



HQ/CS/CL.24B/16613
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Sir,

Sub: Press Release - World-first technology test by the European Tour and Tata Communications shows how virtual reality could transform golf.

Please find attached herewith the press release on the captioned subject being issued today.

Thanking you,

Yours faithfully,
For Tata Communications Limited

PP. Sanjiv Sood

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For immediate release

PRESS RELEASE

World-first technology test by the European Tour and Tata Communications shows how virtual reality could transform golf

Proof of concept at Sky Sports British Masters demonstrates how live 360° video in 8K could enable fans to join their favourite player on the course

London, UK - October 16th 2018 - [The European Tour](#) and [Tata Communications](#) have completed the world's first test of live 360° video in 8K Ultra High Definition - the highest resolution in digital television today. The ground-breaking technology test at [Sky Sports British Masters](#) shows how the most immersive 360° video and virtual reality (VR) applications could enable fans at home and at the course to engage with the action in new ways.

Through a live 360° video in 8K feed, fans could use a VR headset to get a virtual tour of iconic European Tour venues like Walton Heath or Valderrama. The experience could be made even more immersive, enabling fans to step into Rory or Tommy's shoes for a winning putt or perfect drive.

"This proof-of-concept is part of our strategy to attract new fans to the sport by harnessing the latest digital technologies and introducing new, shorter and faster formats," said **Michael Cole, Chief Technology Officer, European Tour**. "With Shotclock Masters, for example, players have just 40 or 50 seconds to play a shot. We're also using more and more shot data to bring fans more engaging insights. We look forward to leveraging live 360° video in 8K to make each tournament more immersive for golf newbies and our core fan base."

Live 360° video could support the evolution of refereeing in golf. For example, by equipping key sections of the course with live 360° cameras, officials and referees could assess each shot and situation in real-time, without causing delays for players and fans. "From a refereeing perspective, live 360° video in 8k could have potential in the future to allow European Tour referees to assess shots in specific locations, remotely and in real-time," said **David Garland, Director of Tour Operations, European Tour**.

The world-first live 360° video feed in 8K was captured on the 18th hole of the Walton Heath Golf Club course, where fans were able to enjoy the action on a large screen, with VR headsets for a personalised viewing experience. The feed was live transcoded by [Visbit](#), using the company's View-Optimized Streaming (VVOS) technology. This solution saves up to 80% of bandwidth, enabling the streaming of data-intensive UHD 8K video over a regular Internet connection. The 8K signal was delivered over Tata Communications' ultra-low-latency [Video Connect](#) network and played on the Visbit 8K Live Player app on Samsung Gear VR headsets with Samsung Galaxy S9 smartphones. The 8K capturing and real-time stitching solution for the proof-of-concept was supplied by [Kandao](#), whose Obsidian 8K VR camera uses six 4K lenses to capture the course from every angle.

"Today's sports fans are savvier than ever - they have an insatiable appetite for data and content that gives them deeper and higher quality viewing experiences," said **Mehul Kapadia, Global Head of Marketing, Tata Communications**. "The adoption of the Video Assistant Referee at the recent FIFA World Cup is just one example of the transformational potential of digital technologies in global sports - which benefits the players, the fans and the entire sports ecosystem. In the same way, apps with live 360° video in 8K would redefine fan engagement in golf, and even have the potential to change how the sport is refereed."



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TATA
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OFFICIAL GLOBAL
CONNECTIVITY SUPPLIER

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PRESS RELEASE

Tata Communications is the Official Global Connectivity Supplier of the European Tour, bringing video feeds from 47 European Tour tournaments in 30 countries worldwide to 40 broadcasters, reaching close to half a billion golf fans.

Ends...

About Tata Communications

Tata Communications Limited (CIN no: L64200MH1986PLC039266) along with its subsidiaries (Tata Communications) is a leading global provider of A New World of Communications™. With a leadership position in emerging markets, Tata Communications leverages its advanced solutions capabilities and domain expertise across its global network to deliver managed solutions to multi-national enterprises and communications service providers.

The Tata Communications global network includes one of the most advanced and largest submarine cable networks and a Tier-1 IP network with connectivity to more than 240 countries and territories across 400 PoPs, as well as nearly 1 million square feet of data centre and colocation space worldwide.

Tata Communications' depth and breadth of reach in emerging markets includes leadership in Indian enterprise data services and leadership in global international voice communications. Tata Communications Limited is listed on the Bombay Stock Exchange and the National Stock Exchange of India.

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About the European Tour

THE EUROPEAN TOUR - CELEBRATING GOLF. WORLDWIDE.

The European Tour celebrates men's professional golf on a global stage. In 2017, the European Tour International Schedule features a minimum of 47 tournaments in 26 countries, including eight Rolex Series events, all part of the Race to Dubai.

Celebrating the global connectivity of the European Tour and Dubai, the Race to Dubai is a season-long competition to crown the European Tour's Number One player, an honour which in 2016 went to Sweden's Henrik Stenson for the second time, and which since 2009 has also been achieved three times by Rory McIlroy, as well as by Lee Westwood, Martin Kaymer and Luke Donald. Formerly known as the Order of Merit, points are accumulated based on prize money won, with the top 10 ranked players at the end of the season sharing a \$5million Race to Dubai bonus pool.

Since its formation in 1972, the European Tour has witnessed 26 Members celebrate a total of 52 Major Championship titles between them, enjoyed ten Members attaining the pinnacle of World Number One and has celebrated its diversity as players from 36 different countries have won on the Tour.

The European Tour also manages the Challenge Tour, which featured 28 tournaments in 22 countries in 2016, and the Senior Tour, which featured 13 tournaments in nine countries in 2016. It is also the Managing Partner of Ryder Cup Europe, the body which, alongside the PGA of America, administers golf's greatest team contest, The Ryder Cup.



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PRESS RELEASE

The European Tour broadcasts live coverage of its tournaments to more than 490 million homes in more than 150 countries every week, generating in excess of 2,200 global broadcast hours for each event. It also enjoys the support of many of the world's leading business brands with Rolex, BMW, Emirates and Titleist as Official Partners.

The European Tour press contacts

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Forward-looking and cautionary statements

Certain words and statements in this release concerning Tata Communications and its prospects, and other statements, including those relating to Tata Communications' expected financial position, business strategy, the future development of Tata Communications' operations, and the general economy in India, are forward-looking statements. Such statements involve known and unknown risks, uncertainties and other factors, including financial, regulatory and environmental, as well as those relating to industry growth and trend projections, which may cause actual results, performance or achievements of Tata Communications, or industry results, to differ materially from those expressed or implied by such forward-looking statements. The important factors that could cause actual results, performance or achievements to differ materially from such forward-looking statements include, among others, failure to increase the volume of traffic on Tata Communications' network; failure to develop new products and services that meet customer demands and generate acceptable margins; failure to successfully complete commercial testing of new technology and information systems to support new products and services, including voice transmission services; failure to stabilize or reduce the rate of price compression on certain of the company's communications services; failure to integrate strategic acquisitions and changes in government policies or regulations of India and, in particular, changes relating to the administration of Tata Communications' industry; and, in general, the economic, business and credit conditions in India. Additional factors that could cause actual results, performance or achievements to differ materially from such forward-looking statements, many of which are not in Tata Communications' control, include, but are not limited to, those risk factors discussed in Tata Communications Limited's Annual Reports. The Annual Reports of Tata Communications Limited are available at www.tatacommunications.com. Tata Communications is under no obligation to, and expressly disclaims any obligation to, update or alter its forward-looking statements.



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