¥156.9-billion Stadium is Ready for Tokyo Olympics 2020. How Do We Not Put It to Waste After?

The New National Stadium, which will be the centerpiece of the 2020 Tokyo Olympics and Paralympics, was officially completed on Saturday, November 30.

On that day, contractor and construction giant Taisei Corporation and its joint venture partners handed over the stadium to the Japan Sports Council (JSC). The construction cost stood at ¥156.9 billion JPY ($1.4 billion USD).

The new stadium will host the opening and closing ceremonies of the Tokyo Olympic and Paralympic Games, as well as the Olympic track-and-field events and women's soccer final.

Although the main venue is now in place for the 2020 Olympiad – the world's largest comprehensive sports festival – blueprints have yet to be drawn up for how to use the stadium after the Olympics. Can the stadium ever become a new iconic facility of Japan's sports world?

Cool Woodland Theme

Prominent architect Kengo Kuma and his office designed it as a “woodland-themed stadium,” its surroundings affluent with trees and fresh verdure. It has been made no higher than about 47 meters (154 feet) so as not to mar the sight of the lush green of the outer gardens of the adjacent Meiji Shrine.

With five stories above ground and two below, the structure has a building area more than double that of the former National Stadium. What has been adopted for part of the roof is Japan's traditional architectural style of eaves, referred to as nokibisashi.

The stadium's chief building materials incorporated lumber procured from all parts of the country. Along the concourse leading to the stadium and other places in the vicinity are approximately 47,000 plants.

The stadium will have a seating capacity of about 60,000 when the Games are underway. In keeping with the theme, the seats are colored in five different tones, including white, greenish yellow, and brown, creating a mosaic resembling an ambience of sunbeams filtering through a forest.

Ready to Cope with Sweltering Heat

An “underground temperature control system” designed to be conducive to the growth of natural grass has been incorporated into the building's infrastructure. It is expected to help maintain favorable conditions for the grass of the pitch.

Also incorporated specially for the stadium are “high-speed rubber tracks” with a high degree of repulsive power that are said to have a positive impact on the performance of athletes.

An array of spray systems and air-circulating fans have been installed to alleviate the heat within the stadium.

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There are a significant number of accommodations inside the venue to help spectators fully enjoy the events. Among them are wireless Local Area Network (LAN) and Wi-Fi spots, beneath the seats and elsewhere, to enable spectators to post messages and make videos for social networking services (SNS) via smartphones. The system can be used by 30,000 people simultaneously, a JSC official said.

Barrier-free access has also been incorporated into the stadium's design, including suggestions from organizations for the disabled to allow everyone to enjoy watching the events. The JSC official added proudly that the stadium "meets the world's highest 'universal design' standards."

An event commemorating the stadium's opening will take place on December 21, when it will be officially christened as the "National Stadium." The Emperor's Cup soccer finals on January 1, 2020, will mark the first sports event at the stadium.

Ball Sports or All Sports and More?

In a November 2017 meeting of relevant Cabinet ministers, it was decided in principle that after the Games the stadium would be used exclusively for ball sports.

One reason was the unavailability of ground to locate tracks for practice nearby, making it impractical to use the stadium for large-scale track-and-field competition after the Olympics.

The greater reason, however, seemed to be that most of the world's well-known stadiums exclusively for ball games are characterized by proximity between spectators' seats and pitches. As noted in the meeting of Cabinet ministers, if the stadium's tracks were to be left as is, the pitch would look distant from spectators. In that case, spectators might find it difficult to have a "sense of presence" when viewing events.

It was later found that remodeling the stadium, including removal of the tracks, would require a colossal amount of money. Moreover, as of three years ago, the cost of continuing maintenance was estimated at about ¥2.4 billion JPY ($22 million USD) per year.

As a result, the opinion gained force this year that the tracks should remain in place to control maintenance cost of the natural grass pitch. This becomes especially important to mitigate the cost of damage from temporary stage setups for concerts, a major pillar for securing the stadium's profitability, according to the JSC.

For all practical purposes, though, the issue of making a choice between allowing the stadium to be used only for ball sports and leaving it as it is for a wider variety of sports has hit a snag.

Private or Public?

Much the same can be said about the feasibility of plans to sell the stadium's operating rights to a private-sector enterprise.

Initially, by the end of the first half of the year, the JSC planned to finalize a business formula for the stadium after it goes private. It also planned to have agreement on the requirements for private firms that would potentially bid for the stadium's operation.

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Because of security concerns during the Tokyo Olympics and Paralympics, however, the stadium owner found it impossible to disclose drawings detailing the structure of the stadium. This caused an eruption of complaints from prospective bidders, who would have no way of making a judgment on the stadium's potential profitability.

As a result, the proposed selloff of management rights has been postponed to the autumn of 2020 or later.

Multifunctionality a Key

For big sports facilities that need huge sums of money for construction and operation, “multifunctional” ways of building have been drawing attention globally.

Many such facilities are built in combination with large hotels and other commercial establishments, for example. Several of these have turned out to be highly profitable. However, there is no land to construct such facilities in the neighborhood of Japan's new national stadium.

Furthermore, it is unclear what steps would be taken for drawing people to the stadium when no sports events are held there. So, at this point, the “prospects for making profits are rather meager,” said a knowledgeable source.

In Singapore, a national stadium was completed in 2014 through a public-private partnership (PPP). The stadium constitutes part of a complex consisting of establishments, such as a large-scale shopping mall, movie theaters, and a library, which, according to local reports, are crowded with visitors every day.

In Los Angeles, where the Summer Olympics are scheduled for 2028, similar projects are underway. Some 2,500 housing units are under construction, and hotels and other businesses have been invited to develop near a new stadium, where the opening and closing ceremonies of the Games are slated. Plans are also in progress for converting Los Angeles' existing stadiums into multifunctional ones.

In London, the stadium that hosted the 2012 Olympic opening and closing ceremonies was used to hold official games of U.S. Major League Baseball in late June 2019. It was the first time ever in Europe.

Overseas, many large-scale sports facilities have employed “smart stadium functions,” using information and communication technologies to help enhance spectators' satisfaction. In Japan, too, cities such as Nagasaki have pursued a vision to have stadiums equipped with ICT functions and coupled with commercial establishments, including hotels.

There are indications are that the people in charge of imagining the future of Japan's new national stadium are most likely to do just that, while considering the pioneering examples at home and abroad.

Source: **¥156.9-billion Stadium is Ready for Tokyo Olympics 2020. How Do We Not Put It to Waste After?**
https://japan-forward.com/%c2%a5156-9-billion-stadium-is-ready-for-tokyo-olympics-2020-how-do-we-not-put-it-to-waste-after/

新国立競技場、青写真描けぬ五輪後の利用法

２０２０年東京五輪・パラリンピックのメインスタジアムとなる新国立競技場が１１月３０日、完成した。大成建設などの共同事業体（ＪＶ）から事業主体の日本スポーツ振興センター（ＪＳＣ）に引き渡された。整備費は１５６９億円。東京大会では開閉会式と陸上のほか、五輪サッカーの会場となる。スポーツの祭典の舞台は整ったが、大会後の利用法は依然として青写真が描けていない。新たな日本スポーツ界の聖地となり得るのか。

暑さ対策の工夫も

建築家の隈（くま）研吾氏らが設計した建築デザインは、木と緑にあふれる「杜（もり）のスタジアム」がコンセプトだ。緑豊かな明治神宮外苑の景観に配慮して高さは約４７メートルに抑えた。地上５階、地下２階建てで、建築面積は旧競技場の２倍超。建築には日本の伝統技法である「軒びさし」が用いられ、４７都道府県から調達した木材が利用されている。

ピッチの状態を良好に保つため、天然芝の生育を促す「地中温度制御システム」や、走路にはゴム製で反発力が高く、記録が出やすいとされる高速トラックも施された。暑さ対策として、スタジアム内に風が入り込むような工夫のほか、暑さを和らげるミスト冷却装置や空気の循環を生み出すファンを設け、熱気がこもらないよう配慮した。

多くの人が観戦を楽しめる設備も充実。スマートフォンによる会員制交流サイト（ＳＮＳ）への投稿や動画視聴に備え、無線ＬＡＮ（Ｗｉ―Ｆｉ）のスポットを座席下などに設置した。３万人の観客が同時に接続可能という。誰でも観戦しやすいよう、障害者団体のアドバイスも設計に取り入れられ、ＪＳＣは「世界最高水準のユニバーサルデザインだ」と胸を張る。

１２月２１日にオープニングイベントを開催し、スポーツでは来年元日のサッカー天皇杯決勝が最初の大会となる。

売却計画先送り

新国立の後利用法は依然として「霧の中」だ。

平成２９年１１月、政府の関係閣僚会議で大会後は球技専用スタジアムとする方針を決めた。近隣にサブトラックを設置する余地がなく、陸上の大規模大会を開催できない。さらに、世界の有名な球技専用スタジアムは観客席とピッチが近いことが特徴。スタジアムに陸上トラックを残せば、ピッチが観客席から遠くなり、「試合の臨場感が損なわれる」との懸念があることなどが理由だった。

しかし、陸上トラックを撤去するなどの改修作業には多額の費用がかかることが判明。３年前に年間約２４億円と試算された維持管理費の捻出は簡単ではなく、収益の柱と見込むコンサートについても、陸上トラックを残した方がステージなどの設置で傷んだ芝のメンテナンス費用が抑えられるとの意見が今年になって強まった。

事実上、球技専用か陸上トラック併存かの議論は暗礁に乗り上げている。

民間事業者に運営権を売却する計画も同様だ。当初は今年半ばにも事業方式や応募要件などの計画を固める方針だったが、東京大会での保安上の理由で詳細な図面などを開示できず、運営権取得に関心を持つ民間事業者側から「採算性などを判断できない」との声が噴出。売却計画は来年秋以降に先送りとなった。

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