# Comments on terminology

**IEEE 802.16 Presentation Submission Template (Rev. 8.3)**

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IEEE 802.16j Session #45, Mon Tremblant, Quebec, Canada

Base Document:

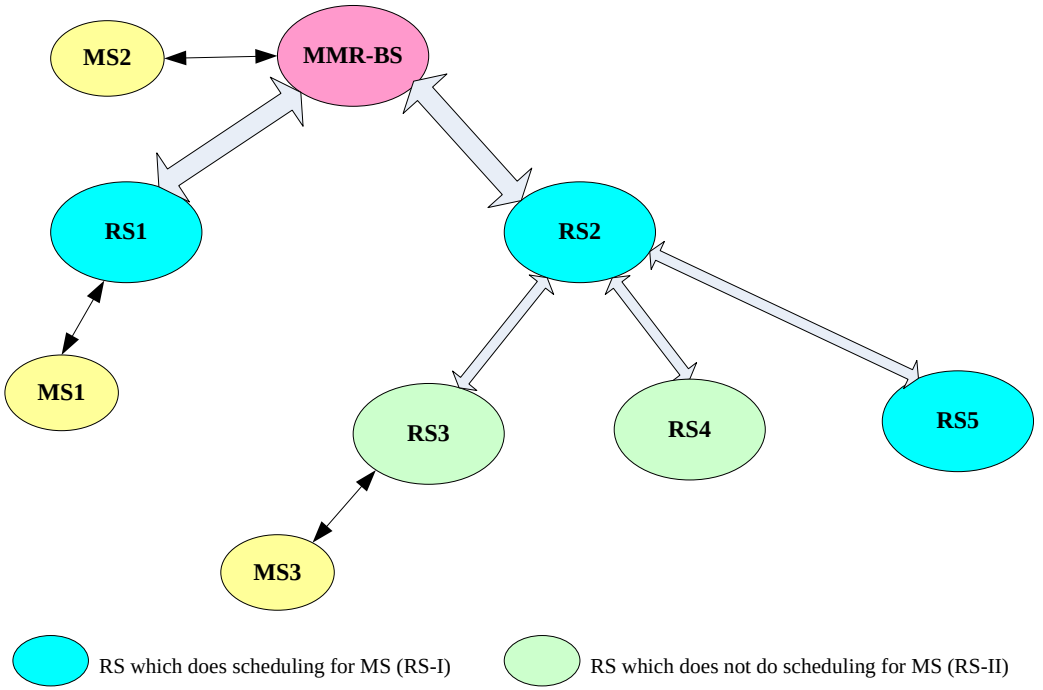
C80216j-06/014, “Harmonized definitions and terminology for Mobile Multihop Relay”

Purpose:

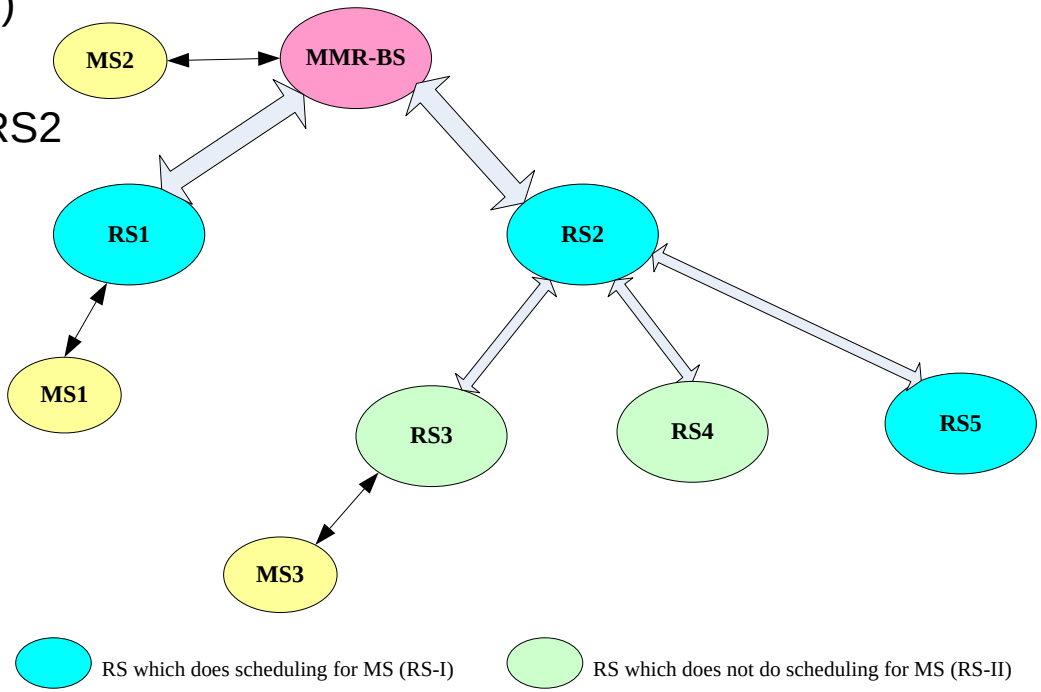
To further clarify some terms defined in the base document.

# Topology

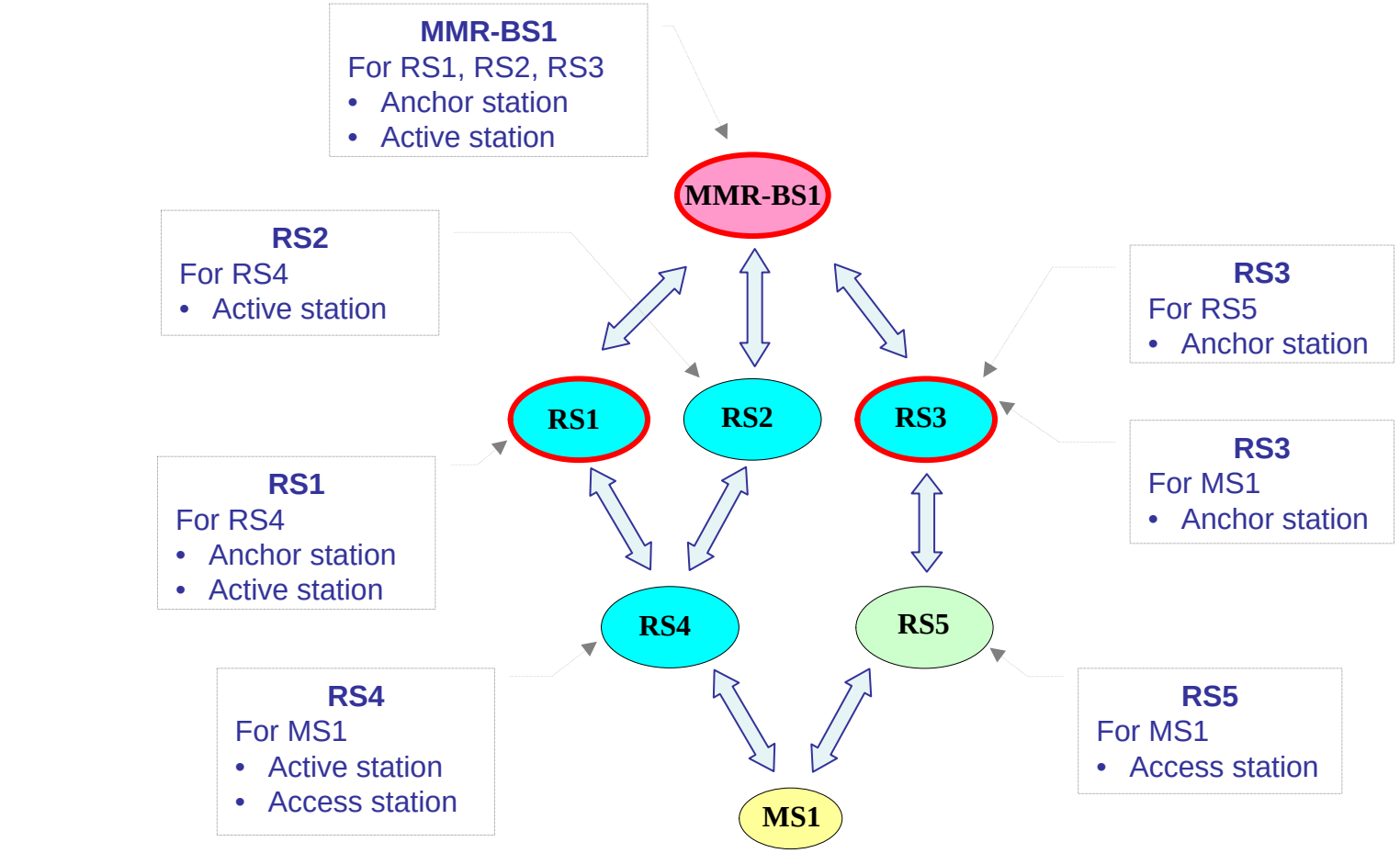
- Two types of RS are considered
  - RS-I:  Schedules resource for MSs controled by it
  - RS-II: Not schedule resource for MSs served by it



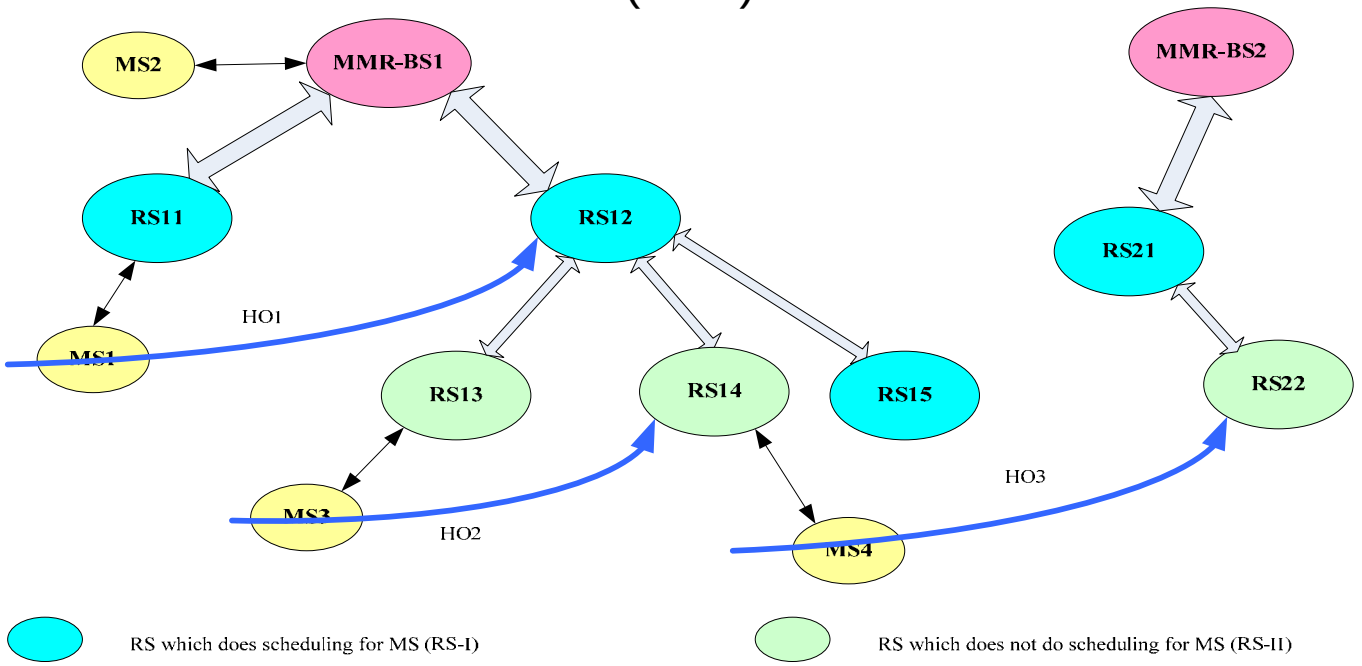
- MMR-BS:
  - Serving BS of of MSi (i = 1,2,3)
  - Access station of MS2
  - Anchor station of MS2, RS1, RS2
- RS1:
  - Access station of MS1
  - Anchor station of MS1
- RS2:
  - Anchor station of MS3, RS3-5
- RS3:
  - Access station of MS3

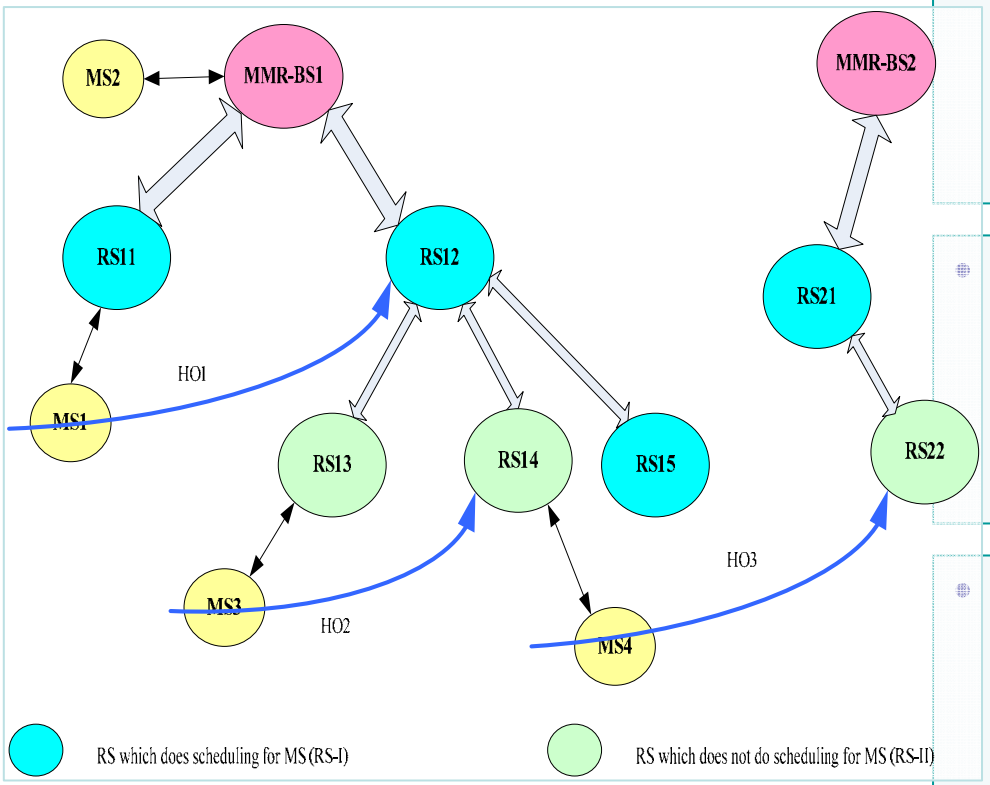



Access station is applicable only for the access link
Anchor station is applicable in both access link and relay link


MMR-BS1
For RS1, RS2, RS3
• Anchor station
• Active station
MMR-BS1
RS2
For RS4
• Active station
RS3
For RS5
• Anchor station
RS1
RS2
RS3
RS1
For RS4
• Anchor station
• Active station
RS3
For MS1
• Anchor station
RS4
RS5
RS4
For MS1
• Active station
• Access station
RS5
For MS1
• Access station
MS1
RS which does scheduling for MS
RS which does not do scheduling for MS

- Intra-MMR-BS HO:
  - HO within an MMR-BS cell (HO1)
- Intra-anchor station HO:
  - HO between two RS-Is controlled by the same RS (HO2)
- Inter-MMR-BS HO:
  - HO between two MMR-BS cell (HO3)



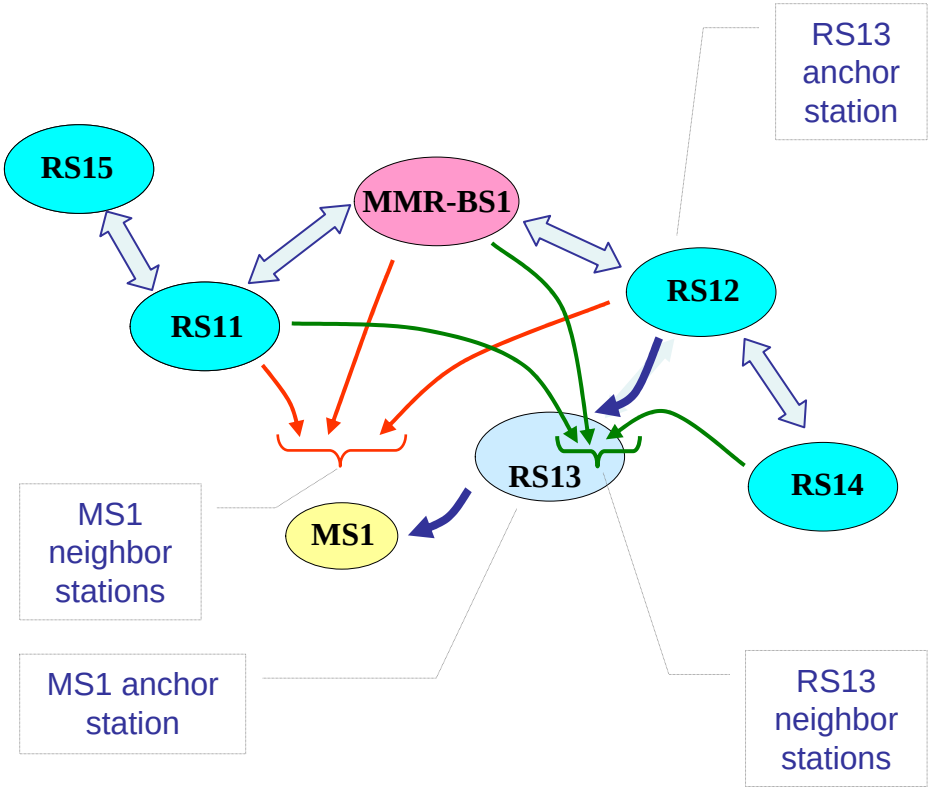



- MMR-BS1:
  - Serving base station of MS1, MS2, MS3

- Handoff-1 (HO1)
  - RS12:
    - Target anchor station of MS1
    - Target access station of MS1

Handoff-2 (HO2)
- RS12:
  - Target anchor station of MS3
- RS14:
  - Target access station of MS3

Handoff-3 (HO3)
- MMR-BS2:
  - Target base station of MS4
- RS21:
  - Target anchor station of MS4
- RS22
  - Target access station of MS4




**MS neighbor station:**

For any mobile station (MS), a neighbor station is a station (other than the anchor station) whose downlink transmission can be received by the mobile station (MS)

**RS neighbor station:**

For any relay station (RS), a neighbor station is a station (other than the anchor station) whose relay link transmission can be received by the relay station (RS)

**neighbor station:**

For any MS or RS, a neighbor station is a station (other than the anchor station) whose downlink transmission can be received by the MS or RS

Combination

# Proposed amendments to 802.16j-06/014

**access station:** ~~The~~ A station at the point of direct access into the network for a given MS ~~or RS.~~ An access station can be a RS, BS, or MMR-BS.

**active station:** A station that is informed of the necessary MS or RS MAC/PHY information to enable it to provide access to the MS or RS in the context of macro diversity.

**anchor station:** ~~The active~~ A station where the ~~mobile station~~ MS or RS is synchronized, performs ranging and monitors the downlink for control information. The anchor station can be RS, BS, or MMR-BS.

**serving base station (serving BS)**: For any MS, the serving **base** station is the station with which the MS has most recently completed registration at initial entry or during a handover. ~~A serving station can be a BS, or MMR-BS~~.

**target ~~serving~~ base station (target BS)**: A station which is the primary candidate for MS registration following a handover. ~~The target serving station can be a BS or MMR-BS~~.

- Both serving BS and target BS have already been defined in 802.16e-2005, so it is not necessary to define them again.
- MMR-BS is a superset of BS, so definitions for BS apply to MMR-BS

# Proposed additional terms

**neighbor station:** For any MS or RS, a neighbor station is a station (other than the anchor station) whose downlink transmission can be received by the MS or RS.

**target anchor station**: For any MS or RS, the station which is the primary candidate to be the anchor station following a handover. A target anchor station can be a RS, BS or MMR-BS.