

VRT, Belgium National Broadcaster Implements NOVELSAT Satellite Broadcast Solutions

New Solution from NOVELSAT Helps Flemish Broadcaster Improve Spectral Efficiency and Enhanced Features

Ra'anana, Israel, September 13, 2018 – NOVELSAT, a world leader in satellite transmission technology, today announced that VRT (Vlaamse Radio- en Televisieomroeporganisatie), the Belgium national public-service broadcaster for the Flemish Region and Community, has implemented NOVELSAT satellite broadcasting solutions including NOVELSAT modems and software. VRT broadcast services include contribution, DTH channels, and radio, all via satellite and a fiber network, across Belgium and parts of The Netherlands and Luxembourg. They approached NOVELSAT with a request to replace their ground station links and contribution SNG transmission equipment. VRT had been transmitting using the outdated DVB-S2 satellite transmission standard with 20-35% RoF (Roll-off Factor). In addition to the efficiency issues, one of the primary catalysts for the request was the new regulation from the Belgium government requiring CID insertion in satellite signals as of 2018.

CID (Carrier ID) refers to a unique ID that is injected into video or data transmissions by a satellite modulator or modem so that an interfering carrier can be easily identified to enable quick resolution of interference situations.

The initial solution provided by NOVELSAT, together with VP Media Solutions, a major Belgium reseller of broadcast solutions and services, includes [NS3000 Professional Satellite Modems](#), with configurations supporting Carrier in Carrier (Carrier Eco Cancellation) and Dual Channel (ASI+IP) capability, all with built-in TCP Acceleration. The NOVELSAT modem offers 5% RoF with the DVB-S2 and S2X standard, and as low as 2% RoF with the NOVELSAT NS4 satellite waveform. These and other features make the NOVELSAT NS3000 the most bandwidth-efficient modem in the satellite industry.

The primary features of the NOVELSAT satellite broadcast solution for VRT include:

Dual channel ASI+IP – Dual channel ASI+IP support enables simultaneous bi-directional transmission of video and IP data. With this capability, VRT's SNG trucks can more efficiently cover major live events more efficiently, at lower cost, and using less satellite bandwidth.

NOVELSAT DUET™ CeC™ – NOVELSAT DUET CEC (carrier-echo-cancellation) software-based Band Reuse Technology doubles the effective data rate over the same transponder segment by enabling simultaneous full duplex video, data, and voice communication using the same bandwidth for both uplink and downlink.

NOVELSAT NS4™ – NOVELSAT solutions support all satellite transmission standards, including DVB-S/S2/S2X. In addition, NOVELSAT provides NS4, the world's most bandwidth-efficient satellite transmission waveform, which supports high data rates of up to 425Mbps using 80Msps, enabling transmission of a single carrier over an entire 84MHz transponder. NOVELSAT NS4 delivers satellite bandwidth savings of up to 45% compared with DVB-S2 and up to 32% vs. DVB-S2X.

Seamless Integration – While other vendors need to customize solutions to enable features such as Channel-in-Channel support and dual channel IP+ASI transmission to work together, all of the

software-based efficiency-enhancing features of the NOVELSAT NS3000 modem work together seamlessly out of the box. The simplicity and feature set of the solution was a major reason that VRT choose the NOVELSAT solution.

“At NOVELSAT we strive not only to provide the most efficient satellite transmission products and solutions. We also take pleasure when our customers find it easy to get the features, they want without a complicated integration process,” said Gary Drutin, NOVELSAT CBO. “The NOVELSAT broadcast solution for VRT meets the customer’s needs for greater efficiency, bi-directional video and data transmission, CID insertion and more. We look forward to providing additional capacity and capabilities to VRT in the future. “

“The new NOVELSAT modems have improved our contribution efficiency with Carrier-in-Carrier transmission, dual channel IP and ASI for video contribution feeds, and a return IP stream for data sharing with our SNGs,” said Tom Grenson, VRT System Engineer ICT Networking & Telecom. “This has provided benefits to our fleet for large scale events where bandwidth demand is high, and cellular coverage or WIFI are often not sufficient. “

“VP Media Solutions was happy to introduce this flexible NOVELSAT solution to VRT to meet their growing satellite requirements. We supported the project from POC through installation and the first successful implementation for a large-scale live international sporting event covered by VRT,” said Emmanuel Charlet, Partner, Head of Sales and Pre-sales, VP Media Solutions. “Improved spectral efficiency and better control of both the forward and return channels under the same frequency has proven to be highly economical for VRT in a variety of scenarios.”

Visitors at IBC 2018 in Amsterdam, September 13-18 can learn more about the world’s most bandwidth-efficient satellite broadcast solutions in the NOVELSAT booth, A51 in Hall 5.

About NOVELSAT

NOVELSAT is a leading provider of next-generation content connectivity solutions. Powered by innovative technologies, our broadcast and broadband solutions are transforming networks’ capabilities to expand growth potential and to drive new experiences on any device, anytime, anywhere. Our high-performance products for satellite and terrestrial content connectivity include integrated video solutions and highly efficient broadband connectivity solutions, as well as best-in-industry content security solutions. Transforming delivery of data and video with new levels of performance, efficiency, agility, and security, NOVELSAT empowers mission-critical and demanding applications for the telecom, enterprise, media, entertainment, government, and mobility markets. For more information visit www.novelsat.com