

# ISMF SUSTAINABILITY HANDBOOK



Font Blanca 2019

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## Introduction

The starting point for improving the sustainability of a ski mountaineering race is to understand and analyse what environmental derivatives has to do with a systematic and careful way, from a broad perspective.

The ISMF identifies this phase with the completion of an environmental diagnosis, to determine and characterize all aspects that may be related to the sustainability of every race, even those over which there is no direct control, but which have an influence.

This is the work document for every ISMF Elite event in terms of sustainability.

Section B is a simple matrix including a pre-formatted action plan and defining the accomplishment level.

Each LOC must fill out the document as detailed as possible and return it completed to the ISMF Commission of Sustainability by the end of the season.

The more precise will your report be, the more efficient and useful our common work will be.

The document is a starting point and should evaluate with your suggestions, so please let us know about any new item or modification within the matrix.

The sustainability is an opportunity to improve in all organization aspects and benefit of a lot of direct and side benefits.

For any question concerning the use of this manual, you can contact [sustainability@ismf-ski.org](mailto:sustainability@ismf-ski.org)

## A. GENERAL INFORMATION

### 1. Basic Information about the event

Name of the event	Font Blanca 2019
Organizer	Comitè Organitzatiu Font Blanca 2019 - FAM
Place	Ordino, Principality of Andorra
Dates	26/01/19 Individual 27/01/18 vertical
Number of competitors	
Number of Staff	
Sustainability área	Francesc Molist, +376 339 121, <a href="mailto:fmolist@sostenibilitat.ad">fmolist@sostenibilitat.ad</a> Jaume Esteve, +376 326 578, <a href="mailto:jesteve@fam.ad">jesteve@fam.ad</a>

### 2. Economical Report

Our Budget was perfectly adjusted and we finally had a very low benefit of 417€, and we can consider it as an excellent budget.

Tema	Pressupost	Cost FAM	Real	Diferència
+ Acol·lides	67.541	33.041	31.828	1.213
+ Antidoping	3.500	700		700
+ Comunicació	55.557	22.057	21.191	866
+ Institucional	1.500	500	299	201
+ Protocol	26.430	26.270	23.480	2.790
+ Recorreguts	2.430	2.430	2.967	537
+ Sostenibilitat	2.845	2.145	1.046	1.099
+ Voluntaris	1.400	1.400	1.325	75
+ General	41.565	21.565	23.380	1.815
+ Inscripcions	950	950		950
+ Sortides - Arribades	5.000	3.000	1.200	1.800
<b>Total general</b>	<b>208.718</b>	<b>114.058</b>	<b>106.717</b>	<b>7.341</b>



Tema	Suma Ing.	Real	Diferència
+ Acol·lides		1.295	1.295
+ Ingressos	119.600	113.180	6.420
<b>Total general</b>	<b>119.600</b>	<b>114.475</b>	<b>5.125</b>

	Despeses	Ajuts	Ingressos	Balanç
<b>Total Pressupost</b>	<b>208.718</b>	<b>94.660</b>		
<b>Cost FAM</b>	<b>114.058</b>		<b>114.475</b>	<b>417</b>



## B. Effects on Natural Habitat, Fauna and Flora

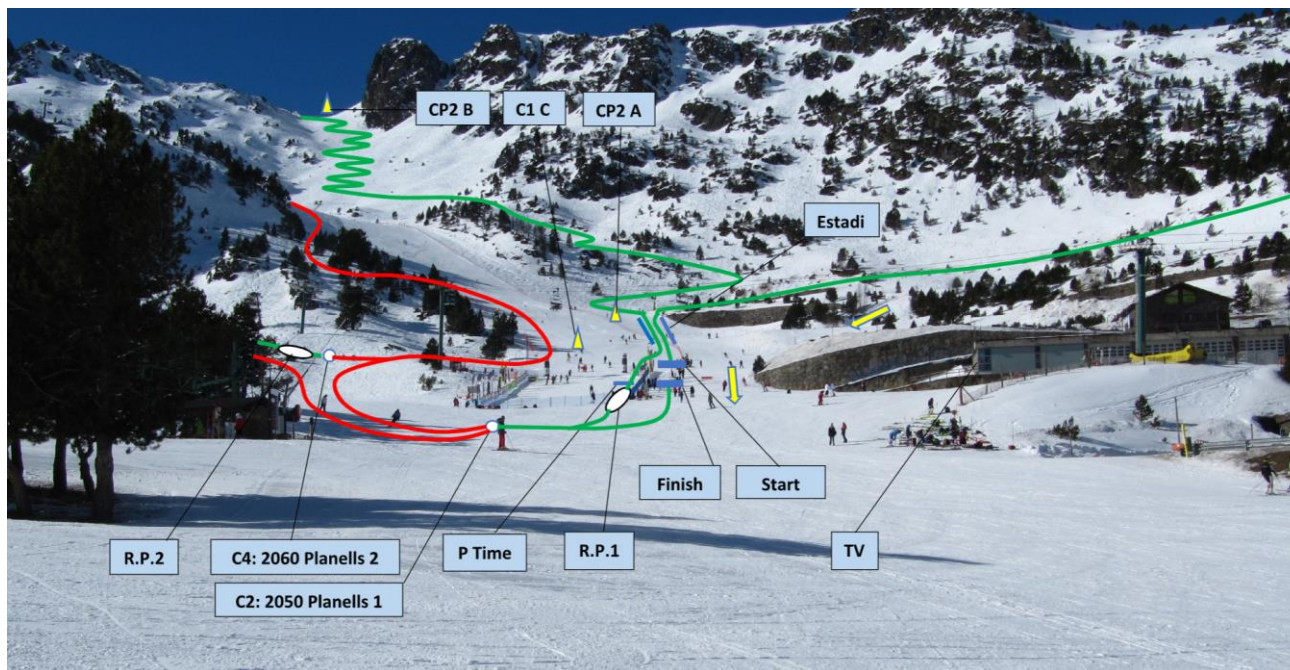
### 1. Location and areas of hyper frequency

#### Individual in Arcalis

Due to very bad weather conditions with a lot of snow in the previous days to the race and the tracers could not access the mountain before Friday 3pm for security reasons. We had to apply our B plan inside the ski resort. We used the resort slopes and some off-piste sections.

The race progressed under excellent weather and snow conditions and even if we were inside the ski resort, we could have wild and safe tracks.

In those conditions, the impact of the event on the Natural habitat can be considered as zero, because it's in the normal activity of the ski resort.



Weather Conditions : Sunny, 5° C temp, No wind

150 Racers ISMF World Cup Category

No Open category was planned.

Estimated Public : 800 people

Event streamed via Youtube with live English comments with almost 2.000 people following the event live

<https://www.youtube.com/watch?v=pMq1YtuNBCY>

We have to underline the hard working conditions due to the pressure of Arcalis ski resort pushing us to end the race as soon as possible and leave the area free for skiers. Arcalis was not happy at all with the event, and the LOC will have to consider the continuity with this ski resort.

### Vertical Race in Arinsal

The vertical race consists in a 740m ascent, using Les Marrades slope and finishing at the Igloo bar. All the track is on the ski resort slopes, so we consider the impact on the habitat as nil, because it's in the normal activity of the ski resort.

Weather conditions : Sunny at the beginning, but turned very windy at the end of the event and the Podiums were realized under an important snow fall.

125 ISMF World cup Racers

80 Open Racers (ISMF & Open were at different times with no interference). From Cadet to Senior categories.

The race was produced and broadcast live on Andorra TV, and via the streaming platform

<https://www.andorradifusio.ad/programes/copa-del-mon-scarpa-ismf-font-blanca-0/blanca-2019/blanca-2019-1-part>

<https://www.andorradifusio.ad/programes/copa-del-mon-scarpa-ismf-font-blanca-0/blanca-2019/blanca-2019-2-part>

## 2. Fauna

In relation to fauna, although these high mountain areas are a refuge of species of interest such as the white partridge (*Lagopus mutus*), the race area cannot be considered as hyper frequentation, susceptible to generate significant disturbances to the fauna.



## C. Action Plan & Evaluation Matrix

### 1. Circuit

We make special trainings for all the volunteers. In the General meeting the person in charge of sustainability explained our plan and gave all the recommendations.

Afterwards, every area responsible does special recommendations in terms of sustainability for his area, individually to each volunteer



Action	Planned	Indicator	Accomplishment Level	Comments
<b>Vertical Signals</b>				
Limit the use of fungible material to that which is strictly necessary.	Yes		2	
Ensure proper anchorage to prevent dispersal in strong winds.	Yes		2	
Monitor before the competition to check the status of the environment (photographs at checkpoints, inventory of banners installed)	Yes		0	
Re-use signs for subsequent races	Yes		2	
Use colour ties and flanges (preferably black) to stop them from getting lost in the snow.	Yes		2	
Limit advertising banners to points of departure and arrivals	No		1	It was not planned, and we planned advertising banners to Control points, but finally we incrustated advertising banners in the streaming production.
Review and methodical collection of material when the race is finished.	Yes		2	2 Kg of material will go to waste 1.000 flags used, 38 missing (3,8%) probably 10 units lost in the circuit, other 28 lost in the ski resort but not in the nature
<b>Snow marking</b>				
Choose an <i>organic based dye</i> or alternative to aniline.	No		0	We just used 33 cl of product and ISMF uses aniline to mark start line

Action	Planned	Indicator	Accomplishment Level	Comments
Do not mix aniline with antifreeze (alcohol or other industrial liquids)	Yes		2	
<b>Safety</b>				
It is preferable that the metal plaques are in black stainless steel to avoid the effects of reflection and facilitate their visibility in the snow.	DNA		??	Fixed media not installed
Retrieve anchors and other equipment that could be removable.	Yes		2	
Opt for lower impact explosives (Ex. Goma-2 ECO, does not contain DNT and reduces emissions of nitrogen oxide and CO2 by almost 70%)	No		??	Government centralizes the explosives and distributes them to the ski resorts for PIDA and eventually the GRIM (Firemen). But it was to secure ski resort, not special for the WC.
Rationalize the amount of explosives and limit the number of detonations to those that are strictly necessary	Yes	<i>Quantity of Detonations Explosives</i>	2	Ski resort specialist only use the necessary detonations to secure the resort area. Quantity of detonations unknown.
Cleaning and recovery of waste from explosions (fuse ends, cables, etc.) if needed	DNA	<i>Kg of waste</i>	??	
<b>Waste</b>				
Set penalties for competitors if they leave waste during a race (rules)	Yes		2	Action included in the ISMF regulation, with 0 penalties imposed. All the control points were aware on this topic
Provide and inform about selective waste collection points at refreshment stations on the course and ensure that these points are located in easily accessible areas.	Yes		2	
Before the competition check the status of the environment (photographs to compare after the event)	Yes		0	Not enough planification, we need 1 person in each sector to be responsible of this topic.
Provide volunteers and members of the organization with waste collection bags.	Yes		2	We did not use special collection bags to prevent extra waste, but every volunteer was using his own backpack



Action	Planned	Indicator	Accomplishment Level	Comments
Methodical review and collection once the race has finished.	Yes	<i>Kg of waste</i>	2	Not compatibilized
<b>Spectators</b>				
Provide areas to concentrate the public and prevent the dispersion of people around the circuit.	Yes		1	In start & Finish areas it was well accomplished, along the track the 2 Policemen and 2 Green guards helped had an important role but we can improving with alternative tracks for the public and better indications
Installation and information about selective waste collection points (can use existing if it is a ski resort)	Yes		2	No extra point was necessary
Provide volunteers and members of the organization with waste collection bags.	No		2	We did not use special collection bags to prevent extra waste, but every volunteer was using his own backpack
Methodical review and clean up once the race has been completed	Yes	<i>Kg of waste</i>	1	Probably can do better
Control the volume of stereos so as not to exceed the legal or recommended limits (70 decibels)	Yes	<i>Decibels</i>	2	1000 W during 3h in individual and 4h during vertical but always limited to 70db. (controlled by our team several times)



## 2. CATERING AND REFRESHMENTS

A Big effort was done in this area. We served a Catering to more 1.000 people over the 3 days. We dealt special efforts with our Catering provider . A team of 4 volunteers where dedicated to developing our ZERO WASTE program.

We used 2018 Logos and posters for the race to indicate the places for waste.

We optimized the calculation of quantities based upon last editions. There was no remaining at all to refreshment areas, and the Catering was re-used in a Hotel.

Our providers serve all the food and beverages in big format packaging and mono-dose formats are banned.

We borough crockery and cutlery (200 units) in reusable material and we bought 300 more that we will use in next editions. We clean them manually every night (It's a very tough task and we must find a more efficient procedure). We re-use them every year.

We don't provide tablecloths and napkins, but the tables are permanently cleaned.

We use local bakers for Pizzas, 'cocas' ... instead of supermarket packaged products.



Action	Planned	Indicator	Accomplishment Level	Comments
<b>Refreshment points</b>				
Prevent food waste. Careful planning and optimization of the preparation and serving of the right amounts of food, as well as care and control of the proper conservation of raw materials, in all the refreshment point.	Yes	<i>Kg of food waste</i>	2	0 Kg Very accurate calculation, and we had NO remaining food.
Serve food in bulk (no packaging)	Yes		2	
Avoid pod and choose large formats for drinks and food.	Yes		2	
Use reusable cups for drinks (avoid disposable plastic cups).	Yes		2	
Choose products from local production and organic products or those with eco certification.	Yes		2	Used quantities 100% Eco certified 10 litres pepsi/cocacola in 2 litres container, 12 bottles of water in 6 litres container, 5kg of Chocolate in tile format, 20l of orange juice, 5 Kgs Isostar powder, 100g of tea, 1,1Kg of lemon, 3Kg of raisins, 3 Kg of almonds, 3 Kg of hazelnuts, 22 Kg of bananas, 10,5 Kg of apples
Installation of selective waste collection points in fractions.	Yes		2	
Subsequent transportation to collection points (containers, eco points)	Yes	<i>total kg of waste</i>	2	Total 17Kg : Waste 4Kg, Cans & plastic 32Kg, Glass 16Kg, paper & cardboard 1Kg
Subsequent clearing of possible waste dumping, if applicable.	DNA	<i>Kg of waste</i>	??	
<b>CATERING</b>				
Prevent food waste. Careful planning and optimization of the preparation and service of the right amounts of food, as well as care and control of the proper conservation of raw materials.	Yes	<i>Kg of food waste</i>	2	Re-used in a Hotel, but we don't have any information about the quantity.

Action	Planned	Indicator	Accomplishment Level	Comments
Choose products and local suppliers	Yes		1	The catering provider does his best but still some products come from long distance
Choose products from organic production or those with eco certification	Yes	% of eco certified products	1	Estimated 30%
Avoid pods (sugar, salt, sauces, coffee capsules, etc.) and opt for large formats for food and drinks. Avoid products with unnecessary wrapping and packaging.	Yes	kg of packaging waste	2	
Avoid bottled water - opt for tap water.	Yes		1	ISMF wants bottled water, but we used large containers (6 l) and tankards to distribute it.
Avoid disposable plastic products (cutlery, glasses, plates, etc.) – Use reusable dishes and glasses.	Yes		2	Special 300 dishes were bought for the event and will be re-used in next editions
Installation and information on selective waste collection points.	Yes	Total kg of waste	2	Total 158 Kg waste including organic 105 Kg, cans and plastic 32Kg , glass 16 Kg, paper & cardboard 5 Kg
Subsequent transportation to waste collection points (containers, eco points).	Yes		2	
If necessary, distribution of leftover food to charities	Yes		2	Park Piolets Hotel re-used it.

### 3. Event Areas

In the different event areas where we could operate, we have edited used specific signs to clearly indicate our policy concerning waste collecting and recycling.



Action	Planned	Indicator	Accomplishment Level	Comments
<b>Choice of event areas</b>				
Prioritizing local areas with the proper dimensions for race activities (capacity, etc.)	Yes		2	
Prioritizing areas and services (hotels, catering, etc.) which have eco certificates or have an environmental policy.	No	% of certified establishments	1	100% of Hotels in Andorra have to follow very strict rules imposed by the government, but at this moment there is not any official label.
Define and provide the necessary means to carry out selective waste collection (all key fractions) from all the areas where activities of the event are being held (press, outdoor areas, etc.).	Yes		2	



Action	Planned	Indicator	Accomplishment Level	Comments
<b>Adaptation of Areas</b>				
Implementation of signposting informing about the best environmental procedures to follow (container location, best practices, etc.)	Yes		2	Not in all places but in all where waste could be produced.
<b>Areas cleaning</b>				
<p>Opting for companies certified (ISO, EMAS, ...) committed to sustainable cleaning.</p> <ul style="list-style-type: none"> <li>- Avoid the use of toxic or potentially polluting products.</li> <li>- Use eco labelled and natural products rather than synthetic chemicals.</li> <li>- Rationalization use of water and chemicals.</li> </ul>	Yes	97 % of ECO Certified products	2	<p>Cleaning company : AVANÇA with ISO 14001 Environmental management.</p> <p>They use products of Crispy <a href="http://www.nitidia.es/system/klinbox">http://www.nitidia.es/system/klinbox</a> more efficient safer for their staff and more environmental friendly, generating very low waste.</p>
Check the proper management of waste by cleaning companies (that the separation of waste is respected and transferred to the correct destination) or the declaration of environmental responsibility of the company.	No	<i>total kg of waste</i>	??	AVANÇA is a confident company and we consider not necessary to check
<b>Energy</b>				
Pre-plan and accurately the distribution and use of areas, as well as only the air conditioning and lighting equipment which is strictly necessary.	Yes	<i>Power consumption (kW)</i>	2	The power consumption of the Catering, Race Office, Press Office, was calculated to perform the CO2 Offset but We don't have the detail
Make sure to disconnect unnecessary lighting, electronic equipment and air conditioning in areas after hours of use.	Yes		2	

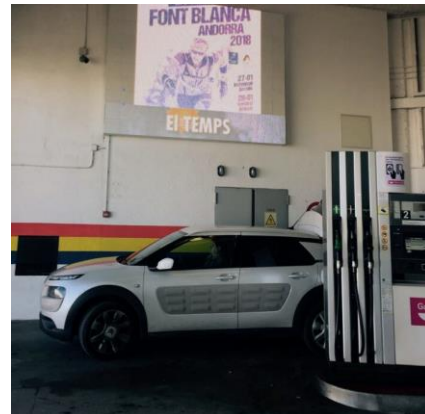
#### 4. Communication

We have dismissed a lot of paper material, but still some are remaining.

We have mainly communicated using digital Screens inside the country but we haven't dismissed posters and stickers completely.

The Helicopter was planned in combination with drones but finally it was not used.

The Vertical and Individual races were broadcasted live in Andorra and on a streaming channel, with a very few increment in sustainability impact (energy and transportation)



Action	Planned	Indicator	Accomplishment Level	Comments
<b>Internal Documentation</b>				
Minimize the production of printed materials using digital alternatives (mail, cloud, USB stick, etc.).	Yes	Number of printed sheets (or kg)	2	Don't have any estimation
In case of printed material use recycled or eco certified paper for printing (chlorine-free or recycled) and use double-sided option.	Yes		2	
<b>Advertising material</b>				
Minimize the production of printed material. opt for digital advertising.	Yes		2	We maximized digital advertising, but still printed versions were produced.

Action	Planned	Indicator	Accomplishment Level	Comments
If any printed material is produced, choose suppliers who ensure that printing is done using eco certified paper.	Yes	Quantity of printed materials (or kg)	2	100 event posters, aprox 5 Kg
<b>Merchandising</b>				
Opt for local products (traditional) or eco certified value-added products.	Yes	- % of eco certified products - Kg of waste generated (packaging)	0	We bought 500 technical dockers for the volunteers and racers from Karpos, but with No eco certification and no info about the packaging generated waste.
<b>Images &amp; video productions</b>				
Use drones for audio-visual recordings in place of helicopter	Yes		2	

## 5. Mobility

We planned the material transportation to optimize the groomers movements.

We asked the volunteers to share cars with a good response, but Public transport was not possible.

FEDA company let us 3 electrical vehicles with a free charging control, to be used by Sustainability area and ISMF staff

Action	Planned	Indicator	Accomplishment Level	Comments
<b>Logistics &amp; Security</b>				
Helicopter: plan flights rationally and minimalize the number of trips, routes, timetables, ...	Yes	<i>Nº of flights or fuel consumption</i>	2	No Flights performed
Plan transportation with groomers and snowmobiles to reduce the number of runs and improve efficiency	Yes	<i>Km travelled or fuel consumption</i>	2	40 Km Groomers Estimated 35 km snowmobile
People transportation with groomers and snowmobiles avoiding traveling in sensitive areas or outside circuit	DNA		??	No sensitive areas
Transportation on the snow with groomers and snowmobiles as far as possible, choose petrol or electric vehicles instead of diesel (more polluting)	Yes	<i>% of vehicles according to category</i>	0	85 % Diesel (Groomers) 15 % petrol (snowmobile)
Transportation on the town, Choose cleaner vehicles (electric, hybrid) petrol instead of diesel (more polluting) to carry out the mobility.	Yes	<i>% of vehicles according to category</i>	2	We had an electrical van for sustainability area (refreshment points) and 4 electrical cars to be used by the LOC and ISMF Officers.
<b>Participants, Volunteers and Professionals</b>				
Mobility planning of Participants, Volunteers and Professionals	Yes	<i>Km travelled or fuel consumption</i>	1	No data available but we can estimate to 6.000 Km



Action	Planned	Indicator	Accomplishment Level	Comments
As far as possible, choose cleaner vehicles (electric, hybrid) petrol instead of diesel (more polluting) to carry out the mobility of people in the organization.	Yes	% of vehicles according to category	1	No data available
Promote vehicle sharing experiences.	Yes	Number of private Vehicles % people using shared transport	1	2,5 people by vehicle, improving 2018 edition 70 % for volunteers, 100 % for participants
Implementation of public transport.	No	% of people using public transport	??	
<b>Public</b>				
Promote the use of public transport to reach the race areas	No	Number of private Vehicles % people using public transport	??	No data available

## 6. Social Responsibility

Thanks to Lavola, our Eco Partner we could calculate our CO2 emissions and compensate them, obtaining the CO2Clean Label

We proposed all the participants to compensate their CO2 travel emissions We included a link to a calculator and an automatic compensation to the teams and racers registration form. Unfortunately, we had 0 compensations.

We purchased 500 solidary bracelets, and we asked people to make donations for the foundation Mountaineers for Himalaya. We finally collected 975€ and made the subsequent donation. We were disappointed with the final amount, we probably have to improve our collection method.



Action	Planned	Indicator	Accomplishment Level	Comments
Making a communication plan and environmental awareness	Yes		2	
Promotion and participation in environmental projects and initiatives and /or charities	Yes		1	We produced 500 bracelets that we sold to spectators and participants to the event and collected 975 € delivered to Mountaineers for Himalaya foundation.
<b>CO<sub>2</sub> Offsetting</b>				
Calculate event CO <sub>2</sub> emissions and compensate it in preference via an International Label.	Yes		2	Lavola Company, Sponsor of the event did the calculation and offset of CO2 at the xxx project
Propose to the teams and racers to compensate their CO <sub>2</sub> travel emissions.	Yes	Tons of CO <sub>2</sub>	0	We proposed to the teams in the confirmation mail after the registration. In The procedure driven by Lavola, They just had to click a link, give some details about their travel and then pay for the compensation. We had 0 responses
Propose to Spectators coming from outside region to compensate their CO <sub>2</sub> travelling emissions	No		??	We have no Information about spectators coming to the event (No tickets or any registering)

## D. Conclusions & Goals for next editions

### 1. LOC Global auto-evaluation

We had a lot of difficulties with the final report.

We did all the actions specified above, but we did not have the exact measurements until September the 20<sup>th</sup> and that delayed our report delivery.

I see that the handbook is very useful to make the plan, but it's more difficult to measure the indicators and the auto-evaluation and final reporting is very hard-working.

But finally, we made the report in a very accurate and systematic way, so I think that we deliver a complete and good report.

A handwritten signature in black ink, appearing to read 'Jaume Esteve', with a long horizontal stroke extending to the left.

*Jaume Esteve*  
*LOC President*  
*Signature*

*Francesc Molist*  
*LOC Sustainable Area responsible*  
*Signature*

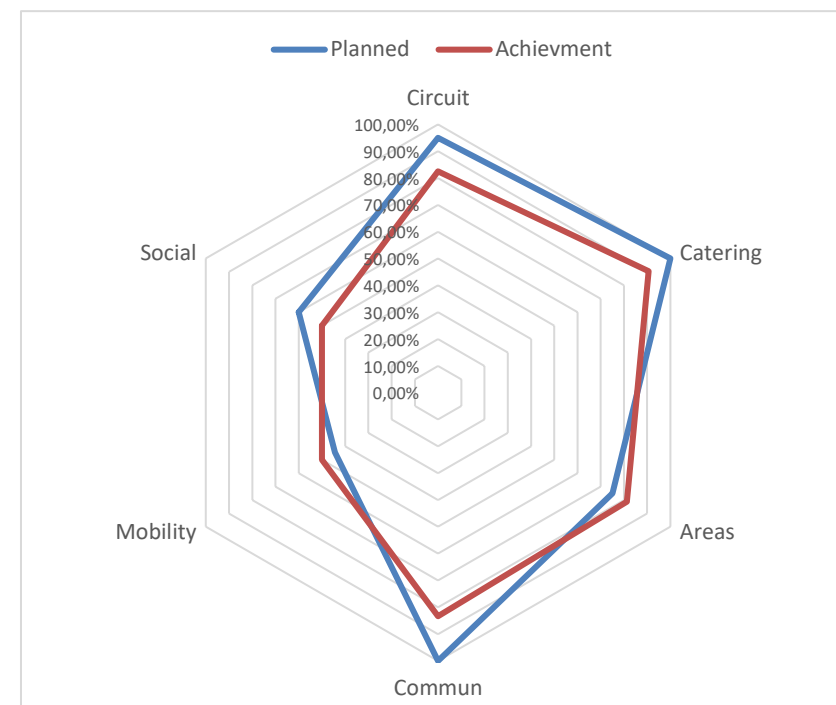
## 2. ISMF Global commentaries (reserved to ISMF Sustainable Commission)

Resume table per section considering the matrix responses.

Modify data in the graphics and get your values (Report values in Excel associated blue table)

Report calculated Values into table.

Chapter	Declared Intention	Achievement Evaluation
Totals	$\frac{\sum \text{Planned} = \text{Yes}}{\text{Total items} - \sum \text{Planned} = \text{DNA}}$ Reported in % format	$\frac{\sum \text{level} * 0,5}{\text{Total items} - \sum \text{Planned} = \text{DNA}}$ Reported in % format
1. Circuit	95 %	82,50 %
2. Catering & Refreshment points	100 %	90,63 %
3. Event Areas	75 %	81,25 %
4. Communication	100 %	83,33 %
5. Mobility	44 %	50 %
6. Social Responsibility	60 %	50 %
Global	84,63 %	77,44 %



The report was delivered out of delay but is really complete.

It was an ambitious plan (84,63 %) of whom 77,44 % was accomplished (That's almost **65% of the global possible actions**), so congratulations for your great job and engagement.

Probably you will improve in Mobility and Social responsibility, because we see your experience, engagement and determination in Sustainability topics

Name  
ISMF General Manager  
Signature

Name  
  
ISMF Sustainability commission  
Signature