The Paradox of the Certification Process: Knowledge Management Approach to Sustainable Development of Mass Social Events

Veronika Jašíková and Vladimír Bureš

Abstract—Currently, the sustainable development represents a topical issue. Tourism is not the exception and the initiatives of sustainable development of tourism have been noticeable within last few years. This phenomenon might be exemplified by the mass event arrangement. The certification process assists the organizers of events such as conferences, sport events, cultural events, festivals or various trade shows since it helps to ensure their sustainability. The sustainability grounds in monitoring of economic, environmental, and social objectives. However, the analysis of selected certifications revealed that most of them do not promote the social aims. This fact might result in various problems such as regional disparities. Therefore, their aim is not the achievement of sustainability, but only of the "greenness" of the organized event. Nevertheless, the certification might be perceived as a source of knowledge which does not necessitate to be shared using the formal certification process. The employment of the knowledge management principles and related tools and methods during the event arrangement enables the utilization of such knowledge and provides their sustainability achievement. The parameter setting of particular certification processes might paradoxically lead into the non-certification ensuring higher level of sustainability and simultaneously also the elimination of regional disparities.

Keywords—Certification process, disparities, knowledge management, mass social events, sustainable tourism.

I. INTRODUCTION

THE world faces crucial changes during its development. Some of these changes may also cause negative impacts on the society. If economic welfare within health environment is ensured, the future generations should be considered with new trends implied by these changes. The rate of economic growth is currently used as the representative indicator of the individual welfare. However, we are fully aware of the fact that the economic growth itself cannot reflect their needs and

V. Jašíková is a Ph.D. candidate in the Information and Knowledge Management study field at the Faculty of Informatics and Management at the University of Hradec Králové, Czech Republic (phone: +420493332351; fax: +420493332235; e-mail: veronika.jasikova@uhk.cz).

V. Bureš received his Ph.D. in the Information and Knowledge Management and is currently an Associate Professor of Systems Engineering at the Department of Information Technologies at the Faculty of Informatics and Management at the University of Hradec Králové, Czech Republic (e-mail: vladimir.bures@uhk.cz).

wishes properly. In this context, the following negative effects of economic activity are mentioned: health hazards ensued by transport pollution and the ozone layer depletion, or the decrease in biodiversity due to the decline of natural sites and new forms of inequality connected with technological changes and changes of production patterns. These negative impacts resulted in the basics of sustainable development concept. In 1987, this term was established in Brundtland report [1]. Nevertheless, the notion itself was introduced to wider public during the Earth Summit (the United Nations Conference on Environment and Development) in Rio de Janeiro in 1992. The commonly accepted definition follows: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" [2].

The paper deals with the particular aspect of environmental management, which is the process of social events certification. The paper analyses several international certification standards, reveals and describes the hidden paradox embodied in the prevailing principles, on which particular certifications are based. Knowledge included in the related materials, procedures, or rules can be considered as Knowledge Management elements and hence be used for proper work with knowledge focused on sustainable development of mass social events.

II. PROBLEM DEFINITION

A. Sustainable Development of Tourism

The basis of sustainable development of tourism is the achievement of economic as well as environmental and social aims. Moreover, the acknowledgment of esthetical and spiritual values of the landscape is essential. The main features of the sustainable tourism are the "greenness", "softness" and the revelation and adoption of alternative, postindustrial and intelligent approaches.

Among the economic objectives, the growth of incomes, the increase of employment, the diversification of economic activities or the equal distribution of costs and benefits between the hosting community and large enterprises profiting from the tourism development can be mentioned. The social aims can be exemplified by the ethical approach to the local community, its involvement and education, local products consumption, local identity enhancement or the protection of

cultural heritage. The environmental targets include the protection and friendly utilization of the environment together with the conservation of the biodiversity, ecosystems, or the landscape throughput.

The management of sustainable tourism is primarily proactive and stems from the principle of preliminary precautions and systematic monitoring of environmental changes. The basic techniques used are spatial area zoning, controlled concentration or spread of visitors within the area, and possibly the restriction or charging of the entrance to its parts.

The development plans and the course of actions considering the tourism development should be prepared in cooperation and participation of both public and private sector for the period of five years [3].

Within the realm of sustainable tourism, a set of particular indicators characterizing the extent of negative environmental impact is available (see Table 1).

B. Issues Related to Mass Events

Nowadays, one of examined areas is the arrangement of social events (conferences, concerts, sport events, festivals, business exhibitions and trade shows, religious meetings, etc.). The organization of such events is usually connected with high energy, material and technological demands and the amount of emissions as well as solid waste depending on the number of participants.

The massive social events lead to the production of vast amounts of waste, transport pollution and related negative externalities (land occupation, emissions, inconsiderate infrastructure building, etc.) [4]. There are initiatives which tend to eliminate these negative impacts. The International Olympic Committee with its effort to "ecologize" sport during the host city selection can serve as an example. The organizing committees of candidate cities must elaborate the environmental policies for the Olympic Games organization. Firstly, the presentation of the environmental plans was required obligatorily from all candidates for the Winter Olympic Games in 2002. The first Olympic Games when the organizing committee intentionally considered the environmental issues were the Olympics in Lillehammer in 1994. During these games, the Environmental Management System was introduced. The organizing committee defined the ecological aspects of the realization of the Olympics and consequently, the tools for environmental planning of vast projects were launched. The concept of ecological administration (the Green Office) was established together with the Green Purchasing. These concepts were afterwards accepted within the whole Norway and other countries [5].

The proclamations related to the sustainability or "greenness" of the mega-events, which require constructing new accommodation and transport routes, are often associated with skepticism. The strategies employed during the event arrangements should not be evaluated only on the basis of the financial efficiency, maximum number of events or amount of event visitors [6]. Based on the Table 1 the sustainability of

social events can be monitored also through the employment of wide range of indicators from different areas. The following can be for example examined: utilized materials, public transport for visitors as well as for official guests, energy consumption, water management, waste management (the amount of waste and its disposal), the amount of packaging material and the possibility of its recycling or further utilization of temporary facilities.

C. Sustainability of Mass Events as a Part of the Sustainable Tourism

The crucial problem is the fact that the events are sometimes realized as short-term or one-time actions. The unrepeatable events enable only the limited participation of the local community and contribute to the drain of earnings from the affected area. Furthermore, the problems might be caused by the wrong determination of the target group of visitors which is not acceptable for the local community and other participants. The main economic aim of the mass event is primarily *the cost reduction per one visitor,* while the mass demand for specific and pre-prepared experience is driven by media. The product is designed broadly and is common for a particular group of visitors with relatively similar characteristics.

Unlike the events described above, the common feature of *sustainable mass events* arrangement and sustainable tourism development is the emphasis on the *non-economic* objectives. The realization of such aims makes high demands on the event organizers (their managerial skills, environmental education, edification, monitoring, applied research, influence on the public opinion, quality standards, knowledge of the environment, etc.) as well as on the quality of destination management in general.

Therefore, from the sustainable tourism perspective more-day mass events organized regularly at the same place are optimal. These support the image creation of a particular destination; contribute to the promotion of local products, habits and traditions; and facilitate wider participation of residents. The choice of appropriate area is consequently the result of selection process considering clear differentiation of its suitability for the event arrangement, determination of the extent of its carrying capacity and intended concentration of visitors to less precious localities. Moreover, the tendency to minimize or regulate the visitor penetration to more valuable areas is also taken into account.

III. METHODS OF SOLUTION

Considering the complexity of mass events arrangement and the demands on their sustainability, the certification represents an appropriate tool for their realization [7]. Therefore, the analysis of selected certification programs as well as awards for the cleanness and greenness of the festivals was conducted.

Site Protection	The category of the site's protection after the index of the International Union for the

	Preservation of Nature (IUCN).
Pressure	The number of tourists who visit the site (year / month with maximum influx).
Intensity of Use	The intensity of use during peak periods (the number of people and per hectare).
Social Impact	The report tourists / residents (during the peak period, but also during the rest of the period).
Development Control	The existence of a method of study of the environment or specific controls on the planning method of the area and the density of use.
Waste Management	% of treated wastewater of the site (additional indicators may lead to structural limitations).
Planning Process	The existence of a methodical plan for the tourist destination in question (with a component "tourism").
Fragile Ecosystems	The number of rare species or endangered ones.
Customer Satisfaction	Visitor satisfaction (using a questionnaire).
Satisfaction of the Local Population	Satisfaction of the local population (using a questionnaire).
Contribution of Tourism to Local Economy	How much tourism represents (%) in all the economic activity.
Carrying Capacity	Aggregate means of measuring that warns in advance of the key factors influencing the carrying capacity of the site related to the various levels of tourism development.
Site Disturbance	Aggregate means of measuring the levels of impact on the site (to know the natural and cultural features under the constraints cumulative effect of tourism and other sectors).
Interest	Means of measuring the quality of the features of the site that make it attractive for tourists and can change over time.

Table 1 Specific Measuring Instruments Indicators (adopted from [8])

The certification process together with particular standard creation and their contents were assessed. The extent of public participation on both certification process and standard creation were examined. Considering only the standards, the presence of standards relating to the local social sustainability was assessed. From the perspective of long-term change of attitude, the common green vision creation was judged. The following programs focused on the mass events certification were analyzed: The ReSport Certification, The Ecologo Certification, The Pledge of Sustainability and The Clean Festival. Furthermore, the awards *GREEN'N'CLEAN Award and A GREENER FESTIVAL Award* were also discussed. There are also several international systems that were taken into consideration during the process of certification program evaluation. These are [9], [10], [11]:

- ISO 14001 - The system of the organizational environmental management assessment according to the international norm ISO 14001, which is primarily focused on the environmental aspects of business.
- BS 8901 Sustainability Management Systems for Events - The standard developed merely for the events industry. Its purpose is to help organizations to operate in a more sustainable manner. The standard is based on the requirements for a sustainability event management system. These should ensure a balanced approach to economic activity, environmental responsibility and social progress relating to events.
- The European Ecolabel (EU Flower) - The European Ecolabel represents the program of ecological labeling of the European Union. This system is intended for accommodation services and is not as widespread and known within Europe in comparison with other certification systems. Nevertheless, the program is guaranteed by the civil service.
- ECEAT (European Centre for Ecological and Agricultural Tourism) Quality Label - Since its establishment in 1993 this private label is focused on the accommodation services and pursues all aspects of sustainability. It is also suitable for small accommodation providers. Its advantage is excellent marketing of labeled enterprise.
- The Green Key - The Green Key® was created to raise the awareness of owners and managers of tourism and leisure establishments on the necessity and possibilities of running a responsible business. The Green Key program rests on 5 pillars:
  - Education for sustainable development and environmental awareness of the owners, staffs and clients of leisure establishments;
  - Environmental preservation by the reduction of the impacts of the establishment on the environment;
  - Economical management as a reduction of the consumption induces a reduction of the costs;
  - Marketing strategy with the promotion of the label and the establishments awarded;
  - Strengthening of the tourism and leisure branch by taking responsibility broader than just their own establishments [12].
- Green Globe - Green Globe Certification provides certification, training & education, and marketing services in 83 countries worldwide. Based in Los Angeles, California and with partners in Mexico, South America, South Africa, Middle East, the Caribbean and Europe, Green Globe Certification provides certification

for the sustainable operations and management of travel and tourism companies and their related supplier businesses. Green Globe Certification also maintains a global network of independent auditors who provide third party inspection and validation [13].

A. The ReSport Certification

In 1998 Council for Responsible Sport (CRS) started a pilot program of massive event certification based on the credit system. The event certificated by the ReSport label must conform to five categories of standards: Waste, Climate, Equipment & Materials, Community & Outreach, and Health Promotion. One credit is granted for each standard which is met. Moreover, three extra credits can be awarded for innovative practices which are not defined within the standards. The events are categorized according to the total amount of reached credits. The classification includes four levels of sustainability: Evergreen for 36 credits and more, Gold from 31 to 35, Silver from 26 to 30, Certified from 21 to 25 credits [14].

Selected types of standards within each category are named below:

- Waste - Recycling of solid waste, one credit per each waste type, Food waste composted or possibly donated to local food charity, Less than 0.5-1 kg of landfill waste per participant, or 10 % reduction in landfill waste per participant in comparison with previous year.
- Climate - 50 % of consumed energy from renewable energy sources, Accessibility of race sites by public or mass transport or possibly supporting carpooling, Use of alternative-fuel vehicles, Use of certified products (BIO, Fair Trade, etc.) or products of local origin, Purchase of carbon dioxide offsets by all participants (carbon footprint compensation based on the purchase of credits of special projects enabling the emission reduction - new trees planting, landscape forestation, support of renewable sources, etc.), or Compact policy of water consumption reduction.
- Equipment & Materials - All materials printed on recycled paper using non-toxic ink, Major part of essential equipment rented or shared, New equipment made from recycled or surplus materials, Race apparels made from alternative fabrics and printed using non-toxic ink and athletes can refuse them.
- Community & Outreach - Event enhances local public-use assets (community centre, bike trail, etc.), Representatives from local community are engaged in organizing committee, Creation of mechanism enabling public participation in sustainable practices, Time or money investment in local non-profit organizations, Increase of public awareness of local environmental issues, Alternative accommodation for overnight participants (dormitories, home stay).
- Health Promotion - Participation of minor disabled, at-risk and female segments of population, Direct involvement of youth, Support of beginners, Education of

public in event's health benefits, Creation of mechanism enabling the participant feedback on sustainability efforts.
- Innovation - Documented and measurable feature of program enhancing the event sustainability.

Among basic prerequisites for the certification, the following can be mentioned: presentation of the event plan including the solution of issues linked with environmental impacts and social sustainability, the way of providing public with information about the event certification process and intended amount of credits, waste recycling on-site of at least one material from the following list: cardboard, paper, metal, plastic or glass. The first step is the on-line assessment of the documentation of sustainability initiatives. Afterwards, on-site verification of the real conditions during the event is evaluated. The certification and re-certification fee depends on the event duration. The basic certification cost $360 and the re-certification is for $260. Other extra charges are the same, from short event for $180 (sprint triathlon, etc.) to full day event for $900 (iron-distance triathlon, etc.). The certification is valid for two years. Nevertheless, the event can choose to re-certify to a higher sustainability level after one year. In June 2010, 13 sport events were certified [14].

B. The EcoLogo Certification

This certification mark was founded in 1988 by the Canadian Government. It covers wide range of categories and is defined as a Type I eco-label which meets the ISO 14024 standard [15]. The EcoLogo is part of the Global EcoLabeling Network (GEN) which ensures the labeling of certified products and unites particular national and international programs. The basic principle of this certification is the participation of various stakeholders during the standard improvements and the whole assessment process. The program EcoLogo promotes the active participation of ecological organizations, non-profit organizations, scientists, producers, local self-governments, etc. The standard development and review process is transparent. Nevertheless, the anonymity of stakeholders who express their viewpoint is maintained.

The key steps of the development and review process are:

1. Defining the product/service category and its environmental and market profile. This phase covers the identification of key stakeholders, documenting the life-cycle based environmental impacts for the product/service, etc.
2. Presentation of proposed drafts. In reference to initial phase, the criteria for the assessment of the environmental leadership for the product/service in particular areas are proposed. Afterwards their quantification, verification and definition follows together with the choice of test methods - all in line with the international norms and considering the viewpoint of the stakeholders.
3. Stakeholder consultation. The aim is to ensure criteria assessment and control from various perspectives. The stakeholder reviews are realized through a series of

4. Repetitive consultation and revision of drafts. The draft based on previous phases is made available to the public for comments through the website of the program.

5. Final standard version determining the criteria and their updating. The proposed criteria are reassessed and updated every three years or according to current needs stemming from technology changes, market development, regulatory shifts, etc.

The product called "Events and Tours" is intended for the certification of events. The evaluation criteria are sustainability and environmental impact reduction. The monitored areas include the amount of produced waste, used materials, energy consumption, carbon production and traffic. The assessment principle is similar to the ReSport certification. The event must reach the minimum amount of points in particular categories through fulfillment of variously evaluated criteria. The event can get from one to four points per each demand. For example, within the category "Waste" (characterized by the achievement of minimum five points), for the drinkable water supply for participants three points are assigned. Identical evaluation has the arrangement of containers for recycling of glass, plastic, metal, paper and cardboard and their transport to the licensed company [15].

Before the event beginning, the organizers must deposit the caution money dependable on the number of participants ($500 - $5.000). This money is refunded after the achievement of the required number of points in all categories. If an event reaches 1 or 2 points less than minimum, the caution money is donated to ecological organization without relation to the event organizers. In case of loss of more points, the event is labeled as unsuitable for the certification for three following years. The sanctions are cumulated till the announcement of the event and its organizers in the list of unauthorized users of the label EcoLogo. The costs connected with the label establishment depend on the product type and number of products. In 2010 the applicant had to pay $1.500 - $5.000 for initial audit and certificate. The price for additional products was $250 - $2.100. Nevertheless, annual license fees are 0,5 % of product sales, minimum fee of $2.000 [15].

C. The Pledge of Sustainability

At the beginning of 2008 the project FitPlanet was launched to provide cost-effective consulting services during the organization and promotion of the environment-responsible sport events. The program is specialized in running, cycling, swimming, walking and multi-sport events. The Pledge of Sustainability is considered as the pre-stage of the ReSport certification and represents the compliance of ten ecological practices. Five are obligatory and the rest is optional. The compulsory practices include usage of electronic versions of materials instead of printed ones, recycling of main types of waste, transport pollution elimination and the purchase of the carbon offsets produced during the athletes' traveling. The utilization of recycled paper, biodegradable plastic, BIO or

recycled fabrics, local products, ecological education during the event, etc. are optional. The FitPlanet consulting services are focused for example on the initiatives resulting in green supply chain or improving the event site after the event [14].

Firstly, the event promises to implement ten eco-practices. This step enables the event to use the Pledge of Sustainability logo and be listed in FitPlanet Green Events database. Moreover, it ensures the access to the list of ecological products and services, handbook how to produce green events, one-hour web seminar, online Eco-forum and 5% discount on consulting services. The pledge is proven 14 days after the event on the basis of the sent documentation (photos, description, emails, etc.). The event can after the verification use the Pledge of Sustainability logo. The price for the verification of the first event is $100. Any additional event cost $25. A discount for the pledge verification is granted if the applicant decides to "re-pledge" in the next year or if the event increases the number of implemented eco-practices. The database of Green Events includes only the events which fulfill the Pledge of Sustainability criteria for one- or more-day events, or possibly own the ReSport certificate. The environmental pledge can be accepted by all event participants through the public pledge, questionnaire filling or through providing the feedback to the organization FitPlanet. The athletes can support such events through displaying the logo on their websites [14].

IV. CASE STUDY: THE EXAMPLE OF CERTIFICATION PROGRAMS IN THE CZECH REPUBLIC

A. The Certification "Clean Festival"

This certificate is awarded by a packaging company EKO-KOM since 2007. In 2007 it was granted to twenty Czech festivals. EKO-KOM gives the event organizers free garbage bags for sorted waste and helps with the communication with local company providing the rubbish collection about the availability of colored trash containers for garbage separation. The aim of this free certification is reuse of plastic and paper separated on-site during the event [16].

The certification begins with the contract arrangement about the cooperation between the festival and the packaging company EKO-KOM. The organizers must ensure the visitors as well as the stand owners the possibility to sort the garbage, at least to the yellow containers/bags for plastic and to blue containers/bags for paper. The waste must be afterwards transported to the assorting line, not to the municipal waste dump. Another certification condition is the enablement of visitor rewards for the waste collection. The reward (a glass of beer or coke, festival gifts, etc.) can be received at the stand "Green Point" either for five plastic cups or fifty sheets of paper. The visitors can there also acquire the detailed information about the waste sorting. Moreover, they can participate in the competition for the gifts - in 2010 the prize was the iPod. The certificate is awarded during the last day of the festival and advocated next year. The condition is again the complex arrangement of the waste sorting and transport of

assorted plastic and paper to reuse facilities [16].

B. The Festival Award for the Effort to Reach the Sustainability

Other activities, which aim to reduce negative impacts of social events, are various awards established in relation to the festivals. The organizations which grant such awards are for example: A Greener Festival or the European Festival Association Yourope.

C. GREEN'N'CLEAN Award

The European Festival Association Yourope unites the largest festivals with live music production without any political or religious overtones. Its members are dedicated to the effort to improve the working conditions. Moreover, these are engaged in health and safety issues, environmental awareness and the cross-border exchange of talents. In 2006/7 the association introduced the printed handbook with environmental guidelines for music festivals called "Green'n'Clean". The award "Green'n'Clean" is granted to festivals since 2009 on the basis of the achievement of a defined number of environmental criteria [17].

D. A GREENER FESTIVAL Award

A non-profit organization A Greener Festival is focused on the support of festivals in proper adoption of environment-friendly practices, especially through providing them the information, education sources and idea swapping. The application for the "A Greener Festival Award 2010" begins with the submission of the self-assessment form which includes 53 questions divided into eight sections. These are event management and administration, carbon dioxide emissions, travel and traffic, Fair Trade and environmental campaigns, waste management, recycling and reuse, water management, local environment, animal and land protection, and noise pollution Festival must also send two tickets for the environmental auditors and cover the administrative costs which are £200/€300 [18]. In 2010 the Open Air Festival in Trutnov was the first Czech participant who entered the competition. This festival uses bio-plastic dishes or cutlery from Czech company BioPlaneta, tries to reduce the carbon footprint, etc.

V. DISCUSSION

The general procedure of eco-label launching comprises the following steps: standards launching, assessment process needed for the label granting, the certificate award, the recognition of certificate worth and especially the eco-label acknowledgement within the realm of tourism [19]. Therefore, the accordance of the impression which the label implies and its real content is of high importance.

Based on the analysis of particular certification programs including also the ratio of standards monitoring the benefits for local community to the total number of standards (see Table 2), it was revealed that these programs are mostly focused on the "greenness", not on the sustainability and even less on the long-term sustainability. The reason is that in case of the majority of studied certifications the crucial emphasis is on the environment. Lesser obvious is the effort to diminish the social and cultural impact on the local community. Whereas the economic and environmental objectives are monitored by everyone, the social aims remain more or less the marginal issue. The monitoring of economic and environmental aims is less complicated than the monitoring of social ones because the latter requires negotiations with various representatives from general public which is very often time-consuming. For two abovementioned aims it is sufficient to select the area with minimal population which is not too worthy (airports, stadiums, halls), ensure the public transport services, and focus on the waste reduction and minimization of the energy consumption. Finally, all other issues are certified except from the sustainability. The consequence of this situation can be for example the impossibility of minimization of existing regional disparities through the local community involvement, sponsorship of the local beneficial activities by the organizers or visitors of the event, etc. Table 2 illustrates that the sustainability in this sense is concerned only in case of The ReSport Certification.

A. Pros and Cons of Particular Certifications

The ReSport Certification

This certification considers mass one- or more-day sport events. The program represents a mid-price category certification. Nevertheless, from the perspective of benefits to sustainability its quality is at the highest level. The work with public is very good, and the assessment of innovative approaches and objectives concerning the changes of attitude of all groups of participants is contributive. The call for sending the comments to particular standards is released on the web sites. The drawback is the geographical limitation which includes only the US, Canada and Great Britain. Hopefully, this situation is only temporary.

The Ecologo Certification

The most expensive type of certification is mostly related to products. The services represent only the marginal matter. The comments on standards are facilitated for free to general public, especially to specialists. The label is involved in Global Ecolabelling Network (GEN).

This program is suitable for one-time mass events when it is not necessary to deal with the environmental devastation and local community participation. The certification considers only the process of making the supply chain of offered services greener. The work with public is not evaluated at all. The sustainability of mass event in not essentially certified.

The Pledge of Sustainability

This pledge represents cheap, administratively not demanding and effective form of the implementation of eco-practices. It covers primarily the material and energy savings. The emphasis on the cooperation with local community and environmental protection is minimal.

Name	The possibility of public participation on the certification process and standard creation	Number of monitored standards focused on the local community (from the total number of standards)	The creation of the common vision with the participation of local community
The ReSport Certification	Yes - The comments can be sent via e-mail. The process of gaining the award and standards are complete and function.	6/41 - separate assessed category.	Yes - the manifest of common values, their distribution among various interest groups. Certificate providers themselves give the evidence for the respect to the local community and its environment to the local self-government and to politicians.
The Ecologo Certification	Yes - the possibility of anonymous comments on standards during the process of their creation and revision.	0/21 - the standard itself not included. The public is perceived as a passive consumer who is not expected to act independently a lot.	Not included in the program.
The Pledge of Sustainability	No - The process of the commitment acceptance and standards are complete and function so far.	0/28 - separate standard focused only on the local community not included. Only the optional part of the commitment - the purchase of local groceries, formation of a volunteer group focused on eco-practices or sponsoring of local ecological programs by participants.	The option of the commitment acceptance by the event participants themselves on the websites of the event.
The Clean Festival	No.	0/3 - standard not included.	Not included in the certification.
GREEN'N'CLEAN Award	The process and the criteria are not generally known.	3/26 - available brochure Green'n'Clean [24] containing tips and ideas.	Both the vision creation and environmental policy are included in the award.
A GREENER FESTIVAL Award	No - The process of gaining the award and standards are complete and function so far.	2/53 - standards are included to a limited extent. These are focused on local websites and markets with local products.	A part of two standards - the general environmental policy and the enhancement of the awareness of the environment.

Table 2 The Certificates from the Perspective of Social Sustainability (Authors' Research)

The pledge was accepted by a lot of events. It is also linked with the program Active´s "Go Green" which is beneficial especially from the marketing perspective of promoting the awareness of the pledge. It is appropriate for smaller events with lower ambitions on sustainability.

The Clean Festival

The criteria are limited only to the way of waste collection and separation. Within this system, positive motivation is utilized while the participants are rewarded for the collection of waste. Moreover, the education of participants is provided at the specialized stand "Green Point" during their rewarding while returning the separated waste. This free certification does not consider both the work with local community and the environment at the event site. The mass event sustainability is not the subject of the certification.

GREEN'N'CLEAN Award

Unfortunately, the criteria as well as the process of award granting for greener and cleaner festival are unavailable. The membership is quite expensive, but personalized consultations are provided to members. High quality printed handbook focused on the management of sustainable events is available on the web sites. The possibility to provide the on-line feedback at the end of each chapter is offered. The orientation on the local community is minimal and the emphasis is given to the issues such as ecology and sustainable management from the point of view of carrying capacity, zoning, etc.

The award is appropriate also for large and one-time events when social aims are not prioritized and these are perceived as annoying issue to deal with. Nevertheless, these are introduced only for the smooth course of event and its marketing. The sustainability is appreciated, but not from the long-term perspective.

A GREENER FESTIVAL Award

The process of the acknowledgement is based on the initial assessment of the prepared festival using the self-assessment form. The award focuses mainly on the waste and energy management and nature protection rather than on the benefits for local community and its participation. Moreover, the improvement in comparison with the last years is evaluated. The entrance fee for the competing festivals is low and the

image and marketing of this award is very good considering its price.

The main *benefits of all existing awards and eco-labels granting* is the creation of general rules, methods and standards providing the organizers easier work.

Their utilization enables costs savings thanks to the reduction of energy, waste and material consumption. Moreover, a lot of mistakes can be eliminated during the management of participant's flow within the area. The site afterwards does not require the recultivation. The approaches to the elimination of potential problems caused by the disagreement and arguments with residents and their representatives are also beneficial.

Among the drawbacks of certification programs is the fact that the number of certification providers and new eco-labels increases. Moreover, the financial demands imply their availability mostly for larger enterprises while these are practically unavailable for non-commercial events. The marketing contribution of the certification or award lies in the enhancement of competitive advantage. Nevertheless, it does not usually cover the costs relating to the certification. The awareness about the labels is geographically limited. The situation with awards is better considering the number of involved subjects. The purposes of the certification often require the necessity of the assignment of an employee or possibly the whole team focused on the environmental management. Extraordinary and innovative approaches are not usually evaluated because of the need of the criteria standardization.

B. Certification as a Knowledge Management Tool

The certification might discourage from its implementation because of its parameter settings (financial demands or limited effects - see the previous chapters). Fortunately, from the perspective of knowledge management [20], particular certificates can be perceived as sources of tips, rules, directions and procedures including important knowledge related to the mass event organization.

The application of such knowledge in practice is not conditioned by any formal procedures. This knowledge provides its creative utilization and through certification (without the certification process itself) also ensures the sustainability of realized events - maybe to even higher extent than in case of the certification itself. Therefore, sharing of appropriate knowledge represents crucial activity necessarily realized within the structure of engaged participants. The long-term sustainability of social events has to be essentially based on the creation of multi-stakeholder public-private network dependant on the finding of common concerns of involved groups of participants with various interests. This way enables to overcome some of the common individual and social barriers of knowledge sharing [21]. While particular parties follow the aims of sustainable development separately and with their own limited sources, their activities are less noticeable and effective than in case of cooperation [22].

The difference considering the knowledge sharing lies in

motivation. Motivated people interested in education in environmental issues can utilize various brochures, texts or lectures for the knowledge acquisition. Unmotivated participants need practice, their own experience and hands-on activities. Individual parties involved in knowledge networks possess different motivation, aims and strategy for learning from mutual cooperation. The interconnection of participants from various areas of public and private sectors who possess different logics, abilities, skills, mental models, language, etc. is beneficial. The result of their cooperation is that the knowledge becomes a part of the network structure, its rules, procedures and participants.

Considering the current knowledge sharing and participation of the local community, the indigenous knowledge is utilizable for the purposes of sustainability [23]. This type of knowledge is known only within the local community which can assist during the social event organization. The knowledge of the environment can significantly support the prevention of various problems from water pollution to logistic and transport troubles. The monitoring of sustainability social aims can therefore positively affect the environmental demands of the event and at the same time reduce the disagreement or increase the interest of local community to the repetition of the event arrangement. Hypothetically, from the sustainability perspective the events organized by residents who know better the local conditions or precious areas should be better in all aspects. Nevertheless, the residents are usually not capable and competent of required administrative and organizational matters. The knowledge management also offers various technological tools and principles utilizable during the mass social event arrangements. Thanks to the progress in informatics exemplified by the parallel computing [25], the improvements are usable for the purposes of tourism as well. Among others, ontological modeling, multi-agent technologies, semantic web or data mining can be mentioned [26].

Nevertheless, these sophisticated tools are not likely suitable for common organizers of mass events (the exception can be represented by the mega-events whose complexity and budget enable or directly require the technology utilization). Therefore, familiar tools such as Lessons Learned systems are employable. Lessons Learned represent validated working knowledge derived from success or failure, that when reused, can significantly impact an organization of social events [27]. The design of similar system enables the creation of the knowledge base using the experience and knowledge previously acquired during the particular event arrangements. This can consequently assist during the future events. The included knowledge can be distributed to the organizers actively or passively (push or pull).

Another simple tool is storytelling. The stories comprise knowledge gathered and verified during a certain period of time. The creation and transfer of knowledge concerning the mass event arrangements is possible not only among the organizers, but also among its participants. To ensure the

sustainability, it is not necessary to employ only modern and advanced technologies and principles based on the work with knowledge. Typical example is the utilization of mobile technologies which are still more intensively used within organizational management and which influence or even determine their operation [28]. Therefore, there is no reason not to utilize the latter for the arrangement of repeatable mass social events.

VI. Conclusion

The certification supports, or at least partially contributes, to the sustainability of mass social events arrangement. In spite of the fact that the certification programs manifest primarily the monitoring of environmental aims, their main objectives are mostly economic. The social objectives relating to the local community are often neglected. This leads to various negative impacts such as regional disparities deepening due to the exploitation of the area and the local sources when a wide range of negative externalities occur. As a result of latter negative experiences, the local residents are adverse to further tourism development and perceive its potential as not perspective. Nevertheless, knowledge focused on the sustainability used within the certification process is worthy. Its utilization through the certification is relatively ineffective due to the financial demands as well as limited efficiency. Therefore, this knowledge might be utilized, shared and developed through the knowledge management tools beyond the framework of the certification process. Moreover, such technique enables to utilize other knowledge, for example indigenous knowledge, not reflected within the certification. This situation results into the paradox of existing certifications which tend to lead into their non-utilization due to their requirements and demands. Withal, these ensure higher level of sustainability of the realized events, especially in cases when these are co-organized by the local community.

References

[1] G. H. Brundtland, "Report of the World Commission on Environment and Development," presented at UNEP's 14th Governing Council Session, Nairoby, Kenia. Retrieved March 29ᵗʰ, 2011. [Online]. Available: http://www.regjeringen.no.

[2] World Commission on Environment and Development, *Our Common Future*, New York: Oxford University Press, 1987.

[3] A. Iancu, L. Popescu, and V. Popescu, "The Sustainable Tourism - between the Conceptual Approach and the Strategy for Putting it in Practice," in *5th WSEAS International Conference on Economy and Management Transformation (Volume I),* Timisoara, Romania, 2010, pp. 33-38.

[4] V. Jašíková and M. Trousil, "Certification of Social Events Sustainability (in Czech)," in *International conference Good Practice of the Tourism Sustainability*, Brno, Czech Republic, 2010, pp. 68-77.

[5] Commonwealth of Australia, "*Environmental Purchasing Guide*," An Australian Government Initiative, 2003. Retrieved March 30ᵗʰ, 2011. [Online]. Available: http://www.environment.gov.au.

[6] D. Getz, *Event Studies: Theory, research and policy for planned events.* Oxford: Butterworth-Heineman, 2007.

[7] V. Jašíková, V. Bureš, and P. Marešová, "The Certification as a Tool for Environmental Management of Social Events," in *6th IASME / WSEAS International Conference on Energy & Environment*, Cambridge, United Kingdom, 2011, pp. 328-334.

[8] D. Simion, M. Mazilu, M. Patrutescu, and R. Ispas, "The Economic and Social Contribution of Tourism from the Sustainable Development Point of View", in *5ᵗʰ WSEAS International Conference on Economy and Management Transformation,* Timisoara, Romania, 2010, pp. 53-60.

[9] H. Hamele, Eco-labels for Tourism in Europe: Moving the Market, in *Ecotourism & Certification: Setting Standards in Practice,* M. Honey, Ed., Island Press, 2002.

[10] D. Kralj, J. Krope J., and D Goricanec, "The Permanent Development as a Consequence of Administration Innovating," *WSEAS Transations on Bussines and Economics,* vol 2, no.2, pp. 17-23.

[11] V. Bendic and D. Tilina, New Tendencies in Quality Management," in *7th WSEAS International Conference on Engineering Education*, Corfu Island, Greece, 2010, pp. 133-136.

[12] The Green Key, Official web site, Retrieved March 2ⁿᵈ, 2011. [Online]. Available: http://www.green-key.org/.

[13] Green Globe, The Premier Global Certification for Sustainability. Official web site. Retrieved March 2ⁿᵈ, 2011. [Online]. Available: http://www.greenglobecertification.com.

[14] The Council for Responsible Sport, ReSport Certification Standards. Retrieved March 11ᵗʰ, 2011. [Online]. Available: http://www.resport.org.

[15] The EcoLogo Program, Official web site. Retrieved March 11ᵗʰ, 2011. [Online]. Available: http://www.ecologo.org.

[16] Clean Frestival, Official web site. Retrieved March 28ᵗʰ, 2011. [Online]. Available: http://www.cistyfestival.cz

[17] Yourope, The European Festival Association. Retrieved March 2ⁿᵈ, 2011. [Online]. Available: http://www.yourope.org.

[18] A Greener Festival, Official web site. Retrieved March 31ˢᵗ, 2011. [Online]. Available: http://www.agreenerfestival.com.

[19] X. Font, "Environmental certification in tourism and hospitality: progress, process and prospects," *Tourism management*, vol. 23, pp. 200 - 201.

[20] V. Bureš, "Conceptual Perspective of Knowledge Management," *E+M Economics and Management*, vol. 12, n. 2, pp. 84-96.

[21] V. Bureš, "Cultural Barriers in Knowledge Sharing," *E+M Economics and Management*, vol. 6, special issue, pp.57-62.

[22] M. Halme, "Learning for Sustainable Development in Tourism Networks," *Business Strategy and the Environment*, vol. 10, is. 2 pp. 100-114.

[23] S. Lodhi and P. Mikulecký, "Management of Indigenous Knowledge for Developing Countries," *WSEAS International Conference on Communication and Management in Technological Innovation and Academic Globalization*, Puerto De La Cruz, Tenerife, 2010, pp. 94-98.

[24] Yourope, The European Festival Association. Retrieved March 20ᵗʰ, 2011. [Online]. Available: http://www.agreenerfestival.com/pdfs/yourope_greenclean.pdf

[25] J. Panuš, "Parallel Computing for Modified Local Search," in *10th WSEAS International Conference on Applied Computer Science*, Iwate, Japan, 2010, pp. 508-513.

[26] P. Čech and V. Bureš, "Advanced Technologies in e-Tourism," in *9ᵗʰ WSEAS International Conference on Applied Computer Science*, Genoa, Italy, 2009, pp.85-92.

[27] P. Secchi, "An Effective way to prevent failures and problems," in *Proceedings of Alerts and Lessons Learned*, Noordwijk, The Neitherlands, 1999.

[28] A. Slabý, T. Kozel, and H. Mohelská, *Mobility in the Business Environment*, Hradec Králové: Gaudeamus, 2010.