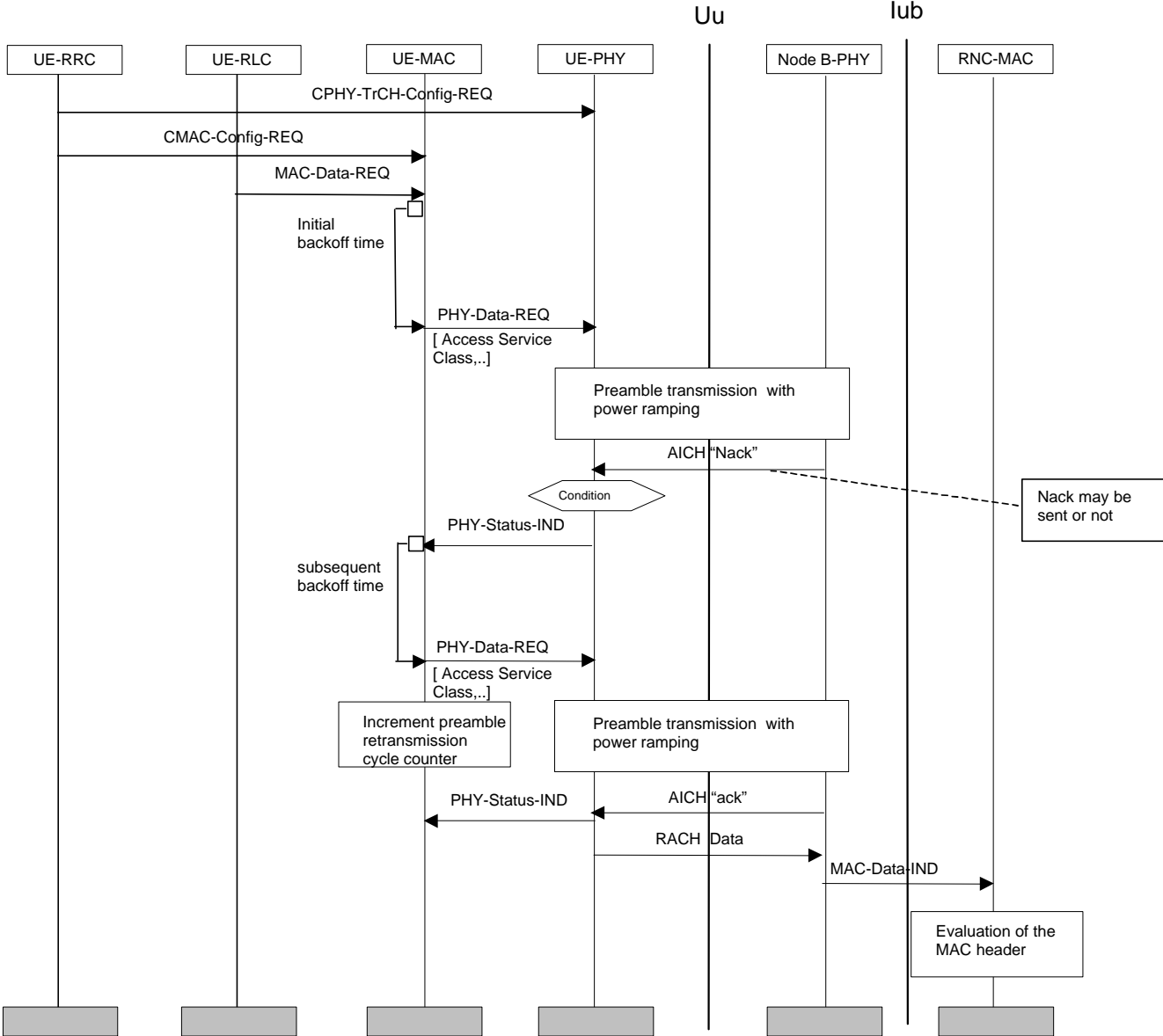


7.7.2 Random access transmission sequence



The RACH and AICH are configured once via a CPHY-TrCH-Config-REQ primitive. This primitive is issued only for initial configuration or when a parameter shall be changed, not for every RACH transmission.

The CMAC-Config-REQ primitive is used to configure MAC parameters required for the random access procedure (e.g. persistence value, maximum number of preamble ramping cycles, initial and subsequent backoff times).

When there is data to be transmitted on the RACH, i.e. reception of a MAC-Data-REQ primitive, the RACH transmission control procedure is started.

After some initial backoff, a primitive PHY-Data-REQ containing the selected Access Service Class (ASC) is sent to L1. This triggers the PRACH preamble transmission procedure, i.e. the physical layer selects a PRACH access slot and signature without further backoff delay imposed on L1, but within the ASC constraints.

If the maximum permitted transmission power was reached without receiving an acknowledgement, or a negative acknowledgement (Nack) has been received on AICH, the preamble ramping cycle is repeated. The number of preamble ramping cycles is counted in MAC.

Upon successful transmission of a preamble, MAC receives an acknowledgement via PHY-Status-IND primitive that the acquisition indicator was received and the message sent.