This document provides an overview of NEMO Basic Support Capability for Mobile RS.

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NEMO Basic Support Capability

MR: Mobile Router
HA: Home Agent
FA: Foreign Agent

Multiple MSs
MRS
MR-BS
Access Control Routers

MAC Handover

IP Mobility
NEMO Basic Support
Highlights for Mobile RS

• Mobile RS attached with
  – MSs and/or,
  – Mobile network (subnet) consisting of IP hosts that do not support mobility

• Mobile RS Applications
  – Trains, light trains (no locomotive engineers), subway, ambulances, ferryboats, etc.
  – Mission critical communications to home network
  – Returns home eventually with mobile network
Handover and IP Mobility for Mobile RS

• MAC handover for Mobile RS
  – Proposals (C802.16j-06/227r1, etc.) for only MSs
  – Mobile RS for IP hosts with no mobility support

• How to maintain the session of each IP (MSs and IP hosts)
  – Moving into/out of different subnets
  – NEMO Basic Support Capability for Mobile RS
NEMO Basic Support for Mobile RS

• The Mobile RS has the mobile router function maintaining bi-directional tunnel to a Home Agent advertising to the infrastructure.
• The Mobile RS is the default gateway for the Mobile Network so that the Mobile Network can be only accessed via the Mobile RS.
• The Mobile RS has a unique Home Address reachable to the registered Home Agent.
• The Mobile RS acquires a Care-of-Address (COA) from the visited link.