

Access Network Information Option for Proxy Mobile IPv6

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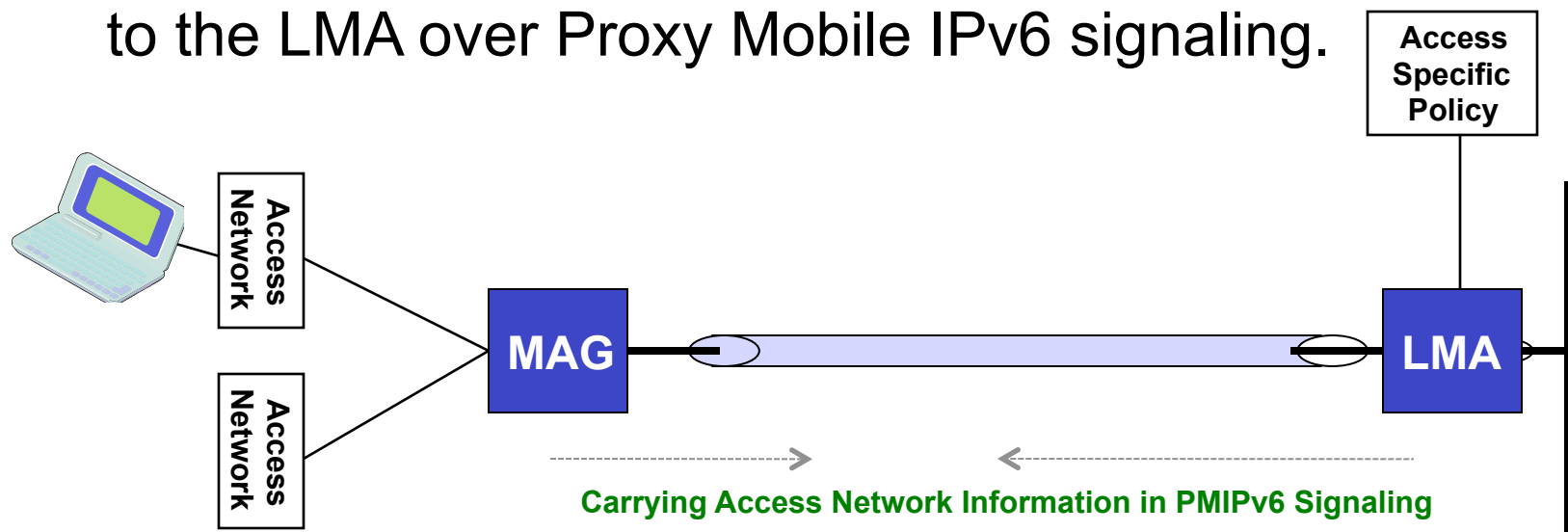
`draft-gundavelli-netext-access-network-option-00.txt`

Motivation and use cases

- In many deployments there is a need for the LMA to provide differentiated services, charging and policing to the mobile nodes based on the access network to which they are attached. For example:
 - a) The service treatment for the mobile node's traffic may be different when they are attached to a access network owned by the home operator than when owned by a roaming partner.
 - b) The service treatment can also be different based on the configured SSID in case of IEEE 802.11 based access networks.
 - c) Shared access networks i.e. radio access & access points owned and **possibly operated by other entity than the owner of a MAG.**
- The base PMIPv6 already includes the Access Technology Type (ATT) information from the MAG to LMA. However, the ATT alone is not sufficient for correct policy decision at the LMA. Thus, there is a need to ensure additional information related to the access network that gets used.

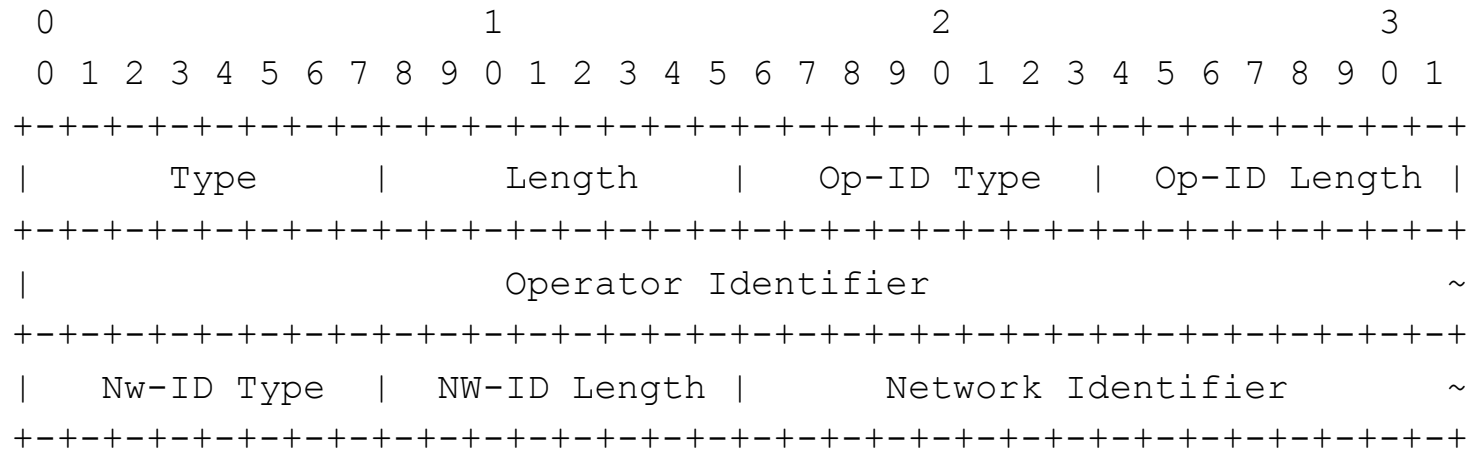
Carrying Access Network Information

- The proposal is to define a new mobility option, so the Access network information can be carried from the MAG to the LMA over Proxy Mobile IPv6 signaling.



- Why not via AAA? Doable but there is no need to depend on an external support infrastructure.

Access Network Information Option Format



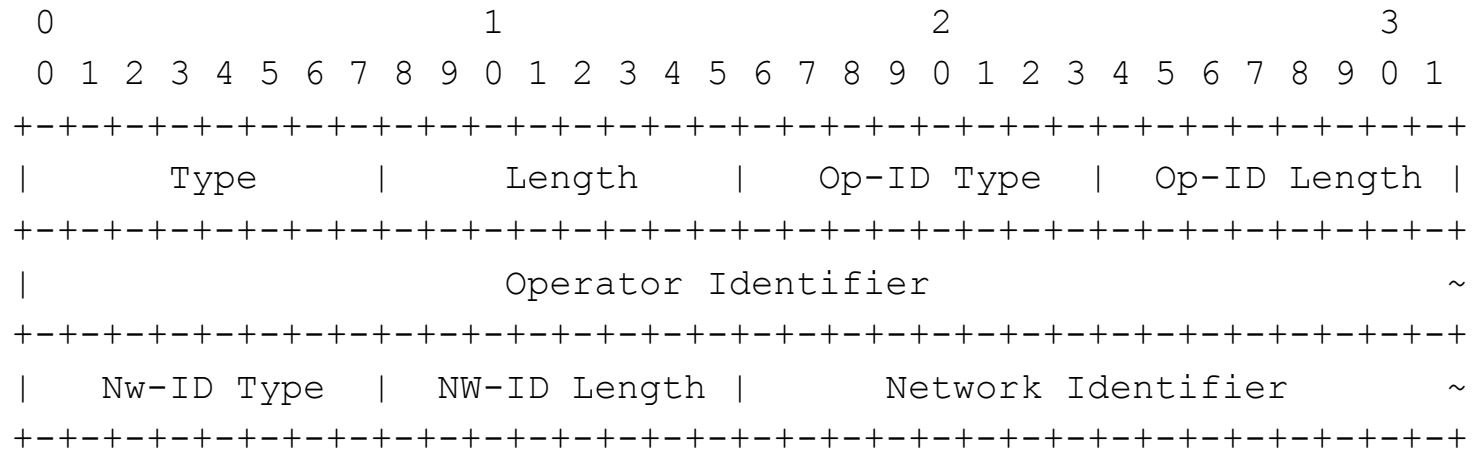
Op-ID Type:

0. Reserved
1. Vendor Id as a private enterprise number (SMI)
2. Realm of the operator
3. xyz (can be expanded with any useful type)

Operator Identifier:

Up to 256 octets. Encoding of the identifier depends on the OP-ID Type

Access Network Information Option Format cont' d



Nw-ID Type:

0. Reserved
1. SSID of the IEEE 802.11 network
2. xyz (can be expanded with any useful type)

Network Identifier:

Up to 256 octets. Encoding of the identifier depends on the Nw-ID Type

Next Steps

- The ANI option needs to be extended to carry arbitrary optional subtype information. Example: the geo-location information of a group of access points.

- **Proposal to standardize the Access Network Information option.**

Thank You

