



## **WiMAX Forum Network Architecture**

(Stage 2: Architecture Tenets, Reference Model and Reference Points)

[3GPP2 – WiMAX Interworking]

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# 1. Internetworking with 3GPP2

**Note:** See §3.0 References in *WiMAX Forum Network Architecture [Part 1]* for references cited in this document.

## 1.1 Integration of WiMAX Access Network in the 3GPP2 X.S0011-C model

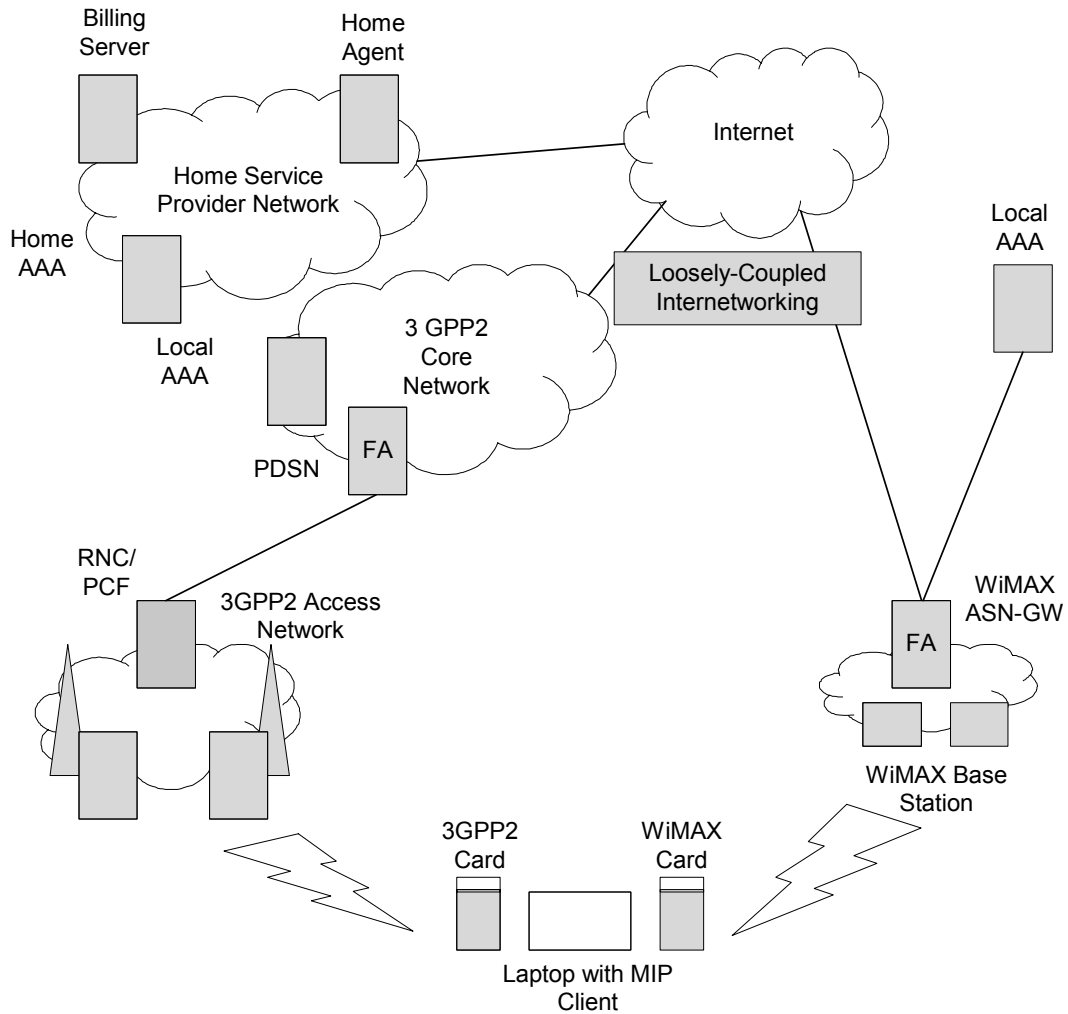
This section describes the interaction between WiMAX Access Network and the 3GPP2 packet data network architecture. Since both the 3GPP2 PDSN (Packet Data Serving Node) and the WiMAX ASN-GW provide mobile IP foreign agent (FA) functionality, this is the simplest point for interworking. To support Interworking, the FA and HA shall support the following IETF RFC's:

- RFC 2003 – 2006
- RFC 3344 [43]
- RFC 3024 (reverse tunnelling)[29]
- RFC 2794 (NAI extension) [22]

In configuring the Mobile IP HA – FA Authentication Extension in the mobile IP registration messages there are three methods for deriving the Security Associations.

- Public Certificates (see Annex A and Annex B in 3GPP2 X.S0011-C)
- Dynamic IKE pre-shared secret distributed by the home AAA server
- Statically configured IKE pre-shared secret

Support of these capabilities and RFC's should allow for session mobility between 3GPP2 Packet Data networks and WiMAX networks for mobile clients.



**Figure 1 - Loosely-Coupled Interworking of WiMAX with 3GPP2**