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Compact Portable Cognitive Satellite Communication System for OSI

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In principle, OSI could be conducted anywhere on the earth. Communication is mission critical for OSI. 10 years have passed since the last Directed Exercises of OSI communication in Jordan. Some of the communication equipment suggested by the exercise, mostly old fashioned radio communication, would find its restrictions for meeting the practical requirements of OSI. Based on cognitive satellite communication and ad hoc communication networking technologies, this work carried out a study of cognitive satellite communication system for OSI. A compact portable satellite communication prototype VSAT has been developed with high reliable capability achieved by advanced cognitive communication technology. The main specifications are the following: Weight is less than 7 kg including lithium battery, which is suitable for inspectors to carry. Size is 310mm×460mm×60mm with antenna and receiver in an integrated design. Working time is up to 5 hours. Communication speed is up to 256Kbps. By means of working with ad hoc hubs (deployment depending on IA terrains, individual terminals, and commercial encryption, it would provide a reliable communication working environment for IT and IT members, supporting secured communication among IT members, ISP representatives, BoO, CTBTO headquarters and other possible parties.

Promotional text

This work carried out a study on compact portable cognitive satellite communication system for OSI, which would provide an option for OSI communication equipment development, so as to meet the urgent need of OSI communication equipment support requirements.

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