

4.2.12 Multiplexing of different transport channels onto one CCTrCH, and mapping of one CCTrCH onto physical channels

Different transport channels can be encoded and multiplexed together into one Coded Composite Transport Channel (CCTrCH). The following rules shall apply to the different transport channels which are part of the same CCTrCH:

- 1) Transport channels multiplexed into one CCTrCh should have co-ordinated timings in the sense that transport blocks arriving from higher layers on different transport channels of potentially different transmission time intervals shall have aligned transmission time instants as shown in figure 4-6.
- 2) Different CCTrCHs cannot be mapped onto the same physical channel.
- 3) One CCTrCH shall be mapped onto one or several physical channels.

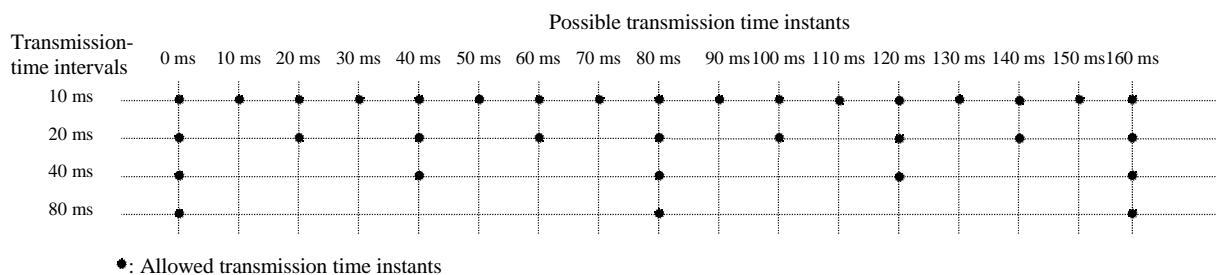


Figure 4-6: Possible transmission time instants regarding CCTrCH

- 4) Dedicated Transport channels and common transport channels cannot be multiplexed into the same CCTrCH.
- 5) For the common transport channels, only the FACH and PCH may belong to the same CCTrCH.
- 6) Each CCTrCH carrying a BCH shall carry only one BCH and shall not carry any other Transport Channel.
- 7) Each CCTrCH carrying a RACH shall carry only one RACH and shall not carry any other Transport Channel.

Hence, there are two types of CCTrCH

CCTrCH of dedicated type, corresponding to the result of coding and multiplexing of one or several DCH.

CCTrCH of common type, corresponding to the result of the coding and multiplexing of a common channel, i.e. RACH and USCH in the uplink and DSCH, BCH, FACH or PCH in the downlink, respectively.

Transmission of TFCI is possible for CCTrCH containing Transport Channels of:

- Dedicated type
- USCH type
- DSCH type
- FACH and/or PCH type.

4.2.12.1 Allowed CCTrCH combinations for one UE

4.2.12.1.1 Allowed CCTrCH combinations on the uplink

The following CCTrCH combinations for one UE are allowed, also simultaneously:

- 1) several CCTrCH of dedicated type
- 2) several CCTrCH of common type

4.2.12.1.2 Allowed CCH combinations on the downlink

The following CCH combinations for one UE are allowed, also simultaneously:

- 3) several CCH of dedicated type
- 4) several CCH of common type