9.6.3 WiMAX - WiFi single radio handover model and procedure

The general single radio handover requirements and configurations as described in Sections 9.1 to 9.3 apply here.

The architecture of WiMAX-WiFi single radio handover is illustrated in figure 9.6.

AP

AP

HA/LMA

AAA

UE

WiFi

SFF

BS

BS

WiMAX

SFF

ASN

GW

WIF

SFF

**Functional element:**

The WiMAX-WiFi single radio handover model uses WiMAX SFF and WiFi SFF entity for single radio handover.

**WiMAX SFF** is used for UE’s handover from WiFi network to WiMAX network. It emulates WiMAX core network and enable UE to pre-register to WiMAX network though WiFi Access network.

**WiFi SFF** is used for UE’s handover from WiMAX network to WiFi network. It emulates WiFi network and enables UE to pre-register to WiFi network though WiMAX access network.

**WIF:** WiFi Interworking Function, used for MN connecting to the WiFi access network to access to the WiMAX CSN. WIF function includes authentication, accounting etc.

**WiMAX to WiFi handover procedure:**

Phase3

Phase2

Phase1

HA/

AAA

WiFi

AN

WiFi

SFF

WiMAX

ASN

UE

WiMAX to WiFi single radio handover

Phase1: WiFi network discovery and selection.

Pahse2: Authentication with WiFi network though WiFi SFF.

Pahse 3: Connect to WiFi access network and disconnect from WiMAX network.

**WiFi to WiMax handover procedure:**

Phase3

Phase2

Phase1

HA/

AAA

Target

BS

WiMAX

SFF

WiFi

AN

UE

Phase1: WiMAX network discovery and selection.

Pahse2: Authentication with WiMAX network though WiMAX SFF.

Pahse 3: Connect to WiMAX network and disconnect from WiFi network.