

```

Void send_frame (void)
{
    s.info = buffer;
    s.seq = next_frame_to_send;
    to_physical_layer(&s);
}

#define MAX_SEQ 1
typedef enum {frame_arrival, cksum_err, timeout} event_type;
include "protocol.h"

void sender_NAK (void)
{
    seqnr next_frame_to_send;
    frame s,r;
    packet buffer
    event_type event;
    next_frame_to_send = 0;
    from_network_layer(&buffer);
    while (true)
    {
        send frame ();
        start_timer (s.seq);
        wait_for_event (&event);
        if (event == frame_arrival)
        { from_physical_layer(&r);
            If (r.kind == ACK and r.ack == next_frame_to_send)
            { stop_timer(s.ack);
                from_network_layer(&buffer);
                inc(next_frame_to_send) }
        }
    }
} /* Note – cksum_err, timeout and ACK-mismatch and NAK all come here!
}

```

```

void receiver_NAK (void)
{
    seq_nr frame_expected;
    frame r, s;
    event_type event;

    frame_expected = 0;

    while (true)
    {   wait_for_event (&event);
        if (event == frame_arrival)
        {   from_physical_layer (&r);
            if (r.seq == frame_expected)
            {   to_network_layer(&r.info)
                inc (frame_expected);
                frame_expected = frame_expected MOD MAX_SEQ;
            }
            s.kind = ACK
            s.ack = 1 - frame_expected;
            to_physical_layer (&s);
        }
        if (event == cksum_err) /* cksum_err comes here */
        {
            s.kind = NAK
            s.ack = ?
            to_physical_layer (&s);
        }
    }
}

```