

# Quality of bathing water — 2008 bathing season

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# Foreword

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## Heading for your favorite beach? Is the bathing water clean?

Europe has a huge diversity of beautiful beaches and bathing areas and each year millions of Europeans choose to spend their holidays cooling down by the water and as this year's bathing season approaches, many citizens throughout Europe will be considering where to spend their holidays.

It is likely that the current economic climate will have a big impact on where Europeans decide to holiday this summer, but an equally important factor in our choice of destination should be the quality of the bathing water.

The European Environment Agency (EEA) and the European Commission are therefore pleased to present the 2008 bathing water report which will help Europeans make informed choices. The report assesses the bathing water quality in all 27 EU Member States in 2008 and thereby gives an indication of the areas where the quality of bathing is expected to be good this year.

Overall in 2008, 96.3 % of Europe's coastal bathing waters and 92 % of inland bathing waters met the minimum water quality standards set by the European Bathing Water Directive. This represents an improvement on the 2007 results and is a cause for satisfaction. However, further work is necessary to constantly improve and maintain the quality of bathing waters.

We all want to know the quality of 'our' local bathing area, beach or lake. Importantly the 'Water Information System for Europe' (WISE) (available at <http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water>), will allow you to check on-line bathing water quality in the 21 000 coastal beaches and freshwater bathing sites across Europe.

You can check the bathing water quality on an interactive map, view the data for a selected country or region and make comparisons with previous years. The data can also be visualised in geospatial mapping programs such as Google Earth and Microsoft Live maps. This information will allow you to get more actively involved in the protection of your environment and to help protect and improve Europe's bathing areas.

We encourage you to make use of this information and the other sources listed in this publication.

We wish you all a pleasant summer.

*Stavros Dimas*  
European Commissioner for the Environment

*Jacqueline McGlade*  
Executive Director,  
European Environment Agency

# 1 Objective of this report

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This report provides an overview of bathing water quality in the European Union during the 2008 bathing season. The objective of the report is to present European citizens with a comprehensive synopsis of the quality of bathing waters in the

Member States of the European Union during the previous bathing season. In addition to demonstrating the quality of the bathing waters in 2008 the report also shows the evolution of bathing water quality from 1990 to 2008.



**Photo:** © Pia Schmidt

## 2 Safeguarding public health

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The first European bathing water legislation, the 'Bathing Water Directive' <sup>(1)</sup> came into force in 1975. Its main objectives are to safeguard public health and protect the aquatic environment in coastal and inland areas from pollution. Bathing waters can be coastal waters or inland waters (rivers, lakes). To be covered by the Directive including its mandatory quality standards as well as its monitoring and information obligations, bathing must either be explicitly authorised, or not prohibited and traditionally practiced by a large number of people. Swimming pools and waters for therapeutic purposes are not covered. The period during which bathers can be expected in bathing areas depends largely on local bathing rules and weather conditions. A bathing season can also vary within a Member State. In the European Union it usually runs from the end of May until the end of September.

New European legislation on bathing water was adopted in 2006 <sup>(2)</sup>. The 'New Bathing Water Directive' updates the measures of the 1975 legislation and simplifies its management and surveillance methods. It also provides for a more proactive approach to informing the public on water quality and creates four quality categories for bathing waters — 'poor', 'sufficient', 'good' and 'excellent'. The new European legislation was transposed into national law in 2008 but Member States have until December 2014 to implement it.

Cyprus, Denmark, Estonia, Finland, Germany, Hungary, Latvia, Lithuania, Slovakia, Spain and Sweden started to monitor bathing waters according to the more stringent new European legislation during the 2008 bathing season, while Luxembourg started in the 2007 bathing season.

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<sup>(1)</sup> Directive 76/160/EEC concerning the quality of bathing water.

<sup>(2)</sup> Directive 2006/7/EC concerning the management of bathing water quality and repealing Directive 76/160/EEC.



### 3 Testing bathing water quality

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The results presented in this report are based on sampling carried out by the national authorities in all EU Member States and checked against a set of physical, chemical and microbiological parameters. These include testing for the presence of coliform bacteria normally found in faeces and other sources, the colour of the water, residues of petrol-based mineral oils, foam from detergents and toxic acids such as phenol. Other tests can be conducted to verify the presence of salmonella or the acidity (pH) of the bathing water.

Using the results of the sampling, the bathing waters are then classified into the following categories:

- those that comply with the mandatory values;
- those that comply with the more stringent guide values;
- those that do not comply with the mandatory values;
- those that are banned or closed throughout the bathing season.

Member States that are not monitoring bathing waters according to the more stringent requirements set out in the New Bathing Water Directive (2006/7/EC) must begin sampling two weeks before the start of the bathing season. Sampling must be carried out every other week at places where the daily average of bathers is highest throughout the bathing season.

Member States that are monitoring under the more stringent new requirements must take one sample at each bathing place shortly before the start of the bathing season and continue sampling until the end of the season, with at least one sample per month.



**Photo:** © Peter Kristensen

## 4 Informing European citizens of bathing water quality in their area

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Member States are obliged to provide the results of their samples for that year's bathing season to the European Commission before 31 December. The Commission, together with the European Environment Agency from 2009 onwards, publishes in early June each year an EU-wide report covering all 27 Member States, available in print and online.

This report presents the 2008 results and the trends in bathing water quality. Reports on the individual 27 Member States are published online.

The bathing water section of the Water Information System for Europe (WISE), which is available at <http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water>, allows users to view the quality of the bathing water at more than

21 000 coastal beaches and freshwater sites across Europe. Users can check bathing water quality on an interactive map or can download data for a selected country or region and make comparisons with previous years. Downloaded data can also be visualised in geospatial mapping programmes such as Google Earth and Microsoft Live maps.

Specific questions can be asked on bathing water quality by e-mailing the Commission at [env-water@ec.europa.eu](mailto:env-water@ec.europa.eu) or by writing to the Commission at:

European Commission  
Environment Directorate-General  
Unit D2  
1049 Brussels  
Belgium



Photo: © Pia Schmidt

## 5 Total number of bathing waters reported in the EU since 1990

More than 21 000 bathing waters were monitored in the 27 Member States for the 2008 bathing season, around two thirds were coastal bathing waters and one third were inland bathing waters (rivers, lakes).

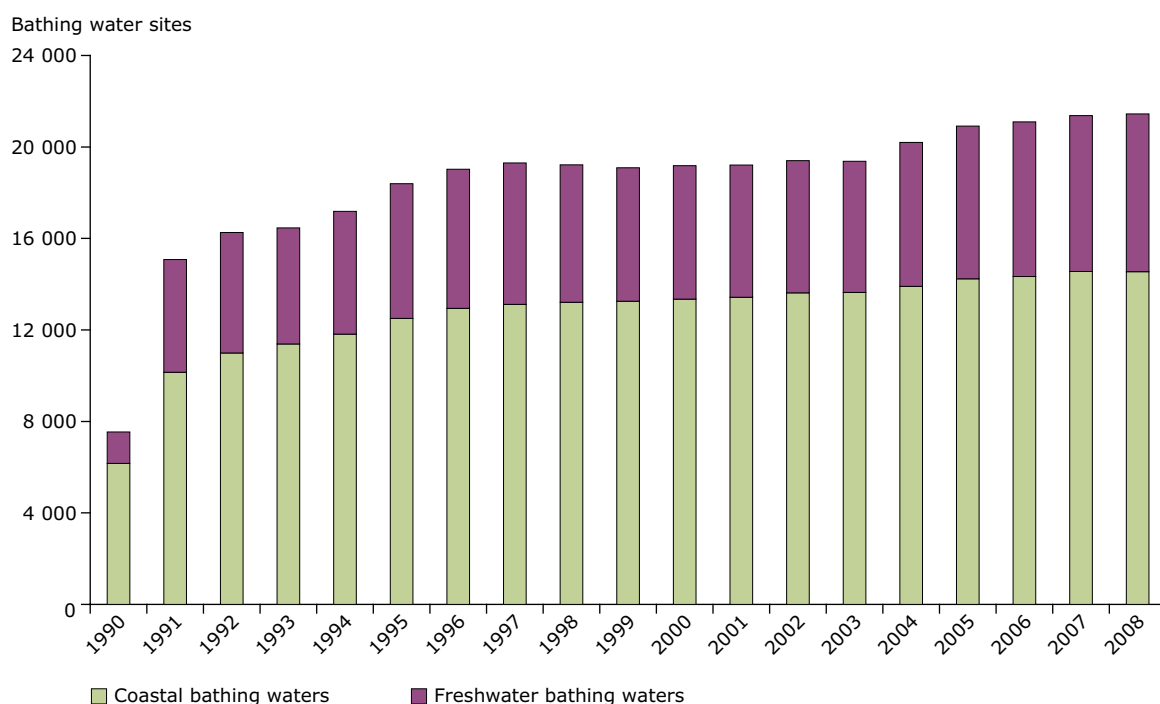
From 1990 to 2008 the number of reported bathing waters increased significantly. Member States reported on 6 165 coastal and 1 374 inland bathing waters in 1990, whereas in 2008 they reported on 14 551 coastal waters (an increase of 8 386) and 6 890 inland bathing waters (an increase of 5 516). These rises are the direct result of Member States increasing the number of bathing waters that they report on but also reflect the fact that EU membership has more than tripled since 1990.

Three Member States (Cyprus, Malta and Romania) only reported data for coastal areas while five

others (Austria, the Czech Republic, Hungary, Luxembourg and Slovakia) only have inland bathing waters. The remaining 19 Member States reported data for coastal and inland bathing waters.

Details on all Member States bathing waters are shown in Table 2 in Chapter 9 of this report and can also be found in national bathing water reports or on the European Environment Agency's bathing water website (<http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water>) and the European Commission's bathing water website ([http://ec.europa.eu/environment/water/water-bathing/report\\_2009.html](http://ec.europa.eu/environment/water/water-bathing/report_2009.html)).

**Figure 1 Total number of bathing waters reported in the European Union since 1990**



**Source:** WISE Bathing Water Quality database based on annual reports by EU Member States.

## 6 Bathing water quality in the European Union

Table 1 in Chapter 9 of this report displays bathing water quality in the European Union in absolute numbers and percentages for coastal and inland bathing waters.

Cyprus, Denmark, Estonia, Finland, Germany, Hungary, Latvia, Lithuania, Luxembourg, Slovakia, Spain and Sweden (12 Member States) reported the bathing water quality during bathing season 2008 according to the New Bathing Water Directive. For this directive, the analysis of bathing water quality is based on two parameters, Intestinal enterococci and Escherichia coli.

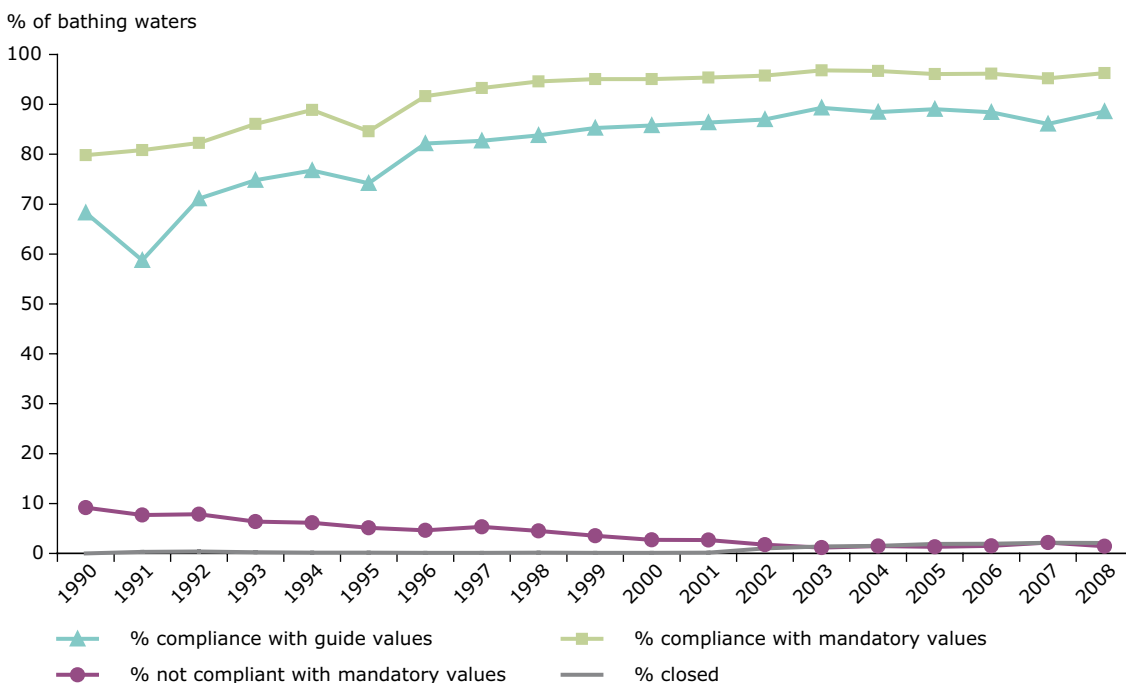
### 6.1 Coastal bathing waters

The overall water quality of coastal bathing waters improved in the European Union in 2008. Some

96.3 % of coastal bathing waters in the European Union complied with the mandatory values of the Bathing Water Directive during the 2008 bathing season (Figure 2). This is an increase of 1.1 percentage points compared to the previous year. Some 88.6 % of coastal bathing waters complied with the Bathing Water Directive's more stringent guide values, a 2.5 percentage point increase from 2007. A small number of coastal bathing waters (1.4 %) did not comply with mandatory values, which represented a 0.8 percentage point decrease. The same proportion of bathing waters were banned or closed throughout the season as in 2007 (2.1 %).

Looking at the overall development since 1990 the quality of the European Union's coastal bathing waters has also improved significantly. The number of bathing waters not complying with the Bathing

**Figure 2 Coastal bathing water quality in the European Union**



Source: WISE Bathing Water Quality database based on annual reports by EU Member States.

Water Directive's provisions decreased from 9.2 % to 1.4 % in 2008, with the lowest level (1.2 %) attained in 2003. Compliance with mandatory values improved dramatically, increasing from 80 % in 1990 to 96 % in 2008. Compliance with guide values likewise rose from 68 % to 89 %.

## 6.2 Inland bathing waters

In 2008, the quality of inland bathing waters improved relative to 2007. More than nine in ten reported inland bathing waters in the European Union complied with the mandatory values during the 2008 bathing season — 3.3 percentage points more than in the previous year (Figure 3). The percentage of inland bathing waters complying with the more stringent guide values increased by 10.7 percentage points. Only 2.8 % of inland bathing areas in the European Union did not comply with mandatory values and 4.6 % were banned or closed throughout the bathing season.

The overall quality of inland bathing areas in the EU has also markedly improved since 1990 but with greater variations than coastal bathing waters. In 1990, 52 % of inland bathing areas complied with mandatory values while in 2008 this number had reached 92 %. Similarly, the rate of compliance with

guide values moved from 36.4 % in 1990 to 73.4 %. The number of bathing areas not complying with mandatory values decreased from 11.9 % in 1990 to 2.8 % in 2008.

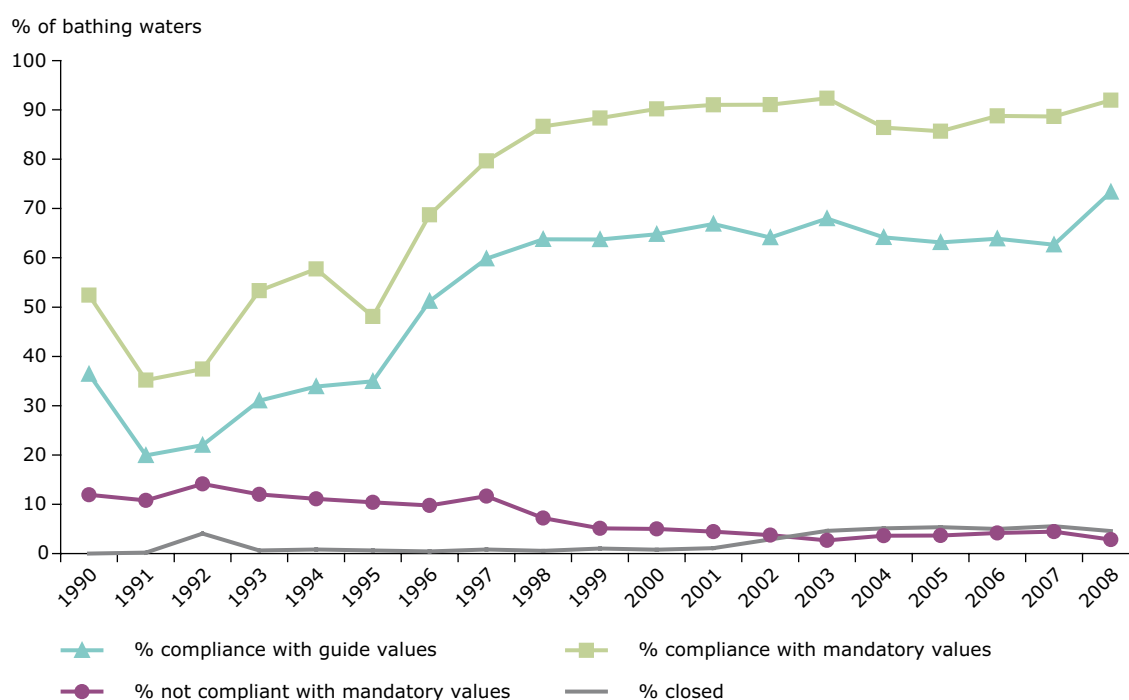
EU bathing water quality results for the 2008 bathing season are shown on Map 1. The bar charts represent the quality assessment for the bathing water of each Member State. Inland and coastal bathing areas are displayed using separate bar charts. Quality assessment for each Member State is provided in Table 2 in Chapter 9 of this report.

## 6.3 Bathing water quality by geographic region

The European Union's overarching water legislation — the Water Framework Directive — uses river basins rather than administrative or political boundaries to define water management areas. Bathing water quality in each Member State can be influenced by that State's activities or those of neighbouring States that occupy the same river basins.

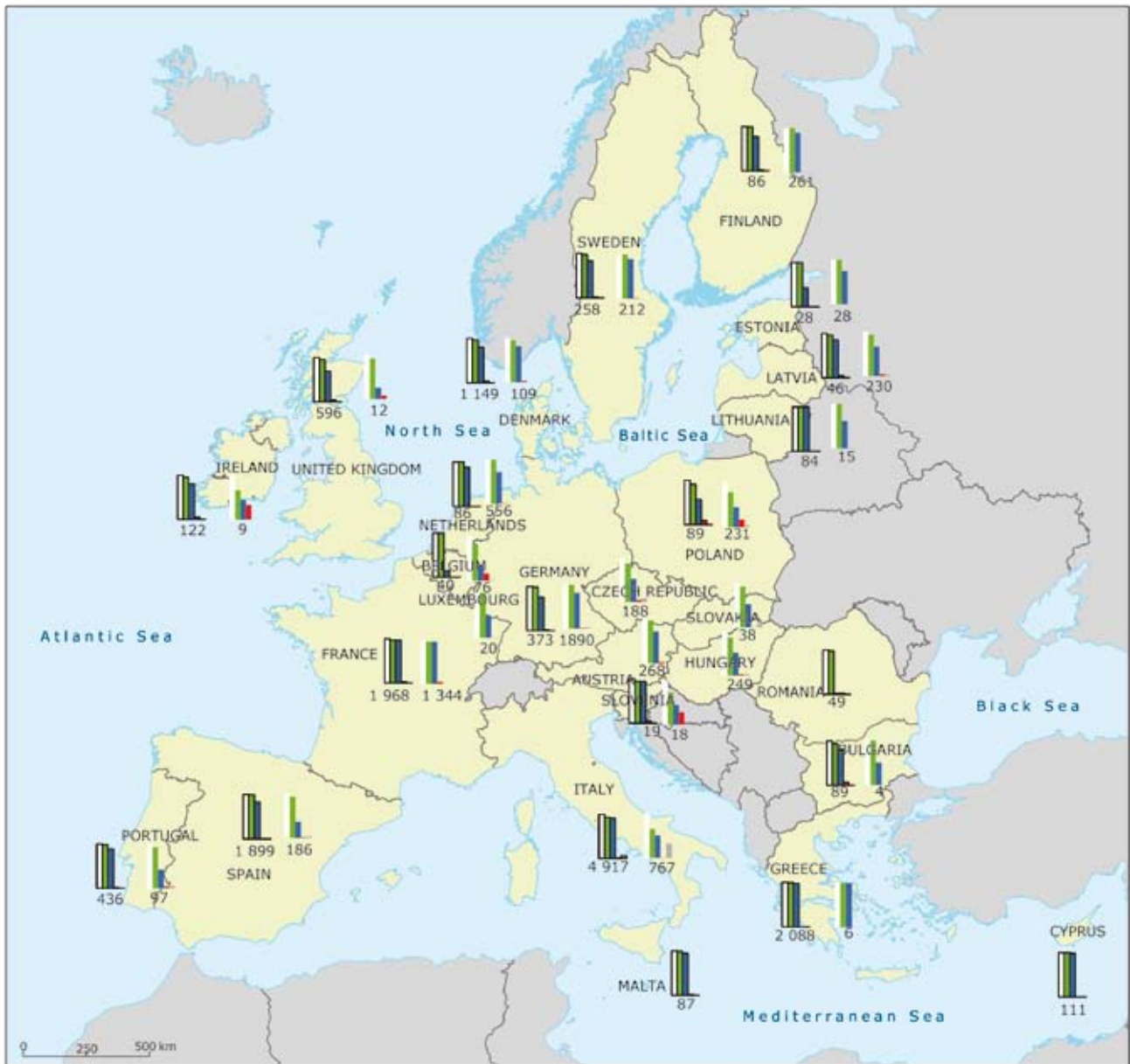
This section presents bathing water quality results by river basins found in the major geographic regions of the European Union:

**Figure 3 Inland bathing water quality in the European Union**



**Source:** WISE Bathing Water Quality database based on annual reports by EU Member States.

**Map 1 Bathing water quality in EU Member States**



**Bathing water quality in EU Member States**

Total number of bathing waters	Not compliant with mandatory values	Inland bathing waters
Compliant with mandatory values	Banned or closed throughout the season	Coastal bathing waters
Compliant with guide values		EU Member States

**Note:** More data on bathing water quality on <http://www.eea.europa.eu/themes/water/mapviewers/bathing>.

**Source:** National boundaries: GISCO.

- the Mediterranean Sea (coastal bathing waters) and the river basin districts flowing out into the Mediterranean Sea (inland bathing waters);
- the Atlantic Ocean (coastal bathing waters) and the river basin districts flowing out into the Atlantic Ocean (inland bathing waters);
- the North Sea (coastal bathing waters) and the river basin districts flowing out into the North Sea (inland bathing waters);
- the Baltic Sea (coastal bathing waters) and the river basin districts flowing out into the Baltic Sea (inland bathing waters);
- the Black Sea (coastal bathing waters) and the river basin districts flowing out into the Black Sea (inland bathing waters).

The analysis of bathing water quality by geographic region is based on the bathing water geographic coordinates reported by Member States.



**Photo:** © Peter Kristensen

6.3.1 Mediterranean Sea

A total of 8 907 coastal bathing waters and 1 370 inland bathing sites were reported by the eight Member States in the EU part of the Mediterranean basin area.

Coastal bathing waters

The Member States that border the Mediterranean Sea: are Cyprus, France, Greece, Italy, Malta, Slovenia and Spain. Italy reported more than half of the coastal bathing areas (55.2 %) for the region.

About 95.8 % of coastal bathing areas in the Mediterranean complied with the mandatory quality

values, just below the European average of 96.3 %. Italy, Slovenia and Spain had compliance rates below 95 %.

Some 93.6 % of bathing sites complied with the more stringent guide values, higher than the European average of 88.6 %. Compliance was above 90 % for all Member States.

Bathing was banned or closed throughout the season at 303 bathing sites; 302 were located in Italy and one in Spain. A total of 57 bathing sites did not comply with mandatory values.

Map 2 Bathing water quality on the Mediterranean Sea coast



**Note:** \* River Basin District.  
More data on bathing water quality on <http://www.eea.europa.eu/themes/water/mapviewers/bathing>.

**Source:** National boundaries: GISCO; large rivers and lakes: EEA; bathing waters data and coordinates: Member States' authorities.



**Inland bathing waters**

Of the 1 370 inland bathing waters reported for the Mediterranean Sea region, 95.4 % were located in France and Italy.

Some 78.7 % of bathing waters complied with mandatory values, somewhat below the European average of 92.0 %. Only Bulgaria, France and Greece had more than 95 % of inland bathing waters complying with mandatory values, with 100 % compliance for the three Bulgarian and six Greece inland bathing waters.

In the Mediterranean area, 68.7 % of inland bathing waters complied with guide values, which was below the European average of 73.4 %. Except for Greece (where all bathing sites complied with the guide values) and France (where 96.3 % were compliant), no other Member State reached 60 %.

A total of 29 bathing waters (2.1 %) did not meet mandatory values. Bathing was banned or closed throughout the season at 254 inland bathing sites (18.6 %), 251 of which were located in Italy.

**Map 3** Bathing water quality in the RBD\* of the Mediterranean Sea



**Note:** \* River Basin District.  
More data on bathing water quality on <http://www.eea.europa.eu/themes/water/mapviewers/bathing>.

**Source:** National boundaries: GISCO; large rivers and lakes: EEA; bathing waters data and coordinates: Member States' authorities.

6.3.2 Atlantic Ocean

A total of 1 998 coastal bathing waters and 816 inland bathing waters were reported for the Atlantic region during the 2008 bathing season.

Coastal bathing waters

Five EU Member States have coasts on the Atlantic Ocean — France, Ireland, Portugal, Spain and the United Kingdom. France and Spain represent about 65 % of bathing areas in this group.

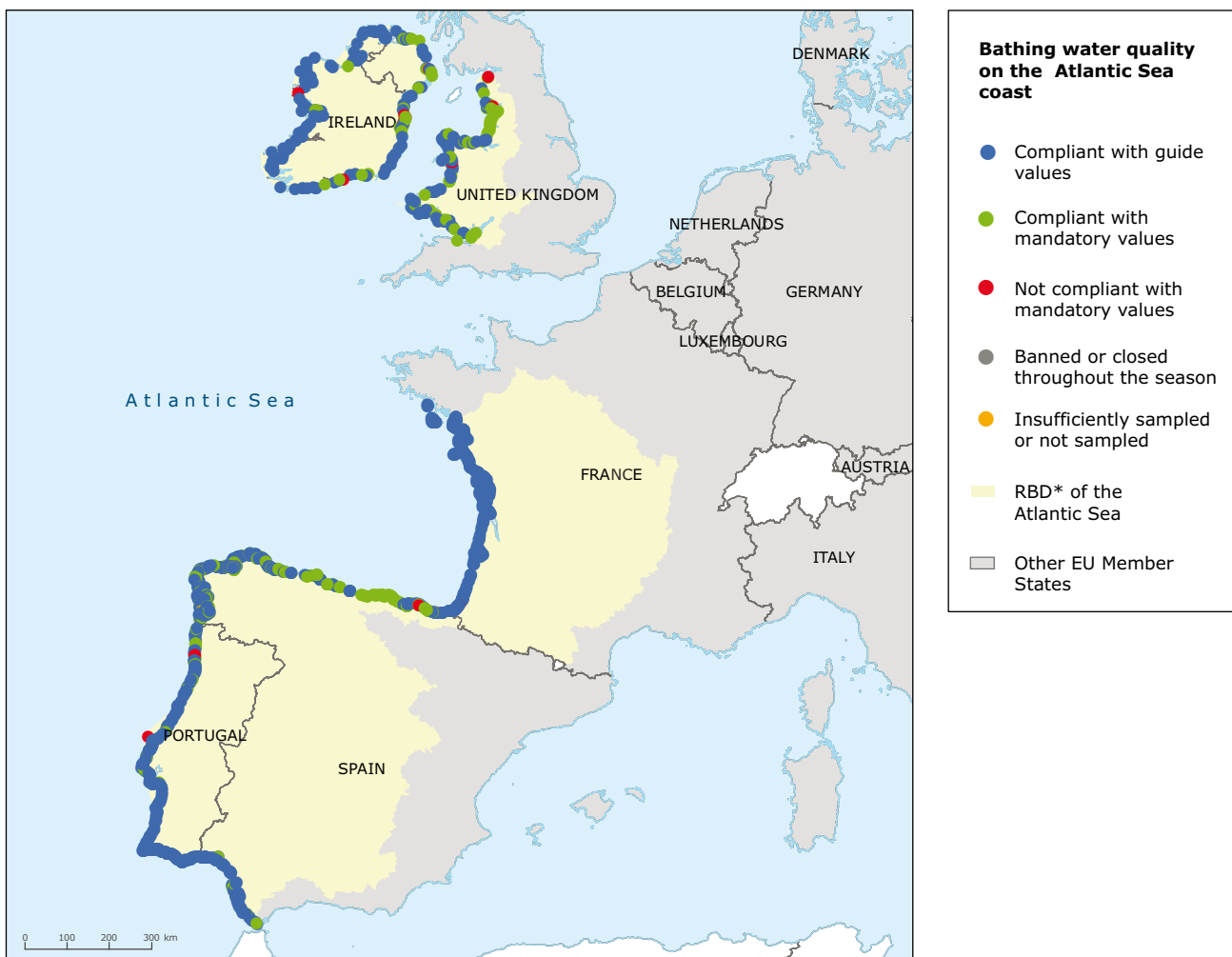
In the Atlantic area, 98.5 % of the coastal bathing waters complied with mandatory values in 2008,

which was higher than the European average of 96.3 %. This figure was above 99 % in France and Spain and below 96 % in Ireland and the United Kingdom.

Compliance with the more stringent guide values (81.7 %) was well below the European average of 88.6 % with compliance rates varying between 58.2 % in the United Kingdom and 99.2 % in France.

Some 21 bathing areas (1.1 %) did not meet mandatory values. The highest rate of non-compliance was reported in Ireland (4.9 %) and the lowest in Spain (0.2 %).

Map 4 Bathing water quality on the Atlantic Sea coast



**Note:** \* River Basin District.  
More data on bathing water quality on <http://www.eea.europa.eu/themes/water/mapviewers/bathing>.

**Source:** National boundaries: GISCO; large rivers and lakes: EEA; bathing waters data and coordinates: Member States' authorities.

**Inland bathing waters**

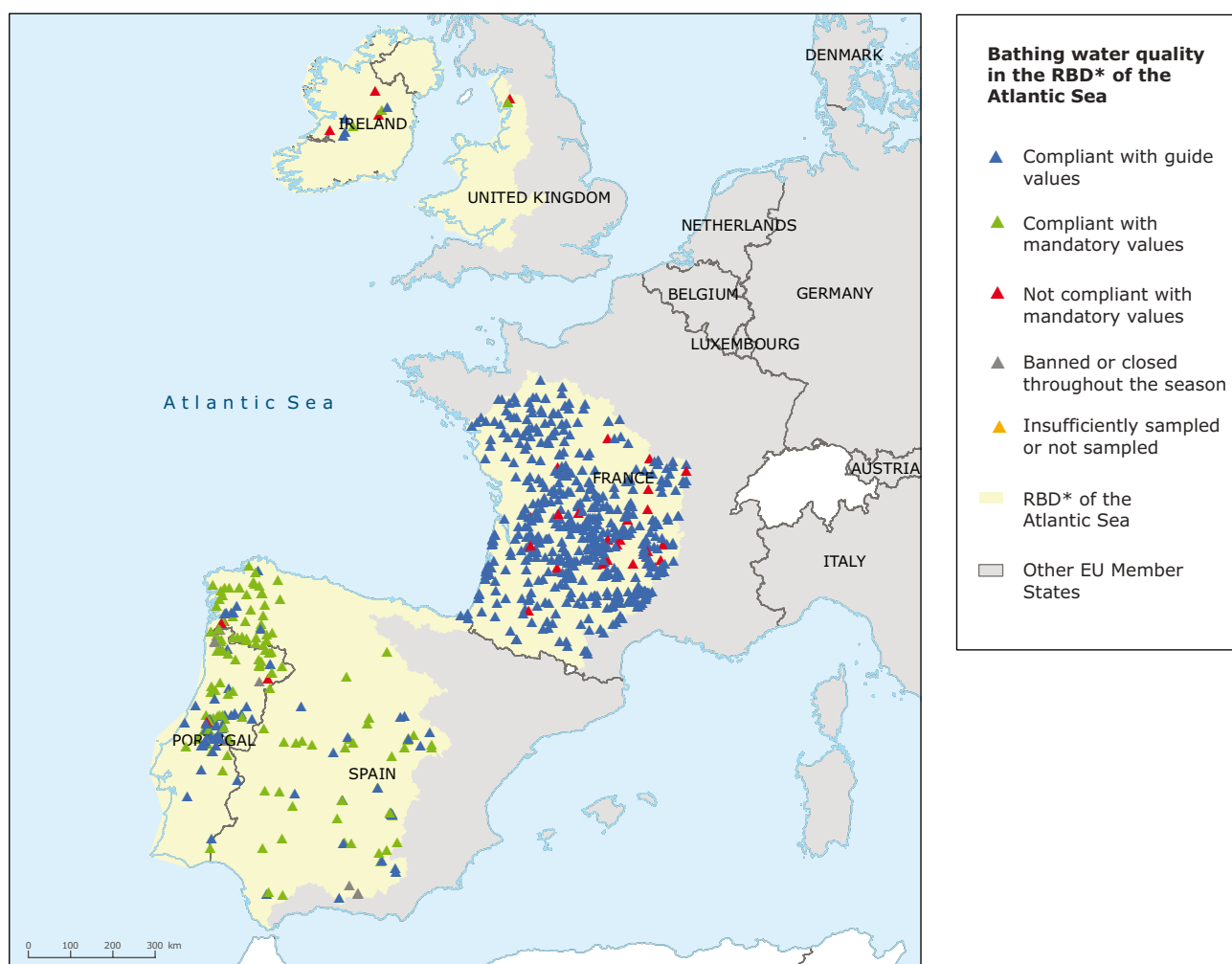
The Atlantic region covers part of the inland waters of France, Ireland, Portugal, Spain and the United Kingdom. France represents more than 71.8 % of the inland bathing waters in the Atlantic region and there are few inland bathing waters in Ireland and the United Kingdom.

Some 95.1 % of inland bathing areas in the Atlantic region complied with mandatory values compared to a European average of 92 %. The compliance rate was above the EU average in France and Spain, while just over two-thirds of the relatively few inland bathing waters in Ireland and the United Kingdom were compliant.

Bathing areas in this region performed relatively well against the more stringent guide values, with 78.3 % of bathing sites complying compared to the European average of 73.4 %. The United Kingdom had the lowest compliance rate at 0 % with few sites reported. The second lowest compliance rate of 26.2 % was in Spain.

A total of 32 bathing sites (3.9 %) did not meet mandatory values. Ireland and the United Kingdom had the highest percentage of non-compliant bathing waters, with one-third of the inland bathing waters not complying.

**Map 5 Bathing water quality in the RBD\* of the Atlantic Sea**



**Note:** \* River Basin District.  
More data on bathing water quality on <http://www.eea.europa.eu/themes/water/mapviewers/bathing>.

**Source:** National boundaries: GISCO; large rivers and lakes: EEA; bathing waters data and coordinates: Member States' authorities.

6.3.3 North Sea

During the 2008 bathing water season a total of 2 050 coastal and 2 479 inland bathing sites were reported for the North Sea region

*Coastal bathing waters*

Seven Member States have coasts on the North Sea: Belgium, Denmark, France, Germany, the Netherlands, Sweden and the United Kingdom. Denmark, France and the United Kingdom reported the majority (84.2 %) of North Sea coastal bathing areas.

Some 96.6 % of bathing waters located on the North Sea complied with mandatory values, similar to the

European average of 96.3 %. The rate of compliance was higher than 90 % for all Member States in the region, with all bathing waters complying in Belgium and the Netherlands.

The share of coastal bathing areas complying with the guide values stood at 83 %, substantially lower than the European average of 88.6 %. This varied between 15 % in Belgium and 95.3 % in France.

Exactly 68 bathing waters (3.3 % of the total) did not meet mandatory values, with the highest rate reported on the French coast (4.7 %).

Map 6 Bathing water quality on the North Sea coast



**Note:** \* River Basin District. More data on bathing water quality on <http://www.eea.europa.eu/themes/water/mapviewers/bathing>.

**Source:** National boundaries: GISCO; large rivers and lakes: EEA; bathing waters data and coordinates: Member States' authorities.

**Inland bathing waters**

A total of 2 479 inland bathing waters were reported in 2008 for the North Sea region. This represents more than a third of reported inland bathing areas in the European Union and covers part of the inland waters of the Austria, Czech Republic, Denmark, France, Germany, Sweden and the United Kingdom, and all of the inland waters of Belgium, Luxembourg and the Netherlands. More than half of these inland waters are located in Germany (53.4 %) and 22.4 % in the Netherlands.

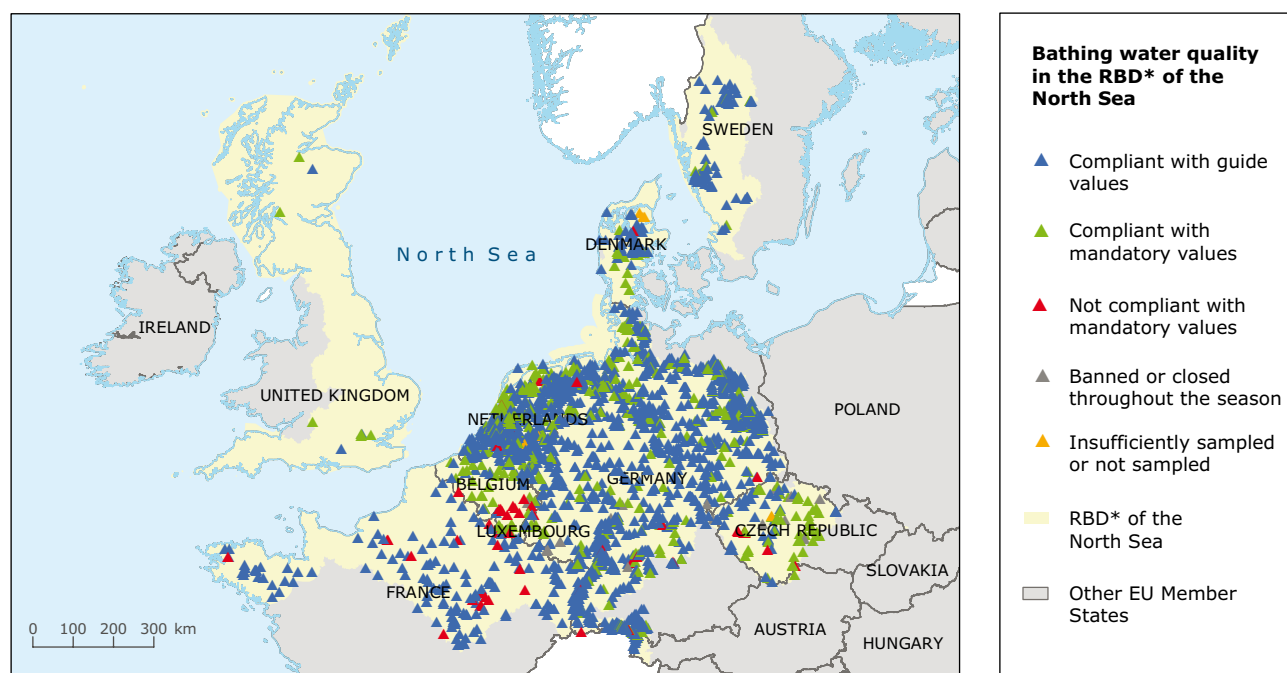
Some 96.7 % of inland bathing waters complied with mandatory values, which was higher than the European average of 92.0 %. The rate of compliance

was higher than 90 % for all Member States in the region, except Belgium and the Czech Republic. In Luxembourg, Sweden and the United Kingdom all inland bathing waters complied with the mandatory values.

About 76.1 % of bathing waters complied with the more stringent guide values compared to the European average of 73.4 %. This varied between 33.3 % in the United Kingdom and 90.8 % in France.

A total of 58 bathing waters (2.3 %) did not meet mandatory values and bathing was banned in 18 sites (0.7 %).

**Map 7 Bathing water quality in the RBD\* of the North Sea**



**Note:** \* River Basin District.  
More data on bathing water quality on <http://www.eea.europa.eu/themes/water/mapviewers/bathing>.

**Source:** National boundaries: GISCO; large rivers and lakes: EEA; bathing waters data and coordinates: Member States' authorities.

6.3.4 *Baltic Sea*

Within the Baltic Sea region 1 274 coastal and 1 249 inland bathing waters were reported in 2008.

*Coastal bathing waters*

Eight EU Member States border the Baltic Sea: Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden. Denmark represents 45.2 % of the reported coastal bathing sites within this region, Germany 21 % and Sweden 13.1 %.

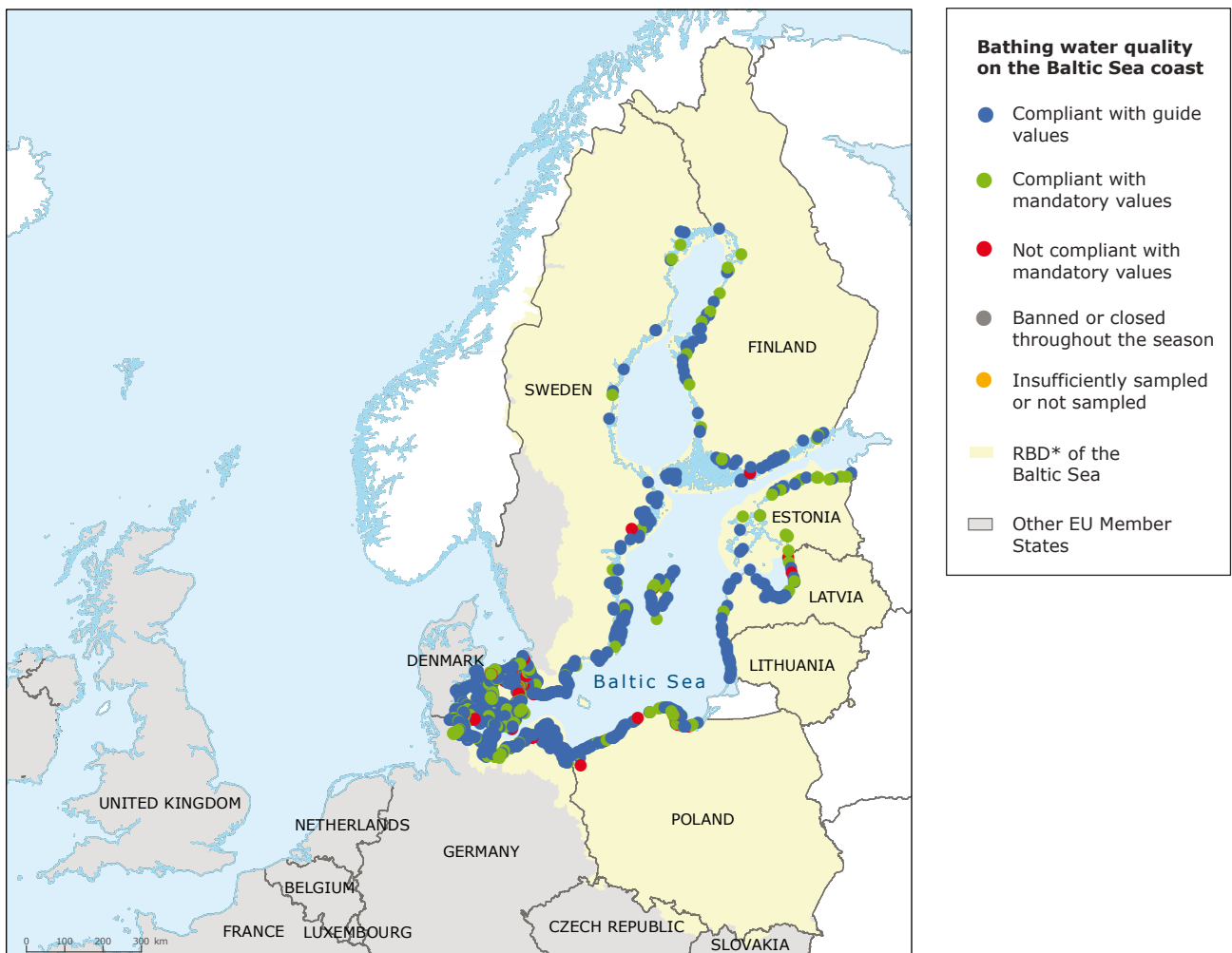
Around 96.3 % of bathing areas complied with mandatory quality values, identical to the European average. In Estonia and Lithuania all bathing areas complied with the mandatory values. The rate of

compliance was higher than 90 % for all Member States in the region, reaching the lowest rate in Poland at 91 %.

Regarding the more stringent guide values, the compliance rate for coastal bathing sites in the Baltic Sea stood at 76.4 %, significantly lower than the European average of 88.6 %. In Latvia, Lithuania and Sweden the average was above 80 %, reaching as high as 100 % in Lithuania. Elsewhere the rate of compliance was much lower, reaching 42.9 % in Estonia and 57.3 % in Poland.

A total of 47 bathing waters (3.7 %) did not meet the mandatory values. This was the highest in Poland (9 %) whereas Estonia and Lithuania reported none.

**Map 8** Bathing water quality on the Baltic Sea coast



**Note:** \* River Basin District.  
More data on bathing water quality on <http://www.eea.europa.eu/themes/water/mapviewers/bathing>.

**Source:** National boundaries: GISCO; large rivers and lakes: EEA; bathing waters data and coordinates: Member States' authorities.

**Inland bathing waters**

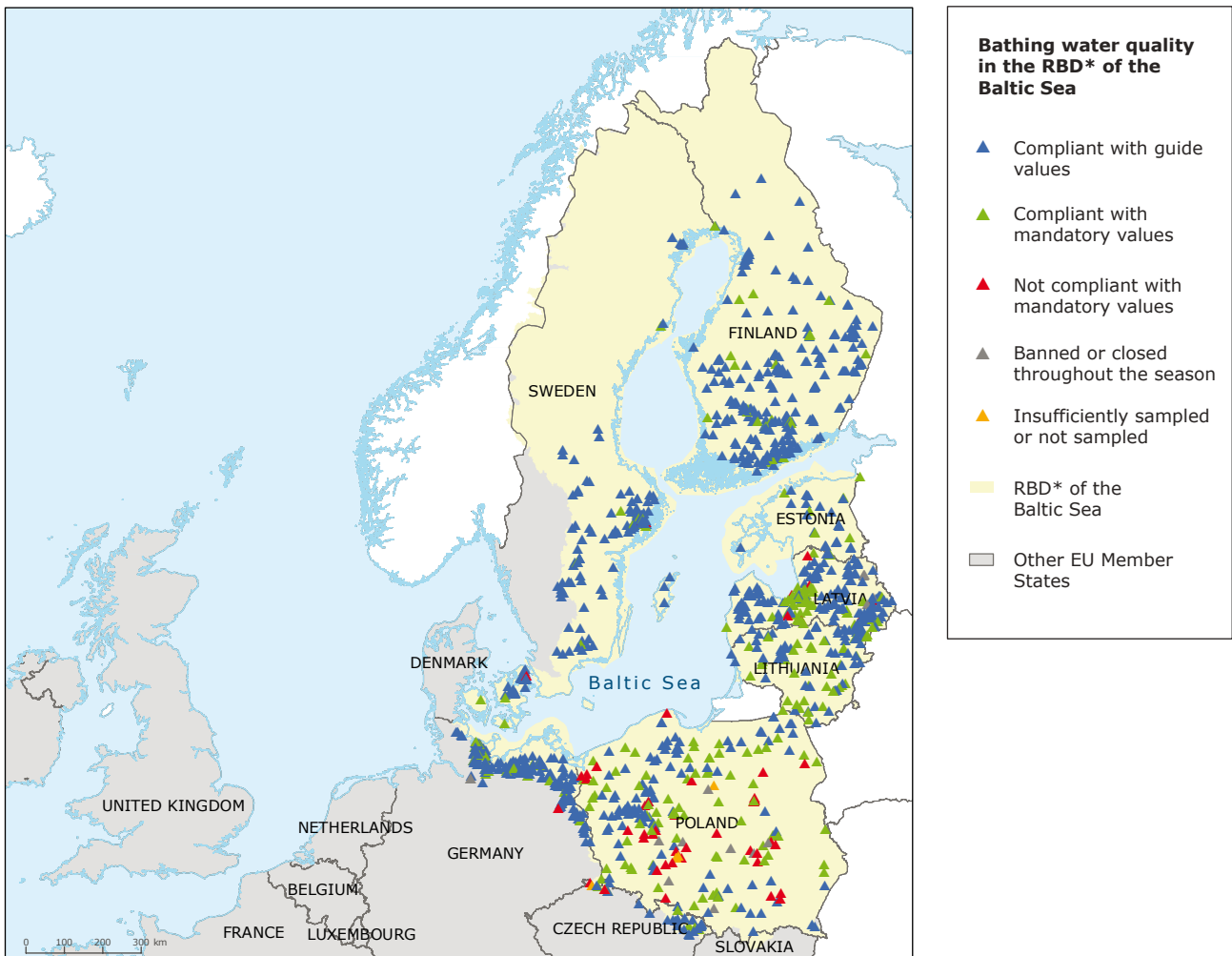
In 2008 a total of 1 249 inland bathing areas were monitored in the Baltic Sea region. Of these, 94 % complied with mandatory values, somewhat higher than the European average of 92.0 %. Only Poland with 78.4 % had a compliance rate below 90 %.

Some 73.7 % of bathing waters in the region complied with the more stringent guide values,

similar to the European average of 73.4 %. The rate of compliance was above 80 % in Denmark, Finland, Germany and Sweden.

Bathing was banned or closed throughout the season in 16 bathing sites (1.3 %) and 54 sites (4.3 %) did not comply with mandatory values. With 16.5 % Poland had the largest share of non-compliant bathing sites.

**Map 9 Bathing water quality in the RBD\* of the Baltic Sea**



**Note:** \* River Basin District.  
More data on bathing water quality on <http://www.eea.europa.eu/themes/water/mapviewers/bathing>.

**Source:** National boundaries: GISCO; large rivers and lakes: EEA; bathing waters data and coordinates: Member States' authorities.

### 6.3.5 Black Sea

In the Black Sea region 138 coastal and 937 inland bathing waters were reported during the 2008 bathing season.

#### Coastal bathing waters

There are only two EU Member States located on the Black Sea: Bulgaria and Romania. Both are comparatively new Member States and started reporting the quality of their bathing waters in 2007.

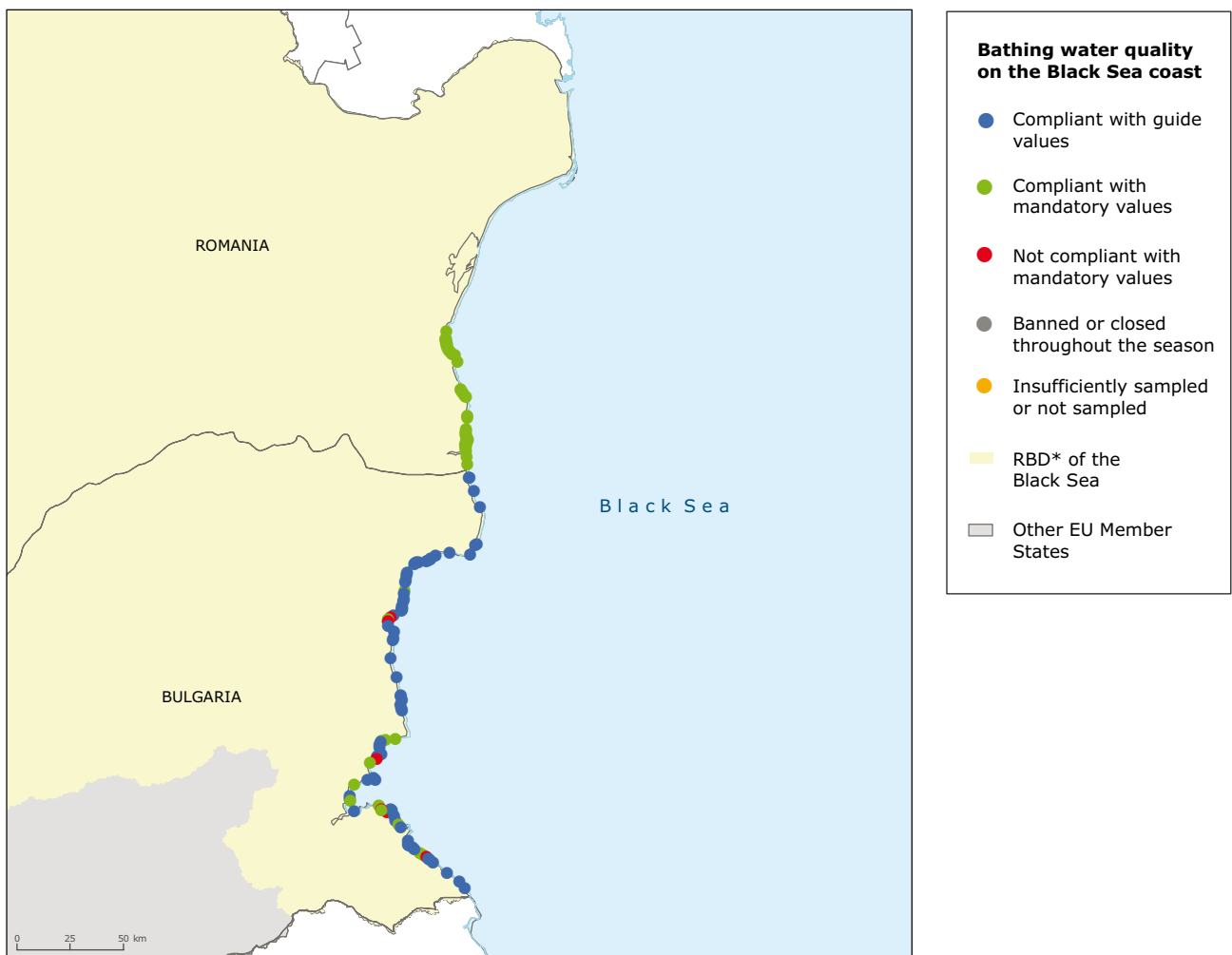
About 94.9 % of bathing areas complied with the mandatory quality values, which was slightly

lower than the European average of 96.3 %. The compliance rates were 98 % in Romania and 93.3 % in Bulgaria.

Compliance with the more stringent guide values stood at 51.4 %, markedly below the European average of 88.6 %. Only one bathing site in Romania met the guide values compared to 78.7 % of sites in Bulgaria.

A total of seven bathing areas (5.1 %) did not meet the mandatory values.

**Map 10** Bathing water quality on the Black Sea coast



**Note:** \* River Basin District.  
More data on bathing water quality on <http://www.eea.europa.eu/themes/water/mapviewers/bathing>.

**Source:** National boundaries: GISCO; large rivers and lakes: EEA; bathing waters data and coordinates: Member States' authorities.



**Inland bathing waters**

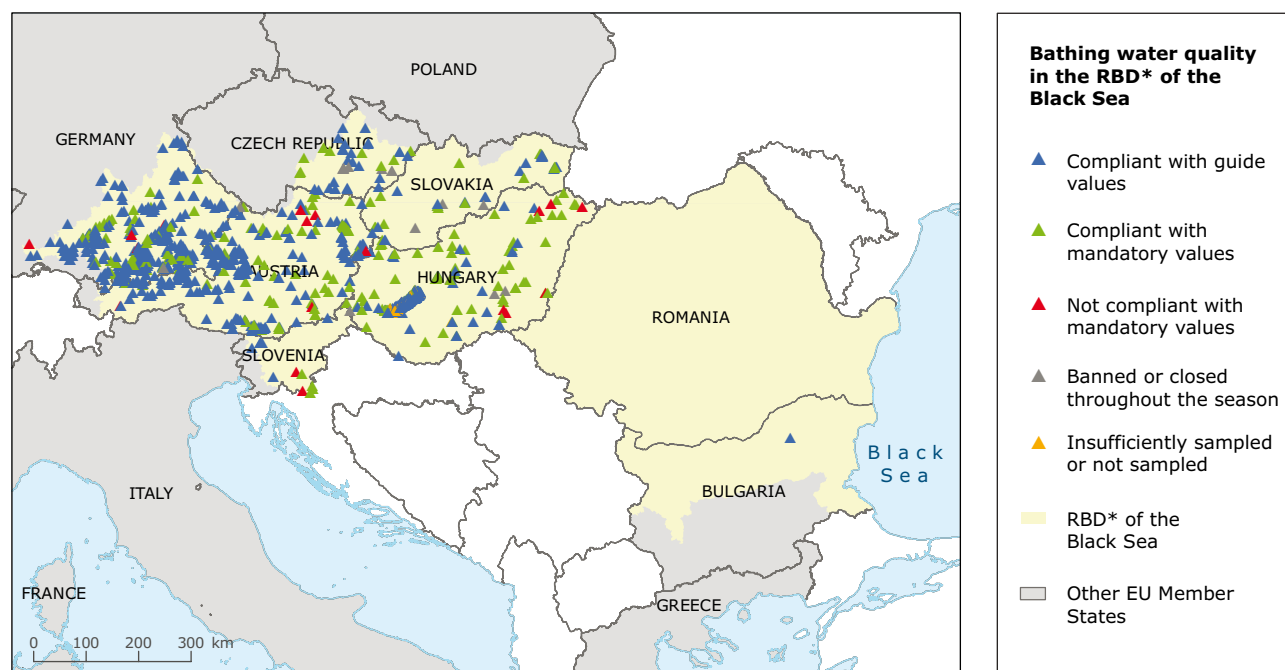
Eight Member States have bathing waters in the Danube River region, which stretches from the Black Sea (Romania and Bulgaria) inland to Hungary, Slovakia, the Czech Republic, Slovenia, Austria and Germany. A total of 948 inland bathing areas were monitored in 2008 in the region but Bulgaria has limited monitoring of inland bathing waters and Romania reports none.

Some 92.6 % of bathing waters complied with the mandatory values, slightly above the European

average of 92.0 %. Compliance was below 90 % in the Czech Republic, Hungary and Slovenia and above 95 % in Austria, Bulgaria and Germany.

Compliance with the guide values stood at 67.8 %, around six percentage points less than the European average (73.4 %). Bathing was banned or closed throughout the season in 19 inland bathing areas (2 %) and 20 bathing sites (2.1 %) did not comply with the mandatory values.

**Map 11** Bathing water quality in the RBD\* of the Black Sea



**Note:** \* River Basin District.  
More data on bathing water quality on <http://www.eea.europa.eu/themes/water/mapviewers/bathing>.

**Source:** National boundaries: GISCO; large rivers and lakes: EEA; bathing waters data and coordinates: Member States' authorities.

## 7 Conclusions on bathing water quality by geographical region

The majority of coastal bathing waters are located in the Mediterranean region (8 907), representing 62 % of all coastal bathing waters in EU. In the North Sea and Atlantic regions the number of coastal bathing waters is around 2 000 (2 050 and 1 998, respectively). In the Black Sea region there are 138 coastal bathing waters.

The highest number of inland bathing waters is located in the North Sea region (2 479). In the Baltic Sea region there are 1 249 inland bathing waters and in the Mediterranean region 1 370. The Black Sea and Atlantic regions have less than 1 000 inland bathing waters, with 937 and 816 respectively. The Baltic Sea region has approximately the same number of coastal and inland bathing waters (1 274 and 1 249 respectively).

Compliance of coastal bathing areas with mandatory water quality values is better on average on the North Sea, Atlantic and Mediterranean coasts than in the rest of the European Union. The Mediterranean coast also has above average compliance rates with the more stringent guide values.

For inland bathing areas, the Atlantic, North Sea, Baltic Sea and Black Sea regions do best compared to mandatory values, while the latter three also do well with the more stringent criteria. Only the inland bathing areas of the Mediterranean fall below the European average in complying with mandatory values.



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## 8 Conclusions on bathing water quality by country

Italy (4 917), Greece (2 088), France (1 968), Spain (1 899) and Denmark (1 149) have the highest number of coastal bathing waters. The United Kingdom has 596. Figure 4 (left) shows the national share of coastal bathing waters in the European Union.

Germany and France have the highest number of inland bathing waters (1 890 and 1 344 respectively). The other countries with more than 500 inland bathing waters are Italy (767) and the Netherlands (556). Figure 4 (right) shows the share of inland bathing waters for countries in the European Union.

Bathing seasons vary between and within Member States but generally run from the end of May until the end of September in the EU.

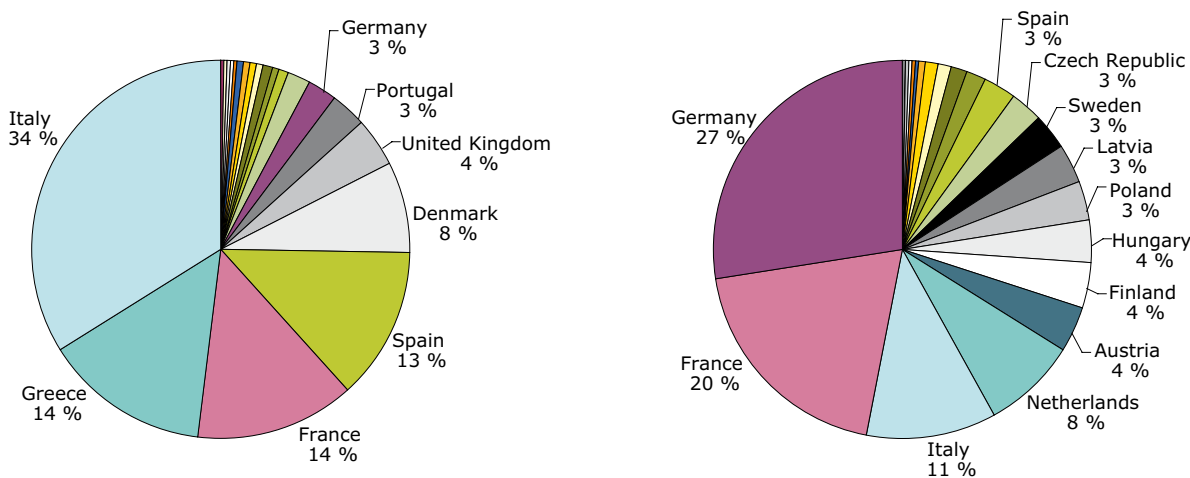
The countries where the highest percentage of bathing waters met the guide values are Cyprus (98.2 %), Greece (97.7 %), France (96.3 %) and Malta

(94.3 %). Countries where more than 80 % of bathing waters with guide water quality are Italy (86 %), Finland (85.9 %), Sweden (85.5 %), Portugal (80.9 %) and Germany (80.8 %).

There are eight countries with a significant number of non-compliant bathing waters. These are France (118 or 3.6 % of all bathing waters), Italy (47 or 0.8 % of all bathing waters), Poland (46 or 14.4 % of all bathing waters), Denmark (44 or 3.5 % of all bathing waters), Germany (25 or 1.1 % of all bathing waters), the United Kingdom (25 or 4.1 % of all bathing waters) and Belgium (12 or 10.3 % of all bathing waters), Latvia (11 or 4 % of all bathing waters).

Four countries have more than 10 bathing waters that were banned or closed throughout the season. These are Italy (553 or 9.7 % of all bathing waters), the Czech Republic (15 or 8.0 % of all bathing waters), Germany (13 or 0.6 % of all bathing waters) and Spain (10 or 0.5 % of all bathing waters).

**Figure 4 National shares of the total number of EU coastal and inland bathing waters**



Source: WISE Bathing Water Quality database based on annual reports by EU Member States.

## 9 Further information on EU bathing water quality

More information on bathing water quality in EU Member States — including the reports for 27 Member States and the EU summary report — can be found on the European Environment Agency's bathing water website and the European Commission's bathing water quality website: [www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water](http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water) and [http://ec.europa.eu/environment/water/water-bathing/report\\_2009.html](http://ec.europa.eu/environment/water/water-bathing/report_2009.html).

Information on bathing areas can also be found at the Water Information System for Europe (WISE) at [www.water.europa.eu](http://www.water.europa.eu). Interactive maps provide users with detailed information on the quality of water in individual bathing areas: [www.eea.europa.eu/themes/water/mapviewers/bathing](http://www.eea.europa.eu/themes/water/mapviewers/bathing).

Data can also be downloaded per country or per region: [www.eea.europa.eu/themes/water/status-and-monitoring/bathing-water-data-viewer](http://www.eea.europa.eu/themes/water/status-and-monitoring/bathing-water-data-viewer).

EU Member States will have to comply with the stricter and more ambitious requirements laid out in the New Bathing Water Directive by 2015 at the latest. The new legislation requires more effective monitoring and management of bathing waters, greater public participation and improved information dissemination. More on the new legislation can be found on the bathing water quality website and on the Commission's legislation website: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:064:0037:0051:EN:PDF>.



Photo: © Stock.xchng

**Table 1 Bathing water quality results in the European Union from 1990 to 2008**

		Total number of bathing areas	Compliance with guide values		Compliance with mandatory values		Not complying		Banned/closed throughout the season	
			Number	%	Number	%	Number	%	Number	%
Coastal bathing waters	1990 (a)	6 165	4 208	68.3	4 920	79.8	565	9.2	0	0
	1991 (a)	10 152	5 963	58.7	8 208	80.9	782	7.7	30	0.3
	1992 (b)	10 996	7 821	71.1	9 048	82.3	865	7.9	42	0.4
	1993 (b)	11 386	8 518	74.8	9 800	86.1	726	6.4	25	0.2
	1994 (b)	11 813	9 067	76.8	10 500	88.9	725	6.1	19	0.2
	1995 (c)	12 500	9 271	74.2	10 575	84.6	640	5.1	18	0.1
	1996 (c)	12 948	10 636	82.1	11 865	91.6	598	4.6	14	0.1
	1997 (c)	13 114	10 847	82.7	12 232	93.3	699	5.3	17	0.1
	1998 (c)	13 210	11 070	83.8	12 496	94.6	596	4.5	19	0.1
	1999 (c)	13 255	11 300	85.3	12 599	95.1	471	3.6	16	0.1
	2000 (c)	13 346	11 446	85.8	12 689	95.1	365	2.7	16	0.1
	2001 (c)	13 428	11 594	86.3	12 806	95.4	359	2.7	23	0.2
	2002 (c)	13 625	11 851	87	13 046	95.8	238	1.7	140	1
	2003 (c)	13 641	12 180	89.3	13 208	96.8	159	1.2	191	1.4
	2004 (d)	13 901	12 297	88.5	13 441	96.7	206	1.5	209	1.5
	2005 (e)	14 234	12 676	89.1	13 673	96.1	188	1.3	272	1.9
	2006 (e)	14 340	12 678	88.4	13 787	96.1	217	1.5	283	2
2007 (f)	14 552	12 526	86.1	13 855	95.2	318	2.2	313	2.2	
2008 (f)	14 551	12 890	88.6	14 009	96.3	208	1.4	307	2.1	
Inland bathing waters	1990 (a)	1 374	500	36.4	720	52.4	164	11.9	0	0
	1991 (b)	4 923	981	19.9	1 733	35.2	531	10.8	10	0.2
	1992 (b)	5 264	1 159	22	1 970	37.4	744	14.1	214	4.1
	1993 (b)	5 076	1 575	31	2 706	53.3	609	12	32	0.6
	1994 (b)	5 368	1 819	33.9	3 100	57.7	596	11.1	44	0.8
	1995 (c)	5 894	2 059	34.9	2 834	48.1	612	10.4	36	0.6
	1996 (c)	6 078	3 111	51.2	4 177	68.7	593	9.8	27	0.4
	1997 (c)	6 189	3 702	59.8	4 930	79.7	721	11.6	52	0.8
	1998 (c)	6 012	3 833	63.8	5 209	86.6	434	7.2	33	0.5
	1999 (c)	5 838	3 719	63.7	5 157	88.3	299	5.1	59	1
	2000 (c)	5 833	3 778	64.8	5 262	90.2	291	5	46	0.8
	2001 (c)	5 784	3 867	66.9	5 264	91	257	4.4	63	1.1
	2002 (c)	5 774	3 701	64.1	5 258	91.1	217	3.8	165	2.9
	2003 (c)	5 729	3 893	68	5 291	92.4	154	2.7	263	4.6
	2004 (d)	6 295	4 039	64.2	5 440	86.4	229	3.6	323	5.1
	2005 (e)	6 677	4 214	63.1	5 720	85.7	244	3.7	357	5.3
	2006 (e)	6 753	4 312	63.9	5 995	88.8	281	4.2	338	5
2007 (f)	6 816	4 270	62.6	6 044	88.7	302	4.4	378	5.5	
2008 (f)	6 890	5 055	73.4	6 336	92.0	196	2.8	315	4.6	

**Note:** Bathing areas insufficiently sampled or not sampled according to the Bathing Water Directive were not included in this table. In some cases the sum of the different categories will not be equal to the total number of bathing areas.

- (a) 7 Member States
- (b) 12 Member States
- (c) 14 Member States
- (d) 21 Member States
- (e) 25 Member States
- (f) 27 Member States

**Table 2 Bathing water quality results in 2008 for the 27 EU Member States**

	Total number of bathing areas	Compliance with guide values		Compliance with mandatory values		Not complying		Banned/ closed throughout the season		
		Number	%	Number	%	Number	%	Number	%	
<b>Coastal bathing waters</b>	Belgium	40	6	15.0	40	100.0	0	0.0	0	0.0
	Bulgaria	89	70	78.7	83	93.3	6	6.7	0	0.0
	Denmark	1 149	916	79.7	1 108	96.4	41	3.6	0	0.0
	Germany	373	282	75.6	368	98.7	5	1.3	0	0.0
	Estonia	28	12	42.9	28	100.0	0	0.0	0	0.0
	Ireland	122	98	80.3	116	95.1	6	4.9	0	0.0
	Greece	2 088	2 039	97.7	2 078	99.5	2	0.1	0	0.0
	Spain	1 899	1 584	83.4	1 887	99.4	4	0.2	4	0.2
	France	1 968	1 913	97.2	1 913	97.2	53	2.7	0	0.0
	Italy	4 917	4 496	91.4	4 563	92.8	42	0.9	302	6.1
	Cyprus	111	109	98.2	111	100.0	0	0.0	0	0.0
	Latvia	46	39	84.8	44	95.7	2	4.3	0	0.0
	Lithuania	15	15	100.0	15	100.0	0	0.0	0	0.0
	Malta	87	82	94.3	86	98.9	1	1.1	0	0.0
	Netherlands	86	76	88.4	86	100.0	0	0.0	0	0.0
	Poland	89	51	57.3	81	91.0	8	9.0	0	0.0
	Portugal	436	390	89.4	430	98.6	5	1.1	1	0.2
	Romania	49	1	2.0	48	98.0	1	2.0	0	0.0
	Slovenia	19	18	94.7	18	94.7	1	5.3	0	0.0
	Finland	86	66	76.7	85	98.8	1	1.2	0	0.0
	Sweden	258	215	83.3	252	97.7	6	2.3	0	0.0
United Kingdom	596	412	69.1	569	95.5	24	4.0	0	0.0	
EU	14 551	12 890	88.6	14 009	96.3	208	1.4	307	2.1	
<b>Freshwater bathing waters</b>	Austria	268	192	71.6	261	97.4	7	2.6	0	0.0
	Belgium	76	27	35.5	63	82.9	12	15.8	1	1.3
	Bulgaria	4	2	50.0	4	100.0	0	0.0	0	0.0
	Czech Republic	188	97	51.6	163	86.7	8	4.3	15	8.0
	Denmark	109	88	80.7	103	94.5	3	2.8	0	0.0
	Germany	1 890	1 547	81.9	1 857	98.3	20	1.1	13	0.7
	Estonia	28	21	75.0	28	100.0	0	0.0	0	0.0
	Ireland	9	4	44.4	6	66.7	3	33.3	0	0.0
	Greece	6	6	100.0	6	100.0	0	0.0	0	0.0
	Spain	186	68	36.6	174	93.5	3	1.6	6	3.2
	France	1 344	1 278	95.1	1 278	95.1	65	4.8	0	0.0
	Italy	767	390	50.8	505	65.8	5	0.7	251	32.7
	Latvia	230	152	66.1	215	93.5	9	3.9	6	2.6
	Lithuania	84	52	61.9	84	100.0	0	0.0	0	0.0
	Luxembourg	20	10	50.0	20	100.0	0	0.0	0	0.0
	Hungary	256	131	51.2	220	85.9	7	2.7	7	2.7
	Netherlands	556	396	71.2	548	98.6	6	1.1	0	0.0
	Poland	231	103	44.6	181	78.4	38	16.5	8	3.5
	Portugal	97	41	42.3	90	92.8	2	2.1	5	5.2
	Slovenia	18	8	44.4	13	72.2	5	27.8	0	0.0
	Slovakia	38	20	52.6	35	92.1	0	0.0	3	7.9
Finland	261	232	88.9	261	100.0	0	0.0	0	0.0	
Sweden	212	187	88.2	210	99.1	2	0.9	0	0.0	
United Kingdom	12	3	25.0	11	91.7	1	8.3	0	0.0	
EU	6 890	5 055	73.4	6 336	92.0	196	2.8	315	4.6	

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