Some Modifications on the Procedure of New Sub-frame Creation

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Purpose:
Modify the procedure of new sub-frame creation.

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Outline

• Which BSs does the new BS send request to?
  – Send request to some neighbor BS, not all member BSs in community

• How to select master sub-frame
  – New BS is responsible for the sub-frame optimization

• Cancellation of sub-frame creation
  – Sub-frame creation procedure may be suspended

• Consist the procedure in 15.4.2.5 with and the message defined in 15.5.2.25/26.
Which BSs does the new BS send request to?

- Current Draft

• Current: Request all member BSs in the community
  – The signaling overhead is increase and the resource efficiency may decrease.

system X selects sub-frame M as master, and the interference sub-frame number is N

interference relationship
Which BSs does the new BS send request to?
- Current Draft

- If the sub-frame number of interference of neighbor is not same, it need not to request all neighbor BSs increase the sub-frame number of their own.
Proposed

- Propose: Request only neighbor BSs with sub-frame number is increased.
All Neighbors with Same Subframe Number

system X selects sub-frame m, and the sub-frame number is n.
Neighbor BSs with Different Subframe Number

system E enters unchanged
How to select master sub-frame

• Current: No description.

• Propose: New BS is responsible for the sub-frame optimization
  – the community is interference free before IBS enters
  – All information of Neighbor is accumulated by the new BS
  – the maximum sub-frame number is limited to 3
    • It looks like easy to find the optimization solution
Cancellation of sub-frame creation

• The new BS may cancel the creation of sub-frame
  – some neighbor BSs reject its request
  – Finding more suitable channel

• Propose to add this function
  – Corresponding text is added
  – Two CXP messages are added
Consist the procedure with the message

• Information elements described in 15.4.2.5 are not consistent with the message defined in section 15.5.2.25 and 15.5.2.26.

• Propose: Consist the procedure with the message