Modification of ISO 8802-2 Type 2 Transitions (Table 4, P88-108)

Note:

Trans. #	ISO Page #	Current state	Event	Action(s)	Next state
MOD-1	P.92	NORMAL	RECEIVE_FRMR_RSP(F=X)_ REASON=N(S)_ERROR	UPDATE_P_FLAG; SEND_RSET_CMD; START_ACK_TIMER; RETRY_COUNT:=0;	RSET
MOD-2	,,	NORMAL	RECEIVE_FRMR_RSP(F=X)_ REASON<>N(S)_ERROR	STOP_ALL_TIMERS; RESET_INDICATION(LOCAL); REPORT_STATUS(FRMR_RECEIVED); S_FLAG:=0;	RESET_WAIT
MOD-3	,,	BUSY or REJECT or AWAIT or AWAIT_BUSY or AWAIT_REJECT	RECEIVE_FRMR_RSP(F=X)	STOP_ALL_TIMERS; RESET_INDICATION(LOCAL); REPORT_STATUS(FRMR_RECEIVED); S_FLAG:=0;	RESET_WAIT
MOD-4	,,	NORMAL	RECEIVE_ZZZ_CMD(P=X) WITH_INVALID_N(R)	IF_P=1_SEND_RR_RSP(F=1); SEND_RSET_CMD; START_ACK_TIMER; RETRY_COUNT:=0;	RSET
MOD-5	,,	NORMAL	RECEIVE_ZZZ_RSP(F=X) WITH_INVALID_N(R)	UPDATE_P_FLAG; SEND_RSET_CMD; START_ACK_TIMER; RETRY_COUNT:=0;	RSET
MOD-6	,,	NORMAL	RECEIVE_I_CMD(P=X) WITH_INVALID_N(S)	SEND_FRMR_RSP(F=P); REPORT_STATUS(FRMR_SENT); START_ACK_TIMER; STOP_OTHER_TIMERS; RETRY_COUNT:=0;	RSET_EXPECTED
MOD-7	,,	NORMAL	RECEIVE_I_RSP(F=X) WITH_INVALID_N(S)	SEND_FRMR_RSP(F=0); REPORT_STATUS(FRMR_SENT); START_ACK_TIMER; STOP_OTHER_TIMERS; RETRY_COUNT:=0;	RSET_EXPECTED
MOD-8	,,	BUSY or REJECT or AWAIT or AWAIT_BUSY or AWAIT_REJECT	RECEIVE_ZZZ_CMD(P=X) WITH_INVALID_N(R) or RECEIVE_I_CMD(P=X) WITH_INVALID_N(S)	SEND_FRMR_RSP(F=P); REPORT_STATUS(FRMR_SENT); START_ACK_TIMER; STOP_OTHER_TIMERS; RETRY_COUNT:=0;	ERROR

MOD-9	,,	BUSY or REJECT or AWAIT or AWAIT_BUSY or AWAIT_REJECT	RECEIVE_ZZZ_RSP(F=X) WITH_INVALID_N(R) or RECEIVE_I_RSP(F=X) WITH_INVALID_N(S)	SEND_FRMR_RSP(F=0); REPORT_STATUS(FRMR_SENT); START_ACK_TIMER; STOP_OTHER_TIMERS; RETRY_COUNT:=0;	ERROR
MOD-10	P.94	NORMAL	(RECEIVE_I_CMD(P=0)_ WITH_UNEXPECTED_N(S) and P_FLAG=0 or RECEIVE_I_RSP (F=0)_ WITH_UNEXPECTED_N(S) and P_FLAG=0 or RECEIVE_I_RSP(F=1)_ WITH_UNEXPECTED_N(S) and P_FLAG=1) and IS_SREJ_USED=TRUE	PROCESS_AND_BUFFER_DATA; UPDATE_N(R)_RECEIVED; SEND_SREJ_XXX(X=0); START_REJ_TIMER; UPDATE_P_FLAG; IF_F=1_CLEAR_REMOTE_BUSY; --- PROCESS_ AND_BUFFER_DATA; SEND_SREJ_CMD(P=1); START_P_TIMER; START_REJ_TIMER; IF_F=1_CLEAR_REMOTE_BUSY;	REJECT
MOD-11	,,	NORMAL	(RECEIVE_I_CMD(P=0)_ WITH_UNEXPECTED_N(S) and P_FLAG=1 or RECEIVE_I_RSP (F=0)_ WITH_UNEXPECTED_N(S) and P_FLAG=1) and IS_SREJ_USED=TRUE	PROCESS_AND_BUFFER_DATA; UPDATE_N(R)_RECEIVED; SEND_SREJ_XXX(X=0); START_REJ_TIMER; UPDATE_P_FLAG;	REJECT
MOD-12	,,	NORMAL	RECEIVE_I_CMD(P=1)_ WITH_UNEXPECTED_N(S) and IS_SREJ_USED=TRUE	PROCESS_AND_BUFFER_DATA; UPDATE_N(R)_RECEIVED; SEND_SREJ_RSP(F=1); START_REJ_TIMER;	REJECT
MOD-13	P.95	NORMAL	RECEIVE_SREJ_CMD(P=0) and P_FLAG=0 or RECEIVE_SREJ_RSP(F=X) and P_FLAG=F	UPDATE_P_FLAG; RESEND_1_I_XXX(X=0); CLEAR_REMOTE_BUSY; --- RESEND_1_I_CMD(P=1); START_P_TIMER; CLEAR_REMOTE_BUSY;	NORMAL
MOD-14	,,	NORMAL	RECEIVE_SREJ_CMD(P=0) and P_FLAG=1 or RECEIVE_SREJ_RSP(F=0) and P_FLAG=1	RESEND_1_I_XXX(X=0); CLEAR_REMOTE_BUSY;	NORMAL

MOD-15	,,	NORMAL	RECEIVE_SREJ_CMD(P=1)	RESEND_1_I_RSP(F=1); CLEAR_REMOTE_BUSY;	NORMAL
MOD-16	P.96	BUSY	LOCAL_BUSY_CLEARED and DATA_FLAG=1 and P_FLAG=0 and IS_SREJ_USED=TRUE	SEND_SREJ_CMD(P=1); START_REJ_TIMER; START_P_TIMER; -- SEND_SREJ_XXX(X=0); START_REJ_TIMER;	REJECT
MOD-17	,,	BUSY	LOCAL_BUSY_CLEARED and DATA_FLAG=1 and P_FLAG=1 and IS_SREJ_USED=TRUE	SEND_SREJ_XXX(X=0); START_REJ_TIMER;	REJECT
MOD-18	P.99	BUSY	RECEIVE_SREJ_CMD(P=0) and P_FLAG=0 or RECEIVE_SREJ_RSP(F=X) and P_FLAG=F	UPDATE_P_FLAG; RESEND_1_I_XXX(X=0); CLEAR_REMOTE_BUSY; -- RESEND_1_I_CMD(P=1); START_P_TIMER; CLEAR_REMOTE_BUSY;	BUSY
MOD-19	,,	BUSY	RECEIVE_SREJ_CMD(P=0) and P_FLAG=1 or RECEIVE_SREJ_RSP(F=0) and P_FLAG=1	RESEND_1_I_XXX(X=0); CLEAR_REMOTE_BUSY;	BUSY
MOD-20	,,	BUSY	RECEIVE_SREJ_CMD(P=1)	SEND_RNR_RSP(F=1); RESEND_1_I_XXX(X=0); CLEAR_REMOTE_BUSY;	BUSY
MOD-21	P.100	REJECT	(RECEIVE_I_CMD(P=0)_ WITH_UNEXPECTED_N(S) or RECEIVE_I_RSP (F=0)_ WITH_UNEXPECTED_N(S) or RECEIVE_I_RSP(F=1)_ WITH_UNEXPECTED_N(S) and P_FLAG=1) and IS_SREJ_USED=TRUE	PROCESS_AND_BUFFER_DATA; UPDATE_N(R)_RECEIVED; SEND_SREJ_XXX(X=0); START_REJ_TIMER; UPDATE_P_FLAG; IF_F=1_CLEAR_REMOTE_BUSY;	REJECT
MOD-22	P.101	REJECT	RECEIVE_I_CMD(P=1)_ WITH_UNEXPECTED_N(S) and IS_SREJ_USED=TRUE	PROCESS_AND_BUFFER_DATA; UPDATE_N(R)_RECEIVED; SEND_SREJ_RSP(F=1); START_REJ_TIMER;	REJECT

MOD-23	,,	REJECT	(RECEIVE_I_RSP(F=X)_
			and P_FLAG=F
			or
			RECEIVE_I_CMD(P=0)_
			and P_FLAG=0
			) and IS_SREJ_USED=TRUE
				V(R):=V(R)+1;
				DATA_INDICATION;
				SEND_ACKNOWLEDGE_CMD(P=1);
				START_P_TIMER;
				UPDATE_N(R)_RECEIVED;
				PROCESS_BUFFERED_DATA;
				IF_F=1_CLEAR_REMOTE_BUSY;
				IF_NO_MORE_BUFFERED_DATA_THEN_
				STOP_REJ_TIMER;
				--- 	
				V(R):=V(R)+1;
				DATA_INDICATION;
				UPDATE_P_FLAG;
				SEND_ACKNOWLEDGE_XXX(X=0);
				UPDATE_N(R)_RECEIVED;
				PROCESS_BUFFERED_DATA;
				IF_F=1_CLEAR_REMOTE_BUSY;
				IF_NO_MORE_BUFFERED_DATA_THEN_
				STOP_REJ_TIMER;
					If there is no more buffered data then
					NORMAL
					else
					REJECT

MOD-24	,,	REJECT	(RECEIVE_I_RSP(F=0)_
			and P_FLAG=1
			or
			RECEIVE_I_CMD(P=0)_
			and P_FLAG=1
			) and IS_SREJ_USED=TRUE
				V(R):=V(R)+1;
				DATA_INDICATION;
				SEND_ACKNOWLEDGE_XXX(X=0);
				UPDATE_N(R)_RECEIVED;
				PROCESS_BUFFERED_DATA;
				IF_NO_MORE_BUFFERED_DATA_THEN_
				STOP_REJ_TIMER;
					If there is no more buffered data then
					NORMAL
					else
					REJECT

MOD-25	,,	REJECT	RECEIVE_I_CMD(P=1)_
			and IS_SREJ_USED=TRUE
				V(R):=V(R)+1;
				DATA_INDICATION;
				SEND_ACKNOWLEDGE_RSP(F=1);
				UPDATE_N(R)_RECEIVED;
				PROCESS_BUFFERED_DATA;
				IF_NO_MORE_BUFFERED_DATA_THEN_
				STOP_REJ_TIMER;
					If there is no more buffered data then
					NORMAL
					else
					REJECT

MOD-26	P.102	REJECT	RECEIVE_SREJ_CMD(P=0) and P_FLAG=0 or RECEIVE_SREJ_RSP(F=X) and P_FLAG=F	UPDATE_P_FLAG; RESEND_1_I_XXX(X=0); CLEAR_REMOTE_BUSY; --- UPDATE_P_FLAG; RESEND_1_I_CMD(P=1); START_P_TIMER; CLEAR_REMOTE_BUSY;	REJECT

MOD-27	,,	REJECT	RECEIVE_SREJ_CMD(P=0) and P_FLAG=1 or RECEIVE_SREJ_RSP(F=0) and P_FLAG=1	RESEND_1_I_XXX(X=0); CLEAR_REMOTE_BUSY;	REJECT
MOD-28	,,	REJECT	RECEIVE_SREJ_CMD(P=1)	RESEND_1_I_RSP(F=1); CLEAR_REMOTE_BUSY;	REJECT
MOD-29	,,	REJECT	REJ_TIMER_EXPIRED and P_FLAG=0 and RETRY_COUNT<N2 and IS_SREJ_USED=TRUE	SEND_SREJ_CMD(P=1); START_P_TIMER; START_REJ_TIMER; RETRY_COUNT:=RETRY_COUNT+1; --	REJECT ------------------------ NORMAL
MOD-30	P.103	AWAIT	RECEIVE_I_RSP (F=1)_ WITH_UNEXPECTED_N(S) and IS_SREJ_USED=TRUE	PROCESS_AND_BUFFER_DATA; UPDATE_N(R)_RECEIVED; SEND_SREJ_XXX(X=0); START_REJ_TIMER; STOP_P_TIMER; RESEND_1_I_XXX(X=0); CLEAR_REMOTE_BUSY; -- PROCESS_AND_BUFFER_DATA; UPDATE_N(R)_RECEIVED; SEND_SREJ_CMD(P=1); START_REJ_TIMER; START_P_TIMER; RESEND_1_I_XXX(X=0); CLEAR_REMOTE_BUSY;	REJECT
MOD-31	,,	AWAIT	(RECEIVE_I_CMD(P=0)_ WITH_UNEXPECTED_N(S) or RECEIVE_I_RSP (F=0)_ WITH_UNEXPECTED_N(S)) and IS_SREJ_USED=TRUE	PROCESS_AND_BUFFER_DATA; UPDATE_N(R)_RECEIVED; SEND_SREJ_XXX(X=0); START_REJ_TIMER;	AWAIT_REJECT
MOD-32	,,	AWAIT	RECEIVE_I_CMD(P=1)_ WITH_UNEXPECTED_N(S) and IS_SREJ_USED=TRUE	PROCESS_AND_BUFFER_DATA; UPDATE_N(R)_RECEIVED; SEND_SREJ_RSP(F=1); START_REJ_TIMER;	AWAIT_REJECT

MOD-33A	P.104	AWAIT	RECEIVE_SREJ_RSP(F=1)	STOP_P_TIMER; RESEND_1_I_XXX(X=0); CLEAR_REMOTE_BUSY; -- RESEND_1_I_CMD(P=1); START_P_TIMER; CLEAR_REMOTE_BUSY;	NORMAL
MOD-33B	,,	AWAIT	RECEIVE_SREJ_CMD(P=0) or RECEIVE_SREJ_RSP(F=0)	RESEND_1_I_XXX(X=0); CLEAR_REMOTE_BUSY;	AWAIT
MOD-33C	,,	AWAIT	RECEIVE_SREJ_CMD(P=1)	RESEND_1_I_XXX(X=0); SEND_RR_RSP(F=1); CLEAR_REMOTE_BUSY;	AWAIT
MOD-34	,,	AWAIT_BUSY	LOCAL_BUSY_CLEARED and DATA_FLAG=1 and IS_SREJ_USED=TRUE	SEND_SREJ_XXX(X=0); START_REJ_TIMER;	AWAIT_REJECT
MOD-35	P.106	AWAIT_BUSY	RECEIVE_SREJ_RSP(F=1)	STOP_P_TIMER; RESEND_1_I_XXX(X=0); CLEAR_REMOTE_BUSY; -- RESEND_1_I_CMD(P=1); START_P_TIMER; CLEAR_REMOTE_BUSY;	AWAIT_BUSY
MOD-36	,,	AWAIT_BUSY	RECEIVE_SREJ_CMD(P=0) or RECEIVE_SREJ_RSP(F=0)	CLEAR_REMOTE_BUSY;	AWAIT_BUSY
MOD-37	,,	AWAIT_BUSY	RECEIVE_SREJ_CMD(P=1)	SEND_RNR_RSP(F=1); CLEAR_REMOTE_BUSY;	AWAIT_BUSY
MOD-38	P.107	AWAIT_REJECT	(RECEIVE_I_CMD(P=0)_ WITH_UNEXPECTED_N(S) or RECEIVE_I_RSP (F=0)_ WITH_UNEXPECTED_N(S)) and IS_SREJ_USED=TRUE	PROCESS_AND_BUFFER_DATA; UPDATE_N(R)_RECEIVED; SEND_SREJ_XXX(X=0); START_REJ_TIMER;	AWAIT_REJECT
MOD-39	,,	AWAIT_REJECT	RECEIVE_I_CMD(P=1)_ WITH_UNEXPECTED_N(S) and IS_SREJ_USED=TRUE	PROCESS_AND_BUFFER_DATA; UPDATE_N(R)_RECEIVED; SEND_SREJ_RSP(F=1); START_REJ_TIMER;	AWAIT_REJECT

MOD-40	,,	AWAIT_REJECT	RECEIVE_I_RSP(F=1)
			and IS_SREJ_USED=TRUE
				V(R):=V(R)+1;
				DATA_INDICATION;
				UPDATE_N(R)_RECEIVED;
				RESEND_I_CMD(P=1)_OR_SEND_RR;
				START_P_TIMER;
				PROCESS_BUFFERED_DATA;
				IF_NO_MORE_BUFFERED_DATA_THEN_
				STOP_REJ_TIMER;
				CLEAR_REMOTE_BUSY;
				--- 	
				V(R):=V(R)+1;
				DATA_INDICATION;
				UPDATE_N(R)_RECEIVED;
				STOP_P_TIMER;
				RESEND_I_XXX(X=0)_OR_SEND_RR;
				PROCESS_BUFFERED_DATA;
				IF_NO_MORE_BUFFERED_DATA_THEN_
				STOP_REJ_TIMER;
				CLEAR_REMOTE_BUSY;
					If there is no more buffered data then
					NORMAL
					else
					REJECT

MOD-41	,,	AWAIT_REJECT	(RECEIVE_I_RSP(F=0)_
			or
			RECEIVE_I_CMD(P=0)_
			) and IS_SREJ_USED=TRUE
				V(R):=V(R)+1;
				DATA_INDICATION;
				UPDATE_N(R)_RECEIVED;
				SEND_RR_XXX(X=0);
				PROCESS_BUFFERED_DATA;
				IF_NO_MORE_BUFFERED_DATA_THEN_
				STOP_REJ_TIMER;
					If there is no more buffered data then
					AWAIT
					else
					AWAIT_REJECT

MOD-42	,,	AWAIT_REJECT	RECEIVE_I_CMD(P=1)_
			and IS_SREJ_USED=TRUE
				V(R):=V(R)+1;
				DATA_INDICATION;
				UPDATE_N(R)_RECEIVED;
				SEND_RR_RSP(F=1);
				PROCESS_BUFFERED_DATA;
				IF_NO_MORE_BUFFERED_DATA_THEN_
				STOP_REJ_TIMER;
					If there is no more buffered data then
					AWAIT
					else
					AWAIT_REJECT

MOD-43	P.108	AWAIT_REJECT	RECEIVE_SREJ_RSP(F=1)	STOP_P_TIMER; RESEND_1_I_XXX(X=0); CLEAR_REMOTE_BUSY; --- RESEND_1_I_CMD(P=1); START_P_TIMER; CLEAR_REMOTE_BUSY;	REJECT

MOD-44	,,	AWAIT_REJECT	RECEIVE_SREJ_CMD(P=0) or RECEIVE_SREJ_RSP(F=0)	CLEAR_REMOTE_BUSY;	AWAIT_REJECT
MOD-45	,,	AWAIT_REJECT	RECEIVE_SREJ_CMD(P=1)	SEND_RR_RSP(F=1); RESEND_1_I_XXX(X=0); CLEAR_REMOTE_BUSY;	AWAIT_REJECT
MOD-46	,,	AWAIT_REJECT	RECEIVE_I_RSP(F=1)_ WITH_UNEXPECTED_N(S) and IS_SREJ_USED=TRUE	PROCESS_AND_BUFFER_DATA; UPDATE_N(R)_RECEIVED; SEND_SREJ_XXX(X=0); START_REJ_TIMER; RESEND_1_I_XXX(X=0); CLEAR_REMOTE_BUSY; STOP_P_TIMER; -- PROCESS_AND_BUFFER_DATA; UPDATE_N(R)_RECEIVED; SEND_SREJ_XXX(X=0); START_REJ_TIMER; RESEND_1_I_CMD(P=1); START_P_TIMER; CLEAR_REMOTE_BUSY;	REJECT
MOD-47	,,	AWAIT_REJECT	P_TIMER_EXPIRED and RETRY_COUNT<N2 and IS_SREJ_USED=TRUE	SEND_SREJ_CMD(P=1); START_REJ_TIMER; START_P_TIMER; RETRY_COUNT:=RETRY_COUNT+1;	AWAIT_REJECT