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3GPP TSG-SA WG2 Meeting #40 Sophia-Antipolis, France, 17<sup>th</sup> – 21<sup>th</sup> May 2004 Tdoc S2-042316

Title: Clarification on Addresses used for Tunnel Establishment

Response to:

Release: Rel 6

Work Item: Interworking WLAN

Source: SA2
To: SA3
Cc: -

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## 1. Overall Description:

To access PS services like IMS a WLAN UE has to establish first a secure tunnel to the PDG in the mobile core network providing the service. The tunnel endpoint IP address is determined by the WLAN UE resolving the selected W-APN FQDN using standard DNS mechanisms. The WLAN UE obtains its local IP address from the WLAN AN or the VPLMN. In principle the WLAN UE can associate to a WLAN AN that supports IPv4 or IPv6 addresses. On the other hand, the W-APN DNS resolution procedure may return also an IPv4 or IPv6 address. It is not clear to SA2 whether the WLAN UE is able to establish a secure tunnel to the PDG, if the tunnel endpoints at the WLAN UE and PDG use IP addresses of different IP versions.

## 2. Actions:

SA2 kindly asks whether SA3 sees any problems from a security point of view to establish a secure tunnel between the WLAN UE and the PDG, if the WLAN UE has obtained a local address with an IP version different from that of the tunnel endpoint at the PDG, e.g. by using mechanisms like IP-in-IP encapsulation.

## 3. Date of Next TSG SA WG 2 Meetings:

TSG-SA2 Meeting #41 16-20 August 2004 Montreal, Canada

TSG-SA2 Meeting #42 11-15 October 2004 Sophia-Antipolis, France