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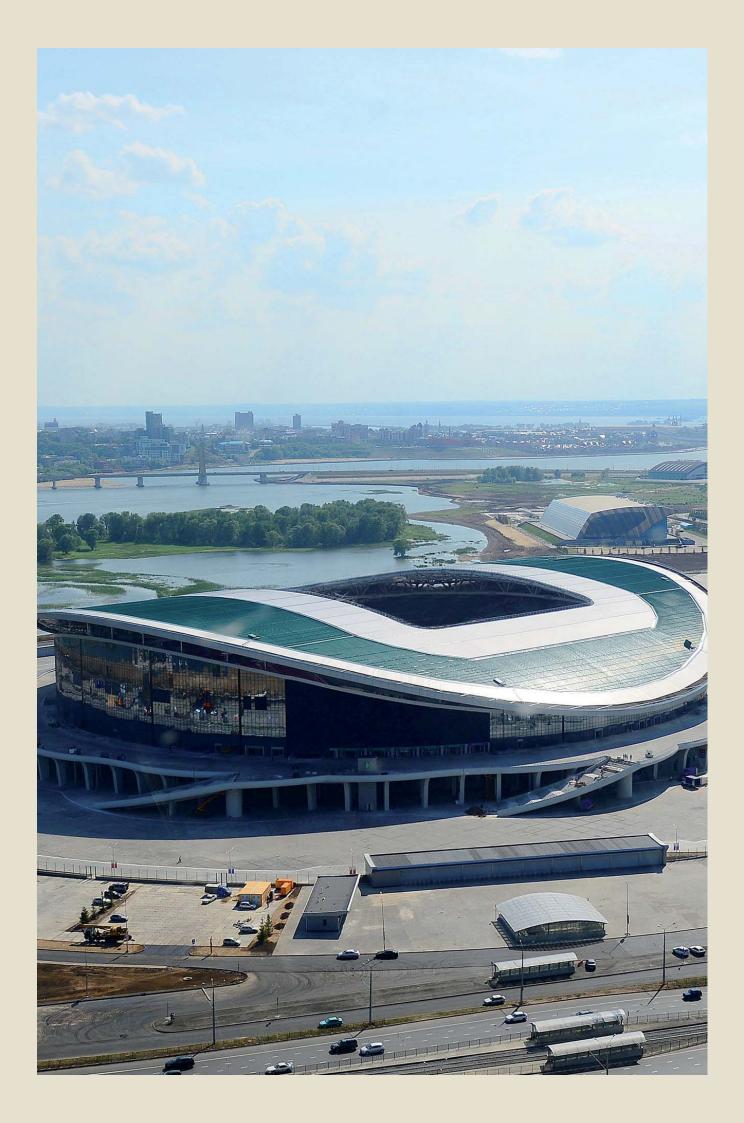
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Waste Management Concept 2018 FIFA World Cup™



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GLOSSARY

In this concept, the following terms have the following meanings:

"2018 FIFA World Cup Host City Agreement" – a three-party agreement concluded between FIFA, the host city administration and the LOC Russia 2018, which sets the terms for preparing for and holding the 2018 FIFA World Cup and the FIFA Confederations Cup 2017 in the host city and also determines the status, role, rights, and obligations of the host city.

"2018 FIFA World Cup Russia Hosting Agreement"

- agreement between FIFA and the LOC Russia 2018, which sets the terms for preparing for and holding the 2018 FIFA World Cup and the FIFA Confederations Cup 2017 in the Russian Federation and also determines the status, rights, and obligations of the LOC Russia 2018.

"2018 FIFA World Cup Russia™ (2018 FIFA World Cup)" - FIFA's 21st World Cup, the finals of which will take place in Russia from 14 June to 15 July 2018.

"2018 FIFA World Cup Stadium Agreement" – a three-party agreement concluded between FIFA, the stadium administration and the LOC Russia 2018 that sets the terms for preparing for and holding the 2018 FIFA World Cup and the FIFA Confederations Cup 2017 and also determines the status, role, rights, and obligations of the stadium authority.

"Arena 2018" – autonomous non-profit organisation, Arena Russia 2018 created by the LOC Russia 2018 to perform duties, including construction inspections and assuring compliance with FIFA requirements for preparing for and holding the FIFA World Cup and the FIFA Confederations Cup, Hosting Agreement

and the Bid Book in the process of designing, constructing, reconstructing and/or overhauling the sports venues intended for preparing for and holding sports competitions.

"Back of house (BOH)" - means service and work areas with restricted access for spectators (kitchens, organisers' offices, team dressing rooms, media centres, broadcast areas, etc.).

"Bid Book" - document containing the Russian Federation's written obligations, including the Government Declaration and Government Guarantees that the Russian Federation issued to FIFA, and also the written obligations of the Russian Football Union duly provided to FIFA during the procedure for determining the host of the 2018 FIFA World Cup and the FIFA Confederations Cup 2017.

"Cleaning Service Provider" - a legal entity that provides cleaning services; selected by the facilities' owners.

"Cleaning Services" - Cleaning Services deal with the removal of undesirable substances from surfaces, with the aim of improving visual appearance and providing comfortable and hygienic sanitary conditions.

"Competition Site (Site)" - Stadium, FIFA Fan Fest Site, International Broadcasting Centre, Venue-Specific Training Site, Team Base Camp, airport, Logistics central warehouse, FIFA Venue Ticketing Centre, Office and other sites involved in organising and holding the Competitions.

"Competitions" - the FIFA Confederations Cup Russia 2017 and the 2018 FIFA World Cup Russia. "Compound" - a restricted-access area identified by FIFA within the internal or external perimeter of a stadium at which Functions are based.

"FIFA (Fédération Internationale de Football Association)" - the world governing body overseeing association football.

"FIFA Cleaning and Waste Management Handbook"

- a document governing the organisation of cleaning and waste management services. The Handbook is used as a legally binding contractual document for FIFA World Cup organisers regarding the provision of cleaning services and waste management; it contains principal and/or additional requirements for Stadiums and other Sites that host the FIFA World Cup.

"FIFA Confederations Cup Russia 2017
(Confederations Cup 2017)" – eighth international football tournament held under FIFA's auspices, which will take place in Russia from 17 June to 2 July 2017.

"FIFA Stadium Requirements Handbook" – the principal FIFA document that provides additional specifications, descriptions and detailed information pertaining to the necessary documentation and requirements that should be fulfilled by the LOC Russia 2018 in accordance with the Hosting Agreement, and by the stadium authority pursuant to the Stadium Agreement.

"FIFA Fan Fest" - the FIFA Fan Fests are the official public viewing events of the FIFA World Cup that take place in Host Cities, providing free access to the FIFA World Cup experience outside of the Stadiums. FIFA

World Cup matches are broadcast at this venue and usually additional entertainment in various forms is offered.

"Front of house (FOH)" – refers to the general-access area for spectators (stands, concession stands for spectators, territory adjacent to the stadium, FIFA Fan Fest Site, etc.).

"Function" - a functional subdivision of the LOC responsible for organising and providing certain services for the Competitions.

"Host City (city hosting the Competitions)" – means a city in the Russian Federation that will host the 2018 FIFA World Cup and/or the FIFA Confederations Cup 2017.

"IBC" - the International Broadcast Centre.

"Interim Waste Collection Point" - temporary waste collection sites that serve as storage space for waste bags and/or full waste containers during the cleaning process. At the end of the cleaning process, the waste bags and/or waste containers are disposed of at the Site's Waste Collection Compound.

"Landfill" – a special facility for the disposal of waste. Traditionally the final part of the waste disposal chain.

"Local Organising Committee (LOC)" - the autonomous non-profit organisation, the Local Organising Committee Russia 2018 was set up to prepare for the competitions in Russia, i.e. the 2018 FIFA World Cup and the FIFA Confederations Cup 2017.

"Recycling" - means the process of using disposed substances to make other goods that will be used.

"Secondary material resources" - materials that can be removed from the waste flow and recycled for reuse (as processed raw materials).

"Segregated waste collection (SWC)" - is a system for managing solid municipal waste (SMW) when waste is segregated by type to separate potentially useful recyclables and to send them to be processed for the subsequent manufacture of new goods. The simplest form of SWC is the separation of SMW into two flows: recyclables (with subsequent additional automatic sorting) and other waste (primarily organic waste).

"Service Level Agreement (SLA)" - SLAs clearly establish an accountable framework for all parties involved in the delivery of Cleaning and Waste Management Services. The agreements define the expectations, responsibilities and communication requirements. They are a part of a rental agreement or a service contract and define the exact scope according to Site-specific requirements. The agreement establishes, among other items:

- the expected standard of cleanliness of the Site (a reference is available in section 30.30. of the FIFA Cleaning and Waste Management Handbook);
- targets for waste disposal that have to be fulfilled (a reference is available in section 40.50. of the FIFA Cleaning and Waste Management Handbook).

"Solid municipal waste (SMW)" - means waste created in communal spaces through the process of human consumption, and also goods that lose their

usability in the process of consumption in communal areas with the purpose of satisfying people's personal and everyday needs. Waste that is formed as a result of the activities of legal entities and individual entrepreneurs and is similar in composition to waste formed in residential areas as a result of human consumption is also considered to be solid municipal waste.

"Solid waste compactor" - a powered, large-capacity container for compacting the volume of collected waste.

"Stadium" - the main Site of the Competitions.

"Stakeholders" - all the parties that are involved in organising and holding the Competitions, including spectators, teams, organisers, facility owners, city administrations, partners and contractors.

"Steward" - Stadium security employees who perform security checks at entrance groups, check tickets, monitor order and security rules at the stands during the events.

"Storage hopper" - a specialised large-capacity container for collecting waste, not equipped with waste compactors.

"The period of holding the 2018 FIFA World Cup or the FIFA Confederations Cup 2017 (hereinafter referred to as the Period of the Sports Competition)" – the period from the finish date of the preparations for the sports competition to the date that comes a month after the final match of the 2018 FIFA World Cup or the FIFA Confederations Cup 2017 is held.

"Volunteers" – citizens of the Russian Federation, foreign citizens or stateless persons that have concluded with FIFA, FIFA subsidiaries or the LOC Russia 2018 civil agreements on participating in events using their experience, knowledge, and skills without being fiscally remunerated for their activities, except for reimbursement of expenses incurred in performing the civil agreements.

"Waste" - substances or items that appear in the process of manufacturing, performing work, providing services or in the process of consumption, which are disposed of, intended for disposal or are subject to disposal.

"Waste Collection Compound" - a Waste Collection Compound comprises a clearly defined area at a Site where waste can be stored until final disposal or further processing through the Waste Management Service Provider. A Waste Collection Compound is equipped with several kinds of waste containers and (if necessary) compactors to store waste at the respective Site. The number of Waste Collection Compounds might vary, depending on the size of the Site as well as the amount of waste being generated on Site.

"Waste management" – is the collection, accumulation, transportation, processing, decontamination, storage and disposal of waste.

"Waste Management Service Provider (Operator)"

- a legal entity that collects, transports, processes, recycles and disposes of solid municipal waste; selected by the facilities' owners.

"Waste Management Services" - services including the collection, processing (sorting), removal and recycling of waste.

INTRODUCTION

The FIFA Confederations Cup and the FIFA World Cup

The FIFA World Cup is one of the most anticipated international events in the world and is held once every four years.

The 2018 FIFA World Cup Russia (2018 FWC) will be the 21st FIFA World Cup finals and will take place in Russia from 14 June to 15 July 2018.

The FIFA World Cup consists of two stages: preliminary competitions, when all national associations of the six football confederations that

meet the requirements compete for the right to play in the final stage and in the final tournament when all 32 qualifying teams compete for the FWC title. The preliminary competitions of the FWC are held in various countries around the world under the auspices of FIFA, the continental confederations and the national associations. Over 800 qualifying games will have been played during the preceding two and a half years, with 211 registered national associations on six continents participating.

Preliminary competitions are held all over the world, and the final competition featuring the 32 qualifying teams are held over one month in the host country

Key milestones of the 2018 FIFA World Cup Russia

14 June to 15 July 2018

2018 FIFA World Cup Russia

1 December 2017

After the last match of the preliminary competition, the Final Draw will take place in Russia to draw the 32 teams into eight groups to compete in the final competition

17 June to 2 July 2017

FIFA Confederations Cup Russia 2017

25 July 2015

Preliminary Draw for the 2018 FIFA World Cup to decide the preliminary qualification groups in four confederations

March 2015

The preliminary competition for the 2018 FIFA World Cup starts in CONCACAF

29 September 2012

Announcement of the 2018 FIFA World Cup Host Cities

2 December 2010

The Russian Football Union is awarded the hosting rights for the 2018 FIFA World Cup by FIFA



pre-selected by FIFA. In December 2010, Russia, represented by the Russian Football Union, received the right to hold the 2018 FIFA World Cup Final Tournament. The 2018 FIFA World Cup will be held in eleven Russian Host Cities: Ekaterinburg, Kaliningrad, Kazan, Moscow, Nizhny Novgorod, Rostov-on-Don, Samara, Saint Petersburg, Saransk, Sochi and Volgograd. A total of 64 games will be played during the tournament, with the FIFA World Cup champions being determined following the elimination stage.

The 2018 FWC is preceded by an event of no less importance from the point of view of preparing for 2018 FIFA World Cup: the FIFA Confederations Cup 2017, the eighth edition held under the auspices of FIFA. It will be held between 17 June and 2 July 2017 in Russia. The tournament will be held at stadiums in the following cities: Kazan, Moscow, Saint Petersburg and Sochi.

The participants in the FIFA Confederations Cup will include the winners of each of the six continental tournaments, the current FIFA World Cup holders and the host country.

Waste Management System for the Competitions

The present Waste Management Concept for the 2018 FIFA World Cup™ Events is aligned with the 2018 FWC Sustainability Strategy and includes a set of approaches, requirements and plans for organising an efficient waste management system





in the 2018 FWC Host Cities at the Competition Sites. Efficient resources and waste management are considered one of the key priorities in achieving the sustainability goals.

The provisions, goals and requirements of the present concept are mandatory for all parties involved in 2018 FWC, including but not limited to: the LOC top management and employees, providers of goods and services for stadiums and FIFA Fan Fest Sites, partners and affiliates and sponsors, representatives of Host City administrations and volunteers.

Rational and efficient waste management is a vital task for any large-scale event. During the FIFA Confederations Cup 2017 and the 2018 FIFA World Cup, environmentally friendly waste management is of paramount importance, as these events involve stadiums and infrastructure facilities, millions of people (including foreign guests) and the provision of the requisite services (catering and concessions, transport, accommodation and security). Such a huge volume of work and services produces a large amount of waste and affects the natural environment and the social sphere of the host country.

An efficient waste management system, specifically organising and introducing segregated waste collection, allows the negative impact from the Competitions to be minimised by separating secondary material resources from the overall volume of solid municipal waste (SMW) and sending useful components for recycling, thus cutting down significantly on the volume of waste sent to landfill and incineration.

MISSION AND REY GOALS

FIFA and the LOC Russia 2018 (the LOC) take a responsible approach in preparing for the 2018 World Cup and they are guided in their work by the principles of sustainability, environmental responsibility and collaboration and they implement an efficient waste management policy when holding the FCC 2017 and the 2018 FWC.

The Mission is to minimise, at all stages of preparation for the 2018 FIFA World Cup and when holding official events under the aegis of FIFA, the negative environmental impact of the waste produced, to recycle the waste, to form a responsible attitude among event participants towards waste management in the best interests of present and future generations.

The mission may be achieved by implementing the key goals:

- minimising waste production;
- setting up an efficient segregated waste collection system with subsequent recycling;
- minimising the quantity of waste sent to landfill

- and minimising the negative impact on the natural environment;
- ensuring comprehensive involvement via an information/education campaign.

When striving to achieve the goals, the LOC is guided by the following:

- pre-planning for waste management;
- involving the public;
- minimising the costs and resources required for setting up an efficient waste management system;
- complying with the current regulations of FIFA and the Russian Federation;
- using global experience in holding large-scale sports events;
- transparency and accountability to stakeholders;
- preferable use of recyclable products and materials that are suitable for recycling into secondary material resources and/or produced from recycled materials;
- adhering to the sustainability principles when providing cleaning and waste management services.





PRIORITY AREAS OF WASTE MANAGEMENT

The present concept is developed in consideration of the recommendations, requirements and obligations in accordance with the following documents:

- Russian Federation Bid Book;
- FIFA Stadium Requirements Handbook;
- Hosting Agreement;
- Host City Agreements;
- Stadium Agreements;
- FIFA Cleaning and Waste Management Handbook;
- FIFA Sustainability Projects and Services Handbook;
- 2018 FIFA World Cup Russia Sustainability Strategy;
- 2018 FIFA World Cup Sustainability Policy;
- Federal Law of the Russian Federation 7-FZ of 1 January 2002 "On Environmental Protection";
- Federal Law of the Russian Federation 89-FZ of 24 June 1998 "On industrial waste and consumer waste" and other regulatory documents of the Russian Federation pertaining to waste management.

The list of obligations of the Russian Federation, the LOC and FIFA pertaining to efficient waste management is contained in Annexe 1 to the present concept.

The Waste Management Project will be conducted according to FIFA's sustainability mission to maximise the positive and minimise the negative environmental social and economic impacts of the Competitions.

All the functional divisions of the LOC and FIFA, Stadium authorities, Sites Owners and Host cities, Hospitality services and licensed souvenir providers, commercial partners, concessions stand operators, Cleaning Service providers, Waste Management operators, hotels, other partners and organisations are all involved in implementing the present concept.

In developing the best global practices, FIFA and the LOC adhere to the following hierarchy of waste management:

Adherence to this hierarchy by all parties involved in preparing for and holding the Competitions during their work will allow the negative impact of the produced waste to be reduced significantly.

The present concept should be implemented at all stages of preparing for and holding the Competitions, from planning to dismantling the overlay infrastructure of Sites and summing up the results.



Figure 1: Hierarchy of the waste management approach.

MINIMISING WASTE PRODUCTION

Minimising waste production is the primary and most efficient method of waste management; not only does it allow resources to be preserved and negative environmental impact reduced, but also ensures savings on financial resources spent on collecting, transporting, processing, and disposal of waste.

Economic advantages achieved through waste reduction:

- reduced cleaning time;
- reduced number of staff engaged in cleaning and waste management;
- reduced number of waste bins, containers for waste collection, garbage trucks and other specialised machinery and equipment necessary for servicing the facilities.

General requirements for minimising waste production

While preparing for and holding the Competitions, it is required that the parties involved comply with the following requirements when managing waste:

- 1. Use digital means of communication: email, file hosting services, multiple-use USB sticks, video conferencing, etc.
- 2. Use double-sided black and white printing and economy mode for printers (with the exception of official documents and presentation materials).
- 3. Give preference to drinking water from coolers over bottled water. Cooler bottles must be reusable.
- 4. Cease use of disposable tableware, cutlery, packaging and plastic bags made from non-recyclable materials.
- 5. Use hand dryers instead of paper towels in toilet facilities.

- 6. Cease use of mixed waste baskets for each workplace and use common containers for waste instead. For example, in an office for 30–50 people, use one container for recyclable waste and one for non-recyclable waste.
- 7. Reuse paper that has only been used on one side.
- 8. Place used documents and drafts in special containers for paper collection (waste paper) for further recycling.
- 9. Place empty plastic/glass bottles and aluminium cans in special recyclable waste collection containers for further recycling.

Waste management best practices for Functional Areas is contained in **Annexe 2** of the present concept.



SETTING UP SEGREGATED WASTE COLLECTION

A key aspect in building an efficient waste management system is the introduction of a segregated waste collection system (SWC). Setting up a SWC involves separating recyclable (materials that are suitable for secondary use and processing) from non-recyclable waste.

Stadiums and FIFA Fan Fest Sites are the principal Sites for large-scale group gatherings. Given that these sites and venues will produce an enormous amount of waste and that they will attract particular attention, the stadiums and FIFA Fan Fests Sites are the key sites for introducing segregated waste collection for subsequent recycling and for promoting responsible waste management. In addition, the approach described in this concept for efficient waste

management should also be implemented at all other Competition Sites. More details about involvement of the LOC Cleaning and Waste Management project team at the various Competition Sites are given in the Annexe 3 to the concept.

Depending on the region, different types of material may be recycled and re-used. When preparing for and holding FIFA events, the LOC distinguishes certain key types of waste that are generated in different areas of stadiums and FIFA Fan Fest Sites and which may be recycled:

- 1. Plastic bottles
- 2. Glass bottles
- 3. Aluminium and tin cans
- 4. Paper (office paper, cardboard, newspapers, magazines, books, etc.)
- 5. Glass and broken glass
- 6. Used batteries
- 7. Used cooking oil (frying fat)
- 8. Film-based packaging (polyethylene, bubble wrap, stretch wrap, etc.)
- 9. Wood items (wire spools, used pallets)

The list of waste generated in different areas of a stadium and FIFA Fan Fests is given in Annexe 4 to the concept.

There are two separate areas for waste processing:

- Front of house (FOH): spectator areas and general access areas where Competition spectators and guests are located;
- Back of house (BOH): service (technical) areas, where work is performed to prepare, manage and hold the Competitions.

FOH

To make the SWC easily understandable in spectator areas, a two-flow waste collection system shall be organised:

RECYCLABLE:

- plastic bottles
- glass bottles (only in Hospitality areas);
- film-based packaging;
- aluminium and tin cans;
- glass and broken glass;
- clean paper;





GENERAL WASTE:

- food and drink remnants;
- soiled paper wrapping and dirty napkins;
- hygiene-related items;
- teabags;
- other waste that is considered nonrecyclable.





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 colors 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 color scheme was also used at the 2016 UEFA European Championship in France.

A two-flow SWC system shall be introduced in all the general access stadium areas, including but not limited to:

- territories around stadiums;
- stadium entrances/exits;
- areas close to food and beverage selling points and merchandise concessions;
- hospitality areas;
- any other places with open access for spectators.

Waste will be removed from containers of both types by replacing full waste bags with new empty ones. To prevent waste flows from mixing, different coloured bags shall be used, such as transparent bags for recyclables and black for non-recyclables. A specific decision will be made individually for each stadium or FIFA Fan Fest.

If bags remain intact, it is recommended that they be reused.

The LOC Cleaning and Waste Management project team decides the number of sets that need to be installed in public access areas and service areas in collaboration with representatives of the functions and administrations of stadiums or other Competition Sites.

BOH

A multi-flow system for segregated waste collection shall be set up in service areas where the functional offices of the LOC, FIFA representatives, partners and service providers are located (a significant part of BOH areas is located in the overlay infrastructure), depending on the type of work producing the waste. The colour scheme for containers in technical areas is recommended but is not mandatory. Containers for collecting specific types of waste must be labelled in English and Russian. It is desirable that intuitively understandable pictograms be used (for more detail, see Annexe 5).

When using colour-marked containers, the following colour scheme is recommended:

Collection of homogeneous waste (such as used paper, PET, glass, etc.) may be organised without using specialised containers.

Functional areas that will produce bulky waste (for instance, television and radio broadcast compounds, logistics compound, ceremonies areas, hospitality services areas, spectator security check areas) shall use specialised large-capacity containers (over eight cubic meters).

Below is a table demonstrating the use of a multi-flow SWC in a stadium's technical (functional) areas.



Table 1. Distribution of specialised containers in the Functional Areas

No.	Functional Area Waste component categories collected separately												
Т		Recyclables		Paper and cardboard	Glass	Metals	Hazardous waste and e-waste	Wood	Cooking oils	Bulky waste and tires	Medical waste	Used absorbent	Food waste and other
1.3.3	Opening/closing ceremonies prop store	+		+				+		+			+
2.2.1	Broadcast premises/ zones	+					+	+		+			+
3.2	Stadium media centre		+	+			+						+
4.1.6 4.2.5	VVIP kitchen(s) and VIP kitchen(s)		+	+	+	+		+	+				+
5.	Organisers' offices (FIFA/LOC)	+		+									+
5.3	Accreditation Centre	+		+									+
5.4.1	Stadium Ticket Centre	+		+									+
5.5	Volunteer centre		+	+		+							+
6.1.8	Commercial hospitality kitchen (indoor)		+	+	+	+			+				+
6.2.1 6.2.2	Commercial affiliate village and Commercial hospitality village (BOH)	+											+
6.2.3	Waste Collection Compound (Hospitality Village)	+	+	+	+	+		+	+				+
7.1.7	Stadium Signage storage & workroom		+										+
7.2.1	Commercial Display (Fan Zone)	+											+
7.3.2	Food and beverage storage		+	+									+
7.3.5	Merchandise concession internal Storage		+	+									+
8.1.7	Mag and bag areas	+											+
-	Stewarding Centre	+											+
-	Guards' Holding Area	+											+
8.2.1.1	Doping Control facilities	+									+		+
10.1.6	Technology compound	+	+				+						+
10.1.6.14	Power Generator Area											+	
10.2.2.	Logistics compound		+	+		+		+		+		+	+
10.3.2.1	Main Waste Collection Compound	+	+	+	+	+		+	+	+		+	+
10.4	Kitchens (third parties' cafeteria)		+	+		+			+				+
-	Parking areas	+											+

^{*} All other Functional Areas of stadiums or other Competition Sites should be equipped with containers to collect recyclable waste and other (non-recyclable) waste

Rules for placing SWC containers

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; as such, bags should be replaced regularly, preferably on a daily basis.

Detailed requirements for setting up the SWC and for cleaning operations are set forth in the FIFA Cleaning and Waste Management Handbook, Chapters 30, 40 and 50. Operational plans for each stadium and other Sites will be drafted and introduced by LOC staff jointly with representatives of the stadiums or other Competition Sites.







CLEANING AND WASTE REMOVAL PROCEDURE

Cleaning is the first stage and precedes all the other stages of waste management. The efficiency of cleaning services and segregated waste collection depends on harmonious and precise cooperation between the cleaning services provider (a cleaning company), transport and waste processing operator and the Cleaning and Waste Management volunteers (for more detailed information about Cleaning and Waste Management volunteers, see the contacts listed at the end of this concept).

Cleaning services include dry and wet cleaning of different surfaces, the collection of discarded waste (waste left on tables), washing of sanitary equipment and other equipment and places. More detailed information on the provision of cleaning services may be found in Section 30 of the FIFA Cleaning and Waste Management Handbook.

The principal stages of waste management at stadiums and other Competition Sites are shown in the diagram below.

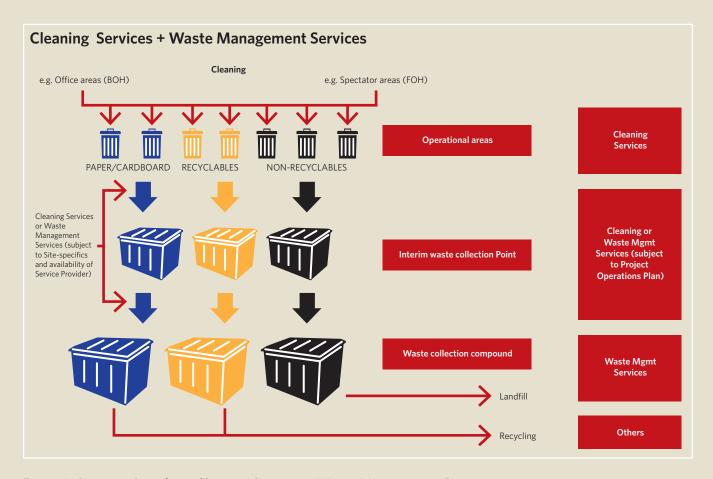


Figure 3: Process chain from Cleaning Service to Waste Management Services.

Key aspects:

- Cleaning services, among other things, include the collection and removal of filled waste bags to interim waste collection points or the temporary storage and accumulation of waste.
- Cleaning specialists are responsible for placing waste bags in each container.
- Waste (both recyclable and non-recyclable) goes to the waste management operators sorting and recycling facilities after being removed from the

general waste collection compound and interim waste collection points.

Organising cleaning and waste management, including setting up the SWC, is performed in accordance with the operational plan that will be drafted by LOC staff jointly with representatives of the stadiums or other Competition Sites; and by the corresponding FIFA office for FIFA Fan Fests.



DISTRIBUTION OF RESPONSIBILITY

In accordance with the FIFA Stadium Requirements
Handbook and the FIFA Cleaning and Waste
Management Handbook, responsibility for providing

the necessary resources and services shall be distributed as follows:

Resource/Services	Responsible party
Receptacles (containers, tanks, bins for the collection of general [non-recyclable]) waste, including 1.1m3 containers on wheels	Site Owners/Waste Management Operator (contractor of the Site Owners)
Bags to collect general waste; uniforms and equipment for cleaning service employees; consumables, communications equipment (radios); vacuum cleaners; washers; supplies; household chemicals; and other supplies and equipment.	Cleaning service provider (contractor of the Site Owners, hereinafter the Cleaning Service)
Sweepers and universal vacuum machines for cleaning surrounding areas	Site Owners/Cleaning Service
Colored containers and bags for segregated waste collection (SWC)	Waste Management Operator/Site Owners/Cleaning Service/ Marketing Partners (there are cases that Commercial Affiliates provide these items upon agreement but they are not ultimately responsible)
Facilities for temporary waste storage, changing rooms for cleaning personnel, CES (cleaning equipment storage rooms) and cleaning service supply storage rooms	Site owners
Temporary infrastructure at interim waste storage sites and the main waste accumulation site at stadiums (fencing, lighting, household and sanitary units, water supply, sewerage, power supply)	Arena 2018 (subsidiary organisation of the LOC)
Waste compactors and waste storage hoppers (both for SWC and SMW), specialised equipment and garbage trucks	Waste Management Operator/Site Owners
Personal protective equipment; uniforms; equipment; supplies; communications equipment; and rest rooms for waste management service staff	Waste Management Operator and Cleaning Service
Containers and supplies for specific waste (such as cooking oils, sorbents for petroleum product spills, etc.)	Waste Management Operator/providers of the corresponding services for the functional units of the LOC
Containers and supplies for the collection and storage of medical waste	Medical service representative (provider from the LOC Department of Medical Services and Doping Control)
Collection of all types of waste in functional areas (kitchens, server rooms of the IT service and television broadcasters, and hospitality areas and compounds) and transfer of the waste to an interim waste collection points	Service provider for the corresponding functional unit of the LOC that generate the type of waste
Collection and disposal of liquid waste from mobile or temporary toilets	Temporary and mobile toilet service provider (contractor Arena 2018)

ESTABLISHING AN EFFICIENT WASTE MANAGEMENT SYSTEM

In order to establish an efficient waste management system in accordance with the concept, the following steps must be taken:

 Plan for and provide an optimal number and type of containers and other equipment to organise the segregated collection of waste inside Sites and in areas adjacent to Sites and also at all functional areas.

Responsible parties:

- a) The LOC Cleaning and Waste Management function is preparing requirements for the number and types of containers, as well as for other types of waste collection equipment.
- b) Stadium administrations and other Site owners are responsible for providing waste collection containers via: purchase, rent or agreements with an operator on free use.
- 2. Select a cleaning and waste management service providers

Responsible parties:

- a) The LOC Cleaning and Waste management project team develops requirements for the levels of cleaning and waste management services for FIFA-LOC Offices, Stadiums, Draw Halls Sites and fully participates in the procurement process by providing expert opinion in the selection process. Service Level Agreements (SLAs) for others Sites are to be reviewed and approval by LOC Cleaning and Waste management project team (Details are provided in Annexe 3 of the concept).
- b) Site Owners carries out procurement processes and contracts Cleaning and Waste

management service providers according to the SLA

3. Draft and coordinate operational plans for cleaning and waste management at Stadiums. The operational plans will, among other things, indicate the routes for moving waste from the places where it is generated to interim storage points and the waste accumulation site, the distribution of flows of separately collected waste, the schedule for using lifts and the staff schedule.

Responsible parties:

The operational plans are prepared by specialists from the LOC Cleaning and Waste Management project team jointly with selected cleaning service providers and waste management operators and, if necessary, are coordinated with the stadium administrations and other functional subdivisions of the LOC.

4. Develop instructions and hold training seminars for the staff of cleaning companies and waste management operators, as well as for volunteers



and providers of other functional services responsible for cleaning in specialised areas (hospitality, catering services, etc.).

Responsible parties:

- a) The LOC Cleaning and Waste Management project team is responsible for preparing and holding training events for the staff of Cleaning Services and Waste Management Operators, training waiters and Hospitality service staff.
- b) The LOC Volunteer Department is responsible for the training of Cleaning and Waste Management volunteers about waste management requirements.
- 5. Prior to the first match, it is necessary: to ensure that all areas are clean and test the functionality of equipment; verify that all supplies are available in a sufficient amount; and ensure that personnel are prepared. All containers must be placed throughout stadiums no later than 30 days prior to the first match.

Responsible parties:

- a) Stadium cleaning service providers are responsible for the provision of cleaning and waste collection services.
- b) Coordinators from the LOC Cleaning and Waste Management project team control and monitor the activities of stadium cleaning service providers.
- 6. During the FCC and the FWC, the operational delivery of any Cleaning and Waste Management Services in all Competition Sites will be performed through the Cleaning and Waste



Management Service Providers in accordance with the Service Level Agreements and this concept.

7. Separately collected waste not mixed with organic waste makes up secondary material resources (SMR) and is removed by specialised organisations as hoppers located in the interim waste storage areas of functional areas and the main waste accumulation site become full. The specialised organisations deliver the collected SMR to industrial sites where the weight of the SMR is recorded. The SMR is then sorted by group (e.g. cardboard is separated from office paper, plastic bottles from film and paper cups) and batches are formed for further recycling. Representatives of the specialised organisations shall take photos or recordings of all the procedures for a report to the LOC.

MONITORING AND REPORTING

During the Competitions, the LOC Venue Cleaning and Waste Coordinators responsible for organising the cleaning and introducing an efficient waste management system at the Sites shall monitor the activities of cleaning and waste management service providers in order to introduce the necessary amendments and additions to the waste management procedures on the basis of practical experience gained.

The waste management operator for each Site must prepare and submit a report on the amount of waste sent for recycling, reuse or disposal to representatives of the stadiums and the LOC. The final information will be used to prepare a report on the organisation of an efficient waste management system. See more information in the Annexe 6 below. The data may be used for future FIFA World Cups and for events of any scale in the 2018 World Cup Host Cities and in other regions of the Russian Federation.

Distributing information on the results of organising SWC will raise public awareness of an environmentally responsible approach to waste management. The report on the results of the Waste Management Project will be prepared by the LOC Cleaning and Waste Management project team in a format approved by FIFA.



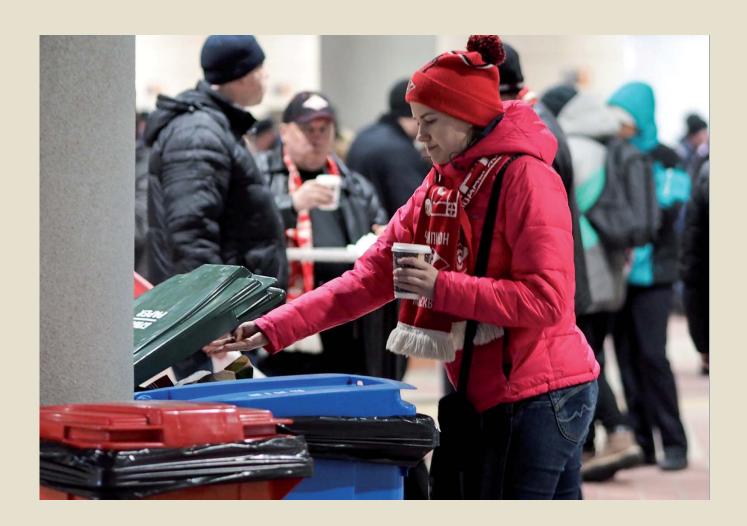
CONCEPT IMPLEMENTATION

The LOC, together with representatives from the Sites, must develop individual plans for organising cleaning and waste management for the stadiums and other sites.

After developing said plans and prior to the Competitions, these plans must be tested at the pre-selected test events (e.g. Russia's Premier League matches) with the participation of the parties involved.

Experience gained in organising these events will allow amendments to be made to the plans to ensure the success of waste management at the Competitions.

The present concept may be revised before the start of the Confederations Cup 2017 and 2018 FWC, with a view to ensuring its compliance with the capabilities of the Host Cities and their developing infrastructure.



ENSURING AWARENESS OF THE WASTE MANAGEMENT SYSTEM

A training programme will be developed as part of the implementation of this concept, the aim of which will be to train and encourage all those involved in organising the Competitions to take a reasonable approach to waste management issues. In addition, the LOC Cleaning and Waste Management project team will develop an information programme that will communicate to all users how to dispose of their waste correctly as well as to educate them on the benefits of sustainable waste management.



LEGACY

As a result of applying this concept, a large volume of waste should be recycled. The experience of introducing an efficient waste management model at the Competitions could be accepted as a new public standard in Russia and used in other cities and

regions of the country. Understanding the principles of responsible waste management and the rules for segregated waste collection may be disseminated among all those involved.



AMENDMENT PROCEDURE

Proposals for introducing amendments and additions to the present concept are initiated by representatives of the LOC, who are responsible for organising cleaning and waste management services and approved by the director of the centralised services department and the FIFA Sustainability & Diversity Department.



ANNEXE 1

List of principal obligations

for setting up a system of efficient waste management at the Confederations Cup 2017 and the 2018 FWC

Obligation	Reference
The government undertakes to fully support all of the LOC's efforts to reduce Competition-caused environmental harm and, in particular, observation of the principles of environmental protection concerning the use of water, energy, transport resources, environmentally vulnerable zones affected by the Competitions, and also provision, construction and development of the infrastructure, waste disposal, and development of the tourist infrastructure.	Government Declaration (v) (Stadium Agreement, 5.11 Environmental Protection. Hosting Agreement, 9.5.15, 9.6.1)
The Host City undertakes to minimise any unfavorable environmental effects of the organisation and holding of the Competitions in the Host City and also to adopt the principles of protecting and ensuring environmental sustainability when considering such issues as use of water and electric power, as well as the condition of the air, ground transport, acquisition, construction and renovation of infrastructure facilities, waste removal and disposal, tourism and protection of environmentally vulnerable zones affected by the Competitions.	Host City Agreement, 4.14 (i)
Implementing a set of measures aimed at reducing the quantity of waste, setting up a segregated waste collection system and waste recycling at the FIFA World Cup stadiums and at the FIFA Fan Fest Sites.	Russia 2018 Bid Book, 5.2.2
Providing additional recycling capacities in the Host Cities where this is necessary in order to improve the environmental situation.	Russia 2018 Bid Book, 6.2
Each stadium is constructed and used in accordance with the highest environmental protection standards; principal attention is focused on 6 (six) key indicators: water and power use, waste management, use of transport, procurement, and prevention of climate change.	Stadium Agreement, 5.11 Hosting Agreement, 9.5.15, 9.6.1 FIFA Stadium Requirements Handbook for the 2018 World Cup, 90.20.20
The FIFA World Cup (FWC) can and, indeed, should be viewed as an opportunity to promote a responsible attitude towards the environment. Minimising the environmental impacts of FWC-related activities and raising awareness among all involved parties are key priorities. Applying state-of-the-art technologies and building standards will ensure that the FWC stadiums are constructed and run in a sustainable manner, and will benefit society after the event.	Sustainability Strategy 2018 FIFA World Cup™, 6 Key issues and objectives
The Stadium Authority shall: apply common labels for waste bins for uniformity (the LOC may support the alignment for achieving this objective/ in case Commercial Affiliates support the waste management process by providing bins, such bins are likely not conform to the ones provided by the Stadium). be responsible for the waste bin stickers to be produced and placed on each bin.	FIFA Stadium Requirements Handbook for the 2018 World Cup, 30.60.20
The following waste collection equipment shall be provided by the Waste Management Service Provider to guarantee the proper realisation of the waste collection, storage and transport services: appropriate waste collection vehicles; waste containers according to contract requirements in varying sizes and shapes (trash cans, wheelie bins, cigarette butt collectors); skips/containers; waste compactors/balers (function may be combined with skips);	FIFA Cleaning and Waste Management Handbook, 40.60.20
 The Waste Management Service Provider is responsible at all times for: the sufficient availability of any of the above mentioned engines and/or tools to carry out the waste collection services; the waste collectors' personal equipment, particularly to protect their health (e.g. gloves, adequate shoes, ear protection, gear to confront adverse weather conditions like rain coats etc.); any other equipment (such as short-wave radios) that support the execution of requested services. The Stadium Authority shall provide the number and types of bins to be defined by the LOC Cleaning and Waste	
Management Team, according to the facilities available in country or Host Cities.	

ANNEXE 2

WASTE MANAGEMENT PRACTICES

Procurement Department

All the products and services used at the sites, venues, and facilities fit into the overall procurement process. As such, suppliers are a key stakeholder in minimising waste volume.

After surveying the needs of all the functions, future purchases must be assessed and the need for them analysed. If a product is to be purchased for use in functional areas, preference must be given to options that provide a product that may be used longer, repaired more effectively or used for other purposes as well, and that produces less waste when used. From a range of similar products, preference is given to those made of recycled materials that are recyclable after losing their usability.

Logistics Function

When choosing an operator for the logistics services, the tender documents must contain the following requirements for minimising waste:

- use of light cardboard packaging to minimize transport costs; multiple reuse of cardboard packaging;
- all bottom plates and pallets must be reusable and recyclable in case of breakage.

Hospitality and VIP/VVIP Services

Invitations and agendas should be sent to guests electronically. When ordering souvenirs or gifts, it is recommended that disposable packaging be minimised. It is preferable to choose functional and useful souvenirs that could be recycled after losing their usability. It is recommended that packaging be of high quality and that it could be reused and recycled.

Merchandise Concessions

When manufacturing licensed products, it is recommended that the bare minimum of packaging be used. The use of environmentally friendly bags is encouraged. Recyclable paper bags are preferred over plastic.

Public Food & Beverage Program

The F&B Programme Concessionaire must take measures to avoid all types of waste generation (e.g. food waste, packaging, individually wrapped condiments). The Concessionaire shall study and take efforts to minimise waste generated by utensils/items such as disposable cutlery. Straws are prohibited. Whenever possible, packaging shall consist of only one type of material, giving priority to paper or cardboard. The same type of tableware and food packaging, such as sandwich packaging and plastic cups made only of PET (polyethylene terephthalate) or PP (polypropylene) shall be used across all Stadiums. This will simplify the procedure for subsequent identification of materials for future recycling.

In order to reduce the waste volume of disposable tableware used, it is suggested that commercial affiliates manufacture keepsake or refillable cups with the World Cup branding to be used at all the World Cup stadiums.

When selecting the Concessionaire for the public F&B Programme, it is recommended that the tender documents include requirements for mandatory use of recycled cardboard packaging and pallets during transportation. It is not recommended to use disposable composite packaging (laminated glass, packaging of polyaluminum film, etc.).

Recommendations for preparing the stadiums and planning the overlay infrastructure

It is recommended that Arena 2018, which controls the design of stadiums and overlay infrastructure, use mostly e-blueprints and documents.

When planning procurement of materials and overlay infrastructure elements, preference should be given to products made from recycled materials that are reusable and recyclable.

IT

It is recommended that, in all the LOC office work stations and office equipment, printers should be set to default economy mode (double-sided printing and a fine font).

Technology that has no valid shelf life for the Event should be disposed of according to local legislation. It is recommended to donate equipment to those who can use it or find alternative options such as organisations who use the parts for other uses.

Recommendations for Planning Decorative Elements, Dressing and Signage

It is preferable to use banners and signs made from recycled or pre-used materials. Other alternatives may include biodegradable materials and options that have a lower impact on the environment. Another way to lessen the environmental impact of signage is to use low volatile organic compounds as well as water-based and UV printing.

When planning procurement of all the elements, requirements for the materials should be approved by the LOC Cleaning and Waste project team in order to use materials that can be recycled by specialised local organisations.

The LOC Cleaning and Waste project team will provide advisory support for all functions for minimising their waste production.



ANNEXE 3

INVOLVMENT OF THE CLEANING AND WASTE MANAGEMENT PROJECT TEAM AT THE COMPETITION SITES

The following graphic depicts the different levels of involvement of the Cleaning and Waste Management Project Team at the various Sites.

Level 1

- a. The Cleaning and Waste Management
 Project Team develops Site-specific Service
 Level Agreements for Cleaning and Waste
 Management Services. It fully participates in
 the procurement process by providing expert
 opinion in the selection process and provides
 additional expert support the respective Project
 Team.
- b. It provides support to the respective Project Team with other planning procedures.
- c. The Cleaning and Waste Management Project Team is also responsible for the overall coordination of services.
- d. During operations the Cleaning and Waste Management Project Team monitors on a full time basis the provision of services on Site through the providers on-Site.

Level 2

- a. The Cleaning and Waste Management Project
 Team provides guidelines for the Cleaning and
 Waste Management Service Level Agreements
 to the respective Project Team. Before the
 completion of procurement the Cleaning and
 Waste Management Project Team shall review
 and approve the Service Level Agreements.
- b. It is also responsible for all internal planning processes and procedures.

- c. The Cleaning and Waste Management Project Team is also responsible for the overall coordination of services.
- d. During operations the Cleaning and Waste Management Project Team monitors the provision of services through the providers on-Site.

Level 3

- a. The Cleaning and Waste Management Project
 Team provides guidelines for the Cleaning and
 Waste Management Service Level Agreements to
 the respective Project Team.
- Before the completion of procurement, the Cleaning and Waste Management Project Team shall review and approve the Service Level Agreements.
- c. During the operations, the Cleaning and Waste Management Project Team monitors the provision of Cleaning and Waste Management Services on-Site on an ad hoc basis.



d. Throughout the Project, the Cleaning and Waste Management Project Team provides support to the Site-responsible Project, upon request.

Level 4

- a. The Cleaning and Waste Management Project
 Team provides guidelines for the Cleaning and
 Waste Management Service Level Agreements to
 the respective Project Team.
- b. During the operations the Cleaning and Waste Management Project Team monitors the provision of Cleaning and Waste Management Services on-Site, on an ad hoc basis.
- c. Throughout the Project, the Cleaning and Waste Management Project Team provides support to the Site-responsible Project, upon request.

The following graphic illustrates the different support categories and outlines which Sites each apply to.

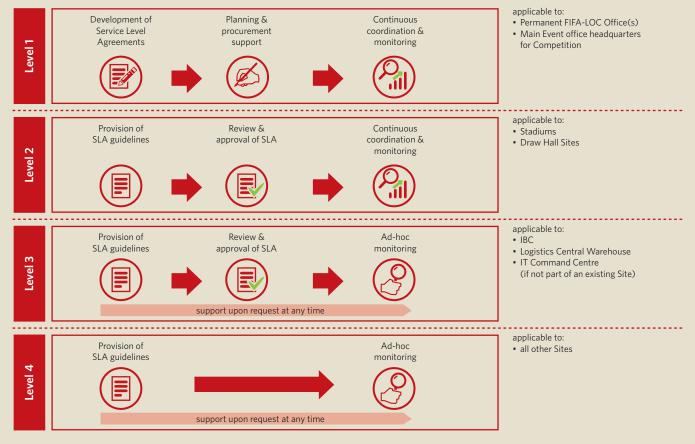


Figure 4: Illustration of the different support categories and outlines to which Sites each apply.

ANNEXE 4

TYPES OF WASTE GENERATED AT FUNCTIONAL AREAS OF COMPETITION SITES

1. Checkpoints, Screening Areas

- plastic bottles and packaging
- aluminium cans
- glass bottles
- packing materials
- food waste and remnants
- other waste
- liquids

2. Food Areas (Catering and Concessions)

- a) Restaurant-type food. Catering services in hospitality areas, VIP/VVIP areas and the compound for commercial partners with a significant amount of foods and beverages.
- food waste and remnants
- glass bottles and other types of glass, including broken dishware
- plastic bottles and packaging
- aluminum and other metal cans as well as damaged metal cutlery
- used cooking oil (frying fat)
- cardboard and corrugated boxes
- wooden crates and pallets
- b) Canteens. Catering services in staff canteens (three-person canteen, canteens for volunteers and canteens for stewards) with a standard quantity of food and beverages.
- food waste and remnants
- plastic bottles and packaging, plastic cutlery
- aluminum and other metal cans
- the use of cooking oil (frying fat)
- corrugated boxes
- other waste

- c) Public eateries in publicly accessible areas (concessions), including stationary and mobile locations equipped with small stands and mobile trays.
- food waste and remnants
- plastic bottles and packaging, plastic cutlery
- aluminum and other metal cans
- other waste
- d) Mobile buffet and restaurant service (catering). Catering refers to the delivery of food and beverages to different consumer groups attending an event. This type of service does not include the sale of food and beverages to the majority of spectators. Client groups include: media representatives; teams and officials; media representatives at training grounds; spectators at training grounds; the IBC; youth programme participants; FIFA staff; and LOC staff.
- food waste and remnants
- plastic bottles and packaging, plastic cutlery
- aluminium and other metal cans
- other waste



3. Logistics Area

The delivery, storage, repackaging and shipment of goods and equipment, including the movement of goods and equipment within stadiums.

- plastic packaging of goods and equipment, including plastic film, foam, ties, etc.
- wooden crates and pallets
- paper, cardboard and corrugated packaging
- metal fixtures and fittings
- oily rags and sorbents
- other waste

4. Medical Service and Doping Control Areas

Provision of first aid, medical services and the collection of doping samples.

- plastic packaging and tableware
- glass bottles and glasses
- metal cans
- medical waste
- other waste

5. Merchandise Concessions

Sale of merchandise and the provision of non-food related services.

- plastic packaging
- paper, cardboard and corrugated packaging
- other waste

6. Media Centre and Organisers' Offices

Preparation of documents and reports. Provision of drinking water and coffee.

- plastic bottles and cups
- aluminium cans
- office paper and boxes
- old batteries
- other waste

7. Supply Warehouse for Opening/Closing Ceremonies

Performances at the opening and closing of the Competitions.

- plastic packaging and plastic bottles
- Confetti, tinsel, banners and other decorative materials
- cardboard and corrugated boxes
- other waste

8. Football Pitch Management

Care of the football pitch grass.

- "green waste" (grass, soil, peat, etc.)
- other waste

9. Design and Signs

Production and installation of all signs and design elements at the stadiums.

- plastic signs, banners and stands
- cloth
- cardboard and corrugated boxes
- other waste







10. Power Supply Areas

Provision of power for all functional areas at the stadiums.

- oily rags and sorbents
- other waste

11. Main Television Broadcasting Area

Support for television broadcasting activities.

- wooden spools from cables
- cardboard and corrugated boxes
- plastic equipment packaging, including plastic film, foam, ties, etc.
- old batteries
- other waste

12. IT and Communications Infrastructure Area

Support for IT services in all functional areas at the stadiums.

- waste from electric and electronic equipment (laptops, monitors, batteries, ink cartridges, pieces of cable, etc.)
- old batteries

- cardboard and corrugated boxes
- plastic equipment packaging, including plastic film, foam, ties, etc.
- other waste

13. International Broadcasting Centre

International broadcasts of all 2018 FIFA World Cup matches. The complex includes offices, media areas, public catering areas and other functional areas.

- wooden spools from cables
- cardboard and corrugated boxes
- plastic equipment packaging, including plastic film, foam, ties, etc.
- waste from electric and electronic equipment (laptops, monitors, batteries, ink cartridges, pieces of cable, etc.)
- plastic bottles and packaging, plastic cutlery
- aluminum and other metal cans
- the use of cooking oil (frying fat)
- food waste and remnants

ANNEXE 5

Labels used on top of bins.

(Examples, used at the FCC Draw in Kazan)

Bin labels shall be displayed on top and on both sides of the bins to ensure that they are visible to spectators.

The pictograms shall reflect the product and packaging that will be disposed of (e.g. if popcorn

is sold, a pictogram of a popcorn bag shall be used. If popcorn is not sold, it shall not be used as a pictogram).

The text must be in both English and Russian.

The design of bin labels will be developed in cooperation between the LOC Cleaning and Waste Management function and Marketing Department.







ANNEXE 6

Waste Evaluation Form

(Example from the FIFA Confederations Cup Russia 2017 Official Draw)

Waste Data Collection Sheet

Name of site coordinator Anton Sotnezov

Name of stadium or IBC KTA + MIC (FCC Draw Kazan)

Date of data collection 14.11.2016 - 27.11.2016

Waste stream	Weight of waste (in metric tonnes)	Method used to calculate weight (if not weighted)	Waste collector	Hazardous or non-hazardous	Disposal method	Waste company
Paper	0.067	electronic balance	OOO "Chistaya Sreda"	non-hazardous	Recycling	JSC "Mariyskiy Tsellyulozno-bumazhnyy kombinat"
PET bottles	0.034	electronic balance	OOO "Chistaya Sreda"	non-hazardous	Recycling	Ltd "EcoTechnologies"
Cardboard	0.8	electronic balance	OOO "Chistaya Sreda"	non-hazardous	Recycling	Ltd "EcoTechnologies"
LDPE	0.038	electronic balance	OOO "Chistaya Sreda"	non-hazardous	Recycling	Ltd "EcoTechnologies"
General waste	0.27	electronic balance	OOO "Chistaya Sreda"	non-hazardous	Landfill	JSC "PZHKH"

