

NOTE: UCT = unconditional transition
SQE = *signal_quality_error*

Figure 7-8—PLS Carrier Sense function*

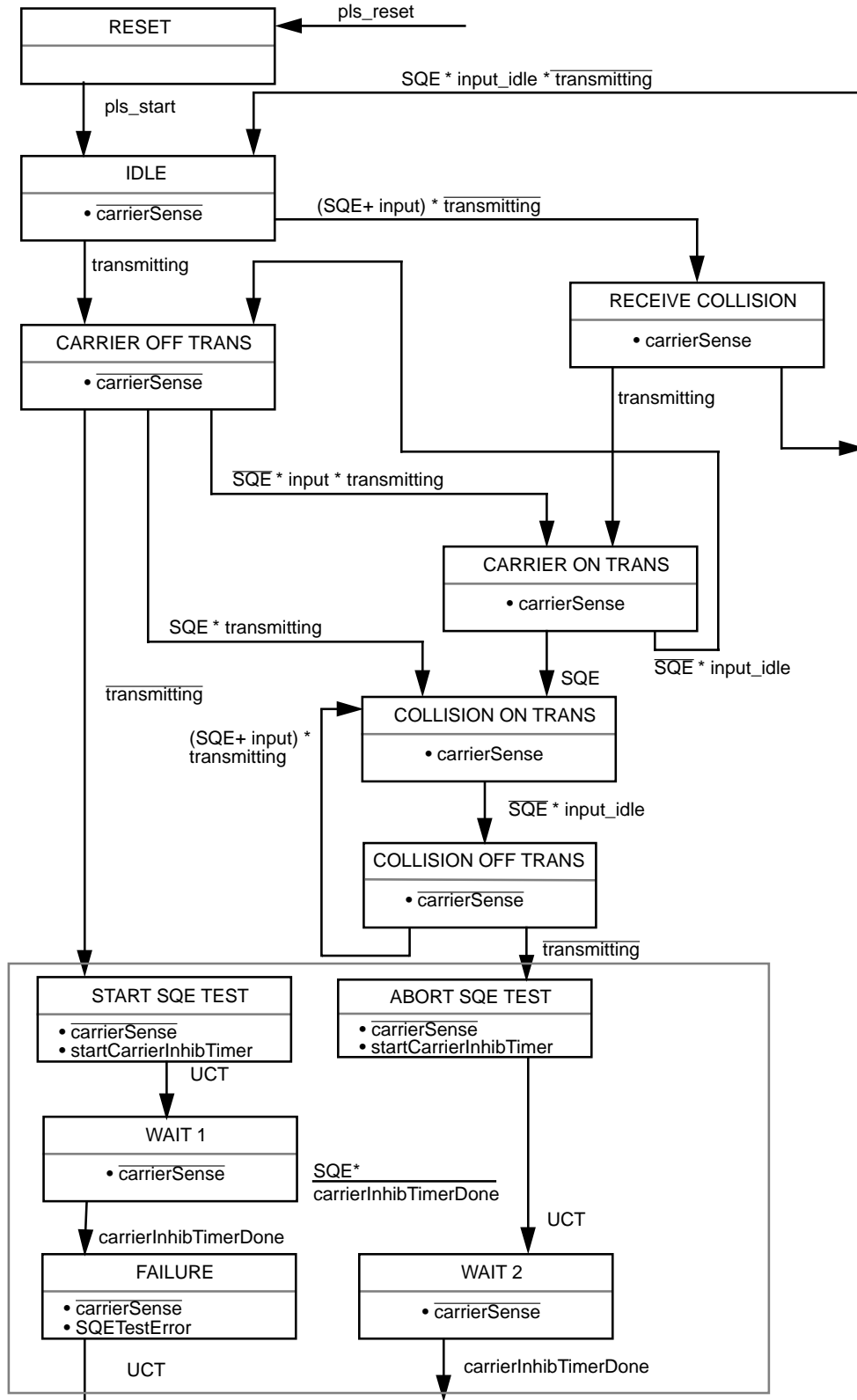
*See footnote 7.

7.2.4.6 Carrier Sense function⁸

The PLS sublayer Carrier Sense function performs the task of sending CARRIER_STATUS to the MAC sublayer every time there is a change in CARRIER_STATUS. The state diagram of Figure 7-8 depicts the Carrier Sense function operation.

Verification of the *signal_quality_error* detection mechanism occurs in the following manner (in the absence of a fault on the medium).

⁸See footnote 7.



NOTES
 1—UCT is unconditional transition; SQE is *signal_quality_error*.
 2—States within the dotted box are not implemented for the PSL sublayer within a repeater port.

Figure 7-8—PLS Carrier Sense function

Comment Number: 1, from SC6 N10 037
Comment Type: Editorial
Section/Clause/Page: Figures 7-7
National Body Concern: The rationale for the revision to Figure 7-7 is given as 'to correct an editorial error'. The change is considerably more than editorial as it changes a 5-state diagram to a 3-state diagram, as well as other changes. A proper rationale is required by Member Bodies so that they can understand the need for and the implications of this change-The UK requires a proper explanation of this change so that it can decide whether or not it should be approved.

Comment Number: 3, from SC6 N10 037
Comment Type: Editorial
Section/Clause/Page: 7-2-4.5, 7.2.4.6., Figures 7-7, 7-8
National Body Concern: The changes to the wording of subclause 7.2-4.5 and 7.2-4.6 and in Figures 7-7 and 7-8 are incorrect in terms of the descriptive model defined in subclause 7.2.2 for use in Clause (chapter) 7 (PLS) for the communications between the MAC and PLS. The term 'collisionDetect', 'carrierSense' and 'transmitting', which are used in the new text of these subclauses and Figures, are from the descriptive model defined in subclause 4.3.3 and used in Clause 4. The UK requires the consistent use of the descriptive model in Clause 7 before it will change its response to approve.

Comment Number: 4, from SC6 N10 037
Comment Type: Editorial
Section/Clause/Page: 7.2.4.5, 7.2.4.6
National Body Concern: ISO/IEC 8802-3 adopts a consistent style in referring to actions involving signals, messages and the Pascal program elements of Clause 4. Binary signals are asserted and negated (or de-asserted), messages are sent and received, the value of a Pascal program variable is set (if it is a Boolean variable, it is set to true or false). The new text of subclause 7.2.4.5 and 7.2.4.6 does not follow this style. For example in 7.2.4.5, there is the text '...the task of sending collisiondetect to the MAC sublayer ...' but collisiondetect is defined in Clause 4 as a Boolean variable and cannot therefore be sent. Similarly for carriersense in 7.2.4.6. The UK requires that the consistent style be used for the replacement text and figures before it will change its response to approve.

Comment Number: 9, from SC6 N10 037
Comment Type: Editorial
Section/Clause/Page: 7.2.4.5, 7.2.4.6, Figures 7-7, 7-8

Note to be added to 7.2.2.1.4 CARRIER_STATUS

Note- Formely, the carrier Sense function described in Figure 7-8 generated the CARRIER_STATUS message described above. For the sake of consistency with common implementation practice, the variable carrierSense is generated directly by the Carrier Sense function in recent editions of the standard. The mapping between the CARRIER_STATUS message and the CarrierSense variable is as follows. When the carrierSense variable changes from False to True, the CARRIER_STATUS message is sent with the parameter CARRIER_ON. When the value of the carrierSense variable changes from True to False, the CARRIER_STATUS message is sent with the parameter CARRIER_OFF.

Similar notes will be provided for SIGNAL_STATUS (7.2.2.1.5) and output_in_progress.