#### Ranging Process for IEEE 802.16j

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Venue:

#### Base Document:

None

#### Purpose:

. Propose ranging process for IEEE802.16j

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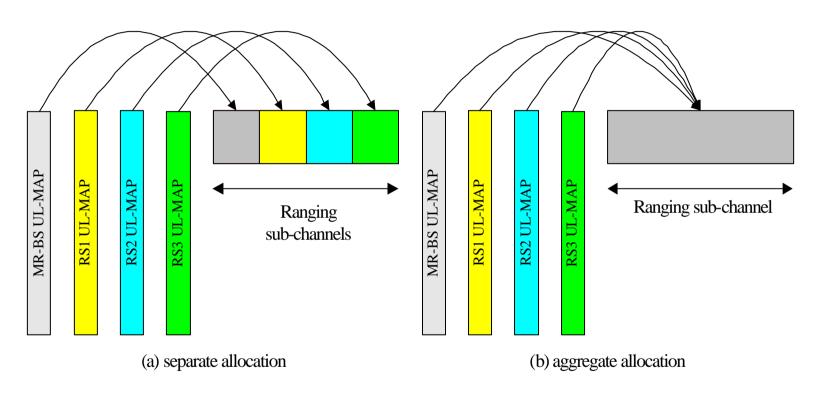
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### **Outline**

- Two methods of ranging sub-channel allocation
  - Separate allocation
    - Ranging for MS
    - Ranging for RS
    - RS's support for MS and RS Ranging
  - Aggregate allocation
    - Ranging for MS
    - Ranging for RS
    - RS's support for MS and RS Ranging
- Proposed text

Both shall relay ranging info to MR-BS

# Two methods of ranging sub-channel allocation



Conditional aggregated report to MR-BS is required

Aggregated report to MR-BS is mandatory

## Ranging for MS and RS

- MS Ranging
  - No change regardless target to be BS or RS
- RS Ranging
  - Perform initial ranging same as MS initial ranging
  - Perform periodic ranging by dedicated BW in contention-free manner.

# Proposed text for RLY\_RNG-REP

Management Message Type=74	8 bits	
BSID	48 bits	BSID of access RS
Ranging type bitmap	3 bits	Bit [0]: if set to 1, for receiving ranging code field Bit [1]: if set to 1, for receiving RNG-REQ with MAC address field Bit [2]: if set to 1, for receiving RNG-REQ with Basic CID field
Padding	5 bits	Shall be set to zero

### References

- [1] IEEE 802.16j-06/016r1, "Proposed Technical Requirements Guideline for IEEE 802.16 Relay TG".
- [2] IEEE 802.16e-2005 standard
- [3] IEEE C802.16j-06/172 "Ranging Process for IEEE 802.16j"