



## THE CHALLENGE

Formula 1® is a sport where every millisecond matters. In such a highly competitive environment there can be no compromise on experiencing the race action, especially for the tens of millions of fans across the world. F1® races are held in some of the most diverse and challenging environments across the globe, from the streets of Singapore to the deserts of Bahrain. In such a situation, it becomes critical to have a reliable connectivity backbone to deliver the action in high quality without any disruption. Some of the main challenges are

- Diverse global locations with approximately 20 race locations in a single season. This means that every new race location comes with its separate set of complexities, be it connectivity routes or last miles delivery at remote locations.
- Formula 1® races are as much about driving skills, as it is about taking strategic decisions through real time data analytics. To deliver this big data across the globe, there has to be seamless connectivity through a robust and reliable global network which is able to transfer large amounts of data in real time across the globe.
- Formula One Management (FOM) needs to ensure it calls its most skilled resources at every race weekend to deliver richer seamless content to the sports' fans. To deliver the action from every race location requires multiple remote teams based in the UK to work and communicate seamlessly with on-site teams at global race locations.
- Delivering consistently at a global platform like F1® requires detailed planning, agility, speedy implementation, and a highly scalable and reliable infrastructure that delivers superior performance consistently. Working with a technology provider that could deliver a high performance solution customised to the F1® environment was key.



## THE SOLUTION

As the Official Connectivity Provider to Formula 1®, Tata Communications delivers high speed connectivity solution across X and Y races covering Y countries around the world, allowing vital real-time content to travel quickly and reliably. Tata Communications' global network footprint enables it to cover all the Formula 1® race locations, giving it the ability to deliver complex solutions to challenging locations.

Temporary high speed connectivity (infrastructure/solution) of up to 1 Gbps is installed, configured, and tested at each race location in just one week. With an increase in the MPLS bandwidth from the previously provisioned average 7Mbps to 300 Mbps, Tata Communications are giving Formula One Management the power to enhance the experience for fans and broadcasters. With a multifold increase in pipeline capacity, they're finding it easier than ever to transfer data.

From Melbourne in March to Brazil in November, the Tata Communications team sets up, connects (and decommissions) networks for races across the globe, all in three days. As a feat of networking, it's the equivalent of changing a tyre in under three seconds. A dedicated race implementation team is there on every race weekend, dealing with the unpredictable and ensuring service delivery. Detailed planning and on-the-ground flexibility ensure that connections are always available, avoiding even a second of downtime for these essential networks.

For seamless interoperability and remote operations, Tata Communications also connects each race location to the Formula One Management's Remote Operations Centre in UK which enables key broadcast and production operations in real-time as the action happens.

## THE INSIDE VIEW...

"Usually Tata Communications is the first team at the track in the weeks leading up to the race. We play a key role in the amazing feat of logistics and organisation that is involved in setting up the trackside operations. When the events are running the onsite team is supported by the Tata Communications' remote pit crew from all functions. These virtual teams, spread across the globe and operating out of different time zones, have demonstrated the capability to support dynamic clients both in terms of the technical expectations, and the timescales and flexibility required in delivery. There is no slack in the schedule. We are constantly pushing the boundaries for Formula1®."

Mike Winder, Vice President -  
Advanced Solution Delivery,  
Tata Communications



## THE BENEFITS

- **Reliability** - All connections link to the Tata Global Network, the world's only Tier 1 network that ranks among the top in five continents - by internet routes, offering unsurpassed scale, reliability and performance. Tata Communications is one of the few service providers to offer secure and seamless MPLS connectivity at any race location across the globe.
- **Customisation** - Tata Communications has designed and delivered a customised solution around the needs of Formula One Management, delivering to global standards and specific SLAs for the established format of race delivery.
- **Partnerships** - To ensure consistency and delivery of the highest quality 'last mile' connections from each track to the Tata Global Network, we manage over 1,600 strong relationships with leading service providers across the globe. This ensures that we are able to connect every race location to our superior global network, as well as guarantee that all links are commissioned, tested and ready to use before the Formula 1® teams roll into town.
- **Remote Operations** - Tata Communications high speed connectivity is enabling Formula One Management to seamlessly connect multiple global teams based on-site and at remote locations. With data, information and all updates being delivered in real-time, Formula One Management is able to deliver high quality race action. Formula One Management is also able to carry out a wide range of broadcast operations via our Video Connect network including real-time transfer of feeds from various race locations to its Remote Operations Centre at Biggin Hill in the UK. This gives them the flexibility to create a centrally managed, whole of broadcast operations, from one location - thereby driving efficiency.
- **Commitment to excellence** - Tata Communications is committed to deliver the best possible solutions to the sport. With detailed planning and co-ordination with FOM's internal teams, we are able to consistently deliver cutting-edge world class solutions that are scalable, reliable and sustainable.

## THE CUSTOMER SPEAKS...

"Formula 1® is a truly global sport, visiting as many as 20 different event locations over the course of a season. It's a huge logistical challenge to ensure that at every one of the circuits we have the same high quality IT connectivity in place, and that's what Tata Communications provides for us. Commitment and reliability is one of the key reasons we chose Tata Communications as our connectivity provider. Coupled with its global infrastructure and extensive contacts, this association means that we can travel anywhere in the world and still expect the same resilience and quality of connectivity."

John Morrison,  
Chief Technical Officer  
Formula One Management

An aerial view of a Formula 1 race track, showing the asphalt track and the surrounding concrete and grass areas.

IF WE CAN DO THIS  
FOR FORMULA 1<sup>®</sup>,  
WE CAN DO IT FOR  
ANYONE, IN ANY INDUSTRY.

## ABOUT TATA COMMUNICATIONS' CONNECTIVITY SOLUTIONS

Tata Communications is the only network operator to wholly own and maintain a complete fibre network ring around the world. Called the Tata Global Network (TGN), it comprises over 500,000km of subsea cable and over 200,000km of terrestrial network fibre, with a data transfer capacity of one terabit per second. This extensive network enables high availability of bandwidth and seamless scalability, with significantly lower latencies and higher uptimes than any other provider. The TGN, along with Tata Communications' principal and capacity ownership of consortium cable systems SMW-3, SMW-4, SAFE, SEACOM, FLAG and I2I, offers the greatest diversity and redundancy across the globe.

Find out how you could tap into Tata Communications' global expertise and innovative thinking to drive your business, by contacting: [formula1@tatacommunications.com](mailto:formula1@tatacommunications.com) We focus on serving key vertical segments, including banking and financial services, pharmaceuticals, hospitality, media and entertainment. With a strong base of over 5000 enterprise customers globally, Tata Communications has the experience and capability to delivery beyond expectations.

Visit [www.tatacommunications.com/formula1](http://www.tatacommunications.com/formula1) to find out more about our services.