

Método de posicionamiento de drones LTE-5G para compensación de fallos en situaciones de emergencia

Ana Rosa Romero⁽¹⁾, Jesús Burgueño⁽¹⁾, Isabel de-la-Bandera⁽¹⁾, Raquel Barco⁽¹⁾
{arromero, jesusbr, ibanderac, rbm}@ic.uma.es

¹Telecommunication Research Institute (TELMA), Universidad de Málaga,
E.T.S. Ingeniería de Telecomunicación, Bulevar Louis Pasteur 35, 29010 Málaga (Spain)

RESUMEN

The failures resulting from cells outages or the partial loss of communications infrastructures make it impossible to serve users in the affected area. Such services would allow them to establish communication in order to get help or provide additional information about the situation to the emergency services. To solve this problem, a compensation method based on a drone deployment is proposed to be used in emergency situations. The proposed algorithm determines the position and power configuration of the drones to cover the affected area. To test and evaluate the effectiveness of the system, the throughput offered in the network after the deployment of the drones is analyzed and compared with a uniform distribution of drones.

AGRADECIMIENTOS

Este trabajo ha sido financiado por la Junta de Andalucía (Consejería de Transformación Económica, Industria, Conocimiento y Universidades, Proyecto de Excelencia PENTA, P18-FR-4647) y a través del Plan Propio de Investigación y Transferencia de la Universidad de Málaga.