Editor - Amy Saunders

A year of change

It's certainly been a busy year in 2016. We're at that point again where we can look back on the last 12 months and say: A lot has happened.

This has been my first year in the satellite industry, and it's been a real eye opener. Coming from a scientific background, it's been amazing to explore all the avenues of space exploration and satellite communications from a technology perspective rather than as a casual observer. I've attended Satellite 2016, CommunicAsia, IBC 2016 and Global MilSatCom, where I've met the industry's best and brightest, and experienced first-hand the next generation of communications capabilities. I've visited market-leading companies Telenor, STN, SIS LIVE and CGC Space, and interviewed established key players as well as exciting new up-and-comers across the entire sector. These experiences have given me a much greater understanding of the industry, while several key people have gone out of their way to explain processes and applications, giving me a greater appreciation of just what can be achieved with satellites.

Within the industry itself, there have been some major news stories that have stood out above the rest. The year started with the launch of Intelsat's first next-generation EpicNG high throughput satellite (HTS) in January, followed by another two EpicNG satellites later in the year. Intelsat ultimately plans to develop a global network of HTS primarily for data applications. In March, the European Space Agency launched its Trace Gas Orbiter plus an Entry, Descent and landing demonstrator Module (EDM) as part of the ExoMars programme to investigate the planet's environment.

May saw SpaceX achieve its third rocket landing on one of its drone ships, paving the way for reusable rockets and more cost-effective satellite launch capabilities. In July, NASA's Juno spacecraft reached Jupiter and began to transmit data back from the gas giant's orbit. China launched the world's first quantum communications satellite demonstrator in August, with which it plans to lay the groundwork for a hack-proof satellite communications network by utilising quantum entanglement.

September was a particularly busy month for major space sector news. First, SpaceX's Falcon 9 rocket blew up on the launch pad in Cape Canaveral, Florida during a test fire, destroying Spacecom's pre-loaded Amos-6 satellite. Next, Tim Peake returned to Earth following a historic six-month stay on board the International Space Station (ISS), having achieved several major goals, including the first spacewalk by a UK astronaut. Finally, the Rosetta probe ended its 12-year mission when it collided with its subject, the 67P/C-G comet.

Photo courtesy of SpeedCast

One common theme from 2016 was industry consolidation. With many of the operators reporting troubling financials, buyouts and stakeholder changes have been all too frequent in the last 12 months. For its part, SES acquired RR Media and merged it with SES Platform Services to create MX1, and, much later in the year, SES increased its stake in O3b Networks to 100 percent. Meanwhile, SpeedCast acquired a 70 percent stake in maritime satcoms provider WINS Ltd from Eutelsat, while Marlink acquired Telemar, which specialises in maritime communications systems.

So, what can we expect from 2017? Certainly, increased consolidation throughout the sector seems likely for many months to come, as companies seize any opportunity to increase the profitability of their businesses and reduce major risk factors. And while there's no doubt that there will be more financial struggles for many, we'll also be seeing some breath-taking new scientific advancements in many fields of the space sector. The dedicated small satellite launch providers will be advancing further towards their goals, while the new generation of HTS will develop a more established role in the global market. The virtual reality (VR) field, meanwhile, is expected to boom as technology becomes more affordable for consumers and content producers alike, shaking up the broadcast industry, while the march towards an increasingly autotomized world via the Internet of Things (IoT) will continue.

It's an interesting time to be present in the satellite industry, and I for one am looking forward to it.