```
Notation:

  FO    -  Fragment Offset
  IHL   -  Internet Header Length
  DF    -  Don't Fragment flag
  MF    -  More Fragments flag
  TL    -  Total Length
  OFO   -  Old Fragment Offset
  OIHL  -  Old Internet Header Length
  OMF   -  Old More Fragments flag
  OTL   -  Old Total Length
  NFB   -  Number of Fragment Blocks
  MTU   -  Maximum Transmission Unit

Procedure:

  IF TL =< MTU THEN Submit this datagram to the next step
       in datagram processing ELSE IF DF = 1 THEN discard the
  datagram ELSE
  To produce the first fragment:
  (1)  Copy the original internet header;
  (2)  OIHL <- IHL; OTL <- TL; OFO <- FO; OMF <- MF;
  (3)  NFB <- (MTU-IHL*4)/8;
  (4)  Attach the first NFB*8 data octets;
  (5)  Correct the header:
       MF <- 1;  TL <- (IHL*4)+(NFB*8);
       Recompute Checksum;
  (6)  Submit this fragment to the next step in
       datagram processing;
  To produce the second fragment:
  (7)  Selectively copy the internet header (some options
       are not copied, see option definitions);
  (8)  Append the remaining data;
  (9)  Correct the header:
       IHL <- (((OIHL*4)-(length of options not copied))+3)/4;
       TL <- OTL - NFB*8 - (OIHL-IHL)*4);
       FO <- OFO + NFB;  MF <- OMF;  Recompute Checksum;
  (10) Submit this fragment to the fragmentation test; DONE.
```