%	6,14%	5,54%	5,00%	
4	Venice	1.605.660	5,85%	5,70%	6,71%	6,53%	6,62%	
5	Marseille	1.597.213	5,82%	5,23%	5,07%	4,27%	3,32%	
Major 5 -SUM 1		10.183.572	37,10%	35,45%	35,35%	34,79%	32,86%	
6	Naples	1.306.151	4,76%	4,57%	4,31%	4,22%	4,84%	
7	Piraeus	1.094.135	3,99%	3,53%	4,08%	4,68%	4,47%	
8	Genoa	1.017.368	3,71%	3,06%	3,19%	3,77%	2,97%	
9	Savona	910.244	3,32%	3,54%	3,94%	3,37%	3,02%	
10	Tenerife Ports	884.173	3,22%	3,36%	3,25%	2,85%	3,30%	
Majo	or 10 -SUM	15.395.643	56,09%	53,51%	54,13%	53,70%	51,46%	
11	Dubrovnik	831.730	3,03%	2,99%	3,46%	4,08%	3,66%	
12	Livorno	807.935	2,94%	2,51%	2,42%	2,65%	3,87%	
13	Corfu	748.914	2,73%	2,33%	2,60%	2,68%	2,45%	
14	Valletta	682.970	2,49%	2,41%	2,00%	1,72%	2,25%	
15	French Riviera Port	s 562.929	2,05%	1,97%	2,31%	2,20%	2,62%	
16	Kotor	536.644	1,96%	1,59%	1,20%	1,14%	0,92%	
17	Lisbon	522.497	1,90%	1,84%	1,94%	2,01%	1,95%	
18	Madeira Ports	522.483	1,90%	2,09%	1,84%	1,73%	2,21%	
19	Palermo	510.078	1,86%	1,97%	2,06%	1,48%	1,32%	
20	La Spezia	507.531	1,85%	2,40%	1,87%	0,77%	0,19%	
Tota	l (Major -20)	21.629.354	78,81%	75,62%	75,83%	74,15%	72,90%	

Cruise calls in the Med and its adjoining seas record a lower level concentration than the accommodated passenger movements. There are five ports that host over 600 cruise calls per year in 2016, as many as in 2015. The total of ports that hosted more than 300 cruise calls stands at 16, which is two less than those that did so in 2015, and equal to those that had done so in 2014. The major-20 ports hosted in 2016 a total of 9.457 calls, which is 177 more than the total of calls in the top-20 of 2015.

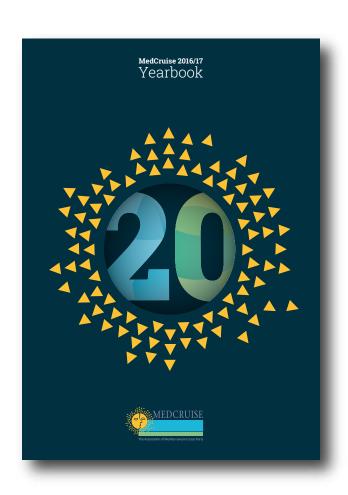
In 2016, the five cruise ports with most calls per year hosted 3.597 calls (15 less than a year before), or 26,7% of the total calls in the region. This percentage is higher than the respective percentage of last year and slightly higher than the 26,4% share that they had combinedly served five years before (2012). The picture is rather different when the focus is on the major-10 ports only (45,5%, or 6.120 calls in 2016, with this share being 42,9% in 2015 and 42,9% in 2012), or expands to include all major-20 ports (70,2% or 9.457 calls in 2016, comparing with a share of 65,7% in 2012.

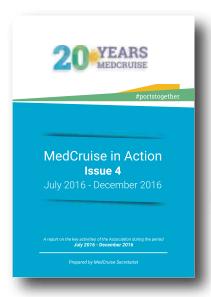
Table 3.12: Major 20 MedCruise Ports - Cruise Calls Concentration

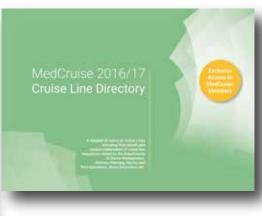
	Total	Calls		Cruise Calls Shares					
No	Port	2016	2016	2015	2014	2013	2012		
1	Civitavecchia	833	6,19%	5,87%	6,06%	6,41%	7,09%		
2	Barcelona	758	5,63%	5,53%	5,58%	5,58%	5,28%		
3	Balearic Islands	742	5,51%	5,82%	4,93%	4,67%	4,31%		
4	Dubrovnik	639	4,74%	3,51%	5,47%	5,63%	4,49%		
5	Piraeus	625	4,64%	4,59%	4,41%	4,75%	5,20%		
Major 5 -SUM		3.597	26,71%	25,32%	26,44%	27,04%	26,38%		
6	Venice	529	3,93%	3,85%	3,55%	3,66%	4,51%		
7	Tenerife Ports	524	3,89%	3,74%	3,73%	3,47%	3,64%		
8	Naples	493	3,66%	3,29%	2,90%	2,94%	3,59%		
9	Marseille	490	3,64%	3,27%	3,61%	2,99%	2,41%		
10	Kotor	487	3,62%	3,04%	2,57%	2,59%	2,34%		
Major 10	0 -SUM	6.120	45,44%	42,50%	42,79%	42,68%	42,88%		
11	Corfu	481	3,57%	3,01%	2,87%	3,21%	3,31%		
12	Livorno	403	2,99%	2,73%	2,48%	2,81%	3,17%		
13	Egyptian Ports	361	2,68%	3,13%	0,21%	0,26%	0,37%		
14	French Riviera Ports	325	2,41%	2,53%	2,68%	2,81%	2,64%		
15	Valletta	317	2,35%	2,26%	2,20%	1,85%	2,13%		
16	Lisbon	311	2,31%	2,26%	2,32%	2,36%	2,14%		
17	Madeira Ports	297	2,21%	2,31%	2,07%	1,94%	2,31%		
18	Split	286	2,12%	1,93%	1,69%	1,50%	1,83%		
19	Kusadasi	278	2,06%	3,79%	3,33%	3,01%	3,32%		
20	Toulon-Var Provence	278	2,06%	0,92%	1,87%	1,78%	1,62%		
Total (M	lajor -20)	9.457	70,22%	67,36%	64,52%	64,21%	65,73%		

MedCruise Yearbook

The Directory of Cruise Ports & Professionals in the Mediterranean and its Adjoining Seas







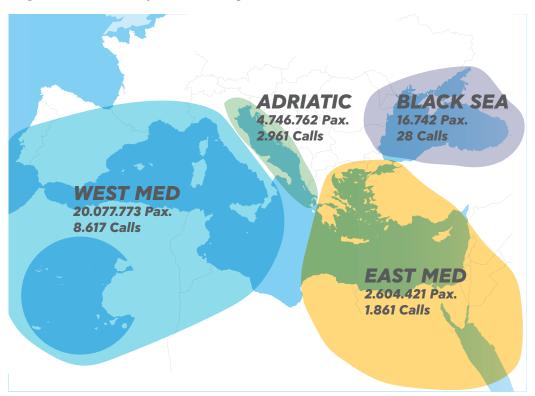


ANALYSIS PER MEDCRUISE REGION

4.1 The MedCruise Regions

MedCruise membership spreads in four distinctive geographical regions, each of them having its own dynamics. These regions are the West Med, the Adriatic, the East Med, and the Black Sea respectively. This section of the report provides an analysis of the statistics per MedCruise region (Map 4.1).

Map 4.1: Cruise Traffic by MedCruise Region in 2016



20,1m pax in the West Med

4,7m pax in the Adriatic

2,6m pax in the East Med

+16.700 pax in the Black Sea

A total of 39 MedCruise members are located in the West Med region (**Table 4.1**). The cruise passenger movements that took place in these ports in 2016 reached 20,07 millions. This total equals to 2,2% increase comparing to 2015 when these ports had hosted 19,96 million passenger movements. It also equals to a growth of 8,3% comparing to five years earlier (**Table 4.2**).

The number of cruise calls in the West Med ports was 8.617. This is 333 more calls compared to 2015, but 24 calls lower compared with the calls that had taken place five years earlier, in 2012 (**Table 4.3**). This is the biggest region of the four in terms of the share of cruise activities hosted, as West Med ports in 2016 accommodated 73,2% of the total passenger movements that took place in the Med (a year earlier, in 2015, the respective share was 72,1%, and a 64,0% share of the respective number of cruise calls (a year earlier the respective share was 63,3% (**Figure 4.1**).

Table 4.1: Total Cruise Traffic 2016

Region	No. of members	Total Cruise Pax.	Total Cruise Calls	Home In/Out Pax.	Transit Pax.
West Med	39	20.077.773	8.617	5.406.968	14.528.596
Adriatic	14	4.746.762	2.961	1.671.031	3.075.743
East Med	16	2.604.421	1.861	497.748	1.695.047
Black Sea	6	16.742	28	463	16.279

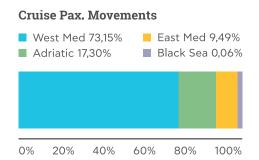
The number of cruise ports that are located in the Adriatic Sea is 14. This is the second biggest cruise region, hosting 17,3% of the total passenger movements and 22,0% of the total cruise calls in the Med and its adjoining seas (**Figure 4.1**). In 2016, these ports hosted 4,74 million cruise passenger movements. This number was 4,7% higher than the number of passenger movements that the same ports recorded in 2015; yet it is lower by 2,3% comparing to the respective number of passenger movements that happened in 2012.

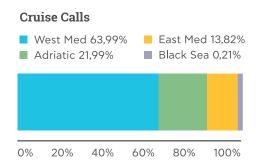
There are also 16 MedCruise member ports located in the East Med. Based on the 2016 data, these East Med ports share 9,5% of the passenger movements and 13,8% of the cruise calls that take place in the Med and its adjoining seas. In particular, these ports registered in 2016 a total of 2,6 million cruise passenger movements, a number that is 25,9% lower than the cruise passenger movements that they had hosted in 2015. This total also represents a lower number of cruise visitors comparing to 2012; by 20,1%, or almost 660.000 passengers. The annual number of calls in the East Med ports declined during 2016 to 1.861 (or by 28,1%); this record is 26,3% lower than the calls in the region in 2012.

As detailed in various sections of the report, the difficult moments that Turkey experienced in 2016, had a major effect in Turkish cruise ports that have seen the cruise traffic minimising, as cruise lines either cancelled or re-directed their calls. Consequently, cruise activities in East Med failed in 2016 to reach the levels of the immediate past years.

The Black Sea is the smallest distinctive geographical port region as regards the magnitude of cruise activities. This region represented in 2015 only 0,06% of the annual passenger movements and 0,2% of the annual cruise calls that took place in the area under examination. Cruise activities in the Black Sea recorded a severe decline for a second successive year. With cruise lines planning their itineraries well in advance - typically somewhere between 2-3 years and 18 months - the difficult political, economic and social conditions observed in the region in past years have had an impact on the records of 2016 as well. MedCruise has intensified its efforts to support the strategy of these ports to regain cruise activities, among others by hosting international gathering of cruise stakeholders in its member ports located in the Black Sea.

Figure 4.1: Cruise Passenger Traffic Shares 2016 per region

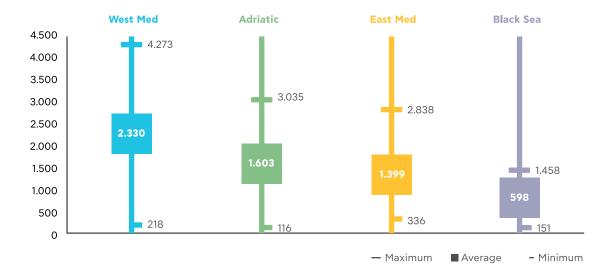




The four sub-regions have distinctive features as regards the type of cruise vessels that are deployed in each of them (**Figure 4.2**). Larger cruise ships are deployed in the West Med, where the average number of cruise passengers per call stands at 2.330. As expected the standard deviation from this number is remarkable, with the maximum average cruise passengers/call recorded in Savona standing at 4.273 passengers. The Adriatic

is the region where the second highest average of passengers/call is recorded (1.603), with the maximum observed at an Adriatic port being 3.037 passengers. Cruise ships deployed in the East Med are even smaller, i.e. 1.399 passengers/call, without any port exceeding an average of 2.838 passengers/call. The region where the smaller cruise ships of all are deployed is the Black Sea (average 598 passengers per call).

Figure 4.2: Average Cruise Passengers/Call 2016 per region



4.2 Cruise traffic evolution per region

Table 4.2 details the evolution and variation of cruise passenger movements, providing a picture of both short and mid-term trends. Following a 8,3% growth since 2012, the West Med stands as the most dynamic region of all (**Figure 4.3**). The change in the Adriatic Sea ports was moderately lower, with the variation of cruise passenger movements since 2012 standing at -2,3%. Nonetheless, the Adriatic Sea is the second major cruise region in the Med.

The East Med ports accommodated within 2016 a total of cruise passenger movements that was 20,1% less than in 2012. This is, however, the outcome of the decline that took place in the very particular conditions of 2016 alone. Until then, the region was experiencing a growth of cruise activities. The fact that Turkey, Syria, and some other parts of the region experienced economic, social and/or political instability and special

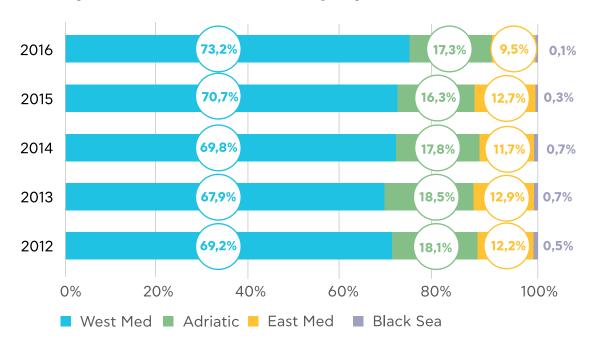
conditions is not irrelevant of the trends observed in the East Med as a whole; thus the decline of cruise movements by almost 900.000 passengers. A year before, East Med would stand as a dynamically growing cruise region.

The same would be said for the Black Sea region as well. In 2014, the Black Sea was standing as the most dynamic region of all, a fact that created the background for return to growth and expectations once a durable stable external environment might help cruise activities to re-emerge in the near future. In 2016, though, only 16.742 cruise passenger movements were registered in the region. Following a 76,4% annual drop in 2016 (the second year of major decline) cruise activities in the Black Sea evaporated. In 2016, the Black Sea region recorded 88,5% or 130.000 passenger movements less that those that had been hosted five years earlier.

Table 4.2: Total Cruise Passenger Movements per region

Region	2016	2015	Variation 2016/2015	2012	Variation 2016/2012
West Med	20.077.773	19.641.139	2,22%	18.546.398	8,26%
Adriatic	4.746.762	4.532.940	4,72%	4.859.013	-2,31%
East Med	2.604.421	3.516.851	-25,94%	3.261.300	-20,14%
Black Sea	16.742	70.934	-76,40%	146.249	-88,55%
Total	27.445.698	27.761.864	-1,14%	26.812.960	2,36%

Figure 4.3: Cruise Pax. Movements Evolution per region



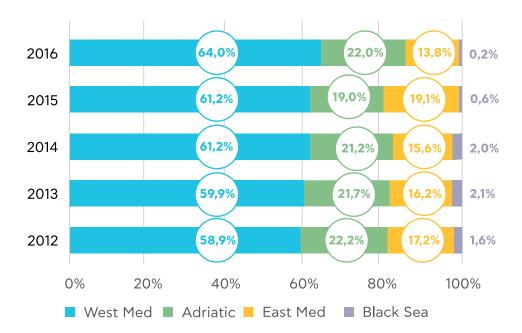
As regards the total number of cruise calls per region (**Table 4.3**), the fortunes of the four sub-regions were diverse. Two of them registered higher numbers of calls when comparing 2016 to the calls registered a year earlier. In the West Med the total of calls in 2016 was 4,0% more than the 8.284 calls of 2015. An even more notable growth was recorded in the Adriatic, where the number of cruise vessels calls in 2016 was 14,9%, or 383 more than the calls of one year before. The number of calls declined substantially in the East Med, -28,2%, and almost eliminated in the Black Sea, where only 28 cruise calls happened in 2016. As a result, a total of 13.467 calls took place in 2016, a number that is 66 calls, or 0,5%, less than in 2015.

Looking at the 5-year trend, the number of calls declined in all four regions. The decline was marginal in the case of the West Med ports (just 0,3%), a single-digit percentage in the case of the Adriatic ports (9,1%), a significant one in the case of the East Med, where cruise calls declined by 26,3% (a decrease that results from developments in 2016 only), and even more significant in the Black Sea, where due to postponements of scheduled calls in the last two years the decline equals to a loss of 209 calls. Following these developments, the share of cruise calls in West Med ports increased in the last five years from 58,9% of calls in the Med to 64,0%, the percentage of the Adriatic remained almost stable (22,0%), while East Med and the Black Sea have seen their respective shares of the total cruise calls in the Med declining (**Figure 4.4**).

Table 4.3: Total Cruise Calls per region

Region	2016	2015	Variation 2016/2015	2012	Variation 2016/2012
West Med	8.617	8.284	4,02%	8.641	-0,28%
Adriatic	2.961	2.578	14,86%	3.259	-9,14%
East Med	1.861	2.590	-28,15%	2.525	-26,30%
Black Sea	28	81	-65,43%	237	-88,19%
Total	13.467	13.533	-0,49%	14.662	-8,15%

Figure 4.4: Cruise Calls Evolution per region



The West Med is the region where most home-porting activities are happening (Table 4.4). Home-porting activities in 28 different ports in the West Med total in 2016 5,41 million passengers; in 2015 that number had reached 5.22 million passengers. Barcelona alone hosted more than 1,56 million home-porting passengers and five other ports hosted between 500.000-850.000 such movements (Civitavecchia, Genoa, Balearic Islands, Savona and Marseille). Eleven other ports that are located in the Adriatic region registered 1,67 million home in/out passengers within 2016, with Venice alone hosting 1,4 million of such passengers and Bari being the only other Adriatic port

hosting more than 100.000 home-porting passengers.

Eight additional home-porting ports are located in the East Med, with Piraeus hosting the vast majority of the home-porting traffic in 2016 (352.000 passengers). The number of home in/out passengers was 1,67 million in the case of the Adriatic and almost 498.000 in the East Med. As regards the Black Sea, most of the cruise passengers that visited its ports in 2015 were transit passengers, as even the few cruises that had used the region for home-porting in 2015 were not repeated in 2016. Trabzon forms the only port that recorded cruise calls departing from the Black Sea.

The total of home in/out passenger movements recorded in 2016 in the ports that are members of MedCruise was just 0,3%, or 20.572 passengers less than the respective movements that had happened a year before. The medium-term trend is also marginally negative, as the ports of the sample hosted in 2016 2,2% less home-porting passengers than in 2012. In absolute numbers, 7,57 million passengers embarked, or concluded, a cruise at a port in the Med, whereas this total was 7,75 in 2012.

Table 4.4: Total Home In/Out Passengers per region

Region	2016	2015	Variation 2016/2015	2012	Variation 2016/2012
West Med	5.406.968	5.220.561	3,57%	5.181.777	4,35%
Adriatic	1.671.031	1.612.830	3,61%	1.820.592	-8,21%
East Med	497.748	757.091	-34,26%	737.523	-32,51%
Black Sea	463	6.300	-92,65%	10.450	-95,57%
Total	7.576.210	7.596.782	-0,27%	7.750.342	-2,25%

Figure 4.5 illustrates the shares of home in/out passengers per MedCruise region since 2012. Within this period the share of the West Med increased by 3,5% to 71,4% of the total. This occurred at the expense of the home-porting traffic in the Adriatic and the East Med. The share of the Adriatic lowered from 23,5% to 22,1% of the total.

The share of East Med, declined from 9,5% in 2012 to 6,6% in 2016, though it is noteworthy that the percentage of the region had remained stable before the so difficult last year. The Black Sea started recording some home-porting activities in 2012, yet today the region hosts a tiny share of less than 0,1%.

2016 71,4% 22,1% 6,6% 0.0% 68.7% 21.2% 10,0% 0.1% 2015 66,2% 2014 24,0% 9,5% 2,0% 2013 66,5% 10,3% 2,1% 23,1% 23,5% 2012 66,9% 9.5% 1.6% 0% 20%4 0% 60%8 0% 100% ■ West Med ■ Adriatic ■ East Med Black Sea

Figure 4.5: Home In/Out Passengers Evolution per region

West Med ports registered in 2016 a total of 14,53 million transit passenger movements (**Table 4.5**). Following this 7,7% increase comparing to 2015, which is the biggest annual growth of all regions as regards the number of transit passengers, the share of the region in terms of transit traffic increased to 75,2% of the total, comparing to a share that equal 68,6% five years before (**Figure 4.6**).

Cruise ports located in Adriatic also recorded a growth of transit cruise passengers in 2016. The growth was 5,3% as the Adriatic ports hosted 3,07 million transit passengers comparing to 2,92 the year before. Comparing to 2012, transit passengers increased by 1,2% and the share of the Adriatic lowered to 15,9% of the total comparing to 16,7% five years before. The number of transit passengers in East Med ports in 2016 was 24,5% less than in 2015, and 33,3% less than in 2012. Black Sea ports have seen extensively lower numbers of passengers cruising

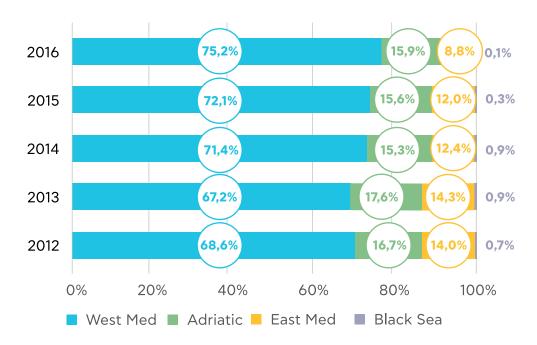
the region in 2016, with the 16.279 transit passengers traffic standing 87,7% lower than the respective passengers in 2012.

In total, on an annual basis transit passengers in the Med and its adjoining seas increased in 2016 by 3,2% and equal to 19.315.665 passengers. Comparing to 2012 the growth stands even higher, at 6,2%. Yet, this growth is the outcome of the 16,4% growth that happened in West Med and was partially counterbalanced by the decline that happened in the three other regions under examination. A result of these developments is the surge of the share of the transit passengers in the region that are hosted by West Med ports (Figure 4.6). Conversely the Adriatic ports share of the total transit passenger movements was 15,9% (comparing to 16,7% in 2012), the East Med ports share was 8,8% of the total (comparing to 14,0% five years earlier). The share of Black Sea ports remains small, standing at just 0,1% of the total.

Table 4.5: Total Transit Passengers per region

Region	2016	2015	Variation 2016/2015	2012	Variation 2016/2012
West Med	14.528.596	13.487.423	7,72%	12.479.458	16,42%
Adriatic	3.075.743	2.920.110	5,33%	3.038.421	1,23%
East Med	1.695.047	2.244.873	-24,49%	2.541.412	-33,30%
Black Sea	16.279	64.634	-74,81%	132.528	-87,72%
Total	19.315.665	18.717.040	3,20%	18.191.819	6,18%

Figure 4.6: Transit Passengers Evolution per region



4.3 The MedCruise Growth Indexes (MEDGRI)

In order to facilitate the monitoring of cruise activity trends in the Mediterranean and its adjoining seas, MedCruise established two indexes aiming to give a clear picture of the evolution of cruise passenger movements and cruise calls respectively, in each of the four MedCruise regions, as well as in the Med as a whole, since 2010.

MEDGRIpax is the index that monitors the annual trend of cruise passenger movements in the Med and in each of the four regions in terms of passenger movements. The index has 2010 as the basis year (MEDGRIpax=100). **Figure 4.7** presents the evolution since the base year, illustrating the imbalanced nature of this growth. Following a setback in 2014 (MEDGRIpax=105) the index returned to higher levels (MEDGRIpax=111 in 2016).

Looking at regional trends Black Sea ports that had experienced the most remarkable growth of all regions in 2013 and 2014, returned in 2015 to half the levels of 2010 (as the index in the particular case stands at 57), and to just 13 in 2016. On the one hand it is tempting to emphasise the importance

of the broader events (social, economic hardship, security, and geopolitical tensions) on the evolution of cruise activities in a particular region. On the other hand, one might acknowledge the potential of the Black Sea region, as demonstrated in 2013 and 2014, and explore mechanisms for returning to growth once stability in all respects returns to the region. The index is lower (85) in the case of East Med region as well, though one year before MEDGRIpax in the East Med was standing at 115, the highest level of all in the particular year. The two other regions continue to host more cruisers than those they were hosting in 2010, with the respective 2016 values of MEDGRIpax standing at 112 in the Adriatic and at 116 in the West Med (127) case.

MEDGRIcalls monitors the annual trend of cruise calls in the Med, and in each of the four regions, having again 2010 as the basis year (MEDGRIcalls=100). The evolution of MEDGRIcalls, which is illustrated in Figure 4.7, is associated with the size of the deployed vessels, as well as with the better utilisation of calling vessels.

MEDGRIpax monitors trends in cruise pax

MEDGRIcallsmonitors
trends in cruise
calls

Cruise passenger numbers in the Med and its adjoining seas are more than in the past, but the number of vessels is lower than those of 2010 in all regions. In two regions though, the West Med and the Adriatic, the number of calls remains stable; a 2016 MEDGRIcalls=99 was recorded in the West Med and a MEDGRIcalls=96). In East Med,

the decline of the number of cruise calls is comparatively bigger than that of the decline of cruise passenger movements, as in 2016 MEDGRIcalls=67. Black Sea ports had seen in previous years the size of visiting cruise ships increasing, but in 2015 and 2016 this trend reversed and the number of calls was minimal

Figure 4.7: Trends in MedCruise regions: The MedCruise Growth Indexes (2010=100)

MEDGR12010=100

MEDGRIpax=111

MEDGRIcalls=91

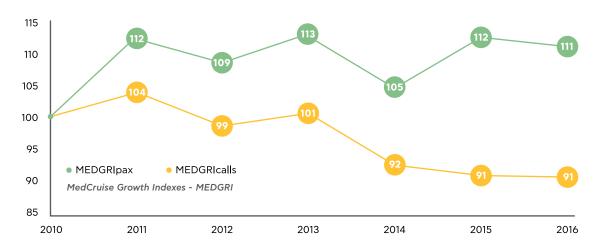
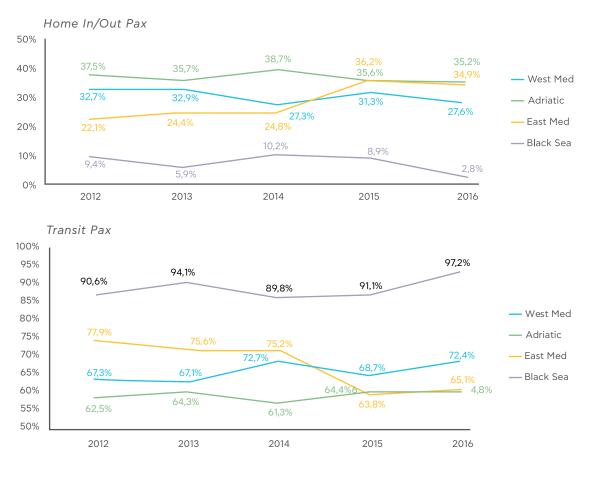


Figure 4.8 provides visualised information on the evolution of home in/out shares per region, as well as those of the transit passenger movements comparing to the total of the cruise passengers recorded in each of the four MedCruise regions per year. Evidently,

a major part of cruise activities taking place in the Adriatic (35,2% in 2016), the East Med (34,9%) and to a lesser extent the West Med (27,6%), are home-porting activities. The respective percentage of the Black Sea is tiny (2,8% in 2016 comparing to 8,9% in 2015).

Figure 4.8: Home In/Out vs Transit Passenger Shares Evolution per region



4.4 Major ports per MedCruise region

In this section the reader might find a presentation of the major ports per region, an overall picture of the variation of passenger movements and cruise calls when comparing the activities of 2016 with those of 2015, as well as a similar comparison with the passenger movements and calls that had been recorded in 2012.

Table 4.6 presents the three major ports of each region as regards total passenger movements, **Table 4.7** the three major ones as regards cruise calls.

Table 4.6: Major Ports per region: Total Cruise Passenger Movements

Region	No	Port	2016	2015	Variation 2016/2015	2012	Variation 2016/2012
	1	Barcelona	2.683.594	2.540.302	5,64%	2.408.634	11,42%
West Med	2	Civitavecchia	2.339.676	2.271.652	2,99%	2.393.570	-2,25%
	3	Balearic Islands	1.957.429	1.996.533	-1,96%	1.341.510	45,91%
	1	Venice	1.605.660	1.582.481	1,46%	1.775.944	-9,59%
Adriatic	2	Dubrovnik	831.730	830.684	0,13%	981.448	-15,25%
	3	Corfu	748.914	647.346	15,69%	655.764	14,20%
	1	Piraeus	1.094.135	980.149	11,63%	1.198.047	-8,67%
East Med	2	Egyptian Ports	411.626	514.887	-20,06%	63.833	544,85%
	3	Kusadasi	347.232	567.291	-38,79%	564.555	-38,49%
	1	Constantza	6.912	31.856	-78,30%	34.010	-79,68%
Black Sea	2	Burgas	5.833	7.575	-23,00%	999	483,88%
	3	Odessa	1.242	6.563	-81,08%	72.516	-98,29%

Table 4.7: Major Ports per region: Total Cruise Calls

Region	No	Port	2016	2015	Variation 2016/2015	2012	Variation 2016/2012
	1	Civitavecchia	833	794	4,91%	1.040	-19,90%
West Med	2	Barcelona	758	749	1,20%	774	-2,07%
	3	Balearic Islands	742	788	-5,84%	632	17,41%
	1	Dubrovnik	639	475	34,53%	659	-3,03%
Adriatic	2	Venice	529	521	1,54%	661	-19,97%
	3	Kotor	487	411	18,49%	343	41,98%
	1	Piraeus	625	621	0,64%	763	-18,09%
East Med	2	Egyptian Ports	361	423	-14,66%	n.a.	-
	3	Kusadasi	278	513	-45,81%	487	-42,92%
	1	Constantza	8	25	-68,00%	41	-80,49%
Black Sea	2	Odessa	5	13	-61,54%	121	-95,87%
	3	Burgas	4	5	-20,00%	1	-

Table 4.8 and Table 4.9 present information on the leading, in terms of size, ports in each region as regards home in/out passenger movements and transit passenger movements respectively.

In the West Med, Barcelona hosted 1,55 million home in/out passengers, which is more than any other port in the entire Med. Civitavecchia accommodated 847.009 home

in/out passengers. Six more ports recorded more than 100.000 cruise passengers of this type in 2016. These were Genoa, Balearic Islands, Savona, Marseille, Naples and Valletta. Precisely the same ports had hosted more than 100.000 passengers the year before. Four more ports – Malaga, Tenerife Ports, Palermo, and Valencia – hosted more than 50.000 home in/out passengers in 2016. The region saw the aggregate home in/out

passengers increasing within 2016 by 3,6%. The increase since 2012 stands at 4,3%. Venice, the second major port of all in the Med and its adjoining seas as regards the hosting of passengers embarking and disembarking a cruise, hosted 1,41 million home in/out passengers within a year. Bari (109.137 home in/out passengers), Corfu (70.684) and Dubrovnik (68.169) are the other three major home-ports of the Adriatic significant levels, even though the decline region, in terms of hosting such type of passengers. In aggregate, the Adriatic ports registered 3,6% more home in/out passengers comparing to a year before, yet 8,2% less than the respective traffic of 2012.

The major East Med homeport is Piraeus (352.663 home in/out passengers in 2016), followed by Cyprus ports (58.163 home in/out passengers). Piraeus registered a significant rise of home-porting activities in 2016 (24,1%) both because it hosted the home-porting of Carnival Vista, but also because a number of cruise vessels were redirected from Istanbul. In fact, a year before, Istanbul was standing as the second biggest home-port in the East Med, hosting 203.135 home-porting passenger movements; however following rerouting of deployed fleet in the region this traffic was minimal in 2016. Cyprus ports also experienced a decline of home-porting activities in 2016, comparing to those of 2015 (-12%). Another Turkish port, Antalya (44.476 home in/out passengers), was the other port in the East Med that hosted in 2016 home in/out passengers of of cruise activities within the turbulent 2016 was remarkable in the case of this port as well. Following the negative developments of 2016, the total of home in/out passengers in the region was 32,5% lower than the total of 2012.

Sochi was the only port of the Black Sea region that recorded a home-porting cruise activity (452 passengers). Due to the geopolitical developments, Constantza, Sochi and Odessa, three Black Sea ports that had hosted such activities in the recent past failed to register any such calls, thus it remains to be seen whether conditions will allow the return of home-porting in the near

Table 4.8: Major Ports per region: Total Home In/Out Passengers

Region	No	Port	2016	2015	Variation 2016/2015	2012	Variation 2016/2012
	1	Barcelona	1.555.819	1.363.754	14,08%	1.438.383	8,16%
West Med	2	Civitavecchia	847.009	868.143	-2,43%	920.612	-8,00%
	3	Genoa	606.278	565.687	7,18%	530.872	14,20%
	1	Venice	1.408.066	1.364.044	3,23%	1.444.100	-2,50%
Adriatic	2	Bari	109.137	85.314	27,92%	196.423	-44,44%
	3	Corfu	70.864	69.926	1,34%	64.165	10,44%
	1	Piraeus	352.663	284.241	24,07%	329.168	7,14%
East Med	2	Cyprus Ports	58.163	66.120	-12,03%	90.511	-35,74%
	3	Antalya	44.476	161.505	-72,46%	145.600	-69,45%
Black Sea	1	Trabzon	452	0	n/d	0	n/d

Following a major rise of transit passengers for a second successive year, Balearic Ports joined Civitavecchia and Naples as the ports accommodating more transit passengers than any other port in the West Med (Table 4.9). Each of these three ports hosted more than 1,1 million transit passengers per year, as did Barcelona (1,13 million passenger movements) and Marseille (1,12 million movements). In the case of six more West Med ports (Tenerife Ports, Livorno, Valletta, French Riviera Ports, Madeira Ports, La Spezia) transit cruise passenger movements in 2016 total between 500.000 and 1.000.000 movements.

Dubrovnik sustains as the major port of the Adriatic region in terms of transit passengers. This is despite the fact that the 763.561 transit passengers that visited Dubrovnik in 2016 were 20,2% less than those visiting the port a year earlier (yet insignificantly less (-0,7%) than in 2012). Corfu that hosted just over 678.000 transit passengers in 2016, or 14,6% less than in 2015 and 17,4% more than in 2012 and Kotor, which recorded an impressive annual expansion within 2016, and thus standing at levels that are 21,9% higher than five years before, contributed significantly to the five-year positive change of transit passengers cruising the Adriatic Sea (1,2%).

Piraeus, Kusadasi and Heraklion are the leading ports in East Med. Souda/Chania, which hosted 147.915 transit passengers in 2016, Cyprus ports, which hosted 83.195 transit passengers, and Bodrum (83.195 passengers) stand as the other East Med ports that achieved more than 50.000 transit cruise passengers within 2016. A year earlier, Istanbul would be included in the list of the top-3 cruise ports in the region, yet

in 2016 the port hosted just 20.456 cruise passengers.

In the Black Sea, all cruise ports have registered low levels of cruise activities within 2016. Comparing with the records of 2012, Odessa lost 81,2% of its transit passenger traffic, while Constantza and Burgas hosted respectively 77,8% and 23,0% less transit passengers.

Table 4.9: Major Ports per region: Total Transit Passengers

Region	No	Port	2016	2015	Variation 2016/2015	2012	Variation 2016/2012
	1	Civitavecchia	1.492.667	1.472.958	1,34%	1.403.509	6,35%
West Med	2	Balearic Islands	1.357.248	875.125	55,09%	1.442.605	-5,92%
	3	Naples	1.164.041	1.137.014	2,38%	1.142.899	1,85%
	1	Dubrovnik	763.561	956.816	-20,20%	768.887	-0,69%
Adriatic	2	Corfu	678.050	591.599	14,61%	577.420	17,43%
	3	Kotor	535.232	244.849	118,60%	439.108	21,89%
	1	Piraeus	741.472	868.879	-14,66%	695.908	6,55%
East Med	2	Kusadasi	329.186	545.973	-39,71%	529.641	-37,85%
	3	Heraklion	231.478	168.106	37,70%	216.461	6,94%
	1	Constantza	6.912	30.739	-77,51%	31.189	-77,84%
Black Sea	2	Burgas	5.833	999	483,88%	7.573	-22,98%
	3	Odessa	1.233	62.068	-98,01%	6.548	-81,17%

4.5 Cruise Traffic per country

MedCruise members spread in 18 different countries in the Mediterranean and its adjoining seas. **Table 4.10** presents the cruise activities that were registered per country. The fact that MedCruise members represent in most cases more than 80% of the total cruise activities per country allows meaningful conclusions on the trends observed. It is acknowledged though this is not in all cases the total traffic within the country, as the numbers of reporting might not always correspond to the total of cruise ports in the respective country.

Figure 4.9 pictures the shares of cruise activities per major country. Double-digit shares of the total cruise activities happening in the Med and its adjoining seas are recorded in Italy (38,0%) and Spain (24,5%), while France (9,3%), Greece (8,4%), Croatia (4,6%) and Portugal (4,3%) follow with single-digit percentages.

As regards the number of cruise calls, the share of Italy is 29,6% of the total calls, that of Spain 20,4% and that of Greece 10,8%. The other major (in terms of cruise calls per year) countries are Croatia (8,6%), France (8,6%) and Portugal (5,7%).

Home in/out passenger shares concentrate in Italy and Spain, with the two countries hosting 50,4% and 31,5% of the total respectively. France (7,1%), and Greece (5,7%) also register notable shares of home-porting activities in the Med.

Transit passenger movements per country are more balanced. Italy (33,9%), Spain (22,1%) and France (10,5%) host double-digit shares, with Greece (9,7%), Croatia (6,2%) and Portugal (5,9%), retaining significant shares as well.

Figure 4.9: Cruise Traffic per MedCruise Country (2016)

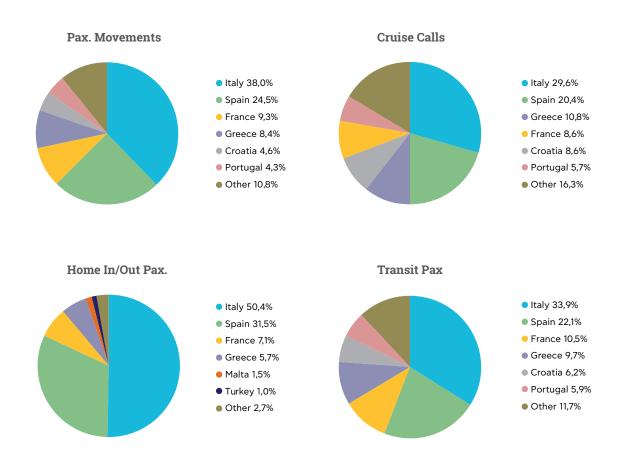


Table 4.10 lists the cruise passenger movements that were recorded in 2016 per country and the respective variations observed when comparing these data with those of previous years.

Table 4.10: Cruise Passenger Movements per MedCruise Country

Country	2016	% Share in 2016	2015	Variation 2016/2015	2012	Variation 2016/2012
Italy	10.427.133	37,99%	10.377.455	0,48%	10.205.218	2,17%
Spain	6.734.455	24,54%	6.559.623	2,67%	6.102.661	10,35%
France	2.564.945	9,35%	2.311.670	10,96%	1.963.452	30,63%
Greece	2.300.473	8,38%	2.054.327	11,98%	2.225.052	3,39%
Croatia	1.269.993	4,63%	1.203.433	5,53%	1.272.433	-0,19%
Portugal	1.190.404	4,34%	1.249.108	-4,70%	1.237.541	-3,81%
Malta	682.970	2,49%	668.277	2,20%	604.014	13,07%
Montenegro	536.644	1,96%	442.029	21,40%	246.623	117,60%
Turkey	500.330	1,82%	1.423.954	-64,86%	1.387.772	-63,95%
Egypt	411.626	1,50%	514.887	-20,06%	n.a.	-
Gibraltar	404.005	1,47%	344.140	17,40%	291.620	38,54%
Monaco	185.392	0,68%	259.325	-28,51%	232.921	-20,41%
Cyprus	141.358	0,52%	173.309	-18,44%	248.356	-43,08%
Slovenia	78.923	0,29%	57.893	36,33%	64.456	22,44%
Bulgaria	6.942	0,03%	10.734	-35,33%	11.694	-40,64%
Romania	6.912	0,03%	31.856	-78,30%	34.010	-79,68%
Ukraine	1.242	0,00%	6.563	-81,08%	72.516	-98,29%
Russia	1.194	0,00%	19.501	-93,88%	20.080	-94,05%
Tunisia	757	0,00%	53.780	-98,59%	528.708	-99,86%

Slovenia (36,3%), Montenegro (21,4%), Gibraltar (17,4%), Greece (12,0%) and France (11,0%), are the countries that registered the biggest growth of annual passenger movements in 2016 comparing to the previous year. Cruise activities in the case of the Black Sea countries presented substantial variations in 2016, yet the instability observed in the region justifies the absence of any conclusions as regards cruise developments in the countries of the region. The same holds true for Tunisia records as well.

The evolution of cruise traffic is quite different when comparing the variation of traffic since 2012. Mediterranean French ports saw their cruise passenger numbers increasing by 30,6%, while in Montenegro such activities were doubled within the 5-year period. Gibraltar also hosted 38,5% more activities in 2016, with the increase of cruise passenger movements also being remarkable in Slovenia (22,4% growth). Double-digit growth was recorded in Spain (10,4%) and Malta (13,1%). Italy (2,2%) and Greece (3,4%) are the other two countries where cruise activities increased, bringing the number of countries where cruise passenger movements enlarged to nine. In the other nine countries the size of cruise activities decreased - in four of them, namely Romania, Ukraine, Russia and Tunisia, cruise passenger movements in 2016 were almost marginal and a tiny percentage of the cruise traffic comparing to that they had recorded five years before.

Considering the annual variation of cruise calls per country (**Table 4.11**), Slovenia (40,8%), Croatia (25,8%), Montenegro (18,5%), and France (11,8%) are the countries that in 2016 saw the number of calls hosted increasing by more than 10%. Calls increased by a single digit variation in the three countries that host most calls of all. These are Italy (4,7%), Spain (1,8%), Greece (5,3%). In the fourth and fifth position stand Croatia and France, which as mentioned already experienced double digit annual growth. Malta (3,6%) and Gibraltar (9,8%) represent the other two countries where cruise calls in 2016 were more than those that had happened in 2015. In the other half countries, the number of cruise calls declined, in some of them i.e. Turkey, Tunisia and the Black Sea countries to extensive levels. For reasons that are already mentioned, we restrain from reaching conclusions on the trends in these particular countries.

The medium-term trends of the number of cruise calls per country indicate a rather different picture. Slovenia and Montenegro are the countries that within the period 2012-2016 experienced major increases in the number of calls. Gibraltar, France, Spain and Malta are the other four countries that, in 2016, accommodated higher numbers of calls comparing to 2012. In 11 other countries, the number of calls per annum was lower in 2016 than in 2012. Unquestionably, the larger size of cruise vessels deployed has had an impact on these trends that affect all cruise regions of the globe including the Med and its adjoining seas.

Table 4.11: Cruise Calls per MedCruise Country

Country	2016	% Share in 2016	2015	Variation 2016/2015	2012	Variation 2016/2012
Italy	3.990	29,63%	3.811	4,70%	4.296	-7,12%
Spain	2.743	20,37%	2.695	1,78%	2.625	4,50%
Greece	1.453	10,79%	1.380	5,29%	1.507	-3,58%
Croatia	1.160	8,61%	922	25,81%	1.347	-13,88%
France	1.152	8,55%	1.030	11,84%	1.050	9,71%
Portugal	772	5,73%	803	-3,86%	811	-4,81%
Montenegro	487	3,62%	411	18,49%	343	41,98%
Turkey	396	2,94%	1.037	-61,81%	1.224	-67,65%
Egypt	361	2,68%	423	-14,66%	n.a.	-
Malta	317	2,35%	306	3,59%	312	1,60%
Gibraltar	224	1,66%	204	9,80%	173	29,48%
Monaco	181	1,34%	209	-13,40%	185	-2,16%
Cyprus	135	1,00%	167	-19,16%	247	-45,34%
Slovenia	69	0,51%	49	40,82%	46	50,00%
Romania	8	0,06%	25	-68,00%	41	-80,49%
Bulgaria	8	0,06%	15	-46,67%	26	-69,23%
Ukraine	5	0,04%	13	-61,54%	121	-95,87%
Russia	4	0,03%	18	-77,78%	27	-85,19%
Tunisia	2	0,01%	15	-86,67%	227	-99,12%

4.6 Measuring Market Concentration

In an industry with limited number of providers, it is worth calculating industry concentration. Given the number of firms in a market and their respective market shares. the Herfindahl - Hirschman Index (HHI) measures the size of firms, in relation to The index with reference to the aggregate an industry and the amount of competition among them.

In the case of Med cruise ports, this index consists of the sum of squared market shares of the 50 largest ports (or summed over all the ports of the sample if there are fewer than 50). The result is proportional to the average market share, weighted by market share. As such, it can range from 0 to 1, moving from a huge number of very small firms to a single monopolistic provider of services. Increases in the HHI generally indicate a decrease in competition and an increase of market power. A HHI index below 0,01 indicates a highly competitive index,

below 0,15 indicates an unconcentrated index, between 0,15 to 0,25 indicates moderate concentration, whereas above 0,25 indicates high concentration.

market as well as the regional ones is detailed in **Table 4.12** and provides some interesting findings. When the total of the ports in the Mediterranean and its adjoining seas are under examination, HHI suggests that the market as regards both cruise passenger movements (HHI=0.04) and cruise calls (HHI=0,03) is not concentrated.

Focusing on the extent of market concentration in each of the regions, this is not always the case. The West Med region is unconcentrated both in terms of total passenger movements (HHI=0,07) and cruise calls (HHI=0,05), but the picture is different in the other regions.

Table 4.12: HHI (Herfindahl - Hirschman Index) per region - Cruise Pax. Movements & Calls

Region	Total Pax Movements					Cruise Calls				
Region	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
All four regions	0,04	0,04	0,04	0,04	0,04	0,03	0,03	0,03	0,03	0,03
West Med	0,07	0,07	0,07	0,07	0,07	0,05	0,05	0,05	0,05	0,05
Adriatic	0,22	0,21	0,22	0,20	0,20	0,14	0,15	0,15	0,14	0,15
East Med	0,21	0,21	0,21	0,16	0,24	0,18	0,17	0,17	0,15	0,19
Black Sea	0,33	0,35	0,23	0,30	0,31	0,32	0,31	0,21	0,21	0,19

The Adriatic has been a moderately concentrated market (HHI=0,20) as regards passenger movements, but not as regards cruise calls (0,15). The East Med is a region representing a moderately concentrated market in the case of both passenger movements (HHI=0,24) and cruise calls (HHI=0,19). The Black Sea on the other hand is a concentrated market as regards passenger movements (HHI=0,31), but just a moderately concentrated one as regards cruise calls (HHI = 0.19).

Neither the home-porting scene nor the scene of ports-of-call that host transit passengers only are concentrated (Table **4.13**). When focusing on the regional picture though some evidence of concentration at

the 'regional' markets is present in the case of home-porting. The Adriatic appears to be a region where a highly concentrated market exists (HHI=0,72) whereas the East Med stands as a concentrated region as well (HHI=0,53). Concentration occurs in the Black Sea, yet this is mostly due to the absence of cruise activities in the last two years.

The picture in the case of transit passengers is less concentrated, i.e. a moderate market concentration occurs in the East Med (HHI=0,26) and in the Black Sea (HHI=0,32). The Med has grown to the second biggest cruise region, being an open market that provides opportunities for all ports located in the region and destinations of interest.

Table 4.13: HHI (Herfindahl - Hirschman Index) per region - Home In/Out & Transit Pax.

Region	Home In/Out					Transit				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
All four regions	0,11	0,11	0,11	0,10	0,12	0,04	0,04	0,04	0,04	0,04
West Med	0,15	0,16	0,14	0,15	0,15	0,06	0,06	0,05	0,06	0,06
Adriatic	0,64	0,68	0,73	0,72	0,72	0,18	0,19	0,19	0,16	0,17
East Med	0,28	0,24	0,25	0,27	0,53	0,21	0,22	0,23	0,20	0,26
Black Sea	1,00	0,74	0,61	0,80	0,95	0,31	0,34	0,24	0,31	0,32

ANALYSIS PER MEDCRUISE PORT SIZE

Categories of MedCruise ports per size

This section presents an analysis of cruise traffic developments based on the size of MedCruise port members. The 75 MedCruise are divided in two categories based on the total cruise passenger movements per year. Category A contains 38 ports, while Category B includes 37.

These two categories are:

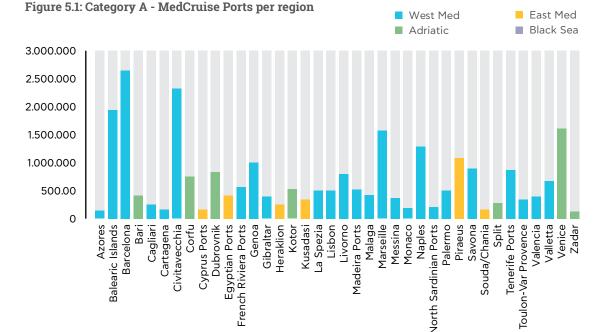
Category A: Port members with more than 100.000 cruise passenger traffic in 2016 Category B: Port members with less than 100.000 cruise passenger traffic in 2016

and different growth strategies from the smaller ones (Category B). The diverse quests and problems of infrastructure, the hosting of dissimilar kind of operations, and, in several times, the different types of cruise companies to deal with, make worth the examination of

Major ports (Category A) have different needs the trends within each of these categories in order to understand the dynamics observed.

> members included in Category A (see also the **Appendix** for the list of ports included in each of these categories).

> Figure 5.1 details the list of MedCruise port



5 ports host more than 1.5m pax/vear

Half of

MedCruise

ports host

more than 100.000

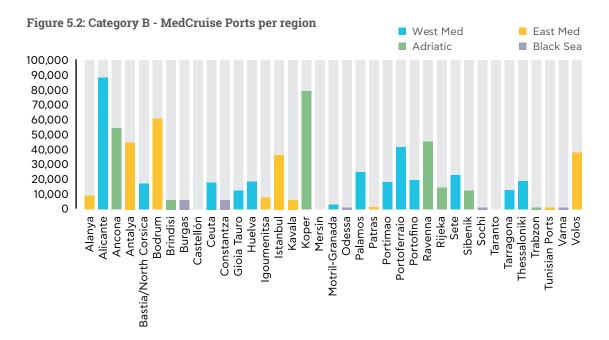
pax/year

In total, 25 of the 38 ports of Category A are located in the West Med. In terms of passenger movements hosted per year, among the major five ports only one is not a port of West Med. This is Venice, an Adriatic port that stands as the fourth major port (1,61 million passenger movements comparing to 1,58 a year earlier). The other four, Barcelona (2,68 million in 2016; 2,54 million in 2015), Civitavecchia (2,34 million in 2016; 2,27 million in 2015), Balearic Islands (1,96 million in 2015; comparing to 2 million

in 2015) and Marseille (1,60 million in 2016; comparing to 1,45 million in 2015) are all West Med ports. Eight ports located in the Adriatic are part of this group. Only five ports located in the East Med can be found in Category A, with Piraeus being the only one that hosted more than 1 million passenger movements in 2016 (980.149 passenger movements within 2015). There is no Black Sea port in this category as all ports in the region recorded less than 100.000 passenger movements in 2016.

Figure 5.2 details the list of ports included in Category B. The geographical distribution of this group of ports in the four regions is more balanced. All Black sea ports are listed in this size category. The list also includes 14 West Med ports, 11 East Med and seven

ports located in the Adriatic. The three larger cruise ports of Category B are located in three different regions. These are Alicante (89.197 passengers) in the West Med, Koper (78.923 passengers) in the Adriatic and Bodrum (21.261 passengers) in the East Med.



5.2 Cruise Traffic by size

Table 5.1 presents the major variations as regards total passengers, cruise calls, home in/out and transit passengers, in the case of each of the two size categories. In 2016, **Category A** ports registered a growth of total passenger movements by 2,5%, of home in/out passengers by 4,2% and of transit passengers by 7,6%. In terms of cruise calls Category A ports experienced an increase by 459 calls or 3,8%.

The growth of the total passengers hosted gets even stronger when examining the mid-term picture. Since 2012 the number of passengers per annum in Category A ports has grown by 7,8%, or approximately 1,9 million cruise passengers. The number of both home in/out passengers increased,

by 1,4%, the rise of transit passenger movements was substantially high (13,6%).

Category B ports recorded a significant decrease as regards cruise passenger traffic in 2016. The total passenger movements halved (-55,7%), the home in/out passengers hosted in these ports in 2016 where 81,1% less than a year before and transit passengers were 54,8% less than in 2015. The more volatile trend in the case of smaller ports is a common phenomenon. One year earlier, in 2015, all these trends had been quite similar with ports of Category B recording a decline in all three categories comparing to 2015. As regards cruise calls, the annual decline in Category B ports within 2016 stood at 35,0%.

Table 5.1: Cruise Traffic Variations by size category

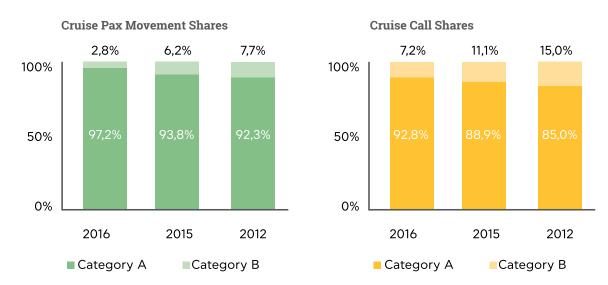
Category		2016	2015	Variation 2016/2015	2012	Variation 2016/2012
Total Pax.	Α	26.682.048	26.037.979	2,47%	24.756.910	7,78%
iotai rax.	В	763.650	1.723.885	-55,70%	2.056.050	-62,86%
Cruise Calls	A	12.491	12.032	3,81%	12.460	0,25%
Cruise Calls	В	976	1.501	-34,98%	2.202	-55,68%
Home In/	A	7.500.611	7.196.437	4,23%	7.400.395	1,35%
Out Pax.	В	75.599	400.345	-81,12%	349.947	-78,40%
Transit Pax.	Α	18.716.798	17.393.500	7,61%	16.471.250	13,63%
II alisit Pax.	В	598.867	1.323.540	-54,75%	1.720.569	-65,19%

What needs to be noted though is that this is the third successive year that this phenomenon was observed (the decline of total passengers in 2015 was 27,2%; passenger movements in Category B ports had declined in 2014 by 17,7%). Thus, the medium-term trends in Category B ports also reflect a picture of limited cruise activity. The total annual passenger movements decreased by 62,9% comparing to the records of five years earlier, with the decrease of home in/ out passengers being higher (78,4%) than the respective drop of transit passengers (65,2%). Cruise calls in 2016 were 55,7% less than the calls of 2012. Notably the ratio home in/out passengers: transit passengers in the case of Category A ports stands at 0,40 and is noticeably higher than the respective ratio of Category B ports (0,12).

As **Figure 5.3** shows, the share of Category B ports remains a minor share of the total cruise passengers that visit the Mediterranean and its adjoining seas. Taking for example the cruise passenger movements that happened in 2016, the share of Category B ports barely touches the 2,8% of the total. One year earlier this percentage was 6,2%, but developments that took place mostly in East Med and the Black Sea have resulted in a significant decrease of cruise activities over the last year. Five years earlier this percentage was standing at the notably higher level of 7,7% (2012).

As regards the total cruise calls hosted per year, the share of Category B ports exceeds 7,2% of the total calls of 2016. This share had been a double digit one a year earlier (11,1% in 2015) and even higher (15%) five years before.

Figure 5.3: Cruise Traffic Evolution by size category



5.3 Variations by Size Category per Region

Table 5.2 details the distribution of the total passenger movements hosted in 2016 by the ports of each size category per region. It also compares these records with the respective records of past years.

The evolution since 2012 suggests that Category A ports located in the West Med have seen the total cruise passenger traffic growing by 11,1%. In 2016 alone passenger movements in these ports increased by 500.000 passengers, or by 2,6% comparing to the respective numbers of 2015. Category A ports located in the Adriatic hosted in 2016 almost the same number of passengers as they did five years ago (-0,2%). The short-term trend though indicates a positive recovery momentum; the annual growth in 2016 was 7,6%, as the difficulties experienced due to a heated debate and thoughts of

major restriction in Venice and affected cruise activities in the region in previous years seem to be less of an issue. In the case of the East Med the records of 2016 stand slightly lower than five years before (-1,6%). This is, however, the result of the rather exceptional negative trend in the region within 2016, when passenger movements were 6,7% less than a year before. There are no cruise ports hosting more than 100.000 passengers per year in the Black Sea.

The case of Category B ports is quite different, as smaller in terms of traffic cruise ports have experienced a decline of the cruise passengers that they host per year. West Med ports of this size category experienced a 16,0% annual traffic drop in 2016, with the 312.707 passenger movements standing 58,5% lower than the passenger

movements of 2012. The five-year variation in the case of Adriatic is negative by 32,9%, as the ports of the sample hosted 105.000 passengers less than in 2012. Notably the variation is almost similar when one compares also the last five years (-33,3%), as Category B Adriatic ports hosted in 2015 similar numbers of passengers that they had hosted in 2012.

In the other two cases though, Black Sea and the East Med, the records of 2016 have been exceptionally low. The 223.375 cruise passengers recorded in the East Med ports of the sample are more than 730.000 less than a year before (-76,9%), and approximately 620.000 passengers less than the ones hosted five years before (-73,5%).

Of similar levels is the drop in the Black Sea ports. In 2016, these ports registered just 16.742 passengers, that is 76,4% less than a year before and 88,5% less than in 2012. The last year has been particularly difficult for the East Med, especially due to the conditions that prevailed in Turkey and led to minimal cruise traffic in the ports of the country. Similarly hard have been the conditions of the last two years in the Black Sea, where geopolitical tensions and disputes have led to the development of negative perceptions as regards cruising in the region. The managing bodies of the ports of these regions work hard in reversing these perceptions and develop a strategy that will allow cruise activities to return in their ports.

Table 5.2: Variations by size category per region: Total Passenger movements

Size Category	Region	% of Total 2016	2016	2015	Variation 2016/2015	2012	Variation 2016/2012
	West Med	72,02%	19.765.066	19.269.000	2,57%	17.792.580	11,09%
Α	Adriatic	16,53%	4.535.936	4.216.926	7,56%	4.544.752	-0,19%
A	East Med	8,68%	2.381.046	2.552.053	-6,70%	2.419.578	-1,59%
	Black Sea	-	-	-	-	-	-
	West Med	1,14%	312.707	372.139	-15,97%	753.818	-58,52%
В	Adriatic	0,77%	210.826	316.014	-33,29%	314.261	-32,91%
D	East Med	0,81%	223.375	964.798	-76,85%	841.722	-73,46%
	Black Sea	0,06%	16.742	70.934	-76,40%	146.249	-88,55%

As regards cruise calls (**Table 5.3**), West Med ports of Category A hosted in 2016 8.160 calls, or 60,6% of the total calls in the Med and its adjoining seas. The number of calls in the case of these West Med ports increased within a year by 5,2%, and comparing to 2012 by 1,8%. In percentage terms, the annual variation of calls in Adriatic and East Med Category A ports, has been of equal magnitude, but of different direction. Category A Adriatic ports in 2016 hosted 2.681 calls, or 15,6% more calls than a year before. Category A East Med ports hosted in 2016 1.650 calls, or 15,5% less calls than a year before. As a result, the 2016 cruise calls in Adriatic ports stand only one call shy of the number of calls recorded in 2012, and equal to 19,9% of the total calls in the Med

and its adjoining seas. In the case of East Med ports of this category, the calls of 2016 were 6,3% less than in 2012, while they equal to 12,3% of the total calls of the year.

Category B ports located in the Adriatic registered in 2016 more calls than the previous year by 8,1%. In all three other regions, the number of calls in smaller ports declined; on annual basis this variation was 12,8% in the West Med, of extraordinary levels in the East Med (decline of 66,9%) and in the Black Sea (decline of 65,4%). Over the last five years small ports in all regions recorded a decline of cruise calls, with the variation of last year being most negative in the East Med and the Black Sea.

Table 5.3: Variations by size category per region: Total Cruise Calls

Size Category	Region	% of Total 2016	2016	2015	Variation 2016/2015	2012	Variation 2016/2012
	West Med	60,59%	8.160	7.760	5,15%	8.017	1,78%
A	Adriatic	19,91%	2.681	2.319	15,61%	2.682	-0,04%
A	East Med	12,25%	1.650	1.953	-15,51%	1.761	-6,30%
	Black Sea	0,00%	-	-	-	-	-
	West Med	3,39%	457	524	-12,79%	624	-26,76%
В	Adriatic	2,08%	280	259	8,11%	577	-51,47%
В	East Med	1,57%	211	637	-66,88%	764	-72,38%
	Black Sea	0,21%	28	81	-65,43%	237	-88,19%

Table 5.4 details the trends per size category as regards the evolution of home in/out passengers. In this case, as one would expect, the big ports of Category A are dominant. These ports recorded 99% of passengers of this type (7.500.611 home in/out passengers). Thus, they are the ones demanding closer consideration. 5,41 million home in/out passengers within 2016 visited Category A West Med ports, a number that equals 71,3% of the total home in/out passengers in the Med. Another 21,9% (1,66 million passengers) is hosted in the Adriatic Category A ports and the rest 5,8% (436.174 passengers) in the biggest East Med ports. The records of 2016 are positive for all these ports with the growth being more significant in the case of East Med (11,5%) than in the Adriatic (4,7%) or the West Med (3,5%). Looking at the mid-term trends the levels of 2016 home

in/out traffic in the West Med were higher than in 2012 by 4,3%. In the Adriatic ports of Category A the number of home in/out passengers in 2016 stands 4,2% lower than in 2012, and in East Med the respective variation is -10,3%. In absolute numbers the total of home in/out passengers of 2016 stands at 100.000 movements more than those recorded in 2012 (1,4% growth).

As regards Category B ports, following the cancellations and the respective decline of the home-porting activities in the East Med, home-porting traffic in 2016 was of insignificant scale. A note of caution though is needed here, in order to best read the data: once a cruise port develops home-porting activities on a regular basis, the result is to host far more passengers per year, and probably moves to the Category A group.

Table 5.4: Variations by size category per region: Total Home In/out Pax.

Size Category	Region	% of Total 2016	2016	2015	Variation 2016/2015	2012	Variation 2016/2012
A	West Med	71,34%	5.405.033	5.220.016	3,54%	5.181.234	4,32%
	Adriatic	21,90%	1.659.404	1.585.066	4,69%	1.732.948	-4,24%
	East Med	5,76%	436.174	391.355	11,45%	486.213	-10,29%
	Black Sea	0,00%	-	-	-	-	-
	West Med	0,03%	1.935	545	255,05%	543	256,35%
В	Adriatic	0,15%	11.627	27.764	-58,12%	87.644	-86,73%
В	East Med	0,81%	61.574	365.736	-83,16%	251.310	-75,50%
	Black Sea	0,01%	463	6.300	-92,65%	10.450	-95,57%

Analysing the trends of transit passenger movements in the case of Category A ports (**Table 5.5**) a sizeable increase took place in the biggest (in terms of passenger movements) region of all, which is the West Med. In 2016, the large ports of West Med hosted 14,31 million transit passenger movements (74,1% of the total). This number is higher than that of the previous year by 9,1% (13,12 million in 2015; 12,04 million in 2014). The situation is similar in the Adriatic where transit passengers increased form 2,63 million in 2015 to 2,88 million in 2016, a positive annual variation of 9,3%. On the contrary, in 2016 the East Med Category A ports registered 6,8% less transit passengers. respectively 73,0% and 74,8% less transit

The 5-year trend indicates that the West Med has been the most dynamic of the three As a result, transit passengers in Category regions, recording a 22,0% increase of transit B ports have retained the 2012 volumes passengers. Within the same period transit passengers in Category A Adriatic ports have grown by 2,3%. In the case of East Med ports of this Category transit passengers declined by 20,7%.

The changes of transit passenger movements observed in the case of smaller ports indicate the presence of a far more volatile market. Ports that hosted in 2016 less than 100.000 cruise passengers have experienced double-digit variations on an annual basis. They also did so when comparing traffic changes to five years before. In the case of the West Med ports of this category transit passengers were 40,4%, less than a year before. In the Adriatic ports the decline was higher by 30,9%. The negative variation in the case of the East Med and Black Sea ports of this category has been higher; in 2016 these ports hosted passengers than they had done in 2015.

of transit passengers, only in the case of the Adriatic, where the records of 2016 were approximately 27.000 passengers lower. The medium-term change has been negative in all other regions. Transit passengers that visited Category B ports declined by 70,6% in the West Med, by 73,4% in the East Med and to just 16.279 passengers in the Black Sea. Yet, a note of caution is required here: some of these cruise activities are now spread to more ports that have not been included in the present part of the report and the related aggregates, due to thresholds that are used for the statistical analysis.

Table 5.5: Variations by size category per region: Total Transit Pax.

Size Category	Region	% of Total 2016	2016	2015	Variation 2016/2015	2012	Variation 2016/2012
	West Med	74,07%	14.307.021	13.115.829	9,08%	11.725.723	22,01%
Α	Adriatic	14,89%	2.876.531	2.631.860	9,30%	2.811.804	2,30%
A	East Med	7,94%	1.533.246	1.645.811	-6,84%	1.933.723	-20,71%
	Black Sea	0,00%	0,00%	0	0	0,00%	0
•	West Med	1,15%	221.575	371.594	-40,37%	753.735	-70,60%
В	Adriatic	1,03%	199.212	288.250	-30,89%	226.617	-12,09%
Ь	East Med	0,84%	161.801	599.062	-72,99%	607.689	-73,37%
	Black Sea	0,08%	16.279	64.634	-74,81%	132.528	-87,72%

5.4 Major Variations in MedCruise ports per size category and region

Categorising MedCruise ports per size category (Category A: large ports; Category B: small ports) and per region (four regions: West Med, Adriatic, East Med, Black Sea), this section presents the ports where the major positive variations took place in 2016 comparing (a) to 2015 and (b) to 2012. While the first comparison illustrates the most recent dynamics in the ports under examination, the second one portrays the medium term trends in ports in the Med and its adjoining seas.

Table 5.6 presents the short-term variation in terms of total passenger movements, cruise calls, home in/out and transit passenger movements.

Table 5.7 presents the respective mediumterm (five year) variations.

The threshold for the preparation of these listings remains the one applied throughout the report (10.000 passenger movements and 20 cruise calls in 2016). Whenever no port qualifies (i.e. there are no Category A Black Sea ports) the respective reference is omitted.

As a result, the following variations lists do not include Burgas (in 2016: 5.833 pax / 4 calls); Castellon (1.095 pax / 2 calls); Constantza (6.912 pax / 8 calls); Igoumenitsa (7.623 pax / 7 calls); Mersin (no calls); Odessa (1.242 pax / 5 calls); Patras (743 pax / 2 calls); Sochi (1.194 pax / 4 calls); Taranto (no calls); Trabzon (452 pax / 3 calls); Tunisian Ports (757 pax / 2 calls) and Varna (1.109 pax / 4 calls).

Table 5.6: Major Variations 2016/2015 (per size category/region)

	Size	Region	Port	2016	2015	Variation 2016/2015
		West Med	Toulon-Var Provence	362.479	240.833	50,51%
nts	Α	Adriatic	Zadar	136.462	74.660	82,78%
Pax mei		East Med	Souda/Chania	147.915	96.612	53,10%
Total Pax Movements	В	West Med	Ceuta	19.251	1.613	1.093,49%
μΣ	5	Adriatic	Rijeka	13.874	9.082	52,76%
		West Med	Toulon-Var Provence	278	124	1.24,19%
<u>s</u>	Α	Adriatic	Dubrovnik	639	475	34,53%
Total Calls		East Med	Souda/Chania	86	59	45,76%
otal	В	West Med	Ceuta	13	4	225,00%
Ľ	Ь	Adriatic	Rijeka	15	7	114,29%
		West Med	Malaga	92.246	32.492	183,90%
lax ax	Α	Adriatic	Bari	109.137	85.314	27,92%
Home In/ Out Pax		East Med	Heraklion	7.302	3.344	118,36%
ĬŌ	В	Adriatic	Ancona	10.896	6.676	63,21%
		West Med	Toulon-Var Provence	350.293	219.576	59,53%
Рах	Α	Adriatic	Zadar	135.584	73.596	84,23%
Sit F		East Med	Souda/Chania	147.915	96.612	53,10%
Transit	В	West Med	Ceuta	19.251	1.613	1.093,49%
-		Adriatic	Rijeka	13.874	9.082	52,76%

Table 5.7: Major Variations 2016/2012 (per size category/region)

ze	Region	Port	2016	2012	Variation 2016/2012
	West Med	La Spezia	507.531	50.239	910,23%
	Adriatic	Zadar	136.462	20.640	561,15%
	East Med	Souda/Chania	147.915	129.087	14,59%
	West Med	Tarragona	14.013	153	9.058,82%
	Adriatic	Rijeka	13.874	9.539	45,45%
	East Med	Volos	37.445	11.926	213,98%
	West Med	La Spezia	211	72	193,06%
	Adriatic	Zadar	114	59	93,22%
	East Med	Souda/Chania	86	54	59,26%
	West Med	Tarragona	22	1	2.100,00%
	Adriatic	Koper	69	46	50,00%
	East Med	Volos	46	21	119,05%
	West Med	Palermo	72.034	37.109	94,11%
	Adriatic	Dubrovnik	68.169	24.632	176,75%
	East Med	Piraeus	352.663	329.168	7,14%
	West Med	La Spezia	500.129	50.239	895,50%
	Adriatic	Zadar	135.584	19.871	582,32%
	East Med	Heraklion	231.478	168.106	37,70%
	West Med	Tarragona	12.171	153	7.854,90%
	Adriatic	Koper	78.872	64.292	22,68%
	East Med	Volos	37.445	11.926	213,98%
	ze	West Med Adriatic East Med Adriatic	West Med La Spezia Adriatic Zadar East Med Souda/Chania West Med Tarragona Adriatic Rijeka East Med Volos West Med La Spezia Adriatic Zadar East Med Souda/Chania West Med Tarragona Adriatic Koper East Med Volos West Med Palermo Adriatic Dubrovnik East Med Piraeus West Med La Spezia Adriatic Dubrovnik East Med Piraeus West Med La Spezia Adriatic Zadar East Med Heraklion West Med Tarragona Adriatic Koper	West Med La Spezia 507.531 Adriatic Zadar 136.462 East Med Souda/Chania 147.915 West Med Tarragona 14.013 Adriatic Rijeka 13.874 East Med Volos 37.445 West Med La Spezia 211 Adriatic Zadar 114 East Med Souda/Chania 86 West Med Tarragona 22 Adriatic Koper 69 East Med Volos 46 West Med Palermo 72.034 Adriatic Dubrovnik 68.169 East Med Piraeus 352.663 West Med La Spezia 500.129 Adriatic Zadar 135.584 East Med Heraklion 231.478 West Med Tarragona 12.171 Adriatic Koper 78.872	West Med La Spezia 507.531 50.239 Adriatic Zadar 136.462 20.640 East Med Souda/Chania 147.915 129.087 West Med Tarragona 14.013 153 Adriatic Rijeka 13.874 9.539 East Med Volos 37.445 11.926 West Med La Spezia 211 72 Adriatic Zadar 114 59 East Med Souda/Chania 86 54 West Med Tarragona 22 1 Adriatic Koper 69 46 East Med Volos 46 21 West Med Palermo 72.034 37.109 Adriatic Dubrovnik 68.169 24.632 East Med Piraeus 352.663 329.168 West Med La Spezia 500.129 50.239 Adriatic Zadar 135.584 19.871 East Med Heraklion <t< th=""></t<>



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.



#PortsTogether

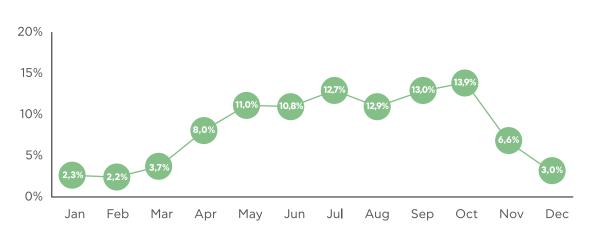
SEASONALITY ANALYSIS

6.1 Seasonality in MedCruise Ports

The seasonality of cruise activities in MedCruise ports is the theme of this section of the report. The focus is on how cruise traffic is distributed on a monthly and seasonal basis. The report also discusses the observed variations depending on the size or the region where a port is located.

Figure 6.1 illustrates the shares of passenger movements per month in 2016. The highest share of cruise passenger movements in 2016 was recorded in October (13,9%). Notably, the same happened in the years 2013-2015 as well, as October hosted around 14,0% of the cruise traffic in these years. In 2012, the month when the major percentage of passenger movements concentrated had been August (14,0%).

Figure 6.1: Cruise Passenger Shares per month (2016)



October 2016: Busiest cruise month (14% of total pax)

As regards cruise calls, the highest share was also registered in October (14,4%). A year earlier, October 2015 had hosted 15,3% of the total annual calls, being also the most populated month of the year.

September 2016 was the second busiest month of the year, with 13,0% of annual passenger movements and 13,4% of annual cruise calls recorded during this month (**Table 6.1**).

Table 6.1: Total Cruise Traffic per month in 2016

Month	Total Cruise Pax	% of Total Cruise Pax	Total Cruise Calls	% of Total Cruise Calls	Pax/Call
January	618.681	2,25%	283	2,10%	2.186
February	599.426	2,18%	272	2,02%	2.204
March	1.002.070	3,65%	498	3,70%	2.012
April	2.198.321	8,01%	1.213	9,01%	1.812
May	3.018.321	11,00%	1.681	12,48%	1.796
June	2.959.161	10,78%	1.375	10,21%	2.152
July	3.492.826	12,73%	1.466	10,89%	2.383
August	3.545.682	12,92%	1.490	11,06%	2.380
September	3.570.017	13,01%	1.808	13,43%	1.975
October	3.804.591	13,86%	1.936	14,38%	1.965
November	1.810.276	6,60%	982	7,29%	1.843
December	826.326	3,01%	463	3,44%	1.785

May to October: 75% of total visits Each month of the May-October period hosts, in a most balanced way, passenger movement shares of 10-14%. In total, 74,3% of the 2016 cruise passenger movements happened during the specific six-months period. The share of the total passenger movements registered during the three winter months (January, February, December) of 2016 was 7,4%, whereas in 2015 the respective share equals to 7,2% of the total annual movements.

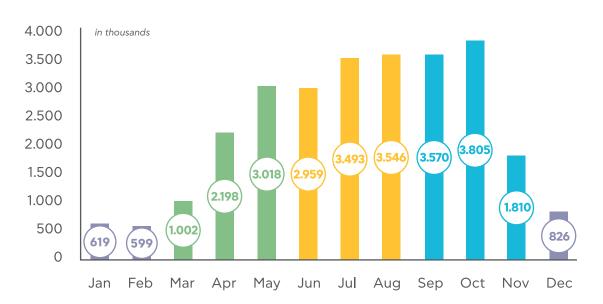
Figure 6.2 visualises the monthly distribution of the total cruise passenger movements per month that took place in the Med and its adjoining seas in 2016. May, July, August, September and October are the months when MedCruise ports recorded more than

three million passenger movements on a monthly basis.

In April and June 2016 this total ranged between 2 and 3 million, while 1,8 million passenger movements were recorded in November and one million in March. Less than 900.000 passenger movements happened per winter month of 2016, following the trend of previous years.

In 2016, the 36,4% of the total cruise passenger movements took place during the three summer months. In 2015 the same percentage stood at 37,2%. The respective share of both 2014 and 2013 stood at 35,4%, which is considerably lower than the one of summer 2012 when almost 40% of the annual cruise traffic took place.

Figure 6.2: Total Cruise Pax. per month (2016)



Detailing the total number of cruise calls per month, (**Figure 6.3**) reveals the presence of a 'regular season' that starts in April, with 1.213 calls, and reaches its peak in October with almost 2.000 calls – this period hardly includes November, when less than 1.000 calls are recorded. Less than 500 calls happen during March, while numbers for December are quite similar. The cruise calls recorded during the other two months of the winter, namely January and February, stand at 283 and 272 respectively. The monthly distribution of 2016 cruise calls stands as a regular pattern, given that a similar one was observed in the recent past as well.

Figure 6.3: Total Cruise Calls per month (2016)

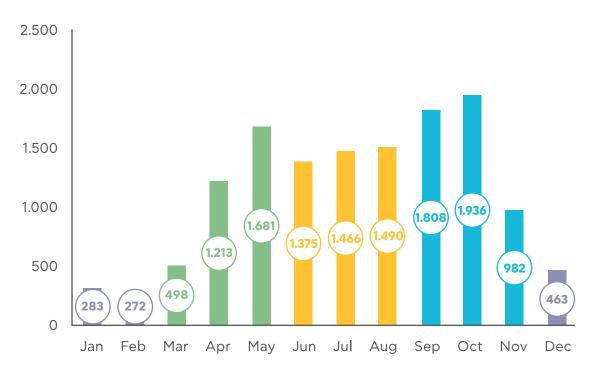


Figure 6.4 presents the average number of passengers per cruise call during each month of the year. The variations per month, as expected, are significant. In July the number of passengers per call appears to be 33,5% higher compared to the respective ratio of December. July is the month of 2016 with the highest rate of passengers per call (2.383), followed by August (2.380) and February

(2.204). The lowest rates are registered in December (1.785) and May (1.796).

Interestingly, this picture is rather different comparing to the one observed one year before, as January was the month of 2015 with the highest rate of passengers/call (2.603), whereas the lowest rate was recorded in May (1.823).

Figure 6.4: Average Pax/Call per month (2016)



July 2016: Highest pax per call rate (2.383)

6.2 Seasonality by region in 2016

The seasonality trends observed in each of the four distinctive regions in which MedCruise membership spreads (West Med, Adriatic, East Med, Black Sea) follow in certain respects dissimilar distributions (**Table 6.2**).

In West Med the cruise traffic is distributed in a more balanced way throughout the year. Cruise activities during the winter months correspond to a 9,2% share of the total cruise passenger movements in the region, while 34,3% take place during the summer.

In the Adriatic and the East Med cruise

traffic is concentrated mostly during the second half of the year, in particular the period commencing in June and ending in November. In absolute numbers the passenger movements in the Adriatic during the winter months (Dec-Feb) barely exceed 20.000, corresponding to a minimal 0,43% of the total traffic taking place in the region on an annual basis.

Traditionally, the Black Sea demonstrates higher concentration of cruise passenger movements during the autumn months; however, in absolute numbers this high percentage of 2016 (75,5%) corresponds to no more than 12.643 passengers.

Table 6.2: Trimester Shares of Cruise Traffic within the MedCruise Regions

Region	Tota	al Passenge	r Movement	Total Calls				
	Mar-May	Jun-Aug	Sept-Nov	Dec-Feb	Mar-May	Jun-Aug	Sept-Nov	Dec-Feb
West Med	23,13%	34,33%	33,36%	9,18%	26,60%	29,15%	35,15%	9,10%
Adriatic	20,14%	45,12%	34,32%	0,43%	20,60%	40,43%	35,22%	3,75%
East Med	23,62%	36,97%	32,47%	6,93%	25,95%	33,32%	34,12%	6,61%
Black Sea	22,06%	2,43%	75,52%	0,00%	25,00%	7,14%	67,86%	0,00%
Total	22,66%	36,43%	33,47%	7,45 %	25,19%	32,16%	35,09%	7,56 %

Region	Но	me In/Out	Passengers	Transit Passengers				
	Mar-May	Jun-Aug	Sept-Nov	Dec-Feb	Mar-May	Jun-Aug	Sept-Nov	Dec-Feb
West Med	23,48%	34,88%	33,21%	8,42%	22,94%	34,29%	33,23%	9,55%
Adriatic	19,80%	46,41%	33,47%	0,32%	20,32%	44,41%	34,77%	0,50%
East Med	23,96%	41,62%	33,59%	0,82%	24,43%	39,44%	33,17%	2,97%
Black Sea	0,43%	0,43%	99,14%	0,00%	22,67%	2,48%	74,84%	0,00%
Total	22,70%	37,86%	33,30%	6,13%	22,65%	36,33%	33,50%	7,52%

6.3 Seasonality by size in 2016

Table 6.3 details the shares of the total cruise traffic that correspond to each trimester of 2016 within the two different port size categories of MedCruise.

Category A ports (i.e., ports hosting more than 100.000 passenger movements in 2016) recorded a higher share of annual passenger movements hosted during the winter times (7,6%) comparing to the respective share observed in Category B ports (1,5%). One year earlier, in 2015, these percentages had been much closer to each other with Category A ports recording 7,0% and Category B ports no less than 5,4%.

In the case of Category A ports, the highest share of the cruise passenger traffic movements (36,4%) was registered during

the summer months. For size Category B ports the autumn proved to be the most popular season, since 38,4% of the total passenger movements in these ports were registered from September to November.

As regards cruise calls, in Category A ports the number of calls reaches its peak in the autumn, as 34,8% of total calls occurred during these months. This percentage though proves to be rather close to the one observed in summer months (32,4%). In the smaller in size Category B the peak happens during the summer months when 38,7% of the calls take place.

Focusing on the different types of passenger movements, the picture is quite balanced during the summer and autumn trimesters for ports of both categories. During each of these trimesters around one third of the total cruise passenger movements takes place. The only exception is the case of homeport activity in smaller ports, where a high concentration is observed during the autumn months (42,6%), while the period between March and May is

the one to follow in terms of home in/out passenger concentration (35,9%). Given the low levels of cruise passenger movements registered in Category B ports during winter months, it is no surprising that almost no home-porting activity (0,02%) took place in the particular ports during this period of time.

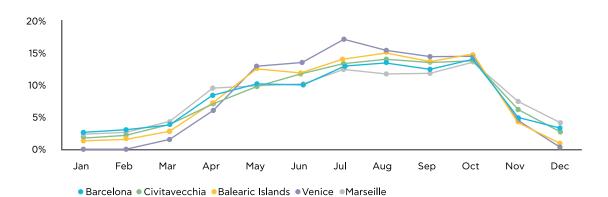
Table 6.3: Trimester Shares of Cruise Traffic within the two size categories

	Size Category	Mar-May	Jun-Aug	Sept-Nov	Dec-Feb
Cruise Pax Movements	А	22,62%	36,44%	33,32%	7,62%
Ciuise i ax i lovellielits	В	23,96%	36,14%	38,40%	1,51%
Cruise Calls	Α	25,06%	32,37%	34,81%	7,77%
Ciuise Calis	В	26,84%	29,51%	38,73%	4,92%
Home In/Out Pax	Α	22,57%	38,03%	33,21%	6,20%
Home my Out Fax	В	35,84%	21,56%	42,58%	0,02%
Transit Pax	Α	22,67%	36,23%	33,39%	7,70%
Hallsit Fax	В	21,98%	39,19%	37,06%	1,76%

6.4 Seasonality of cruise activity in MedCruise Ports

Seasonality trends in the major five ports in the Med (**Figure 6.5**) do not differ remarkably from that of the total sample. Barcelona, Civitavecchia and Marseille register in January, February and December movements that do not exceed 4% of their total annual traffic, yet are much higher than the respective shares of 2015. Balearic Islands are also close to reach these numbers, Venice records an insignificant share of passenger movements during winter months. The concentration of traffic in the period May-August is far more evident in Venice (58,3% of its total traffic) rather than in any other major port.

Figure 6.5: Major 5 MedCruise Ports Cruise Pax Seasonality 2016



Seasonality patterns of 5 major cruise ports

Table 6.4 presents those MedCruise ports registering the major concentration of their cruise activities during spring time. The top port of this list is Alanya, which hosts almost 87,0% of its annual cruise traffic during this trimester. Motril-Granada and Azores, both West Med port members, also benefit from spring months cruising; within this period the former hosts more than 52.2% of the

total of its annual passenger movements, and the latter 46,8%. Two other Turkish ports, Antalya and Istanbul host more than 45% of their annual movements during spring months, while in aggregate no more than 226.840 passenger movements or 3,7% of the total movements that take place in MedCruise ports during this period are recorded in the 10 most concentrated ports.

Table 6.4: Highest Concentration of Passenger Movements (March/April/May 2016)

No	Port	Region	Size	the port's	% share of all MedCruise ports trimester traffic	Total Pax Mar-May	Total Calls Mar-May
1	Alanya	East Med	В	86,97%	0,13%	8.064	8
2	Motril-Granada	West Med	В	52,21%	0,04%	2.386	10
3	Azores	West Med	Α	46,83%	0,95%	58.966	73
4	Antalya	East Med	В	46,72%	0,34%	21.213	8
5	Istanbul	East Med	В	45,91%	0,27%	16.852	19
6	Bastia/N. Corsica	West Med	В	39,08%	0,12%	7.243	8
7	Kavala	East Med	В	33,86%	0,03%	2.046	5
8	Volos	East Med	В	31,58%	0,19%	11.827	13
9	Cartagena	West Med	Α	29,91%	0,90%	56.175	40
10	Cyprus Ports	East Med	Α	29,76%	0,68%	42.068	32
	Total			-	3,65%	226.840	216

The picture is quite different in the case of the cruise passenger movements that take place during the summer months (Table 6.5). with the 871.837 movements of the 10 most Several ports register more than 45% of their concentrated ports representing 8,7% of annual cruise passenger traffic during these months, with this percentage exceeding

50% in five cases. Cruising during these months seems to be more concentrated, the share of all MedCruise ports during the summer months.

Table 6.5: Highest Concentration of Passenger Movements (June/July/August 2016)

No	Ports	Region	Size	the port's	% share of all MedCruise ports trimester traffic	Total Pax Jun-Aug	Total Calls Jun-Aug
1	Ancona	Adriatic	В	59,75%	0,33%	32.802	13
2	Tarragona	West Med	В	59,22%	0,08%	8.298	6
3	Gioia Tauro	West Med	В	54,67%	0,08%	7.521	7
4	North Sardinian Ports	West Med	Α	51,63%	1,09%	108.620	55
5	Huelva	West Med	В	51,24%	0,10%	10.285	8
6	Livorno	West Med	Α	49,77%	4,02%	402.117	170
7	Igoumenitsa	East Med	В	49,10%	0,04%	3.743	3
8	Portoferraio	West Med	В	48,07%	0,21%	20.553	47
9	Portofino	West Med	В	47,70%	0,09%	9.490	23
10	French Riviera Ports	West Med	Α	47,68%	2,68%	268.408	123
	Total			-	8,72%	871.837	455

Table 6.6 presents the ports with the highest concentration of their annual cruise traffic in autumn months. Evidently, this concentration is observed in smaller ports as all 10 ports included in the list form Category B ports (less than 100.000 passengers per year). The sum of the movements happening in these 10 ports

represents a very small percentage of the total movements that takes place in the Med during autumn. The list reveals an additional feature of cruise activities in the Med and its adjoining seas: the three autumn months is the period when several ports with comparatively fewer calls per year experience most of their movements.

Table 6.6: Highest Concentration of Passenger Movements (September/October/November 2016)

No	Port	Region	Size	% share of the port's total traffic	% share of all MedCruise ports trimester traffic	Total Pax Sep-Nov	Total Calls Sep-Nov
1	Castellon	West Med	В	100,00%	0,01%	1.095	2
2	Patras	East Med	В	100,00%	0,01%	743	2
3	Trabzon	Black Sea	В	100,00%	0,00%	452	3
4	Brindisi	Adriatic	В	81,29%	0,05%	4.284	10
5	Constantza	Black Sea	В	75,95%	0,06%	5.250	5
6	Odessa	Black Sea	В	75,20%	0,01%	934	4
7	Burgas	Black Sea	В	74,94%	0,05%	4.371	2
8	Sochi	Black Sea	В	73,28%	0,01%	875	3
9	Varna	Black Sea	В	68,62%	0,01%	761	2
10	Thessaloniki	East Med	В	66,88%	0,14%	12.625	14
	Total			-	0,35%	31.390	47

Cruise numbers during the three winter months are quite different insofar as the concentration in specific ports is concerned (Table 6.7). Tunisian Ports is the MedCruise port member registering the highest concentration during these months (58,5%). Tenerife, Madeira and Egyptian Ports are the ones to follow with shares standing at 38,4%, that take place in the Mediterranean and 33,5% and 30,7% respectively. Impressively, in the case of Tenerife Ports the 339.150 passenger movements that are registered

during this period represent 16,6% of the total trimester traffic in MedCruise ports.

The other seven ports of the list host shares of the range 10% to 20% of their total annual traffic during the months under examination. In total, 46,8% of the passenger movements its adjoining seas during winter months happen in the 10 ports presenting the major concentration.

Table 6.7: Highest Concentration of Passenger Movements (December/January/February 2016)

No	Port	Region	Size	% share of the port's total traffic	% share of all MedCruise ports trimester traffic	Total Pax Dec-Feb	Total Calls Dec-Feb
1	Tunisian Ports	West Med	В	58,52%	0,02%	443	1
2	Tenerife Ports	West Med	Α	38,36%	16,59%	339.150	194
3	Madeira Ports	West Med	Α	33,46%	8,55%	174.839	92
4	Egyptian Ports	East Med	Α	30,65%	6,17%	126.149	91
5	Savona	West Med	Α	16,30%	7,26%	148.337	39
6	Azores	West Med	Α	16,18%	1,00%	20.370	16
7	Palermo	West Med	Α	15,96%	3,98%	81.396	26
8	Sibenik	Adriatic	В	14,04%	0,08%	1.724	32
9	Volos	East Med	В	12,85%	0,24%	4.812	4
10	La Spezia	West Med	Α	11,61%	2,88%	58.926	14
	Total			-	46,77%	956.146	509

6.5 Winter Cruise

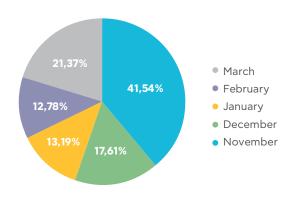
60 MedCruise host winter Cruise With the potential of increased winter tourism being at the centre of attention for several stakeholders, it is worth presenting the trends of cruise activities as well those ports that recorded the most passenger movements and cruise calls during the extended winter period that lasted from November 2015 to March 2016.

During this period 60 out of 75 MedCruise Ports recorded cruise activity. The port members that did not record any cruise traffic at all during these five months were Ancona, Bastia/North Corsica, Burgas, Ceuta, Constantza, Igoumenitsa, Odessa, Patras, Rijeka, Sochi, Taranto, Tarragona, Trabzon, Tunisian Ports and Varna.

The distribution of cruise activities within the five months period under examination is illustrated by **Figure 6.6**. It is November when 41,5% of the total winter tourism took place, whereas March and December also have considerable shares of the total winter cruise traffic.

Cruise activities taking place in the November-March period total between November 2015 and March 2016 4,7 million passenger movements, and 2.237 cruise calls (Table 6.8). The West Med ports hosted the major share of this total (more than 3,9 million passenger movements). This region recorded in 2016 a 4,6% increase of passenger movements comparing to the previous year. The increase in terms of shares is even more significant in the Adriatic and the East Med, yet the absolute numbers in these cases are comparatively small. Black Sea hosted no cruise traffic during the period under examination.

Figure 6.6: Cruise Passenger Shares per month



Winter cruisers increased by 9% since 2015

Winter cruise calls increased by 14% since 2015

Table 6.8: Winter Cruise Traffic per Region

	Cru	iise Passenç	ger Moveme	ents	Cruise Calls				
Region	Winter 2015 - 16	Winter 2014 - 15	Winter 2013 - 14	1 Year Evolution	Winter 2015 - 16	Winter 2014 - 15		1 Year Evolution	
West Med	3.924.022	3.751.408	3.808.446	34,60%	1.655	1.525	1.701	8,52%	
Adriatic	362.969	227.764	286.039	59,36%	311	217	289	43,32%	
East Med	375.020	295.726	332.708	26,81%	271	221	263	22,62%	
Black Sea	0	2.701	13.700	-100,00%	0	7	12	-100,00%	
Total	4.662.011	4.277.599	4.440.893	8,99%	2.237	1.970	2.265	13,55%	

Figure 6.7 visualizes winter traffic per MedCruise region per month. This figure illustrates the dominant role of West Med in all months. Both East Med region and Adriatic maintain a visible share in November and March. Unlike Adriatic, East Med retains significant levels also during the other three months.

Figure 6.7: Winter Cruise traffic per MedCruise region per month

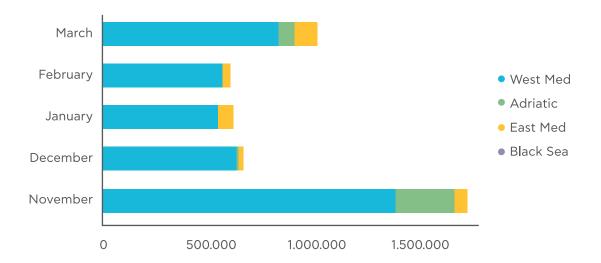


Table 6.9 presents the major ports in each region insofar winter cruising is concerned. Tenerife Ports top the list with 603.216 winter cruisers. Barcelona follows with 543.565 passengers celebrating a 15,0% increase comparing to the previous year; with Civitavecchia that comes next recording a slight decrease (-3,8%).

In the case of the Adriatic, Venice experienced a remarkable increase standing at 41,4%, while Dubrovnik that occupies the second place recorded a lower annual growth of 3,0%. Another Adriatic cruise port that saw its numbers of winter traffic considerably increasing in 2016 is Corfu, which occupies the third position in terms of winter cruise passenger movements in the region. Egypt tops the list with 98.664 winter cruisers in the East Med, yet negative trends were observed in the other two listed ports of the region. Piraeus, which is the major cruise port of East Med, recorded a 12,5% decline and Heraklion recorded a 2,7%.

Table 6.9: Winter Cruise 2016 - Major MedCruise Ports per region

Region	No	Port	Nov 15-Mar 16	Nov 14-Mar 15	Nov 13-Mar 14	1-Year Evolution
	1	Tenerife Ports	603.216	n.a.	n.a.	-
West Med	2	Barcelona	543.565	472.883	541.263	14,95%
	3	Civitavecchia	374.189	388.955	471.063	-3,80%
	1	Venice	126.702	89.583	90.561	41,44%
Adriatic	2	Dubrovnik	51.961	50.448	64.791	3,00%
	3	Corfu	47.618	34.851	49.528	36,63%
	1	Egyptian Ports	98.664	n.a.	n.a.	-
East Med	2	Piraeus	96.087	109.762	131.545	-12,46%
	3	Heraklion	48.026	49.328	46.223	-2,64%

Table 6.10 provides information on the distribution of traffic in the 15 ports hosting most cruise passenger movements in winter months. 13 of these ports are located in West Med, and only Venice in Adriatic and Egyptian Ports in East Med.

Tenerife Ports top this list with 603.216 passengers, with Barcelona being the

second one with 543.565 passengers and an annual increase standing at 15,0%. Madeira Ports (6,7%), Venice (41,4%) and Valletta (32,7%) hosted significantly increased winter traffic during last year, while Marseille (-11,6%), Balearic Islands (-7,0%), Genoa (-12,3%), Naples (-30,1%), Palermo (-10,0%) and Lisbon (-9,4%) saw their traffic decreasing considerably.

Table 6.10: Winter Cruise 2016 - Major 15 MedCruise Ports: Cruise Pax. Movements

No	Port	Nov 15- Mar 16	Nov 14- Mar 15	Nov 13- Mar 14	1-Year Evolution	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016
1	Tenerife Ports	603.216	n.a.	n.a.	-	136.399	167.846	101.109	86.183	111.679
2	Barcelona	543.565	472.883	541.263	14,95%	198.269	89.251	69.769	84.764	101.512
3	Civitavecchia	374.189	388.955	471.063	-3,80%	133.522	71.144	50.693	51.386	67.444
4	Savona	338.116	339.992	312.661	-0,55%	130.362	49.369	44.640	40.333	73.412
5	Madeira Ports	336.156	315.135	308.170	6,67%	87.090	77.821	64.235	45.597	61.413
6	Marseille	310.123	350.994	337.741	-11,64%	115.561	43.530	40.102	42.908	68.022
7	Balearic Islands	242.399	260.714	281.193	-7,02%	99.582	27.392	25.456	33.656	56.313
8	Genoa	239.345	272.900	232.049	-12,30%	81.515	46.241	31.269	35.568	44.752
9	Naples	162.634	232.813	152.084	-30,14%	59.617	31.306	17.863	22.623	31.225
10	Palermo	155.820	173.106	127.780	-9,99%	32.232	32.500	18.713	31.641	40.734
11	Malaga	139.028	144.955	138.527	-4,09%	58.692	26.927	17.667	14.271	21.471
12	Venice	126.702	89.583	90.561	41,44%	100.760	234	0	540	25.168
13	Valletta	119.868	90.365	92.397	32,65%	55.966	24.378	1.685	13.026	24.813
14	Lisbon	101.009	111.529	124.674	-9,43%	47.751	23.430	11.338	3.731	14.759
15	Egyptian Ports	98.664	n.a.	n.a.	-	n.a.	n.a.	57.548	18.760	22.356

Table 6.11 provides the respective list as far as cruise calls are concerned. In the top of this list one can find the ports of Tenerife with 375, while at the same time three more ports, namely Madeira Ports (182), Barcelona (153), and Civitavecchia (119) hosted more than 100

calls, with the calls in the other ports of the list standing within the 50-100 calls range. Whereas no major positive results were observed in terms of one-year growth, Lisbon experienced a significant decline of calls (-14,8%), with Genoa recording a very similar result (-14,5%).

Table 6.11: Winter Cruise 2016 - Major 15 MedCruise Ports: Cruise Calls

No	Port	Nov 15- Mar 16	Nov 14- Mar 15	Nov 13- Mar 14	1-Year Evolution	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016
1	Tenerife Ports	375	n.a.	n.a.	-	99	107	53	51	65
2	Madeira Ports	182	177	190	2,82%	54	46	31	21	30
3	Barcelona	153	163	205	-6,13%	68	26	16	19	24
4	Civitavecchia	119	129	166	-7,75%	51	23	14	13	18
5	Marseille	99	112	126	-11,61%	45	13	11	10	20
6	Balearic Islands	90	91	115	-1,10%	44	9	8	11	18
7	Naples	89	89	66	0,00%	28	17	12	15	17
8	Savona	87	86	85	1,16%	32	15	12	10	18
9	Malaga	72	78	74	-7,69%	40	11	6	6	9
10	Lisbon	69	81	86	-14,81%	34	15	8	2	10
11	Egyptian Ports	65	n.a.	n.a.	-	n.a.	n.a.	31	13	21
12	Piraeus	64	74	76	-13,51%	24	5	7	5	23
13	Dubrovnik	56	57	79	-1,75%	25	5	4	7	15
14	Genoa	53	62	57	-14,52%	20	12	6	6	9
15	Valletta	52	53	59	-1,89%	28	7	2	5	10

The **Appendix** presents the seasonality of cruise activities in MedCruise ports based on the shares that each port recorded per trimester, providing a clear picture of the distribution of traffic in each port per three months period during the year 2016.

FERRY TRAFFIC EVOLUTION IN **MEDCRUISE PORTS**

7.1 Ferry traffic in MedCruise ports

Cruise has evolved the last three decades as This is an analysis of the ferry traffic, i.e. a distinctive market in the majority of ports hosting such activities. In most of the cases, MedCruise ports. 17 out of these ports did though, cruise has been inextricably linked with other passenger activities such as the hosting of coastal shipping services. Thus, in some cases, cruise activities take place right next to the other 'passenger' part of the port. In other ports, i.e. most of the of calls or passengers, co-habitation is the norm: cruise and ferry traffic is hosted in the same berthing places and served in the same apron areas and terminals. Besides, the scale of ferry traffic in passenger ports is quite important to be overlooked - focusing in the European ports alone, the Mediterranean region has the highest share of ferry traffic in terms of passenger volume.

This section provides a statistical analysis of ferry traffic in MedCruise ports offering some valuable information to those interested in the evolution of passenger ports, but also to those interested in planning, developing, managing and administering cruise ports. The data reported refer to 2015 and comparisons are made with the immediate past year (2014).

passengers and ferry calls, recorded in 69 not host any ferry traffic at all; notably in four cases the ferry traffic was not handled by the particular entity that is responsible for the cruise port. Thus, beyond the precise data of ferry calls and ferry passengers in the reporting port, the reader times in those ports hosting smaller number of the section will be able to conclude more on the trends observed in ferry traffic in the Med and its adjoining seas, rather than the precise scale of this traffic.

> MedCruise member ports hosted in 2015 76,99 million ferry passengers, 3,3% more than in 2014, and 281.507 ferry calls, i.e. 5,4% more than the year before. This growth has been balanced in three regions, West Med, East Med and Adriatic. The reporting West Med ports hosted 41,17 million ferry passengers (3,2% growth comparing to 2014) via 199.495 calls (5,7% growth); East Med ports hosted 23,88 million ferry passengers (3,9% growth) via 41.304 calls (3,6% growth); and ports in the Adriatic hosted 11,94 million ferry passengers (2,3% growth) via 40.708 calls (5,9% growth). There has been only one port in the Black Sea reporting ferry traffic so it is not possible to reach valuable conclusions.

MedCruise ports host 77m ferry pax (3.3% annual growth)

Table 7.1: Ferry Traffic in MedCruise Ports per Region

Region	2015 Ferry Pax	2014 Ferry Pax	Ferry Pax 2015/2014	2015 Ferry Calls	2014 Ferry Calls	Ferry Calls 2015/2014
West Med	41.170.119	39.876.252	3,24%	199.495	188.766	5,68%
Adriatic	11.941.245	11.671.421	2,31%	40.708	38.453	5,86%
East Med	23.882.704	22.985.695	3,90%	41.304	39.885	3,56%
Black Sea	0	15.818	-100,0%	0	99	-100,0%
Total	76.994.068	74.549.186	3,28%	281.507	267.203	5,35%

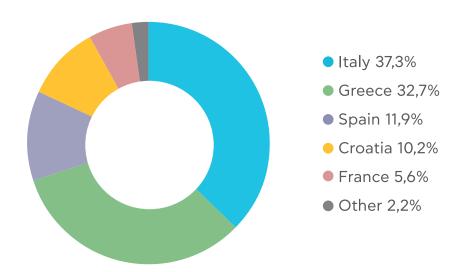
MedCruise ports host 280.000 ferry calls (5.4% annual growth)

7.2 Ferry traffic per country

As regards the distribution of ferry traffic per country (**Figure 7.1**), the majority of this traffic is taking place in the MedCruise members located in Italy (37,3%, more than 28,7 million ferry passengers) and Greece (32,7%, more than 25,2 million ferry passengers), followed by Spanish ports (11,9%), Croatia (10,2%), and France (5,6%). Just 2,2% of the reported total took place in the ports located in the rest 13 countries.

Figure 7.1: 2015 Ferry Passenger Shares per Country

5 Med countries host 98% of total ferry traffic in the region



As **Table 7.2** details ferry passenger numbers increased in 2015, comparing to 2014, in all countries with significant ferry traffic bar France, where the number of ferry passengers declined by 1,2%. The major growth took place in Spain, by 7,5%,

and Croatian ports, by 5,1%. As regards the number of ferry calls, the increase was most substantial in Spain (16,6% annual growth). In France the decline of ferry calls per annum (8,3%), was higher than that of ferry passengers.

Table 7.2: Ferry Traffic in MedCruise Ports per country

Country	2015 Ferry Pax	2014 Ferry Pax	Ferry Pax 2015/2014	2015 Ferry Calls	2014 Ferry Calls	Ferry Calls 2015/2014
Italy	28.752.414	28.162.395	2,10%	139.857	135.290	3,38%
Greece	25.210.576	24.372.208	3,44%	53.199	51.430	3,44%
Spain	9.188.836	8.545.933	7,52%	49.295	42.287	16,57%
Croatia	7.830.569	7.453.060	5,07%	25.399	23.870	6,41%
France	4.321.353	4.373.640	-1,20%	4.379	4.776	-8,31%
Other	1.690.320	1.641.950	2,95%	9.378	9.550	-1,80%
Sum	76.994.068	74.549.186	3,28%	281.507	267.203	5,35%

7.3 MedCruise Ports hosting ferry traffic

The MedCruise ports hosting most ferry passengers movements per year (**Table 7.3**) are Piraeus, which following an annual growth of this traffic by 5,1% hosted over 16,4 million ferry passengers in 2015, Naples that hosts more than six million ferry passengers per year (growth of 4,1% in

2015), and Messina that hosted in 2015 5,89 million ferry passengers (-1,74 comparing to the year before). Two more ports recorded in 2015 ferry passenger movements of over 4,5 million passengers: Balearic islands that hosted 4,94 million ferry passengers (+9,9%) and Split (+7,7%).

Table 7.3: MedCruise Port Members hosting ferry traffic (Ferry Pax 2015; Major 5)

#	Port	2015	2014	Var. 2015/2014
1	Piraeus	16.450.423	15.650.713	5,11%
2	Naples	6.324.192	6.077.136	4,07%
3	Messina	5.887.487	5.991.549	-1,74%
4	Balearic Islands	4.943.654	4.496.140	9,95%
5	Split	4.793.226	4.451.638	7,67%

When the focus is on the number of ferry calls, the MedCruise ports hosting most ferry calls per year (Table 7.4) are Messina, which following an annual growth of 4,7% hosted over 62.060 calls in 2015, Naples that in 2015 hosted 48.957 ferry calls (growth of 2,1% in 2015), and Balearic Islands that hosted in 2015 21,4% more ferry calls than a year before (37.354 calls). Split (16.635 ferry calls in 2015) and Piraeus (14.032 calls) conclude the top-5 MedCruise ports in terms of hosted ferry calls.

Table 7.4: MedCruise Port Members hosting ferry traffic (Ferry Calls 2015; Major 5)

#	Port	2015	2014	Var. 2015/2014
1	Messina	62.060	59.279	4,69%
2	Naples	48.957	47.930	2,14%
3	Balearic Islands	37.354	30.776	21,37%
4	Split	16.635	15.379	8,17%
5	Piraeus	14.032	13.766	1,93%

A total of 71.673.031 passengers and 281.507 ferry calls was the ferry traffic that was hosted 1.342 passengers. The average is higher than in MedCruise ports within 2015. The average number of ferry passengers per call deviates significantly per port. **Table 7.5** details the 10 cases with the highest average of passengers per ferry call. Toulon-Var Provence leads this

ranking, with the average pax/call reaching 1.000 ferry passengers in the seven ports of the list. Beyond the ten ports listed in Table 7.5, there are 11 more ports where the average number of passengers per ferry call in 2015 was higher than 500 passengers.

Table 7.5: MedCruise Port Members hosting ferry traffic: Average Ferry Pax per Call (2015; Major 10)

#	Port	2015 Ferry Pax	2015 Ferry Calls	Av. Pax/Calls
1	Toulon-Var Provence	1.389.379	1.035	1.342
2	Tunisian Ports	728.718	562	1.297
3	Sete	136.175	113	1.205
4	Piraeus	16.450.423	14.032	1.172
5	Gioia Tauro	13.868	12	1.156
6	Civitavecchia	1.537.907	1.350	1.139
7	Mersin	2.032	2	1.016
8	Bastia/North Corsica	2.116.144	2.248	941
9	Livorno	1.913.856	2.067	926
10	Madeira Ports	267.541	302	886

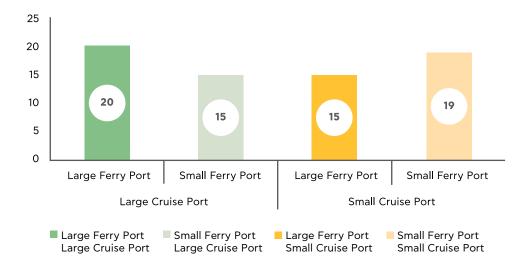
7.4 MedCruise Ports per Cruise and Ferry Size Category

A total of 35 cruise ports that host more than 100.000 cruise passengers ('large cruise ports' - Category A), host ferry traffic as well (Figure 7.2). 20 out of these ports host also significant ferry passenger traffic, i.e. more than 260.000 ferry passengers per

annum. In the case of the smaller cruise ports that are MedCruise members (less than 100.000 cruise passengers per year -Category B), 15 ports would qualify as 'large ferry ports' as in 2015 they hosted more than 260.000 ferry passengers.

Figure 7.2: MedCruise Ports Overview by Size Category

20 large cruise ports host significant ferry traffic



7.5 Cruise & Ferry traffic per port and per region

The figures included in this section illustrate used in the case of the West Med, including the levels of cruise passengers' traffic and ferry passengers traffic that were recorded in each MedCruise port in 2015. These data provide a clear picture of the level of operation that takes place in each of these ports.

The analysis is detailed in Figures referring to the different sub-regions. Two figures are located in East Med.

those ports hosting more than one million ferry passengers (Figure 7.3) and those hosting less than one million ferry passengers per year (Figure 7.4). Figure 7.5 details the levels of the two kinds of passenger traffic in the ports located in the Adriatic Sea, while Figure 7.6 details the respective levels in the case of ports

Figure 7.3: 2015 Total Ferry Pax vs Cruise Pax by Region; West Med (Ferry Pax > 1 million)

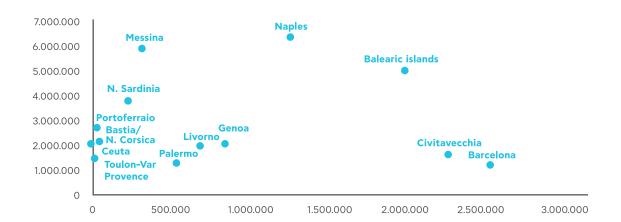


Figure 7.4: 2015 Total Ferry Pax vs Cruise Pax by Region; West Med (Ferry Pax < 1 million)

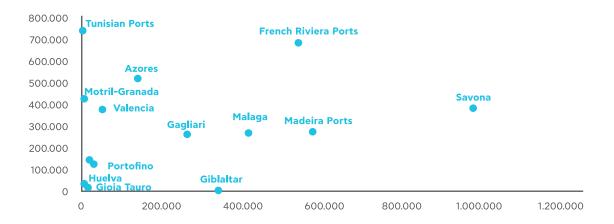


Figure 7.5: 2015 Total Ferry Pax vs Cruise Pax by Region; Adriatic

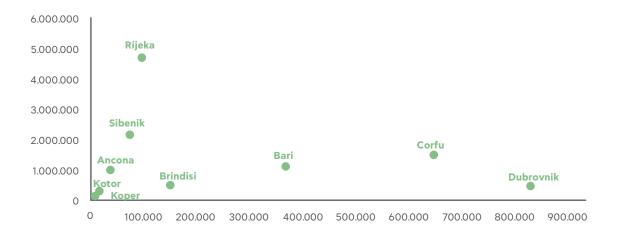
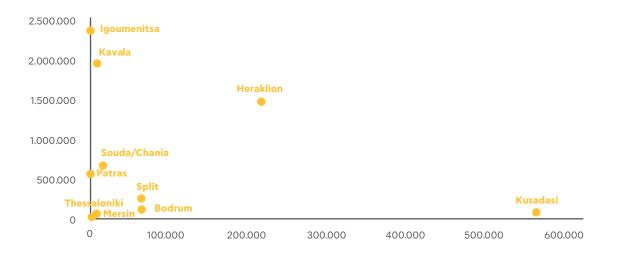


Figure 7.6: 2015 Total Ferry Pax vs Cruise Pax by Region; East Med



APPENDIX I

MedCruise Ports: Total Cruise Passenger Movements 2012-2016

No	Port	2016	2015	Variation 2016/2015	2014	2013	2012	Variation 2016/2012
1	Alanya	9.272	22.321	-58,46%	19.092	57.454	36.703	-74,74%
2	Alicante	89.197	82.296	8,39%	34.583	41.860	78.825	13,16%
3	Ancona	54.901	39.277	39,78%	37.220	109.492	110.106	-50,14%
4	Antalya	45.405	171.117	-73,47%	175.274	167.794	159.756	-71,58%
5	Azores	125.904	141.846	-11,24%	95.765	87.437	102.881	22,38%
6	Balearic Islands	1.957.429	1.996.533	-1,96%	1.587.064	1.541.376	1.341.510	45,91%
7	Barcelona	2.683.594	2.540.302	5,64%	2.364.292	2.599.232	2.408.634	11,42%
8	Bari	400.875	368.281	8,85%	561.602	604.781	618.882	-35,23%
9	Bastia/North Corsica	18.533	53.024	-65,05%	57.927	43.292	16.686	11,07%
10	Bodrum	61.261	70.038	-12,53%	33.407	29.551	53.480	14,55%
11	Brindisi	5.270	151.922	-96,53%	25.450	4.628	13.507	-60,98%
12	Burgas	5.833	7.575	-23,00%	41.763	5.673	999	483,88%
13	Cagliari	255.873	263.247	-2,80%	81.844	146.003	80.555	217,64%
14	Cartagena	187.843	151.195	24,24%	137.985	134.225	83.917	123,84%
15	Castellon	1.095	366	199,18%	130	1.514	1.292	-15,25%
16	Ceuta	19.251	1.613	1093,49%	2.432	4.605	6.088	216,21%
17	Civitavecchia	2.339.676	2.271.652	2,99%	2.140.039	2.538.259	2.393.570	-2,25%
18	Constantza	6.912	31.856	-78,30%	69.910	54.614	34.010	-79,68%
19	Corfu	748.914	647.346	15,69%	672.368	744.651	655.764	14,20%
20	Cyprus Ports	141.358	173.309	-18,44%	183.507	271.673	248.356	-43,08%
21	Dubrovnik	831.730	830.684	0,13%	894.216	1.136.503	981.448	-15,25%
22	Egyptian Ports	411.626	514.887	-20,06%	n.a.	n.a.	n.a.	-
23	French Riviera Ports	562.929	546.199	3,06%	595.685	613.218	701.367	-19,74%
24	Genoa	1.017.368	848.227	19,94%	824.109	1.050.085	797.239	27,61%
25	Gibraltar	404.005	344.140	17,40%	299.923	278.139	291.620	38,54%
26	Gioia Tauro	13.758	13.868	-0,79%	3.320	2.590	1.600	759,88%
27	Heraklion	238.780	219.805	8,63%	242.951	270.020	215.700	10,70%
28	Huelva	20.071	4.788	319,19%	0	296	2.090	860,33%
29	Igoumenitsa	7.623	3.090	146,70%	3.096	4.650	1.827	317,24%
30	Istanbul	36.708	589.314	-93,77%	589.353	683.598	564.555	-93,50%
31	Kavala	6.042	12.783	-52,73%	13.087	6.995	4.323	39,76%
32	Koper	78.923	57.893	36,33%	58.970	65.434	64.456	22,44%
33	Kotor	536.644	442.029	21,40%	309.322	317.746	246.623	117,60%
34	Kusadasi	347.232	567.291	-38,79%	553.231	583.459	564.555	-38,49%
35	La Spezia	507.531	667.446	-23,96%	483.564	213.858	50.239	910,23%
36	Lisbon	522.497	512.128	2,02%	500.872	558.040	522.604	-0,02%
37	Livorno	807.935	697.955	15,76%	626.356	736.516	1.037.849	-22,15%
38	Madeira Ports	522.483	580.348	-9,97%	475.955	482.112	593.550	-11,97%

No	Port	2016	2015	Variation 2016/2015	2014	2013	2012	Variation 2016/2012
39	Malaga	442.931	419.121	5,68%	409.298	397.416	651.393	-32,00%
40	Marseille	1.597.213	1.451.059	10,07%	1.311.284	1.188.031	890.020	79,46%
41	Mersin	0	1.593	-100,00%	0	1.697	774	-100,00%
42	Messina	373.199	327.702	13,88%	319.750	501.316	438.379	-14,87%
43	Monaco	185.392	259.325	-28,51%	200.039	249.806	232.921	-20,41%
44	Motril-Granada	4.570	6.481	-29,49%	19.589	16.809	10.606	-56,91%
45	Naples	1.306.151	1.269.571	2,88%	1.113.762	1.175.018	1.297.233	0,69%
46	North Sardinian Ports	210.386	238.256	-11,70%	166.985	206.140	276.941	-24,03%
47	Odessa	1.242	6.563	-81,08%	8.506	91.949	72.516	-98,29%
48	Palamos	25.505	40.800	-37,49%	38.612	29.775	33.400	-23,64%
49	Palermo	510.078	546.884	-6,73%	531.712	410.999	354.499	43,89%
50	Patras	743	1.090	-31,83%	745	1.264	374	98,66%
51	Piraeus	1.094.135	980.149	11,63%	1.055.556	1.302.581	1.198.047	-8,67%
52	Portimao	19.520	14.786	32,02%	14.634	20.141	18.506	5,48%
53	Portoferraio	42.752	37.486	14,05%	27.365	16.828	23.099	85,08%
54	Portofino	19.894	30.696	-35,19%	21.579	22.749	24.181	-17,73%
55	Ravenna	45.582	39.964	14,06%	44.607	97.041	100.987	-54,86%
56	Rijeka	13.874	9.082	52,76%	9.026	7.809	9.539	45,45%
57	Savona	910.244	982.226	-7,33%	1.018.794	939.038	810.097	12,36%
58	Sete	23.791	20.555	15,74%	9.918	11.084	8.584	177,16%
59	Sibenik	12.276	17.562	-30,10%	12.693	29.784	15.355	-20,05%
60	Sochi	1.194	19.501	-93,88%	34.299	21.384	20.080	-94,05%
61	Souda/Chania	147.915	96.612	53,10%	33.304	124.205	129.087	14,59%
62	Split	275.651	271.445	1,55%	184.062	189.107	245.451	12,30%
63	Taranto	0	314	-100,00%	582	446	311	-100,00%
64	Tarragona	14.013	11.600	20,80%	1.894	1.421	153	9058,82%
65	Tenerife Ports	884.173	933.154	-5,25%	840.268	794.151	885.623	-0,16%
66	Thessaloniki	18.876	26.356	-28,38%	19.720	14.591	8.004	135,83%
67	Toulon-Var Provence	362.479	240.833	50,51%	341.128	385.971	346.795	4,52%
68	Trabzon	452	2.280	-80,18%	17.118	9.032	7.949	-94,31%
69	Tunisian Ports	757	53.780	-98,59%	440.433	511.065	528.708	-99,86%
70	Valencia	404.783	371.374	9,00%	372.975	473.114	599.130	-32,44%
71	Valletta	682.970	668.277	2,20%	517.594	477.759	604.014	13,07%
72	Varna	1.109	3.159	-64,89%	20.939	2.997	10.695	-89,63%
73	Venice	1.605.660	1.582.481	1,46%	1.733.839	1.815.823	1.775.944	-9,59%
74	Volos	37.445	67.096	-44,19%	57.825	20.227	11.926	213,98%
75	Zadar	136.462	74.660	82,78%	53.791	34.575	20.640	561,15%

APPENDIX II

MedCruise Ports: Total Cruise Calls 2012-2016

No	Port	2016	2015	Variation 2016/2015	2014	2013	2012	Variation 2016/2012
1	Alanya	13	34	-61,76%	23	53	31	-58,06%
2	Alicante	53	50	6,00%	29	32	43	23,26%
3	Ancona	34	24	41,67%	20	66	63	-46,03%
4	Antalya	16	55	-70,91%	65	70	60	-73,33%
5	Azores	121	138	-12,32%	90	92	122	-0,82%
6	Balearic Islands	742	788	-5,84%	678	699	632	17,41%
7	Barcelona	758	749	1,20%	767	835	774	-2,07%
8	Bari	145	148	-2,03%	147	171	206	-29,61%
9	Bastia/North Corsica	23	90	-74,44%	94	92	51	-54,90%
10	Bodrum	44	92	-52,17%	82	136	136	-67,65%
11	Brindisi	14	60	-76,67%	22	15	36	-61,11%
12	Burgas	4	5	-20,00%	27	5	1	300,00%
13	Cagliari	110	97	13,40%	54	94	72	52,78%
14	Cartagena	120	108	11,11%	109	115	76	57,89%
15	Castellon	2	2	0,00%	1	3	2	0,00%
16	Ceuta	13	4	225,00%	8	8	10	30,00%
17	Civitavecchia	833	794	4,91%	833	959	1.040	-19,90%
18	Constantza	8	25	-68,00%	92	69	41	-80,49%
19	Corfu	481	407	18,18%	395	480	485	-0,82%
20	Cyprus Ports	135	167	-19,16%	223	255	247	-45,34%
21	Dubrovnik	639	475	34,53%	752	843	659	-3,03%
22	Egyptian Ports	361	423	-14,66%	n.a.	n.a.	n.a.	-
23	French Riviera Ports	325	343	-5,25%	369	420	387	-16,02%
24	Genoa	248	198	25,25%	209	298	213	16,43%
25	Gibraltar	224	204	9,80%	181	179	173	29,48%
26	Gioia Tauro	13	12	8,33%	6	7	7	85,71%
27	Heraklion	165	170	-2,94%	160	177	156	5,77%
28	Huelva	17	6	183,33%	0	1	3	466,67%
29	Igoumenitsa	7	6	16,67%	13	14	4	75,00%
30	Istanbul	42	331	-87,31%	331	408	486	-91,36%
31	Kavala	18	22	-18,18%	26	14	10	80,00%
32	Koper	69	49	40,82%	45	54	46	50,00%
33	Kotor	487	411	18,49%	353	387	343	41,98%
34	Kusadasi	278	513	-45,81%	458	451	487	-42,92%
35	La Spezia	211	175	20,57%	254	149	72	193,06%
36	Lisbon	311	306	1,63%	319	353	314	-0,96%
37	Livorno	403	369	9,21%	341	420	465	-13,33%
38	Madeira Ports	297	312	-4,81%	285	291	339	-12,39%

40 Marseille 490 442 10,86% 497 447 354 38,42% 41 Mersin 0 2 -100,00% 0 4 2 -100,00% 42 Messina 223 160 39,38% 165 228 187 19,25% 43 Monaco 181 209 -13,40% 182 221 185 2-22,22% 44 Motri-Granda 21 27 -22,22% 30 28 27 -22,22% 45 Naples 493 445 10,79% 399 440 527 -6,45% 46 North Sardinian Ports 130 149 -12,75% 98 117 141 -7,80% 47 Odessa 5 13 -61,54% 32 148 121 -95,87% 48 Palamos 37 37 0,00% 36 38 26 42,33% 50 Patras 2 3 <th>No</th> <th>Port</th> <th>2016</th> <th>2015</th> <th>Variation 2016/2015</th> <th>2014</th> <th>2013</th> <th>2012</th> <th>Variation 2016/2012</th>	No	Port	2016	2015	Variation 2016/2015	2014	2013	2012	Variation 2016/2012
41 Mersin 0 2 -100,00% 0 4 2 -100,00% 42 Messina 223 160 39,38% 165 228 187 19,25% 43 Monaco 181 209 -13,40% 182 221 185 -2,16% 44 Motril-Granada 21 27 -22,22% 30 28 27 -22,22% 45 Naples 493 445 10,79% 399 440 527 -6,45% 46 North Sardinian Ports 130 149 -12,75% 98 117 141 -7,80% 48 Palarmos 37 37 0,00% 36 38 26 42,31% 49 Palermo 174 200 -13,00% 221 189 156 11,54% 50 Patras 2 3 -33,33% 2 2 2 3 -33,33% 2 2 2 3 <	39	Malaga	253	233	8,58%	227	248	293	-13,65%
42 Messina 223 160 39,38% 165 228 187 19,25% 43 Monaco 181 209 -13,40% 182 221 185 -2,16% 44 Motril-Granada 21 27 -22,22% 30 28 27 -22,22% 45 Naples 493 445 10,79% 399 440 527 -6,45% 46 North Sardinian Ports 130 149 -12,75% 98 117 141 -7,80% 47 Odessa 5 13 -61,54% 32 148 121 -9,87% 48 Palamos 37 37 0,00% 36 38 26 42,31% 49 Palermo 174 200 -13,00% 221 189 156 11,54% 50 Patras 2 3 -33,33% 2 2 2 3 -33,33% 51 Portimac 43 <td>40</td> <td>Marseille</td> <td>490</td> <td>442</td> <td>10,86%</td> <td>497</td> <td>447</td> <td>354</td> <td>38,42%</td>	40	Marseille	490	442	10,86%	497	447	354	38,42%
43 Monaco 181 209 -13,40% 182 221 185 -2,16% 44 Motril-Granada 21 27 -22,22% 30 28 27 -22,22% 45 Naples 493 445 10,79% 399 440 527 -6,45% 46 North Sardinian Ports 130 149 -12,75% 98 117 141 -7,80% 47 Odessa 5 13 -61,54% 32 148 121 -95,87% 48 Palamos 37 37 0,00% 36 38 26 42,58% 49 Palermo 174 200 -13,00% 221 189 156 11,54% 50 Patras 2 3 -33,33% 2 2 2 3 -33,33% 51 Piraeus 625 621 0,64% 606 711 763 -18,09% 52 Portima 43 <td>41</td> <td>Mersin</td> <td>0</td> <td>2</td> <td>-100,00%</td> <td>0</td> <td>4</td> <td>2</td> <td>-100,00%</td>	41	Mersin	0	2	-100,00%	0	4	2	-100,00%
44 Motrili-Granada 21 27 -22,22% 30 28 27 -22,22% 45 Naples 493 445 10,79% 399 440 527 -6,45% 46 North Sardinian Ports 130 149 -12,75% 98 117 141 -7,80% 47 Odessa 5 13 -61,54% 32 148 121 -95,87% 48 Palamos 37 37 0,00% 36 38 26 42,31% 49 Palermo 174 200 -13,00% 221 189 156 115,4% 50 Patras 2 3 -33,33% 2 2 3 -33,33% 51 Piraeus 625 621 0,64% 606 711 763 -18,09% 52 Portimao 43 47 -8,51% 56 67 82 -30,49% 52 Portimao 57 80 <td>42</td> <td>Messina</td> <td>223</td> <td>160</td> <td>39,38%</td> <td>165</td> <td>228</td> <td>187</td> <td>19,25%</td>	42	Messina	223	160	39,38%	165	228	187	19,25%
45 Naples 493 445 10,79% 399 440 527 -6,45% 46 North Sardinian Ports 130 149 -12,75% 98 117 141 -7,80% 47 Odessa 5 13 -61,54% 32 148 121 -95,87% 48 Palamos 37 37 0,00% 36 38 26 42,31% 49 Palermo 174 200 -13,00% 221 189 156 11,54% 50 Patras 2 3 -33,33% 2 2 3 -33,33% 51 Piraeus 625 621 0,64% 606 711 763 -18,09% 52 Portimao 43 47 -8,51% 34 42 36 19,44% 53 Portofino 57 80 -28,75% 56 67 82 -30,49% 55 Ravenna 42 34	43	Monaco	181	209	-13,40%	182	221	185	-2,16%
46 North Sardinian Ports 130 149 -12,75% 98 117 141 -78,0% 47 Odessa 5 13 -61,54% 32 148 121 -95,87% 48 Palamos 37 37 0,00% 36 38 26 42,31% 49 Palermo 174 200 -13,00% 221 189 156 11,54% 50 Patras 2 3 -33,33% 2 2 3 -33,33% 51 Piraeus 625 621 0,64% 606 711 763 -18,09% 52 Portimao 43 47 -8,51% 34 42 36 19,44% 52 Portimao 18 112 5,36% 101 102 39 22,58% 54 Portofino 57 80 -28,75% 56 67 82 -30,49% 55 Ravenna 42 34	44	Motril-Granada	21	27	-22,22%	30	28	27	-22,22%
47 Odessa 5 13 -61,54% 32 148 121 -95,87% 48 Palamos 37 37 0,00% 36 38 26 42,31% 49 Palermo 174 200 -13,00% 221 189 156 11,54% 50 Patras 2 3 -33,33% 2 2 3 -33,33% 51 Piraeus 625 621 0,64% 606 711 763 -18,09% 52 Portinao 43 47 -8,51% 34 42 36 19,44% 53 Portofina 18 112 5,36% 101 102 89 32,58% 54 Portofina 57 80 -28,75% 56 67 82 -30,49% 55 Ravenna 42 34 23,53% 38 74 67 -37,31% 56 Rijeka 15 7 114,29%	45	Naples	493	445	10,79%	399	440	527	-6,45%
48 Palamos 37 37 0,00% 36 38 26 42,31% 49 Palermo 174 200 -13,00% 221 189 156 11,54% 50 Patras 2 3 -33,33% 2 2 3 -33,33% 51 Piraeus 625 621 0,64% 606 711 763 -18,09% 52 Portimao 43 47 -8,51% 34 42 36 19,44% 53 Portoferraio 118 112 5,36% 101 102 89 32,58% 54 Portofino 57 80 -28,75% 56 67 82 -30,49% 55 Ravenna 42 34 23,53% 38 74 67 -37,31% 56 Rijeka 15 7 114,29% 247 221 276 -94,57% 57 Savona 213 231 -7,79% 279 241 207 2,90% 58 Sete 36 31	46	North Sardinian Ports	130	149	-12,75%	98	117	141	-7,80%
49 Palermo 174 200 -13,00% 221 189 156 11,54% 50 Patras 2 3 -33,33% 2 2 3 -33,33% 51 Piraeus 625 621 0,64% 606 711 763 -18,09% 52 Portimao 43 47 -8,51% 34 42 36 19,44% 53 Portofino 57 80 -28,75% 56 67 82 -30,49% 55 Ravenna 42 34 23,53% 38 74 67 -37,31% 56 Rijeka 15 7 114,29% 247 221 276 -94,57% 57 Savona 213 231 -7,79% 279 241 207 2,90% 58 Sete 36 31 16,13% 24 28 20 80,00% 59 Sibenik 106 83 27,71%	47	Odessa	5	13	-61,54%	32	148	121	-95,87%
50 Patras 2 3 -33,33% 2 2 3 -33,33% 51 Piraeus 625 621 0,64% 606 711 763 -18,09% 52 Portimao 43 47 -8,51% 34 42 36 19,44% 53 Portofino 57 80 -28,75% 56 67 82 -30,49% 55 Ravenna 42 34 23,53% 38 74 67 -37,31% 56 Rijeka 15 7 114,29% 247 221 276 -94,57% 57 Savona 213 231 -7,79% 279 241 207 2,90% 58 Sete 36 31 16,13% 24 28 20 80,00% 59 Sibenik 106 83 27,71% 93 100 84 26,19% 60 Sochi 4 18 -77,78%	48	Palamos	37	37	0,00%	36	38	26	42,31%
51 Piraeus 625 621 0,64% 606 711 763 -18,09% 52 Portimao 43 47 -8,51% 34 42 36 19,44% 53 Portofino 118 112 5,36% 101 102 89 32,58% 54 Portofino 57 80 -28,75% 56 67 82 -30,49% 55 Ravenna 42 34 23,53% 38 74 67 -37,31% 56 Rijeka 15 7 114,29% 247 221 276 -94,57% 57 Savona 213 231 -7,79% 279 241 207 2,90% 58 Sete 36 31 16,13% 24 28 20 80,00% 59 Sibenik 106 83 27,71% 93 100 84 26,19% 60 Sochi 4 18 -77,78%	49	Palermo	174	200	-13,00%	221	189	156	11,54%
52 Portimao 43 47 -8,51% 34 42 36 19,44% 53 Portoferraio 118 112 5,36% 101 102 89 32,58% 54 Portofino 57 80 -28,75% 56 67 82 -30,49% 55 Ravenna 42 34 23,53% 38 74 67 -37,31% 56 Rijeka 15 7 114,29% 247 221 276 -94,57% 57 Savona 213 231 -7,79% 279 241 207 2,90% 58 Sete 36 31 16,13% 24 28 20 80,00% 59 Sibenik 106 83 27,71% 93 100 84 26,19% 60 Sochi 4 18 -77,78% 63 49 27 -85,19% 61 Souda/Chania 86 59 45,76%<	50	Patras	2	3	-33,33%	2	2	3	-33,33%
53 Portoferraio 118 112 5,36% 101 102 89 32,58% 54 Portofino 57 80 -28,75% 56 67 82 -30,49% 55 Ravenna 42 34 23,53% 38 74 67 -37,31% 56 Rijeka 15 7 114,29% 247 221 276 -94,57% 57 Savona 213 231 -7,79% 279 241 207 2,90% 58 Sete 36 31 16,13% 24 28 20 80,00% 59 Sibenik 106 83 27,71% 93 100 84 26,19% 60 Sochi 4 18 -77,78% 63 49 27 -85,19% 61 Souda/Chania 86 59 45,76% 38 47 54 59,26% 62 Split 286 261 9,58% <td>51</td> <td>Piraeus</td> <td>625</td> <td>621</td> <td>0,64%</td> <td>606</td> <td>711</td> <td>763</td> <td>-18,09%</td>	51	Piraeus	625	621	0,64%	606	711	763	-18,09%
54 Portofino 57 80 -28,75% 56 67 82 -30,49% 55 Ravenna 42 34 23,53% 38 74 67 -37,31% 56 Rijeka 15 7 114,29% 247 221 276 -94,57% 57 Savona 213 231 -7,79% 279 241 207 2,90% 58 Sete 36 31 16,13% 24 28 20 80,00% 59 Sibenik 106 83 27,71% 93 100 84 26,19% 60 Sochi 4 18 -77,78% 63 49 27 -85,19% 61 Souda/Chania 86 59 45,76% 38 47 54 59,26% 62 Split 286 261 9,58% 233 225 269 6,32% 63 Taranto 0 2 -100,00%	52	Portimao	43	47	-8,51%	34	42	36	19,44%
55 Ravenna 42 34 23,53% 38 74 67 -37,31% 56 Rijeka 15 7 114,29% 247 221 276 -94,57% 57 Savona 213 231 -7,79% 279 241 207 2,90% 58 Sete 36 31 16,13% 24 28 20 80,00% 59 Sibenik 106 83 27,71% 93 100 84 26,19% 60 Sochi 4 18 -77,78% 63 49 27 -85,19% 61 Souda/Chania 86 59 45,76% 38 47 54 59,26% 62 Split 286 261 9,58% 233 225 269 6,32% 63 Taranto 0 2 -100,00% 3 2 5 -100,00% 64 Tarragona 22 11 100,00%	53	Portoferraio	118	112	5,36%	101	102	89	32,58%
56 Rijeka 15 7 114,29% 247 221 276 -94,57% 57 Savona 213 231 -7,79% 279 241 207 2,90% 58 Sete 36 31 16,13% 24 28 20 80,00% 59 Sibenik 106 83 27,71% 93 100 84 26,19% 60 Sochi 4 18 -77,78% 63 49 27 -85,19% 61 Souda/Chania 86 59 45,76% 38 47 54 59,26% 62 Split 286 261 9,58% 233 225 269 6,32% 63 Taranto 0 2 -100,00% 3 2 5 -100,00% 64 Tarragona 22 11 100,00% 3 3 1 2100,00% 65 Tenerife Ports 524 506 3,56%	54	Portofino	57	80	-28,75%	56	67	82	-30,49%
57 Savona 213 231 -7,79% 279 241 207 2,90% 58 Sete 36 31 16,13% 24 28 20 80,00% 59 Sibenik 106 83 27,71% 93 100 84 26,19% 60 Sochi 4 18 -77,78% 63 49 27 -85,19% 61 Souda/Chania 86 59 45,76% 38 47 54 59,26% 62 Split 286 261 9,58% 233 225 269 6,32% 63 Taranto 0 2 -100,00% 3 2 5 -100,00% 64 Tarragona 22 11 100,00% 3 3 1 2100,00% 65 Tenerife Ports 524 506 3,56% 513 520 534 -1,87% 66 Thessaloniki 23 35 -34,29	55	Ravenna	42	34	23,53%	38	74	67	-37,31%
58 Sete 36 31 16,13% 24 28 20 80,00% 59 Sibenik 106 83 27,71% 93 100 84 26,19% 60 Sochi 4 18 -77,78% 63 49 27 -85,19% 61 Souda/Chania 86 59 45,76% 38 47 54 59,26% 62 Split 286 261 9,58% 233 225 269 6,32% 63 Taranto 0 2 -100,00% 3 2 5 -100,00% 64 Tarragona 22 11 100,00% 3 3 1 2100,00% 65 Tenerife Ports 524 506 3,56% 513 520 534 -1,87% 66 Thessaloniki 23 35 -34,29% 31 18 11 109,09% 67 Toulon-Var Provence 278 124	56	Rijeka	15	7	114,29%	247	221	276	-94,57%
59 Sibenik 106 83 27,71% 93 100 84 26,19% 60 Sochi 4 18 -77,78% 63 49 27 -85,19% 61 Souda/Chania 86 59 45,76% 38 47 54 59,26% 62 Split 286 261 9,58% 233 225 269 6,32% 63 Taranto 0 2 -100,00% 3 2 5 -100,00% 64 Tarragona 22 11 100,00% 3 3 1 2100,00% 65 Tenerife Ports 524 506 3,56% 513 520 534 -1,87% 66 Thessaloniki 23 35 -34,29% 31 18 11 109,09% 67 Toulon-Var Provence 278 124 124,19% 257 266 238 16,81% 68 Trabzon 3 10	57	Savona	213	231	-7,79%	279	241	207	2,90%
60 Sochi 4 18 -77,78% 63 49 27 -85,19% 61 Souda/Chania 86 59 45,76% 38 47 54 59,26% 62 Split 286 261 9,58% 233 225 269 6,32% 63 Taranto 0 2 -100,00% 3 2 5 -100,00% 64 Tarragona 22 11 100,00% 3 3 1 2100,00% 65 Tenerife Ports 524 506 3,56% 513 520 534 -1,87% 66 Thessaloniki 23 35 -34,29% 31 18 11 109,09% 67 Toulon-Var Provence 278 124 124,19% 257 266 238 16,81% 68 Trabzon 3 10 -70,00% 31 28 22 -86,36% 69 Tunisian Ports 2 15 -86,67% 175 201 227 -99,12% 70 Valencia	58	Sete	36	31	16,13%	24	28	20	80,00%
61 Souda/Chania 86 59 45,76% 38 47 54 59,26% 62 Split 286 261 9,58% 233 225 269 6,32% 63 Taranto 0 2 -100,00% 3 2 5 -100,00% 64 Tarragona 22 11 100,00% 3 3 1 2100,00% 65 Tenerife Ports 524 506 3,56% 513 520 534 -1,87% 66 Thessaloniki 23 35 -34,29% 31 18 11 109,09% 67 Toulon-Var Provence 278 124 124,19% 257 266 238 16,81% 68 Trabzon 3 10 -70,00% 31 28 22 -86,36% 69 Tunisian Ports 2 15 -86,67% 175 201 227 -99,12% 70 Valencia 181 174 4,02% 195 223 204 -11,27% 71 Valletta 317 306 3,59% 302 277 312 1,60% 72 Varna 4 10 -60,00% 35 12 25 -84,00% 73 Venice 529 521 1,54% 488 548 661 -19,97% 74 Volos 46 57 -19,30% 53 31 21 119,05%	59	Sibenik	106	83	27,71%	93	100	84	26,19%
62 Split 286 261 9,58% 233 225 269 6,32% 63 Taranto 0 2 -100,00% 3 2 5 -100,00% 64 Tarragona 22 11 100,00% 3 3 1 2100,00% 65 Tenerife Ports 524 506 3,56% 513 520 534 -1,87% 66 Thessaloniki 23 35 -34,29% 31 18 11 109,09% 67 Toulon-Var Provence 278 124 124,19% 257 266 238 16,81% 68 Trabzon 3 10 -70,00% 31 28 22 -86,36% 69 Tunisian Ports 2 15 -86,67% 175 201 227 -99,12% 70 Valencia 181 174 4,02% 195 223 204 -11,27% 71 Valletta 317	60	Sochi	4	18	-77,78%	63	49	27	-85,19%
63 Taranto 0 2 -100,00% 3 2 5 -100,00% 64 Tarragona 22 11 100,00% 3 3 1 2100,00% 65 Tenerife Ports 524 506 3,56% 513 520 534 -1,87% 66 Thessaloniki 23 35 -34,29% 31 18 11 109,09% 67 Toulon-Var Provence 278 124 124,19% 257 266 238 16,81% 68 Trabzon 3 10 -70,00% 31 28 22 -86,36% 69 Tunisian Ports 2 15 -86,67% 175 201 227 -99,12% 70 Valencia 181 174 4,02% 195 223 204 -11,27% 71 Valletta 317 306 3,59% 302 277 312 1,60% 72 Varna 4	61	Souda/Chania	86	59	45,76%	38	47	54	59,26%
64 Tarragona 22 11 100,00% 3 3 1 2100,00% 65 Tenerife Ports 524 506 3,56% 513 520 534 -1,87% 66 Thessaloniki 23 35 -34,29% 31 18 11 109,09% 67 Toulon-Var Provence 278 124 124,19% 257 266 238 16,81% 68 Trabzon 3 10 -70,00% 31 28 22 -86,36% 69 Tunisian Ports 2 15 -86,67% 175 201 227 -99,12% 70 Valencia 181 174 4,02% 195 223 204 -11,27% 71 Valletta 317 306 3,59% 302 277 312 1,60% 72 Varna 4 10 -60,00% 35 12 25 -84,00% 73 Venice 529	62	Split	286	261	9,58%	233	225	269	6,32%
65 Tenerife Ports 524 506 3,56% 513 520 534 -1,87% 66 Thessaloniki 23 35 -34,29% 31 18 11 109,09% 67 Toulon-Var Provence 278 124 124,19% 257 266 238 16,81% 68 Trabzon 3 10 -70,00% 31 28 22 -86,36% 69 Tunisian Ports 2 15 -86,67% 175 201 227 -99,12% 70 Valencia 181 174 4,02% 195 223 204 -11,27% 71 Valletta 317 306 3,59% 302 277 312 1,60% 72 Varna 4 10 -60,00% 35 12 25 -84,00% 73 Venice 529 521 1,54% 488 548 661 -19,97% 74 Volos 46	63	Taranto	0	2	-100,00%	3	2	5	-100,00%
66 Thessaloniki 23 35 -34,29% 31 18 11 109,09% 67 Toulon-Var Provence 278 124 124,19% 257 266 238 16,81% 68 Trabzon 3 10 -70,00% 31 28 22 -86,36% 69 Tunisian Ports 2 15 -86,67% 175 201 227 -99,12% 70 Valencia 181 174 4,02% 195 223 204 -11,27% 71 Valletta 317 306 3,59% 302 277 312 1,60% 72 Varna 4 10 -60,00% 35 12 25 -84,00% 73 Venice 529 521 1,54% 488 548 661 -19,97% 74 Volos 46 57 -19,30% 53 31 21 119,05%	64	Tarragona	22	11	100,00%	3	3	1	2100,00%
67 Toulon-Var Provence 278 124 124,19% 257 266 238 16,81% 68 Trabzon 3 10 -70,00% 31 28 22 -86,36% 69 Tunisian Ports 2 15 -86,67% 175 201 227 -99,12% 70 Valencia 181 174 4,02% 195 223 204 -11,27% 71 Valletta 317 306 3,59% 302 277 312 1,60% 72 Varna 4 10 -60,00% 35 12 25 -84,00% 73 Venice 529 521 1,54% 488 548 661 -19,97% 74 Volos 46 57 -19,30% 53 31 21 119,05%	65	Tenerife Ports	524	506	3,56%	513	520	534	-1,87%
68 Trabzon 3 10 -70,00% 31 28 22 -86,36% 69 Tunisian Ports 2 15 -86,67% 175 201 227 -99,12% 70 Valencia 181 174 4,02% 195 223 204 -11,27% 71 Valletta 317 306 3,59% 302 277 312 1,60% 72 Varna 4 10 -60,00% 35 12 25 -84,00% 73 Venice 529 521 1,54% 488 548 661 -19,97% 74 Volos 46 57 -19,30% 53 31 21 119,05%	66	Thessaloniki	23	35	-34,29%	31	18	11	109,09%
69 Tunisian Ports 2 15 -86,67% 175 201 227 -99,12% 70 Valencia 181 174 4,02% 195 223 204 -11,27% 71 Valletta 317 306 3,59% 302 277 312 1,60% 72 Varna 4 10 -60,00% 35 12 25 -84,00% 73 Venice 529 521 1,54% 488 548 661 -19,97% 74 Volos 46 57 -19,30% 53 31 21 119,05%	67	Toulon-Var Provence	278	124	124,19%	257	266	238	16,81%
70 Valencia 181 174 4,02% 195 223 204 -11,27% 71 Valletta 317 306 3,59% 302 277 312 1,60% 72 Varna 4 10 -60,00% 35 12 25 -84,00% 73 Venice 529 521 1,54% 488 548 661 -19,97% 74 Volos 46 57 -19,30% 53 31 21 119,05%	68	Trabzon	3	10	-70,00%	31	28	22	-86,36%
71 Valletta 317 306 3,59% 302 277 312 1,60% 72 Varna 4 10 -60,00% 35 12 25 -84,00% 73 Venice 529 521 1,54% 488 548 661 -19,97% 74 Volos 46 57 -19,30% 53 31 21 119,05%	69	Tunisian Ports	2	15	-86,67%	175	201	227	-99,12%
72 Varna 4 10 -60,00% 35 12 25 -84,00% 73 Venice 529 521 1,54% 488 548 661 -19,97% 74 Volos 46 57 -19,30% 53 31 21 119,05%	70	Valencia	181	174	4,02%	195	223	204	-11,27%
73 Venice 529 521 1,54% 488 548 661 -19,97% 74 Volos 46 57 -19,30% 53 31 21 119,05%	71	Valletta	317	306	3,59%	302	277	312	1,60%
74 Volos 46 57 -19,30% 53 31 21 119,05%	72	Varna	4	10	-60,00%	35	12	25	-84,00%
	73	Venice	529	521	1,54%	488	548	661	-19,97%
75 Zadar 114 96 18,75% 77 69 59 93,22%	74	Volos	46	57	-19,30%	53	31	21	119,05%
	75	Zadar	114	96	18,75%	77	69	59	93,22%

APPENDIX III

MedCruise Ports: Total Home In/Out Passengers 2012-2016

No	Port	2016	2015	Variation 2016/2015	2014	2013	2012	Variation 2016/2012
1	Alanya	0	0	-	0	0	0	-
2	Alicante	n.a.	0	-	144	0	286	-100,00%
3	Ancona	10.896	6.676	63,21%	9.110	42.128	41.485	-73,74%
4	Antalya	44.476	161.505	-72,46%	164.387	151.973	145.600	-69,45%
5	Azores	1.182	1.787	-33,86%	833	473	1.487	-20,51%
6	Balearic Islands	600.181	553.928	8,35%	606.549	490.631	466.385	28,69%
7	Barcelona	1.555.819	1.363.754	14,08%	1.222.487	1.506.286	1.438.383	8,16%
8	Bari	109.137	85.314	27,92%	152.056	165.031	196.423	-44,44%
9	Bastia/North Corsica	0	0	-	0	0	0	-
10	Bodrum	72	1.045	-93,11%	366	1.174	2.884	-97,50%
11	Brindisi	7	20.899	-99,97%	48	119	143	-95,10%
12	Burgas	0	2	-100,00%	0	0	0	-
13	Cagliari	8.456	16.536	-48,86%	133	5.731	0	-
14	Cartagena	186	0	-	0	0	0	-
15	Castellon	0	0	-	0	0	0	-
16	Ceuta	0	0	-	0	0	0	-
17	Civitavecchia	847.009	868.143	-2,43%	730.938	989.998	920.612	-8,00%
18	Constantza	0	667	-100,00%	5.049	388	0	-
19	Corfu	70.864	69.926	1,34%	71.881	70.735	64.165	10,44%
20	Cyprus Ports	58.163	66.120	-12,03%	76.892	100.905	90.511	-35,74%
21	Dubrovnik	68.169	61.797	10,31%	24.790	24.840	24.632	176,75%
22	Egyptian Ports	n.a.	n.a.	-	n.a.	n.a.	n.a.	-
23	French Riviera Ports	41.967	55.302	-24,11%	34.791	56.523	33.549	25,09%
24	Genoa	606.278	565.687	7,18%	571.463	649.282	530.872	14,20%
25	Gibraltar	90	583	-84,56%	0	0	0	-
26	Gioia Tauro	21	147	-85,71%	0	0	0	-
27	Heraklion	7.302	3.344	118,36%	23.925	55.443	47.594	-84,66%
28	Huelva	0	0	-	0	0	0	-
29	Igoumenitsa	0	0	-	0	0	0	-
30	Istanbul	16.252	203.135	-92,00%	148.297	168.790	102.819	-84,19%
31	Kavala	0	0	-	0	0	0	-
32	Koper	51	82	-37,80%	47	56	164	-68,90%
33	Kotor	1.412	2.921	-51,66%	0	0	1.774	-20,41%
34	Kusadasi	18.046	37.650	-52,07%	36.389	36.940	18.940	-4,72%
35	La Spezia	7.402	96.881	-92,36%	40.280	1.507	0	-
36	Lisbon	47.632	42.536	11,98%	41.465	50.834	44.006	8,24%
37	Livorno	9.274	4.181	121,81%	2.088	4.991	70.525	-86,85%
38	Madeira Ports	2.775	3.721	-25,42%	3.421	3.975	11.889	-76,66%

No	Port	2016	2015	Variation 2016/2015	2014	2013	2012	Variation 2016/2012
39	Malaga	92.246	32.492	183,90%	74.170	71.249	220.217	-58,11%
40	Marseille	486.964	503.325	-3,25%	506.412	381.318	313.322	55,42%
41	Mersin	0	0	-	0	0	0	-
42	Messina	18.027	17.068	5,62%	19.951	36.190	29.413	-38,71%
43	Monaco	26.225	29.563	-11,29%	33.093	35.909	28.280	-7,27%
44	Motril-Granada	0	0	-	0	0	0	-
45	Naples	142.137	126.672	12,21%	99.423	110.689	160.219	-11,29%
46	North Sardinian Ports	0	0	-	0	0	0	-
47	Odessa	9	15	-40,00%	44	9.389	10.448	-99,91%
48	Palamos	0	0	-	0	0	0	-
49	Palermo	72.034	65.582	9,84%	65.935	42.869	37.109	94,11%
50	Patras	0	0	-	0	0	0	-
51	Piraeus	352.663	284.241	24,07%	256.196	308.705	329.168	7,14%
52	Portimao	44	238	-81,51%	1.130	88	257	-82,88%
53	Portoferraio	0	0	-	0	0	0	-
54	Portofino	0	0	-	0	0	0	-
55	Ravenna	673	107	528,97%	3.314	16.827	36.313	-98,15%
56	Rijeka	0	0	-	9.026	7.124	9.539	-100,00%
57	Savona	577.145	647.364	-10,85%	668.473	670.031	638.706	-9,64%
58	Sete	28	149	-81,21%	2.817	8	0	_
59	Sibenik	0	0	-	0	0	0	_
60	Sochi	0	5.611	-100,00%	14.509	0	0	-
61	Souda/Chania	0	0	-	0	0	0	-
62	Split	879	0	-	330	1.301	1.085	-18,99%
63	Taranto	0	0	-	0	0	0	-
64	Tarragona	1.842	11	16645,45%	0	0	0	-
65	Tenerife Ports	74.124	n.a.	-	n.a.	n.a.	n.a.	-
66	Thessaloniki	774	51	1417,65%	161	6	7	10957,14%
67	Toulon-Var Provence	12.186	21.257	-42,67%	28.974	27.087	22.483	-45,80%
68	Trabzon	452	0	-	0	0	0	-
69	Tunisian Ports	0	0	-	0	0	0	-
70	Valencia	60.963	63.142	-3,45%	73.907	74.348	118.897	-48,73%
71	Valletta	114.731	140.512	-18,35%	93.581	102.034	94.880	20,92%
72	Varna	2	5	-60,00%	6	1.205	2	0,00%
73	Venice		1.364.044	3,23%	1.509.097	1.512.596	1.444.100	-2,50%
74	Volos	0	0	=	0	0	0	_
75	Zadar	877	1.064	-17,58%	1.763	1.636	769	14,04%

APPENDIX IV

MedCruise Ports: Transit Cruise Passenger Movements 2012-2016

No	Port	2016	2015	Variation 2016/2015	2014	2013	2012	Variation 2016/2012
1	Alanya	9.272	22.321	-58,46%	19.092	57.454	36.703	-74,74%
2	Alicante	n.a.	82.296	-	34.439	41.860	78.539	-100,00%
3	Ancona	44.005	32.601	34,98%	28.110	67.364	68.621	-35,87%
4	Antalya	929	9.612	-90,33%	10.887	15.821	14.156	-93,44%
5	Azores	124.722	140.059	-10,95%	94.932	86.964	101.394	23,01%
6	Balearic Islands	1.357.248	1.442.605	-5,92%	980.515	1.050.745	875.125	55,09%
7	Barcelona	1.127.775	1.176.548	-4,15%	1.141.805	1.092.966	970.251	16,24%
8	Bari	291.738	282.967	3,10%	409.546	439.750	422.459	-30,94%
9	Bastia/North Corsica	18.533	53.024	-65,05%	57.927	43.292	16.686	11,07%
10	Bodrum	61.189	68.993	-11,31%	33.041	27.667	50.238	21,80%
11	Brindisi	5.263	131.023	-95,98%	25.402	4.509	13.364	-60,62%
12	Burgas	5.833	7.573	-22,98%	41.763	5.673	999	483,88%
13	Cagliari	247.417	246.711	0,29%	81.711	140.272	80.555	207,14%
14	Cartagena	187.657	151.195	24,12%	137.985	134.225	83.917	123,62%
15	Castellon	1.095	366	199,18%	130	1.514	1.292	-15,25%
16	Ceuta	19.251	1.613	1093,49%	2.432	4.605	6.088	216,21%
17	Civitavecchia	1.492.667	1.403.509	6,35%	1.409.101	1.548.261	1.472.958	1,34%
18	Constantza	6.912	31.189	-77,84%	64.861	54.226	30.739	-77,51%
19	Corfu	678.050	577.420	17,43%	600.487	673.916	591.599	14,61%
20	Cyprus Ports	83.195	107.189	-22,38%	106.615	170.768	157.845	-47,29%
21	Dubrovnik	763.561	768.887	-0,69%	869.426	1.111.663	956.816	-20,20%
22	Egyptian Ports	n.a.	n.a.	-	n.a.	n.a.	n.a.	-
23	French Riviera Ports	520.962	490.897	6,12%	560.894	556.695	667.818	-21,99%
24	Genoa	375.711	282.540	32,98%	252.646	400.803	266.367	41,05%
25	Gibraltar	403.915	343.557	17,57%	299.923	278.139	291.620	38,51%
26	Gioia Tauro	13.737	13.721	0,12%	3.320	2.590	1.600	758,56%
27	Heraklion	231.478	216.461	6,94%	219.026	214.577	168.106	37,70%
28	Huelva	20.071	4.788	319,19%	0	296	2.090	860,33%
29	Igoumenitsa	7.623	3.090	146,70%	3.096	4.650	1.827	317,24%
30	Istanbul	20.456	386.179	-94,70%	441.056	514.808	479.371	-95,73%
31	Kavala	6.042	12.783	-52,73%	13.087	6.995	4.323	39,76%
32	Koper	78.872	57.811	36,43%	58.923	65.378	64.292	22,68%
33	Kotor	535.232	439.108	21,89%	309.322	317.746	244.849	118,60%
34	Kusadasi	329.186	529.641	-37,85%	516.842	540.018	545.973	-39,71%
35	La Spezia	500.129	570.565	-12,34%	443.284	212.351	50.239	895,50%
36	Lisbon	474.865	469.592	1,12%	459.407	507.206	478.598	-0,78%
37	Livorno	798.661	693.774	15,12%	624.268	731.525	967.324	-17,44%
38	Madeira Ports	519.708	576.627	-9,87%	472.534	478.137	581.661	-10,65%

No	Port	2016	2015	Variation 2016/2015	2014	2013	2012	Variation 2016/2012
39	Malaga	350.685	386.629	-9,30%	335.128	326.167	431.176	-18,67%
40	Marseille	1.110.249	947.734	17,15%	804.872	806.713	576.698	92,52%
41	Mersin	0	1.593	-100,00%	0	1.697	774	-100,00%
42	Messina	337.512	310.634	8,65%	299.799	465.126	408.966	-17,47%
43	Monaco	159.167	229.761	-30,72%	166.946	213.897	204.641	-22,22%
44	Motril-Granada	4.570	6.481	-29,49%	19.589	16.809	10.606	-56,91%
45	Naples	1.164.041	1.142.899	1,85%	1.014.339	1.064.329	1.137.014	2,38%
46	North Sardinian Ports	210.386	238.256	-11,70%	166.985	206.140	276.941	-24,03%
47	Odessa	1.233	6.548	-81,17%	8.462	82.560	62.068	-98,01%
48	Palamos	25.505	40.800	-37,49%	38.612	29.775	33.400	-23,64%
49	Palermo	438.044	481.302	-8,99%	465.777	368.130	317.390	38,01%
50	Patras	743	1.090	-31,83%	745	1.264	374	98,66%
51	Piraeus	741.472	695.908	6,55%	799.360	993.876	868.879	-14,66%
52	Portimao	19.476	14.548	33,87%	13.504	20.053	18.249	6,72%
53	Portoferraio	42.752	37.486	14,05%	27.365	16.828	23.099	85,08%
54	Portofino	19.894	30.696	-35,19%	21.579	22.789	24.641	-19,26%
55	Ravenna	44.922	39.857	12,71%	41.293	80.214	64.674	-30,54%
56	Rijeka	13.874	9.082	52,76%	0	685	0	_
57	Savona	333.099	334.862	-0,53%	350.321	269.007	171.391	94,35%
58	Sete	23.763	20.406	16,45%	7.101	11.076	8.584	176,83%
59	Sibenik	12.276	17.562	-30,10%	12.693	29.784	15.355	-20,05%
60	Sochi	1.194	13.890	-91,40%	19.790	21.384	20.080	-94,05%
61	Souda/Chania	147.915	96.612	53,10%	33.304	124.205	129.087	14,59%
62	Split	274.772	271.445	1,23%	183.732	187.806	244.366	12,44%
63	Taranto	0	314	-100,00%	582	446	311	-100,00%
64	Tarragona	12.171	11.589	5,02%	1.894	1.421	153	7854,90%
65	Tenerife Ports	810.049	n.a.	-	n.a.	n.a.	n.a.	-
66	Thessaloniki	18.102	26.305	-31,18%	19.559	14.585	7.997	126,36%
67	Toulon-Var Provence	350.293	219.576	59,53%	312.154	255.824	324.312	8,01%
68	Trabzon	0	2.280	-100,00%	17.118	9.032	7.949	-100,00%
69	Tunisian Ports	757	53.780	-98,59%	440.433	511.065	528.708	-99,86%
70	Valencia	343.820	308.232	11,55%	299.068	398.766	480.233	-28,41%
71	Valletta	568.239	527.765	7,67%	424.013	375.785	509.134	11,61%
72	Varna	1.107	3.154	-64,90%	20.933	1.792	10.693	-89,65%
73	Venice	197.594	218.437	-9,54%	224.742	303.227	331.844	-40,46%
74	Volos	37.445	67.096	-44,19%	57.825	20.227	11.926	213,98%
75	Zadar	135.584	73.596	84,23%	52.028	32.939	19.871	582,32%

APPENDIX V

Seasonality of cruise activities in MedCruise Ports (Cruise Pax Shares of MedCruise Ports per region – Shares per trimester in 2016)

Alicante 27,16% 27,98% 43,78% 1,07% Azores 46,83% 2,35% 34,64% 16,18% Balearic Islands 22,61% 40,75% 32,71% 3,93% Barcelona 22,18% 36,65% 32,14% 9,02% Bastia/North Corsica 39,08% 15,32% 41,59% 4,01% Cagliari 23,98% 36,37% 33,04% 6,60%	
Balearic Islands 22,61% 40,75% 32,71% 3,93% Barcelona 22,18% 36,65% 32,14% 9,02% Bastia/North Corsica 39,08% 15,32% 41,59% 4,01%	
Barcelona 22,18% 36,65% 32,14% 9,02% Bastia/North Corsica 39,08% 15,32% 41,59% 4,01%	
Bastia/North Corsica 39,08% 15,32% 41,59% 4,01%	
Cagliari 23,98% 36,37% 33,04% 6,60%	
Cartagena 29,91% 27,65% 41,80% 0,65%	
Castellon 0,00% 0,00% 100,00% 0,00%	
Ceuta 23,92% 35,69% 40,39% 0,00%	
Civitavecchia 19,59% 38,98% 34,11% 7,31%	
French Riviera Ports 23,67% 47,68% 28,48% 0,17%	
Genoa 24,87% 29,89% 34,64% 10,60%	
Gibraltar 27,07% 33,93% 37,31% 1,69%	
Gioia Tauro 14,62% 54,67% 30,72% 0,00%	
Huelva 3,17% 51,24% 42,60% 2,99%	
La Spezia 20,01% 35,64% 32,74% 11,61%	
Lisbon 25,99% 23,61% 42,98% 7,42%	
Livorno 17,48% 49,77% 30,66% 2,09%	
Madeira Ports 29,55% 8,39% 28,60% 33,46%	
Malaga 24,15% 24,43% 40,53% 10,89%	
Marseille 23,79% 33,93% 33,12% 9,15%	
Messina 23,98% 38,14% 35,51% 2,38%	
Monaco 17,38% 41,97% 38,03% 2,62%	
Motril-Granada 52,21% 5,23% 42,56% 0,00%	
Naples 20,53% 41,62% 32,79% 5,07%	
North Sardinian Ports 17,99% 51,63% 30,03% 0,35%	
Palamos 19,81% 45,83% 34,35% 0,00%	
Palermo 25,89% 31,08% 27,07% 15,96%	
Portimao 24,67% 42,54% 30,61% 2,18%	
Portoferraio 13,05% 48,07% 38,88% 0,00%	
Portofino 15,05% 47,70% 37,24% 0,00%	
Savona 29,74% 21,68% 32,28% 16,30%	
Sete 21,23% 42,48% 36,28% 0,00%	
Tarragona 11,33% 59,22% 27,51% 1,94%	
Tenerife Ports 26,89% 8,48% 26,27% 38,36%	
Toulon-Var Provence 17,98% 46,79% 34,12% 1,12%	
Tunisian Ports 0,00% 0,00% 41,48% 58,52%	
Valencia 22,38% 28,09% 43,94% 5,59%	
Valletta 24,19% 34,29% 36,32% 5,20%	

Port	Mar-May	Jun-Aug	Sept-Nov	Dec-Feb	
Ancona	8,96%	59,75%	31,30%	0,00%	
Bari	23,37%	43,31%	33,33%	0,00%	
Brindisi	10,63%	4,72%	81,29%	3,36%	
Corfu	19,06%	46,17%	34,52%	0,26%	
Dubrovnik	21,70%	43,65%	34,09%	0,56%	
Koper	20,38%	41,50%	36,73%	1,39%	
Kotor	17,57%	46,05%	36,04%	0,35%	
Ravenna	24,51%	45,29%	30,19%	0,00%	
Rijeka	10,80%	26,92%	60,55%	1,72%	
Sibenik	22,96%	37,52%	25,47%	14,04%	
Split	19,67%	45,99%	33,72%	0,63%	
Taranto					
Venice	20,45%	45,63%	33,57%	0,34%	
Zadar	18,29%	42,36%	38,21%	1,14%	
Port	Mar-May	Jun-Aug	Sept-Nov	Dec-Feb	
Alanya	86,97%	0,00%	13,03%	0,00%	
Antalya	46,72%	0,00%	53,28%	0,00%	
Bodrum	22,89%	45,96%	31,16%	0,00%	
Cyprus Ports	29,76%	25,92%	39,97%	4,35%	
Egyptian Ports	19,91%	21,20%	28,24%	30,65%	
Heraklion	26,91%	37,57%	32,04%	3,49%	
Igoumenitsa	18,68%	49,10%	32,22%	0,00%	
Istanbul	45,91%	40,51%	13,58%	0,00%	
Kavala	33,86%	3,48%	62,66%	0,00%	
Kusadasi	24,21%	46,80%	28,99%	0,00%	
Mersin					
Patras	0,00%	0,00%	100,00%	0,00%	
Piraeus	21,90%	42,36%	32,83%	2,90%	
Souda/Chania	18,41%	43,06%	36,23%	2,29%	
Thessaloniki	3,13%	29,99%	66,88%	0,00%	
Volos	31,58%	18,64%	36,93%	12,85%	
Port	Mar-May	Jun-Aug	Sept-Nov	Dec-Feb	
Burgas	25,06%	0,00%	74,94%	0,00%	
Constantza	21,12%	2,92%	75,95%	0,00%	
Odessa	24,80%	0,00%	75,20%	0,00%	
Sochi	26,72%	0,00%	73,28%	0,00%	
Trabzon	0,00%	0,00%	100,00%	0,00%	
Varna	12,98%	18,39%	68,62%	0,00%	

APPENDIX VI MedCruise Ports per Size Category

Category A (>100.000 pax.)						
No	Port	Cruise Pax. 2016				
1	Azores	125.904				
2	Balearic Islands	1.957.429				
3	Barcelona	2.683.594				
4	Bari	400.875				
5	Cagliari	255.873				
6	Cartagena	187.843				
7	Civitavecchia	2.339.676				
8	Corfu	748.914				
9	Cyprus Ports	141.358				
10	Dubrovnik	831.730				
11	Egyptian Ports	411.626				
12	French Riviera Ports	562.929				
13	Genoa	1.017.368				
14	Gibraltar	404.005				
15	Heraklion	238.780				
16	Kotor	536.644				
17	Kusadasi	347.232				
18	La Spezia	507.531				
19	Lisbon	522.497				
20	Livorno	807.935				
21	Madeira Ports	522.483				
22	Malaga	442.931				
23	Marseille	1.597.213				
24	Messina	373.199				
25	Monaco	185.392				
26	Naples	1.306.151				
27	North Sardinian Ports	210.386				
28	Palermo	510.078				
29	Piraeus	1.094.135				
30	Savona	910.244				
31	Souda/Chania	147.915				
32	Split	275.651				
33	Tenerife Ports	884.173				
34	Toulon-Var Provence	362.479				
35	Valencia	404.783				
36	Valletta	682.970				
37	Venice	1.605.660				
38	Zadar	136.462				

	Category B (≤100.00	0 pax.)
No	Port	Cruise Pax. 2016
1	Alanya	9.272
2	Alicante	89.197
3	Ancona	54.901
4	Antalya	45.405
5	Bastia/North Corsica	18.533
6	Bodrum	61.261
7	Brindisi	5.270
8	Burgas	5.833
9	Castellon	1.095
10	Ceuta	19.251
11	Constantza	6.912
12	Gioia Tauro	13.758
13	Huelva	20.071
14	Igoumenitsa	7.623
15	Istanbul	36.708
16	Kavala	6.042
17	Koper	78.923
18	Mersin	0
19	Motril-Granada	4.570
20	Odessa	1.242
21	Palamos	25.505
22	Patras	743
23	Portimao	19.520
24	Portoferraio	42.752
25	Portofino	19.894
26	Ravenna	45.582
27	Rijeka	13.874
28	Sete	23.791
29	Sibenik	12.276
30	Sochi	1.194
31	Taranto	0
32	Tarragona	14.013
33	Thessaloniki	18.876
34	Trabzon	452
35	Tunisian Ports	757
36	Varna	1.109
37	Volos	37.445

Alanya | Alicante | Ancona | Azores | Balearic Islands | Barcelona | Bari | Bastia/North Corsica | Brindisi | Burgas | Cagliari | Cartagena | Castellon | Ceuta | Civitavecchia Constantza

MEET MEDCRUISE

Corfu | Cyprus Ports
Dubrovnik
Egyptian Ports
French Riviera Ports
Genoa | Gibraltar
Gioia Tauro
Heraklion | Huelva
Igoumenitsa | Istanbul
Kotor

#PortsTogether

Kavala | Koper | Kotor
Kusadasi/Bodrum/Antalya | La Spezia | Lisbon
Livorno | Madeira Ports
Malaga | Marseille | Mersin

Messina | Monaco

Motril-Granada | Naples

North Sardinian Ports | Odessa

Palamos Palermo | Patras | Piraeus | Portimao Portoferraio | Portofino | Rijeka | Savona | Sete Sibenik | Sochi | Souda/Chania | Split | Taranto Tarragona | Tenerife Ports | Thessaloniki Toulon-Var Provence | Trabzon | Tunisian Ports Valencia | Valletta | Varna | Venice | Volos | Zadar

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Salamis Shipping

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SNEAL

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World Synergy Travel



The MedCruise Team

The report has been produced by the MedCruise Secretariat based on data provided by the port members of the MedCruise Association.

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