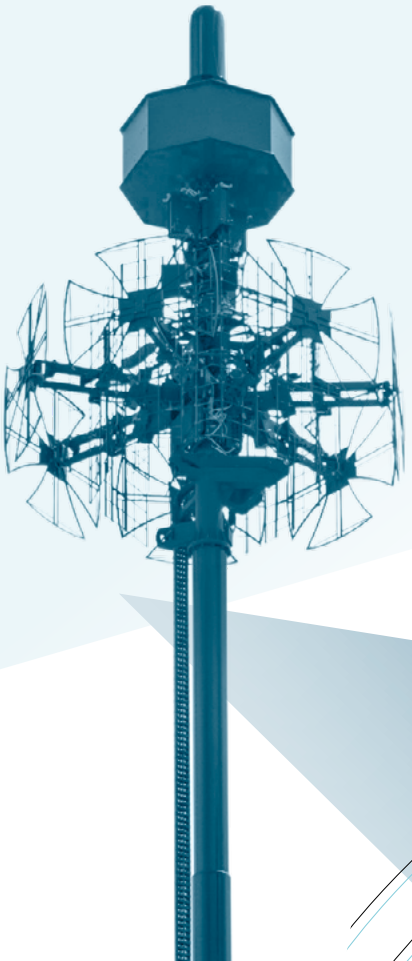
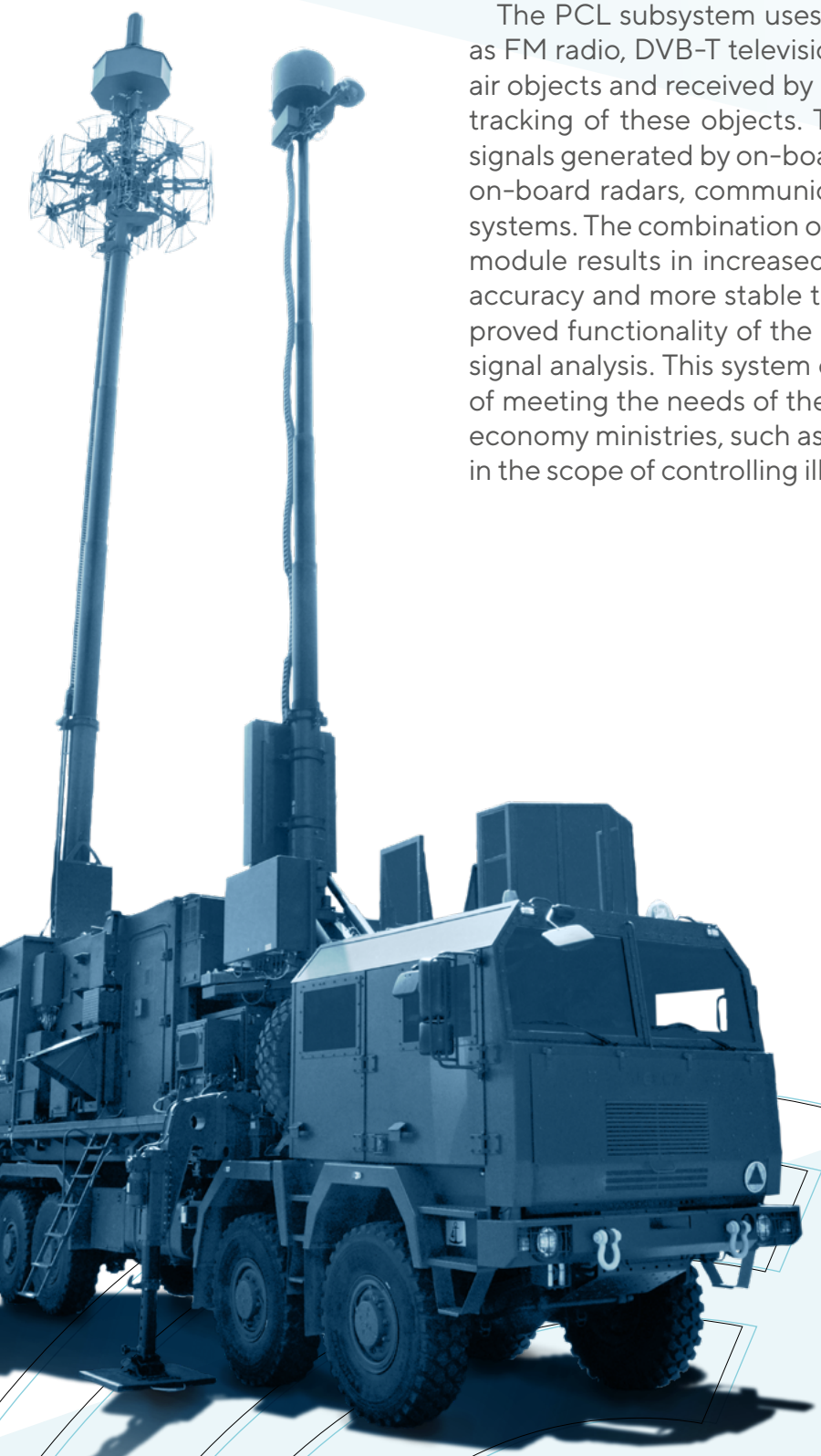
PITRADWAR PGZ



SPL
PASSIVE LOCATION SYSTEM

The Passive Location System (SPL) is an innovative airspace observation system on a global scale. This system provides continuous airspace observation with localization and tracking of air objects, while not emitting any signals, making it undetectable for hostile ESM (Electronic Support Measures) systems. SPL was designed and is being developed by PIT-RADWAR S.A. in cooperation with AM Technologies Sp. z o.o. Sp. k. and the Warsaw University of Technology.

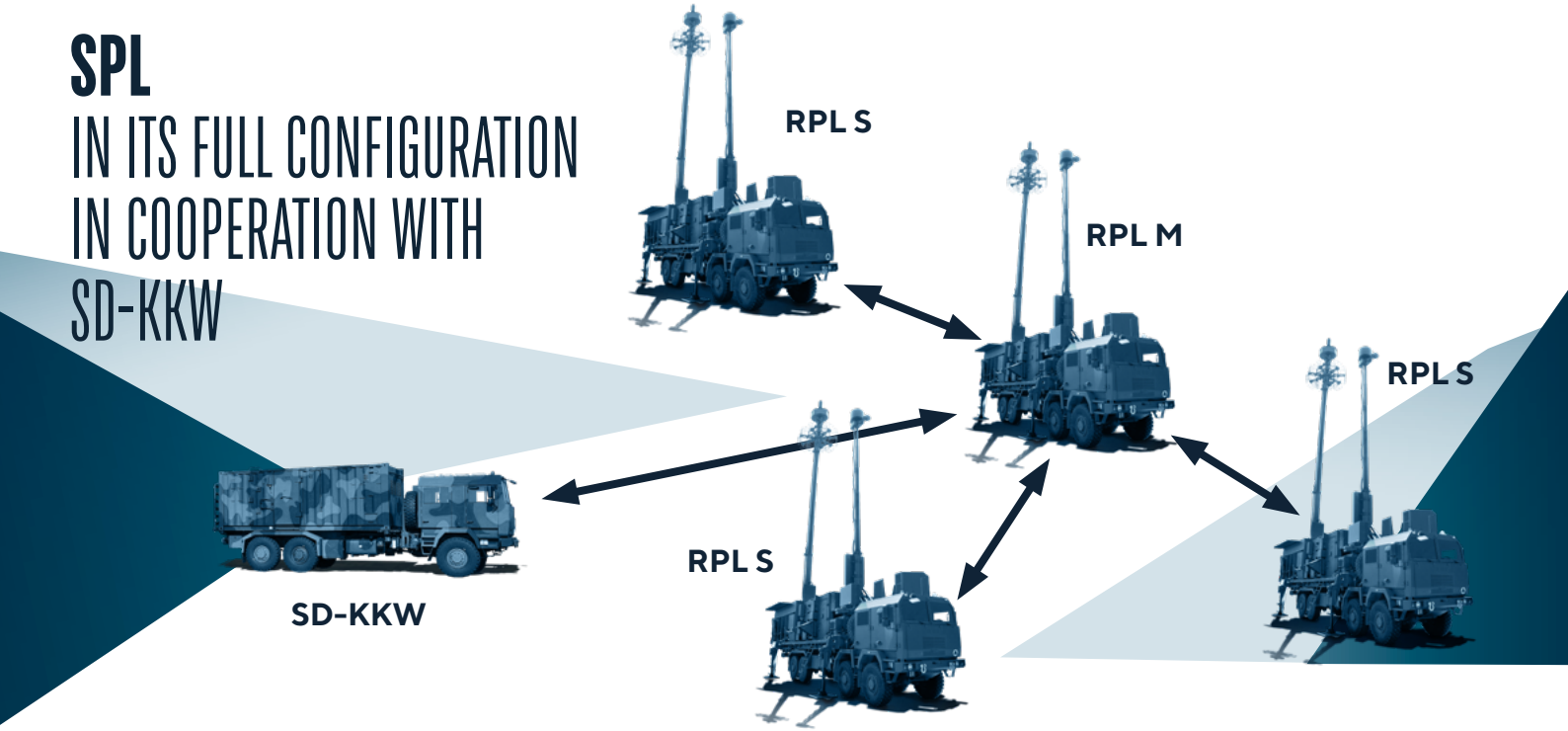
SPL combines two passive subsystems: the PCL (Passive Coherent Location) subsystem and the PET (Passive Emitter Tracking) subsystem, allowing for multistatic operational work with coverage of a very wide frequency range. This system in its full configuration consists of 4 Passive Location Radars (RPL), identical in terms of hardware and software. Passive operation is also possible in an incomplete configuration of 1 to 3 radars. In each configuration, one of the radars works as a leader (M - Master), and the others as subordinate (S - Slave). The key to achieving high system efficiency is the Fusion Module, which in the leader radar (M) performs the fusion of data from both passive subsystems coming from subordinate radars (S). Operation of the SPL in an incomplete configuration causes limitations in the use of data from the PET subsystem, but even with the autonomous operation of a single radar, it allows for the location and tracking of air objects, although in a limited area. The SPL communicates with the C2 system (Battle Control Station) via a leading radar using a fiber optic or radio link.



The PCL subsystem uses signals from occasional transmitters, such as FM radio, DVB-T television, or GSM telephony, which, dispersed on air objects and received by individual radars, allow for the location and tracking of these objects. The PET subsystem is based on detecting signals generated by on-board transmitters of airborne objects, such as on-board radars, communication links, the IFF system and navigation systems. The combination of the PCL and PET subsystems in the fusion module results in increased detection probability, greater localization accuracy and more stable tracking of the object's route, as well as improved functionality of the airborne object type classification through signal analysis. This system can be successfully used both in the scope of meeting the needs of the Ministry of Defense, as well as other state economy ministries, such as the Border Guard or the Customs Service, in the scope of controlling illegal crossing of the state's air border.

SPL, both when used in the Ministry of Defense and civilian ministries, is very attractive from the ecological point of view, because it is not a source of high-power electromagnetic radiation. Additionally, in connection with the above, there is no need to allocate a separate frequency band range for the needs of SPL operation. Due to the innovativeness and uniqueness of the system on an international scale and the fact that it was developed for the first time in our country, as well as the huge interest in its use outside Poland, there are potential opportunities for the State Treasury to obtain income from its sale.

SPL
IN ITS FULL CONFIGURATION IN COOPERATION WITH SD-KKW



NCBR

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