LEAVING A LEGACY

A new approach to hosting major events, using existing venues alongside temporary infrastructure, is becoming the new norm.

While new build venues have traditionally taken pride of place at major events like the **Olympic Games**, times are changing and there is now a concerted move to use as much existing infrastructure as possible.

Cities throwing their hats in to the ring to stage major events are being urged to suggest existing venues, complemented by temporary infrastructure.

The **Paris 2024 Olympic** and **Paralympic Games** is an excellent example of this, with the plan for one of the world's greatest sporting events fully aligned with the International Olympic Committee's (IOC) Agenda 2020's "New Norm" of 95% existing or temporary infrastructure.

All new infrastructure to be constructed in Paris, including housing units forming part of the Olympic Village and Media Village, in addition to the Aquatics Centre, will help meet the long-term needs of people in the communities where the venues are being built.

Paris 2024 will mainly use existing world-class sporting facilities, showcasing France's know-how and expertise in organising major international competitions and the country's passion for sport.

They will include the **Stade de France** (opening and closing ceremonies, athletics), the **Stade Roland-Garros** (tennis, boxing, wheelchair tennis,

wheelchair basketball and wheelchair rugby), the **Paris Arena I** (basketball, judo and wheelchair basketball), the **Velodrome national de Saint-Quentin en Yvelines** (track cycling), the **Parc des Princes** (football) and the legendary **Stade Jean-Bouin** (Rugby sevens).

Paris' most emblematic and iconic sites will be transformed into spectacular competition venues in the heart of the city.

The temporary **Grand Palais** will host the fencing and taekwondo competitions, the **Esplanade des Invalides** archery, and the beach volleyball and football 5-a-side competitions will take place at the **Champ de Mars**, while the marathon, the triathlon and the open-water races will start off at the foot of the Eiffel Tower, in the cleaned-up Seine river. Finally, the equestrian events will take place in the majestic gardens of the **Château de Versailles**.

COMPACT CONCEPT

The Paris 2024 concept embraces a 'Games in the heart of the city' - a compact design for an unforgettable experience.

Some 80% of competition venues, hosting 22 sports, will be located within a 10 km radius of the Olympic and Paralympic Village. The true epicentre of the project, the Village will be located a short 7 km north of the centre of Paris and less than 2 km from the Stade de France. 85% of athletes will be accommodated less than 30 minutes from their competition venues.

All venues are spread across two main zones, connected by the Seine river:

A zone in the heart of Paris, with the capital's emblematic sites highlighting the Games and a Paris/Grand Paris axis, in line with the Greater Paris urban development project, for the Games to benefit the general public by meeting the needs of the various regions.

The new **Aquatics Centre** will be built in close proximity to the Stade de France, and will be reconfigured at the end of the Games as a local facility (2,500 seats).

This will be the only sporting facility built specifically for the Games. The construction of a second site, **Paris Arena II**, an 8,000-seat sports hall, has already been planned regardless of the Games and will be completed by 2021.

TEMPORARY GRAND PALAIS

A programme of renovation at the **Grand Palais**, planned completely independently of the Games, has given

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rise to an opportunity to include the **Temporary Grand Palais** venue in the Paris 2024 Games concept.

This temporary facility is being created to host the major art, fashion and sport shows and events usually held at the historic venue during its renovation. Once the work is complete, the temporary structure will be retained for a few more months, until September 2024, in order to stage the Paris 2024 Judo and Wrestling events.

The temporary structure will have a spectacular design, benefitting from high-quality architecture that will see it blend perfectly with the area around the Champ de Mars.

The venue will have an area of approximately 13,500 m², capable of accommodating up to 9,000 spectators at Games time.

The Grand Palais concept, which did not exist during the bid phase, will remove the need to create a temporary venue at Le Bourget, originally planned to house Badminton.

In the new Games concept, Badminton events will be held at Arena 2, located at Porte de la Chapelle, just 3 km from the Stade de France, creating a further link between Paris and Seine Saint-Denis.

With a 7,500 seating capacity, this medium-sized venue fills a gap in the French capital's sports inventory, and would have been built regardless of the Games as a new home for Paris basketball, handball and volleyball clubs.

In addition, with Judo taking up a prestigious new home at the Temporary Grand Palais, it will be possible to concentrate all the Basketball disciplines (men's, women's, qualifications and finals) at Paris Arena 1.

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The unprecedented staging of sport at these venues, both existing and temporary, will see Paris transformed into an extraordinary Olympic City enhanced by Games celebration sites along the banks of the Seine.

AQUATICS CENTRE

The newly built Olympic Aquatics Centre (OAC) is designed to enhance the Games experience for all groups (athletes, spectators, etc) while making use of legacy planning.

All Aquatics events (apart from the 10 km marathon) take place on a single site at Plaine Saulnier in Saint-Denis, next door to the Stade de France, forming a venue cluster of the two major sports of Aquatics and Athletics, situated just a few metres from the Olympic Village.

The Games-time configuration will feature five pools (two permanent; three temporary):

A temporary 50m pool for the Olympic and Paralympic swimming events and the water-polo finals, with seating for 15,000 spectators; a 50m pool, connected to a 25m pool, within a permanent structure that will accommodate 5,000 seated spectators at Games time (2,500 in legacy) and will host Diving, Synchronised Swimming and Water Polo preliminaries.

Two temporary 50m warm-up pools for athletes competing in swimming, synchronised swimming and water polo events will also be built.

After the Games, the permanent facilities in the Aquatics Centre (one 50m and one 25m pool) will be made available for the use of local residents and schoolchildren in Seine Saint-Denis. The three other – temporary – pools will be dismantled and reinstalled elsewhere in the department. In 2024, Seine-Saint-Denis will benefit from nine new swimming facilities as a result of the \gg

The Stade de France will stage Paris 2024 athletics events



Games: The five pools at Plaine Saulnier, including three temporary pools to be reassembled elsewhere in Seine Saint-Denis; and four new training pools for the Games, in: Marville (renovated) – Aubervilliers, Aulnay and Noisy-le-Sec.

PLANNING FOR THE FUTURE

Stefan Klos CEO of bid masterplanning consultancy **Proprojekt** said that this new legacy approach embodied by Paris 2024 is gaining traction.

He said: "The way of approaching these kinds of events is about to change. The first solution is temporary and modular. We've seen that at the London 2012 Olympic Games where the grandstand extensions to the aquatic centre were removed after the games.

"And we will see that at the Qatar World Cup 2022 where the local organising committee is planning for temporary seating structures to be removed after the event."

The seating areas can be dismantled and then shipped to developing countries as a donation for football development.

Klos added: "This is to ensure that you don't have capacity post tournament that does not match your day to day demand. There is even one fully modular and fully demountable stadium, Ras Abu Aboud. "Using temporary infrastructure also makes sense from an operational point of view. Something that is not often talked about is if you build a new venue it adds to your operational costs because it means that you have not got an experienced workforce on site. So very often if you build new venues for World Cups or Olympic Games, you have to buy international experienced quys in to operate them."

RAS ABU ABOUD



The **Ras Abu Aboud Stadium** for the **2022 FIFA World Cup** Qatar will consist of 990 modular containers built in seven storeys and it will be completed in June 2020.

It will be the first large stadium in the world built of modular containers and it will also be the first "green stadium" that is detachable, mobile and recyclable in the history of the **FIFA World Cup**.

Project manager Wang Fei said: "Strictly speaking, we are not 'building' but 'producing' this stadium. The prefabricated modular structure makes it possible to use less material and give rise to less waste and emissions, and three years may be saved for the whole construction.

"This is not the biggest benefit. It is always a headache to put a stadium to further use after an international event.

"This stadium is a detachable modular building, so it can be reused for other competitions in other places and also be pieced together into several small venues. They can even be completely converted into economically affordable housing or refugee housing. Moreover, the place where the original stadium stands can be quickly turned into a green park."

He explained how the stadium will be built:

"After the site is selected, the framework of the entire stadium is constructed with steel, then containers are put in place like Lego building blocks, and finally painting and decoration is carried out. That is how a modern stadium comes into being."

Each one of the 990 modular containers is about 6.2m long by 5m wide by 2.5m high.

Each container is designed and decorated in different colours and patterns at the time of on-site assembly. ■