New TS packet

Number full > 0?

- Decrease number full
- Reduce buffer_full_len
- number full > 0?
- Copy the first packet of buffer full to data_full
- Skip adaptation field

Payload_unit_start_indicator

Continuing packet

New packet

- Call append_data with data_len = PACKET_SIZE - buf pointer
  ie the data after the TS header and start_flag = START_TS

- Call append_data with data_len = pointer field
  ie the data before the pointer field and start_flag = NO_START

- Increment the buffer pointer with pointer field

Packet_full number > 0?

- Return 0
- Return 1

There are two packets
Packet_full : contains the good packet or nothing
Packet_partial : contains the unfinished packet and one buffer which contains all the full packets

The packet contains
- The buffer
- It's len
- It's status

The global structure contains the PID and the CC
Concernin the full buffer the structure contains the size of the full packets which are inside the total size and the total number

There is three possible status
PACKET_EMPTY
PACKET_STARTED (packet already contains data)
PACKET_VALID (packet is full and CRC32 is valid)