START BIRTHDAY SYN FLOOD
Start the Birthday Paradox SYN flood
SEND SYN_FLOODED

CHECK PORT PREDICTION
Receive PORT_PRED
Log own port allocation method
Send WAITING_FOR_BUDDY_ALLOC

START
Send a HELLO

If peer’s port allocation is random

GET BUDDY’S PORT
Receive BUDDY_PORT
Go to next state

If both peers’ external ports are known

GET BUDDY PORT ALLOCATION
Receive BUDDY_ALLOC
Log buddy’s port allocation method
Send WAITING_FOR_BUDDY_PORT

START DIRECT CONNECTION
Start the connection
Send BUDDY_SYN_SEQ

FORGE SYN/ACK
Receive PEER_SYN_SEQ
Forge a SYN/ACK to buddy
Wait for success
Send GOODBYE

WAIT FOR BIRTHDAY SYN FLOOD
Wait for the buddy to do the Birthday Paradox SYN flood
Send WAITING_TO_SYN_ACK_FLOOD

START SYN ACK FLOOD
Receive SYN_ACK_SEQ_NUM
Do the SYN/ACK Flood
Send SYN_ACK_FLOOD_DONE

WAIT FOR SUCCESSFUL SYN/ACK
Receive BUDDY_SYN_ACK_FLOODED
Find the SYN/ACK that made it through
Send BDAY_SUCCESS_PORT

CONNECT AGAIN
Receive CONNECT_AGAIN
Open a second connection
Send CONNECTED_AGAIN

At any point during the connection if there is an error then it is implied that the peer closes the connection and backtracks through the states.

The loops in the state diagram can only be taken once.