

EXPERT COUNCIL UNDER THE COUNCIL OF THE FEDERATION COMMITTEE FOR AGRARIAN AND FOOD POLICY AND ENVIRONMENTAL MANAGEMENT

> ANALYTICAL DEPARTMENT OF THE COUNCIL OF THE FEDERATION (an associate member of the European Parliamentary Technology Assessment)

Application of the latest technical developments in the field of environment protection

On October 20, 2016 in the Council of the Federation was held a joint meeting of the sections «Legal regulation in the field of ecology and environmental protection» and «Food and processing industry» of the Expert Council under the Council of the Federation Committee for Agrarian and Food Policy and Environmental Management on the theme «Greening of economic activity as a key factor of the development of food industry companies». The meeting was attended by representatives of food industry companies, science and civil society, and also developers of reference books of the best available technologies (BAT).

New technological approaches to the solution of environment protection



tasks have been presented. It was noted that unmanned aircrafts are even more often used in ecological projects. For ecological example, during raids Moscow the in and Moscow region which are carried out by the Public chamber of the Russian

Federation according to complaints of the population.

The mobile ecological laboratory is used for carrying out measurements of air near industrial enterprises, identification of unauthorized dumps of household garbage, check of legality of warehousing of waste and conducting works in the sphere of subsurface. The laboratory is equipped with the modern analytical equipment which allows to fix content 36 harmful chemicals in air, and also the unmanned aircraft performing video recording from air.

Drones are used by EMERCOM of Russia (the Ministry of the Russian Federation for Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters) for monitoring of a condition of the woods and identification of seats of forest fire in the difficult terrain. These russian-made drones which are issued by the group of companies ZALA AERO entering in world famous of JSC Kalashnikov Concern. Specialists consider pilotless devices of plane type — ZALA 421-16E and ZALA 421-16EM are the most effective in detection and monitoring of the fires.

The unmanned aircraft ZALA 421-16EM also showed the high efficiency in fight against illegal fishing. In particular, such aircraft is used fight for against in the poachers Nizhny Novgorod



Russian-made Drone ZALA 421-16E: general look and linear dimensions.

Region. It is able to carry out tasks in difficult weather conditions and at any time. It is extremely important because poachers often catch fish at night.

Time of flight of the unmanned aircraft ZALA 421 16EM makes 2,5 hours, action radius – 50 km, maximum height of flight – 3600 m. It observes mobile and fixed objects in an automatic mode. After start the airplane begins to transfer the received image in real time. Information arrives on the monitor which is set in mobile office for control, and also in center where data are analyzed that allows to coordinate actions of terrestrial groups quickly.

