Design of Downlink Control Channels for MHN Enhanced System

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***(Pt9)Abstract*—In spite of the high need for high data rate for users, there has been no wireless mobile backhaul system supporting 10Gbps data rate for fast moving group vehicle such as a subway and a train. In ETRI, we have been designing and developing MHN–E (Mobile Hotspot Network - Enhanced) system to meet the criteria which is focused on fast moving vehicle. MHN-E system supports up to 10Gbps downlink data transmission rate for fast moving group vehicle. Supported moving velocity is considered up to 500km/h. In this paper, downlink control channel structures of MHN-E system are described and their performances are shown.**

***(Pt9)Keyword*— Control Channels, MHN-E, Millimeter Wave, Multi-flow.**

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