

Kaisa Karjalainen

COMPATIBILITY OF  
ECOCOMPASS  
ENVIRONMENTAL  
MANAGEMENT SYSTEM TO  
NON-REPETITIVE EVENTS  
Case World Gymnaestrada 2015

Bachelor's thesis  
Environmental engineering


November 2015



MAMK

University of Applied Sciences

## DESCRIPTION

	<b>Date of the bachelor's thesis</b>  20.11.2015
<b>Author(s)</b> Kaisa Karjalainen	<b>Degree programme and option</b> Environmental engineering
<b>Name of the bachelor's thesis</b>  Compatibility of EcoCompass environmental management system to non-repetitive events, case World Gymnaestrada 2015	
<b>Abstract</b>  Environmental management is common nowadays in most industries and the events industry makes no exception. In an increasingly standardized world, the first standard to systematically manage sustainability in events came quite late, in 2007. In Finland, EcoCompass environmental management system was first created for small and medium size enterprises and in 2012 – 2014 further adapted to suit events.  Because the way non-repetitive events are planned differs significantly from repetitive events, which resemble more continuous businesses, there was a need to assess EcoCompass' suitability specifically for non-repetitive events. The research method was explanatory case study with the case being World Gymnaestrada 2015, a big, international gymnastics festival, which was organized in Helsinki in July 2015. Benchmarking to two other non-repetitive events was made. Data was acquired from interviews, participant observation and documentation made for the event.  Although World Gymnaestrada was able to pass the external audit leading to the certificate, some incompatibilities were identified resulting in improvement suggestions for two of the criteria, initial assessment of performance and final report, along with advice on how to make event management more suitable for EcoCompass. It was seen that starting the environmental work early, efficient communication and organizing a pilot event are the best ways to integrate EcoCompass into event planning.  Having the environmental management system was definitely beneficial for the event since it helped to concentrate the resources efficiently, guided the work and was an effective way to communicate about the environmental work to stakeholders resulting in very positive feedback from staff, participants and authorities. Therefore, EcoCompass is a very welcome addition to the event industry.	
<b>Subject headings, (keywords)</b>  EcoCompass, event management, environmental management system, non-repetitive event	
<b>Pages</b>  67 pages + 2 appendices	<b>Language</b>  English
<b>Remarks, notes on appendices</b>	
<b>Tutor</b>  Anne-Marie Tuomala	<b>Bachelor's thesis assigned by</b>  Finnish Gymnastics Federation

## CONTENTS

1	INTRODUCTION.....	1
1.1	Need and benefits of the study.....	1
1.2	World Gymnaestrada and EcoCompass .....	3
2	ENVIRONMENTAL IMPACTS OF EVENTS .....	4
2.1	Environment as an input .....	5
2.2	Local and global impacts .....	7
2.3	Positive impacts .....	7
2.4	Short and long term impacts .....	8
2.5	Benefits of environmental management in events.....	9
3	EVENT PLANNING .....	9
3.1	Types of events .....	10
3.2	Project based planning approach .....	11
3.3	Event phase based planning approach .....	12
3.4	Event planning process .....	13
3.4.1	Background work.....	14
3.4.2	Planning .....	16
3.4.3	Staging the event.....	18
3.4.4	Showtime .....	19
3.4.5	After the event.....	19
3.5	Typical components of events .....	20
4	SYSTEMATIC ENVIRONMENTAL MANAGEMENT IN EVENTS.....	21
4.1	Ideology of management systems.....	22
4.2	EcoCompass .....	25
4.2.1	Criteria .....	26
4.2.2	General process.....	27
4.3	Other common standards .....	29
4.3.1	ISO 14001 & EMAS directive.....	30
4.3.2	BSI 8901 & ISO 20121.....	31
4.4	Other alternatives.....	32
4.4.1	Carbon and ecological footprints.....	32
4.4.2	PESTE approach .....	34
4.4.3	Ecolabels .....	34

4.4.4	Cost-benefit tables .....	35
4.4.5	Key performance indicators.....	36
4.4.6	Guidelines, protocols and checklists.....	37
5	MATERIALS AND METHODS .....	38
5.1	Research strategy .....	38
5.2	Data acquisition .....	39
5.3	Analysis methods.....	41
6	EVENT PLANNING AND ECOCOMPASS AT WORLD GYMNAESTRADA .....	42
6.1	Event characterization .....	42
6.2	Bidding for the event .....	43
6.3	Planning phase .....	44
6.4	Event.....	46
6.5	Post-event phase .....	47
7	CHALLENGES IN THE PROCESSES.....	48
7.1	Criteria based challenges .....	48
7.1.1	Initial assessment of performance.....	49
7.1.2	Final report.....	50
7.2	Event based challenges .....	50
7.2.1	Starting from scratch.....	51
7.3	Other challenges .....	52
7.3.1	Audit .....	53
7.3.2	Economic challenges .....	54
8	FOUND DEVELOPMENT SUGGESTIONS .....	54
8.1	Modification of the criteria.....	54
8.1.1	Initial assessment of performance.....	55
8.1.2	Final report.....	57
8.1.3	Incentives for continuity .....	57
8.2	Ideas for the consultants .....	59
8.3	Considerations for event planners .....	60
8.3.1	Pilot event .....	60
8.3.2	Audit .....	61
8.3.3	Beginning of work .....	62
8.3.4	Integration of stakeholders.....	62

8.3.5 Commitment and resources.....	64
9 CONCLUSION .....	66
BIBLIOGRAPHY .....	68

#### APPENDICES

1 Interviews

2 World Gymnaestrada 2015 event planning process

## 1 INTRODUCTION

Events are a great way to bring people together from all walks of life to share their knowledge, skills and enthusiasm over a certain topic and gain valuable or just entertaining experiences to go home with. They range from small scale get-togethers to multi-day international happenings and from music festivals and product launches to Olympic Games and UN conferences. Therefore, the events industry is huge. While creating a cheerful festival spirit or an innovative conference setting, events also cause a burden on the environment. The amount of waste or greenhouse gas emissions created in large events is literally tons, and some events might produce toxic wastes or disturbance to the surroundings. A responsible event organizer tries to minimize the negative impacts and maximize the positive ones. For businesses, using environmental management systems has been common for this task already for a couple of decades but for events the shift to systematic environmental management has happened much later.

Events, especially non-repetitive events, are quite different from the manufacturing companies for which the management systems were originally directed; consequently, it is natural that they need adjusting to suit the special characteristics of events. In Finland, EcoCompass was created to meet the need. Improving environmental performance is becoming more commonplace in all types of activities thus having a certifiable environmental management system tailored also for events is a great tool for managing the industry's environmental impacts collectively. However, according to my experience as environmental coordinator for World Gymnaestrada 2015, which also had an EcoCompass environmental management system, improvements to its compatibility to non-repetitive events should still be made to accommodate the differences in event planning.

### 1.1 Need and benefits of the study

The aim of this thesis is to provide development suggestions for the EcoCompass criteria to better suit non-repetitive events along with guidance for event planners on how to avoid any challenges and get the most benefits out of their system, and tips to EcoCompass consultants to help the event planners build the system as efficiently as possible. This is achieved by assessing the challenges World Gymnaestrada 2015 had with its system and comparing the findings with the experiences of other non-repetitive events

to increase the validity of the results. The point of view of the consultants was also asked and their expertise contributed to the development suggestions.

World Gymnaestrada is only the third non-repetitive event to have the system, so there is not very much experience in the matter, yet, but other non-repetitive events are already establishing their systems. Hence, now is a good time to assess what kind of challenges there has been and what can be done to solve them. Previously, EcoCompass has only been available in the capital region of Finland and Hyvinkää but as of 2015 it has started to expand to the rest of the country and has also raised international interest (Ekokompassi 2015; Viinikka 2015). It means that the number of users is likely to increase rapidly in the near future but in order for it to become commonplace in the events industry, it is important that the system is user friendly and does not complicate the event organizing unnecessarily but still improves the environmental performance.

The compatibility of EcoCompass to repetitive events and businesses is already on a good level, since 96% of the users were satisfied with it (Ekokompassi 2015). The planning of an event from scratch differs significantly from producing the same event repeatedly which resembles more the cyclic production of continuous businesses. Although most events are repetitive, what makes non-repetitive events worth considering is that they are often the biggest ones, and consequently, likely to cause the biggest environmental impacts. Hence, it is important to provide good tools for the organizers to reduce those impacts. Moreover, the biggest events are usually very visible, also on an international scale; therefore, executing them in a responsible way is very important for the whole country, especially since Finland is known for its pure nature. In addition, the increasingly environmentally aware public demands organizations and businesses to reduce their impacts. Being able to show certified commitment when organizing World Championships, EU summits or other large international events is a great opportunity to boost the green image, and since the competition to get to host big events can be tough, environmental management can sometimes even be a decisive factor in a tight situation. World championships, international summits and the like can be regarded as non-repetitive events due to the change in location - even though from the perspective of a spectator or attendee they are repetitive.

## 1.2 World Gymnaestrada and EcoCompass

World Gymnaestrada is belongs to the Gymnastics for All -discipline of gymnastics and anyone regardless of skill level, physical ability, age or background is welcome to participate. There is no competition but performances. As a result, the Helsinki World Gymnaestrada in July 2015 attracted approximately 21 000 participants from 53 countries to show their skills in altogether about 1000 performances. The performances took place over the course of a week on 15 different stages in 7 venues. In addition, side programme, such as music, gym workshops and gymnastics trials were organized around the city. World Gymnaestrada is the most significant of the Gymnastics for all events and is organized every four years somewhere in the world. (FIG 2015.)

The event is governed by FIG, the International Gymnastics Federation, which gives the right to organize the event to a local organizer based on bids, much in a same way as World Championships of any sport or the Olympic Games. World Gymnaestrada resembles those big competitions in many ways even though it is not a competition. For example, there is an Olympic style opening ceremony with the country delegations marching into the stadium in their national track suits. Possibilities for accommodation, food and transport need to be provided for the participants, as well. Essentially, the only difference is the lack of winners and losers which consequently replaces the competitive spirit with encouragement and cheering for all. The 2015 event was organized by the Finnish Gymnastics Federation in close cooperation with the City of Helsinki and the Ministry of Education and Culture.

EcoCompass is a Finnish environmental management system standard developed by the capital region municipalities which was first directed for small and medium size enterprises and later further adapted for events. The pilot phase was conducted from 2012 to 2014 under the name of Greening Events and World Gymnaestrada 2015 participated in it. EcoCompass is based on the ISO 14001 environmental management system standard and the EU EMAS directive but is more concentrated on the practical environmental work. It can be verified by external auditors and if the audit is passed, a certificate is issued. The process is supported by consultants which is very valuable for small businesses and event organizers since they might not have anyone within the organization with experience in environmental matters or management systems in general. (Ekokompassi 2015; FCG konsultointi 2014, 11 - 13.)



What makes World Gymnaestrada 2015 an excellent case study for this thesis is the fact that, although it is not, planning wise it bears a close resemblance to world and European sport championships which are probably the most common large non-repetitive events organized in Finland. Therefore, it is possible to make generalizations about the results of this thesis to them increasing significantly the number of entities who can benefit from this study. If there is proven benefit for such a big number of large and visible events, there might even be more incentive to adjust the EcoCompass criteria to better suit non-repetitive events.

Another advantage in using World Gymnaestrada as a case is that due to the environmentally conscious working culture of the Finnish Gymnastic Federation, the decision to organize the event in an environmentally responsible way was made at the same time with the decision to bid for the event. This commitment from the organizers was visible in many ways before the systematic environmental management with EcoCompass started in 2013. Therefore, it is possible to develop an optimal EcoCompass process schedule for the event planning of World Gymnaestrada so that all the environmental actions are guided with the management system, which in real life were done due to the green attitude of the organizers. Consequently, the next organizers of non-repetitive events can be suggested an optimal schedule for building their environmental management system in relation to their event planning process so that the potential for improving environmental performance is maximized and challenges minimized.

## **2 ENVIRONMENTAL IMPACTS OF EVENTS**

As Case (2013, 138) notes, internationally the event industry and the event management education have not put emphasis on environmental performance until quite recently. On the other hand, many Finnish event organizers have had interest in systematic environmental management at least since the pilot project for EcoCompass although the first events can be considered pioneers in the field as they have had some previous environmental work before starting to establish the actual system (Levula 2015; Niinivaara 2015). Remains to be seen what the general attitude of event organizers towards environmental management is when the system becomes more common.

The more systematic movement towards sustainability in the event industry is considered to have been started by the International Olympic Committee after receiving criticism for poor environmental performance at Albertville Olympics in 1992. Since then, environmental performance has been one criterion to be assessed in the bidding process and the Sydney Olympics in 2000 are considered to be the first green games. Of course, individual events have taken the environment into consideration before that but the IOC decision made it more visible for other types of events and changed the thinking of the industry. Since then, other sports championships have demonstrated more systematic environmental management, such as the first green IAAF athletics World Championships in Helsinki in 2005 or FIFA football World Championships in Germany in 2006 and green values are nowadays one criterion of their bidding processes (FIFA 2006; Koivusalo & Heinonen 2005, 3; Collins, Jones & Munday 2008). (Case 2013, 41 – 43.)

Since the social paradigm seems to be moving towards sustainability and people are more environmentally aware, it is important for event organizers to satisfy the participants and spectators' demands by integrating environmental management into event planning. Governments are also under pressure to meet their own sustainability goals thus organizing a green festival is more likely to receive a grant or other economic benefit (Jones 2010, 10). In addition, when taking into consideration the size of the industry, its impacts as a whole can be very big. In Helsinki about 1800 events take place annually and nationally, about 17 000 events were organized only during the month of July in 2013 (FCG konsultointi 2014, 1; Tapahtumainfo). Hence, the industry as a whole should accept their responsibility and join the effort to mitigate its impacts. In addition, events are an optimal place to initiate a change in attitudes and ways people live since an event creates a temporary world of its own which can inspire the people to live more sustainably also afterwards (Jones 2010, 5).

## **2.1 Environment as an input**

It is not only so that an event causes impacts on the environment but the environment also has an impact on the event. Events also depend on the resources that the environment provides. Therefore, they are interdependent of each other and the event organizers should take their impact on the environment into consideration in order to have a stable two-way relationship.

Probably the most visible way the environment influences an event is in form of climate and weather. Some events even depend on a certain type of climate as is the case with winter sports championships. In recent years many winter sport events have faced difficulties due to lack of snow, and with climate change, hosting winter sport competitions might not be possible for many traditional hosts anymore. In addition, climate change causes extremes in weather and that might completely ruin or at least complicate some events. For example, sailing or aviation events require certain kind of wind conditions and all outdoor events suffer from too much rain, cold or heat. Even indoor events might see a decline in the number of spectators or attendees due to unfavourable weather conditions causing economic damage to the organizers. (Case 2013, 9, 20 - 24.)

Another way the environment has an impact on the event is as a provider of raw materials, energy and water. Even small events cannot function without them making them an indispensable connection between all events and the environment. Sometimes events use even more raw materials and energy than businesses or households. For example, disposable plates and cutlery are sometimes the only viable option due to large quantities required or lack of washing facilities. Energy consumption might peak, as well, with light and sound technology, or with transport and logistics. Sometimes people or supplies come to the event from the other side of the world using significant amounts of fossil fuels. Therefore, the event organizers should be mindful of their own fuel usage since when fossil fuels diminish, their price will increase, increasing costs for the event organizers to acquire their supplies and diminish the attendance numbers due to increased costs of travel. (Case 2013, 6 – 14, 26 - 28.)

The environment can also act as a setting for an event as is the case, for example with fields hosting large music festivals or forests hosting cross country skiing competitions. Urban environment hosts also many market days and city celebrations and its importance should not be undermined. To be able stage events in those settings in the future, it is important to take their conservation into consideration in the event planning and possibly even leave a positive legacy behind. (Case 2013, 13 – 14, 35 - 48.)

As it can be seen, events depend on the environment and in order for the industry to thrive and continue to expand also in the future, each event, including non-repetitive events, must do their part to ensure that the environment stays in such condition that staging events is possible for the future generations. In addition, every event, albeit

small individually, must behave responsibly as environmental protection is a collective effort of every sector, location and individual, not only the biggest polluters or the decision-makers´.

## **2.2 Local and global impacts**

Usually the local area and residents bear the consequences of events, be it positive or negative. They might benefit with increased economic possibilities or improved infrastructure but suffer from noise, congested traffic and waste left in their area. The natural environment might be damaged due to trampling or erosion and local flora and fauna disrupted, especially if the event lasts for a long time or there are events held repeatedly in the same place. Light pollution can also be an issue for some animals or even humans especially outside cities where it is usually dark. (Case 2013, 58 – 65.)

On the other hand, some impacts can have global consequences. For example, the London Olympics 2012 is estimated to have produced 3,3MtCO<sub>2e</sub> worth of greenhouse gas emissions contributing to climate change worldwide (LOGOC 2012, 19). Poor quality fuels can also cause acid rain far away from the actual event site. Another important global consequence rises from our ever more global supply chains. Events require a wide variety of products and when the whole journey of the item is accounted for from cradle to grave, it might have involved several countries from all over the world. Hence, the impacts of those products are spread to all those places. It is, however, worth noting that the impacts can be positive, such as contributing to local economy or increasing the demand for organic agriculture. Therefore, paying attention to sustainability is important in procurement also for events. (Case 2013, 75 – 80; Jones 2010, 251 - 257.)

## **2.3 Positive impacts**

Events are also capable of causing positive environmental impacts which stay as a legacy long after the event. One Finnish example of that is the bottle return system which was first developed for the Helsinki Olympics in 1952 and has since been made nationwide and copied to many other countries (Palpa). As a result, Finland recycles more than 90% of its bottles and cans. Several other big sport events, such as the London Olympics in 2012 have made conscious decisions to construct accommodation or venues on previously contaminated or derelict sites which have been remediated as a result,

and the value of some neighbourhoods has increased. In addition, construction can be done using new innovative methods increasing their visibility in the hope that they will become more common. (Collins et al 2008; Case 2013, 53, 98 - 102.) (LOCOG 2012, 46 - 48.)

Not all positive impacts result from Olympic scale events or permanent structures. For example, in events of any size, rubbish can be cleaned from the surroundings leaving the area tidier than before. Of course, this is not a permanent solution but it can kick-start a change in the community or at least provide a temporary impact. Another way of leaving a positive legacy is by increasing people's knowledge about environmental matters and influencing their habits by providing them with an opportunity to try new things. For example, in World Gymnaestrada 2015 vegetarian food and drinking tap water were promoted and made possible in every venue, and using public transport and walking were made the most convenient choices for moving around. Hopefully having positive experiences about them in the event encourages changing habits at home. In addition, events can be held specifically to raise awareness about an environmental issue or to improve the environment. Events can also drive change in business practises of suppliers through requesting more sustainable products, organic food or renewable energy increasing their market share and encouraging new companies to enter the market (Jones 2010, 6 - 10). (Case 2013, 51 - 53.)

## **2.4 Short and long term impacts**

Many event organizers defend their lack of environmental management with the fact that events only last for a few hours or days, so they won't have a lasting impact on the environment. This is true with, for example noise and light pollution or temporary increase in traffic. However, many impacts can last for a long time. For example, plastic waste left in the environment lasts there for hundreds of years and might even travel with wind or water to damage other areas. Greenhouse gas emissions also last in the atmosphere much longer than the event, and the natural setting might take several weeks or even months to recover from the trampling from large crowds. Also the collective impact of several short term events in the same location might turn short term impacts into long term ones. For example, flora and fauna might not suffer too much disruption from a single weekend festival in their habitat, but if events are organized in the same

setting regularly, their living in the area might become impossible. (Case 2013, 58 – 65.)

## **2.5 Benefits of environmental management in events**

What makes considering the environment in event management worthwhile is that it might have knock-on effects, both positive and negative, also on other aspects. For example, remediating environmental damage caused by the event can be very expensive, but on the other hand, minimized noise pollution or traffic congestion can lead to positive response from the local population making them cooperative and willing to host other events in the future. The approval of the locals is important as large events often require hundreds or even thousands of volunteers to carry out many tasks during the event and it is best if they can be recruited locally. In addition, if locals do not approve of the event, there might be protests or even sabotage which definitely dampens the festival spirit. Positive image in the eyes of the increasingly environmentally conscious population can only be a positive thing for event organizers. In addition, decreased use of energy or materials results in direct savings, and if an effort has been made to minimize the amount of waste produced, the bill from the waste management company will be smaller. (Case 2013, 1, 5 – 7.)

On a global scale, international events that demonstrate sound environmental management practises for their international attendees might see benefits in increased tourism or the event organizer might build an environmentally responsible reputation which could be beneficial when bidding to host other large international events. Hopefully World Gymnaestrada's environmental performance managed to create that kind of reputation for the City of Helsinki and the Finnish Gymnastics Federation, so that they will benefit from it when bidding to host other events in the future. In addition, the environment also has an impact on the event making it important to consider also from that perspective.

## **3 EVENT PLANNING**

Events can be held for any reason imaginable and range in size from just a couple of people to hundreds of thousands. Duration also varies from just an hour to even several weeks. Regardless of the differences, organizing any kind of event follows some kind

of plan. There are several ways to reach any goal and approaches vary, but many similarities exist, as well.

### **3.1 Types of events**

The first thing to do in event planning is to define what kind of event is in question. There are several ways to categorize events, and sometimes the boundaries are vague or the event can belong to various categories. One way to classify events is a division to traditional, hybrid and niche events. Traditional events are distinguished by having a governing body, they are time honoured and recognized. Most sport events fall into this category, since they are recognized all over the world and there is always a governing body which sets the rules not only for the sport but also for how the event should be like. However, the event can also be organized for tourism or cultural purposes but known regulations are still followed. Niche events are the polar opposite of traditional events. They are innovative and completely new thus lacking former recognition and known rules. A hybrid event is somewhere in between; it uses some characteristics from a known event but adds new innovations to it. Many Finnish summer games, such as the Swamp Soccer World Championships belong to this category. Over time niche and hybrid events may evolve into a traditional event. (Mallen & Adams 2013, 1 – 6.)

Another common way to classify events is according to size and impact. Bowdin, Allen, O'Toole, Harris and McDonnel (2006, 14 – 18) divide them into four different categories; major, mega, hallmark and local/community events. Major events attract a significant amount of visitors and media coverage, and have potential to cause noticeable economic impacts. They are also usually international in scale thus featuring in yearly event calendars. Many sport championships or the Formula One Grand Prix belong to this category. Mega events are even more influential attracting global media and affecting whole economies. They also attract significant amounts of participants and audience from all over the world. The Olympics undeniably belong to this category as well as the FIFA World Cup and World Fairs. Hallmark events are usually of significant size but what sets them aside from major events is that they are very closely attached to a certain place and its unique characteristics. The Munich Oktoberfest and Rio Carnival are examples of hallmark events. Local and community events are much smaller in size and are mainly targeted for local audiences and often celebrate the surrounding area and

culture. They can also be organized to raise awareness about a topic related to the local area.

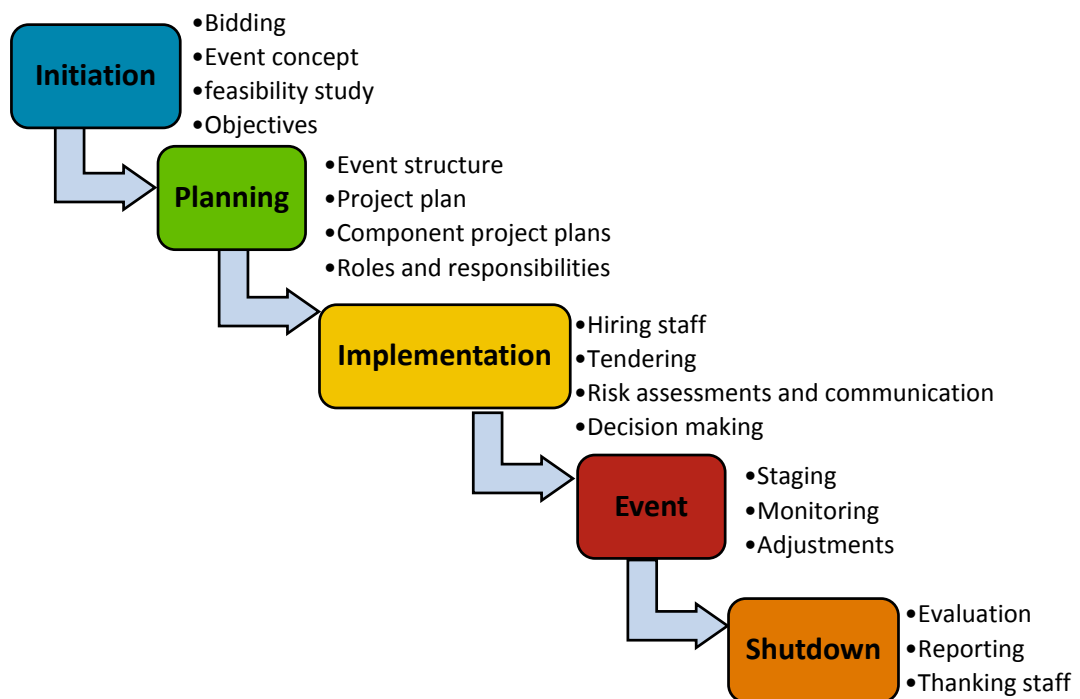
Events can also be classified by form or content and often include several subcategories. Cultural events include all kinds of art shows, music festivals and calendar events often tied to a religious or cultural theme. In Finland, cultural events are further classified according to their impact into local events, local events with tourism potential, national events and significant national events (Pasanen & Hakola 2009, 9).

Political events include, for example inaugurations and campaigns while educational events are often workshops, seminars and conferences. Sports events do not only include competitions but also player recruitment, and showcase events to boost the sport's visibility. Business events, sometimes known as MICA events (Meetings, Incentives, Conventions and Exhibitions) have a trade focus and include, for example, product launches but are sometimes not exclusive to people within the business. (Bowdin et al 2006, 18 – 22; Pasanen & Hakola 2009, 11 – 12.)

### **3.2 Project based planning approach**

Non-repetitive events are close to a text book example of a project with an initial situation, budget, a goal/product which is the event, and a clearly defined end point. Therefore, some sources use project management approach also for event planning. Kauhanen, Juurakko and Kauhanen (2002, 23) and Iiskola-Kesonon (2006, 8) state that project management is an appropriate way to plan any event. On the contrary, Bowdin et al (2006, 285 - 286) recognize that projects require a stable environment and a possibility to clearly define all aspects and assets in the beginning of planning for it to be an effective approach. Therefore, in my opinion, rigorous project management might not be the most suitable planning approach to very large events which are usually planned over several years and consequently, include many uncertainties and variables. Project management tools will, however, be useful for managing parts of the event, such as the different components and some project management tools, such as a Gantt chart or critical path analysis might prove very useful. The general project management process is presented in figure 1.





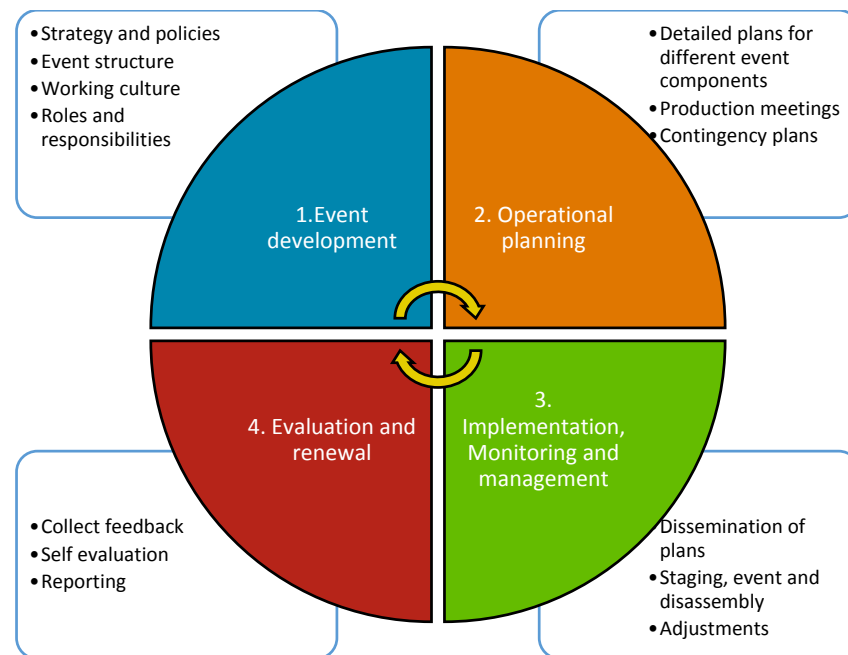
**FIGURE 1. Project management process (Bowdin et al 2006, 268; Kauhanen et al 2002, 26)**

According to Bowdin et al (2006, 266 – 267) project management in events can be seen as integration of the separate components, such as logistics and marketing into a cohesive combination so that they work together to achieve the objectives of the event. The project itself can be divided into five different phases; initiation, planning, implementation, event and shutdown (figure 1). On the other hand, Kauhanen et al (2002, 26) have eight phases in their approach which divides the previous initiation phase further to decision to start project planning, background assessments, initial project planning and a decision to start detailed planning. Risk assessment and feasibility study should also be done after the project plan, not in the initiation phase, according to them.

### **3.3 Event phase based planning approach**

Mallen and Adams (2013, 27) divide event planning into four different phases in which different activities are carried out (figure 2). In a way it can be seen as a continuation to the project based planning approach but it has been developed further and allows better for the event to develop over time, so in my opinion, it seems more suitable for very

large events and non-repetitive events which are organized over several years and contain more uncertainties and variables than smaller events.



**FIGURE 2. Event phase based planning process (Mallen & Adams 2013, 27)**

The approach starts with event development where the background is established, much like the initiation and planning phases of the project based approach (figures 1 & 2). It defines the goals and general rules, and distributes the responsibilities. Operational planning follows and means making several different plans of each event component in a way that the goals of the event, set during event development, are reached. The plans should be so precise and fit seamlessly together that it is possible to implement them as such to create a successful event. The implementation, monitoring and management phase happens during the staging of the event, the event itself and its disassembly and can be considered the hands-on part of event organizing. Evaluation and renewal phase is again more office work and is focused on producing information about the event to be able to improve when organizing other events in the future.

### **3.4 Event planning process**

In practice, no matter which approach is used the actual tasks are more or less the same. Just the name of the phase and some preferred tools vary. The event planning process can also combine the most suitable parts from both approaches.

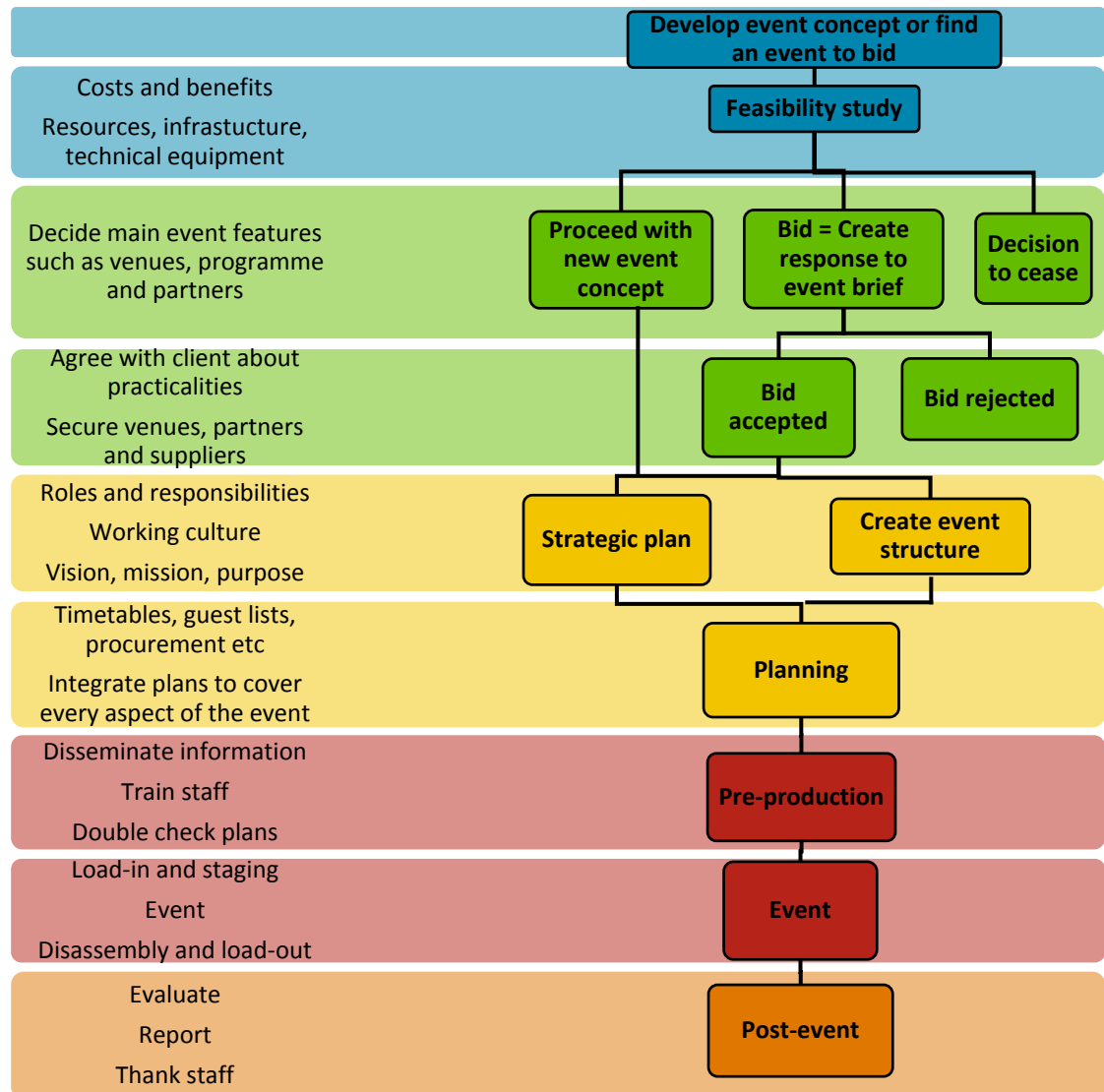
### 3.4.1 Background work

For many commercial event production companies, the event planning process starts with finding possible customers for which to organize an event (figure 3). Completely new events can be created, as well. When an interesting event is found the first thing to do is to assess the feasibility and any risks regarding the project. It includes, for example, identifying suitable venues, technical possibilities and funding. If the outlook seems positive and chances to win the bid realistic, a decision to bid can be made. (Soutar 2005, 8 – 10.)

For the bidding, the entity who wants the event organized usually has a set of requirements or a description how the event should be like, known as a brief (figure 3). This will help the event organizer to design a concept for the event on a general level. The smaller the event, the more specific the response for the brief can be but for the biggest events, such as the Olympics which are planned over several years, the details are decided along the way. However, there are some essential parts of the event that should be included in an event proposal, and they are probably required by every brief. Venues are one of them, and since they are an important aspect of an event, care needs to be taken when choosing them. Access to appropriate technologies or equipment needs to be assessed, as well as making sure that what is proposed complies with legislation. Money is also always a central question, so a draft budget needs to be included in the proposal where the money is divided between the different components of the event. When the financial matters are decided, suppliers or partner organizations can be found. For commercial partners, quotes for the products and services needed can be asked and added to the event proposal. Event owners are also interested in how the event will look and feel like from the perspective of the attendee thus style and design related ideas are included. (Soutar 2005, 10 – 14, 19 - 24.)

In addition, following the more corporate way of operating, an event also needs a strategy and policies which set the general goals and rules for the work ahead (Mallen & Adams 2013, 44 – 53; Bowdin et al 2006, 124). According to the event phase based planning approach, all these actions belong to the event development phase while the initiation phase of the project based planning approach covers the first actions. An initial project plan should also be made at the early stage of event production which can be

supplemented into a more concrete one once it is sure that the event will take place (Kauhanen et al 2002, 26).



**FIGURE 3. Event planning process in practice (Karjalainen 2015; based on Bowdin et al 2002, 199; Soutar 2005)**

Another important part of the event development phase is forming an event structure (figures 2 & 3). According to Mallen and Adams (2013, 37) an event structure establishes the formalization, meaning rules, policies and roles of individuals; complexity, including scope and hierarchy of committees; and centralization establishing the decision making power of the different committees and employees. For a small event, it can be as small as a project manager and possibly one member of staff, but for larger events

it can consist of several different committees with different purposes and types of members. For example, some events might require the support of the whole city or even country so a support committee is formed with people representing entities whose support the event needs for taking place. However, Bowdin et al (2006, 122) states that forming the event structure should only be done after the bid has been won, and Soutar (2005, 20) suggests that only a light version of the event team should be included in the bid.

### **3.4.2 Planning**

When the event has been won, the first step is to check the proposal again with the client to agree on how closely they want to follow it or if there are any changes. Practical matters, such as status meeting schedules should also be agreed. Another important task to do immediately is to secure venues, suppliers and artists promised in the bid to make sure that they are available for the event. If the event is seen as a project, this is where the planning phase in figure 1 starts and a project plan is made listing everything that is needed to deliver the event as promised and distributing the responsibilities to the different departments or committees. For all the event components, a separate plan, known as component project or operational plan, is made which gives more detail. Creating a strategy with mission, vision and purpose is also part of the planning phase in the project based planning approach. (Figure 3.) (Bowdin et al 2006, 122 – 134, 269.)

In addition to establishing a way of working and a schedule with the client, the same must be done with the staff working to plan the event. The staff probably have to be hired first, and responsibilities, meeting schedules and working culture established. The event phase based planning approach sees these activities belonging still to the event development phase. (Mallen & Adams 2013, 34 – 37, 44 – 53; Soutar 2005, 26 – 28.)

In the planning phase, the initial plan on how the event will look like and what will happen will slowly transform into stricter timetables, specific technical equipment and exact orders of performances until everything is covered to stage the event like was promised (Soutar 2005, 26 - 33). Mallen and Adams (2013) call this phase operational planning (figure 2). The aim of this phase is to produce written plans about each event component, such as transport or ceremonies, to such detail that they cover each aspect and action of the component making it possible for them to be implemented as such in

the event. In practice, this means that several different types of plans are needed to be made for each component for it to cover everything. Firstly, a logical plan, which is basically the same as a component project plan, can be made covering all items, actions, people and such to deliver the event component. A sequential plan, in turn, covers the actions attached to time, so it will be known in which order and when everything is done. Detailed plans cover all the smallest details to the amount of bread needed for catering or minute by minute task list for a ceremony. Other kinds of plans can also be made according to the needs of the event and in the end; they are combined to an integrated plan of the whole event component combining the different plans into a cohesive unit. All the plans are refined throughout the operational planning in production meetings which unite the different operators regarding the event, such as venue representatives, suppliers and planners of other event components which need to cooperate. Good plans always come with plan Bs and Cs, known as contingency plans, which are made to keep the event running smoothly just in case everything does not go as planned. They are made throughout the operational planning phase, and some of them might become the main plan already in this stage if the initial plan is discarded, for example, because of incompatibility with another component or too risky implementation. (Mallen & Adams 2013, 73 – 79.)

In comparison to the project based approach, the operational planning phase seems to cover the planning and implementation phases of the project since they contain all the same tasks but the operational planning allows for the plans to develop while some parts are already in the implementation (Mallen & Adams 2013, 69 – 70, 73 - 80). In the project based approach implementation covers the application of the plans such as hiring staff, tendering, monitoring the relevancy of plans and making decisions based on the comparison between plans and reality (figure 1). Reporting about the work in progress to stakeholders and active risk management are other essential parts of the implementation. In practise, implementation of the plans includes meetings, communication between different parties and revision of the plan if needed. Regular meetings with the planning team are important and serve as a platform to discuss any issues that have risen, to spread information about the meetings with the client and partners, and to cooperate between the different departments. (Bowdin et al 2006, 269.)

### 3.4.3 Staging the event

Staging of the event means transforming the place from its usual appearance to the event venue promised to the client. This work starts with the arrival of supplies, known as load-in, and possible construction of temporary structures. Decoration, installation of technical equipment and different checks follow and rehearsals are held. The checks and rehearsals are important since once the event has started, it is more challenging to change anything, order missing supplies or teach staff how to use the equipment. From the event organizer's point of view, staging of the event, the actual event and disassembly belong to the same phase and the tasks carried out during this time are very hands-on; consequently, the project based approach includes staging into the event phase while the event phase based approach includes it into the implementation, monitoring and management phase (figures 1 & 2). (Bowdin et al 2006, 269 – 270; Soutar 2005, 45 – 53.)

Before the actual staging of the event starts, Soutar's (2005) practical event planning approach has a pre-production phase when the plans are slowly starting to come together and transform into action. It is like the last moments of the implementation phase in the project based planning approach and the start of the implementation, monitoring and management phase in the event phase based planning approach. In the pre-production phase many new members of staff or volunteers, who are responsible for the practical side of the work during the event, start their work. Communication to transfer all the information about the plans, agreements and outstanding tasks is essential in this phase. Double checking that supplies have been ordered and external people, such as artists or speakers have their schedule and any other information should be done at this stage. In addition, making sure that the plans of the different departments fit together is essential and communication to suppliers, technicians and such about the surrounding activities around their own tasks has to be done since it might affect their work. For example, access to a certain entrance might be blocked for a while due to loading of other equipment or sound checking might have to be done at a certain time due to other activities on the stage. A useful way to fit all the pieces together is to hold a pre-production meeting where the different suppliers can meet each other and discuss any issues and clarify their plans and needs about the event. (Soutar 2005, 36 – 44.)

#### **3.4.4 Showtime**

If the previous phases of event organizing have been successful, the event itself will run according to the plan on its own. In practise, there will always be some minor issues during the event but if they can be solved on the spot or with just one phone call, the event organizer should be pleased with the work (Soutar 2005, 45 - 56.) In the event phase, there is quite little the project manager can do but monitor performance, manage any issues and trust the competence of the staff. The number of staff or volunteers and the actions carried out in different areas of the event increase exponentially making it impossible to make dramatic changes but smaller adjustments can still be made. Usually, collecting feedback from the attendees also starts already during the event. (Bowdin et al 2006, 270.)

#### **3.4.5 After the event**

After the actual event is over, the event needs to be disassembled and the site returned to its usual condition. If the event organizer has purchased some supplies that it does not need anymore, a way to dispose of them needs to be sought. Activities carried out at the event site are called on-site shutdown but also off-site shutdown needs to take place. It includes, for example, settling of outstanding financial matters, reporting, releasing contractors and dissolving the event structure. Communication about the event continues afterwards to different stakeholders. (Bowdin et al 2006, 270; Soutar 2005, 54 – 56.)

In the post-event phase, feedback is collected from the client and possibly from the attendees to improve in the following events. This part covers the same actions as in the evaluation and renewal phase, and the project management approach puts this together with the shutdown phase of the event (Mallen and Adams 2013, 147 -149). The event organizer's own evaluation is also valuable since they have the insider's view on how the event went. Reporting all the successes and failures along with the general outline of the tasks performed by the different departments is important because, even though the plans should explain how the event went, the reality might be different and the perspective obtained from the actual work done during the event phase helps improving in the future. The final task, which should not be forgotten, is thanking everybody who gave their time and effort to make the event happen. The shutdown phase resembles



more the implementation phase and the plans for the shutdown have already been made in the planning phase. In case of a repetitive event, the event shutdown may include preparation for the next event. (Bowdin et al 2006, 270, 369 – 371; Soutar 2005, 57 - 59.)

### **3.5 Typical components of events**

Depending on the type of the event, many different components need to be thought of for it to be a cohesive event. Regardless of the planning approach used, the components and what they include are the same. According to Mallen and Adams (2013, 35) the typical components for sport, recreation and tourism events are:

- accommodation
- accreditation
- ceremonies
- communications
- doping control and medical services
- catering
- hospitality services
- media management
- official management
- participant management
- results and awards
- spectator services
- logistics
- transportation

The content for most of these components is self-explanatory and the details depend on the type of the event and its goals. For example, participant management for World Gymnaestrada required volunteer attachés who helped the country delegations with practicalities while the array and availability of medical services needed to be much higher than for most events, considering the amount of participants and the type of activity they were doing. On the other hand, there was no need for results and awards

department. What is needed within each of the components is established in the operational or component project plans and the team member responsible for implementing the plan makes it more detailed as the event slowly materializes.

Jones (2010, 11) states that the main environmental impacts of events come from energy use, transport, water use and sewage, resource consumption and waste. It is clear that these impacts relate to all of the components to varying degrees. Consequently, it is important that the people who are responsible for planning the components are aware of their impacts and knowledgeable about the ways to reduce them.

#### **4 SYSTEMATIC ENVIRONMENTAL MANAGEMENT IN EVENTS**

Management systems are a systematic approach for companies or organizations to establish a framework to control its policies, set itself objectives and the means to reach those objectives about a certain aspect of its business (BSI; CQI). The use of management systems started with large manufacturing corporations aiming to improve the quality of their products to gain competitive advantage. Later management systems have been developed to improve other aspect of businesses, as well, such as health and safety or environmental performance, and are also widely applied to a variety of businesses. Nowadays also service providers, and recently even events, have established certified management systems.

A common way for a company or an organization to establish and implement a management system is by following a set of rules known as a standard. The best known standards have been developed by ISO (International Organization for Standardization), such as the ISO 9001 quality management system standard and the ISO 14001 environmental management system standard. In addition, there are national standardization organizations, such as ANSI (American National Standards Institute) or BSI (British Standards institute) which have developed their own management system standards. It is also possible for a company to develop its own management system without following a standard. However, then it will be more difficult for the stakeholders to know how the company manages its performance as there is not a known set of requirements behind it and no possibility to have the system certified by an independent third party. (Sayre 1996, 2 – 10.)

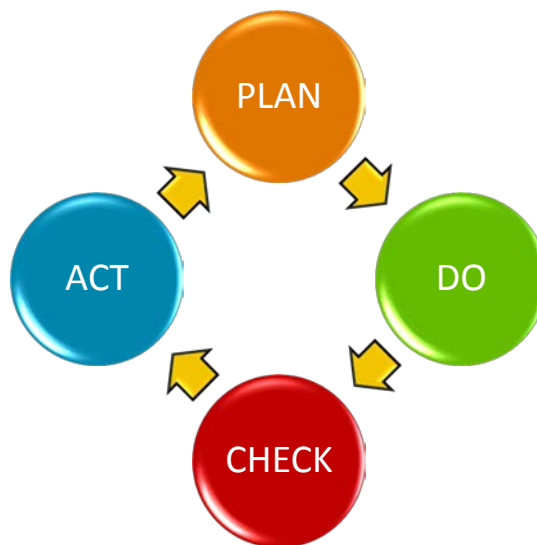
Management systems' main benefits to the companies include increased efficiency, better risk management and more consistent performance leading to better customer satisfaction (ISO; Pesonen et al 2005, 13-14; Ekokompassi 2015). They also help the company to better understand the way it operates making it easier to find potential for improvement (Pesonen et al 2005, 13-14). Hence, it is possible to be proactive rather than reactive with regards to accidents and minimize unnecessary operations or use of materials, water and energy. This can lead to significant savings as accidents of any kind can be very costly and resources are expensive. Certified management systems following an international standard might also help a company to expand to new international markets or just to win a tender with a local customer, and if the standard requires compliance with relevant legislation, like the ISO 14001 does, it might make cooperation with the authorities easier (Sayre 1996, 1-3, 24-25). In case of events like World Gymnaestrada, the benefits of having a certified environmental management system include enhanced image and stakeholder satisfaction as well as efficient use of resources since with very large events it might be difficult to know where to concentrate the efforts and resources on. The organizers of the event will hopefully benefit from the management system also in the future when applying to host other events as environmental performance is becoming more popular as a criterion in the bidding; therefore being able to show proven good performance in previous events might be a beneficial factor in tight competition. (Ekokompassi 2015.)

#### **4.1 Ideology of management systems**

Management systems are based on the idea of continuous improvement of performance. In order to identify improvement potential, firstly, it is important to assess the current state of the performance, identify the most significant aspects and impacts, and what kinds of processes and procedures there are regarding those aspects. By knowing all this, it is possible to set objectives, measurable targets and actions to reach the targets. Since every company or organization is different, the basis for their management system is also different even from other similar businesses. Also, since the companies set their targets by themselves, the use of management systems does not necessarily guarantee a superior performance to those who do not use a management system, like it is with different labels who actually demand certain level of performance. Therefore, when comparing companies' performance, for example, regarding environmental protection, it is important to not only look whether they have a certificate or not, but also what kind

of targets and actions there are that have enabled the company to achieve the certificate. (Pesonen et al 2005, 11 – 12.)

The ideology for continuous improvement is often visualized with the PDCA (Plan-Do-Check-Act) cycle, also known as the Demming's cycle (Figure 4). The planning phase consists of identification of the most significant aspects, setting the targets and the actions to reach the targets. The targets should be measurable and the actions to reach them should have a time limit by which they will be accomplished along with a person responsible for their implementation. With non-repetitive events it might be very difficult to measure the improvements by traditional metrics or statistics, so more innovative ways might have to be sought. For established companies, or even repetitive events, it is easier to set measurable targets as there is possibility to gather base data from previous performance but this is not possible for a non-repetitive event. To overcome the issue, World Gymnaestrada 2015 set many of the actions so that it was possible to assess them as yes or not done (Ympäristöohjelma 2015). Other suitable targets for non-repetitive events that were also used at World Gymnaestrada are percentages of total, for example, the percentage waste recycled out of the total amount produced. That way, ambitious, meaningful and representative objectives without a way to measure them were developed, but there was a way to assess whether or not improvement was made. (Pesonen et al 2005, 20 – 26, 51 – 52.)



**FIGURE 4. Plan – Do – Check – Act- cycle (ISO 14001)**

The second step is act where the actions set in the planning step are carried out (figure 4). In order to be successful in that, it is important to communicate the targets and the

actions required to those people responsible for implementing them. If the people are committed to the matter, they might even find more actions. Consequently, efficient communication and keeping environmental protection high on the agenda are important and definitely worthwhile. Training or guidance might also be necessary for the people to be able to conduct their tasks, thus the need to provide them with training should be assessed. Sometimes written instructions or tips might suffice for training like was often the case at World Gymnaestrada. (Pesonen et al 2005, 53 – 57.)

The third step is checking where it is evaluated whether or not the targets were reached (figure 4). If the targets were tied to a deadline by which they should be reached, they can be checked as soon as the deadline has passed one by one. The performance as a whole needs to be checked comprehensively from time to time to identify if the measures taken have been effective, if the targets have been reached and if new targets can be set. These checks are called audits. The management of the organization can carry out their own management review but the checking can also be done by someone else in the organization. In that case, the check is called an internal audit. An independent third party can also check the performance of the organization and its compliance with the management system criteria. That is called an external audit, and if the management system follows a standard which is certifiable, a passed external audit will lead to the certificate. Many of the larger management system standards, such as the ISO 14001, require the organization to conduct all three different types of checking. The standard which World Gymnaestrada 2015 used only requires an external audit which is good for events because the only time comprehensive checks can be done on an event is during it, leaving no time to act if nonconformities or improvement potential are found. Also the event itself and the time before it are very busy for the organizers making participation in three slightly different but very similar checks very inconvenient. However, something like management reviews were carried out during the planning phase of the event as the documents needed to be checked against the event planning to guarantee that all the actions were executed, and to identify if more could be done. (Pesonen et al 2005, 66 – 75; Ekokompassi 2015.)

The last step is act where action is taken if nonconformities with the management system criteria are found, the operations of the organization have changed significantly making a part of the management system redundant or the targets have not been reached. In the best case, the performance regarding some aspect has improved so much that it

is not a significant aspect anymore, or the organization has resources to concentrate on another aspect; then the management system can be modified to accommodate the changes. If targets are reached, or they do not seem ambitious enough anymore, the act step is a good time to rise them. In case of non-repetitive events only one PDCA cycle is conducted during the whole lifetime of the event and its organizing committee. Therefore, the act step does not have a purpose for the event at hand. However, some entities usually organize also other events, so the things learnt at the check step can be used to improve the performance in the next events even though they might be different. On the other hand, there are smaller PDCA cycles rolling inside the system as, for example, is the case of regular updating the environmental programs and when plans are becoming more precise making it possible to check the significance of the actions and act accordingly, if need rises. (Pesonen et al 2005, 90 - 96.)

## **4.2 EcoCompass**

The criteria for an EcoCompass environmental management system follow closely the main requirements of the ISO 14001 standard but with less guidance or sub requirements. This is compensated by the fact that the management system is set up in cooperation with a professional consultant who makes sure that the system is established in an appropriate way. The lack of sub requirements is also beneficial for events as they vary very much in their aspects and ways they work making it easier to fulfil the requirements in a way most suitable for them. Another difference between the two standards is that EcoCompass concentrates more on the practical side of the management system while the ISO 14001 demands more background work and establishing support procedures for the system (Niinivaara 2015). The lack of the background work is beneficial especially for non-repetitive events as there are no existing procedures from previous work and having to establish and document them to use them only once means tedious work for very little benefit. Concentrating on the practical side, the management system does not unnecessarily complicate the event organizing or create large amounts of extra work. The help of the consultant along with many readymade formats for the documentation are the other main ways how the EcoCompass differs from ISO 14001.

### 4.2.1 Criteria

It should be noted that there are two sets of criteria within EcoCompass, one for companies and another for event organizers. The basis for both sets is the same, and if read alongside the ISO 14001 standard, it can be noted that the components in all three are very similar. The 10 criteria for the EcoCompass event management system are (Ekokompassi 2015):

1. The event acts according to environmental laws and regulations.
2. The event has appointed someone as responsible for environmental matters.
3. The event organises an environmental assessment where the initial situation is charted and the most significant environmental impacts ensuing from the company's operations are assessed.
4. The event has its own environmental policy which forms the basis for the environmental goals.
5. The key persons appointed by the event for environmental issues take part in the environmental training provided by EcoCompass. The key persons instruct the rest of the staff to take environmental issues into account in their actions.
6. The event has a waste management plan. Waste is sorted at least according to the regional waste management regulations.
7. The event records its hazardous waste, stores it safely and delivers it for due treatment.
8. The event has a list of all chemicals used. Operational safety bulletins are available for the staff and the employees have been primed for the safe use of the chemicals. The company stores its chemicals according to regulations.
9. The event prepares annually an environmental programme which includes goals and measures in the following sub-sectors:
  - a. Reducing the amount of waste
  - b. Saving energy and changing over to green electricity.
  - c. Steering the procurements in an environmentally-friendly direction.
  - d. Taking environmental issues into account also in products and services acquired through subcontracting.
  - e. Improving the material efficiency in product development, product manufacturing or in service processes.
  - f. Intensification of logistics and commuting.

g. Environmental communications or some other sector defined together with EcoCompass.

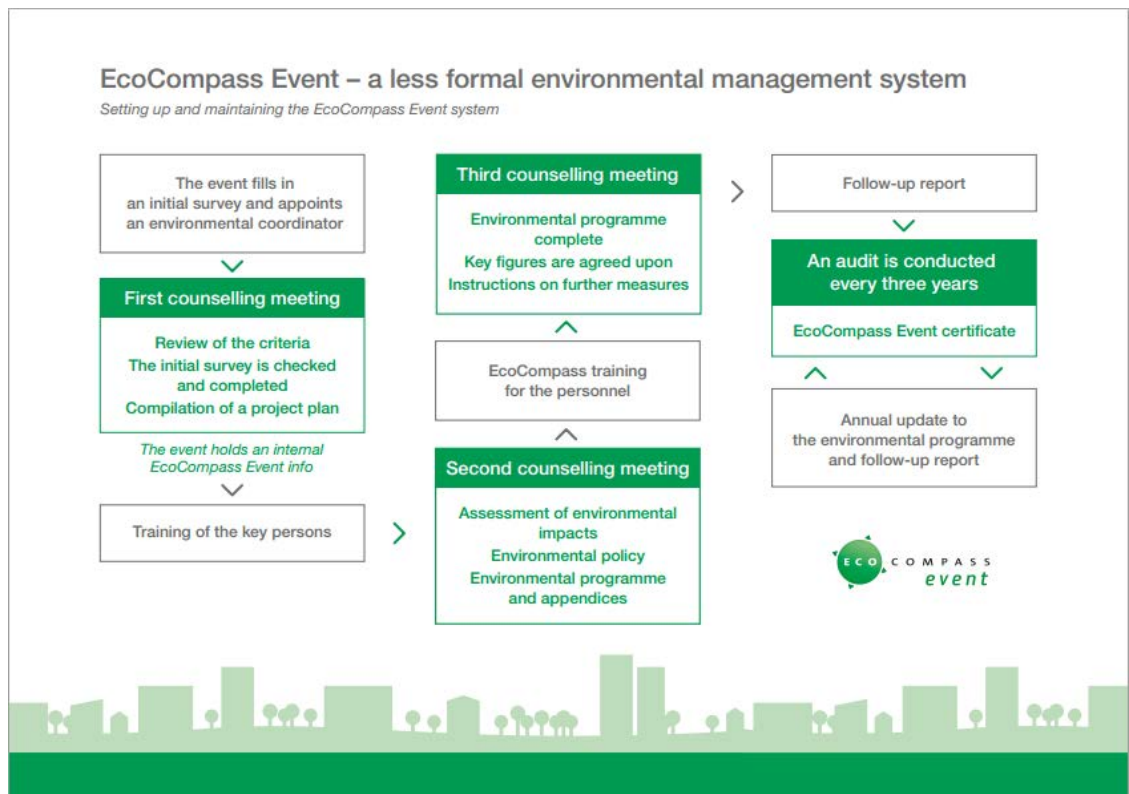
10. The event reports to EcoCompass every year about the outcome and fulfilment of goals and key ratios describing the company's environmental actions. The monitoring report is available for the company's staff.

What makes EcoCompass resemble also the EMAS directive is the requirement to submit a report about environmental performance. There is a ready-made format for it. EMAS requires the report be available to the public but with EcoCompass, it is enough that the staff have access to it. (Ekokompassi 2015; BioIntelligence Services 2009; Pesonen et al 2005, 17)

#### **4.2.2 General process**

The process of establishing the environmental management system starts by filling out a questionnaire about the current environmental performance of the event and assigning a person who is responsible for the environmental performance like illustrated in figure 5. The questions deal with the way the event has managed the main environmental aspects which are common to all events, such as waste generation or energy consumption. After that, the first meeting with the consultant can be arranged where the assessment can be supplemented, the criteria clarified and a general plan about the environmental work made (Ekokompassi 2015; Alkukartoitus 2014).





**FIGURE 5. General EcoCompass process (Ekokompassi 2015)**

After communicating to the whole organization about the decision to set up the management system and training of the environmental coordinator, the second meeting with the consultant can be arranged (figure 5). In that meeting the consultant and the coordinator determine the most significant environmental aspects and impacts of the event and evaluate the event organizer's possibilities to influence the impacts. The impact assessment helps identifying the focuses of the environmental work and therefore serves as a basis for the environmental policy. The policy is a public statement where the organization commits to improving the chosen aspects of its environmental performance. The third task done in the meeting is the first version of the environmental programme which includes targets, and actions on how to reach the targets along with deadlines and responsible persons to implement the actions. The programme must be approved by the consultant and top management of the event organization. When that is done, the organization is allowed to use the EcoCompass Event Candidate- logo to communicate externally about their ongoing work to implement the EcoCompass environmental management system. There is no such stage in the ISO 14001 standard but it has been specifically made for event organizers as it is valuable in their communication to different stakeholders. (Ekokompassi 2015.)

Between the second and the third meeting with the consultant, the environmental coordinator trains the rest of the staff to take the environment into consideration in their work and introduces the environmental programme to them. Hence, everybody knows what their responsibilities are and can have an influence on the programme, as well. In the third meeting the environmental programme is updated and the key performance indicators are agreed (Figure 5). The indicators are different kinds of data that the organizer agrees to submit about the event's environmental performance. The indicators can be related to, for example, amount of waste produced, water consumption or the amount of ecolabel products used. In addition to these three meetings, it is also possible to communicate with the consultant as need raises, and especially for larger events, more meetings can be arranged. The process is also customisable to suit the event in other ways, and the other requirements in addition to the ones in figure 5, the event organizers can fulfil at a time most suitable for them. (Ekokompassi 2015.)

If the event is repetitive, the organizers commit to submitting a report about their environmental performance to EcoCompass and to update their environmental programme yearly (figure 5). The event is audited once every three years and at least a part of it must be done during the event to check the practices at the event. Hence, environmental management system made for World Gymnaestrada was only audited in July 2015 although the work had already started in 2013. There was also no official requirement to update the programme yearly, since it is only required for certified events, not the ones in process of establishing the system, but in practise it was checked for accuracy and relevancy every couple of months as the event organizing progressed.

### **4.3 Other common standards**

EcoCompass is not the only standard event organizers can use to systematically manage the event's environmental performance. However, it is the only environmental management system standard specifically developed for events that is currently available in Finland. Other possibilities include using a general environmental management system standard for any kind of operation or a sustainability management standard specifically developed for events, which also takes into consideration social and economic sustainability.

### 4.3.1 ISO 14001 & EMAS directive

The ISO 14000 series of environmental standards was first published in 1996 and has been updated a few times since then. The most famous one of the series is the ISO 14001 Environmental management systems - requirements with guidance for use, while the other standards in the series give more instructions on, for example, environmental communication, monitoring and eco-design (ISO 14001; ISO). It is evident from the standard's requirements to document procedures and assess previous performance that it has been originally designed for regular companies which do continuous business, so in my opinion it would be very difficult for a non-repetitive event like World Gymnaestrada to implement it as a whole, even though it does say in the description of the standard that it is suitable for any type or size of organization (ISO). That said, the IAAF World Championships in 2005 did have a certified ISO 14001 environmental management system which also complied with the EMAS directive (Koivusalo & Heinonen 2005, 5).

The EMAS (Eco-Management and Audit Scheme) is a system developed by the EU to manage and audit environmental performance of companies and organizations within the European community. There is an EU decree 761/2001 where it is set and the Finnish legislation has adopted it by setting the EMAS act 914/2002 (Pesonen et al 2005, 17). It is voluntary to follow the scheme, but if an organization or company wishes to do so, it needs to establish an environmental management system according to the ISO 14001 standard, and in addition to submit a verified public statement about its environmental performance much in a same way as companies are required to submit financial statements. For the effort, the organization will be registered into the EMAS network and issued an EMAS logo to use in its communication. EcoCompass follows this with the requirement to also submit a final report on performance before the certification process is complete. According to EMAS' own assessment, the relation of EcoCompass to it is very close (Ekokompassi 2015; BioIntelligence Services 2009). (Pesonen et al 2005, 17-18.)

### 4.3.2 BSI 8901 & ISO 20121

Unlike the ISO 14001, the BSI 8901 and the ISO 20121 Event sustainability management system standards are only applicable for events and take a broader stance on sustainability instead of only environmental matters. The BSI 8901 is, according to Case (2013, 126), the first management system standard that takes environmental management into consideration in event planning. The first version of it was only published in 2007 which indicates how short the history of systematic sustainability management in the event industry is. The current version of it is from 2009 and it served as the basis for the ISO 20121 which was published in 2012 to coincide with the London Olympics, which is probably the most famous event that has used the management system. These two standards are very alike and set to merge in the near future (Case 2013, 130 – 133, 146 – 148,)

These standards use as their basis the same ideology of continuous improvement and the PDCA cycle as most standards and their focus is on the Brundtland report's definition of sustainability (figure 4). It means that the event must be economically, socially and environmentally planned and implemented so that it takes into consideration the needs of the present generation without compromising the possibility of the future generations to satisfy their needs. The ISO 20121 standard recognizes that the supply chain is a significant part of any event where every aspect of sustainability should be considered along with engaging and communicating with stakeholders. Consequently, these themes have been given their own sections in the standard. Unfortunately there was no possibility to read the whole standard to evaluate its suitability for non-repetitive events and to understand the more specific requirements. However, from what can be gathered from the summary and case studies from different sources, it seems like the standard is correctly focused on the peculiarities of the events which the ISO 14001 standard fails to address, and also, it is less dependent on improving previous performance but encourages to find improvement potential in the most significant aspects of the event planning, such as risk control or supply chain, instead. It also encourages seeking opportunities to cause positive impacts which can be significant in case of events, such as the positive legacy left on the site of the event or awareness raised among the attendees. Therefore, in my opinion, it seems like a suitable standard for non-repetitive events, as well. (ISO 2012; Case 2013, 126 – 129, 146 – 148.)

#### **4.4 Other alternatives**

Although having a management system is a comprehensive way for an event to manage its impacts, risks and performance as a whole, it is not the only way. An event can focus on a more narrow area of its operation or just one main impact if it wishes. This, of course is possible with a management system, as well, since the organization can set the scope of the system as it pleases but then, in my opinion, the biggest benefit, the comprehensiveness, is lost. On the other hand, just concentrating on one thing might be better if the event organization does not have experience with management systems as setting up one without complete understanding of them can be daunting. Doing at least something to improve performance is definitely better than doing nothing. EcoCompass addresses the possible lack of experience effectively by providing support and ready-made tools to set up the system leading hopefully to good quality, comprehensive management systems. The following examples of tools can be implemented on their own to improve an event's environmental performance, but they could be useful as part of a management system, as well. According to Collins et al (2008), a combination of different qualitative and quantitative methods to make environmental decisions would be ideal since qualitative methods can highlight pressure points on which to concentrate efforts while quantitative methods provide a measurable tool to compare impacts or effects.

##### **4.4.1 Carbon and ecological footprints**

Calculating carbon footprints is a common method used by many companies to demonstrate environmental consideration. However, it is only a way to show the greenhouse gas emissions of a product or an operation, and as such, nothing is actually done to reduce them. The footprint's main benefit is that it illustrates where the biggest impact comes from making it possible to concentrate reduction efforts in the most efficient way. Being a quantitative method, calculating footprints yields results which can be compared to other events or reference values, as long as the same assessment method was used, which is useful for decision-makers. In addition, seeing the impacts of their actions in comparable numbers might encourage the event attendees to choose more environmentally friendly options and learn about more sustainable choices. (Collins et al 2008; Jones 2010, 17.)

The main flaw with carbon footprint is that it only considers greenhouse gas emissions. Usually the main gases are included in the calculations, not only carbon dioxide. However, a product might have other environmental impacts than greenhouse gas emissions that carbon footprint does not take into consideration. Something can be very climate friendly while causing significant water pollution or toxic waste. This issue has been addressed in the more comprehensive ecological footprint which calculates the use of resources to create a product (Collins et al 2008). They do not seem to be as commonly used as carbon footprints, probably due to complicated and labour intensive calculations, but they would provide the event goers or organizers a more solid foundation for decision making. However, the ecological footprint for the 2004 and 2007 FA cup finals were calculated and they were able to clarify where the biggest impacts of the event came from resulting in improvements in the practices in the following years (Collins et al 2008). (Jones 2010, 17 – 20.)

What makes calculating different footprints inconvenient for events is that calculators which can be found online are very general and do not take into consideration the details used in the event. In addition, there are no appropriate standards, and many uncertainties and dynamic decisions are made constantly, making designing an event specific calculator challenging (LOCOG 2012, 19; Collins et al 2008; Jones 2010, 18). For example, the origin of food items or growing method can have a big impact, such as tomatoes grown in a greenhouse or in open air, and locally or far away, and whether equipment is bought or hired makes a difference. The event organizer would have to collect that kind of data for all the products used to make a comprehensive calculator making building one very expensive and complicated. Despite the best efforts, it can still only give an estimate or indication of the emissions. In addition, a non-repetitive event could not use it in the future; therefore, it might be too much effort for the benefit received. On the other hand, since much of an event's environmental impacts come from people's behaviour, it might be worthwhile to make a footprint calculator for a limited amount of products or services in an aspect of event where the attendee's decision has a big impact. Transport or food options could be useful targets to show them that their decisions do have an impact but counting the whole footprint for the event might not be worth it. The London Olympics 2012 and 2005 Helsinki IAAF World Championships designed their own carbon footprint calculators and although they recognize that they are imprecise and not exhaustive, they were a valuable tool for them to reduce their

emissions (LOCOG 2012, 19 – 24; Koivusalo & Heinonen 2006, 8). (Jones 2010, 18 – 21.)

#### **4.4.2 PESTE approach**

A more comprehensive analysis than an ecological footprint would be a PESTE analysis. PESTE stands for Political, Economic, Social, Technology and Environment. Sometimes an L is added to stand for Legal. Hence it takes into consideration the whole sustainability of a decision, not just the environment and due to the social aspect, can help to better evaluate the impact on image, as well. Traditionally this kind of analysis is used by companies to analyse the environment they work in or the implications of a new project or product. The letters can be subtracted or additional letters describing other aspects could be added to suit event planners' needs. (PesteAnalysis.)

For large events, like World Gymnaestrada, this kind of comprehensive approach could be useful when making major decisions and it would incorporate taking the environment into consideration every step of the way, along with other important aspects, such as, economics. Large events require taking so many things into consideration that having the letters to guide the thinking could help leaving no aspect overlooked. Making well-grounded and thoroughly thought of decisions during planning can avoid having unfortunate surprises during the event leading to improved quality and smooth running of the actual event. This kind of approach might increase its importance in the future as the International Olympic Committee has recently announced that it will pay closer attention to the human rights and reduced bureaucracy in the future bids to host the Olympics, along with its already existing environmental standards (IOC 2014). These same criteria might trickle down to other sport federations making them more common in the event industry.

#### **4.4.3 Ecolabels**

Since the use of a management system does not guarantee superior performance, a better option might be to create an ecolabel for events where the requirements to get one would be ambitious enough for an event to be considered environmentally friendly. This would be especially useful and encouraging for non-repetitive events since they only really

complete one PDCA cycle in their operation, meaning that the aim regarding environmental performance needs to be high straight away. The requirements set to get the label could include, for example, a certain percentage of renewable energy used or biodegradable plates in catering. Internationally there are some green festival awards, such as A Greener Festival and Yourope Green'n'Clean awards or EcoLogo certificate that can be obtained if certain criteria have been met (Jones 2010, 26). Something like that has been done by Sport Finland with their Liikunnan Ekomerkki, which is an ecolabel for sport club's operation as a whole but one requirement is recycling at events (Wuolio et al 2008, 7).

#### **4.4.4 Cost-benefit tables**

Cost-benefit tables are commonly used in finance to evaluate the viability or attractiveness of different options from monetary point of view. According to Case (2013, 102 - 103) these tables work well also in event management when comparing the feasibility of different options in the planning phase. Their advantage is that they tie different action's impacts on money which most event managers are used to viewing anyway, and to keep control of the budget. It is possible that a bigger initial investment actually saves money due to avoiding other costs, especially with regards to material efficiency or waste reduction efforts.

The challenge in using them in environmental decision making is that many decisions might have intangible benefits which are difficult to tie with a monetary value in order to get a fully representative analysis. Good image does not have monetary value and neither does avoided greenhouse gas emissions for events since they do not participate in the carbon trade scheme. To solve this problem, coefficients can be given to the intangible benefits. This, however, requires estimating coefficient values for the different benefits which might be difficult and subject to opinion differences. Benefits which do have monetary value would be, for example, amount of waste collection fees or electricity costs.

In World Gymnaestrada this method could have been used, for example, when deciding solutions for the participant lunch drinks. Options could have been to use cups of different kinds, bottled water or filling existing water bottles from tap. Then, what needed to be done would have been to determine the costs involved in each option, such as the



price of cups or installation of water taps as well as the staff needs to execute each option. Those costs needed to be compared to the tangible benefits, such as, waste bill reduction and give coefficients to intangible benefits like being able to improve material efficiency and promote the use of tap water, which were both objectives of the environmental programme (Ympäristöohjelma 2015). This could have given numerical implications of all the options and evaluation could have been made whether the money invested would be worth the impact made on improving the environmental performance.

#### **4.4.5 Key performance indicators**

Key performance indicators are measurable values, such as energy consumption, which are used to monitor the event's environmental performance. They are especially useful for repetitive events because they can make visible if improvement has been made. If the measuring method is the same, comparisons can also be made between different non-repetitive events. They are a way to demonstrate documented evidence to stakeholders about improvement, and they often relate to the main impacts. In addition, they are justified by the thought that what can be measured, can be managed, and of course an event organizer wants to show as favourable records as possible thus being likely to put more effort on minimizing the impact. According to Case (2013, 164 – 184) the most common key performance indicator tools for events are:

- ISO 14031 Environmental performance evaluation standard
- Manual on the Preparation of Indicators for Eco-efficiency (United Nations 2004)
- Environmental Key Performance Indicators (Defra 2006)
- Event Organizer's Sector Supplement (GRI 2012)
- Global Reporting Initiative sustainability performance indicators (GRI 2012)

All these protocols are aimed to help identify what kind of indicators the event organizer, or any business operator, should measure so that they are relevant to the activity, and how the measurements should be made in order for them to be representative and comparable to others. Of course, it is not obligatory to follow any protocol but just decide what and how should be measured regarding the most important environmental aspects. Sometimes, especially if the event is organized in a rented venue, the equipment

of the venue might set limitations to the indicators which could be measured. The same is true with work practises of suppliers if information is required from them.

#### **4.4.6 Guidelines, protocols and checklists**

Different guidelines, protocols and checklists have been made for many different types of events from conferences to music festivals. They can be very useful for event organizers to gather ideas for their environmental work as the main areas where impacts occur are often the same for similar types of events, and some are even the same across the whole event industry. They do not provide as event specific actions as an environmental management system does as they lack the environmental impact assessment which is done for the particular event in question to find out its special conditions. Another benefit about carrying out an impact assessment is that then the actions target the most significant aspects of the event on which the organizers can have an influence. Some of the most recognized guidelines and protocols according to Case (2013, 141 – 142, 149 - 158) are:

- Sustainable Events Guide (Defra 2007)
- The Hanover principles: Design for sustainability (McDonough 1992)
- Copenhagen sustainable meetings protocol (2011)
- Staging Major Sport Events: The Guide (UK Sport 2005)
- The sustainable Music Festivals (Brooks et al 2007)
- The Green Meetings Guide (UNEP 2009)
- Green Meetings Report (CIC 2004)
- Manual on Sport and the Environment (IOC 2005)
- Greener events (Harding & Malone 2010)

Guidelines done for a specific area or country can also provide helpful tips about local regulations and legislation which might get overlooked otherwise. For example, the Neat Event! –manual (2014), which was done for the events in the capital region of Finland, and Ekologisen ja turvallisen yleisötilaisuuden järjestämisopas by Jari Lampinen (2011) combine regulations with general tips on how to reduce the main impacts of most events.

In addition to different guidelines, there are networks where event organizers can share their tips and get new knowledge about greening their event. They even organize seminars bringing the event organizers and the experts together. Examples of such networks are Sustainable Events Planner, GreenBase and A Greener Festival (Jones 2010, 33).

## **5 MATERIALS AND METHODS**

Since the purpose of this thesis was to gain a holistic view of the conflicts between the environmental management system and event planning, explanatory case study was chosen as the research method. Explanatory case studies are most useful when trying to explain relationships of different contemporary phenomena - over which the investigator has little or no control - in its environment (Yin 1996, 1, 14). Such a phenomenon is the environmental management system in the environment that the event planning creates.

### **5.1 Research strategy**

The main question to answer was what makes it challenging for non-repetitive events to comply with the EcoCompass criteria. Initial propositions were that organizing a non-repetitive event is very different from the way the traditional users of environmental management systems, manufacturing companies, operate, and that the history of systematic environmental management at events is relatively short, meaning that incompatibilities are likely to exist. To answer the main research question taking into consideration the propositions, the sub questions about how events are planned and how an EcoCompass environmental management system is established needed to be answered. Both these questions are "how" and "why" questions, which suggest a case study as the most appropriate research method (Yin 1996, 6). Only one case, World Gymnaestrada 2015, was used but it embedded two different units of analysis, the event planning and the environmental management system, and the combination and analysis of the two together revealed the challenges.

In addition, to increase the external validity of conclusions and to make analytical generalizations about the challenges, benchmarking to other non-repetitive events also using EcoCompass was made. Analytical generalization means that a theory developed from the findings of one case study are compared to the results of other cases and if they

confirm the theory, replication can be claimed (Yin 1996, 30 – 32, 36). Generalization can improve the usability of the findings for future events. Finally, improvement suggestions for the EcoCompass criteria along with useful tips for event planners and consultants to avoid the challenges were developed.

The scope of the study reached to cover the whole planning and production of the event, from the initial idea to apply to host World Gymnaestrada in 2007 until the very last requirement of EcoCompass, the final report, was successfully complied with in September 2015. All the requirements of EcoCompass were, therefore, included but what were not, were any challenges in implementing the environmental programme. This is due to the fact that although having an environmental programme is one of the requirements, the content of it depends solely on the event organizers. Hence, challenges in implementing it exist because of either unsuitable actions chosen for the programme or unforeseen changes in the circumstances during event planning but not due to incompatibility of the EcoCompass criteria itself.

Since the purpose of this study was to find and solve the structural incompatibilities, another aspect which was not included was challenges that might have come from people acting in a less than optimal way when fulfilling the criteria. However, things that might cause people to act in an unsuitable way as a consequence of a circumstance that the event planning and EcoCompass create were included in the research. The actual research was done between March and October 2015.

## **5.2 Data acquisition**

Due to the nature and purpose of the research, the main data collection method was interviews although some of the background information regarding the two units of analysis was derived from written internal documents, such as the World Gymnaestrada environmental programme. Since there were no previous similar studies to use as reference or to gain background information on challenges that non-repetitive events face with EcoCompass environmental management system, the only suitable interview technique was semi structured thematic interviews. They yield open answers around the desired themes which is exactly what was needed since there might be a wide variety of issues that a stricter interview protocol might not be capable of revealing. Open-ended questions also allow asking for opinions and improvement suggestions which

were important information when developing the overall improvement suggestions. So far, the people who are working with non-repetitive EcoCompass events are relatively few, so the aim was to interview all the environmental coordinators of non-repetitive events which have either already certified the system or are in process of setting it up. It was only possible to reach the environmental coordinators of Women's Floorball World Championships 2015 and Lahti Nordic Ski World Championships 2017. In addition, the current EcoCompass consultants were interviewed. The names of the interviewees and the themes used for the interviews can be found in appendix 1. The interviews were made between August and October 2015 and written notes were made about them although issues had also been discussed earlier during event planning.

To gain a more comprehensive understanding and to improve data quality, people from different positions were interviewed (appendix 1). Representatives of World Gymnaestrada 2015 shared their knowledge of both the event planning process and the environmental management system process and the environmental coordinators of other non-repetitive events shared their experiences with EcoCompass. All these people provide a valuable insight from inside the organizations using EcoCompass. On the other hand, the EcoCompass consultants have an in depth understanding of the management system, its structural incompatibilities with non-repetitive events along with the challenges they have faced with it in their work with several different events. Most of the events they have worked with have been repetitive due to it being the more common type, but their experiences included non-repetitive events, as well. Experience gained from repetitive events should not be undermined since challenges may be applicable to non-repetitive events, as well.

Due to my involvement in establishing and implementing the EcoCompass environmental management system for World Gymnaestrada 2015, participant observation was another data acquisition method. Essentially, it means that personal experiences and observations were used as data. Participating in the process helped to gain valuable deeper understanding about how the management system works in the context of event planning that might have been challenging to obtain using other methods, even direct observation. Understanding the processes well was especially important since the study topic was so new that there was no existing conceptual framework which could have provided guidance. It also helped in the theory development phase as well as in defining

the scope and the propositions for the study. The information from participant observation was also useful when deciding the themes for the interviews. In addition, it was possible to ask more specific questions from the environmental coordinators of other events to confirm if the other events had faced similar difficulties.

To further improve the construct validity of the study, the interviewees were informed beforehand about the general purpose of the interview and key informants were asked to review the thesis before submission to guarantee that there were no mistakes on the interpretation of the answers and nothing was omitted. Construct validity deals with the data collection step of the research and tries to convince that sufficient data of reliable quality has been used to study the case (Yin 1996, 32 – 34). Furthermore, a brainstorming session was organized with the EcoCompass consultants to discuss the improvement suggestions and to check the data collected.

### **5.3 Analysis methods**

The first step in analysing the data was to create a timeline which visualizes the combination of the event planning process and environmental management system process (appendix 2). To highlight challenges regarding timing which World Gymnaestrada dodged due to early involvement of environmental management, the main actions regarding environmental performance were added to the timeline. When the challenges based on the timeline, participant observation and interviews had been identified, a cluster analysis was made to try to group the findings into different categories, namely relating to different criteria that were challenging to comply with and to challenges due to the combination of EcoCompass process with event organizing. Then, problem trees were drawn for the different clusters. Problem trees are a useful way to demonstrate causal relationships of events making it possible to identify the root causes of the challenges. When they are known, it is possible to build explanations for the issues and start finding solutions from the right place.

Internal validity deals with the quality of conclusions which have been made. The aim was to identify the causal relationships of the events, or just plainly the chain of events, in such a way that it leaves no room for misinterpretations (Yin 1996, 35). The participant observation helped explaining the chain of events in a more valid way since it omits the possibility of misunderstandings and missing pieces of information due to less than

accurate interview questions. The chronological time series (appendix 2), which demonstrates the event planning process alongside the environmental management system process, further improves the validity of the causal relationships derived from the data. Furthermore, the conclusions obtained were compared to the situations of the other non-repetitive events to see if similar challenges occurred under similar conditions to test the validity of the conclusions.

## **6 EVENT PLANNING AND ECOCOMPASS AT WORLD GYMNAESTRADA**

Organizing an event like World Gymnaestrada is a huge operation, not only because of the size of the event but also because it is quite unique in many ways compared to most of the events organized in Helsinki. Regardless, the event planning process explained in this chapter demonstrates that it still follows closely the general principles of the theory about event planning. The EcoCompass process is described alongside planning and both of them visualised together in appendix 2.

### **6.1 Event characterization**

World Gymnaestrada is definitely a traditional event since it has been organized regularly since the 1950s, has certain rules, such as the lack of competition or a minimum amount of gymnasts in a large group performance, and the International Gymnastics Federation governs it. Size and impact wise, it could be classified as a mega event. There were 21 000 participants, 17 000 of which were international, which is more than what the ultimate mega events, the Olympics have. They were also from 53 countries covering five continents. Nearly 200 media representatives were present from over 20 countries and the event even managed to attract volunteer workers from 27 different countries (Yli-Patola 2015; Vattulainen 2015). What comes to the economic impact of the event, it was estimated to be 23 - 27M€ to the capital region (Laitila et al 2015, 23 – 25). The amount of international and national tourists staying in hotels in Helsinki increased 25% and 10% respectively compared to July 2014 even though 14 000 of the participants stayed in school accommodation which is not included in the data (Laitila et al 2015, 25 – 26; Visit Helsinki 2015). The amount of nights stayed at hotels was the all-time record in Helsinki and mainly attributed to the event (Malmberg 2015). Hence, it can be concluded that the event is also economically significant. With regards to content, the event is clearly a sport event to showcase the sport even though it does have a

cultural element to it with the different national evening and afternoon shows which celebrate the different cultures of the participating countries. According to the Finnish categorization, World Gymnaestrada would definitely be a significant national event.

## **6.2 Bidding for the event**

Although there had been rumours since the 1960s that Finland will host the next World Gymnaestrada, the project really started in 2007 by comprehensively assessing the possibility to organize the event. In practise, it meant finding, for example, possible partner organizations, venues and funding. The main partner organizations, the City of Helsinki and the Ministry of Education and Culture were identified, sufficient funding was arranged and the overall feasibility of the project seemed positive. Hence, a decision to bid for the event was made in 2008. (Laakso 2015.)

The overall concept of the event, the brief, comes from FIG but the local organizers have to make several decisions about the content, as well. For example, the initial event structure was planned and the main venues, the Olympic Stadium and Messukeskus Expo and Convention Centre, were decided. Something new was also added to the traditional event concept, such as a special show to celebrate the Finnish white midsummer nights and large group performance traditions. Already in this stage it was crystal clear for the organizers that the event would be organized in an environmentally responsible way, and it was visible especially in the venue selection because one criterion in selecting them was their close proximity from each other to reduce the need for transport, and reachability by public transport from all over the city. However, EcoCompass for events had not even been created yet and the BSI 8901 standard was only in its infancy, so there was a more limited amount of suitable tools for systematic environmental management than nowadays, mainly just the ISO 14001 standard. At this stage the environmental work was guided by the personal green values and knowledge of the organizers based on previous World Gymnaestradas, and common knowledge that traffic for over 20 000 people causes huge environmental impacts. In addition to the event concept, the budget was thought about and the partner organizations became part of the team at the bidding phase. (Laakso 2015.)

The actual bidding took place during 2009 and included making tentative reservations for the main venues and other provisional contracts. An overall project plan about the



event was made for the bid but it was light in comparison to the actual project plan which was done after winning the bid. The green values of the event, the image of Finland as a pure destination, public transport and the support of the whole country were the main themes in the bid and really made Helsinki stand out from its competitors. Finally, in the end of a bidding tour in Japan in May 2010, Helsinki won the bid. All in all, the bidding phase of World Gymnaestrada followed closely the process described in chapter 3 and included all the main components. (Laakso 2015.)

### **6.3 Planning phase**

When the event had been won, the planning could start properly. It included making a detailed project plan about the event as a whole as well as plans for the different components. Those plans are like the component project plans of the project management approach or the logical plans of the event phase based approach described in chapter 3. The event structure was also properly formed and appointed. In this initial stage of the planning, the green values also became more defined and included, for example, waste minimization, efficient logistics and public transport, and offering vegetarian food and tap water. (Laakso 2015.)

When the project had been defined, tendering and preliminary negotiations with different suppliers, service providers and partners were started. For example, accommodation schools and volunteer sourcing options were assessed and negotiations began. Possible city venues were identified, as well, and for example, the Senate Square venue was a fruit of that. What was good was that the environmental focuses existed already making it possible to bring them up in the negotiations meaning that all the operators were aware of the commitment to environment from the beginning. (Laakso 2015.)

During the early times in the planning, in summer 2011, the previous World Gymnaestrada was organized in Lausanne, Switzerland, giving a possibility for a delegation of about 50 people to observe how their Swiss counterparts organized their event and meet with them to discuss details. This gives valuable information to the next organizers about the dos and don'ts in the planning and what could be improved, although not all the information is usable as such due to the change in location. For example, Fazer Foods, the Finnish organizer for the participant lunch service was there to observe and

they then adapted the concept to work in their setting. In my opinion, knowing the following organizer of the event already during the current World Gymnaestrada is very beneficial since having a possibility to observe behind the scenes and to discuss with the previous organizers really helps with diminishing the uncertainties that organizing a non-repetitive has. (Laakso 2015.)

The Finnish organizers went even further with improving practices that can be learnt from other events and organized a national gymnastics event called Sun Lahti in summer 2013. It resembled World Gymnaestrada in many ways but was much smaller with only about 8 000 participants. Even Sun Lahti was organized with the World Gymnaestrada's green values in mind and the decoration materials were designed so that they were usable for World Gymnaestrada and some programmes had been made with the main event in mind. For example, a programme called the Swan was made for Sun Lahti with the intention to perform it again two years later, so the costumes, nearly 900 of them, could be saved for later saving a lot of fabric and a flea market for new gymnasts was organized to buy the costumes from those who were not going to participate in World Gymnaestrada. (Laakso 2015.)

In 2012 the pilot project for EcoCompass, Greening Events, started. World Gymnaestrada could not fully participate in it because there was no possibility to obtain the certificate because the event was after the end of the project, but participated in the trainings anyway. The systematic environmental work started in November 2013, a few months after Sun Lahti, when the Helsinki Environment Centre made a component project plan for the environmental work. It included, for example, initial schedule for work, roles and responsibilities for different people and goals and resources. The implementation of the plan started in February 2014 by having the first actual meeting with the EcoCompass consultants where the initial assessment of performance was completed. At the same time new staff started in the beginning of 2014 to implement the operational plans for, for example, volunteer management, communications, logistics, and school accommodation. Their tasks included not only implementing the plans but also making more detailed plans for the components like described in chapter 3.4.2 about planning phase. In April 2014 the environmental impact assessment, as well as the first version of the environmental programme were made followed by finding out about relevant legislation in May. (Appendix 2.) (Laakso 2015; Suominen 2015.)

All along, the team met regularly, every two weeks, to discuss issues, brainstorm and disseminate information about the different event components. Other meetings were also held with different stakeholders, such as authorities, representatives from the City of Helsinki and country delegations. Possibilities for cooperation were also arranged for partner companies and more partners and suppliers were sourced. In October the environmental work continued with the first updates for the environmental programme and legislation list. During the winter, two training sessions about the environmental work were organized to the staff with one being the official training that is a requirement of EcoCompass. During the winter, new staff also started work and many of the actions set in the environmental programme were already in implementation. (Laakso 2015; Suominen 2015.)

#### **6.4 Event**

The pre-production phase of the event can be considered to have started in May since the volunteer trainings were organized then. One of the tasks in the pre-production phase is to disseminate the plans to the people who are implementing them. Load-in started soon after in June with the arrival of the first supplies and the pace of different meetings intensified. June was also the month when the waste management plan, last of the requirements of EcoCompass which can be complied with before the event, was completed although the work for it had started much earlier. World Gymnaestrada did not have any own chemicals, thus eliminating the need to create a chemical registry.

Construction of the temporary structures started the week before the event followed by decoration, installation of equipment and more supplies. The first participants also started arriving already a few days before the opening ceremony, and the first accommodation schools were opened. Many of the volunteers started their work already before the official opening and rehearsals were held at the Olympic stadium.

The EcoCompass audit started that week, as well, with checking the documentation and interviewing the secretary general and the environmental coordinators. The documents required by the criteria had been sent to the auditor beforehand and more of the internal documents were checked during the audit. For a large event like World Gymnaestrada with a comprehensive environmental programme, this part of the audit took half a day. Therefore, it was very good that it was organized already before the event, not during

it. In the audit it was also agreed that if World Gymnaestrada returns the final report before the second part of the audit with all the information that it already has and commits to supplementing it after the event with the rest of the information, it is allowed to communicate about receiving the EcoCompass certificate straight after the second part of the audit even though officially the final report should be completed before. This was a very important exception to make for the official procedure as publishing the news about the certificate created a storm of excellent feedback and definitely increased the visibility of the environmental work. The communication value would have been lost if the news had only been published after officially receiving the certificate.

The rest of the audit was conducted on the third day of the event. The practices in the main event venues and one of the accommodation schools were checked and short interviews for staff and volunteers were conducted. No non-conformities were found meaning that the audit was clearly passed. Because the first version of the final report had been returned, the news about the EcoCompass certificate was published. During the event, most work for all the staff included supervising that everything was going according to plans and making adjustments if needed. Different meetings were still organized during the event to provide a possibility to disseminate information about any changes, ideas or issues and to collect feedback from the country delegations.

## **6.5 Post-event phase**

When the event was over, disassembly of the temporary structures started straight away and lasted the following few days. At the same time redistribution of the items acquired for the event started. Great care had been taken already before the event in the planning phase that as little as possible goes to waste. Hence many of the equipment had already been sold and only needed to be taken away. Organizations to donate unnecessary items were sought and found, and surplus items were sold at two flea markets especially organized for the volunteers. The volunteers were also thanked by organizing a get-together with food and live performers.

When the load-out was over, the work continued with evaluation, reporting and settling of other matters. Communication about the event continued to different media. Feedback from the participants, audience and volunteers was also collected. When the most

urgent matters were out of the way, the staff also had a get-together to celebrate a successful event. The last of the EcoCompass criteria, the final report was completed in September, when the data about the key performance indicators had been received and processed.

All in all, the event planning of World Gymnaestrada follows closely the general event planning process described in chapter 3 with elements of both the project based and the event phase based planning approaches. Therefore, it can be estimated that the findings of this thesis can be usable for many events following the same planning method. However, the type and size of the event can have a big influence on the results as can also timing when the EcoCompass process is started and if environmental work has been done earlier or not. The EcoCompass process went also according to the general process. There were more meetings with the EcoCompass consultants than described in chapter 4.2.2 but that is standard practice for large events and unlikely to affect the structural compatibility of the system to the event because all the requirements were still complied with like described in the chapter, just more divided.

## **7 CHALLENGES IN THE PROCESSES**

Despite successfully establishing and implementing the environmental management system, the process did include some challenges. However, with the help of the consultants, it was possible to find innovative solutions to mitigate them and the process overall went very well. The management system also demonstrated its flexibility to varying situations of events like was described about the final report in the previous chapter.

### **7.1 Criteria based challenges**

Challenges complying with two criteria were found, the initial assessment of performance and the final report. These findings were only relevant to World Gymnaestrada while the benchmarked events had not had similar issues. However, they have not yet had the events thus lacking experience with the final report. Anyway, their experiences prove that there is a way for a non-repetitive event to avoid challenges with the initial assessment of performance.

### 7.1.1 Initial assessment of performance

The first challenge when establishing an EcoCompass environmental management system for a non-repetitive event rises right at the beginning when assessing the initial state of environmental performance. There is a ready-made questionnaire for it and a repetitive event could fill it out easily based on what was done at the previous event. A non-repetitive event does not have previous event to derive data from making some questions impossible to answer properly because the decisions dealing with the questions might be made several months or even a couple of years later.

In addition, the earlier in the event planning the questionnaire is answered, the more difficult it is, as some questions are very detailed and require that the plans are already in implementation. These kinds of questions are, for example, about environmental communication to media and spectators or if the drivers of supplies have been trained about ecological driving (Alkukartoitus 2014). If the EcoCompass process is started early, a couple of years before the event, like is the case with World Gymnaestrada and FIS Nordic Ski World Championships in Lahti in 2017, the plans are on a too general level to answer properly (Virtanen 2015). The Women's Floorball World Championships 2015 started its EcoCompass process much later, less than a year before the event and they did not struggle with filling the questionnaire as the event planning was much more advanced (Kuvaja 2015). On the other hand, then the challenge to be able to comply with all the requirements on time and to still be able to have an influence on the event planning might rise. Hence, starting the process early is very important for a non-repetitive event but also challenging due to the lack of detailed plans. The initial assessment of the performance is an important requirement as it is the foundation on which the management system is established, and it also gives the EcoCompass consultants important information about the event and how it works, so it is important that is filled as comprehensively as possible (Levula 2015).

On the other hand, the more specific questions in the questionnaire could be used as a checklist for issues that should be addressed later in the planning, like World Gymnaestrada did. There is, however, no incentive or requirement for the event organizers to review the assessment regularly for it to effectively serve as a reminder. Even the name of the document does not remind the organizers to check it again as the name suggests

that it is something that should be filled out once in the beginning, so it is easily forgotten.

### **7.1.2 Final report**

What might make writing the final report challenging is the fact that events, especially non-repetitive events, rely very much on different suppliers and subcontractors and operate in venues which they do not own. This means that for collecting data for the key performance indicators, the event organizer has to rely on data provided by the suppliers and that might be hard to obtain after the event. Assessing what kind of data it is important to collect, if it is obtainable from the different companies and guarantee that the information is given after the event, is important well in advance. Obtaining some information, such as energy consumption data from an existing venue, might be very difficult as their energy bill gives the monthly consumption but the event that requires the information lasted only for a weekend. Collecting data and reporting about the performance is an important step also for a non-repetitive event thus changing the requirements to omit it is not an option. The event organizers should be instructed to pay attention to the matter instead.

Another challenge regarding the final report is that EcoCompass is not officially certified before the report has been approved by the consultant. This puts the organizers of non-repetitive events into a disadvantaged position because the City of Helsinki and Espoo give a 30% discount on land lease for events which have an EcoCompass certificate at the time of the event. There is no way a non-repetitive event can supply all the information required before the event making it possible to officially obtain the certificate, so the discount will be lost if no agreement can be reached with the city department in question of giving the discount. The practices of the different departments giving the discounts on their land have not been unified yet, so there might be a difference depending on which type of land the event is organized. (Niinivaara 2015.)

## **7.2 Event based challenges**

EcoCompass is such a new tool in the event industry that currently all the event organizers are implementing it for the first time. Therefore, it is likely that the event planning

does not take the environmental management system into consideration in the most optimal way due to lack of experience within the event team. With time experience accumulates and the process will hopefully become smoother.

### **7.2.1 Starting from scratch**

It is evident from the chronology in appendix 2 that the earlier the event organizer starts taking the environment into consideration, the better are its chances of making an impact. In the case of World Gymnaestrada 2015, the green values behind the venue selection and the overall commitment to organize an environmentally friendly event were even one of the decisive factors for Finland to win the bid. The early start, however, comes with challenges for a non-repetitive event with regards to systematic environmental management as the plans in the beginning are still vague and the possibilities to influence the environmental impacts depend much on the partner organizations' capabilities and they might not have been found, yet. In addition, the team is very small and has many other tasks, so allocating time for environmental management might be difficult.

Having no previous example makes it challenging for the consultant to get a comprehensive picture of the event and to define the scope of the environmental management system. Also, having little detailed information makes filling out the initial assessment of environmental performance challenging. Knowing what the main impacts are has not been found challenging but determining where it is possible to have an influence has, since there is no experience from a previous based on from which to improve (Suominen 2015). Regardless, setting the main objectives for the environmental programme and writing the environmental policy have gone fine, not least because World Gymnaestrada's values were set already much earlier. More challenging has been setting measurable targets without initial values and with no chance to improve further in the next events, but innovative ways to mitigate that have been found for all the events interviewed. In addition, the lack of possibility to improve in the future events creates pressure for the organizers to try and influence everything which might lead to ineffective use of resources (Suominen 2015). On the other hand, it can be seen as a positive ambition and the guidance from the consultant and the management system as a whole helps directing it to the most important aspects.



The EcoCompass consultants reported that sometimes the planned environmental programme differs from the actual environmental work done (Levula 2015; Niinivaara 2015). This might be due to the fact that many of the actions depend on the suppliers or partner organizations and what kinds of contracts and agreements it is possible to make with them. Ideally, the first version of the programme should be done before any of the contracts have been made, so that the event organizers have a better chance at having an influence and the actions set in the environmental programme can be implemented as planned. However, this has not been the case with any of the events assessed and might even be impossible because at least with World Gymnaestrada, the first partnerships were already formed in the bidding phase.

It is also very likely that it is not possible to implement all the actions of the programme for a host of reasons, such as lack of space or staff, budget or different regulations. In that case, all that needs to be done is to change the programme to correspond to the actions done. This requires the commitment of the environmental coordinator to check on the implementation of the programme regularly and update it as needed, and the staff that is responsible for implementing the action to report if there are any changes to the plans. Hence, the environmental coordinator needs to check back with the environmental programme that everything is done but also look into the future as the event slowly materializes to see if there is more potential for improvement and change the programme accordingly. If the changes occur early in the event planning process, it is easy to notice them and make the necessary changes but if they happen during the event or just before it, the updates are easily forgotten due to it being a very hectic time for the event organizers. Not having efficient communication about environmental work or sloppy documentation practices might also lead to positive surprises during the audit if even more actions are done than what is stated in the environmental programme. This, however, is more like a bonus than a problem but demonstrates the need for detailed documentation and efficient communication within the event organizing team.

### **7.3 Other challenges**

In addition to the challenges due to the criteria and event planning some other challenges were identified which could not be attributed to either of them. The general circumstances during the event, not event planning itself, can cause challenges with the system

like described about the audit. In addition, external operators can cause challenges with their requirements like will be described about the lost discount.

### **7.3.1 Audit**

There might be a challenge in executing the audit during the event as it is a very busy time for the event organizers, including the environmental coordinator who must be present in the audit. EcoCompass has already addressed this challenge by making it a two part audit where the documentation is checked and key staff interviewed before the event and only practices that cannot be checked then are viewed during the event along with some shorter interviews of volunteers and other staff. This saves time significantly during the event and was found very helpful also at World Gymnaestrada. For a multi-venue event, the audit will still take a few hours even if not every venue is checked. Fortunately, the largest events, such as world championships or World Gymnaestrada take place over several days so it is possible to choose a day which is most suitable for the event organizer. Smaller events might not consider organizing the audit a challenge because it takes much less time to conduct. So far, the EcoCompass consultants state that conducting the audit has not been too challenging but care must be taken to choose the timing right (Levula 2015; Niinivaara 2015).

Another challenge with the audit is that passing it does not officially mean that the event is EcoCompass certified. The final report, which non-repetitive events can only submit after the event, needs to be completed. This is inconvenient because it is very valuable for the event organizers to be able to communicate about their certificate during the event to capitalize on the hype and festival spirit and direct the attendees' attention to the environmental work done at the event. Being allowed to communicate a month or two after the event when the report has been accepted would dilute the communication value. People are more familiar with certificates than audits, and many people might not even know what an audit is; therefore, communicating during the event that an audit was passed might not receive the same kind of reaction than communicating that a certificate was received. So far, how this issue has been addressed is that non-repetitive events have been allowed the right to use the certificate when the audit is passed with a promise that the final report is submitted later (Levula 2015). The value of that was noticed at World Gymnaestrada since after the news were published about the certificate, lots of people, participants and volunteers, came to congratulate me about it and

express their appreciation about us taking the environment into consideration. However, the requirement that also the final report must have been approved before certification is officially granted remains an incompatibility that needs to be addressed.

### **7.3.2 Economic challenges**

What might deter event organizers from using the system for several non-repetitive events, especially smaller ones is that the initial fee has to be paid for every event separately. In a way, it makes sense, since a separate system has to be set up for each event. However, if the events are quite similar in nature, like might be the case with sport federations' events, it might be possible to use the system from the previous event as a base and just assess its suitability and modify if needed. It would make establishing the system much easier as would the experience the organizer obtained from the previous event.

The lost discount on land rent also puts the organizers of non-repetitive events in an unfair position compared to repetitive events. A way to reach an agreement with the different departments of the city should be sought and the practices between the departments unified. Being able to obtain the discount is important and helps compensate the resources used for the environmental work. In addition, it is only fair since the work towards the environment has already been done before and the event and only reporting about it is missing.

## **8 FOUND DEVELOPMENT SUGGESTIONS**

After analysing the challenges and drawing the problem trees to identify the root causes of some of the challenges, development suggestions were found. Event organizers seem to have an important role in smooth environmental management. All in all, with just small adjustments the challenges could be avoided.

### **8.1 Modification of the criteria**

Some modification for the challenging criteria could be made to mitigate the challenges found. However, it must be kept in mind that EcoCompass must still remain compatible

for repetitive events, as well. In addition, all the criteria of the system serve a purpose; therefore, the modifications need to retain their relevancy for the overall system.

### **8.1.1 Initial assessment of performance**

Since the consultants and environmental coordinators of World Gymnaestrada reported challenges with the initial assessment of performance, some changes should be made to make it more compatible. Firstly, it would be beneficial if EcoCompass could address the bidding phase of event organizing for those events who want to begin their work early. In the early phase, questions about what has been done so far do not have a purpose, so the assessment of the initial performance could be preceded with a checklist covering the aspects that most events need to take into consideration in that phase. From the bidding phase of World Gymnaestrada, those kinds of things could include:

- Does the venue/venues have an environmental management system or other green values
- Is the venue(s) easily reached with public transport
- Has the event organizer included anything about its green values or objectives to host a green event in the application
- Has the event organizer considered what might be its main green objectives
- Is accommodation organized within easy transport options
- Has the organizer communicated about organizing a green event to different stakeholders, especially partners or suppliers

Because it is not even certain yet that the event will be hosted, starting the whole EcoCompass process, or even making any detailed plans, might be unnecessary (Levula 2015). Therefore, the checklist covering the most important components might suffice and the actual process can be started in the planning phase when it is certain that the event will take place.

In the beginning of the planning phase, the initial assessment could be now continued with another checklist which takes into consideration all the main components of the event. It should be designed so that it serves a purpose no matter in which stage of the planning phase an event starts the EcoCompass process. One way to achieve this is by adding a time when an answer to a question can be obtained if it is currently too early

to answer. That, along with a set date to update the checklist would encourage the event organizer to return to the document, so it would not be forgotten, and it would remind to keep considering the environmental performance continuously. Also, changing the name of the document from initial assessment of performance to, for example, self-assessment would better remind the event organizers to return to it from time to time (Niinivaara 2015). The questions in the second part of the checklist could, for example, include:

- Are the environmental values part of the training of new staff
- Have main partners/media/suppliers/participants been informed about the green values of the event
- Are suppliers asked to give information about their environmental work in tenders
- Are environmental considerations part of the volunteer training
- Has the event organizer gathered information about environmentally friendly practices from other similar events

After the second checklist is completed, the EcoCompass process can continue like before with the first meeting with the consultant where the checklists are reviewed, the criteria clarified and a project plan made.

Alternatively, the existing assessment could be kept but for a non-repetitive event, all the questions that could not be answered, but which are relevant later, could be transformed into actions in the environmental programme and set with a time when they can be completed. This way the need to having to update two quite similar documents constantly is eliminated. Keeping the environmental work on the table is important with non-repetitive events as everything is done for the first time, ideas surge constantly and irreversible decisions are made, so considering the green values should be fresh in mind. Therefore, regular and frequent enough updating of the programme should be required and the dates of every update should be left visible in the document, not just the latest update (Levula 2015).

### **8.1.2 Final report**

To mitigate the issue that certification is not complete without the final report, a third level to it could be added to the existing candidate and certified which is achieved when the report has been returned. They could be, for example, candidate – certified/labelled – verified. However, there would be a challenge with it to make it suitable for repetitive events since they would achieve the third level before the second and also in deciding, which is the final level. Hence, an alternative could be a better solution.

Another option would be that the report is apart from the certification meaning that a non-repetitive event could officially gain the certificate during the event without the report. In that case, a way to ensure that the report is returned needs to be established. One way could be by giving the discount for land use only after the report has been returned, not when the audit has been passed. This, however, would not encourage all the events, since not all of them use areas eligible for the discount. In addition, accounting problems might surge when money is still transferred long after the event. A penalty for not returning it by a deadline could be issued but an encouragement instead of a threat would be a better option. Another label for the organizer, not the event itself, could be given for completing the work. Such an EcoCompass Event Organizer –label could also be an effective incentive for entities which organize events casually, such as sport federations, to continue systematic environmental work in the future. The label is further discussed in the next chapter.

The easiest and most feasible option to address the discount issue would probably be that the discount is given in exchange of a signed audit report and not the certificate itself. This would just require that the different departments of the city modify and unify their practices to allow it. Then, the actual certificate could be given when the report has been done. The special arrangement to allow non-repetitive events to communicate about the certificate before the report has been completed has worked fine, so far, and that practice could continue.

### **8.1.3 Incentives for continuity**

Many event organizers organize events casually alongside its normal line of business. Sport federations are a good example of them. In addition, event producing companies

might produce some non-repetitive events along with regular recurring events. Event companies might want to organize their casual events, such as product launches or anniversary parties in a sustainable way. Since EcoCompass is event specific, it cannot really be used in the communication of the organizer without reference to the event for which it was achieved. Not having the benefit of the label afterwards might discourage the organizers to have the system in the next events. In addition, it puts the organizers of non-repetitive events into an unfair position with organizers of repetitive events because they can use the label for the next three years and it is easy to refer to the event since it is always a current topic.

To encourage continuity of the work, some recognition should be given to the organizers, as well. For example, World Gymnaestrada 2015 has a separate web page from the Finnish Gymnastics Federation, so the organizing body is not associated to the label in a clear way. A label, such as EcoCompass Event Organizer, to be used on the web page could be a good way and it would remind the organizers of the work, too. It could be valid for the same three years as the EcoCompass certificate for repetitive events meaning that the organization could use it, for example, when bidding to host other events during that time to demonstrate their continuous commitment.

Another way, which is probably also better from the environmental point of view, would be to establish the EcoCompass Company –environmental management system to the sport federation or event producing company. Organizing environmentally friendly events could be one of the components of the environmental programme or a whole separate programme could be made for events, which is then updated for each particular event. This way the organization can not only communicate about their continuous commitment regarding events but also manage the other main environmental impacts related to their other operations. (Levula 2015; Niinivaara 2015.)

Another way to encourage organizers to continue to use EcoCompass in following non-repetitive events could be by giving a discount on the initial fee if the events are so similar in nature that the previous work done could be used as a base. In that case, establishing the new system would be like more intensive updating of the documentation done for the previous event rather than setting up a whole new system from scratch. With the help of the consultant, it could be assessed which parts of the previous system

are usable as such and which need updating. With the future events in mind, the environmental policy could be formulated in such a way that it is directly usable also for the future events that the organizer is likely to organize later. Having such an event sustainability policy on the web page of the organizer - not the actual event - would be a good reminder for the organizers, and to also communicate wider about the company or sport federation's continuous commitment to producing green events.

## **8.2 Ideas for the consultants**

Since organizing a non-repetitive event is different from a repetitive event so much that it influences the establishing of the management system, also the consultant should take the differences into consideration. Due to the lack of initial information in the early phase, it is important to pay attention and encourage the event organizer to fill the initial assessment of performance and environmental impact assessment as thoroughly as possible to set the management system to a right track (Levula 2015). After that, it is good to remind the event organizer that the system is flexible, so the following steps might not go in the same order as in the criteria but can be complied with at a time suitable for the event planning. For example, for World Gymnaestrada the last requirement to comply with, apart from the final report, was making a waste management plan, just a few weeks before the event. In addition, it is good to remind that all the documents can and should be updated if there are bigger changes in the way how the event will be like.

Another thing to consider due to the dynamic nature of planning is to keep in touch regularly, especially if there are several months between the meetings. As especially in smaller events the environmental coordinator might also have other responsibilities, the environmental work could be easily forgotten. Since keeping the matter actual among the event team is important to execute all the planned actions and to identify more improvement potential along the way, it is important that EcoCompass is not buried under other tasks. Just a simple email once in a while might suffice and to not take too much of the consultant's time but another option, especially for large events, is to organize extra meetings if needed. Occasional questions about how the event planning is advancing are also a good idea to check that the event has not changed too much from the initial situation on which the foundation of the system is laid. Knowing how the event planning process is going also helps in deciding when it is a good time to meet. For



example, drafting the first version of the programme would be ideal before too many members of staff have started work while organizing the training after is most efficient.

### **8.3 Considerations for event planners**

Although EcoCompass is a tool to make environmental work convenient and efficient for event organizers and even comes with professional help, effort from the organizers is still required. They have also a big role to play in mitigating the challenges the event planning of a non-repetitive event creates. What really made a difference with World Gymnaestrada's environmental work, and was also noticed by external parties, was the excellent commitment from everybody within the organization.

#### **8.3.1 Pilot event**

The only way to deal with some of the challenges the non-repetitiveness creates is to try and view it at least somewhat like a repetitive event. That can be achieved by organizing a pilot event or to test and document practices from a similar event. For example, the annual Lahti Ski Games serve as a test event for the Nordic Ski World Championships, EFT tournament for the Floorball World Championships and the Finnish Gymnastics Federation organized a pilot event called Sun Lahti in 2013 to test practices for World Gymnaestrada (Kuvaja 2015; Laakso 2015; Suominen 2015; Virtanen 2015). Practices and procedures, not only for environmental management but other aspects, as well, used in those events can then be improved for the actual event. The environmental coordinators of all the events as well as the EcoCompass consultants agree that organizing a pilot event makes it easier to deal with the lack of initial information (Kuvaja 2015; Levula 2015; Niinivaara 2015; Suominen 2015; Virtanen 2015). In addition, a new scheme which was used for the first time in World Gymnaestrada, called Tapahumat Tutuiksi, invites staff from other sport federations to volunteer in events to gain behind the scenes experience which they can then use as a base for their own events. This seems like a very usable scheme as sport events share many similar aspects and might even be organized in the same venues. In addition, the environmental work, along with previous assessments done for Lahti Ski Games is thought to have contributed greatly to the smooth EcoCompass process for the World Championships (Virtanen

2015). Therefore, organizing a pilot event or very close cooperation with a similar repetitive event could be a very usable way to address the challenge the lack of initial data creates.

Thinking about the future, documenting practices done at events is important for future non-repetitive events helping the lack of initial data then. The final report requires the organizers to gather it, as well. Often the organizers, be it sport federations or event producing companies, tend to produce similar types of events although the events themselves might be non-repetitive; therefore, the documentation gathered could be similar enough to be usable. Reports about the practices from World Gymnaestrada were produced after the event both for the Finnish Gymnastics Federation and the International Gymnastics Federation to help the next organizers of World Gymnaestrada. These reports also included information about the environmental work.

### **8.3.2 Audit**

According to the experience from World Gymnaestrada, the first days of the event are the most inconvenient ones for the audit as the volunteers are not yet confident with their tasks, so the help of the environmental coordinator is needed and some minor adjustments might still take place. Hence, from the time perspective, the best time for the audit is more towards the end of the event. On the other hand, the final days might be inconvenient, as well, especially in sport competitions since the news about the certificate will be lost in the excitement of the finals. In addition, the auditor should give some suggestions on how to improve next time and some of the suggestions might be such that it is possible to implement them straight away. Therefore, organizing the audit as soon as possible would be best to get the benefits. More importantly, if the audit is not passed, but requires some improvement, it is better to have the audit early to be able to fix the non-conformities and still have time for a re-audit.

To get the most benefit for green image from the audit, a good day for it could be looked from the event calendar. A slightly quieter news day could be chosen so that the environmental work does not disappear into the news feed too fast. Therefore, days when Finland is playing, there is a favourite band playing or a conclusion of a conference reached might not be the best days for audit. They are likely to be more hectic days for the staff allowing less time for interviews, as well.

### **8.3.3 Beginning of work**

As it can be seen from the chronology in appendix 2, an early start in environmental work is very important in order to make significant improvements. In addition, as it has been established before, including something about green values already in the bid to host an event can make a big difference. World Gymnaestrada 2015 might not have taken place in Helsinki without the incorporation of the green values in the bid. Another important reason to start early is that some of the big partner organizations and businesses are selected in a very early phase making it important that they can be communicated straight away about the aim of organizing an environmentally friendly event to get them to commit. The same is true for the smaller partners and suppliers and also to pay attention to what kind of companies are selected. Also, since transport and logistics form a significant part of the environmental impacts of the event and venues are chosen in the very beginning, it is essential that there is some environmental consideration in the very early phase of project. Therefore, it is important that the second meeting with the consultant takes place in a quite early stage of planning so that the main focuses of the environmental work can be identified and the first version of the programme drafted before too many contracts are signed.

On the other hand, starting too early might be challenging, as well, since the event plans might be on a too general level to be able to make a reasonable environmental programme, so careful consideration regarding timing is important. For big events, organizing an extra meeting with the consultant in the early phase to help with making the logical plans for the different components in an environmentally friendly way before the actual programme is drafted could be a good idea. On the other hand, just having the checklist to give ideas for the early phase might be enough to yield good results for smaller events.

### **8.3.4 Integration of stakeholders**

Because event organizers rarely own many items, equipment or venues they use, integrating the suppliers and partners to the environmental work is essential. This is best done by communicating about the green objectives of the event from the beginning of the negotiations. Environmental work gives competitive advantage to the companies as

well, so requests about their own green values are usually answered, and being able to attach the supplier to one of the environmentally friendly decisions of the event is good for their image, as well. Therefore, cooperation can be beneficial for both parties. The companies are the experts in their own products and services, so they might even have good solutions they have used elsewhere; therefore, discussing different options with them can be very fruitful.

Another topic that should be discussed with suppliers and partners is the disclosure of data for the final report. Getting certain kind of data might be impossible without prior arrangements and disclosing the data after the event might be forgotten. Therefore, after assessing what kind of data it is important to collect, a way to get the data from the companies should be established in cooperation with them. A way to ensure that the data is given later is by writing the agreement into the contract or memo from a meeting. (Niinivaara 2015.)

Another important group of stakeholders that should be integrated into the environmental work is the staff. Due to the lack of initial data and procedures, several options to reach the same goal in planning and the dynamic nature of decision making, the staff need to know about the environmental values and what is expected from them. It does not mean that they need to be able to make the most environmentally friendly decisions but to remember that it is one aspect to consider and ask advice from the environmental coordinator when needed. Bringing up the environmental work frequently in meetings should help in keeping the matter relevant and in mind even during the more hectic times.

Lastly, the event attendees should not be forgotten when communicating the environmental values and work of the event. Events can attract thousands of people meaning that a significant portion of the impacts come from their actions. Therefore, it is important to communicate with them in an efficient way to get them to do their part. Repetition is always an effective method for learning, thus the same information should be given in different media, such as web page, posters and social media. Also, paying attention to the style of the message is important. Eventgoers do not want their festival spirit ruined by a green police, so a positive and encouraging, yet informative, style might be the best way.

### 8.3.5 Commitment and resources

Organizing events is teamwork at its best and since the environmental work has an influence on the planning of every component, it is important that everybody is committed to do their part. Commitment is especially important for non-repetitive events due to the dynamic and forward-moving nature of the event planning. According to the feedback from several sources, strong commitment towards environmental protection throughout the whole local organizing committee was one of the key elements in World Gymnaestrada's success in its environmental work and definitely made my work as environmental coordinator easy.

Moreover, commitment of top management is essential since they have a good overview of the whole event planning, can influence the work of others and lead the work by showing a positive example. The best way to get the top management to commit is by having them participate in the initial phases of establishing the environmental management system (Levula 2015). This way they understand the main environmental impacts the event has, the reasons behind the main objectives of the environmental programme and they can also have their say on the environmental policy and green values. Top management also has the most comprehensive overview of the event, thus their input in the initial assessment and environmental impact assessment can help in identifying the most important aspects.

In addition, having committed staff helps with the issue that changes and additions to the environmental programme occur throughout the planning. Dedicated staff are more likely to remember to inform about the changes and even come up with their own ideas. This helps the environmental coordinator to keep the documents up to date. To encourage the exchange of information, and implementation of the actions in general, the environmental coordinator should make the environmental work as easy and convenient as possible, so it is done without too much disruption to other tasks. For example, for World Gymnaestrada, a ready-made phrase to attach when requesting quotes was made and the answers received were documented in a very simple excel sheet. The sheet was later amended to include recycling of the items acquired. Hence, the same sheet provided all the information regarding environmental consideration of procurement and different diagrams can be easily drawn from the data as needed. Having an easy flow of

communication both ways helps with keeping both the documentation and the environmental coordinator updated about what is happening in the planning of each event component and consequently, improvement potential can be identified and utilized.

In addition, having the documenting procedures ready when new staff start their work helps since they can become part of their working routine from the beginning. The same is true with incorporating the environmental values and any actions in the environmental programme regarding the work into the training of new staff. Therefore, it would be great if the first draft of the programme was ready before the team is very big. If the event has volunteer workers, they should also be communicated about the environmental values and given information on how they can take the environment into consideration in their own work.

To help with the commitment of not only staff but also different partner organizations, it is beneficial that the environmental work is kept high on the agenda and taken up regularly in different meetings. This way, there are effortless ways to discuss improvement ideas and ask for advice as the event planning advances and hopefully improvement potential can be identified on time and the documents kept up to date. Also, the different suppliers might be more motivated to find new ways to work if they see that the event organizers are serious about their environmental values. In addition, updating the documents regularly and often enough helps with keeping track if all the actions have been done since fixing things later might be impossible.

Environmental work takes also resources and human resources are a significant part of those. For a large event like World Gymnaestrada, having an environmental team coordinating the work could be an efficient option. Not only do two pairs of eyes identify improvement potential better but also can discuss ideas together. What worked very well for World Gymnaestrada was to have a pair of environmental coordinators with one more involved in the whole event planning due to other tasks and the other only concentrating on the environmental work. This way information from the different meetings was efficiently transferred to environmental actions and vice versa. In addition, we both agree that having any other responsibilities than the ones we had close to the event, and especially during it, would have resulted in lower quality work due to lack of time (Suominen 2015). Having a too big team might result in decreased cohesion

in the work but for large events having people to work in different departments alongside environmental work helps with disseminating information both ways.

## 9 CONCLUSION

Despite the challenges in establishing the environmental management system, World Gymnaestrada 2015 passed the audit with flying colours proving that EcoCompass already suits non-repetitive events as such. The challenges were far from impossibilities. It was also definitely worth the effort to have the environmental management system. Although the environmental values of the event were already well thought of before the start of the EcoCompass process, the system helped clarify why something is done and something is not, leading to more efficient use of resources and an easy way to justify decisions. This is especially beneficial for major events since there is so much to take into consideration. Therefore, having clear objectives really helps in allocating resources.

What is more, the certificate was an excellent way to communicate with different stakeholders about the work done. The amount of good feedback, appreciation and congratulations received after the news of the certificate was published really enhanced the visibility of the environmental work among stakeholders and contributed to creating a green image for the event. Hopefully this reputation helps when bidding to host other international events in Helsinki or in Finland. In addition, the certificate brings credibility for the work.

In the future, when there has been more EcoCompass certified non-repetitive events, this research could be repeated to reassess the compatibility of the management system. Then, it could be seen if the improvement ideas have been effective and they could even be developed further, if needed. It would be interesting to see the results from different events which have followed the suggestions to varying degrees to see if they have experienced the same kinds of challenges either due to not having taken notice of the suggestions or despite of it. Also, if the criteria are modified, it should be evaluated if the modifications have been efficient and that no new challenges have risen due to the changes. If the criteria do change, the impacts on repetitive events need to be assessed to make sure that the modifications suit them, as well.

In addition, what could be assessed in another study is if different types of events have had similar challenges and if they could benefit from the results of this thesis. For example, concerts or conferences might have to deal with completely different issues although similarities in the challenges can be expected if the planning process follows the same principles as World Gymnaestrada's. Also, the influence of the size of the event on the challenges should be assessed especially regarding smaller events since this thesis only addressed large events. Small events might not be so restricted with different possibilities to reach goals and the organizing span is shorter making them more agile also in their environmental work. Hence, they might not face the same challenges. The sheer size and uniqueness of World Gymnaestrada might have been the main reason why the initial assessment of performance seemed redundant but for a smaller event, it might be possible to answer the questions also in the early stage of the planning. The same could be true with the challenges due to having to start from scratch. Smaller events have more possibilities and examples from other events that reduce the lack of initial information to manageable amounts but because World Gymnaestrada was so big and had an unusually large number of participants who the event organizers had to look after, the options were more limited and completely new innovations had to be sought increasing the amount of uncertainties.

All in all, EcoCompass is a very useful tool both for small and medium size enterprises, and events. The practical approach and help of the consultants make it an easy but effective way to improve environmental performance. The success of World Gymnaestrada in using it, being a very large and complex event, demonstrates that it is usable for anyone and since EcoCompass is still developing fast and new practices are developed and tested along the way, the results it yields are likely to increase in the future. Hopefully the event organizers in Finland make the most of this tool and the whole industry gradually becomes greener.



## BIBLIOGRAPHY

Alkukartoitus 2014. Initial assessment of performance. Internal document. World Gymnaestrada 2015.

BioIntelligence Service 2009. EMS Factsheet - EcoCompass. PDF-document. [http://ec.europa.eu/environment/emas/pdf/StepUp/EMAS\\_BIO EMSFS\\_EcoCompass\\_FINAL\\_Feb.pdf](http://ec.europa.eu/environment/emas/pdf/StepUp/EMAS_BIO EMSFS_EcoCompass_FINAL_Feb.pdf). Updated 6/2009. Referred 1.10.2015.

Bowdin, Glenn, Allen, Johnny, O'Toole, William, Harris, Rob & McDonnell, Ian 2006. Events management. Oxford: Butterworth-Heinemann.

Brooks, Sarah, O'Halloran, Dan & Magnin, Alexandre 2007. The sustainable music festival – A strategic guide. Blekinge Institute of Technology. PDF-Document. [http://www.artisterformiljon.se/afm\\_2/wp-content/uploads/2014/10/BTH-Master-20070604\\_MusicFestivalsGuidebook.pdf](http://www.artisterformiljon.se/afm_2/wp-content/uploads/2014/10/BTH-Master-20070604_MusicFestivalsGuidebook.pdf). Updated 2007. Referred 3.10.2015.

BSI. What is a Management System? British Standards Institute. WWW-document. <http://www.bsigroup.com/en-AU/About-BSI/Frequently-Asked-Questions/What-is-a-Management-System/>. No update information. Referred 15.8.2015.

Case, Robert 2013. Events and the environment. New York: Routledge.

CIC 2004. Convention Industry Council's Green Meetings Report. Convention Industry Council. [http://www.conventionindustry.org/Files/CIC\\_Green\\_Meetings\\_Report.pdf](http://www.conventionindustry.org/Files/CIC_Green_Meetings_Report.pdf). Updated 15.6.2004. Referred 3.10.2015.

Collins, Andrea, Jones, Calvin & Munday, Max 2008. Assessing the environmental impacts of mega sporting events: Two options? Cardiff University. Electronic journal. Cardiff: Elsevier.

Copenhagen Sustainable Meetings Protocol 2011. Sustainable events Denmark. WWW- page. <http://www.sustainableeventsdenmark.org/introducing-the-copenhagen-sustainable-meetings-protocol>. Updated 25.11.2011. Referred 3.10.2015.

CQI. Management systems: purpose and benefits. Chartered Quality Institute. WWW-document. <http://www.thecqi.org/Knowledge-Hub/Knowledge-portal/Corporate-strategy/Management-systems/>. No update information. Referred 15.8.2015.

Defra 2006. Environmental key performance indicators – Reporting guidelines for UK business. Department of Environment, Food and Rural Affairs. PDF-document. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/69281/pb11321-envkpi-guidelines-060121.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69281/pb11321-envkpi-guidelines-060121.pdf). Updated 2006. Referred 3.10.2015.

Defra 2007. Sustainable events guide. Department of Environment, Food and Rural Affairs. PDF-document. <http://www.emfevents.co.uk/uploads/SustainableEventsGuide.pdf>. Updated 2007. Referred 3.10.2015.

Ekokompassi 2015. EcoCompass www-page. <http://www.ekokompassi.fi/>. Updated 2015. Referred 20.9.2015.

FCG konsultointi 2014. Greening Events -hankkeen arviointi. Evaluation of Greening events project. Finnish consulting group. Internal document. Updated 11.4.2014. Referred 12.9.2015.

FIFA 2015. Football for the planet. WWW-document. <http://www.fifa.com/sustainability/football-for-planet.html>. No update information. Referred 20.8.2015.

FIG 2015. Gymnastics for all. International Gymnastics Federation. WWW-document. <http://www.fig-gymnastics.com/site/page/view?id=236>. No update information. Referred 12.8.2015.

GRI 2012. Sustainability Reporting Guidelines & Event Organizers Sector Supplement. Global Reporting Initiative. PDF-document. <https://www.globalreporting.org/resource/library/G3-1-English-Event-Organizers-Sector-Supplement.pdf>. Updated 2012. Referred 3.10.2015.

Harding, Phil & Malone, Rachel 2010. Greener Events. Government Office for the South West. PDF-document. <http://www.oursouthwest.com/SusBus/greener-events.pdf>. Updated 2010. Referred 3.10.2015.

Iiskola-Kesonen, Hanna 2006. Mitä, miksi, kuinka? Käsikirja tapahtumajärjestäjille. Suomen Liikunta ja Urheilu ry.

IOC 2005. Manual on sport and the environment. International Olympic Committee. PDF-document. [http://www.olympic.org/Documents/Commissions\\_PDFfiles/manuel\\_sport\\_environment\\_en.pdf](http://www.olympic.org/Documents/Commissions_PDFfiles/manuel_sport_environment_en.pdf). Updated 3/2005. Referred 3.10.2015.

IOC 2014. Olympic agenda 2020. International Olympic Committee. PDF-document. [http://www.olympic.org/documents/olympic\\_agenda\\_2020/olympic\\_agenda\\_2020-20-20\\_recommendations-eng.pdf](http://www.olympic.org/documents/olympic_agenda_2020/olympic_agenda_2020-20-20_recommendations-eng.pdf). Updated 9.12.2014. Referred 2.10.2015.

ISO. Management system standards. International Organization for Standardization. WWW-article. <http://www.iso.org/iso/home/standards/management-standards.htm>. No update information. Referred 15.8.2015.

ISO 14001. ISO 14001 requirements. WWW-document. <http://www.iso14001.com.au/iso-14001-requirements.html>. No update information. Referred 26.10.2015.

ISO 2012. Sustainable events with ISO 20121. International Organization for Standardization. PDF-document. [http://www.iso.org/iso/sustainable\\_events\\_iso\\_2012.pdf](http://www.iso.org/iso/sustainable_events_iso_2012.pdf). Updated 7/2012. Referred 15.8.2015.

Jones, Meegan 2010. Sustainable event management – A practical guide. London: Earthscan.

Kauhanen, Juhani, Juurakko, Arto & Kauhanen, Ville 2002. Yleisötapahtuman suunnittelu ja toteutus. Vantaa: WSOY.

Koivusalo, Salla, Heinonen Ulla 2005. Eco-Efficient Major Event Manual – Greening the events Layman’s report. Helsinki University of technology. PDF-document. [http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.showFile&rep=file&fil=LIFE04\\_ENV\\_FIN\\_000309\\_LAYMAN.pdf](http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.showFile&rep=file&fil=LIFE04_ENV_FIN_000309_LAYMAN.pdf). Updated 2005. Referred 15.8.2015.

Kuvaja, Miira 2015. Interview 29.9.2015. Environmental coordinator. Tampere 2015 Women’s Floorball World Championships.

Laakso, Maria 2015. Interview 1.10.2015. Secretary General. World Gymnaestrada 2015.

Laitila, Osmo, Ratilainen, Teemu, Puronaho, Kari & Virkkunen, Klaus 2015. Gymnaestrada 2015 Helsinki –tapahtumatutkimus. Valtion Liikuntaneuvosto 2015:6. PDF-document. [http://www.liikuntaneuvosto.fi/files/387/Gymnaestrada2015\\_webversio.pdf](http://www.liikuntaneuvosto.fi/files/387/Gymnaestrada2015_webversio.pdf). Updated 25.11.2015. Referred 25.11.2015.

Lampinen, Jari 2011. Ekologisen ja turvallisen yleisötilaisuuden järjestämisoapas. Sas-tamala: Suomen Ympäristö- ja terveystieteen kustannus.

LOCOG 2012. A Legacy of change. London Olympics sustainability report. London Organizing Committee for Olympic Games. PDF-document. <http://learninglegacy.independent.gov.uk/documents/pdfs/sustainability/5-london-2012-post-games-sustainability-report-interactive-12-12-12.pdf>. Updated 12/2012. Referred 15.9.2015.

Levula, Elina 2015. Interviews 7.7.2015 and 1.10.2015. EcoCompass Event project coordinator. Finnish Olympic committee.

Mallen, Cheryl & Adams, Lorne 2013. Event management in sport, recreation and tourism – Theoretical and practical dimensions. New York: Routledge.

Malmberg, Lari 2015. Helsinki teki heinäkuussa matkailuennätyksen – syynä Gymnaestrada. Metro. WWW- article. <http://www.metro.fi/uutiset/a1387814467338>. Updated 23.9.2015. Referred 1.10.2015.

McDonough, William & partners 1992. The Hanover Principles – Design for sustainability. William McDonough Architects. PDF-document. <http://www.mcdonough.com/wp-content/uploads/2013/03/Hannover-Principles-1992.pdf>. Updated 1992. Referred 3.10.2015.

Neat event! 2014. Environmental guide for event planners. Greening Events. PDF-document. <http://www.greeningevents.fi/tapahtumajarjestajan-avuksi-uusi-ymparisto-toipas-siisti-tapahtuma/>. Updated 17.7.2014. Referred. 20.8.2015.

Niinivaara, Irina 2015. Interviews 7.9.2015 and 1.10.2015. EcoCompass coordinator. Helsinki Regional Environmental Services.

Palpa. WWW-document. <http://pantilliset.fi/perustietoa/>. No update information. Referred 5.9.2015.

Pasanen, Katja & Eva-Maria Hakola 2009. Suomalaisten kulttuuritapahtumien matkailullinen merkittävyys ja kansainvälinen potentiaali. Matkailunedistämiskeskus. A:166. PDF- document.

Pesonen, Hanna-Leena, Hämäläinen, Kirsi & Teittinen, Outi 2005. Ympäristöjärjestelmän rakentaminen. Helsinki: Talentum 2005.

PestleAnalysis. What is PESTLE Analysis? A Tool for Business Analysis. WWW- article. <http://pestleanalysis.com/what-is-pestle-analysis/>. No update information. Referred 25.8.2015.

Sayre, John 1996. Inside ISO 14000 – The competitive advantage of environmental management. Delray Beach: St. Lucie Press.

Soutar, Carolyn 2005. Staging events – A practical guide. Ramsbury: Crowood.

Suominen, Saija 2015. Email 27.8.2015. Project manager. World Gymnaestrada 2015.

Tapahtumainfo. Statistics for monthly events in 2013. WWW-document. <http://tapahtumainfo.fi/tilasto.php>. No update information. Referred 1.12.2014.

UNEP 2009. Green Meetings Guide. United Nations Environmental Programme. PDF-document. <http://www.unep.org/sustainability/docs/GreenMeetingGuide.pdf>. Updated 2009. Referred 3.10.2015.

United Nations 2004. Manual for the preparers and users of eco-efficiency indicators. United Nations Conference on Trade and Development. PDF-document. [http://unctad.org/en/docs/iteipc20037\\_en.pdf](http://unctad.org/en/docs/iteipc20037_en.pdf). Updated 2004. Referred 3.10.2015.

Vattulainen, Vesa 2015. Myös vapaaehtoisuuden näytösjuhla. KansalaisAreena ry. News group article. <http://kansalaisareena.fi/verkkoareena/myos-vapaaehtoisuuden-naytosjuhla/>. Updated 9/2015. Referred 1.10.2015.

Viinikka, Pekka 2015. Suomalainen ympäristöosaaminen matkalla olympialaisiin. YLE. WWW-article. [http://yle.fi/urheilu/suomalainen\\_ymparistoosaaminen\\_matkalla\\_olympialaisiin/8372738](http://yle.fi/urheilu/suomalainen_ymparistoosaaminen_matkalla_olympialaisiin/8372738). Updated 11.10.2015. Referred 13.10.2015.

Virtanen, Maarit 2015. Email 9.10.2015. Environmental manager. Lahti 2017 FIS Nordic Ski World Championships.

Visit Helsinki 2015. Heinäkuu Helsingin kaikkien aikojen vilkkain matkailukuukausi.. City of Helsinki. WWW-document <http://www.hel.fi/www/uutiset/fi/kaupunginkanslia/heinkuu-helsingin-kaikkien-aikojen-vilkkain-matkailukuukausi>. Updated 23.9.2015. Referred 1.10.2015.

Wuolio, Tiinu, Fohlin, Kaj-Erik, Koskela, Soile, Luoto, Karoliina, Muukkonen, Jukka, Pyhälä, Kaisa, Ruuskanen-Himma, Eila 2008. Pitääkö tätäkin nyt mieltä? Hyvän seuran reilun pelin opas. Suomen Liikunta ja urheilu ry. PDF-document. [http://www.sport.fi/system/resources/W1siZiIsIjIwMTMvMTEvMjUvMTdfNT-NfMTNfMTM3X1NMVXJlaWx1bnBlbGlub3Bhc19wYWlub29uLn-BkZiJdXQ/SLUreilunpelinopas\\_painoon.pdf](http://www.sport.fi/system/resources/W1siZiIsIjIwMTMvMTEvMjUvMTdfNT-NfMTNfMTM3X1NMVXJlaWx1bnBlbGlub3Bhc19wYWlub29uLn-BkZiJdXQ/SLUreilunpelinopas_painoon.pdf). Updated 06/2008. Referred 28.8.2015.

Yin, Robert 1996. Case study research- Design and methods. Thousand Oaks: Sage publications 1994.

Yli-Patola, Sanna 2015. Personal notice 14.10.2015. Communications manager. World Gymnaestrada 2015.

Ympäristöohjelma 2015. Environmental programme. Internal document. World Gymnaestrada 2015.

**APPENDIX 1.****Interviews**

<b>Interviewee, date and place</b>	<b>Position and company</b>	<b>Interview themes</b>
Elina Levula 7.9.2015 and 1.10.2015 Helsinki	EcoCompass coordinator Finnish Olympic Committee	<ul style="list-style-type: none"><li>• Consultant's experiences with EcoCompass</li><li>• Greening events and non-repetitive events</li><li>• Challenges and improvement ideas</li></ul>
Irina Niinivaara 7.9.2015 and 1.10.2015 Helsinki	EcoCompass consultant Helsinki Regional Environmental Services	<ul style="list-style-type: none"><li>• Consultant's experiences with EcoCompass</li><li>• Greening events and non-repetitive events</li><li>• Challenges and improvement ideas</li></ul>
Maarit Virtanen 9.10.2015 email	Environmental manager Lahti2017 FIS World Championships	<ul style="list-style-type: none"><li>• Event planning and EcoCompass processes</li><li>• Environmental work</li><li>• Challenges and improvement ideas</li></ul>
Maria Laakso 1.10.2015 Phone interview	Secretary general World Gymnaestrada 2015	<ul style="list-style-type: none"><li>• Event planning process</li><li>• Environmental work</li></ul>
Miira Kuvaja 29.9.2015 Helsinki	Environmental coordinator WFC2015 World Championships	<ul style="list-style-type: none"><li>• Event planning and EcoCompass processes</li><li>• Environmental work</li><li>• Challenges and improvement ideas</li></ul>
Saija Suominen 27.8.2015 email	Project manager World Gymnaestrada 2015	<ul style="list-style-type: none"><li>• EcoCompass process</li></ul>

World Gymnaestrada 2015 event planning process

