

Practice to be assessed and included in the Guidelines

**Number/code:** OM/PR6

**Title:** SEPARATE WASTE BINS SELECTION AND MANAGEMENT

**Guidelines section:**

<input type="checkbox"/>	Governance	<input checked="" type="checkbox"/>	Operational management
		<input type="checkbox"/>	<i>Context of the event</i>
		<input type="checkbox"/>	<i>Event</i>
		<input type="checkbox"/>	<i>Stadium management</i>
		<input checked="" type="checkbox"/>	<i>Procurement</i>
		<input type="checkbox"/>	<i>Mobility and logistics</i>

**Description:**

Waste has to be separated in a way that it can be treated separately by the municipal or private waste disposal facilities. Special consideration has to be given to hazardous wastes (e.g. energy-saving lamps, pharmaceuticals), electrical appliances as well as toners and colour ink cartridges. These wastes are separated, collected, and disposed of appropriately.

The selection of the right type of bins for separate waste collection along with the provision of clear information on it (which types of materials can be collected in that specific bin) is fundamental for reaching ambitious separate waste collection targets. Colour-coding and infographic should be clear and similar to the ones used in the local context (e.g. colour-codes used by the municipality that hosts the event) to avoid confusion. The same type of bins and signals should be used for all the event's sites. To improve operations flexibility, bins should be designed in a way that allows to easily change their destination (e.g. use removable and interchangeable adhesives to signal waste fractions). Waste stations should be carefully located: in every station, there should be one bin for each waste fraction (according to the specific destination of the area).

Examples:

1) For Russia 2018 World Cup:

- Colour-codes: A yellow container (receptacle) or a container with a yellow lid shall be used for recyclable waste. For other (non-recyclable) waste, a grey container (receptacle) should be used; however, other more common colours such as green may also be used in an effort to save money. This colour scheme has been chosen in accordance with the draft Decree of the Government of the Russian Federation "On Approving the Rules for Managing Solid Municipal Waste and the Types of Standard Contract for Providing the Municipal Waste Management", which specify the rules for marking containers when segregated waste collection is implemented in the Russian Federation. This colour scheme was also used at the 2016 UEFA European Championship in France.
- Bins location: Containers (receptacles) for segregated waste collection both in public (spectator) and technical areas are placed in clusters ("sets"), i.e. within the immediate proximity of containers for the collection of recyclable waste or individual types of waste, such as used paper.

There must be a container for the collection of other waste (non-recyclables). Containers are placed in visible and accessible places. When placing containers for other types of waste (non-recyclables), the likelihood of unpleasant smells spreading to the surrounding areas should be taken into consideration;

2) EXPO Milano 2015:

- Colour-codes: recalled the EXPO logo colours and the same colours used in the Municipality of Milan for identifying the MSW fractions: blue for glass, yellow for plastic and aluminum, green for organic and purple for paper and card boxes. The only different colour was pink for the unsorted waste (usually grey in the Municipality of Milan).

- Bins selection: AMSA and Expo 2015 collaborated to identify the best solution from a functional point of view applying the following criteria:

a. Functionality of bins to reach the set selective waste collection objectives; bins were modulated into 3 to 5 compartments for the different streams of recoverable materials: paper and cardboard, plastic and metal packaging, organic matter, glass and residual dry matter;

b. Maximal reduction of occupied space (130 litre per bin and 1-2 m<sup>2</sup> taken up at each collection point);

c. Prevention of any overflowing (total volume calculated according to the degree of filling and emptying frequency throughout the day);

d. Prevention concerning safety (stability, surfaces and edges, rigid bins for glass and organic matter) and security (allowing for a rapid content inspection);

e. Use of bin surfaces for educational pictogram notices on environmental themes and for providing precise indications on waste sorting (in Italian, English and French);

f. Positioning of collection points for maximum waste interception (proximity to potential large waste producers, including catering facilities and food & beverage points of sale, as well as most popular areas for visitors, such as gates and rest areas);

- Bins location: Following a first phase of desk study for the positioning of waste bins, mapping all needs related to spaces and streams, the opening of the Event marked the beginning of field verification, based on points of greater waste production and on the convenience of collection operations. For example, since the very first days after the opening to the public, large 1,100-litre bins were provided to collect voluminous items and placed close to Participants producing high amounts of waste though having limited storage space. The actual situation as well as daily-created maps were different every morning, causing paradoxical and amusing situations. The chase for bins which had been moved by Participants during the night according to their own needs – and never for the common good – was carried out with dedication by operators who spent 2-3 weeks to stabilise the situation and consolidate the correct and final location of bins. Also depending on the events and initiatives hosted by Expo Milano 2015 during the semester of activity (e.g. Guinness World Record for the longest pizza, Ice Cream Festival etc.) bins were moved by operators based on needs.

Bins were covered by adhesives with information of the waste fraction that could be exchanged when needed.



### **Environmental benefits**

A more effective and efficient waste management helps preventing waste in landfills and optimizes waste destined to reuse and recycling.

### **Economic benefits:**

It helps prevent waste disposal costs.

### **Applicability and replicability potential**

Bins selection and location should be carefully planned according to the local waste management rules, colours code and infographics.

#### **1) Source**

[Russia 2018 World Cup](#) (pp. 17 – 18)

[EXPO Milano 2015](#) (pp. 62 – 63)

[Green Events Austrian Ecolabel](#) (p 14)