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(54) **TECHNIQUES FOR CONFIGURING SUPPLEMENTARY DOWNLINK SUPPORT FOR HALF-DUPLEX UE**

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(57) **ABSTRACT**

Aspects of the present disclosure provide techniques configuring half duplex UEs (HD-UEs) to implement supplementary downlink (SDL) in band combination that may be in same or different frequency range designations (e.g., FR1 or FR2). Particularly, in order to compensate for the loss of downlink coverage and improve load balancing, aspects of the present disclosure configure the UE to perform random-access channel (RACH), a procedure that is a shared channel used by wireless terminals to access the mobile network, on the anchor carrier in time division duplex (TDD) band and after initial access, the UE may be configured to switch to SDL to receive subsequent downlink signals.