Necessity for S_ID in REC Payload

The REC payload consists of an OX_ID, RX_ID, and S_ID. FC-LS allows the S_ID in the payload to be different from the S_ID in the header. This is needed to allow a port to send an REC when it is the responder of the referenced exchange.

This can happen when the Target sends an FCP_RSP frame, which requests confirmation. If the FCP_RSP or FCP_CONF frame is lost, the target will send an REC to the initiator. The S_ID in the header of this REC will belong to the Target. The S_ID in the payload of the REC will belong to the initiator.

Some devices are capable of both Initiator and Target Mode activity, and thus can receive an REC in either capacity. These devices need the S_ID in the payload to determine whether they own the specified OX_ID or RX_ID. Hence, the S_ID in the payload is necessary to allow a device to uniquely identify the exchange referenced by the REC.