AGENDA ITEM:	
TITLE: Packet Data Dormant Handoff	
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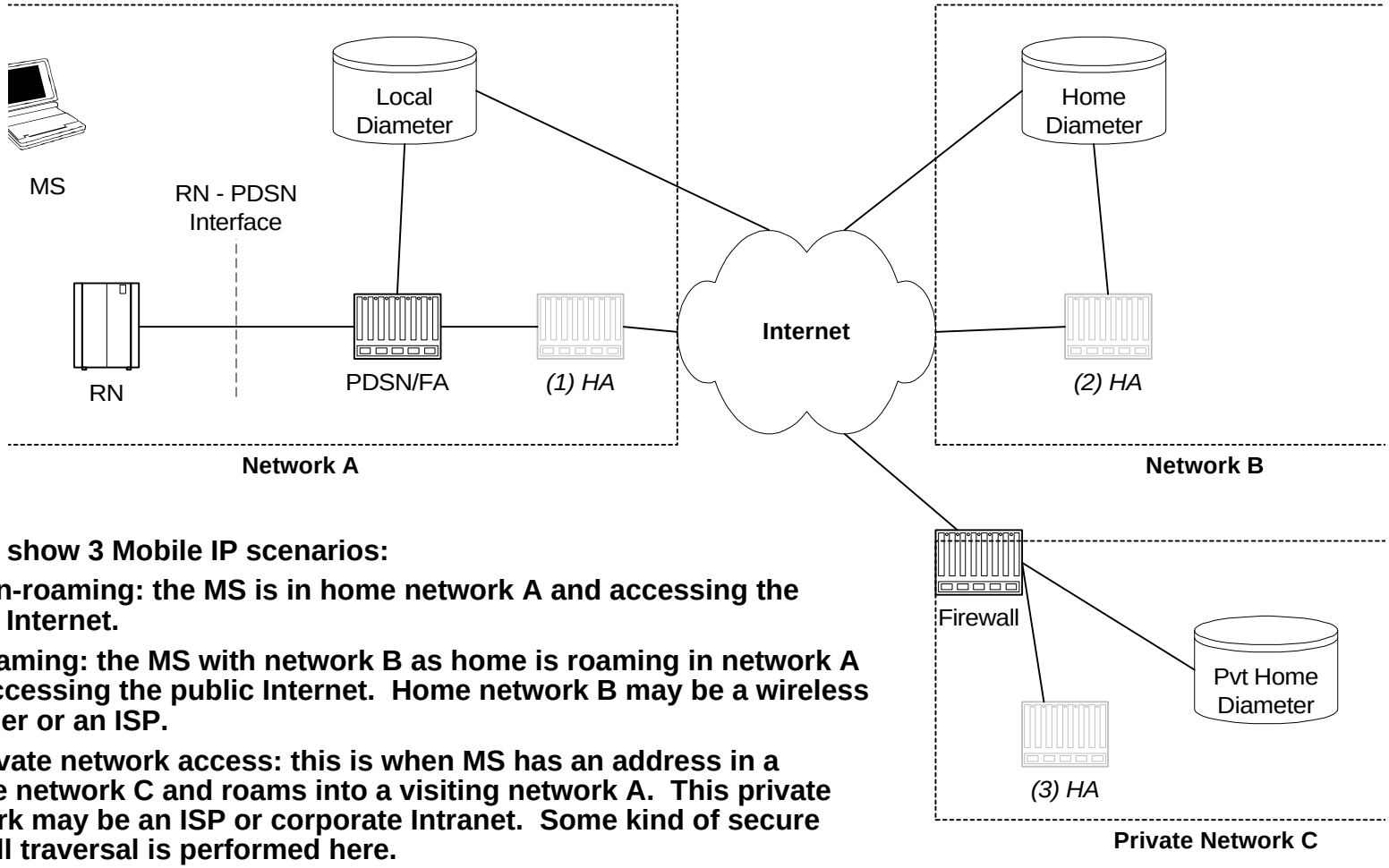
DOCUMENT FOR:	Discussion

Background:

This contribution provides an overview of 3PP2 packet data dormant handoff.

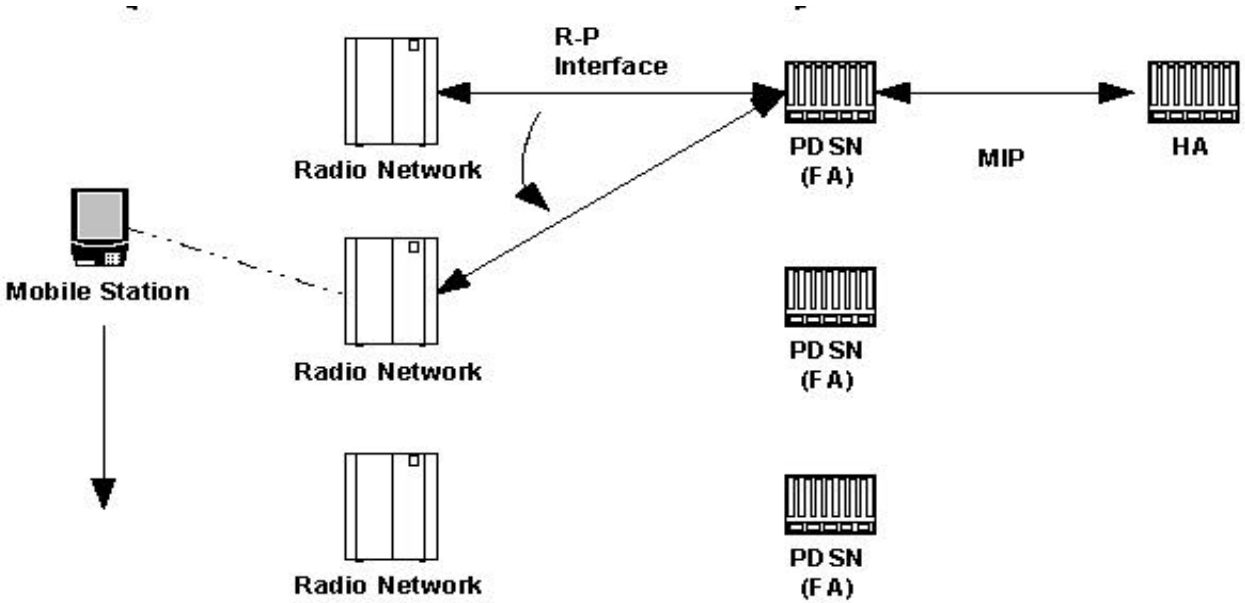
Overview of Architecture



The figures show 3 Mobile IP scenarios:

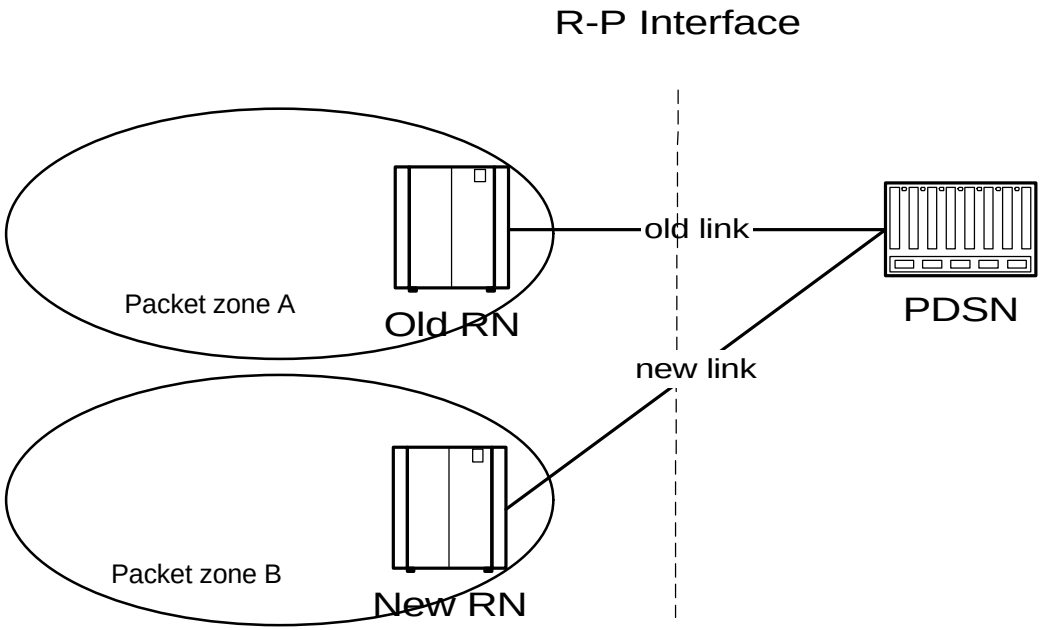
- **(1) Non-roaming: the MS is in home network A and accessing the public Internet.**
- **(2) Roaming: the MS with network B as home is roaming in network A and accessing the public Internet. Home network B may be a wireless provider or an ISP.**
- **(3) Private network access: this is when MS has an address in a private network C and roams into a visiting network A. This private network may be an ISP or corporate Intranet. Some kind of secure firewall traversal is performed here.**
- **DIAMETER server to server communication is used for authentication, secure communication as well as accounting.**
- **Mobile IP is used for mobility management.**

Dormant Mode Handoff



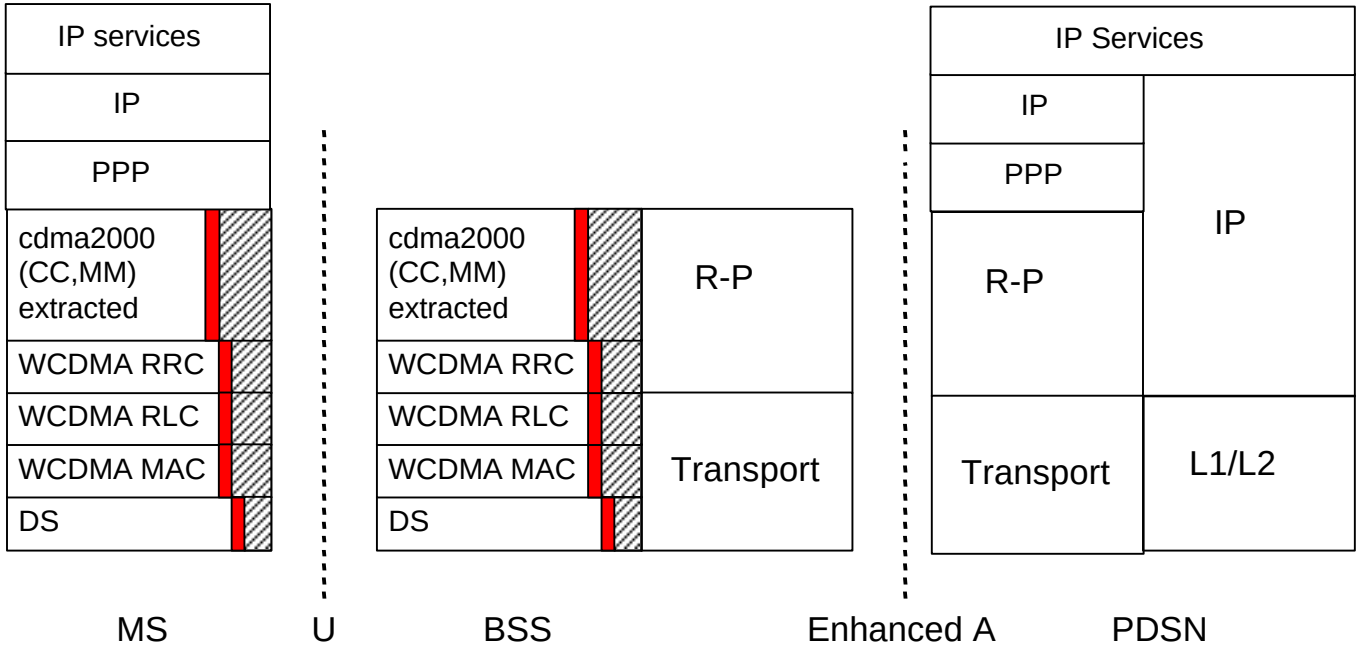
- **Mobile is in dormant mode (idle) and moves out of RN coverage area.**
- **Mobile still within same PDSN coverage area**

Dormant Handoff Mechanism



- **Mobile arrives in new RN (detects change of packet zone ID)**
- **RN determines if mobile already associated with a PDSN. This can be done by either:**
  - **Querying total set of PDSNs**
  - **Querying database in cellular network**
- **RN initiates new R-P connection with PDSN**
- **PDSN releases old R-P connection**

DS Mode over ANSI-41: Packet Data



- **PPP, IP and packet data exist in a service layer above L3**
- **No L1/L2 air interface parameters are carried in packet data service layers.**
- **No L1/L2 air interface parameters are carried over R-P interface**

Conclusions

- **The Radio Network requires the following capabilities:**
  - **Support a mobile dormant state (data session active, no dedicated air interface channels allocated).**
  - **Buffer user data when radio resources are not in place or are insufficient to support the flow of data.**
  - **Handling of new mobiles when they move into its coverage area**
  - **New RN identifies PDSN where mobile currently has data session.**
  - **New RN initiates an R-P connection to PDSN.**
- **No radio specific parameters need to be communicated to PDSN.**
- **There are no impacts to L1 and L2 of DS mode to support dormant handoff.**