

Press Release Enhancements to NOVELSAT NS4[™] Set the Satellite Transmission Efficiency Bar Even Higher

Independent Field Tests At Large UK Teleport Show Updated Version of NOVELSAT NS4™ Increases Efficiency Advantage Over DVB-S2X By Up To 32%.

Ra'anana, Israel, September 12, 2018 – Recent independent testing, confirmed by NOVELSAT, a world leader in satellite transmission technology, indicate that new enhancements to the NOVELSAT NS4[™] satellite transmission waveform have further increased its efficiency edge over the DVB-S2X standard. Head-to-head comparison tests performed by a large teleport in the UK show that NOVELSAT NS4[™] performs up to 32% more efficiently compared with DVB-S2X. That translates into more data and video transfer per MHz of bandwidth for satellite communications providers, especially in saturated environments.

Live field tests were performed over a 36MHz transponder on both linear (non-saturated) and nonlinear (saturated) links. While NOVELSAT NS4[™] showed a 22% boost in efficiency, compared with DB-S2X, over linear links, the results over non-linear links far outstripped previous results, at up to 32% better than DVB-S2X. The enhancements that NOVELSAT has made to its NOVELSAT NS4[™] waveform set the stage for the company to break the satellite transmission bandwidth efficiency record that it had set with the previous version of NOVELSAT NS4[™] (which performed up to 22% better than DVB-S2X).



The field tests also included linear bi-directional links supported by NOVELSAT DUET[™] CeC[™] (carrier-echo-cancellation) software-based Band Reuse Technology. NOVELSAT DUET[™] CeC[™] 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. The results of these bi-directional tests rendered an impressive 37% advantage over DVB-S2X on the same links.



The NOVELSAT NS4[™] satellite transmission waveform can be implemented on any NOVELSAT satellite modem, modulator or demodulator – which also support DVB-S, DVB-S2, DVB-S2X and



DVB-CID standards. Existing NOVELSAT customers can benefit from the new NOVELSAT NS4[™] enhancements through easy OTA (Over-the-Air) software upgrades.

"Our engineers are on a constant quest to break the satellite transmission efficiency records that we have consistently set over the last 7 years," said Itzik Wulkan, NOVELSAT CEO. "Our broadcast and data transmission customers are constantly increasing the load on their satellite links. With these new enhancements to NOVELSAT NS4[™], they will transmit even more data and video without increasing their budget of expensive satellite bandwidth."

NOVELSAT will showcase its enhanced NOVELSAT NS4[™] solutions at the IBC 2018 show at the Amsterdam RAI, September 12-18, 2018 in 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 <u>www.novelsat.com</u>