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Purpose:

The purpose of this document is to give recommendations on mobility management of mobile multi-hop relay .

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# Recommendation on Mobility Management of Multi-hop Relay

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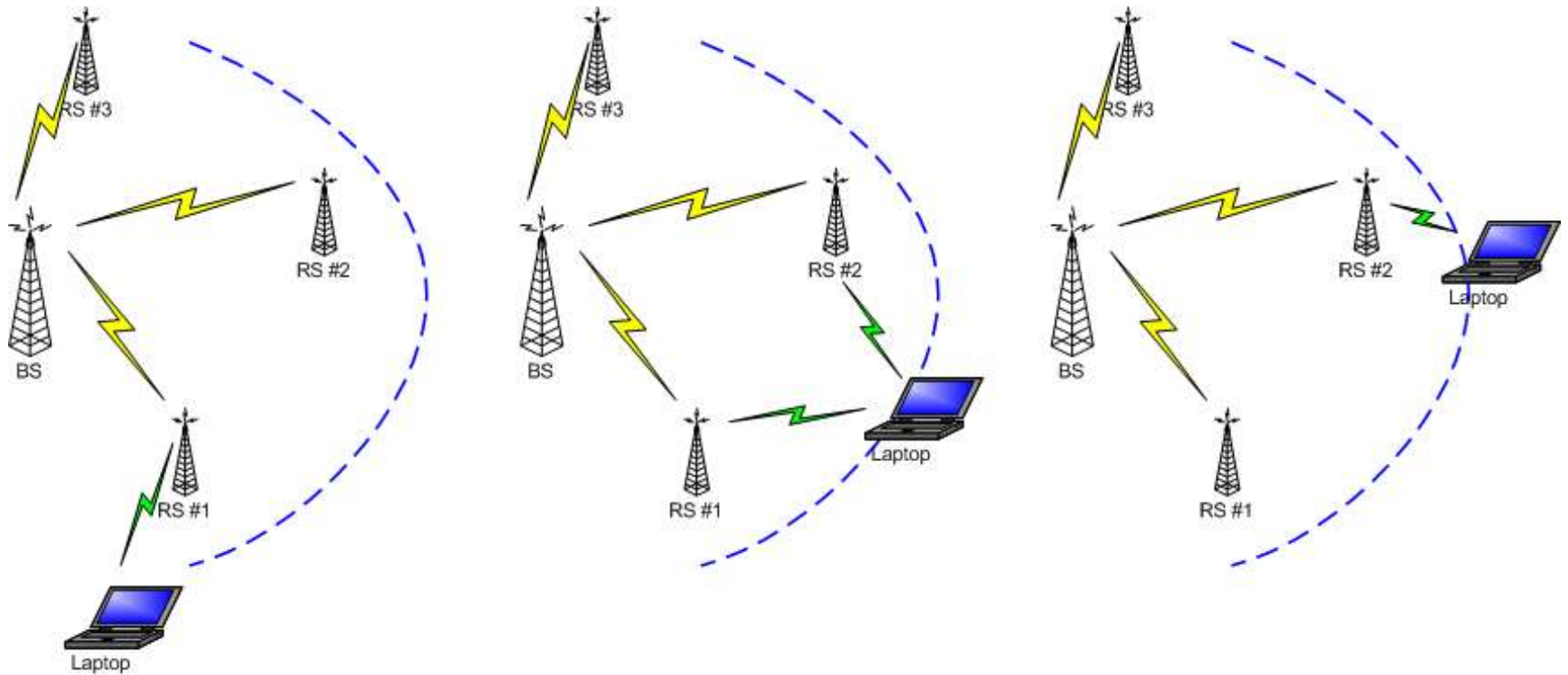
# Content

- Assumption & Definition
- Scenario
- Recommendation
- Example of Intra-Relay cluster handover process

# Assumptions & Definition

- Assumptions
  - A1. Backward compatible with current 16e
  - A2. RS only forward MS's traffic which is in its coverage
  - A3. RS transmit same preamble at same OFDMA symbol, MS have no idea the existence of RS
  - A4. RS relay broadcast message
- Definition
  - Define the set of one BS and connected RS as a Relay Cluster

# Scenarios( Intra-Relay Cluster handover)



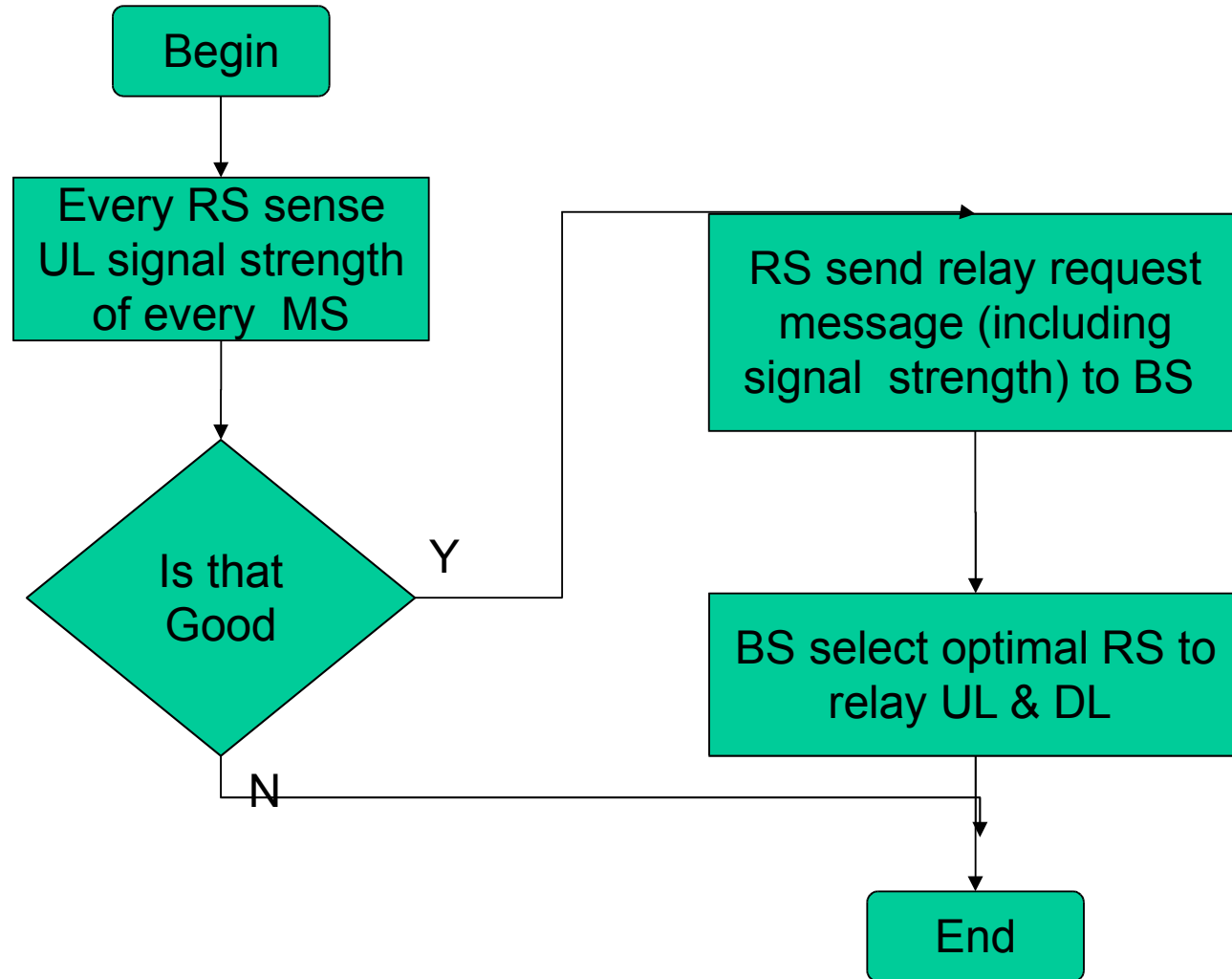
# Intra-relay cluster handover problem

- MS should keep connection with BS when MS move from one RS to another
- BS should find optimal RS to relay UL & DL traffic when MS move from one RS to another
- MS have not ability to distinguish downlink signal from different RS

# Recommendation on Handover

- Intra-relay cluster handover
  - RS only measure & report to BS
  - BS make final decision
  - UL route selection should base on measurement MS's uplink signal strength
  - DL route selection should base on UL route selection
- Inter-relay cluster handover
  - Follow the old routine

# Example





# Appendix

