

THE GREAT OLYMPIC MYTH

The Sochi Olympic Games combines genuine technological achievements with persisting old myths, unprecedented costs and the heaviest ever security

By **Crispin Andrews**

A Russian traffic police officer patrols a road near venues of the Sochi Olympic Park

THE ARRIVAL of this quadrennium's Winter Olympic Games in Sochi, Russia, will inevitably rekindle memories of the last Russian Olympiad – the 1980 Moscow Games. On that occasion, Soviet General Secretary Leonid Brezhnev's refusal to withdraw his troops from Afghanistan prompted 65 countries, led by rival superpower the USA, to boycott the event.

Six more countries sent athletes, but refused to take part in the opening ceremony. Diplomats, not competitors, walked the British and Irish flags around the Olympic Stadium. Four other countries protested by marching under

the Olympic flag rather than their own.

Two terrorist attacks in Volgograd (formerly Stalingrad) and some very public rows about Russia's anti-gay laws are unlikely to distract Russian President Vladimir Putin from following London, Vancouver and Beijing's example of making the host country look as utopian as possible to the watching world.

When spectators come away from Russia this February, authorities want the enduring memory to be of magnificent Olympic stadiums and a flawless Games – symbols, perhaps, of Russia's transformation into a successful managed democracy.

Sochi Stadiums

The Sochi stadiums are split into two clusters. One cluster, in the region of the Black Sea, has six venues; the other, 30 miles away in the Caucasus Mountains, has five. A 45-minute train ride on the new Sochi Light Metro connects the two clusters.

Without existing sports infrastructure in the area, Russia has had to build its elements from scratch. Like most modern sports stadiums, the Sochi arenas are a contradictory spectacle. Visually stunning, aesthetically pleasing, conceptually... interesting. For instance, does the 12,000-seat Bolshoi Ice Dome, where some of the ice



'When an Olympic Games embraces green technology, environmental stewardship comes across, not as a fringe, progressive, political idea, but something mainstream'
 Allen Hershkowitz, Sports Greening Initiative

hockey games will take place, look like a frozen drop of water, as designers envisaged? Or, as some commentators have suggested, a giant robot jellyfish? The sort of thing Godzilla might fight on the big screen.

Then there's the Iceberg Skating Palace with its curved blue and black stained-glass exterior. Synthetic iceberg on the subtropical Black Sea banks? Or another giant jellyfish? And a psychedelic one at that.

The opening, closing and medal ceremonies will take place at the Fisht Stadium, Sochi's Olympic centrepiece. Asymmetrically shaped, it sits on a raised mound. With a translucent shell roof and

LED lights, it's designed to look like a Fabergé egg. Modesty precludes our speculating what it looks like, but call to mind a Fabergé egg it certainly does not.

What do you do with a stadium?

Damon Lavelle from architect Populous, which designed the stadium, explains that Fisht was built using parametric design software – CAD software that uses algorithms to drive design.

"You can test things rapidly by using the algorithms to define forms of buildings," Lavelle says. "It makes it quicker to adjust the design if necessary."

As it turns out, this was very necessary. Fisht was originally proposed as a 25,000-seat stadium, which would be upgraded to 45,000 for the 2016 football World Cup finals. This temporary extension would then be removed to take capacity back down to 25,000 for FC Zhemchuzhina-Sochi home games. Until, that is, the team went bust in August 2011 and pulled out of the Russian Second Division.

Legacy, like the stadiums themselves, is a jelly-like concept, able to be moulded over the years to the political motivation of whomever is arguing. The impact of the Games themselves, though, is confined to that single, indelible two-week period – and >

< no more indelible than the bit where everyone is watching at the same time: the opening ceremony.

"In spring 2011, it transpired that the opening ceremony would be bigger than originally envisaged," says Lavelle. Organisers decided they wanted a huge false floor built into the stadium's lower seating tier. This would allow performers to enter and exit the stage. It would support water, light and pyrotechnics, and also temporary hangers at either end.

"The stadium will probably end up more like a huge theatre, but open, not enclosed," explains Lavelle. He thinks Fisht will be ideal for the likes of Cirque de Soliel, but is not so sure about football. For starters, the false floor is where the football pitch would be.

Multi-purpose stadiums

Repurposing a stadium to make it a multi-use venue is a complex business: proximity to the pitch, the right acoustics, overall atmosphere – each event has different requirements.

At Stadium Australia, built for the 2000 Sydney Olympics, seating tiers are moved back and forth to accommodate the different shaped grounds needed for Australian Rules football, rugby union or league, cricket and football. In the UK, Manchester City's Etihad Stadium, built for the 2002 Commonwealth Games, has two tiers running along the sides of the stadium and an open air temporary stand at one end. Subsequent to the Games, the ground level was lowered to make way for 12,000 new seats, the open end completed and the roof finished. The Etihad holds 47,000 for football and 60,000 for music concerts.

Originally, three other Sochi arenas were to be dismantled and relocated after the Games. Unfortunately, officials could not agree where the venues should go, so they're likely to stay in Sochi, maybe – President Putin has suggested – as an elite winter sports academy for children.

Paint it green

Being seen to be 'green' is vital for Olympic organisers, and Sochi picks up the baton

An information banner with the photos of suspected terrorists in a department store in Sochi



from the previous (several) incumbents in claiming to be the 'greenest' event of all time.

Membranes cover mountain peaks at the Sanki sliding centre to stop the snow melting. Solar batteries provide electricity at the Bolshoi stadium. Fisht is covered in the same transparent, ethylene tetrafluoroethylene membrane as Cornwall's Eden Project and Bayern Munich's Allianz arena.

EFTE is a fluorine-based plastic that lets in light but keeps moisture out, providing the stadium with resistance to cold and air pressure. Germicidal paint covers the three main stadiums as well as the Iceberg skating palace, and each of these arenas has an air pollution and decontamination system under its roof. Solar-powered radiators and boilers service the new railway station in Adler, the nearest town to the coastal cluster, while photo-electric transformers or wind generators provide energy throughout the coastal cluster.

"When an Olympic Games embraces green technology, environmental stewardship comes across, not as a fringe, progressive, political idea, but something mainstream that's actually good for business," says Allen Hershkowitz, director of the Sports Greening Initiative at the Natural Resources Defense Council. "All the major industries are involved with the Olympics, either as

vendors or sponsors, so an environmentally responsible Olympics gets good messages into the marketplace."

Over the last ten years, Hershkowitz has seen more stadiums in the USA fitted with LED lighting, wind turbines and recycling systems. Nascar has put electrical vehicle chargers at all of its venues. "People who run sports stadiums are competitive," he says. "What one does well, a rival looks to take on, or outdo."

Hershkowitz adds that owners of smaller arenas also compete to reduce their energy footprint. "These venues put on basketball, hockey, wrestling or rock concerts and are trying to save money as well as look after the environment."

Fighting Mother Nature

Lavelle doesn't think the Sochi stadiums are as green as they could have been, though. "Russian building regulations meant that there were certain things that we could not do and certain things we had to do," he says. Making the stadium earthquake proof, for a start. The region is prone to earthquakes up to a magnitude of 9.0. In December 2012, a 5.6 quake hit the region. Last January, there was a 3.8 quake.

"The ground underneath Adler is prone to liquefaction when there is an earthquake," Lavelle says, explaining that in the event of a major quake, the stadium's foundations would act like a giant raft.

Last October the *Moscow Times* reported that Russian Railways, who are building the Sochi Light Metro, were being anything but green. The newspaper revealed that the company had been fined \$3,000 for illegally dumping construction waste in a landfill just outside Sochi. Reporters discovered other waste disposal sites around the city, despite Sochi's 'zero-waste' pledge. The newspaper alleged that moisture from the landfill would seep into underground springs that fed the nearby Mzymka River contaminating local water supplies for up to 15 years.

Olympic officials, of course, denied that Sochi is falling behind on its green commitments. They did admit, however, that official policy is now to burn, rather than treat, unsorted trash. Just as well, since Sochi doesn't have an industrial recycling plant.



Sochi 2014's opening ceremony was even bigger than originally envisaged

Good excuse for surveillance?

Russian Olympic organisers know from experience how costly bad publicity can be. On 25 July 1980, six days after the Moscow Games began, Vladimir Vysotsky, an influential poet, actor and singer, died of a heart attack in the city. On 28 July, the day of his funeral, demonstrators clashed with police around Moscow's Taganka Theatre, where Vysotsky was a regular performer. Over 10,000 people demonstrated. For the protestors, it was an outburst of defiance, in honour of their former hero. For the Western media it was a chance to show the world that even ordinary Russians opposed their political masters. Once again, Russia looked bad.

This time around, it seems that the Russian administration isn't taking any chances with Russia's public image. Last November, investigative journalists Andrei Matkov and Irina Borogan revealed that the Russian Federal Security Service (FSB) plans to monitor all communications coming in and out of the Sochi area for the duration of the Games.

The journalists showed that Russian authorities had ordered major amendments to telephone and Wi-Fi networks in and around Sochi. All telephone and Internet providers, they discovered, had been required by law to install SORM, the FSB's system for monitoring and intercepting communications, into their own systems.

The FSB had updated SORM, to cope with the extra Olympic traffic. Now, the authorities could access any communication from anyone in the Sochi area, without a warrant. But according to Dr Gus Hosein from Privacy International, there is a bigger worry. "What happens to these surveillance structures when the event is over, will they be dismantled?" he asks. "If you visit Sochi, will you bring SORM back with you? Once you've been in the Russian system, will the FSB still be able to monitor your communications, when you get home?"

Dr Hosein adds that security is necessary to stop terrorism, but believes it is protests that the Russians are really afraid of. "They're clamping down on free expression of political speech," he says.

It's hardly surprising, though. Russia's chance to shine in front of the whole world has it in a potentially hugely vulnerable position. To create an image that lasts longer in the minds of people around the world than a few reports about civil rights abuses, security firms and construction companies have made, and will continue to make, a lot of money. So too, hotels, resorts and airlines. And officials and politicians, if you believe reports from opposition politicians about \$30bn worth of kick-handers being distributed.

When Sochi 2014 is over, and we can all forget about the finer rules of curling and struggle to remember the name of the woman who won gold-medal triumph in the luge so we can shift our hearts, the eyes of the world will be shifted to South Korea, and the next Winter Olympics will be the 'best', 'most' but 'least' Winter Olympic Games. *

SECURITY

THE OLYMPIC RING OF STEEL

Russia erects ring of steel around Sochi

Tens of thousands of police and troops backed by anti-aircraft missiles, warships and military aircraft are being deployed to the Black Sea resort of Sochi in a \$2 billion security operation – the biggest in Olympic history



Dec 29-30, Volgograd: 34 people killed by two suicide bombers

Moscow

RUSSIA

Area of detail

800km
500 miles

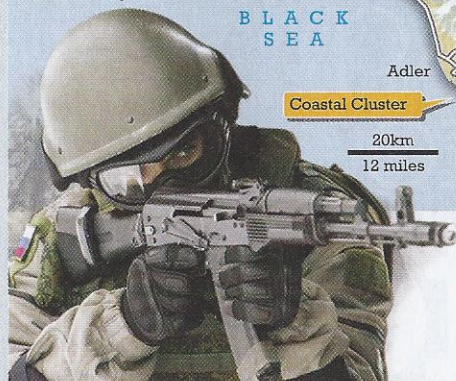
SECURITY ZONES

Controlled zone:

Greater Sochi municipality

- Visitors to register with local authorities within three days or face expulsion
- Cars without local license plates or special permits banned
- Sale of firearms, explosives and ammunition prohibited

Forbidden zone: Entirely closed



SECURITY PERSONNEL

- 37,000 police officers and Interior Ministry troops, including Alpha counter-terrorist unit of Spetsnaz special forces with shoot-to-kill policy against Islamist militants
- Up to 30,000 regular troops to patrol borders with breakaway Georgian republic of Abkhazia

Source: Rossiyskaya Gazeta Pictures: Getty Images, Russian Ministry of Defence

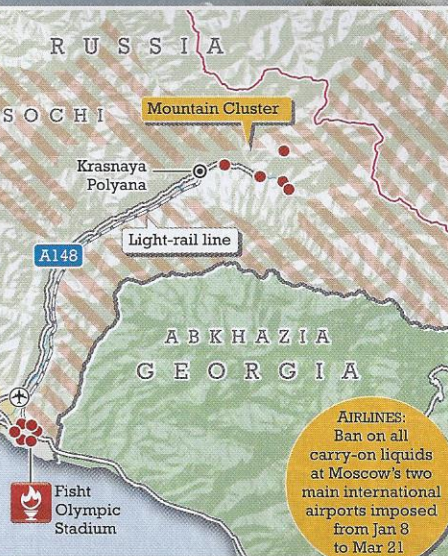
Squadrons of Mig and Sukhoi fighter jets and up to 12 drones patrol skies

AIR DEFENCE

- Six Pantsir-S anti-aircraft batteries and unknown number of ultra-modern S-400 missile defence systems deployed

SURVEILLANCE

- All telephone and internet communications monitored by SORM surveillance system during Games



NAVAL DEFENCE

- Destroyers, submarines and four of Russian Navy's new Grachonok anti-saboteur boats with teams of divers and special sonar equipment to patrol coast



Russia has pumped an estimated \$51bn (£30bn) into the venture, making it by far the most expensive Olympic Games in history.

The cost of the Sochi Games is three and a half times greater than that of the 2012 Summer Olympics in London and about 25 times that of the previous winter Olympics in Vancouver, Canada.

Russia has also tried to make sure that its Winter Games are the most secure ever.

A decree has established two security zones: the 'controlled' zone stretches 100km along the Black Sea coast and 400km inland, where visitors will be subject to strict X-ray checks of their cars and documents; while the 'forbidden' zone starts at the border with Abkhazia and encompasses the whole of the Sochi resort area and the surrounding mountains, which

will be entirely closed for any incursions. Only cars with local Sochi number plates or those with special accreditation are allowed to drive into the 'controlled' zone.

All hunting retailers and wholesalers in the area have been ordered to stop trading for the duration of the Games too, whereas more than 30,000 police and soldiers backed by anti-aircraft missiles, warships and military jets are deployed in the area to enforce this ring of steel.

In his TV documentary, screened in the UK last January, John Sweeney, Britain's leading investigative journalist, reminded his audience that Sochi is a ... subtropical town, and conducting winter Olympics in it is not at all cost-effective. But Sochi is also the favourite holiday haunt of Putin, who regards the Games as his pet project, on which no expense can be spared.