

# Guidelines for Implementing the Plan of Action on Environmental Health Risks in Tourist Establishments.

**A WORKING DOCUMENT FOR THE MEDITERRANEAN POLLUTION ACTION PROGRAMME, (MED-POL), WHO-UNEP, March 2011**

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# 1 OVERVIEW

For the Mediterranean Pollution Action Programme, the WHO-UNEP office based in Athens has produced a detailed and fully referenced technical report – *Plan of Activities Related to the Environmental Health Risks in Tourist Establishments* [1]. Its intention is to help with the prevention, control and management of the principal environmental health problems for tourism in the Mediterranean coastal region.

The report was based on a detailed, comprehensive Working Paper - *The Assessment, Prevention and Control of Health Risks in Tourist Establishments in the Mediterranean* [2]. The Working Paper was discussed at a technical group meeting convened by WHO in Athens, in April 2007. The WHO report of this meeting, *Meeting on Health Risks Associated with Tourist Establishments in the Mediterranean*, [3] is available on the Arts Access International website <http://www.artsaccessinternational.org/> with the working paper and the final report.

The implementation plan which follows has been prepared based on this work.

Key areas covered include:

- Predictions of tourist numbers;
- Action being taken in support of sustainable tourism;
- Key areas addressed in the final ‘Plan of Activities’ report;
- Cultural and Heritage considerations;
- Shared goals of sustainable tourism and healthy tourism;
- Actions to be taken at different levels and by different organizations and groups: what needs to be done and by whom;
- Economic appraisal and related issues;
- A framework for implementing the ‘Plan of Activities, using the 5-step model developed for the implementation of environmental management systems following the International Organization for Standardization (ISO) standards ISO 14001 [4] and ISO 14004 [5];
- An appended example, detailing additional information specific to one risk area - Food Safety.

This Implementation Plan should be examined in conjunction with the WHO *Plan of Activities* [1]. It cannot cover in detail all the environmental health risks associated with tourism in the Mediterranean Region. Instead it is intended as a framework to guide central and local decision making and to help ensure sustainable tourism, the control and, wherever possible, prevention of environmental health problems for tourists, and the well-being of all persons involved whether they be local, residential populations, tourist visitors or workers in the tourist and associated travel industry.

The WHO-UNEP office would welcome information based on experience in utilizing the material outlined in this Implementation Plan. It could then, in a suitable format, be placed on the WHO Mediterranean Pollution Action Plan website as additional resource material. This would supplement the Implementation Plan and be available for anyone to access and use.

This report is intended to help support sustainable development in the Mediterranean Region. There is an old Greek proverb which illustrates the collective efforts of all stakeholders in the region towards this objective:

*‘Civilisation flourishes when people plant trees under which they will never sit.’*

## 2 BACKGROUND

### 2.1 Tourist numbers and sustainability

Visitor numbers to the Mediterranean coastal regions are predicted to reach 312 million by 2025, with the Southern and Eastern Mediterranean countries and Eastern Adriatic countries likely to see the highest growth rates [6]. The drain on local resources from the regular tourist influx, and its impact on ecosystems, natural heritage sites and factors contributing to climate change, must be weighed against the economic and social advantages which tourism has brought to the region.

The need for sustainable tourism to achieve a balance between reducing the adverse impacts of tourism and increasing its value for local communities, is being addressed by the Mediterranean Commission on Sustainable Development (MCSD). In the Commission’s framework strategy, the Mediterranean Strategy for Sustainable Development (MSSD), which was adopted by the Parties to the Barcelona Convention in 2005, the promotion of sustainable tourism is a priority action [7]. In 2009, the Marrakech Task Force on Sustainable Tourism Development reported on a three-year programme completed by the International Task Force on Sustainable Tourism Development (ITF-STD) [8]. The task force’s main objectives are: *‘1) to encourage the implementation of actions that promote sustainable tourism through the development of support tools and 2) to present new initiatives and support existing ones that may inspire pilot projects and good practices in other countries to foster sustainable tourism development as defined by the UN World Tourism Organization (UNWTO)’* [8].

This body of work led to a set of policy recommendations addressed to all key stakeholders, including local authorities, local communities, international organizations, the private sector, NGOs and consumers. It underpins the ongoing development by the UN Commission on Sustainable Development (CSD) of a 10-Year Framework of Programmes (10YFP) on sustainable consumption and production (SCP) [8].

### 2.2 Risks to tourist health

Less attention has been given to the harm caused to tourists by environmental factors, yet the phenomenon of mass tourism also brings risks to public health. Health is recognized as a central component of sustainable development, since both lack of development resulting in poverty, and inappropriate development resulting in over consumption of resources and environmental degradation, a situation often exacerbated by tourism, have serious repercussions for health [9]. The World Health Organization (WHO) has estimated that poor environmental quality

contributes to 25 per cent of all preventable ill health in the world today [10]. At the World Summit on Sustainable Development in 2002 [11] health, including links to hazards in the environment, was one of five key priorities addressed and it is recognized that such links are global concerns which require international legal cooperation [9]. The problems for tourist health and environmental quality in the Mediterranean coastal areas are clearly interdependent [3] and there is an urgent need for both to be adequately managed and controlled across the region.

The report *Plan of Activities Related to the Environmental Health Risks in Tourist Establishments* [1] was prepared for the meeting of MEDPOL National Coordinators in June 2007. It identified major health risks associated with environmental factors in tourist establishments in the Mediterranean coastal areas. The twelve hazard areas on which the report focused, were identified as priorities for action in view of their frequency of occurrence, the level of concern over consequences and the feasibility of bringing about improvement. The areas were:

- Outdoor air pollution
- Indoor air pollution
- Water supply – drinking water quality
- Water sanitation – waste water pollution
- Bathing and recreational water
- Sun exposure
- Heat exposure
- Noise pollution
- Well-being and aesthetics
- Food safety
- Hotel safety
- Principal communicable diseases

It was considered that in each of these areas:

- there are existing problems which need sorting out;
- there is an unmet need for new educational and training materials;
- the quality of preventive and control services could be improved;
- local and/or national standards or guidelines exist, against which there is a need to assess the effectiveness of risk assessment, monitoring, control and prevention.

For each key area, the report provided:

- Characteristics/pollutants and sources of pollution/hazards
- Health impacts and hazards
- Current guidelines and standards
- Measures and actions which need to be taken by governmental bodies
- Recommendations for tourist establishment operators.

The aim of the report was to formulate a plan of action to reduce the burden of disease related to these factors. Implementation of this plan will necessitate consideration of the 21 countries

bordering the Mediterranean as one area, whilst bearing in mind the different needs of each nation, the diversity of cultures and differing public health infrastructures.

### 3 CULTURE AND HERITAGE CONSIDERATIONS

#### 3.1 The Underlying Framework of Health, Well-being and Sustainable Development:

In February 2006 the United Nations Environment Programme (UNEP), created the International Task Force on Sustainable Tourism Development. It recognises the interdependence of sustainable development with health and well-being. This interdependence was addressed in the MED/POL Action Plan [1], with respect to the management, prevention and control of environmental health risks. Increasingly too, the interdependence recognises the importance of cultural and heritage factors. They are qualities and characteristics that influence considerably the tourist experience and economic well-being of society. Accordingly, local Implementation Plans need to ensure educational systems are in place to support understanding and valuing of them and that local economies can enable appropriate opportunities for relevant business development.

Given this background politicians, policy and senior decision makers need to promulgate the underlying framework of health, well-being and sustainable development. In it the WHO defines 'health' as: '*a state of complete physical, mental, social and spiritual well-being and not merely the absence of disease or infirmity*'. The term 'well-being' can in turn be considered as indicating "*a holistic notion of achieving a state of health, comfort and happiness*" [12]. It has also been noted that '*well-being*' is considered in some Government Acts as having four dimensions: viz. economic, environmental, social and cultural [2].

In contemporary society too, again as reported in the MED/POL Action Plan [1], and at both population and individual levels, sustainable development is needed to help achieve these states of health and well-being. The term was coined in 1983 by the World Commission on Environment and Development (the Brundtland Commission). It is: "*a pattern of resource use that aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but also for generations to come*" ([www.wikipedia.org](http://www.wikipedia.org)). However, as the United Nations Department of Economic and Social Affairs has reported, "*the achievement of sustainable development requires the integration of its economic, environmental and social components at all levels*" ([www.un.org](http://www.un.org)).

#### 3.2 Cultural and Heritage Tourism: An Expanding Sector of the Tourist Industry:

Both the tourism industry and tourists are responding to developments associated with this sustainable development framework and international policy. For example, different sectors of the industry are expanding rapidly to include activities that depend on long-term sustainability of the quality and characteristics of natural environments. They include:

- **ecotourism** with travel to areas of outstanding beauty, bird, nature, wild animal and marine reserves, national parks, and wilderness areas;
- **activity and adventure travel** with for example, long-distance rural trekking and biking, white water rafting, canoeing, ocean rowing, bungee jumping, horse, donkey, camel and elephant-based trips;
- **special interest and sports holidays** that focus on for example a particular sport or arts activity;
- **ocean, river and lake cruises** by ship with on-board entertainment and educational activities;
- **virtual tourism:** computer-simulated environments that simulate virtually and often with sound, physical presence in places in the real world as well as in imaginary worlds, and enabled in the real world by remote cameras and microphones placed in bird and nature reserves, game parks, and other cultural and heritage areas, offering real-time nature experience for visitors and with minimal environmental impact [13];
- **cultural tourism** with opportunities to explore the lifestyle of local people, their history, art, architecture, religion(s), social customs, archaeological sites, museums, public reserves, art galleries and UNESCO World Heritage Sites;
- **heritage tourism** defined by the National Trust for Historic Preservation in the United States as: “*travelling to experience the places and activities that authentically represent the stories and people of the past*” ([www.wikipedia.org](http://www.wikipedia.org)).

These areas are becoming further subdivided. For example, it is reported that: “*cultural and nature-based experiences .... are highly significant and complementary market forces*”, and that: ‘nature-based tourism’ “*encompasses many leading and rapidly growing tourism subsets including soft and hard adventure activities, beach tourism, wildlife tourism, scenic driving and sightseeing, eco-tourism and garden tourism*” ([www.developtourism.com](http://www.developtourism.com)).

Implementation Plans need to consider the growth of these different sub-sets of tourism and the impact of these trends. To help the process, new frameworks of thinking are emerging. They need to be addressed at all levels in educational programmes for tourism-receiving, host populations, and by travel companies and tour operators, as well as by individual tourists.

### 3.3 Cultural and Heritage Tourism at the Local Level:

At the local community level the combination of cultural and heritage tourism has become an important area for local residents for the following reasons:

- it can have a positive economic and social impact;
- it establishes and reinforces identity;
- it helps to preserve cultural identity;
- it fosters understanding of culture and as such an instrument to facilitate harmony and understanding among people;
- it supports local culture and helps renewal of tourism;
- it encourages conservation and accurate interpretation of cultural resources;
- it allows authentic visitor experience, and;



- it stimulates earned revenues from cultural resources ([www.wikipedia.org](http://www.wikipedia.org)).

Implementation Plans need to consider these factors and be sure appropriate arrangements are in place locally for:

- conservation of the resources that attract tourists to a country, region or specific local area, including the protection of community assets ([www.nztourismstrategy.com](http://www.nztourismstrategy.com)) ;
- the identification, management and protection of the heritage and amenity values;
- understanding of the impact of tourism on communities and regions;
- achieving economic and social goals and benefits;
- provision of financial resources for protection of the cultural heritage assets, and for appropriate marketing and promotion ([www.wikipedia.org](http://www.wikipedia.org)) .

Cultural heritage tourism can therefore be seen as a blend of education, entertainment, preservation, conservation and income generation ([www.wikipedia.org](http://www.wikipedia.org)). In it, the balance of what is sought and can be achieved is best achieved by agreement where possible of all sectoral interests for the values attached to the specific community resources that attract tourists and that are being considered. Accordingly, as ‘value’ can be defined from the Concise Oxford Dictionary as being ‘*a quality that gives something worth or desirability and that has utility*’, educators have a key role to ensure the values attached to different resources and assets in a community are fully studied and widely understood. By ensuring this process as part of the Implementation Plan in any local area, it becomes much more likely that the most appropriate and sustainable values will be accepted and adopted by all stakeholders.

### **3.3.1 Fostering Educational Developments for Cultural and Heritage Tourism**

The inclusion and involvement of all stakeholders is essential because as the Chair of the International Task Force on Sustainable Tourism Development has emphasised, the tourist “*industry is very dependent on the quality of local environments and societies as tourists are often looking for aesthetical and culturally attractive places to visit*”. He noted that therefore, if “*tourism is not managed properly, it can damage the very resources that ensure its success and sustainability*” [www.uneptie.org/scp/tourism/activities/taskforce/pdf/TF%20REPORT\\_final.pdf](http://www.uneptie.org/scp/tourism/activities/taskforce/pdf/TF%20REPORT_final.pdf) .

To help foster educational developments for wider understanding and fully informed decision-making in the educational process that is needed, an anthropological framework for the basis of human values has been developed with the WHO, Nuffield Trust and Office of International Health Cooperation and Development of the Italian Red Cross. It has four core components:

- appreciation of different civilisations, cultures, customs and societies;
- awareness of tools a society develops for its sense of place, purpose and security;
- knowing what influences thinking and perceptions among members of a group;
- linking within ourselves external experiences and internal feelings

The details of this framework have been published. They can be readily accessed and freely downloaded [14,15].

The sustainable development of tourism also depends on the capacity of society to enhance its cultural and social capital. Therefore, in considering what people value and relating this to the building of cultural capital and what tourists seek, educationalists at all levels need to consider what holds a local community together and what makes it attractive to tourists.

Factors needing to be considered with cultural and heritage tourism at the national and local levels, in addition to those associated with the basis of human values, include social values and group identities associated with:

- **nationhood:** the feeling of a community of people who share a common history, language, culture, ancestry, and / or territory;
- **active citizenship:** ‘the philosophy that citizens should work towards the betterment of their community through economic participation, public, volunteer work, and other such efforts to improve the life for all citizens ([www.wikipedia.org](http://www.wikipedia.org))’
- **community spirit:** having a sense of connection with ourselves, each other, work and home;
- **culture:** the set of shared attitudes, values, goals and practices that characterises a group, organisation or institution;
- **cultural capital:** the wealth created through celebrating and investing in cultural histories, values, ideologies, ritual and programmes” [16];
- **social capital:** the collective human factors of talent, capability, creativity, innovation and knowledge, including the sense of realising one's potential and achieving self-fulfilment [17].
- **social organisation:** the formation of a stable structure of relations inside a group, which provides a basis for order and the patterns of relationships;
- **social cohesion:** the material conditions of employment, income, health, education and housing, the social order, safety and freedom from fear, tolerance and respect for other people, together with peace and security , positive interactions, exchanges and networks between individuals and communities that bring people together in society;
- **belief:** the search, content and structure for a long-term coherent narrative that fosters the sense of identity, belonging and meaning in life and living;
- **belief systems:** the way a people or society has structured confidence in the truth or existence of something such as a religious creed or faith that is not immediately susceptible to rigorous proof;
- **traditions:** rituals, beliefs, practices or objects passed down within a society, valued and still maintained in the present, with origins in the past;
- **a sense of history:** understanding of the past associated with knowledge acquired by investigation and analysis, and often in seeking to appreciate better the patterns of cause and effect that determine events;
- **archaeology:** the study of human society, primarily through the recovery and analysis of the material culture and environmental data which they have left behind and including objects formed by humans and others previously unhandled by humans, and cultural landscapes;
- **conservation:** the act of preserving, guarding, or protecting something for its safe keeping;

- **heritage:** something that has come from the past and has been passed down from preceding generations and often associated with qualities and characteristics of a people or place that are valued.

The word ‘*heritage*’ needs too to be fully understood by all stakeholders involved with the Implementation Plan. It has several different senses. They include:

- **natural heritage:** an inheritance of fauna and flora, geology, landscape, landforms and other natural resources;
- **industrial heritage:** monuments, buildings,
- **cultural heritage:** the legacy of physical artefacts and intangible attributes of a group or society
- **artefacts:** heritage items such as tools, utensils, archaeological findings
- **tradition:** customs and practices inherited from ancestors

What happens too in the modern world can be seen as a result of interconnected events, each one consisting of a person or group acting for reasons of their own motivations (e.g. profit, curiosity, religious beliefs) with no concept of the final result of what either their or their contemporaries’ actions finally lead to. The interplay of the results of these isolated events is what drives history and innovation. The process can be seen therefore as the synergistic interaction of past events and innovations ([www.wikipedia.org/connections](http://www.wikipedia.org/connections)).

It has been reasoned that the more understanding individuals have of this process and its inter-connections, then the more likely it is they will take an active interest in other societies, communities, and groups, contribute constructively to the process, and feel better empowered in the enjoyment of their own lives [15].

The above themes underlying the basis of human and social values and group identities provide a framework with Implementation Plans to help develop educational tools that are needed for more responsible tourism. The framework could be structured further at the local level and marketed alongside community-generated opportunities for cultural and heritage tourism. These opportunities include fostering interest in:

- iconic qualities and characteristics of local built and natural environments to which groups of people attach value, including for example architecture, statues, memorials, sculpture, public art, parks, reserves, geological formations, local flora, and fauna such as in the Mediterranean Region, the Monk Seal,;
- cultural events such as local festivals, carnivals, ceremonies, celebrations, public art exhibitions, theatre, opera, dance, music, and literature;
- visual and auditory art experiences such as son et lumiere displays, and opera and music in for example historic amphitheatres;
- collections, archives and other displays of cultural, heritage and other historical material in museums, art galleries, libraries, and places of worship;
- improved opportunities for aesthetic experience in support of the aesthetic component of ‘*health*’ included in the WHO European Charter on Environment and Health developed and promulgated by the Ministers of Health and Ministers of the Environment in Europe

[18], and the need reported by a WHO Inter-Regional Consultation on Environmental Health for the aesthetic aspects of recreational value and mental health within healthy tourism to be addressed [19].

With the WHO, several practical examples of the aesthetic approach in support of healthy cultural and heritage tourism have been published; they are readily-available on the Internet [14]. Tourists greatly appreciate these aesthetic opportunities and experiences, value them and return sometimes frequently, to revisit and again enjoy the experience. In addressing them in the Implementation Plan there are therefore considerable economic gains for the host, tourist-receiving, local population.

With respect to culture and heritage opportunities, questions local educators and policymakers may wish to consider which underpin the suggested framework include:

- What do we in our local community have opportunities to experience ?
- How are we introduced to that experience ?
- How do we interpret the experience ?
- What influences our perception of that experience ?
- Which experiences do we value ?
- Do we wish to profile and market these opportunities for such experiences ?
- Do these opportunities need further investment and development to help attract responsible tourists ?

By making these sorts of cultural and heritage connections, positive feedback loops to support values and valuing of qualities and characteristics of the local environment and what goes on in it can be set up between the community infrastructure and its individuals. This will help the community to determine its business opportunities for tourism needs and developments they consider appropriate and wish to foster.

### **3.3.2 Environmental Actions for Local Authorities:**

Local educators and policymakers can apply the above framework to identify priorities for environmental actions. For example, dog fouling is an aesthetic and microbiological health problem for which Local Authorities have a variety of interventions to tackle the problem. Those that have been used include:

- Placing notices in public areas;
- media coverage;
- enforcement;
- leaflet distribution;
- the provision of free ‘poop’ scoops and siting of dog waste bins;
- DNA testing of dogs and discarded faeces [20].

A further aesthetic and environmentally degrading example is the 60 billion single issue plastic bags used in Italy each year until December 2010 and amounting to 330 bags / person /year. To

resolve the adverse health effects, a law was introduced banning plastic bags and requiring all single issue bags to be biodegradable.

### **3.3.3 Educational actions in an Implementation Plan can include:**

1. For the Government - integrating into the national curriculum cultural and heritage environment teaching with related subjects such as history, citizenship, geography, environmental science, architecture and design;
2. For the Education Sector - emphasising the role of culture and heritage in teacher training and developing the necessary skills and teaching resources that reflect community cultures;
3. For the Heritage Sector - providing guidance and training for owners and managers as to educational programmes and educational resources which acknowledge the contributions, values and needs of different social groups; and fostering the development of appropriate icons, symbols and emblems.
4. For Operators of Culture and Heritage Opportunities - supporting local conservation and preservation activities, providing facilities and educational material to encourage visits by schools, community and special-interest groups, and individuals, and considering opportunities for the development of virtual tourism.

An example of a tourist-welcoming educational action at Local Government level is in Athens airport, Greece, where in 2007 several of the luggage trolleys had on them pictures of a landscape, sunset and local architecture, together with the caption: '*Greece: explore your senses*'. Outside the airport several billboards had been erected along the motorway leading into the city with the same pictures and the caption: '*Greece: five senses to explore: one country to adore*'. On travelling back towards the airport on the same motorway facing billboards had the same pictures and noted: '*Greece: there is so much still to explore*'.

### **3.4 The UNEP Green Passport and a proposed accompanying Passport to Global Citizenship:**

Different educational tools that have been developed in different areas of the Mediterranean Region to use with areas explored in this section of the Implementation Plan could be examined and uploaded as useful resources to the website of the Mediterranean Pollution Action Programme. Based on them, a comprehensive web-based online, downloadable resource, DVD and accompanying hard copy booklet and leaflet material could be prepared in partnership with the WHO and UNEP and evaluated for use by travel agents, tour operators, and group tour organisers. The material could then be brought together as a proposed Passport to Global Citizenship that includes a code of social and behavioural conduct. It could be developed to help encourage informed and engaged citizens and communities to:

- understand and take control of their unique identities;
- celebrate their cultures;
- recognise and share their differences; and
- articulate their social, environmental, economic, cultural and spiritual needs.

Section 3.3.1 above outlines key areas for consideration in the overall educational framework. Development of this framework would help the UN system to ‘*cultivate a widespread culture of community*’.

Such a passport could be based on themes covered in this section of the Implementation Plan. It could accompany the UNEP Green Passport which introduces to tourists simple ways to make every holiday a more sustainable activity. The Green Passport addresses tourism that respects the environment and culture and supports the economic and social development of local communities. It describes for each stage of the tourist’s holiday how decisions can make a difference. The areas covered include:

- choice of the tourism destination;
- how to plan the trip;
- how to get there;
- moving around in the destination;
- how to relate to the host community and its surroundings;
- choice of souvenirs;
- the trip back home;
- subsequent actions ([www.unep.org/greenpassport](http://www.unep.org/greenpassport) ; [www.tourism@unep.org](http://www.tourism@unep.org) ).

This proposal for a Passport to Global Citizenship is put forward in support of the Brighton Declaration which identified ‘*health as global citizenship*’ as being one of five needed global health action areas [21,14].

### **3.4.1 Cultivating the Engagement of Individual Tourists in Cultural and Heritage Tourism:**

Implementation plans also need to address the behaviour of individual tourists and tour company representatives. For example, earlier work in 2006 with the WHO Collaborating Centre for Tourist Health and Travel Medicine in Rimini, Italy, identified the increasing concerns about travel abroad associated with:

- insecurity in many places, instability, uncertainty, threats to personal freedom and liberty, and destructive and other inappropriate behaviour of individual tourists;
- the behaviour of some overseas-posted travel company representatives [14].

To help address these issues it has been reported that “*improved understanding of ourselves and of other people would help considerably to reduce present psychological tensions within and between people*” [14]. The desire for education among tourists requires however personal motivation. Wider appreciation is therefore needed of the worth of being better prepared before travelling. The more it has been suggested, people read, study, talk to people, search the Internet and otherwise enquire before travelling, the more it prepares them for their trip and helps to open their minds to fresh insights, new ideas, and different ways of looking at life and living. This experience can it is reported be nourishing and enriching as well as helping us to re-examine our own sense of values and find for ourselves more worthwhile and fulfilling lives [14,15]

Tourists, in support of their enjoyment of travel and so as to enhance their sense of emotional well-being, can also be helped with general education to appreciate better the personal benefits that can be obtained from:

- allowing time to become aware of, contemplate and take an interest in other cultural and spiritual values, customs, habits, interests and expressions;
- clarifying in their individual minds what experiences have been stimulating and worthwhile, assimilating them, and then applying and using what they have seen, witnessed and / learned from them;
- keeping a diary or journal when travelling in which to record writings, drawings, paintings, and / or photographs to record their impressions (the internal perceptions and interpretations of experiences);
- enjoying the use of imagery and metaphor with different tourist experiences to make links and associations with other experiences in their life and to then record these feelings [15].

By improving personal awareness and understanding, the experience of different cultures in the wider world can help to enhance an individual's personal identity and self-respect, develop tolerance and respect for other people, their lifestyles, customs and values, and to clarify what is personally of value and that gives meaning, direction, and a sense of purpose in life and living. Implementation plans should therefore include links to national curricula and arrangements with local educational establishments.

### **3.4.2 Social Marketing:**

Cultural and heritage tourism have evolved from increasing awareness of and interest in our human diversity and the patterns of living associated with different expressions of human values and group identity. *“By analogy with biodiversity it has been argued that cultural diversity may be vital for the long-term survival of humanity, and that the conservation of indigenous cultures may be as important to humankind as the conservation of species and ecosystems is to life in general. The General Conference of UNESCO took this position in 2001, asserting in Article 1 of the Universal Declaration on Cultural Diversity that ... cultural diversity is as necessary for humankind as biodiversity is for nature”.* ([www.wikipedia.org/wiki/culturaldiversity](http://www.wikipedia.org/wiki/culturaldiversity) ).

Given this assertion and for the sustainable development of tourism in any locality, widespread and deep understanding of the qualities and characteristics associated with these inter-dependent cultural and heritage factors and those which underpin human values, are needed. All stakeholders and at all levels need to consider them.

At the local level surveys are needed to inform the debate. Social marketing can be a useful tool for this purpose. It is defined as: *“the systematic application of marketing, along with other concepts and techniques, to achieve specific behavioural goals for a social good”* and in which tourist sector organisations and government ministries can use standard marketing approaches to improve the promotion of their relevant services and organisational aims ([www.wikipedia.org/social\\_marketing](http://www.wikipedia.org/social_marketing)).



Eight essential components of social marketing have been identified ([www.wikipedia.org/social\\_marketing](http://www.wikipedia.org/social_marketing)) :

1. a consumer orientation to realise organisational, social goals;
2. an emphasis on the voluntary exchange of goods and services between providers and consumers;
3. research in audience analysis and segmentation strategies;
4. the use of formative research in product and message design and the pretesting of these materials;
5. an analysis of distribution and communication channels;
6. use of the marketing mix, utilising and blending product, price, place and promotion characteristics in intervention planning and implementation;
7. a process tracking system with both integrative and control functions;
8. a management process that involves problem analysis, planning, implementation and feedback functions.

These components can be used by national and local governments to explore the:

- qualities and characteristics of cultural and heritage tourism outlined in this section of the Implementation Plan,
- need for educational interventions designed to meet identified needs, and
- success of these interventions in improving awareness, interest and engagement in cultural and heritage tourism and in community and personal gains that can be achieved.

Integrated, systems thinking may be needed to help identify strategies that can promote dynamic networks of diverse stakeholders, show potentials of solutions that work across sub-systems and that inspire learning. The WHO has published recently such an approach to the overall process of health intervention design and evaluation [22]. It may help interdisciplinary decision-making and introduction of a local Implementation Plan.

#### 4 IMPLEMENTATION OF THE ACTION PLAN ON HEALTH RISKS

The WHO Plan of Activities explained why implementation of an effective plan is important . It helps to ensure environmental, economic, social and cultural wellbeing for host tourist-receiving populations, and for the sustainable development of healthy tourism [1].

Tackling the identified health risks will require coordinated activities related to the exchange of information, existing legislation, and capacity building [3]. As reported by the WEHAB working group in their framework for action on health and the environment for the 2002 World Summit on Sustainable Development [23], *'In general, knowledge of environment and health risks is segmented, and information is incomplete. Commonly, mechanisms to ensure co-ordination at the national, regional and local levels regarding health effects, impact assessment and the development of adequate reporting systems are lacking. In addition, mechanisms are frequently not in place to ensure that such information, once obtained, is transmitted to the various relevant sectors for action.'* The report goes on to recommend that *'Greater attention needs to be paid to developing managerial, administrative, institutional, human resource, legal and financial*



*capacities to address health, environment and development linkages and to work in an integrated fashion both between and within sectors.'*

One objective of the present Implementation Plan is to help establish the sharing of resources to improve tourist health across the Region. The Project Team, whether it be at the local or more central level, should therefore work closely with the Mediterranean Pollution Action Programme. Its aims and objectives, governance procedures, operational guidelines and technical support systems, provide a clear, structured Regional framework on which to base individual projects and an overall, coordinated plan. Also, the MSSD aims to put strategies in place to promote the positive impacts of tourism and minimise the negative, goals which are shared by this approach to tourist health. Since the same tourist industry stakeholders are involved, much could be borrowed from the model developed by the ITF-STD for sustainable tourism.

#### 4.1 What needs to be done

Following the ITF-STD model, the following areas need to be addressed in implementing the action plan for reducing health risks:

- Legislation and policy: to include recommendations, standards and certification schemes; governance issues; financing mechanisms
- Training and capacity building: compilation of existing educational resources (courses, manuals, e-learning), development of new materials where needed, for all tourism stakeholders
- Communication and information sharing: dissemination of information, website linking, sharing of good practice and networking; raising awareness

##### 4.1.1 Legislation, policy and certification schemes

Responsibility for health and safety lies with the tour operators, the owners and managers of tourist establishments, the providers and operators of the buildings, facilities and equipment used, and with the individuals using these resources. National legislation may vary in different countries and there may also be statutory responsibilities which are enforced by external inspectorates. All countries are bound by the International Labour Organisation (ILO) standards which have the aim of: *'promoting opportunities for women and men to obtain decent and productive work, in conditions of freedom, equity, security and dignity* [24]. The labour standards were developed to ensure that the growth of the global economy would benefit all sectors of society, and their protection, which extends to workers in the informal economy, is particularly relevant in the current economic crisis [25]. Member states are also subject to European law.

Health and safety requirements can be met in three main ways:

1. the government, or local authority, have responsibility for making and enforcing laws, regulations and standards;

2. private and voluntary groups in the community meet local need not covered by statutory services;
3. individual members of the public have responsibility for complying with the appropriate laws and standards, and also to act in a manner which will help protect their own health and that of others [26].

Voluntary certification schemes which inspect tourist establishments and award a logo or seal of approval if standards are met are believed to be one of the best means of influencing tourism [27]. However many different programmes exist, particularly in the accommodation sector, and some 'in-house' schemes operated by trade associations benefit the industry more than the tourist.

A certification programme developed with the involvement of various stakeholders and independently audited, can raise standards if the public are made sufficiently aware of its purpose to seek out locations or establishments with a high rating. A well-established example of a successful scheme which has improved the cleanliness of bathing beaches is the Blue Flag Programme [28].

#### *THE BLUE FLAG PROGRAMME*

*The idea of the Blue Flag, an award for beaches based on sewage treatment and bathing water quality, originated in France in 1985. Two years later, an expansion of the concept which included other areas of environmental management, such as waste management and coastal planning and protection, and could be awarded to marinas as well as beaches, was launched by the European Commission as the Blue Flag Programme in the "European Year of the Environment".*

*Today, the voluntary scheme is global and run by the independent non-profit organisation Foundation for Environmental Education (FEE). It extends to 41 countries across Europe, South Africa, Morocco, Tunisia, New Zealand, Brazil, Canada and the Caribbean.*

*The award of a Blue Flag is based on compliance with 32 criteria which cover aspects of: environmental education and information; water quality; environmental management; and safety and services. Beaches and marinas must reapply each season.*

<http://www.blueflag.org/>

#### 4.1.2 Training and capacity building

As identified by the meeting in Athens [3], training and capacity building are priorities in implementing the health risks action plan, with the need to develop and/or identify appropriate materials for public health professionals, workers in the tourist industry and consumers of tourism. At university level, additional health-related material and courses may be needed

The World Tourism Organization (UNWTO), part of the United Nations, is the leading international organization in the field of tourism and is of particular assistance to developing countries. Its Education and Training programme supports Member States in the formulation and implementation of educational policies, plans and instruments which effectively contribute to an improvement in the quality, competitiveness and sustainability of the tourism sector through excellence in education and training.

At local level, it is key to the success of a scheme that comprehensive local expertise is built up by training the trainers, who in turn will cascade their knowledge to raise standards amongst workers at all levels in the industry.

An example of this is UNEP's project '**Improving Environmental Management of SMEs in the Accommodation Sector**' which made use of a specially designed e-tool [8,29].

#### ***IMPROVING ENVIRONMENTAL MANAGEMENT OF SMEs IN THE ACCOMMODATION SECTOR***

*Following assessment of needs and current capacities in the pilot regions, a practical, ready-to-use e-tool was developed to help managers and owners in the hotel sector understand, develop and implement environmental management practices to improve their environmental performance.*

*To optimize take up of this tool, capacity building seminars were organized to train the hotel owners and managers, with the aim of creating a group of trained experts who would then develop training in environmental management at local, regional and national levels .*

[www.unep.fr/scp/tourism](http://www.unep.fr/scp/tourism)

Individual project team leaders would benefit from a coordinated approach. In it, an open learning resource of shared technical and educational development materials could be accumulated. One model that could be adopted and extended is that of the Public Health Open Resources in the University Sector (PHORUS) project from the Royal Society for Public Health, an international organization that works closely with WHO [30].

## THE PHORUS PROJECT

Project **PHORUS** is part of a UK initiative to provide open educational resources (OER) in Higher Education. Focusing on public health it is funded by the Higher Education Funding Council for England (HEFCE) and supported by **JISC** and **the Higher Education Academy**. PHORUS is led by the **Health Sciences and Practice Subject Centre** working with **the Royal Society for Public Health, Bournemouth University** and other institutions. The aims of the project are to:

- Critically assess the enablers and barriers to releasing learning resources in Public Health for open access in order to develop a conceptual framework to inform OER implementation and thereby enhance the student learning experience.
- Identify and work towards openly releasing existing Public Health learning resources.

### **Objectives:**

- Explore and develop business approaches & determine IPR challenges applicable to enabling the release of resources.
- Strengthen the Community of Practice to encourage contributions from the Universities Public Health Network.
- Identify and critically assess enablers and barriers.
- Promote the culture of sharing across various health related disciplines.
- Use the concept of OER to encourage reflection on developing educational processes through sharing experiences.
- Include a range of stakeholders: students, learning technology roles, ISS, 3rd sector (NGO – Public Health Forum).
- Identify and release Public Health Learning Resources for open access.
- Synthesize, review, and capture emerging themes and open resources through a single access point on the Health Sciences and Practice Subject Centre website.
- Disseminate findings and share good practices with the HE community.
- Evaluate the underpinning processes and outcomes of the project.

<http://phorus.health.heacademy.ac.uk/>

Dissemination of examples of good practice as used in the PHORUS project is another invaluable means of improving knowledge and raising standards. Various online manuals or interactive websites have been developed to encourage ethical and sustainable tourism. Aimed at both the tourism industry and travellers themselves they include:

- *The Responsible Tourism Handbook. A guide to good practice for tourism operators.* Greening the WSSD initiative, 2003.
- *The Responsible Travel Handbook* (2006) Available from: [www.tinyurl.com/zh5b5](http://www.tinyurl.com/zh5b5)
- The Federation of Tour Operators (FTO) in the UK has developed two preferred code of practice tools for its members on Health and Safety.
  - 1) *Preferred Code of Practice – Health and Safety* is issued to all accommodation providers and contains advice covering:
    - Fire Safety
    - Food Hygiene
    - Pool Safety
    - General Safety
    - Beach Safety
    - Children’s Clubs
    - Villa Safety
    - Incident Investigations
    - Natural Disasters
  - 2) *Preferred Code of Practice - Disabled and Persons with Reduced Mobility* which was produced following the EU’s 2007 legislation on disability.

Both are available from: <http://www.fto.co.uk>

An example aimed at tourists from the ITF-STD is the Green Passport Campaign which is ‘*about tourism that respects the environment and culture and is good for the economic and social development of the communities that will be your hosts*’. It aims to improve communication with tourists and raise awareness of their potential to contribute to sustainable development by making responsible holiday choices. In addition to the information provided to tourists in the Green Passport itself, the website (<http://www.unep.fr/greenpassport/>) provides links to various partner organizations involved in raising awareness in the tourism sector. These include amongst others:

- CBD’s Biodiversity and Tourism Network: a web based platform designed to foster dialogue between tourism practitioners and to disseminate support for implementing the CBD guidelines on biodiversity and tourism development;
- Friends of World Heritage: an initiative which raises awareness of the importance of protecting World Heritage and promoting sustainable tourism, and raises funds to support projects in communities which depend on World Heritage sites.
- National Geographic’s Centre for Sustainable Destinations: provides resource and tools for communities, travel professionals and travelers.

- Tourism Concern: raises awareness of the impact of tourism with the general public, government decision makers and the tourist industry.

Campaigns to raise awareness amongst consumers, along with easily recognized certification schemes (Section 4.1.1), will increase demand for ‘safe’ and ‘healthy’ establishments, an incentive which gives owner/managers the potential to boost their local economy.

### 4.1.3 Communication and information sharing

The management and coordination of multi-national cooperative projects has been vastly aided by developments in information and communication technology (ICT) which have enabled the linking of websites and use of shared data platforms. In addition to this improved potential for communication, networking and the exchange of information between those involved in project management, ICT facilitates the sharing of knowledge and best practice which is a valuable resource for training and capacity building. [15]. Most importantly, in this medium the information which is shared can be totally up to date and many sites include an interactive forum where users can communicate.

#### CHOLERA CAFÉ

The Cholera Café website (<http://www.choleracafe.com/>) is a ‘one stop shop’ for professionals involved in international health promotion in the field of communicable disease prevention, surveillance and treatment. Developed in 2006 by a multidisciplinary team, the site links to other key websites in this field (e.g. WHO, CDC, UCLA) so that any information which might be required by a humanitarian worker can be accessed through this one portal. The current version provides:

- updated news including outbreak alerts and evolving humanitarian crises;
- free epidemiological software and toolkits;
- downloadable manuals, guidelines, articles and fact sheets;
- a facility for sharing or asking for advice.

## 4.2 WHO SHOULD BE DOING WHAT: Stakeholders and responsibilities

### 4.2.1 Stakeholders

Stakeholders who will need to be informed of, and involved in, the proposed activities include:

- decision makers at local and regional level including local government authorities (public health, environment, tourism, transportation, etc.);
- tour operators and tourist establishment operators.

In addition, in order to raise awareness and build capacity there should also be involvement by;

- academic and public health institutions;
- voluntary organizations;
- consumer organizations;
- labour unions and other concerned entities.

#### **4.2.2 Levels of responsibility**

**National and local authorities** create the conditions necessary for a coordinated approach to healthy tourism. They should:

- work with the private sector, NGOs and consumers to develop a clear policy on environmental health risks and an environmental health management strategy (EHMS) for achieving defined environmental health objectives;
- develop integrated management and strong leadership to engender a sense of shared purpose;
- integrate tourist health strategy with strategies for sustainable tourism since the two are interdependent and share goals with programs such as economic development, poverty reduction [8];
- develop policies which promote change in the behaviour of both tourist establishment operators and consumers to reduce the incidence of environment related disease;
- encourage all local tourist establishment operators to develop an individual environmental health management strategy (EHMS);
- assist in the development of performance indicators and other shared resources such as networking facilities and shared platforms for dissemination of best practice;
- assist small businesses where necessary with technical, mechanical and financial assistance;
- strictly enforce relevant rules and regulations in regard to health and safety AND encourage incentive for compliance such as certification schemes;
- liaise with universities and other teaching institutions in the provision of education/training;
- stimulate the demand for safer and healthier holidays by raising awareness amongst consumers and encouraging coordinated certification schemes.

#### **Tour Operatators and Tourism Organisations**

Tour operators have a responsibility to:

- ensure that the facilities used by the holidays they sell or promote maintain the necessary standard of safety and hygiene and that this is regularly monitored (see box below);
- ensure that clients are fully aware of particular risks in their destination country;
- remain up to date at all times on changing situations in the countries they promote.

### *HOLIDAY DEATHS FROM CARBON MONOXIDE POISONING*

*In Corfu in 2006, two young children died from carbon monoxide poisoning in holiday accommodation. The leak was traced to a faulty boiler. Two employees of the British tour operator, one a consumer affairs executive who was responsible for filling in health and safety forms for the travel agency, and the other a holiday representative, were amongst 11 people charged in connection with the deaths. In 2010 a Greek court found them not guilty of manslaughter by negligence.*

*The hotel manager, the head of the hotel's technical department and an electrician were each jailed for seven years. A civil engineer was given two years probation.*

*The bereaved parents expressed disappointment at the verdict because they felt that the travel company employees were vital links in a chain and could have prevented the tragedy.*

<http://www.guardian.co.uk/uk/2010/may/04/thomas-cook-not-guilty-corfu-deaths>

### **Tourist establishment operators**

- are responsible for the safety of their paying guests and their employees;
- must abide by local and national regulations and standards;
- should develop a clear environmental health policy based on the needs/capacities of their own business;
- establish an environmental health management strategy (EHMS) with clear objectives and targets aimed at improving standards within a given timeframe;
- be committed to documenting and maintaining a system for monitoring and evaluating the EHMS;
- ensure that all employees understand the EHMS and receive the necessary training to implement it.

### **Individuals**

Tourists have a responsibility for their own health, but it is the duty of **travel clinics** and **tour operators** to ensure availability of up to date materials on health risks so that the individual travellers can:

- ensure that they are fully informed of local conditions before travelling;
- take the necessary precautions to protect themselves from avoidable hazards such as sunburn;



- help to raise standards by choosing destinations and establishments that are certified by a recognized quality system;
- take personal responsibility for their behaviour;
- reduce the likelihood of motion sickness by eating lightly before and during travel, sitting near an open window if possible, or where movement is least (middle of bus or boat, near wing of aircraft, avoiding reading and taking preventives);
- minimise threats to wellbeing from culture shock or worries about personal safety by sleeping as well as possible, preparing beforehand, and practicing mental distraction or relaxation techniques [15].

### 4.3 Identification and management of environmental health risks to tourist health

Three levels of management can be identified:

**Top:** preparation and development of overall policy and strategy, including budgetary and resources issues;

**Middle:** implementing policy, and planning for delivery of services within fiscal constraints;

**Lower:** implementing plans and auditing outcomes from the procedures, guidelines and protocols in place.

#### 4.3.1 A method for prioritizing risks

In assessing, managing and controlling risk, the WHO has developed a method to help management at each level to prioritize health risks associated with tourist establishments in the Mediterranean coastal areas [3]. It is reproduced below.

A questionnaire has been developed containing all the health issues mentioned in the Action Plan and discussed further in this Implementation Plan. With it, meeting participants / other stakeholder groups are invited to identify health and well-being topics in tourist establishments that they think should have priority for further consideration in the Mediterranean region. For each topic, and using the scoring system, participants are invited to evaluate them under three headings, i.e. “Frequency”, “Complexity”, and “Concern/Consequences”. For ease of understanding, ‘Frequency’ means “how often do I come across issues associated with the topic”, ‘Complexity’ is understood as the “difficulty to deal with this issue”, and ‘Concern/Consequences’ is interpreted as “if we get it ‘wrong’, is this a big problem” ? By using the following scale participants can give a score to each of the proposed topics.

Frequency	1= not often	2= average	3= often
Complexity	1= straightforward	2= average	3= complicated
Concern	1= not a worry	2= some problems	3= major consequences

Scores given separately for each topic on the individual questionnaires, and for each of the three headings: “Frequency” “Complexity” and “Concern”, are then added up. These total scores on the individual questionnaires given for each topic are in turn multiplied by the “Concern/Consequences” score on each questionnaire to give a final score for each topic on the individual questionnaires. The results are then summed up separately for each topic and by adding the scores of each of the participants. The topics are then placed in rank order; the highest scoring topic ranked with the highest priority and the lowest with the lowest priority.

#### 4.4 Economic Appraisal and Related Issues:

The meeting convened in 2007 by WHO on health risks associated with tourist establishments in the Mediterranean, noted that sustainable development recognizes and protects diversity without endangering the cohesion of the whole society and the unity of the State [3]. As reported too by MED/POL [31], and in the Med/POL Action Plan prepared in 2007 [1], the Mediterranean Strategy for Sustainable Development has four objectives:

1. to contribute to economic development by enhancing the Mediterranean assets;
2. to reduce social disparities by implementing the Millennium development Goals and strengthen cultural identities;
3. to change unsustainable production and consumption patterns and ensure the sustainable management of natural resources, and
4. to improve governance at the local, national and regional levels and include among its priorities “sustainable tourism as a leading economic sector”.

This strategy when well-managed helps to reinforce social cohesion and cultural and economic development which in turn strengthens synergy with other economic sectors [3]. Nevertheless, needs and priorities for the management, control and prevention of environmental health risks vary in different areas and countries of the Mediterranean Region. There are too, budgetary constraints, opportunity costs and the cost implications for different systems of environmental hazard control. Key stakeholders who can help to ensure that policy appropriate systems and procedures are put in place and that they are of appropriate standard are the National Co-ordinators of the MED POL Programme, working closely with their National Government Minister for the Environment.

Within this strategic framework it is also important to note that without community engagement, social capital is diminished and cost-effective and efficient systems may not be possible. Social capital encompasses the human factors of talent, capability, creativity, innovation and knowledge [17]. It needs to be considered in economic appraisal as does cultural capital, defined as: “*the wealth created through celebrating and investing in cultural histories, values, ideologies, ritual and programmes*” [16]. Accordingly, under each national strategy for environmental controls, and in assessing priorities for the governance policies and for their successful development, acceptance, introduction and use, the MED/POL National Co-ordinators and Government Ministers should ensure that locally-introduced Implementation Plans consider and discuss with local communities, the interdependence of broad-based issues such as:

- international, national and local research knowledge;
- asset mapping as the process of intentionally identifying the human, material, financial, entrepreneurial and other resources in a community and as a basis for exploring needs, gaps and opportunities in services provision ([www.bonner.org/resources](http://www.bonner.org/resources)) ;
- ideology and value judgements;
- cultural sensitivities;
- central and local political expediency;
- social capital of communities such as their networks, institutions, relationships and social cohesion that enable synergy and active participation in programmes and initiatives;
- the overall economic, environmental ,cultural and social well-being of local host, tourist-receiving populations;
- cost benefit analysis including cost effectiveness and efficiency;
- opportunity costs.

In considering this framework for economic appraisal, although the costs of preventive measures for environmental health risks can be considerable, they need to be balanced against costs to local society that can arise if problems occur. Two examples of bathing beaches experience in the Mediterranean were used in the Action Plan [1], to illustrate this concern:

1. In 1989, large tracts of mucilage on the shoreline, caused by the decay of algae, made many Italian beaches temporarily unsuitable for bathing. As a consequence a 40% reduction in local tourism was experienced during the important Summer season. Economic loss was identified in terms of changes in perceived amenity value:
  - Tourist visitor days lost;
  - Reduced use of hotels, restaurants and other amenities;
  - Damage to tourist-dependent activities such as the food industry, and local travel and water sports operators;
  - Damage to fishing activities
  - Damage to the local and international image of the area as a tourist resort [32].
2. In 1993, Turkey suffered red algal tides as a result of which pollution-related illness caused an estimated 10,000 lost working days amongst local swimmers and fishermen [33].

If too, environmental illness or injury is sustained by a visitor in for example a tourist establishment such as a hotel, apartment block, restaurant, or café, or with a local tourism industry such as the operator of a travel tour company, leisure or sports facility, enormous costs for individuals, tourism establishments and tour operators can be generated [17]. They arise from a combination of:

- time commitments for consultations and the preparation of statements and appearances associated with complaints, grievance and disciplinary proceedings of employers, legal briefings, court and professional hearings, tribunals and / or other disputes;

- time costs of legal proceedings for involved lawyers, industrial liaison officers and police;
- loss of professional status and employment earnings;
- diminished morale, self-esteem, confidence and sense of personal integrity;
- worry and distress to the staff / employees involved or implicated and the effects on their family;
- costs to the employer and state associated with sickness absence and reduced productivity;
- claims for loss of earnings, pain and distress, injury to feelings and reputation, and aggravated damages;
- hospital, repatriation and other health care costs of affected persons.

In costing these economic issues at the local level, Ministers for the Environment and of Public Works can impose frameworks for Local Government Environmental Health Departments to consider and in the context of the duty of care required by national and international law. To enable this, incentive schemes could be introduced. For example, the WHO meeting convened in Athens to discuss the Action Plan recommended that award schemes based on indicators that identify the absence or low potential of environmental health risk in tourist establishments should be established, and that it should include the development of training for officials of the local and or tourist authorities and industry, and hotel operators [3].

Such incentive schemes, developed initially at the local or country-specific level, might then be expanded in the Mediterranean Region. The schemes could become linked to potential Mediterranean Pollution Control Programme support, endorsement and branding with a possible WHO-approved quality standard. Alternatively it might be part of the proposed 'Mediterranean tourist quality label' [6]. The branding and standard could be specific for each, some or all of the environmental health risks discussed in detail in the MED/POL Action Plan. One worked example on which such a system could be based initially is the Blue Flag Award scheme of the Foundation for Environmental Education in Europe.

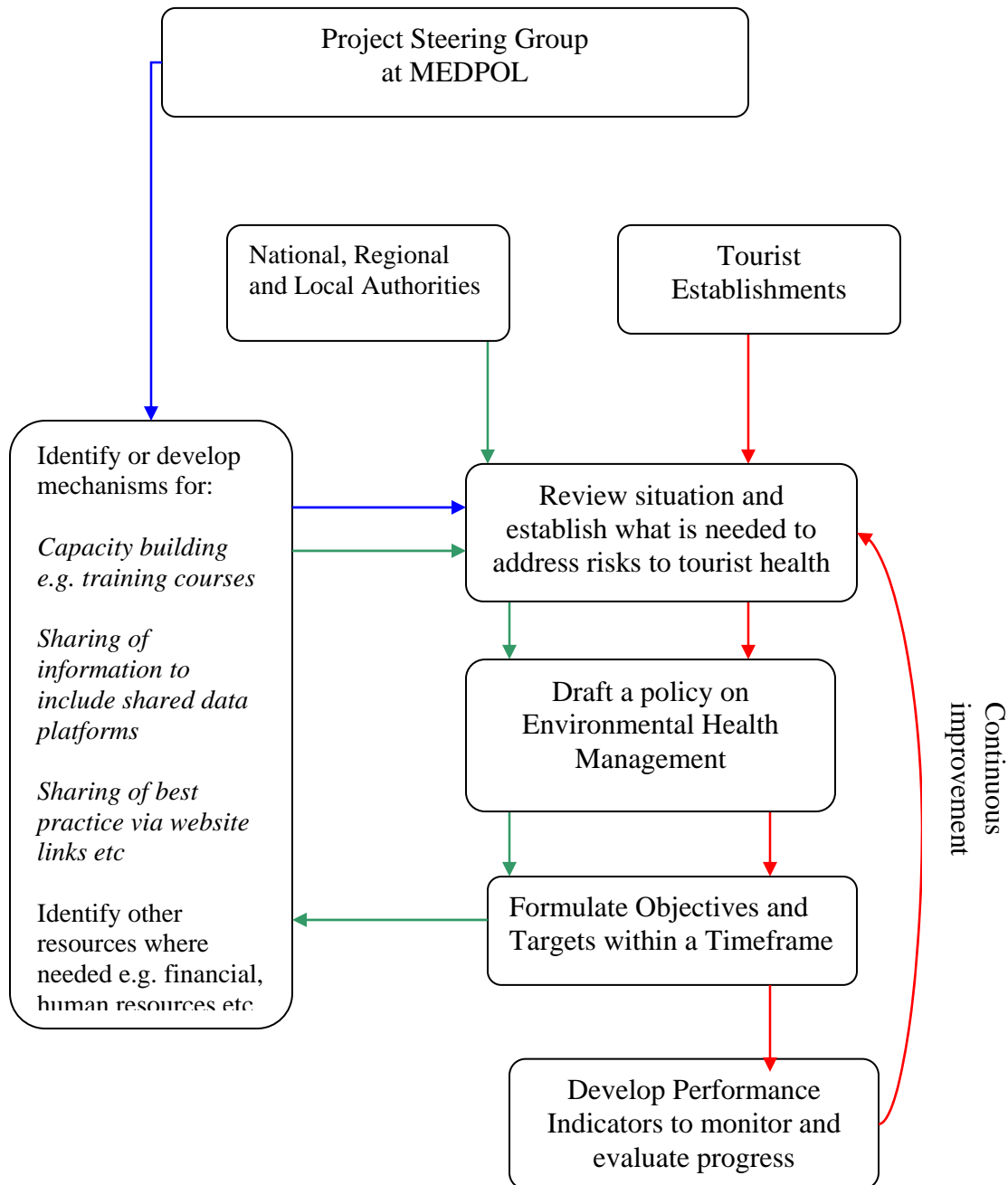
Branding and an approved standards system for environmental health risk control and prevention are likely to be incentives and attract interest of tourists when they are planning and booking a holiday they wish to enjoy. They are therefore valuable economic tools.

In conclusion, economic appraisal is a system for evaluating the costs and benefits to society, organizations, and communities. The system involves consideration of all the inputs, processes, procedures, outputs and outcomes. It needs to be tailored to national and local needs and their associated environmental, social, cultural and fiscal dimensions. Skilled management and detailed information are needed to resolve questions surrounding what are often competing priorities. Academic departments and major employers can help with these resources.

The framework proposed here for the development of an Environmental Health Management System (EHMS), is based on the five steps recommended in the guidelines for implementing the International Standard ISO 14004:1996 for environmental management systems. The framework recommends that authorities at regional, national and local levels, and all tourist establishment

operators, ensure that they have defined an Environmental Health Policy from which, with the aid of the Action Plan, an EHMS with objectives and targets appropriate to that organization can be developed.

Figure 1. Environmental Health Management for Tourism



## **5. FRAMEWORK FOR THE PREPARATION OF AN ENVIRONMENTAL HEALTH MANAGEMENT SYSTEM (EHMS) FOR THE IDENTIFICATION AND MANAGEMENT OF RISKS TO HEALTH IN TOURIST ESTABLISHMENTS.**

An Environmental Health Management System (EHMS) formalizes the management of risks to health in the environment through a framework which aids the identification and control of those risks. It assists a nation, an authority or an organization in the routine monitoring of risk control, identifying lines of responsibility, checking compliance against local/internal policy and legislative and regulatory requirements, and identifying opportunities for improvement.

This EHMS provides guidelines for implementing the action plan described in MedPol's 2007 report '**Plan of Activities Related to the Environmental Health Risks in Tourist Establishments**'. It is a tool *to assist each nation, and each of its tourist establishments*, to review existing conditions and approaches against the relevant standards and determine where improvement is needed. Modelled on the *Guidelines to implementing ISO 14004* [5], it provides a structured process for achieving continual improvement which is tailored to the diverse cultural, social and economic circumstances of each country. It covers allocation of resources, assignment of responsibilities, and ongoing evaluation of practices, procedures and processes and can be used for each of the 12 factors covered by that report.

Initially, each nation needs to use the framework to establish a National EHMS for tourist health. Then Local Authorities each adapt it if necessary to their local conditions and have a Local EHMS which will monitor compliance of all local tourist operators and take responsibility for 'sole traders' such as street vendors. Finally each tourist establishment (SMEs) uses it to develop its own in-house EHMS specific to that business and covering just those health areas which are relevant. This will abide by the rules and regulations set internationally and also by relevant national and local EHMSs, and will make use of any systems and resources which have been made available by the Project Steering Group (e.g. for equipment, technical expertise, training, shared business services etc).

**The overall aim of this EHMS framework is to provide Mediterranean countries with an integrated tool for implementing the 2009 Action Plan for improving standards towards healthy and sustainable tourism.**

**The starting point** is the aforementioned report which provides a comprehensive review of 12 factors posing risk to tourist health, the means of reducing those risks and international standards where appropriate.

## **Step 1. COMMITMENT AND POLICY**

*The published environmental health policy, developed by top management, reflects the organizations' mission, core values and guiding principles. It considers the expectations of all stakeholders and includes commitment to comply with all relevant legislation and regulations. The policy is the basis upon which objectives and targets will be set, to improve and maintain performance. (Implementation guidelines for BS ISO14004:1996)*

The organization's environmental health policy should:

- Be defined by top management;
- Be appropriate to the nature, scale and environmental health impacts of its activities, products or services;
- Include a commitment to continual improvement to minimise risks to tourist health;
- Include a commitment to comply with relevant environmental health legislation and regulations, and to other requirements such as industry guidelines if appropriate;
- Provide the framework for setting and reviewing environmental health objectives and targets;
- Be documented, implemented and maintained;
- Be communicated to all employees and be available to the public;
- Have a named person responsible for its implementation.

N.B. where an environmental health policy is not already in place, or does not meet the criteria above, an initial review of the organization's current practice should be undertaken using questionnaires, interviews, checklists, inspections, reviews of records etc., to identify which of the hazard areas outlined in the action plan apply to the activities of the organization, and to evaluate current performance against standards, codes of practice etc. The aim is to consider all aspects of environmental health relevant to the organization as a basis for establishing an Environmental Health Management System.

## Step 2. PLANNING

The report **Plan of Activities related to the Environmental Health Risks in Tourist Establishments** identified 12 potential hazard areas with their current regulating guidelines and standards. Measures and actions required to be taken by governmental bodies, and recommendations for tourist establishment operators, are included.

The report can be used by each organization to review its own practice, and to identify environmental health impacts associated with its activities, products or services.

The results of this process, together with the defined environmental health policy, inform the setting and prioritization of objectives, and specific and measurable targets set within a timeframe.

The table below references the page numbers for each of the 12 potential hazard areas detailed in the WHO report, where details of the recommended actions for each one can be obtained.

<b>Environmental Health Risk Area</b>	<b>Page no</b>	<b>Guidelines and Standards</b>	<b>Actions for Governmental Bodies</b>	<b>Recommendations for tourist establishment operators</b>	<b>Relevance/priority for this organisation</b>
Outdoor Air Pollution	p7	p7	p9	p11	
Indoor Air Pollution	p13	p14	p15	p17	
Water supply – drinking water	p23	p23	p25	p27	
Water sanitation	p30	p31	p32	p33	
Bathing and recreational waters	p35	p37	p39	p43	
Sun exposure	p48	p49	p50	p52	
Heat exposure	p54	-	p55	p57	
Noise pollution	p60	p61	p62	p65	
Well-being and aesthetics	p67	-	p68	p69	
Food safety	p71	p71	p72	p76	
Hotel safety	p78	p78	-	p80	
Communicable diseases	p83	-	p87	p89	



## Environmental Health Objectives and Targets

- All significant **environmental health risks** to tourists, in each area covered by the Action Plan which is relevant to an organization's activities, should be considered in setting environmental health objectives. (*See section 4.3.1 above for a method of prioritization.*)
- **Environmental health objectives** should be established to meet the goals of the organization's environmental health policy.
- Specific and measurable **targets** should be set within a specified timeframe.
- Objectives and targets should be documented with procedures in place for maintaining these documents.

The SMARTA mnemonic may help when setting objectives, which should be:

- Specific;
  - Measurable;
  - Achievable;
  - Relevant;
  - Time framed;
  - Agreed.
- 
- **Performance indicators** should be set for monitoring progress towards each objective.

Using the FABRIC mnemonic, performance measures should be:

- Focused;
  - Appropriate;
  - Balanced;
  - Robust;
  - Integrated;
  - Cost-effective.
- 
- An environmental health management program for achieving the objectives and targets should be established and maintained.

### **Step 3. IMPLEMENTATION AND OPERATION**

*For effective implementation, an organization should develop the capabilities and support mechanisms necessary to achieve the objectives and targets of its environmental health policy (ref guidelines).*

#### **Resources, roles and responsibilities**

- Roles, responsibilities and authorities should be defined, documented and communicated in order to achieve effective management of the environmental health programme.
- At each governance level management must ensure that appropriate resources are available to establish, implement, maintain and improve the environmental health management system. They include for example:
  - Human resources;
  - Specialized skills;
  - Organizational infrastructure;
  - Technology;
  - Financial resources.
- Top management should appoint a specific management representative(s) for the environmental health system, with responsibility and authority for its implementation and maintenance.

#### **Competence and training**

- Employees at all levels should be made aware of environmental health issues and the importance of conforming to the environmental health policy.
- The knowledge and skills necessary to achieve the environmental health objectives should be identified.
- Training needs at all levels should be identified.
- The competence of all employees whose activities impact on environmental health should be assessed, documented and regularly monitored.

#### **Communication and reporting**

- The operational processes and procedures of the environmental health management system should be defined, documented and updated when necessary.

- Documentation should describe the means of achieving environmental health objectives and targets, with key roles and responsibilities.
- Processes should be developed for communicating internally, and externally if required, on aspects of environmental policy and performance (e.g. to keep employees motivated; to encourage public understanding)

### Emergencies

- Procedures should be in place for identifying the potential for, and responding to, emergencies or accidents.
- These procedures should be periodically tested and reviewed/revised after these tests, or after an actual emergency.

## **Step 4. MEASUREMENT AND EVALUATION**

*To ensure that your organization is performing in accordance with its stated environmental health management policy, and complying with standards and regulations, performance should be measured and monitored against the objectives and targets set.*

- A system should be in place to measure and monitor ongoing performance against the organization's objectives and targets (*see Step 2 for establishment of performance indicators*).
- Compliance with relevant legislation and standards should be evaluated.
- A procedure needs to be in place to identify from the monitoring process those activities which require corrective action or improvement.
- Processes should be in place to ensure the reliability of data (e.g. calibration of instruments, testing of equipment etc).

## **Step 5. REVIEW AND IMPROVEMENT**

- Top management should carry out and document a review of the environmental health management system.

## APPENDIX 1. FOOD SAFETY

### (i) Stakeholders' levels of responsibility

	<b>At all levels, compliance with existing legislation is essential</b>
<b>International responsibilities</b>	<p>Ensuring the need for a common basis for measures governing human food and animal feed which will:</p> <ul style="list-style-type: none"> <li>• allow the safe movement of foodstuffs across boundaries;</li> <li>• cover all stages of the food production chain from farm to table.</li> </ul> <p>Responsibility lies at this level for:</p> <ul style="list-style-type: none"> <li>• a scientific and technical support system to provide independent advice;</li> <li>• a communication network to ensure cooperation with participating countries, using for example the WHO international reporting system for communicable diseases;</li> <li>• dialogue with consumers and other stakeholders;</li> <li>• assessment of risks and keeping the public informed;</li> <li>• setting up a rapid alert system for emergencies.</li> </ul>
<b>National</b>	<p>Ensuring with production, distribution, trade and food preparation that governmental control and audit processes and procedures are in place.</p> <p>Responsible for setting up systems to enforce food law:</p> <ul style="list-style-type: none"> <li>• ensure the compliance of food business operators;</li> <li>• establish appropriate measures and penalties for infringement (for non-EU countries, most specifically where food or feed is exported)</li> </ul> <p>Nations also contribute to the development of international technical standards</p>
<b>Sub-regional and Local Government</b>	<p>Authorities should be responsible for the registration of training organizations and all businesses operating at each stage of the food chain, .</p> <p>Have monitoring and inspection systems in place to ensure compliance with national and international regulations.</p> <p>Provide adequate training and information on food hygiene, appropriate to the size of the business.</p> <p>Keep the public informed on food safety matters.</p>
<b>Individual establishments</b>	<p>At all stages of the food production chain, operators must ensure that food and feed meets the requirements of food law.</p> <p>They must implement HACCP if appropriate.</p> <p>Appropriate systems and procedures must be in place to ensure traceability of food, feed, food-producing animals and any substance incorporated into foodstuffs, at all stages of production, processing and distribution.</p> <p>Any food or feed product considered to be harmful to human or animal health must immediately be withdrawn and the appropriate authorities informed.</p> <p>If such a product has reached consumers, they must be informed and the</p>

	product recalled. They must cooperate with authorities in actions to reduce risks.
<b>Tourism operators</b>	FTO has its own Preferred Code of Practice on Health and Safety, which is supplied to all accommodation providers, to ensure consistency across destinations. It carries out structured inspections to ensure compliance from its members and works with suppliers, governments, tourist offices, and stakeholders to raise awareness. It also provides training (see below) Tourism operators may wish to support initiatives to certify standards in tourist establishments (not a requirement of legislation)
<b>Tourists and local population</b>	All consumers are stakeholders in the safety of food and should contribute feedback on food matters where risk is concerned. They should take responsibility for familiarizing themselves with all information available to the public regarding avoidable risks (e.g. for vulnerable groups such as pregnant women, infants or the elderly) and tourists should ensure that they are fully informed about local conditions for the country they are visiting, and precautions which are advisable.

## (ii) European legislation (as an example)

In response to a series of food-related crises in the 1990s (e.g. BSE) the European Commission's White Paper on Food Safety (COM/99/0719) [34] recognized the need for a policy which had a sound scientific basis and up-to-date legislation, and which provided a common basis for the different Member States. Measures were proposed to improve quality standards at all stages of the food chain from farm to table, and to promote better enforcement of legislation in an integrated way which harmonized national control systems and was flexible and easily understood by all consumers and other stakeholders. The general principles set out for European food safety policy were:

1. a comprehensive, integrated approach throughout the food chain;
2. a clear definition of the roles of all stakeholders in the food chain (feed manufacturers, farmers and food operators, the Member States, the Commission, consumers);
3. traceability of feed and food and their ingredients;
4. a coherent, effective and dynamic food policy;
5. risk analysis (comprising risk assessment, management and communication);
6. scientific advice to the highest standards of independence, excellence and transparency;
7. application of the precautionary principle in risk management.

[http://europa.eu/legislation\\_summaries/other/132041\\_en.htm](http://europa.eu/legislation_summaries/other/132041_en.htm)

The Regulations of current European Food Law cover all stages of the food production chain: primary production, processing, transport, distribution, sale and supply of food and animal feed. They address:

- Animal feed;
- Animal health and welfare;
- Food hygiene;
- Limits on contaminants and residues in food;
- Additives, flavouring, packaging and irradiation of foodstuffs;
- Emergency measures;
- The decision-making process in relation to food.

Controls and monitoring are now in place at all stages from farm to table. General principles and requirements for the European Community were set down in **Regulation (EC) No 178/2002** which established the **European Food Safety Authority** and food safety procedures generally known as the **General Food Law**.

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32002R0178:EN:NOT>  
<http://www.efsa.europa.eu/>

(iii) Regulations concerning controls for the attention of competent authorities:

**Regulation (EC) No. 882/2004** sets out the official controls that Member States must adopt for feed and food law. It covers the monitoring and enforcement of compliance by businesses and covers not only food hygiene legislation but also all other feed and food safety standards, and animal health and welfare rules.

Full text of the regulation is available at:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2004:165:0001:0141:EN:PDF>

The regulation includes a framework for financing inspections and other enforcement controls, which are the responsibility of the European Commission's Food and Veterinary Office.

The Regulation empowers the Commission to develop training programmes for staff of the competent authorities of the Member States and **also from non-European Union countries**. Its adoption led to the establishment of EC strategy '*Better training for safer food*' (see section (vi) below)

[http://ec.europa.eu/food/training\\_strategy/index\\_en.htm](http://ec.europa.eu/food/training_strategy/index_en.htm)

**Regulation (EC) No 854/2004** lays down specific rules for the organization of official controls on products of animal origin intended for human consumption.

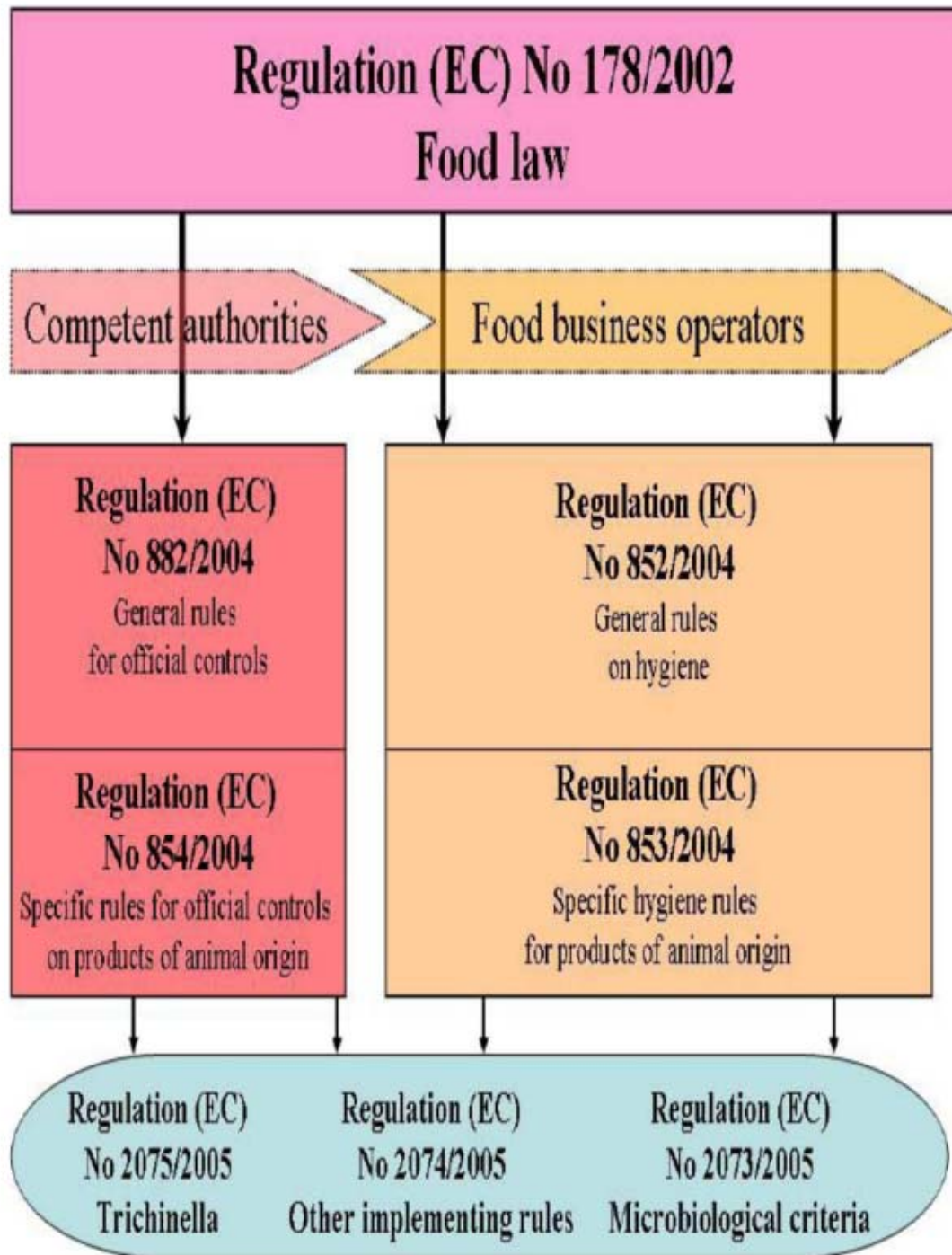
(iv) General hygiene requirements for all food business operators

**Regulation (EC) No 852/2004** lays down general hygiene requirements for all food business operators

**Regulation (EC) No 853/2004** supplements 852/2004 with specific requirements for food businesses dealing with foods of animal origin

Further regulations cover specific instances (see Figure 2)

Figure 2 Structure of the EU Hygiene Regulation  
 (From: Commission Staff Working Document, Annex II, 2009 [35])





The Regulations were designed to simplify food hygiene legislation and to be adaptable for the technical requirements of different food businesses. They are subject to review and the 2009 report on the first three years found that overall the hygiene package had had a positive impact, although there was room for improvement in implementation. It reported that Member States and private stakeholders clearly felt that the requirement for HACCP-based procedures should not be extended to primary production at present [8].

#### (v) Guidance documents

As part of the 2004 Food Hygiene package, the Commission and Member States established a series of guidance documents for food business operators and competent authorities, to assist in implementation of the Regulations. These are listed in Annex IV of the Commission Staff Working Document [35] which can be found at: [http://ec.europa.eu/food/food/biosafety/hygienelegislation/docs/staff\\_working\\_doc\\_part1\\_en.pdf](http://ec.europa.eu/food/food/biosafety/hygienelegislation/docs/staff_working_doc_part1_en.pdf)

They include for example:

*Guidance document on the implementation of procedures based on the HACCP principles, and on the facilitation of the implementation of the HACCP principles in certain food businesses.* European Commission Health & Consumer Protection Directorate-General, Brussels, 2005.

This document [36] describes how the 7 principles of HACCP are applied, and give guidance on a simplified implementation which might suit small businesses, based on the Recommended International Code of Practice – General Principles.

#### (vi) Training: courses and resources

**Better Training for Safer Food (BTSF)** is a European Commission training initiative launched in 2009 which covers food and feed law, animal health and welfare, and plant health rules [37]. It trains Member States and other country national authority staff involved in official controls in these areas with the aim of:

- making control systems more efficient and harmonized;
- providing economic benefits by creating a level playing field for food businesses which will encourage cross border trade;
- ensuring that the food industry respects EU regulations safeguarding public, animal and plant health.

Training programmes run on a range of subjects related to these fields.

Following its pilot phase, the initiative is currently under review. Future plans include the possibility of setting up an e-learning tool for basic level training.

[http://ec.europa.eu/food/training\\_strategy/index\\_en.htm](http://ec.europa.eu/food/training_strategy/index_en.htm)

**The Centre for Environmental Health Activities (CEHA) at WHO** has produced a manual for the Eastern Mediterranean Region.

**Hazard Analysis and Critical Control Point Generic Models for some Traditional Food: A manual for the Eastern Mediterranean Region** World Health Organization, Regional Office for the Eastern Mediterranean Centre for Environmental Health Activities, July 2008

This manual [38] aims to assist Eastern Mediterranean countries in adopting and applying the HACCP system to ensure food safety when producing traditional foods. It is intended to help producers, regulators, trainers and others concerned with the safety of traditional foods in the Eastern Mediterranean Region, and may be used as material for training in food hygiene and the HACCP system, as well as the basis for the development of food safety programmes. It is recommended that governmental or nongovernmental agencies engaged in health, food control, or safety of the environment, should help the producers of traditional foods, who may have no knowledge of the HACCP system, in implementing the models shown, which cover seven traditional food groups, and in developing and sharing generic HACCP models for other traditional foods in the Region. Available from: <http://www.emro.who.int/ceha/newsdetails.asp?id=156>

**The Federation of Tour Operators (FTO)** has produced a video for training inspectors in the application of its own *Preferred Code of Practice in Health and Safety*. Food Hygiene is one area covered. Bespoke training courses can be written and delivered according to the needs of specific establishments, resorts or destinations. Other methods include roadshows, seminars and in-house training in food handling which can be delivered in the local language.

For more details of training and resources:

<http://www.fto.co.uk/health-and-safety/education-training-support/>

## (vii) Examples of good practice

In November 2010, the Food Standards Authority (FSA) introduced a national food hygiene rating scheme in England, Wales and Northern Ireland. Local authorities are responsible for carrying out inspections of food businesses to check that they meet the requirements of food hygiene law. Many local authorities had introduced local rating schemes but this national initiative ensures consistency for businesses and clarity for consumers.

A food safety officer from the local authority inspects a business to check that it meets the requirements of food hygiene law. The hygiene standards found at the time of inspection are then rated on a scale. At the inspection, the officer will check:

- how hygienically the food is handled – how it is prepared, cooked, re-heated, cooled and stored
- the condition of the structure of the buildings – the cleanliness, layout, lighting, ventilation and other facilities
- how the business manages and records what it does to make sure food is safe

Following inspection, businesses are given a rating on a scale of 0-5, where 5 = very good and 0 = urgent improvement needed. The ratings are available to the public on the FSA website.



The food safety officer will explain to the person who owns or manages the business what improvements are needed and how they can achieve the top rating of '5'. The local authority will check that these improvements are made.

A sticker showing the awarded rating can be displayed in the premises, and although this is not compulsory, as the scheme becomes widely known, potential customers will be able to avoid those businesses where they cannot see at a glance the standard of hygiene practice.



In a recent snapshot survey for the FSA, more than eight in 10 members of the public (86%) indicated that they consider hygiene standards to be extremely important when eating out, significantly outweighing other considerations such as price and location. The scheme helps the public to choose where to eat out or shop for food by giving this information about the hygiene standards in restaurants, pubs, cafés, takeaways, hotels and other places serving food, as well as supermarkets and other food shops.

<http://www.food.gov.uk/news/newsarchive/2010/nov/fhrslaunch>

### Concluding Note

As noted in the text, together with Appendix 1, this implementation plan should be examined in conjunction with the separately prepared *Plan of Activities Related to the Environmental Health Risks in Tourist Establishments*.

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