

Resource allocation for Hot zone operation

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Venue:

TGm SDD: Femtocells

Base Contribution:

Purpose:

Discuss and adopt the proposed text for SDD

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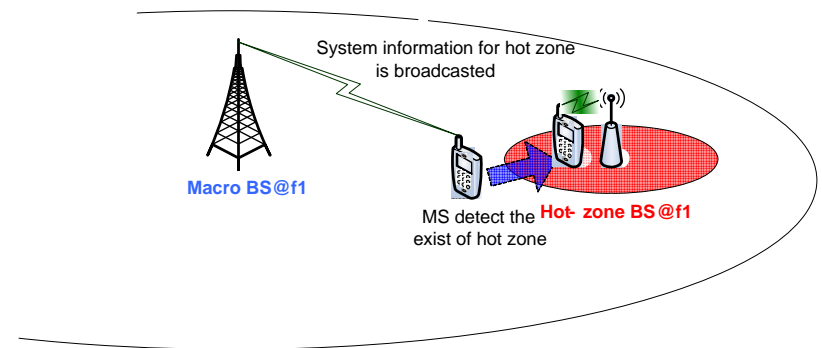
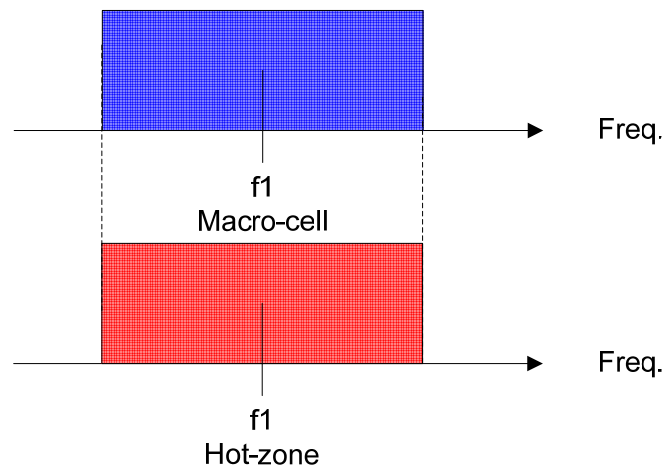
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Hot Zone Operation Model

- Hot zone is a femtocell BS open to all 16m subscribers
- Hot Zone Operation Model
 - Hot zones are deployed to increase cell capacity
 - Some of them may be deployed outside
 - Hot zones in macro coverage may operate in the same FA of macro BS
 - It may cause interference



Problem definition & requirements

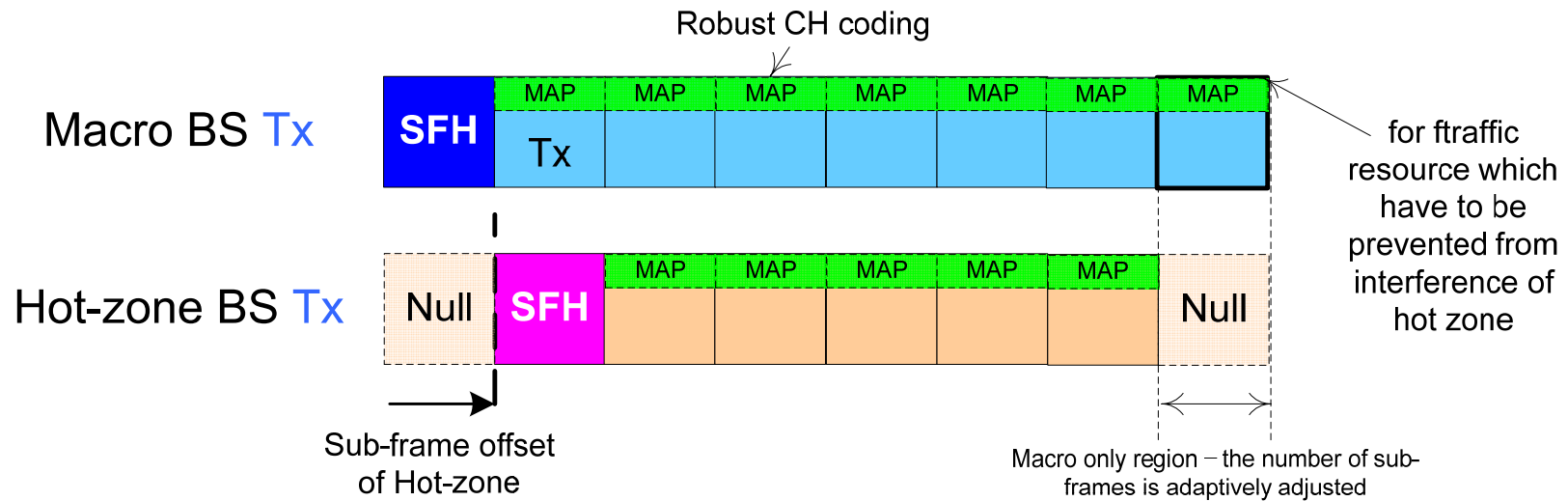
- Problem definition
 - Hot zone coverage is hole for macro BS coverage
 - Handover can be a good solution for MS to keep the connection
 - However, HO may not always guarantee the connection, considering
 - Small size of hot zone
 - Configuration of deployed hot zone
 - High speed mobile
 - How to keep connection for a MS which can't perform HO to hot zone
- Requirements to support hot zone
 - Hot zone deployment shall not prevent 16m system from guaranteeing connection to system

Outline of our proposal

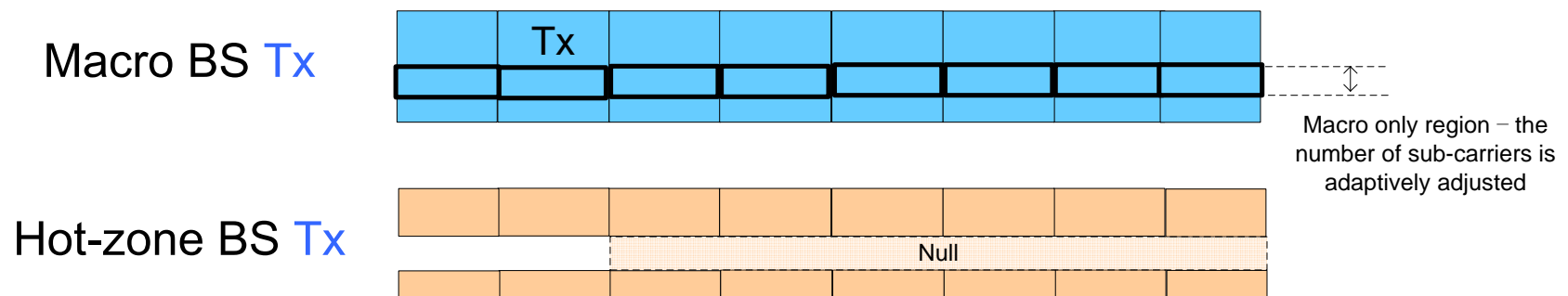
- Two solutions
 - MS approaching Hot zone makes HO to hot zone BS
 - MS passing Hot zone keeps connection to macro BS
- Two schemes are used in hybrid manner depending conditions
 - MS detects Hot zone
 - MS decide to make HO to Hot zone or keep connection to BS
 - HO to hot zone
 - Normal HO procedure
 - Keeping connection to BS
 - Hot zone reserves resources and not schedule them
 - MS signals to BS to allocate the reserved resources
 - BS allocate the MS the reserved resources

Example of reserved resource

Downlink



Uplink



Proposed text

[Insert the following text]

17.x Hotzone Support

A hot zone BS can reserve resource in cooperation with macro BS where the hot zone is installed. The reserved resource can be used to keep the connection between a MS in the hot zone coverage and the macro BS. MS can report macro BS to allocate the reserved resource in hot zone.