Peer-to-peer dialogue.
The router will pass this
datagram onto another
router or to the destination
system.

10. Routing the packet. IP examines
the IP header and makes a routing
decision. It determines which outgoing
link is to be used and then passes
the datagram back to the link layer
for transmission on that link.

IP

I	T	Data

LLC

11. Forming LLC PDU. An LLC
header is added to each IP datagram
to form an LLC PDU. The header
contains sequence number and
address information.

9. Processing the frame. The
frame relay layer removes the
header and trailer and processes
them. The frame check sequence
is used for error detection. The
connection number
identifies the source.

L	I	T	Data

12. Framing A MAC header and
trailer is added to each LLC PDU,
forming a MAC frame. The header
contains address information and the
trailer contains a frame check sequence.

Frame Relay

MAC

Physical

Physical

F	I	T	Data	F

M	L	I	T	Data	M

8. Arriving at router. The
incoming signal is received
over the transmission medium
and interpreted as a frame of bits.

13. Transmission. Each
frame is transmitted over
the medium as a sequence
of bits.

Figure 2.10   Operation of TCP/IP: Action at Router