

WIRELESS MULTI-CELL COMMUNICATION SYSTEM AND METHOD FOR MANAGING RESOURCE POWER TO PROVIDE HIGH SPEED DOWNLINK PACKET ACCESS SERVICES

ABSTRACT

A method and wireless multi-cell communication system for providing high speed downlink packet access (HSDPA) services. The system includes a radio network controller (RNC) in communication with a plurality of base stations. The RNC sends a control signal to at least one base station having a plurality of timeslots, e.g., in a time division duplex (TDD) system and/or frames including transmission timing intervals (TTIs), e.g., in a frequency division duplex (FDD) system assigned thereto for the establishment of HSDPA channels. The control signal indicates a maximum allowed HSDPA transmit power for each of the timeslots and/or TTIs. The base station sends a feedback signal to the RNC indicating the results of measurements of the power of the transmitted HSDPA timeslots and/or TTIs during a predetermined time period.

Figure 1