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EMSA/ESA SAT-AIS INITIATIVE – FIRST OPERATIONAL RESULTS OF THE DATA PROCESSING
CENTER & SERVICES AND NEXT GENERATION PAYLOAD AND MICRO-SATELLITES

Abstract

Satellite-based Automatic Identification System (SAT-AIS) provides AIS data via satellite, allowing for the detection and tracking of seafaring vessels on global scale and contribute therefore to maritime awareness. SAT-AIS is able to assist European entities and institutions in law enforcement, fisheries control campaigns, customs, maritime border control operations, maritime safety and security issues including marine pollution response, search and rescue and anti-piracy. The European Space Agency (ESA) and the European Maritime Safety Agency (EMSA) are cooperating to maximise the provision and use of SAT-AIS data and have demonstrated several new SAT-AIS data services. EMSA and ESA have implemented a SAT-AIS Data Processing Centre (DPC) under a joint project team which is currently being integrated into the Integrated Maritime Data Environment (IMDatE) at EMSA to enhance the operational maritime services. Within ESA's Telecom Programme the next generation SAT-AIS receiver payload for the Norwegian NORSAT-1 mission is being developed. The Norwegian Space Centre is the customer and mission prime and Kongsberg Seatex is the receiver prime. Through a second activity, a new generation of SAT-AIS micro-satellites is developed, within a Private Public Partnership with exactEarth as the customer, operator and service provider and LuxSpace as the satellite prime. The status and first results of the on-going SAT-AIS activities are presented in this paper.