Remote Radio head

RRH Description

Remote Radio head has become very important subsystems for distributed Base station Architecture. The remote radio head contains the base station's RF circuitry plus analog-to-digital or digital-to-analog converters and up/down converters. **RRH** has operation and management functions. It has optical interface, which connects RRH with base station system. RRH Base station system consists of REC and RE, where in REC consists of baseband processing chain viz. scrambling, channel coding and modulation. RE consists of ADC/DAC, PA, LNA and RF/IF filters. Distance between REC and RE will be usually about 10Km and interface will be optical signal which usually carry Control/mgmt, Sync and IQ signals. RRH is used to extend the coverage of a base station sub-systems in the remote rural areas.

RRH Interfaces: Control and Mgmt- Used for call processing and for operation and maintenance signals.
Sync- Used for synchronization purpose, will carry timing information.
IQ- Data that will be carried between radio base station to the mobile station and vice versa.
Above interfaces are connected with Layer 2. Layer 2 is connected with layer 1 i.e. PHY layer.

REFERENCES:

Common Public Radio Interface-CPRI Specification V1.4 for RRH

http://www.cpri.info/downloads/CPRI_Specification_V_1_4.pdf