Number/code: OM/ML4

Title: LOGISTICS OF GOODS AND MATERIALS

Guidelines section:

	Governance	X	Operational management

	Context of the event		*Procurement*
	Event	X	*Mobility and logistics*
	Stadium management		

Description:

Related to mobility another issue is the impact of freight movements. Sport involves much specialised equipment and athletes, and teams often need to transport their kit around the world. Freight is not limited just to sports equipment; sports events also require vast quantities of goods and materials that have to be transported to and from venues, and this can add substantially to the carbon footprint. The impacts of freight are similar to those of transporting people, just different in scale and the types of vehicles used. Logistics managers therefore need to consider the environmental impacts of different transport modes and routes, and the social and economic impacts on host communities where large numbers of truck movements in and out of venues can cause localised disruption, noise and air pollution.

Measures to reduce the impact of freight logistics for events may include:

• Location of distribution warehouses to allow the best route to venues to minimise impact on communities and optimise travel times;

• Optimal loading of vehicles to avoid wasted journeys;

• Operating a “quiet night-time delivery” policy;

• Selecting freight suppliers that operate modern low-emission fleets and compensate their carbon emissions;

• Where practical, using rail and river options instead of road transport; and

• For overseas freight, favouring sea freight over air freight, to significantly reduce carbon emissions.

In the case of touring teams and mobile events, the challenge is to achieve a balance of optimising what has to be transported each time and what can be used locally at the different stages of the tour. What might be saved on freight could be lost through waste from using local materials and equipment on a one-off basis.

Examples:

1) Tokyo 2020: The operation of the Games requires the transportation of a large amount of people, materials, goods, and wastes. Transportation contractors and waste disposal contractors are encouraged to reduce CO2 emissions through distribution by using low-pollution and fuel-efficient vehicles and practicing eco-driving such as the reduction of sudden acceleration and braking and the reduction of engine idling. For transport of materials and waste, in particular, they will aim to reduce CO2 emissions by securing efficient transport routes according to transport plans developed in advance, and implementing efficient transport according to the state of road congestion. For food procurement, they will seek to reduce CO2 emissions associated with logistics by selecting food in season and produced in neighbouring regions wherever possible, with consideration given to quality and costs.

2) London 2012 Games: 100% of LOCOG Logistics managed goods to be delivered to Games venues by more sustainable modes or methods such as water, non-idling policy, night time deliveries, telematics and electric vehicles. Measures included freight telematics system in use, and biodiesel trucks as well two types of electric vehicle used on the Park. Freight journeys were planned from factory gate to ultimate end-user, avoiding unnecessary handling in warehouses, or double freighting. electric vehicles on the Park became an increasingly popular choice for distributing small parcels and material around the Village because they could be used at night due to the lack of engine noise, providing a safer and less congested time to operate.

3) The Stade de Nice was given an eco-design based on a life-cycle approach, with the objective of limiting the environmental impact of the construction and use of the stadium. The stadium's structure is made up of 4,000m^3 of wood, which stores carbon and contains little embodied energy compared with other materials. Local materials were used to reduce the impact of transporting building materials. The roof of the stadium is translucent in order to provide the pitch with natural light and minimise noise pollution. The Mediterranean climate (hot and dry in summer) influenced the concept for the stadium: natural ventilation of the pitch and offices, a rainwater collection system, photovoltaic modules on the roof, etc. Ultimately, energy and water-saving systems are included in most of the stadium's functions.

Environmental benefits

Reduction of the carbon footprint.

Economic benefits:

Reduction of the logistic related costs.

Applicability and replicability potential

Different measures can be applied in order to render more efficient the logistics of goods and services. Each event/stadium should conduct an analysis to understand which measures are the most apt to ameliorate the environmental sustainability through

1) Source

IOC Sustainability Essentials (p. 53)

TOKYO 2020 (p.36)

LONDON 2012 (p. 25)

UEFA EURO 2016 (p. 37)