Winning the race to reduce packaging in Barcelona

Barcelona Sports Institute (Spain)

Background

For over 40 years, the La Mercè Race (Cursa de La Mercè) has been held each September as part of Barcelona’s “La Mercè” festivities. The 10km race is organised by the City of Barcelona, and is one highlight among hundreds of free events celebrating the city and Catalan culture. Before the race, each runner receives a special race t-shirt which they can wear on the day to mark them out as one of the participants. The race will still take place in 2020 with appropriate safety precautions, and can even be completed “virtually” as part of a special show of solidarity against COVID19 (more information here).

The race’s organiser, Barcelona Sports Institute (IBE), is committed to reducing the environmental impact of sports events, and it identified waste reduction as a priority in its greening plan for the La Mercè race. In addition to replacing disposable plastic cups from water stations with compostable cups, IBE wanted to reduce the waste generated when athletes collect their t-shirts. In previous years, the t-shirts handed out have been individually wrapped in plastic, which is immediately disposed of by participants who want to wear it for the race.

In addition, the IBE wanted to buy t-shirts which met the standards of MADE IN GREEN by OEKO TEX, to ensure t-shirts were free from harmful chemicals and made under safe working conditions. They also wanted to reduce local transport emissions in the delivery of t-shirts.

Procurement objectives

In addition to the plastic bags wrapping each t-shirt, it was also noticed by the IBE that the t-shirts were being delivered in a lot of excess cardboard. For example, in 2018, over ten thousand t-shirts were delivered in boxes of 50, requiring 310 triple-layered corrugated cardboard boxes. These boxes were also lined with additional cardboard. IBE calculated that the delivery used 398.41m² of cardboard (almost the size of a basketball court), weighing 425kg. IBE decided to use packaging reduction in its award criteria, and developed a clear method to objectively evaluate the packaging reduction offered by each bidder, and monitor the reduction in packaging between contracts.

In 2018, the IBE published a Call for Tenders to procure t-shirts for the 2019, 2020 and 2021 editions of the race. For 2019, the call for tender specified that 13,180 t-shirts were required. The volumes required for 2020 and 2021 would be confirmed 10 months ahead of each race taking place.
Criteria used

Subject matter of the contract:

Supply of t-shirts for the La Mercè race 2019-2020-2021 with sustainable public procurement measures.

Award Criteria:

The following award criteria were developed to select the most economically advantageous offer. A maximum 100 points were available:

Price (34 points): The highest score was awarded to the lowest bidder permissible (i.e. excluding abnormally low prices). Other bids were awarded points on a proportional scale. A maximum budget for this tender was set at €146,211 (including VAT). Any bids which exceeded this would be excluded.

Transport (10 points): Vehicles used for local delivery were awarded points based on their environmental impact (certified according to Spain’s DGT classification):

- Zero emission vehicles – electric goods transport vehicles in all their variants (electric, extended range electric, plug-in hybrid with at least a 40km electric range, hydrogen) (10 points)
- ECO-vehicles – plug-in hybrid with less than 40km electric range, non-plug-in hybrids, natural gas or liquefied gas (6 points)
- Vehicles with C badge – gasoline vehicles that comply with the Euro 4, 5 and 6 standard, or diesel vehicles with Euro 6 (2 points)
- Other vehicles with a B badge or no badge (0 points)

Waste (18 points): The bidder was asked to present a technical file describing the design of the box used for packing t-shirts, including the total number of boxes, the mass of each box and the total mass of packaging (TMP), and a calculation of the percentage of waste reduction (PWR) using the following formula:

\[ PWR = 100 - \left( \frac{100 \times \text{TMP}}{425,01} \right) \]

Cardboard reduction was awarded on the following scale:

- Reduction equal to or greater than 75% of the waste (12 points)
- 50% - 74.99% reduction of waste (5 points)
- 25% - 49% reduction of waste (2 points)
- Reduction of less than 25% of the waste (0 points)

In addition, 6 points were awarded for the total elimination of individual plastic bags.

Green fibres (18 points): T-shirts should be made from fibres produced in ways not harmful to the environment or health, or use of recycled fibres, verified by:

- MADE IN GREEN certification by OEKO TEX, or equivalent (9 points)
- Certificate proving use of recycled polyester (9 points)

Design (12 points): The evaluation of some criterion was based on a value judgement, including the design (4 points), comfort (6 points), and breathability (2 points). Samples of the male and female t-shirts in medium size were required, plus a copy of the catalogue and the technical files on the fabrics used.

Production period: up to 8 points were available for reduction of the production period ahead of the delivery deadline.
Results

Four bids were received, out of which one was disqualified for reasons not related to the sustainability criteria, and three evaluated.

The winning bidder Master Touch Publicidad SL scored 77.6 points out of 100. As both the winner and second place scored the same amount of points in the environmental criteria (6 points for transport, 18 points for waste reduction, and 9 points for green fibres), price was the deciding factor. The winning bid offered a price of €142,341.25.

Environmental impacts

As a result of this procurement, the new race t-shirts are certified by MADE IN GREEN OEKO TEX, and are delivered using ECO vehicles, which leads to less CO₂ emissions and reduces air pollution in the city. The packaging used to deliver the t-shirts has been reduced by over 75%, through the delivery of the t-shirts in reusable crates that the company takes back, after the t-shirts have been distributed to the runners packs prepared for the race. The winning supplier has also completely eliminated single-use plastic bags, which in 2019 alone saved 13,000 plastic bags. Separately, the 2019 race also avoided the use of 39,000 single-use PET water bottles (more information here in Catalan).

Due to COVID-19, some changes have been necessary in 2020, and plastic bags will be used. As no refreshment stops will be available during the race, runners will be given a plastic bottle, however, they will only receive one at the beginning of the race, and it will come with a plastic strap, to encourage runners to hold on to and use just one bottle.

Lessons learned

This contract proves that the market is ready and able to meet a range of environmental solutions. Two of the offers, including the cheapest offer, were able to meet all the desired environmental criteria, offering ecolabelled t-shirts, delivered by eco vehicles, and using less packaging.

When evaluating waste reduction, it is important to have objective, transparent and clear criteria. To do so, it is necessary to plan ahead and set a baseline (meaning, understand the amount of packaging currently being used). To ensure the right result, it is also necessary monitor the packaging on delivery, and have appropriate penalties in place. For example, t-shirts are still delivered with maxed paper, which is inserted to protect the t-shirt’s print. In future editions, the city will also try to eliminate this waste.

Finally, the general commitment to green the La Mercè Race helped enable this approach. It makes it easier to identify different impact sources and progressively tackle issues using a range of tools, including procurement.

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For related information, please see European GPP criteria for:
• Road Transport and the Technical Background Report;
• Textiles and the Technical Background Report.