PRESS RELEASE

ADDVALUE'S PROPRIETARY IDRS SERVICE IS PROUDLY ENDORSED AS A KEY COMPONENT OF EO-ALERT, AN EUROPEAN UNION'S HORIZON 2020 FUNDED CONSORTIUM LED BY DEIMOS SPACE OF SPAIN IN PROMOTING THE CONCEPT OF REAL-TIME GLOBAL DELIVERY SERVICE FOR EARTH OBSERVATION PRODUCTS

Singapore, 21 January 2021 – Singapore Exchange Mainboard-listed Addvalue Technologies Ltd, a leading player in the mobile satellite communications industry, announced that its wholly-owned subsidiary, Addvalue Innovation Pte Ltd ("**Addvalue**"), has won endorsement for its proprietary Inter-satellite Data Relay Service ("**IDRS**") from EO-ALERT, a European Union's Horizon 2020 funded consortium comprising leading members of the European space industry as well as academic partners, as a key enabler for a real-time global delivery service for Earth Observation ("**EO**") products. Horizon 2020 is the financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness.

The EO-ALERT consortium is led by DEIMOS Space of Spain, with participation of the German Space Agency DLR, spacecraft manufacturer OHB Italia, Graz Technical University of Austria, and Politecnico di Torino of Italy.

EO-ALERT primarily aims to define and develop the next-generation EO data and processing chain based on a novel flight segment architecture that moves key optimized EO data processing elements from the ground to space using on-board processing with the objective of providing the EO products to the end user within minutes of collecting the data. Within the frame of EO-ALERT, Addvalue's IDRS service provides a very compelling option for delivering the on-board processed products to end users globally and within seconds.

The next generation EO data chain proposed by EO-ALERT exploits the observation that the classical EO data chain is focused on the fast transfer of the raw sensor data to ground, leading to the bottleneck that currently exists, and the natural drive towards optimisation of the classical EO data chain, through faster data transfer to ground, with higher compression ratios, and improved ground station contact periods. However this raw data is not the EO product of market value. In fact, in commercial applications, the EO raw data is not provided nor sold to the end user, and this is also the case in

institutional EO solutions; the EO raw data is simply an intermediate step. The market value lies in the EO product delivered to the end user, not in the basic EO raw data. Hence if the EO image products can be generated on-board the satellite, given its very low data volume relative to the raw data, it can be very quickly and reliably transferred to ground.

EO-ALERT proposes innovation in several critical technological areas regarding on-board elements of the data and processing chain: on-board image generation and processing for both Synthetic Aperture Radar (SAR) and optical sensor data, on-board reconfigurable data handling, high-speed on-board avionics, on-board data compression and reconfigurable high data rate communication links to ground. These technological areas cover the EO processing chain from the acquisition of the image up to delivery to a ground station. Such innovations will also provide capabilities for the optimisation of the classical EO data chain towards a data chain with greatly improved data throughput.

A test campaign was done by the EO-ALERT consortium independently to demonstrate and validate the EO-ALERT concept together with modeling of the IDRS link in flight, using a standard Inmarsat Broadband Global Area Network (BGAN) terminal (which emulates the Addvalue space transceiver) and bench tests over the Inmarsat satellite. These tests confirmed that Addvalue's IDRS service is indeed a reliable solution to provide real time global alert data delivery of EO products from Optical and SAR EO satellites to ground. For example, in one of the application scenarios under EO-ALERT, namely ship detection and classification based on a European Maritime Safety Agency (EMSA) Vessel Detection Service (VDS), Addvalue's IDRS service could **enable the end-to-end global delivery time to be less than one minute**. This is a quantum leap in resolving the inherent latency problem facing all LEO satellites operators today. Going forward, one will expect the IDRS service to become a standard feature for EO service operators globally, in particular, for applications when real time on demand data relay is of the essence.

Kindly refer to press release by EO-ALERT.

The EO industry is continually developing and evolving a seamless integration of new technologies, sensing modalities, and unconventional data sources. As the demand for EO data explodes to address climate change and weather data collection, disaster recovery, maritime transport, environmental monitoring, etc., the need for capturing the EO data and deliver it to the end user with a minimum delay becomes more critical, thereby increasing the demand for the real-time delivery of satellite-based EO services. The global satellite-based EO market was valued at US$2.7 billion in 2019, and it is

expected to nearly double to US$4.4 billion by 2025, registering a CAGR of 8.5% per annum.*

Dr Colin Chan, Chairman and CEO of Addvalue, commented: "*We are delighted to have the open endorsement of IDRS from the EO-ALERT Consortium, and this truly epitomizes the IDRS as a game changer to the way communications are provided for the LEO satellite operators. We are certainly pleased and honored to be the first in the world to be in a position to provide such a proven low latency, on demand and reliable service, and will capitalize on this pole position to reach out to the EO industry in meeting the ever growing demands*".

* "Satellite-based Earth Observation Market - Growth, Trends, Forecasts (2020 - 2025)" - https://www.mordorintelligence.com/industry-reports/global-satellite-based-earth-observation-market-industry

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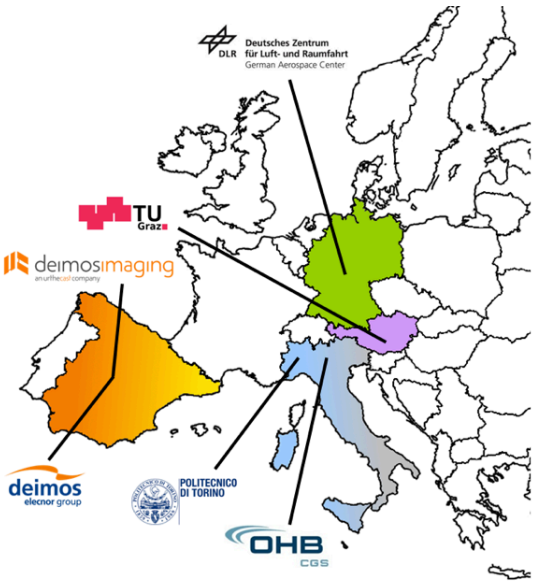
About Addvalue Technologies Ltd (www.addvaluetech.com)

Addvalue Technologies Ltd (A31), a SGX Mainboard-listed, is a leading satellite-based communication solutions company. Addvalue provides state-of-the-art communication terminals for use in space, in the air, at sea and on the ground. The company also offers extensive engineering and integration services to its customers. Addvalue's expertise extends far beyond where the world's terrestrial networks end. Whatever the market or application, the company's wide range of satellite-based products and services is sure to offer the right technology to drive enhanced connectivity. Learn more at.

About EO-ALERT (www.eo-alert-h2020.eu)

EO-ALERT is a Horizon 2020 European Union research activity led and coordinated by DEIMOS Space. It started in January 2018 and is ending in 2021. It aims at achieving very high throughput and very low latency (below five minutes) in the delivery of EO images and products. The partners of EO-ALERT are DEIMOS Space, DLR, Technische Universität Graz, Politecnico di Torino, OHB Italia and Deimos Imaging, with the participation of the Spanish State Meteorological Agency (AEMET) as a third party. The consortium covers the full R&D cycle, from university to industry, and over the full EO value chain, facilitating the maturation of the innovative concepts, so as to enable their rapid exploitation in upcoming EO missions.

The main objective of EO-ALERT is that of developing, in a fully integrated approach, the technological building blocks required to achieve the primary goal of a next-generation EO data and processing chain, to provide enhanced EO products and services in terms of high availability rate and very low latency (e.g. rapid meteorological and civil security image products and warnings).



EO-ALERT Consortium

About Horizon 2020

Horizon 2020 is the biggest EU Research and Innovation programme ever with nearly €80 billion of funding available over 7 years (2014 to 2020) – in addition to the private investment that this money will attract. It promises more breakthroughs, discoveries and world-firsts by taking great ideas from the lab to the market.

Horizon 2020 is the financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness.

Seen as a means to drive economic growth and create jobs, Horizon 2020 has the political backing of Europe's leaders and the Members of the European Parliament. They agreed that research is an investment in our future and so put it at the heart of the EU's blueprint for smart, sustainable and inclusive growth and jobs.

By coupling research and innovation, Horizon 2020 is helping to achieve this with its emphasis on excellent science, industrial leadership and tackling societal challenges. The goal is to ensure Europe produces world-class science, removes barriers to innovation and makes it easier for the public and private sectors to work together in delivering innovation.

Horizon 2020 is open to everyone, with a simple structure that reduces red tape and time so participants can focus on what is really important. This approach makes sure new projects get off the ground quickly – and achieve results faster.

The EU Framework Programme for Research and Innovation will be complemented by further measures to complete and further develop the European Research Area. These measures will aim at breaking down barriers to create a genuine single market for knowledge, research and innovation.

About DEIMOS Space (www.deimos-space.com)

DEIMOS Space, the coordinator of EO-ALERT and leader of the activities regarding the development of key technologies towards the next generation satellite EO processing chain, is the technology company within the ELECNOR Group specialised in the design, engineering and development of solutions and systems integration in the aerospace, satellite systems, remote sensing, information systems and telecommunications network sectors. In the space sector its expertise encompasses Mission and Flight Engineering, Space Situational Awareness, Ground Segment Systems, Flight Software Systems and Global Navigation Satellite Systems.

About Inmarsat (www.inmarsat.com)

Inmarsat is the world leader in global, mobile satellite communications. It owns and operates the world's most diverse global portfolio of mobile telecommunications

satellite networks, and holds a multi-layered, global spectrum portfolio, covering L-band, Ka-band and S-band, enabling unparalleled breadth and diversity in the solutions it provides. Inmarsat's long-established global distribution network includes not only the world's leading channel partners but also its own strong direct retail capabilities, enabling end-to-end customer service assurance.

The company has an unrivalled track record of operating the world's most reliable global mobile satellite telecommunications networks, sustaining business and mission critical safety & operational applications for more than 40 years. It is also a major driving force behind technological innovation in mobile satellite communications, sustaining its leadership through a substantial investment and a powerful network of technology and manufacturing partners.

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