

AWARDS FOR
IMPROVING
THE COASTAL
ENVIRONMENT:

THE EXAMPLE
OF THE
BLUE FLAG

United Nations Environment Programme



Foundation for Environmental Education in Europe











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INTRODUCTION

The world's coastal regions are densely populated and environmentally vulnerable. They are subject to increasing pressures from a number of sources, including industrial development, urban expansion, the exploitation of marine resources and tourism. There is thus an urgent need to integrate the many uses made of coastal resources so that they can be developed in harmony with one another and with the environment. Agenda 21 and in particular its chapter 17 'Protecting and Managing the Oceans' reaffirmed this need.

This publication describes one way in which tourism is being better integrated with the coastal environment: the European Blue Flag campaign. Now a decade old, the Blue Flag campaign is an award system in which European beaches that fulfil a number of exacting criteria in relation to factors such as the quality of bathing water, cleanliness and safety are given the right to fly the Blue Flag. With the generous financial and moral support of the European Commission, this flag has become a European symbol of coastal environmental quality. It is much sought after by local authorities throughout Europe for the status it confers on them and the attraction it has for beach tourists. In 1995, 1463 European beaches were awarded Blue Flags.

For some time the Industry and Environment Centre of the United Nations Environment Programme (UNEP IE) has been working with the Foundation for Environmental Education in Europe (FEEE), which coordinates the Blue Flag campaign, and the World Tourism Organization (WTO) to investigate the possibility of extending the campaign to non-European regions. One way of doing this was to commission a study of the issues involved.

One conclusion of this study is that schemes such as the Blue Flag campaign have done much to improve environmental awareness in coastal areas. However, the Blue Flag campaign has evolved rapidly and efficiently under European conditions to serve European needs. In other areas of the world, the coastal environment is geographically and physically different, social and economic conditions have little in common with those in Europe, and the coastal environment faces quite different threats. Such areas might benefit greatly from similar schemes and, while the Blue Flag campaign as constructed in Europe might not be directly transferable to non-European regions, its principles and topics of concern are equally relevant anywhere in the world and could be therefore be adopted.

However, other countries and regions wishing to initiate award schemes for beaches can learn much from the Blue Flag experience. The final chapter of this publication highlights the problems likely to be encountered and the steps that need to be taken to mount a successful coastal award campaign.

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World Tourism Organization: Peter Shackleford, Chief, Environment and Planning; and

FEEE: Jan Eriksen, Director, and Lene Andersen, International Blue Flag Coordinator.

Lene Andersen of FEEE prepared the first draft of this document. Robin Clarke wrote the final version and prepared the illustrations and page layout.

THE IMPORTANCE OF COASTAL ZONES

More than half of the world's population lives within 60 km of a coastline. By the year 2020, that figure will have risen to three-quarters. The world's coastal areas are thus exposed to rapid urban growth, increasing population pressure, pressures from major industries, particularly tourism, and extensive exploitation of marine resources. The results include the pollution of marine and freshwater resources, air pollution, loss of marine and land resources, the loss of cultural resources, loss of public access, soil degradation, and increasing levels of noise and congestion.

Tourism is the most important industry in many coastal areas. By 1994, international world tourist receipts had reached more than US\$320 000 million a year and the number of international tourist arrivals totalled 528 million. Much of this money and many of these arrivals affect coastal areas since the beach holiday—'sun and sand' tourism—is still the most popular form of tourism. Coastal areas are thus one of the tourism industry's principle resources, and there is an urgent to protect and improve coastal resources.

Although there have been many attempts to protect coastal areas and to encourage sustainable forms of coastal development, few have been successful. The main reason for this is that they have largely been sectoral, and there is fierce competition for coastal resources in many areas. For example, there is often conflict in coastal areas over access to the coastline, which is required for tourist beaches, marinas, aquaculture and cooling for power generation.

The environment of many coastal areas has been adversely affected by tourism. In many of the major resorts in the Mediterranean area, for example, the population more than doubles during the summer tourist season, and local government is hard put to provide the resources required. As a result, in several areas of the Mediterranean bathing water is polluted, the sea is overfished, natural wetlands are drying up, and disposal of wastewater and sewage presents difficult problems. According to a UNEP report, problems connected with wastewater disposal in four areas of the Island of Rhodes, for example, were costing the island more than US\$8 million a year in lost tourist revenue in the early 1990s. The report continues:

Coastal resources cannot be used by any interest group as their exclusive right. The sea cannot be regarded as a common basin for effluent disposal ... Almost all coastal and marine areas produce or support multiple products and services. Sectoral solutions usually 'transfer' the problem between resources, products and services. Tourism will not flourish if the area loses its attraction to visitors; fisheries are usually on the receiving end of everyone else's problems. Industry and energy facilities can degrade the environment for all other activities. There is, therefore, a need to bring sectoral activities together to achieve a commonly acceptable coastal management framework.

Guidelines for Integrated Management of Coastal and Marine Areas, UNEP, 1995. 'More than half of the world's population lives within 60 km of a coastline. By the year 2020, that figure will have risen to three-quarters. The world's coastal areas are thus exposed to rapid urban growth, increasing population pressure, pressures from major industries, particularly tourism, and extensive exploitation of marine resources.'

'The transfer of coastal erosion down wind, or water pollution downstream, or air pollution dispersed further afield by ever higher smoke stacks are not acceptable solutions to coastal conflicts.'

INTEGRATED COASTAL AREA MANAGEMENT

As pressures increase, problems can no longer be transferred. The transfer of coastal erosion down wind, or water pollution downstream, or air pollution dispersed further afield by ever higher smoke stacks are not acceptable solutions to coastal conflicts. Mechanisms have to be created to ensure that environmental costs are incorporated into economic evaluations and not passed on to other areas or to future generations. An integrated approach

is needed to bring together the conflicting demands of society for products and services, taking into account both current and future interests. The aim is generate economically, socially and ecologically acceptable policies for coastal and marine management.

Integrated coastal zone management (ICZM) has been developed to serve these needs. ICZM is a continuous, proactive and adaptive process of resource management for environmentally sustainable development in coastal areas. Its three

Principles of Integrated Coastal Zone Management (ICZM)

- The coastal area is a unique resource system which requires special management and planning approaches
- Water is the major integrating force in coastal resource systems
- It is essential that land and sea uses be planned and managed in combination
- The edge of the sea is the focal point of coastal management programmes
- Coastal management boundaries should be issue-based and adaptive
- A major emphasis of coastal resources management is to conserve common property resources
- Prevention of damage from natural hazards and conservation of natural resources should be combined in ICZM programmes
- All levels of government within a country must be involved in coastal management and planning
- The nature-synchronous approach to

- development is especially appropriate for the coast
- Special forms of economic and social benefit evaluation and public participation are used in coastal management programmes
- Conservation for sustainable use is a major goal of coastal resources management
- Multiple-use management is appropriate for most coastal resource systems
- Multiple-sector involvement is essential to sustainable use of coastal resources
- Traditional resource management should be respected
- The environmental impact assessment approach is essential to effective coastal management

Source: Clark, J. R. Integrated Management of Coastal Zones: FAO, Rome, 1992, FAO Fisheries Technical Paper No. 327. major objectives are to:

- strengthen sectoral management by improving training, legislation and staffing;
- preserve the biological diversity of coastal ecosystems by preventing habitat destruction, pollution and overexploitation; and
- promote the rational development and sustainable utilization of coastal resources.

The principles that underlie ICZM are summarized in the box on the left.

BACKGROUND TO THE BLUE FLAG CAMPAIGN

The Blue Flag campaign, which is the main subject of this publication, takes this as its background. The campaign began in the mid-1980s as a means of encouraging local authorities to provide clean and safe beaches (and marinas) for local populations and tourists. But the campaign was increasingly conducted within the much wider context of environmental improvement of the coastal area, and the criteria used in the campaign have been progressively broadened as the campaign has matured. The long-term objectives of the campaign are to:

- improve understanding of the coastal environment; and
- promote the incorporation of environmental issues in the decisionmaking processes of local authorities and their partners.

In 1994, the focus of the Blue Flag strategy

began to broaden from individual beaches to community policies in relation to the coastal environment. This significant policy change was made in recognition of the importance of integrated coastal management: tourism is one of the industries that has to compete for limited coastal resources and tourism depends, in turn, on a clean and undamaged environment with which to attract visitors. These conditions cannot be met without integrated coastal planning.

It is important to distinguish award-winning schemes of this sort from the kind of regulations that have in the past been legislated to compel industries and local authorities to observe environmental standards. While there is still an important role for such regulations, positive reward schemes which are voluntary and non-punitive are increasingly popular. The Blue Flag campaign falls into this category. Award schemes and eco-labelling are common in the tourism industry, though as yet there is little objective information on their effectiveness in achieving environmental goals.

'In 1994, the focus of the Blue Flag strategy began to broaden from individual beaches to community policies in relation to the coastal environment ... the organization plans eventually to introduce new requirements on such issues as traffic management, recycling, wastewater management and coastal zone planning.'

THE EUROPEAN BLUE FLAG CAMPAIGN

The Blue Flag Campaign is an award scheme that seeks to reward local government and its partners for providing safe and clean beaches and marinas. The award, the Blue Flag itself, is given annually to beaches and marinas that satisfy a number of essential criteria; progress in reaching a further set of guideline criteria is also taken into consideration in the annual award. The criteria used for beach selection are dealt with in detail in the next chapter.

The campaign is organized by the Foundation for Environmental Education in Europe (FEEE), a network of organizations working to promote environmental education in Europe (see box). One of FEEE's earliest projects was a pollution-tracking exercise in which bottles containing a message identifying their point of origin were allowed to drift at sea. The drifting bottles provided a means of tracking the spread of solid wastes at sea, and the campaign's logo was a bottle floating on three wave tops. It was this logo that gave rise to the Blue Flag.

The first 11 Blue Flags were awarded in France in 1985 to municipalities that achieved high standards in bathing water quality and wastewater treatment. The next year the number of applicants quadrupled, and 43 Blue Flags were awarded. In 1987 the FEEE took over the organization of the campaign, with support from the Commission of European Communities. A year later the campaign had spread to eight other countries—Denmark, Germany, Greece, Ireland, Italy, Portugal, Spain and the United Kingdom—and 391 Blue Flag awards were made. By 1995, Blue Flags were flying at 1454 beaches and 337

marinas, Bulgaria, Cyprus, Finland and Turkey had joined the campaign, pilot schemes had been started in Estonia and Sweden, and Blue Flags were being awarded for natural inland waters as well as coastal beaches and marinas (marinas are not considered in this publication).

THE AIMS OF THE CAMPAIGN

The campaign is targeted at local authorities, the general public and the tourism industry. Its main objectives are to improve understanding of the coastal environment and promote the incorporation of environmental issues in the decision-making processes of local authorities and their partners.

The campaign is part of a much larger movement towards voluntary self-regulation by industry to achieve specified environmental standards. Self-regulation is proving both more popular and more successful than the older 'command-and-control' procedures by which national and local government created regulations with which individual industries were then forced to abide.

In the long term, the goals of the form of self-regulation catalysed by the Blue Flag campaign include promotion of:

- the sustainable use of coastal resources;
- awareness of the need for integrated management of the coastal zone (ICZM);
- awareness of the importance of the coastal environment to its users; and
- sound national policies on water quality.



The Foundation for Environmental Education in Europe

The Foundation for Environmental Education in Europe (FEEE) seeks to promote environmental education by carrying out campaigns and improving awareness of the importance of environmental education. It is composed of a network of organizations which undertake individual projects in their own countries and participate in international efforts. The FEEE, which has its headquarters in Denmark, runs three major campaigns in Europe: the Blue Flag Campaign, Eco-Schools and Young Reporters for the Environment.

The development of Blue Flag criteria

1987

Bathing water criteria for total and faecal coliforms are based on either national standards or the European Community 'imperative' standards for total and faecal coliforms, whichever are the more strict

1990

Environmental education activities become essential criteria

1992

Bathing water criteria for total and faecal coliforms are based on both the 'imperative' and the 'guidance' standards of the European Community Directive, regardless of national standards

1993

Bathing water criteria include maximum counts for faecal streptococci

1994 on

Blue Flag strategy moves from focus on a single beach to a community policy focus

1996-97

new requirements to be introduced on such issues as traffic management, recycling, wastewater management and coastal zone planning

post 2000

criteria expected to include matching level of wastewater treatment to visitor load, coastal management plans, environmental impact assessments for new projects, and recycling. These aims are achieved through an annual award given to those recipients that achieve a set of specified standards. The value of the award is the message that it sends about its recipients to users of the coastal environment—a message that symbolizes clean and safe beaches managed with consideration for the environment. The Blue Flag is thus a form of eco-label for beaches which guides the consumer—the tourist—towards a quality environment.

There is little doubt that the message is efficiently and positively relayed. In 1995, for example, 90 French national and regional publications carried a total of 278 articles on the Blue Flag campaign. Only one was critical of the campaign.

One important principle of the Blue Flag scheme is that it sets progressively higher goals for its participants as knowledge improves and standards are raised. The box on the left shows how some of the standards have changed in the past and how they are expected to change in the future.

The success of the Blue Flag campaign has been due to a number of factors, of which the most important appear to be:

- the criteria for awarding the Blue Flag are set in advance;
- the award is valid for only one year, and has to be earned anew each year;
- even during that year, the Blue Flag will be removed from beaches where conditions have deteriorated so that the criteria for qualification are no longer fulfilled; and
- the awards are made by independent committees whose decisions cannot be

influenced by those with vested interests.

The Blue Flag award is not lightly given. In France in 1995, for example, 160 communes applied for the flag for their beaches but only 82 of them received it. In many participating countries, on average fewer than half the applicants actually receive the award.

HOW THE CAMPAIGN WORKS

The Blue Flag scheme works simultaneously at three levels: local, national and international.

Local organizations

The local authority, in partnership with local organizations, makes the initial decision to apply for the Blue Flag award. The other participants in the partnership are likely to be local associations, businesses concerned with tourism, tourist groups themselves and representatives of the local population. The application for the award is made to the national Blue Flag operator and it must be made by local government itself, which thus becomes the key player in the Blue Flag award system. Local governments have been persuaded by the importance of the Blue Flag award to introduce many improvements on European beaches. Examples of some of the changes recently introduced, at least partly in order to comply with Blue Flag criteria, are given in the box on the right.

Local government has many responsibilities in relation to its beaches. These include:

- ensuring that bathing water quality meets required standards;
- organizing litter collection and environmentally-sound forms of litter disposal;
- ensuring visitor safety on beaches;
- managing beaches to avoid environmental deterioration;
- maintaining beaches in an aestheticallypleasing form;
- informing visitors about the need to protect the environment, safety precautions, and available services;
- incorporating environmental considerations into local planning;
- improving environmental education and information activities;
- coordinating applications for Blue Flag awards;
- surveying awarded sites and reporting on conditions to the national Blue Flag operator; and
- flying the Blue Flag on awarded beaches and displaying the relevant criteria.

National organizations

The national Blue Flag organization is a private, non-profit, non-governmental organization (NGO). This organization is responsible for

- publicizing the national campaign;
- advising and training applicants on how best to fulfil the Blue Flag criteria;
- verifying the reliability of information provided by applicants;
- ensuring that the national campaign is conducted according to international guidelines; and
- ensuring that those who receive the award fulfil their resulting obligations;

National Blue Flag operations are often housed within an existing NGO as one of its activities-for example, in the United Kingdom the national Blue Flag campaign is operated by the Tidy Britain Group which is therefore the Blue Flag organization in the United Kingdom. In Greece, the Blue Flag campaign is operated by the Hellenic Society for the Protection of Nature. There are also countries in which a close partner to the national Blue Flag organization takes care of the Blue Flag campaign; for example, in the Netherlands FEEE-N has overall responsibility for the Blue Flag campaign as the Dutch member of FEEE but the Royal Dutch Touring Club hosts the national Blue Flag operation. This arrangement reduces costs and simplifies procedures since the national Blue Flag operation can normally be provided with offices and office equipment at little additional cost.

The national organization is also responsible for running the national jury that judges applicants and nominates those that it believes fulfil the necessary criteria. It is, of course, most important that decisions on applicants are not taken by the national operator alone but by a broad and balanced set of interests. National authorities that need to be represented in the jury include those:

- in charge of water quality monitoring and the implementation of water quality policies;
- that make and oversee national policies on coastal zone management, nature protection and tourism; and
- national safety boards that make policy and safety guidelines for those on or near the sea.

Improvements catalysed by Blue Flag awards

Bulgaria, 1995

Publication of brochures on sea water conditions and dune flora

Calvi, Corsica, 1995

Tenders invited for alternative means of disposing of household wastes

Dieppe, France, 1995

More than 90 million francs (US\$18 million) earmarked to improve bathing water quality

United Kingdom, 1990-95

Access improvements for cars and cyclists, and particularly for pedestrians and the disabled

Lassithi, Greece, 1995

Creation of natural area and wetland around artifical lake

Spain, 1992-

The Blue Flag campaign has insisted on observance of the Sea Shore Act of 1992

Turkey

Demolition of an unauthorized and environmentally-damaging establishment near Bodrum Yahsi Beach

Portovenere, Italy, 1994

Establishment of environmental education centre on a small island 200 metres from the beach

Skælskør, Denmark, 1994

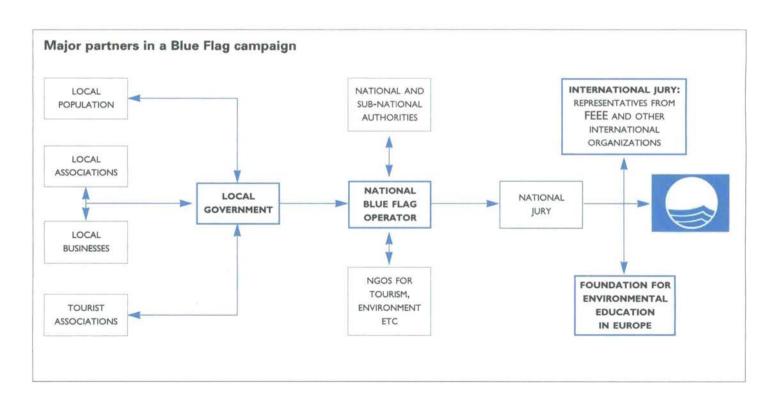
Blue Flag guide-training scheme for the long-term unemployed The national juries thus typically comprise representatives of ministries of the environment, health, tourism and marine affairs, national associations of municipalities, consumer associations and environmental organizations. The make-up of a typical jury is shown in the box on the next page.

The national organization receives and processes nominations from the national jury. The names of successful candidates are then passed on to the European jury, which resolves any disputed applications.

The names of successful candidates are then announced by the national organization and the Blue Flags are raised at ceremonies throughout Europe on a set date, usually in the first week of June.

The national Blue Flag operator must cooperate with a number of national partners. For example, in most countries a department within the Ministry of Health or Environment is responsible for monitoring bathing water quality. Other partners are likely to include national tourism authorities, safety boards, sea and coastal authorities, and environmental authorities dealing with coastal zone management and the protection of nature. All these bodies provide technical and political support for the Blue Flag campaign.

In addition, the national operator also needs to decide which sub-national organizations should be involved in or informed of the national campaign. In many countries, sub-national organizations are wholly or partially responsible for such activities as the management of protected



How to appoint a national jury: the example of France

The composition of national juries is important because they guarantee the independence of the awards. In France there are 25 Departmental Commissions which form 'local juries' which vet initial applications. These are then forwarded to the national jury which consists of:

- 7 members of the French Blue Flag organization;
- the Director of Water, Ministry of the Environment;
- the Director of Nature and the Countryside, Ministry of the Environment;
- the Director-General of Health, Ministry of Health;
- one member of the Tourism Directorate, Ministère de l'Equipement;
- one member of the Directorate for the Sea, Ministère de l'Equipement;
- the President of the Conservatoire du Littoral; and
- one well known environmentalist.

areas, the monitoring of environmental quality, and the planning of wastewater treatment and solid waste disposal. In France, the Departmental Committee on Sanitation plays a useful role in ensuring that the information provided by local communes is correct and has not been influenced by local desire to attain the award. In Spain and Germany, the regions have a high degree of autonomy and play somewhat different roles in the Blue Flag process. In Spain the autonomous regions must approve the local authority's application. In Germany, the regions play an important role in policy making because they may formulate environmental regulations that are stricter than Federal laws. The Blue Flag campaign therefore needs regional support as well as the support of the Federal government.

International organizations

Any scheme that involves more than one country-and such schemes are inevitably more prestigious and effective than national ones-requires some form of international organization. The Blue Flag organization is unusual in that it is essentially a network of national organizations. Thus there is no expensive, centralized pan-European headquarters to maintain. A small international centre exists in Denmark whose main jobs are to organize meetings for national operators to discuss common problems and future requirements, to catalyse the campaign's international contacts, to ensure exchange of information and know-how between countries, to produce common European information and promotional materials, and to run the European Jury.

Financing mechanisms for national operators

Bulgaria (800 000 BUL a year)	
private company sponsorship	30%
public company sponsorship	43%
fees	27%
C (2000 CVP)	
Cyprus (2000 CYP a year) Cyprus Marine Environment	
Protection Association	62.5%
Cyprus Tourism Organization	25%
other sponsorship	12.5%
	12,370
Denmark (US\$175 000)	
fees	75%
The Outdoor Council	20%
sponsorship	5%
Greece (US\$76 000 a year)	
Ministry of Environment	85%
fees	8%
donations	7%
Instant (18622.000)	
Ireland (US\$22 000 a year) Department of the Environment	100%
Department of the Environment	100%
Portugal (US\$82 000 a year)	
national and regional authorities	45%
fees	29%
voluntary work, etc.	26%
Slovenia (10 million SIT)	
national authorities	70%
sponsorships	30%
Spain (US\$90 000 a year)	
national authorities	63%
regional authorities	33%
FEEE project support	4%
Sweden (US\$44 000 a year)	
currently only fees,	
sponsorships will be sought in the	future
Turkey (5100 million TL a year)	
fees	67%
Ministry of Tourism	29%
FEEE project support	4%
United Kingdom (US\$37 000 a	vear
fees	67%
Tidy Britain Group grant	33%
ridy britain Group grant	3370

The European Jury is chaired by the FEEE. Its members are usually the President, Vice-President and Secretary General of the FEEE, and a representative of the European Commission's Directorate General XI. The European Jury's main job is to resolve controversial applications and, to quote the FEEE publication on Blue Flag Awards in 1995, to ensure 'a common meaning and standard of the European Blue Flag wherever it is found'.

HOW THE CAMPAIGN IS FUNDED

The Blue Flag campaign is financed at the international level by a grant from the European Union to the FEEE. National Blue Flag operations are not expensive but they all require funds to pay staff, organize meetings and promote the organization. These funds can be provided in three basic ways: through governments grants, industrial sponsorship or fees.

The box on the left lists the budgets for some of the Blue Flag national operators. Typically, the major costs for a fairly large national campaign (involving hundreds of beaches) are the salary of those involved, perhaps one person full time, one person half-time and payments for inspectors' time (perhaps 250 hours a year involving five different inspectors). On the other hand, pilot schemes are often staffed by volunteers and may benefit from small grants from the FEEE.

Some national operations, such as those in France and Ireland, are financed directly by a government agency such as the Department of the Environment, Tourism

or Water. Others, such as the one in Italy, are financed mainly by an industrial sponsor. Where industrial sponsors are used, the sponsor is not normally represented on the jury in order to safeguard the independence of the award process. Yet others, including the United Kingdom, are supported mainly by fees, of which there are several kinds: membership fees, fees charged for applications, and fees for the provision of the Blue Flag itself. Where fees are substantial, it is usual to provide a range of services in return. Thus the UK application fee is \$750 which entitles the applicant to advice, pre-award visits and consultation with a written report, the flag itself, and assistance with promotion in the form of leaflets, press releases and posters.

HOW THE CAMPAIGN IS MONITORED

An important characteristic of the campaign is that the Blue Flag can be taken away as well as awarded. It follows that beaches must be inspected to ensure that they do indeed comply with the criteria. Most national operators have a small budget for their inspection team. In some countries every beach is claimed to be inspected every week; in other countries beaches are inspected only annually.

Blue Flags are removed from European beaches almost every year, though rarely more than one or two in any one country. Removal of flags is thus not a hollow threat but a real possibility—and indeed one of the criteria for selection is that a beach remove its own Blue Flag should conditions deteriorate in such a way that the essential criteria are no longer fulfilled. This is a form

of self-regulation which has been developed in a number of countries and in which the public can also play a role. The illustration opposite shows how Ireland has approached the problem.

European Blue Flag Awards 1995

"THIS BEACH IS UNDER OBSERVATION BY YOU"

At the Irish Jury meeting held in April 1995 it was decided that a notice highlighting matters which the Jury feels need particular attention should be displayed at each beach.

You, the beach user are the key. You can point out to the Local Authority any problems you see. This will help keep the beach up to the high standard needed if it is to keep the flag.

Please contact either Louth County Council at tel: 042-35457 or An Taisce - National Co-ordinators Blue Flag Scheme at tel: 01-4549248 if you have any comments.

Beach name: Clogherhead

Matters under Scrutiny at this beach:

- 1. Vandalism in the toilets
- 2. The caravan park

An Taisce Caring for Ireland's Environment

An Taisce - The National Trust for Ireland, Tailors' Hall, Back Lane, Dublin 8.

Example of public monitoring of Blue Flag criteria encouraged in Ireland.

BLUE FLAG CRITERIA FOR BEACH SELECTION

To be eligible for the Blue Flag award, a beach has to achieve certain standards in three separate areas: water quality, beach management and safety, and environmental information and education. Some of these standards are considered essential, and they must be achieved if a Blue Flag is to be awarded. Others are considered desirable, and success in achieving these guideline requirements is taken into account in the decision as to whether to award a Blue Flag. The essential and guideline criteria are summarized in this chapter in both checklists and boxes, alongside more detailed discussions of the issues involved. The official wording of the criteria, together with the guidance notes issues by the FEEE on how the criteria are to be interpreted, are reproduced as an Annex.

The criteria are not the only basis for the Blue Flag award: the European Jury also takes into account evidence of plans for environmental improvements as well as future environmental education projects. It is important to realize that on a continent of Europe's size and geographical diversity, beach requirements vary widely. What is needed for an almost deserted beach in the north of Finland, for example, differs from the requirements for a large, crowded and popular beach near a major city on the Mediterranean. National operators are thus free to interpret all or some of the guidance requirements as essential criteria in their national schemes. The United Kingdom, for example, treats all the guiding criteria as essential. Needless to say, the essential criteria have to be applied to all beaches flying the Blue Flag.

'... the criteria are not the only basis for the Blue Flag award: the European Jury also takes into account evidence of plans for environmental improvements as well as future environmental education projects.'

Blue Flag bathing water quality criteria

Essential criteria

1. Water quality must comply with the requirements of the EU Bathing Water Directive for total and faecal coliforms and for faecal streptococci. Water samples must be taken fortnightly during the bathing season, starting a fortnight before the beginning of the season. At least 80 percent of the sampling results for the two coliform parameters must be below the EU guideline value while for faecal streptococci 90 percent of the results must be below the guideline. No more than 5 percent of the samples may exceed the EU 'imperative' value for the two coliform parameters. During the season

information on bathing water quality must be posted on the beach, and updated regularly.

- No industrial or sewage-related discharges may affect the beach area.
- The beach and its immediate hinterland must comply with official development plans and planning laws.
- There must be no gross or visible pollution from sewage or other sources.
- There must be no visible hydrocarbon pollution.

Guideline criteria

- Local and regional emergency plans should exist to cope with pollution accidents.
- Seaweeds and other vegetation should not be allowed to accumulate or left to decay on the beach.

'... untreated sewage is the commonest pollutant and the principle cause of infection in coastal water. In many coastal areas, even in developed countries, much sewage is discharged directly into the sea without treatment.'

Water quality check list

Essential

- microbiological monitoring
- ✓ public display of water quality data
- ✓ no discharges affecting beach
- compliance with official plans and legislation
- ✓ no visible pollution

Guideline

- √ plans for pollution accidents
- √ no decaying vegetation

WATER QUALITY

The quality of bathing water on Europe's beaches is variable. This is a cause for concern because, apart from aesthetic considerations, polluted bathing water can pose serious health risks. The main dangers are from:

- gastro-intestinal infections, with symptoms which include diarrhoea, abdominal pain, vomiting, nausea and fever;
- skin and ear infections;
- skin irritation and sensitization;
- eye, nose and throat irritations; and
- respiratory allergies.

Any of these conditions can affect people bathing or swimming in polluted water, or those who practise other sports such as scuba diving and wind surfing. They can also affect people playing on or near the water's edge and people who have prolonged contact with wet sand.

Sources of pollution

The main causes of bathing water pollution are agricultural run-off, untreated or poorly treated wastewater and sewage, industrial discharges, and thermal pollution from industry and power stations. Of these, untreated sewage is the commonest pollutant and the principle cause of infection in coastal water. In many coastal areas, even in developed countries, much sewage is discharged directly into the sea without treatment.

Water quality parameters

Since the main dangers are from infection

by micro-organisms, the Blue Flag campaign assesses water quality by reference to three groups of organisms: total coliforms, faecal coliforms and faecal streptococci. These are all harmless bacteria, found in large numbers in the human intestine, which are widely used as indicators of water quality (specifically of the presence of sewage in the water). Streptococci are included as well as coliforms because they are more persistent in the environment (days to weeks) than coliforms (hours to days), and their presence may still indicate sewage contamination some time after the coliforms have died off.

The table on the right shows the criteria set by the World Health Organization, the Environmental Protection Agency in the United States (US EPA) and the European Economic Community (EEC). There are small variations between these criteria, and the Blue Flag campaign currently uses the EEC criteria set in 1975. As has already been noted, however, the Blue Flag criteria are in continuous evolution, and the current practice may change, particularly since recent evidence suggests that a count of one specific coliform, Escherichia coli, might be preferable to the total and faecal coliform counts (several countries, including France and Denmark, have in fact already implemented this change). The European Union has recently made new proposals for a bathing water quality directive, details of which are also shown in the table opposite. Furthermore, both the US EPA and the World Health Organization are considering widening or revising their standards. Until recently, standards have been produced mainly to lessen the chances of gastrointestinal infection. In future, they are likely

	World Health Organization (1974)	US Environmental Protection Agency (1986)	European Economic Community (1975)	European Unior proposal (1994)
Total coliforms/100 ml			I=95%<10000 G=80%<500	none
Faecal coliforms/100 ml	50%<100 and 90%<1000	geometric mean<200 and 90%<400	I=95%<2000 G=80%<100	none
Escherichia coli/100 ml		*	100	I=95%<2000 G=80%<100
Faecal streptococci/100 ml	50%<100 and	enterococci<35	I none G=90%<100	I=95%<400 G=90%<100
Salmonella		•	I=0	none
Enteroviruses	÷	¥	I=0	I=0 plus no bacteriophage
рН	within 10% of natural value	6.5-8.3	I=6.0-9.0	
Temperature	<30 °C unless naturally caused	**	···	-
Dissolved oxygen	5		G=80-120% saturation	I=80-120% saturation
Transparency	less than 10% above natural turbidity	+	I=I metre G=2 metres	none
Other	no change in colour, taste or odour; no floating debris oil or other material forming objectionable deposits	2	no abnormal changes in colour, no visible film or odour of mineral oils, no persistent foam, no odour of phenols, no solid sewage	
Sampling	as conditions require several metres off shore in water > 1 m deep at depths of 20–50 cm	at least 5 per 30 days on public beaches	at least every 2 weeks first sample 15 days before season, in areas where bathing density is highest, 30 cm below surface	

NOTES

^{1.} Bacteria occur in water not as free individuals but as clumps or attached to particles, and it is these clumps or particles that are counted in tests. Thus 90%<400 means that 90% of samples taken must contain fewer than 400 bacteria-containing clumps or particles per 100-ml sample.

^{2.} I stands for imperative, meaning required, G for guideline, meaning recommended.



Beach ashtrays are distributed on some French beaches in an attempt to reduce smoking litter.

'Blue-green algae can cause an acute skin inflammation, called marine cyanophyte dermatitis. The red algae called dinoflagellates produce neurotoxins which can accumulate to harmful levels during a bloom. Since they are eaten by mussels and other shellfish, where the toxins accumulate, they are potentially dangerous. Protection against algal blooms is difficult.'

to be broadened to include both allergic reactions and to place greater emphasis on the aesthetic appearance of beaches.

Medical debris, including discarded hypodermic syringes, has become increasingly common on Europe's beaches, and is not only unsightly but potentially dangerous.

The Blue Flag criteria do not specifically include the need to monitor other organisms or specific chemical and physical attributes of the water. However., the campaign does recommend routine monitoring of a number of these other parameters and national Blue Flag juries will ensure, through the participation of the relevant national authorities, that applicants that have problems in other areas are taking appropriate steps to deal with them.

For example, it may be necessary to extend monitoring and control operations if there are outbreaks of viral contamination, particularly by enteroviruses, some of which are highly infectious. While monitoring for enteroviruses is both difficult and expensive, current investigations suggest that monitoring for a group of viruses called bacteriophages can provide a good indicator of the extent of viral contamination in general and enteroviruses in particular. Similarly it may become necessary to monitor salmonella levels should there be an outbreak of salmonella poisoning or if a location becomes polluted as a result of accidents such as a broken sewer. Particular circumstances may call for the use of other indicators, such as Pseudomonas aeruginosa and Candida albicans, where amoebic or fungal infections are occurring.

Algae will also have to be monitored, should these be problematic. Algal blooms are caused by the discharge of nutrients from agriculture or from poorly treated wastewater. In effect, the algae that always exist, albeit in low concentrations, are fertilized and undergo an explosive population growth which quickly clouds the water. Blue-green algae can cause an acute skin inflammation, called marine cyanophyte dermatitis. The red algae called dinoflagellates produce neurotoxins which can accumulate to harmful levels during a bloom. Since they are eaten by mussels and other shellfish, where the toxins accumulate, they are potentially dangerous. Protection against algal blooms is difficult. Where they occur, regular monitoring of water turbidity is important and the cause of unusual changes should be identified. Where algal blooms occur often, emergency response plans should be elaborated.

Temperature and acidity are the two most important physical characteristics of bathing water. Temperature should not rise above 30 °C as a result of thermal pollution or industrial discharges. The pH value of bathing waters should be in the 6.5–8.5 range; more alkaline or more acidic water can cause eye irritation.

Aesthetic considerations

The aesthetic condition of a beach is important to three human senses—sight, smell and taste. While such factors are not easily quantified, the Blue Flag campaign does include a number of specific aesthetic criteria. These are that bathing waters should be free from:

- materials that can settle and create objectionable deposits;
- floating debris such as scum and oil;
- substances with objectionable colours, smell or taste, or which produce turbidity; and
- substances and conditions that produce undesirable forms of aquatic life (such as algal blooms).

Sampling requirements

Sampling of water quality must be systematic and carried out at a number of sites, the number being determined by the size of the bathing population, the proximity of potential sources of pollution, and the occurrence of maximum use and pollution periods.

Samples must be collected in sterile containers by operators wearing plastic gloves at points that are at least one metre below the sea surface and several metres from the shore. Samples should be delivered to the analytical laboratory within four hours in cooled containers that are sealed from the light. The laboratory should analyse the samples as soon as possible. The laboratory selected should itself be independent, guaranteed by other bodies, such as the State, and be equipped to carry out the analyses involved in an efficient manner.

Sampling should start two weeks before the peak season and continue until it ends, at at least fortnightly intervals. It is a good idea to take a few out-of-season samples in order to establish baseline values.

Informing the public

The tourist is becoming increasingly concerned about the quality of the environment in general and of bathing water in particular. These concerns greatly influence the choice of holiday site and the tourist thus appreciates objective information. Tourists are also entitled to maximum transparency on the part of the facilities they use and pay for. The provision of such information also encourages beach users to help keep both the beach and the bathing water clean and hygienic.

Bathing water quality data must therefore be displayed in every bathing area and must be updated regularly. If necessary, these data should be accompanied by information on any improvement works being carried out or planned. This information must be displayed on the beach but can also be publicized in the town hall, at aquatic sports and sailing clubs, and at first aid and lifesaving posts.

Pollution control measures

Local authorities have an obligation to assess all discharges into the sea, monitor bathing water quality, investigate the causes of any deterioration in quality and, where this deterioration poses a threat to health, prohibit bathing in the affected areas.

Major discharges into the sea, particularly near the coastline, should be eliminated if they are near to tourist beaches and if local authorities do not have access to microanalytical techniques for assessing 'Major discharges into the sea, particularly near the coastline, should be eliminated if they are near to tourist beaches and if local authorities do not have access to microanalytical techniques for assessing bathing water quality.'

'The Blue Flag campaign has played a role in speeding the introduction of [efficient sanitation] schemes in a number of areas. The important thing is that efficient plans are made to introduce sanitation, even if they can be implemented only at a pace determined by the availability of funding.'

Management and safety check list

Essential

- ✓ provision for litter
- ✓ beach cleaning
- no driving, bicycle racing, dumping or unauthorized camping
- ✓ safe access
- ✓ beach use zoning
- ✓ sanitary facilities
- ✓ lifeguards and/or life-saving equipment
- ✓ first aid posts
- ✓ control of domestic animals

Guideline

- √ drinking water supply
- ✓ public telephones
- √ provision for handicapped people
- ✓ proper maintenance of buildings and equipment

bathing water quality. All such discharges are controlled to some extent by either local or national legislation, although discharges that are not harmful to the environment may be permitted if investigations show them not to be harmful to either health or the environment. For example, filtered domestic wastewater can be discharged without harm through spray cones fixed to long outlet pipes that discharge well away from the shore in areas where coastal waters have the capacity to purify themselves through the actions of prevailing winds, currents and tides. Where such conditions do not exist, the wastewater must be treated. Particularly harmful wastes, such as those from hospitals, must be pretreated before they are discharged into the sewage system.

While efficient sanitation schemes (which involve both the collection and the treatment of sewage) are expensive, they are being increasingly introduced into coastal areas. The Blue Flag campaign has played a role in speeding the introduction of such schemes in a number of areas. The important thing is that efficient plans are made to introduce sanitation, even if they can be implemented only at a pace determined by the availability of funding. For this reason some Blue Flag awards have been made on the basis of plans to introduce sanitation in the future where beaches were not seriously affected by a lack of sanitation.

BEACH MANAGEMENT AND SAFETY

The main management and safety requirements of Blue Flag beaches are

simply stated: they must be clean and safe.

Cleanliness

The first requirement is to provide enough litter bins to accommodate all the rubbish generated by its users. These bins must be regularly emptied—at least daily—and properly maintained. Bins on the beach should be covered and not more than 25 metres apart. Alternatively larger receptacles can be placed at beach access points, providing means can be found of persuading tourists to carry their litter there.

Since tourists and other beach users cannot always be relied upon to dispose of all their own rubbish, the beach area must also be regularly cleaned. The Blue Flag requirement is that the beach be cleaned daily during the season, although this requirement is waived if cleaning is obviously not always necessary.

One important means of keeping the beach clean is to provide clean toilets and washing facilities. On average, one toilet is required for approximately every 100 people of each sex. Separate facilities for the disabled are a guideline requirement but the provision of toilets in general is an essential requirement because the periphery of beaches without these facilities quickly becomes fouled, the beach environment is spoiled and bathing water quality may deteriorate to perhaps dangerous levels. The provision of proper sanitation is expensive since all sewage wastewater must either be stored in leakproof tanks that are regularly emptied or led directly by sewers to a sewage treatment plant.

Blue Flag criteria for beach management and safety

Essential criteria

- Litter bins must be provided in adequate numbers, and must be properly secured and regularly maintained and emptied. There must be adequate provision for refuse, algal matter and other pollutants collected on the beach.
- 2. The beach must be cleaned daily during the bathing season when this is necessary.
- On the beach there will be no driving unless it has been specifically authorized, no bike or car races during the bathing season, no dumping and no unauthorized camping.
- 4. There must be safe access to the beach.
- 5. There must be active management of conflicts that occur between users and between the uses made of the beach—for example, conflicts that arise between the need to protect the environment and the need for recreational uses. Zoning of

recreational activities is also required whenever these are incompatible.

- There must be adequate and clean sanitary facilities with controlled sewage disposal, in the form of closed and seepageproof tanks that are regularly emptied or pipes leading to a sewage treatment plant.
- Beach guard(s) must be on duty during the bathing season and/or adequate safety provisions made, including the provision of life-saving equipment.
- 8. First aid posts must be available and clearly signposted.
- National laws concerning dogs, horses and other domestic animals must be strictly enforced on the beach. Their access and activities must be controlled.

Guideline criteria

- A source of drinking water should be available.
- 2. Public telephones should be within easy access from the beach.
- Access ramps and special toilet facilities should be available for handicapped persons.
- All beach buildings and equipment should be properly maintained.

For similar reasons, the access of dogs, horses and other domestic animals to the beach must be controlled. Although the Blue Flag campaign makes no detailed requirements, it does insist that relevant national laws be observed. In most cases, dogs should be banned from the beach area itself, and kept on leashes on all areas immediately adjacent to the beach.

It is also a guideline requirement that all buildings and equipment on the beach be properly maintained, for both aesthetic and safety reasons. Where construction work has to be carried out, care should be taken to prevent public access and minimize risks to beach users.

Safety

Safety from drowning must be assured either by the presence of lifeguards during the season or by appropriate life-saving equipment. The provision of such equipment is only one element in a safety strategy since the equipment must be

Beach safety in the United Kingdom

UK beach safety has been determined by the Blue Flag operator in conjunction with the Royal Life Saving Society and the Royal Society for the Prevention of Accidents. Highlights include:

- flags used to identify areas patrolled by lifeguards (red/yellow), surfing areas (black/white), and dangerous (red), caution (yellow) and calm (green) conditions;
- compulsory access to the beach for emergency vehicles;
- first aid facilities available during 10.00–18.00 on the sea front;
- daily beach supervision during 10.00–18.00:
- records kept of all emergency incidents;
- emergency plans drawn up to cope with pollution incidents;
- public telephones within a threeminute walk from anywhere on the beach checked daily;
- codes of conduct and laws governing beach use prominently displayed;
- information to be provided on potential hazards such as dangerous fish, submerged objects, and dangerous currents and tides;
- safe access routes to the beach;
- beaches that are steeply shelved or have rip tides or strong undercurrents are not accepted for the Blue Flag award;
- conflicting and incompatible needs of different users must be resolved by zoning.



clearly displayed and signed, and it must be easily accessible—at intervals of every 100–200 metres, for example, where there are no lifeguards.

Similarly the times of lifeguard attendance and the areas they patrol should be publicized at the beach information point, and by flags or markers on the beach itself. Lifeguards must possess appropriate qualifications for their job.

The availability of public telephones is only a guideline requirement of the Blue Flag campaign. Telephones should be checked daily and be within a three-minute walk from any point on the beach. Direct-line phones to the police and local hospitals are also a good idea. These are often best sited at first aid posts.

First aid posts are another Blue Flag

Most of the Blue Flag criteria for beach management and safety are summarized in these signs, now commonly found on many European beaches.

requirement; they should preferably be manned, by qualified staff wearing easily distinguishable uniforms or with other distinguishing features.

Safety off the beach is almost important as in the sea, and means of access from car parks to the beach should also be safe.

Where such paths are steep, tourists should be given warning of this before beginning the descent.

On the beach itself, driving should always be forbidden, except for official vehicles, and bicycle races should be forbidden during the season. Dumping and unauthorized camping must also be forbidden.

It is important to provide designated zones for different activities since some are dangerous to others: wind surfing and water skiing, for example, must not be allowed where bathing is permitted. Beach use zoning is a Blue Flag requirement wherever there is potential conflict between or dangers from different uses.

While the Blue Flag requirements for safety are individually itemized, safety is best tackled with an overall plan. The preparation of such a plan requires an initial risk assessment. Blue Flag national operators can provide information on how to make risk assessments.

ENVIRONMENTAL INFORMATION AND EDUCATION

The Blue Flag campaign lays considerable emphasis on education, training and the raising of public awareness. The targets of these activities are visitors, schoolchildren, the local population and all those who hold positions of responsibility in relation to the coastal environment. The overall aim is to improve understanding and management of the coastal environment.

Other more immediate uses of information are also involved. Thus the first requirement is that prompt public warning be made if a beach becomes polluted or unsafe, for example as a result of a sudden discharge of storm water, rough sea

'The Blue Flag campaign lays considerable emphasis on education, training and the raising of public awareness. The targets of these activities are visitors, schoolchildren, the local population and all those who hold positions of responsibility in relation to the coastal environment. The overall aim is to improve understanding and management of the coastal environment.'

Blue Flag criteria for environmental information and education

Essential criteria

- Prompt public warnings must be given if the beach or a part of it is expected to, or has, become grossly polluted or otherwise unsafe. This requirement includes unsafe conditions due to the discharge of storm water.
- Information on protected sites and rare or protected species in the area must be publicly displayed and included in tourist information, except where such information might endanger the site or specimens.
 Information must include a public code of conduct.

- 3. The responsible authority must:
- display on or close to the beach updated information on water quality and the location of sampling points;
- display the Blue Flag criteria as close as possible to the location of the Blue Flag itself; and
- must remove the Blue Flag if any of the essential requirements is no longer satisfied.
- The responsible authority must be able to demonstrate at least five educational activities related to the coastal environment.

Laws governing beach use and code of conduct must be readily available to the public on request (for example, in tourist offices, the town hall or at first aid posts).

Guideline requirements

I. Environmental Interpretation Centres, Ecology Centres or similar permanent public or school environmental awareness places should be available to those using the beach.

Denmark's contributions on information and education

Public awareness

- folders on the Blue Flag campaign, with advice on good behaviour in relation to the coastal environment, produced by the national organization and distributed by local communities;
- popular book on bathing water quality explaining regulations and parameters;
- creation of Blue Flag information centres on the marine environment;
- guided tours in the coastal environment;
- tours at sea featuring marine biology and fishing technologies;
- guided tours of local wastewater treatment plants.

Education

- school visits to Blue Flag information centres;
- excursions to the beach, the dunes and on boats;
- elements of the national curriculum devoted to the coastal environment.

Training

- training for the long-term unemployed to become Blue Flag guides;
- regular theme meetings for laboratory personnel;
- yearly meetings between local government politicians and administrators, and Blue Flag officials.

Check list for environmental information and education

Essential

- ✓ public warning of gross pollution and unsafe conditions
- information on protected sites and rare species
- ✓ public display of information on the beach
- at least five educational activities relating to coastal environment

Guideline

 environmental awareness centres available to beach users conditions or algal blooms. This requirement is the public information complement to the guideline requirement on bathing water quality that stipulates that emergency pollution plans should exist. Public warnings normally comprise notices via the media, beach signs and display information at municipal and tourist offices.

The Blue Flag organizations require evidence that the interests of protected sites and rare or protected species have been addressed. This normally involves liaison with local conservation organizations. In most cases, information on such sites and species should be publicly displayed; however, where doing so would endanger a fragile environment or an

extremely rare species, such information may be better withheld. This information is normally best displayed along with other information on the site, which should include:

- data on bathing water quality;
- location of car and bicycle parks;
- safety information;
- codes of conduct, including restrictions on domestic animals;
- the Blue Flag criteria;
- the Blue Flag national office address; and
- a map showing the area of the beach and the location of sampling points.

This information should be displayed at every commonly used access point to the

beach, and at first aid and beach management posts. The Blue Flag campaign also requires any beach that fails to continue to fulfil the Blue Flag criteria to take down its Blue Flag.

The final essential criterion relates to the basic aims of the FEEE and requires that the beach authority partake in at least five educational activities relating to the coastal environment. These are intended to promote FEEE activities by:

- increasing awareness of and care for the coastal environment;
- training local people and tourism providers in matters relating to the environment;
- increasing participation in local decision making in relation to the coastal environment;
- promoting the sustainable use of the area for tourism and recreation; and

training decision makers and resource managers.

Finally, the one guideline recommendation in this area is that those using the beach should be given access to such local organizations as Environmental Interpretation Centres, Ecology Centres or similar permanent groups run by, for example, local schools or local authorities. The box on the left, which describes Denmark's extensive activities in the area of education and information, provides good examples of the way in which this can be done.

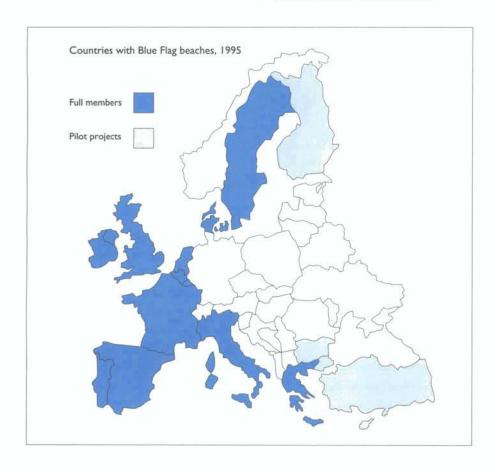
LESSONS FROM THE BLUE FLAG CAMPAIGN

SUCCESS OF THE CAMPAIGN

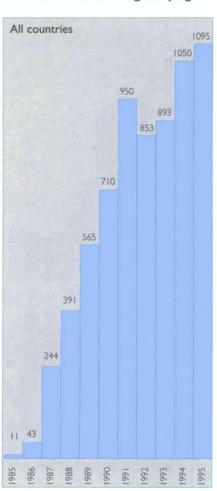
The Blue Flag campaign has been a success. Since it began in 1985, it has grown in size, in coverage, in scope and in influence. The bar charts on this and the following pages chart the number of Blue Flag awards for beaches over the past 11 years, both in total and by country. The number of awards, of course, is neither the only indicator of success nor a totally accurate one. In some years, in some countries, the number of awards has fallen, usually not as a result of any declining interest in the campaign but because of increasingly strict award criteria.

The success of the Blue Flag campaign is due mainly to the principles on which the campaign is based. These are:

- positive reinforcement, which highlights the achievements of the award-winning beaches;
- broad participation, involving numerous local and national groups on which all action depends;
- voluntary action, implying that those who volunteer to join accept the responsibility for complying with Blue Flag criteria;
- independent operation, so that the award system cannot be influenced by local or financial interests:
- continuous evolution, in that the



Growth of the Blue Flag campaign



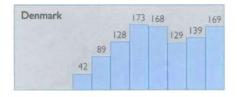
Bar chart above shows the growth in Blue Flag beach awards during the period 1985–95. Since France and Italy make awards to local municipalities rather than individual beaches, the actual number of Blue Flags flown at individual beaches is higher than these figures suggest: 1454 in 1994 and 1463 in 1995, for example. Figures include awards for natural inland waters.

Map on the left shows countries participating in the Blue Flag beach and natural inland waters campaign in 1995.

Growth of the Blue Flag campaign



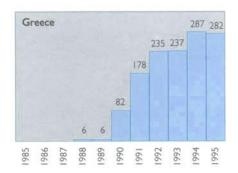












selection criteria change with time, leading to higher and broader standards;

- its international nature, which provides awards that have much greater significance than would national or subnational awards; and
- limited validity of awards for one year only, which requires participants to make continuous efforts to achieve the standards set by the campaign.

The Blue Flag campaign is expanding in a number of ways. It is encouraging pilot projects in countries that are not yet part of the campaign, with the object of eventually making them full members. It is extending its activities from beaches and marinas to cover natural inland waters as well. And, most importantly, it is broadening its criteria to comply with its new focus on community policies on coastal zones rather than individual beaches.

PILOT PROJECTS

Pilot projects are undertaken to determine whether a new country has the facilities needed to implement a Blue Flag campaign. Are there appropriate regulations, policies and capacities in relation to bathing water quality, safety, collection and disposal of hazardous wastes, environmental education and land-use planning? These are important questions because the Blue Flag campaign is aimed at both stimulating local action and improving national policy making in the areas covered by the Blue Flag criteria.

Once a Blue Flag operator has been created, it must identify the national and regional partners with which it should work. The operator and its partners then

examine the possibility of Blue Flag implementation at national and local levels. Suitable model or demonstration sites are selected. These are then improved and an evaluation of the pilot phase is carried out. Countries that have carried out pilot projects include Turkey (now a full member, and the first outside the European Union) which awarded 12 Blue Flags for beaches in 1993, Sweden and Estonia, which participated for the first time in 1994 with pilot projects for marinas, and Slovenia. Cyprus and Bulgaria have also set up national Blue Flag operators and begin pilot projects in 1995.

NATURAL INLAND WATERS

Belgium has led the movement to incorporate natural inland waters into the Blue Flag system. The campaign there is run by Bond Beter Leefmilieu, the Federation of the Flemish Environmental Movement, and has industrial sponsorship. In 1994 the national jury awarded Blue Flags to 7 of the 15 applicants. The campaign's main aims are to raise public awareness of the recreational uses of natural inland waters and to urge policy makers to pay special attention to water quality monitoring and wastewater management. The campaign includes the publication of leaflets on bathing in inland waters and guided nature walks round inland lakes. The success of this programme—and its potential importance—is likely to lead to further efforts to include natural inland waters in the Blue Flag campaigns of other countries. Two regions of France have already begun informal pilot projects on inland waters.

CONCERN FOR THE COASTAL ENVIRONMENT

While the Blue Flag campaign has always been concerned with the coastal environment, its outlook is set to broaden yet further in the future. By the turn of the century it hopes to see a number of new criteria taking effect. These are likely to include minimum levels of wastewater treatment which will depend on the number of peak season users, a local coastal area management plan, proof of environmental impact assessment for new projects and plans, and recycling schemes involving operators of the tourism industry in beach areas.

Issues such as these are vital to the future of coastal regions. When the Blue Flag campaign first started, its criteria were such that beaches located in communities without adequate wastewater treatment could fly the Flag; so could clean beaches which made public waste dumps of the hinterland immediately behind the beach. Such issues can be tackled only if the campaign broadens its objectives—as it has now decided to do—to improve the environmental management of coastal regions rather than just individual beaches.

This is an issue of some importance to other regions or countries about to investigate their own equivalents of the Blue Flag campaign. Should such organizations start, as did the Blue Flag campaign, by considering just water quality, safety and beach cleanliness? Or should they begin by tackling the larger issues? Such questions can only be answered by the regions and countries themselves,

taking specific account of their own situations.

RELEVANCE OF THE BLUE FLAG APPROACH

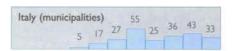
The Blue Flag campaign has been highly effective in Europe. Some of the reasons for this success are that:

- the campaign started with simple criteria that were not too difficult to achieve:
- the countries in the region agreed to opt for common criteria and standards;
- common criteria were easier to agree on and achieve since they already existed for bathing water quality in the form of an EC Directive:
- local government plays important roles in Europe which has enabled the campaign to raise community awareness of the importance of the coastal environment.

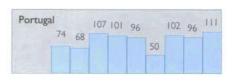
When adapting the Blue Flag campaign to non-European regions, regional- and country-specific issues and conditions (which may well be outside the European experience) should not be forgotten. The campaign should be developed to respond to local conditions and to address local environmental priorities. Some of these issues are discussed in the next chapter.

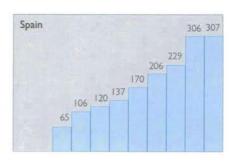
Growth of the Blue Flag campaign

















DEVELOPING CAMPAIGNS OUTSIDE EUROPE

The Blue Flag campaign is essentially a European programme, conceived initially for the countries of the European Union (then the European Economic Community) but now being expanded into East European countries and countries that lie on the edges of Europe. The campaign has proved to be a valuable way of improving the coastal environment. Similar award schemes in other countries and regions could benefit greatly from the Blue Flag experience.

In adapting a scheme such as the Blue Flag campaign to countries and regions outside Europe, it is important to consider how to embrace the differences arising from:

- physical and geographical differences between Europe and other regions;
- social and economic differences between Europe and other regions; and
- institutional and legal considerations.

This chapter considers these differences and then provides advice on how best, under the conditions given, to adapt the Blue Flag campaign to new countries and regions. Such schemes would have the same aims as the European Blue Flag campaign but would be developed as regional and independent initiatives.

THE IMPORTANCE OF GEOGRAPHY

Continents or regions that include tropical, equatorial beaches differ markedly from those in Europe, even those on the Mediterranean. Coral reefs are a feature of many such beaches and, indeed, a considerable attraction for tourists. Coral reefs are not only easily damaged but they

are also vulnerable to the introduction of new species—in the 1960s the crown-ofthorns starfish, for example, destroyed large areas of the Great Barrier Reef off eastern Australia. Fragile environments such as this need special forms of protection.

Tropical beaches may also be nesting areas for rare or endangered species, such as the Leatherback Turtle (*Dermochelys coriacea*) and this may call for some restrictions. In Trinidad and Tobago, for example, two of the most famous beaches where turtles nest are prohibited areas during the nesting period of I March to 3 I August. Permits to watch turtle nesting behaviour have to be purchased. Such permits, of course, are no guarantee of protection.

For these reasons, the protection of nature and the environment must also be a strong element in a scheme such as a Blue Flag campaign applied to tropical, equatorial regions that are rich in biodiversity and which harbour unspoilt habitats for rare or even endangered species of both flora and fauna. In addition, while Europe is now characterized by a predominantly urbanized coastal zone, this is less likely to be the case in developing countries. However, the potential for growth in such countries and the attraction of their exotic and unspoilt nature for tourism do present potential threaths to the coastal environment. Thus when adapting a scheme such as the Blue Flag campaign to these areas, a primary objective must be that the scheme can ensure careful management of the envisioned development and that the potential impacts of development and use of beaches for tourism are taken into account.

'The Blue Flag campaign ... has proved to be a valuable way of improving the coastal environment. Similar award schemes in other countries and regions could benefit greatly from the Blue Flag experience.'

'Community organizations nearly always exist to represent local interests but such village-based organizations rarely have the experience needed to conduct anything as complicated as a Blue Flag campaign.'

Conditions on tropical beaches differ in other ways. Some may be in active earthquake zones, and many lie on the track of tropical storms, including cyclones and tornadoes. Such beaches obviously require advanced early warning systems if they are to be safe. Others are exposed to forms of marine life, including both jellyfish and sharks, that are dangerous to those using the water. Many tropical beaches need careful monitoring for the presence of dangerous forms of marine life. Schemes like the Blue Flag campaign would have to find means of dealing with natural hazards.

Some of the problems encountered on European beaches are likely to be more severe in tropical areas. Agal blooms, for example, are likely to be more common in warmer waters where there is an excess of nutrients, and care would need to be used in monitoring for algae and the dermatitis and toxic effects sometimes associated with them.

In Europe, the bathing season is limited to the summer months. In the tropics there may ne no seasonality nor any natural break in the holiday season. Thus the adaptation of an award scheme such as the Blue Flag campaign to tropical regions and countries would have to take account of how to structure the award system when there is no natural period of time in which the award can be said to be valid. At the same time, the influence of private interest activities on the development and use of the coastal zone must be balanced with the needs and interests of the local population. Tourism development must be sustainable, by which is meant that it must be not only ecologically sustainable but also

economically, culturally and socially sustainable as well. A primary objective of any adaptation of a Blue-Flag-type campaign to other regions and countries must be to ensure coordination and dialogue between the local population and economic and development interests such as tourism.

Finally, the chemica! and physical conditions of the bathing water may be difficult to monitor because of a complete or partial lack of the analytical facilities needed for routine monitoring. Note that the absence of such analytical facilities does not necessarily make a beach any less safe, nor its waters any less clean. It does, however, mean that for coastal areas being developed for urbanization or tourism, there is no system of monitoring to provide data on water quality.

In such cases the best alternative may be to introduce some form of routine monitoring of the water combined with strong restrictions on the proximity of wastewater and sewage discharges to the beach and coastline. Restrictions on the proximity of wastewater and sewage discharges must, however, not be designed so that diversion of wastewater away from tourism areas and beaches to areas and beaches used by the local population is encouraged. The local population may well be fishing from the beach and using the beach for swimming.

The risk of becoming infected from eating shellfish and fish from sewage-affected waters is much greater than the risk associated with bathing. Thus part of any scheme like the Blue Flag Campaign should be to introduce such monitoring of bathing water quality as would be adequate in view

of potential pollution levels. Such monitoring serves not only to ensure the safety of visiting tourists but also that of local populations and thus contributes to their quality of life.

SOCIAL AND ECONOMIC ISSUES

The Blue Flag campaign depends to a great extent on local authority initiatives. In Europe, the local authority wields considerable power. Elsewhere, this is not necessarily the case; indeed, in some regions local authorities are extremely weak or even non-existent. Community organizations nearly always exist to represent local interests but such villagebased organizations rarely have the experience needed to conduct anything as complicated as a Blue Flag campaign. To complicate matters still further, the private sector often plays a more major role in beach development than it does in Europe. Outside Europe, particularly in Asia, resort owners often buy the right to control beach use and access. While this reduces the potential role of local government even further, it does provide an additional potential partner for award schemes which may therefore have to target the resort owner from the private sector. Other possible targets include local tourist organizations. In many developing regions, hotel associations could play active roles in coastal award campaigns.

At the same time, the influence of the private sector on the development and use of the coastal zone must be balanced with the needs and interests of the local population. Tourism development must be

sustainable, by which is meant that it must be not only ecologically sustainable but also economically, culturally and socially sustainable. A primary objective of any adaptation of the Blue Flag campaign to other regions and countries must be to ensure coordination and dialogue between the local population and economic and development interests such as tourism.

This is especially the case when beaches support marine communities that live on or near the beach and rely on marine resources for their subsistence. Such communities often have a complicated relationship with beach tourism, which is both a source of additional income and a potential threat to the area's marine resources and traditional lifestyles. Development plans for such areas must resolve these potential conflicts. Beach tourism damaged traditional fishing practices in many parts of Europe, particularly the Mediterranean, but when these effects first began to occur, little thought was given to their long-term implications or their consequences for the coastal environment. The Blue Flag campaign thus has little experience in this area on which to draw.

On the economic front, coastal award campaigns are relatively costly. National costs, as in Europe, can be financed by grants from national and regional government organizations, sponsorship by industry, fees from applicants, the sale of Blue Flags and Blue Flag membership fees. Where there is a need for industrial sponsorship, care will need to be taken to ensure that such sponsorship is not able to influence the award-winning process. On the

'The first step is to conduct an initial feasibility study to discover whether a campaign is needed and, if it is, whether those likely to be involved would welcome the campaign and cooperate to make it work.'

A checklist for action

- ✓ conduct a feasibility study
- ✓ identify a coordinating organization
- ✓ find a funding source
- define the scope and extent of the campaign
- ✓ set award-winning criteria
- begin to raise public awareness by calling for applications for a pilot scheme
- ✓ select beaches for the pilot scheme
- analyse results of the pilot scheme, correct shortcomings and finalize the criteria
- ✓ launch the campaign

other hand, it may well be possible to persuade different government organizations to finance different aspects of the campaign. In Turkey, for example, the Ministry of Tourism finances the cost of water quality analysis.

INSTITUTIONAL AND LEGAL CONSIDERATIONS

Coastal award campaigns like the Blue Flag campaign, whether being established within or outside Europe, will need to find answers to the following questions:

- which agencies have jurisdiction over coastal zones?
- to what extent do these agencies interact and cooperate?
- what regulations and standards govern the sustainable use of coastal resources—for example, are there coastal building regulations, limitations on fishing rights, water quality standards, rights of public access to beaches?
- how effectively are these regulations enforced?
- how developed are local capacities to run a campaign for improving the coastal environment—are there facilities, for example, for monitoring bathing water quality?

If regulations are totally lacking, or if they are rarely enforced, it will be more difficult to define the award criteria. However, where there is a lack of regulations voluntary schemes can be quite effective.

A CHECKLIST FOR ACTION

As already mentioned, coastal award

schemes must take account of local conditions and there will therefore be differences in approach in different regions and countries. However, the Blue Flag experience suggests that attempts to set up similar movements outside Europe need to consider a number of items before making any commitments. These items are summarized in the checklist box on the right. The text below provides more detail on each of these subjects.

Conduct a feasibility study

The first step is to conduct an initial feasibility study to discover whether a campaign is needed and, if it is, whether those likely to be involved would welcome the campaign and cooperate to make it work. The feasibility study should investigate:

- whether coastal tourism is sufficiently important in the country or region to justify the effort of mounting a campaign or whether local environmental conditions could be significantly improved through a campaign aimed at local communities;
- the extent to which local communities rely on coastal resources for their daily subsistence;
- who has jurisdiction over coastal areas and resources, whether those involved interact and cooperate with one another, and whether they would support a campaign;
- whether those responsible for the operation of tourist beaches would support the campaign;
- what regulations exist on water quality and whether they could form the basis

of some of the initial criteria;

- what local capacities exist to develop, manage and monitor the campaign;
- how much the scheme might cost and how it could be financed:
- the scope of the campaign and the areas where it might operate; and
- how the public is likely to react to the campaign.

Choose or set up the organizing institution

The feasibility study should identify the organizing institution that could be used to run the campaign. This should be a nongovernment organization. If the scheme is to involve several countries, there will need to be an international coordinator as well as national operators for the scheme. The latter are best based on existing institutions already connected with the coastal environment. When selected, the national operator will need to appoint a national committee, comprising representatives from all those organizations that appear likely to have an interest in the campaign, including those responsible, for instance, for water quality monitoring, coastal development, tourism and safety. This committee will conduct the pilot schemes and can later form the basis of a national jury.

Estimate costs and find a funding source

Funds may be available from either a state or a private source, or indeed from both. A diversity of funding sources may be more difficult to administer but is less likely to give any one body or industry the chance to exert undue influence. In developing countries it is likely that some funding will have to be provided by the applicants in the form of application or membership fees. In the first instance, such fees should be kept low in order to encourage applications. When a scheme becomes established, and the award has gained public recognition, fees may be increased. As we have seen, in Europe some countries, including the United Kingdom, make extensive use of fees to finance their operations. Others rely almost solely on government or industrial grants.

Define the scope and extent of the campaign

The feasibility study is used to define both the scope of the campaign and the areas where it will operate. A more detailed analysis is now needed, including the preparation of an inventory of tourist and community beaches, the resources available to them and the environmental conditions prevailing at each site. This information will provide an overview of the current situation and will help in defining the award-winning criteria and in selecting the beaches likely to be involved in the pilot schemes.

If it is concluded that the Blue Flag campaign, with its four areas of concern (environmental education and information, coastal quality, beach services and safety, and water quality) is the award scheme that should be implemented, the use of the name and logo of the Blue Flag campaign must be condoned by FEEE as the owner of the campaign.

'Public communication and information dissemination are vital to the success of the cambaign, which in the last analysis is aimed at improving conditions for the general bublic that uses coastal resources.'





Examples of Blue Flag publicity from Greece and Finland.

Set award-winning criteria

Detailed information on individual beaches is needed to finalize the criteria used in making the awards. These should attempt to tackle the most important environmental problems first. However, criteria should not 🔹 Is there a nearby independent laboratory be out of reach of most of the applicants. They can always be (and should be) strengthened as the campaign gathers popularity.

It is important that the inputs of all those concerned with the campaign be taken into account when setting the initial criteria. Key actors will include the scientific community, local authorities, the tourism industry (including private sector resource owners and beach managers) and local community groups. The criteria should:

- address priority environment and tourism issues:
- be attainable;
- be specified in advance;
- form the basis for awards that are timelimited, usually to a year or a season;
- be capable of being monitored and controlled; and
- be simple to implement (at the outset).

The most complex questions concern bathing water quality, the foundation stone on which the European Blue Flag campaign was built. Lack of analytical laboratories and common regional standards may make this important issue more difficult to address than it was in Europe. The WHO Regional Centre for Europe has made a detailed analysis of the requirements for water quality monitoring for the Black Sea region (see References). There are four major

points to investigate.

- Are there sufficient trained staff to collect the samples, using standard procedures, and store them under cold conditions until collection?
- qualified to carry out the analysis, with trained staff and adequate equipment?
- Can the samples be transported to the laboratory sufficiently quickly so that they can be analysed within at most four hours of being collected? If not, can a mobile laboratory be created?
- Can the laboratory prepare the necessary written reports and deliver them to the beach or municipality within a specified time?

Even where laboratories are totally lacking, however, some provision will have to be made for water quality monitoring, even if the initial requirements are minimal. Failure to plan for water quality monitoring, even (or particularly) where water quality is currently good, is an invitation to pollution. Answers to these questions will help define the initial requirements and assess the need to develop technical infrastructures and train personnel.

Begin to raise public awareness

The easiest way to raise public awareness in the first instance is to invite applications for a pilot scheme. This is best done by announcements in the press and on the radio, and by correspondence with the relevant local authorities. Feature articles on the campaign should be written before applications are sought because the first announcement will certainly solicit

invitations for in-depth information from local and national newspapers. A simple guide or handbook on how to get started at local level should be made available to potential applicants. The general public will also need information brochures, which will later be distributed to those sites that win the award. Examples of such brochures are shown on this and the facing page.

Select beaches for pilot scheme

Once the first applications have been received, an initial selection can be made. It is important, however, not to include any beaches where conditions are such that they could later result in bad publicity. One of the features of the success of the Blue Flag campaign is that virtually all the publicity the campaign has received has been positive. If possible, the beaches selected should be representative of the range of beaches likely to be involved in a successful campaign.

Analyse results of pilot scheme

When the first season is completed, the results of the pilot scheme can be analysed. This is the time to fine tune the criteria, to correct the shortcomings of the pilot scheme and to identify the lessons learned.

Launch the campaign

The launch of the campaign needs to be finely orchestrated so that the flags or other awards are displayed on award-winning beaches on the same day, with local ceremonies and with as much publicity as possible in the local and national press. This will ensure that, at least for the first few

years, the number of applicants will double annually, as happened with the Blue Flag campaign in Europe.

CONDITIONS FOR SUCCESS

Experience with the Blue Flag campaign in Europe suggests that there are a number of pre-conditions for the success of schemes to improve the coastal environment. These are as follows.

- The campaign must be honest, transparent and credible. This is easier to achieve if an independent body coordinates the campaign, and if decisions on the awards are made by an independent committee.
- The award-winning criteria must be clearly defined in advance and founded on reasonable premises. The awards must be capable of being withdrawn if the criteria cease to be fulfilled. Awards, in any case, should not be valid for more than one year.
- The campaign should first tackle important but easily implementable issues. What is important must be defined by local actors not by outside experts. As the campaign evolves, it should incorporate additional criteria and widen its scope. The aim should be for continuous improvement.
- The approach must be positive and must appear to be positive.
- Efforts must be made to involve all the users of coastal zones.
- Sufficient trained staff must exist to run the campaign, or facilities must be found to provide the required training.
- Public communication and information dissemination are vital to the success of





Examples of Blue Flag publicity from Denmark and Sweden.

The scope and the requirements of new campaigns will have to be defined according to prevailing conditions in the countries and regions concerned. As the history of the European Blue Flag campaign shows, it is best to start with a few well-defined requirements and then to expand them over the years ...'

the campaign, which in the last analysis is aimed at improving conditions for the general public that uses coastal resources. The scheme cannot succeed if the public is not made aware of its existence and its achievements.

CONCLUSIONS

Future award schemes modelled on the Blue Flag campaign may have to tackle many of the same problems as were encountered in the beginning in Europe but they may also have to deal with issues of which the European campaign has no experience. Differences between European and non-European countries, particularly those in developing regions, with respect to geography, social and economic conditions, and institutional and legal bases require special consideration. However, it is important that those charged with the elaboration of new schemes make maximum benefit of the knowledge already gained. New schemes will have to be selffinancing but they should be organized to benefit as much as possible from the experience gained in the Blue Flag campaign and in other similar activities. Later, when more than one new campaign has been launched, there should be considerable opportunity for south-south technical cooperation. As in all development projects, the exchange of experience is a key to success.

The sharing of information and experience is particularly critical since new award schemes must be extremely carefully prepared. Such schemes must be well planned and well executed or they will fail for lack of credibility. In the process, they

will diminish the chances of success for subsequent schemes.

The scope and the requirements of new campaigns will have to defined according to prevailing conditions in the countries and regions concerned. As the history of the European Blue Flag campaign shows, it is best to start with a few well-defined requirements and then to expand them over the years, keeping in mind the conditions for success that have been developed in this report.

Moreover, countries which are interested in developing award schemes inspired by the European Blue Flag campaign should consult IEEE. The national operator organizations of the countries participating in the European Blue Flag campaign harbour a wealth of experience and insight in setting up and running coastal award schemes.

Together with the International Blue Flag Coordinator situated in Denmark, teams of national operators and, where relevant, other representatives of the European Blue Flag countries, could advise interested countries in other parts of the world.

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ANNEX: THE GROUPS OF CRITERIA IN THE EUROPEAN BLUE FLAG CAMPAIGN

A beach eligible for the Blue Flag is one for which it has been chosen by the authorities to actively encourage visitors. This decision must have been based on a consideration of the capacity and sensitivity of the beach and its immediate hinterland.

It is necessary for the local authorities to consider, given the existing and expected load of visitors, and the available resources for beach management and related environmental management, how large an area will be designated for the Blue Flag.

In defining the extent or delimitation of the areas and the amount of services and facilities to offer, local planners should take the following into account:

- the number of day visitors on average and at peak;
- whether visitors come and go during the day or they stay at the beach for the whole day;
- the entire length of beach area visited and neighbouring to a potential Blue Flag beach, examining the likelihood of spill-over effects (facilities and services drawing users from neighbouring unmanaged beaches, litter from neighboring unmanaged beaches affecting the managed beach, etc.);
- the need to provide different types of beaches for visitors with different habits and tastes;
- the setting of the beach—geology and geomorphology, flora and fauna, and landscapes of sensitivity and special interest or with protected status—

- Criterion 18 requires that the use of the beach and surroundings for recreation and tourism does not jeopardize the natural environment;
- the types of recreational activities demanded by the visitors and their compatibility with each other and with the surrounding natural environment

WATER QUALITY

 To be eligible for entry a beach must comply with the standards of the Blue Flag for bathing water quality.

Guideline Bathing Water must meet the mandatory and guideline standards for the faecal and total coliform parameters and the guideline standard for faecal streptococci.

A beach must have at least one sampling site but, more importantly, the number and location of sampling sites must reflect the location of potential sources of pollution—both direct and diffuse.

 No industrial or sewage discharges affecting the beach area. The National Operator's Office should be notified of any discharge points in the area of the presented beach.

The presence of a discharge point does not necessarily eliminate the beach from consideration.

It is, however, necessary that sampling sites

as mentioned in I, are located so as to determine whether outlets affect the hygienic bathing water quality.

Regarding industrial pollution, the national operator office must be notified of outlets in the vicinity of the beach. Moreover, the appropriate authorities must document in a statement that:

- the influence of the potential pollution is being monitored; and
- it does not pose a public health hazard.

Beach and intertidal area

Local emergency plans to cope with pollution incidents.

Where there is a written emergency procedure it should be submitted with the application. The public should be informed of pollution or potential danger by the posting of information at the Information Point through the media or other relevant methods of communication. In order to protect the integrity of the Blue Flag and beach management it is crucial that the flag be taken down if there is any infringement of the criteria, e.g. sewage pollution.

 The beach and immediate hinterland must comply with official development plans and planning laws.

Siting of facilities and use of the area must be subject to planning guidelines which include environmental assessments. These guidelines and/or regulations must be met by the applicant.

5. No gross pollution by sewage-

related or other waste matter including litter and no discharge of industrial or urban waste.

If the beach is so located as to be affected by sewage-related, run-off waste or waste originating from the sea remedial actions must be taken (at best removal of sources, other alternatives include regular collection and removal at sea and on land).

In a litter and gross pollution context, it is important for the local authorities and beach managers to think holistically and not merely to focus on the single beach contesting for the Blue Flag.

The litter on such a beach has many sources, neighbouring beaches, the sea—cruise ships, private yachts, dumping from other ships, via rivers to the sea—and the hinterland.

These sources should be identified and appropriate mitigating and remedial actions taken.

6. No oil pollution.

The beach must be monitored for such pollution, and emergency plans devised in case a beach is deemed particularly susceptible (see criterion 3.)

Municipal land-side sources must also be identified and managed.

No algal or other vegetation materials accumulating or decaying.

Algal vegetation is generally accepted as

referring to seaweed. Whilst small amounts of seaweed are inevitable it should not be allowed to accumulate, and become a hazard or distasteful to the public.

INFORMATION AND EDUCATION

8. Prompt public warning if the beach, or part thereof, has, or is expected to, become grossly polluted or unsafe. This requirement includes the discharge of storm water, and should also include incidences of algal blooms.

This criterion is naturally closely connected to criterion 3. These two criteria represent two different aspects of the same requirement: local emergency plans. One deals with the monitoring and remediation that must be accounted for in such a plan. This criterion deals with the public information side of the same plan.

Contingency plans must be devised to broadcast warnings to the public, both through the media and through the provision of signs on the beach and at municipal and tourist offices.

 Evidence that the interests of protected sites and rare or protected species have been addressed, for example with close liaison with recognized local conservation organizations.

Some sites may prove environmentally delicate and require particular management techniques in which case evidence must be provided to show that recognized local

conservation organizations or other local resource interests have been approached for advice and problems addressed.

It may be that the fragility of certain environments will preclude them from this sort of award on the grounds that greater visitor numbers would endanger habitats, wildlife and flora, and landscapes or geology.

- 10. Public displays of
 - bathing water quality with updated information on water quality
 - car and bicycle parks
 - safety information including times of first aid, lifeguard attendance and area patrolled (if relevant)
 - local codes of conduct including restrictions regarding domestic animals
 - Blue Flag criteria
 - Blue Flag National Office address
 - map delineating the area of the awarded beach and location of sampling points.

This information should be displayed at every reasonable access point to the beach.

11/13. The municipality should be able to demonstrate that it encourages promotional and educational activities throughout the year relating to the coastal environment in the area.

Environmental education activities promote

the aims of the Blue Flag Campaign by:

- increasing the awareness and care for the coastal environment of its recreational and livelihood users:
- training personnel and providers of touristic services in environmental matters;
- increasing the participation of local interests in coastal zone environmental management decisions and promoting the sustainable use of the area for recreation and tourism; and
- training decision makers and resource managers.
- Laws covering beach use and appropriate codes of conduct easily available to the public at tourist and municipal offices.

CLEANSING

 Appropriate litter bins in adequate numbers, properly secured and regularly maintained, emptied at least daily.

Litter bins should be covered and of a suitable character and appearance. When located on the beach as opposed to by access roads, 25 metres is the recommended minimum interval between receptacles although numbers may vary according to the bin capacity, numbers of users and the effect of the tide on the area of the beach.

Another solution is to have larger receptacles located at beach access points. Such an approach necessitates inducing beach visitors to bring their litter with them

when leaving the beach at the end of the day.

When choosing and locating bins the following points should be considered:

- bin capacity;
- type and source of litter;
- volume of pedestrian traffic;
- servicing methods and intervals including peak times;
- local environment, e.g. potential strong winds, high tides, scavenging seagulls;
 and
- accessibility, e.g. height, surface.

15. Adequate cleansing of the beach.

Litter should not be allowed to accumulate or be unsightly and must comply with any national guidelines.

Provisions must be made for regular surveying and cleansing of the beach. Local planners should also consider the impact of neglected neighboring beaches. Thus it is recommended that not only Blue Flag beaches but all community beaches are cleaned on a regular basis.

MANAGEMENT

 Prohibition of unauthorized driving, dumping and camping.

Where there are no physical barriers preventing access to the beach by vehicles there should be a prohibition of unauthorized driving, dumping or camping about which there should be information displayed.

In case prohibiting driving on the beach is an unreasonable limitation to access for example on very wide beaches, cars on the beach must be managed through the designation of areas for driving and parking. Cars must be prohibited from the water to a certain distance up on the beach and there should be a car-free area on the beach.

Similarly, alternative means of bringing visitors to the beach such as shuttles or encouraging biking must be planned for.

17/25. Easy and safe access to the beach for all including disabled people where this is possible.

There should be safe access to the beach and resort facilities from the car and bicycle parks with controlled traffic flow on any intervening roads.

The car park surface must be in good order. Reserved spaces for disabled person's parking must be clearly marked and give easy access to the resort facilities.

Where it is absolutely necessary to park on the beach it must be safe, controlled, clearly marked and defined (see 16.). Parking on the beach should never be allowed on narrow beaches.

Access paths must be safe, with regulation of other traffic and the securing of steps, etc. Consideration should be given to the sensitivity of landscapes and flora in planning such paths. Whenever possible access must be provided for disabled people.

Bicycle paths are encouraged whenever relevant.

Similarly there should be provisions for appropriate means of car and bicycle parking.

18. Manage the conflicting and incompatible needs of different users, e.g. zoning for swimmers, surfers, windsurfers, motorized craft, nature conservation.

Swimmers should be protected from all sea craft. Distinctions should be made between motorized craft, e.g. personal water craft users, water skiers and powercraft users, and should be separated from paddle or sail craft.

Consideration should also be given to potential noise nuisances from some activities (particularly motorized activities).

Zoning planning should be enforced by clear signs at information points, entry points to access channels, explicit reference in literature and by buoyed lanes.

Similarly, conflicts between recreational uses and nature conservation concerns must be considered and managed. It is unacceptable if recreational activities induce environmental degradatio, for example increased coastal erosion, elimination of vegetation, tearing of seaweed from the seabottom by anchoring leisure boats and pollution from their toilet tanks, disturbance of birds and other fauna by motorcraft and noise, and divers extracting submarine wildlife.

Thus it may be necessary to restrict, disperse or otherwise manage certain activities both for the sake of the enjoyment and safety of other visitors and for the sake of protecting the surrounding nature.

 Adequate toilet facilities, cleaned and maintained daily, including facilities for disabled people.

The number of toilet facilities available must take into consideration the maximum number of visits expected at the beach at any one time.

Facilities for disabled people may be restricted by the use of a RADAR key.

Access to toilet facilities must be safe with no hindrance or interference from vehicular traffic.

Sewage from such facilities must not enter the ground or the sea untreated.

Consideration should also be given to the appearance of the toilet facilities. As for other buildings in the beach area, they should be well integrated with the built and natural environment.

SAFETY

 Lifeguards on duty during the summer season and/or adequate provision including lifesaving equipment.

The provision of rescue equipment should be seen only as one element of an overall strategy. Where rescue equipment is provided, it should be clearly positioned, visible and located at regular intervals permitting them to be reached quickly from any point on the beach. Intervals of 100–200 m are recommended on a beach without lifeguards. All equipment should be regularly inspected.

The times and area patrolled by lifeguards should be clearly defined and marked.

Lifeguards should hold appropriate qualifications from an appropriate and recognized training and assessment agents and tested by qualified, independent assessors.

Lifeguards should only be employed for this particular task and not in combination with duties such as water sports rentals and services, cleaning or other.

It is recommended that lifeguards bear uniforms or other signia making them easily recognizable on a crowded beach.

Bathing areas patrolled by lifeguards should be explicit. The area should be defined both on the map at the information point and physically on the beach with markers or flags. The following recognized flag zoning is recommended:

red = danger red/yellow = lifeguard-patrolled areas black/white = surfing only

unless a national flag zoning system already exists.

An additional complementary flag system to warn of the condition of the sea has been adopted in many countries and follows the traffic light colour code:

red = danger yellow = caution green = calm

It is imperative that local planners undertake a risk assessment of the beaches, if possible assisted by the appropriate national authority or expert body in order to define the appropriate response strategy.

Clearly sign-posted First Aid facilities must be available.

First-aid facilities can be manned or simply in the form of easily-accessible equipment. It is strongly recommended that busy beaches or family beaches has manned first-aid stations. Logically such first-aid personnel should have appropriate qualifications.

It is also recommended, particularly on busy beaches, that there is daily beach supervision throughout the high season.

This may be through attendant lifeguards, a first aid officer, beach officer or a combination.

All beach personnel should be readily identifiable and conversant, through appropriate training, with the following:

- supervision duties and requirements;
- potential local hazards including
 - location of hazards, access points, zones, public rescue equipment
 - preventative strategies including details of flag systems, safety information provision, seasonal/daily variations in levels of provision

- emergency provision including public rescue equipment, first aid points, telephones, vehicular access points;
- Blue Flag criteria.

Where the supervisory role is taken on by the lifeguard, the over-seeing of the beach should not detract from the specific responsibilities of a lifeguard. A beach officer/supervisor should also be visible, mobile and able to summon appropriate aid, monitor pollution, provide information for the public.

It is recommended that a record be kept of all emergency incidents and that the National Operator's office is notified of any significant incidents. These records should be available for inspection on request.

A standardized form for reporting emergency and rescue incidents should be used.

Dogs must be banned from the award area throughout the high season.

Dogs must be kept on a lead and under control on all adjoining or abutting areas throughout the bathing season. National laws concerning dogs, horses and other domestic animals must be strictly enforced and their access and activities must, under all circumstances, be controlled.

A clearly marked and protected source of drinking water.

The source of fresh drinking water can be within the toilet facilities block or on the sea front but must be protected from birds

and other animals. This can be in the form of a drinking fountain.

24. Public telephones which must be checked daily, within easy access (5 minutes walk) from any point of the award beach.

The requirement for telephones is primarily for emergency purposes. They should be clearly signed and accessible to the public at all time.

26. All buildings and equipment must be maintained to a high standard and, where practicable, there must be safe confinement of all construction work which must not detract from the enjoyment of the beach user.

Any construction work or hazardous derelict structures should be enclosed to prevent ready access by the public, particularly small children.

Consideration should also be given to the appearance of structures by the beach. They should whenever possible (new construction) be well integrated with the natural and built environment, according to design and environmental standards.

ABOUT UNEP INDUSTRY AND ENVIRONMENT

The Industry and Environment centre was established by UNEP in 1975 to bring industry and government together to promote environmentally sound industrial development. UNEP IE is located in Paris and its goals are to:

- 1. encourage the incorporation of environmental criteria in industrial and tourism development plans;
- 2. facilitate the implementation of procedures and principles for the protection of the environment'
- 3. promote the use of safe and clean technologies; and
- 4. stimulate the exchange of information and experience throughout the world.

UNEP IE provides access to practical information and develops cooperative on-site action and information exchange backed by regular follow-up and assessment. To promote the transfer of information and the sharing of knowledge and experience, UNEP IE has developed three complementary tools: technical reviews and guidelines; Industry and Environment—a quarterly review, and a technical query-response service. In keeping with its emphasis on technical cooperation, UNEP IE facilitates technology transfer and the implementation of practices to safeguard the environment through promoting awareness and interaction, training and diagnostic studies.

ABOUT THE WORLD TOURISM ORGANIZATION

The World Tourism Organization (WTO) is the leading international organization in the field of travel and tourism. Its members include 134 national governments and more than 325 affiliates, representing tourism-related businesses such as airlines, hotel groups and tour operators. as well as travel industry associations and local governments.

With its headquarters in Madrid, WTO was founded in 1975 and has been entrusted by the United Nations with the promotion and development of international tourism.

In promoting and developing travel and tourism—the world's largest industry—WTO's goal is to stimulate business and economic development, as well as foster peace and understanding among nations.

WTO's action programme is divided into six areas:

- 1. Cooperation for Development;
- 2. Education and Training;
- 3. Statistics and Market Research;
- 4. Environment and Planning;
- 5. Quality of Tourism Development; and
- 6. Communication and documentation.

ABOUT THE FOUNDATION FOR ENVIRONMENTAL EDUCATION IN EUROPE

The Foundation for Environmental Education in Europe (FEEE) seeks to promote environmental education by carrying out campaigns and improving awareness of the importance of environmental education. It is composed of a network of organizations which undertake individual projects in their own countries and participate in international efforts. The FEEE, which has its headquarters in Denmark, runs three major campaigns in Europe: the Blue Flag Campaign, Eco-Schools and Young Reporters for the Environment.



UNITED NATIONS ENVIRONMENT PROGRAMME

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