

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	802.16g Figure 1 issues	
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Re:	Call for comments	
Abstract		
Purpose	This document attempts to clarify what delta changes 802.16g should make to 802.16-2004 (as amended by succeeding amendments)	
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802.16g Figure 1 Issues

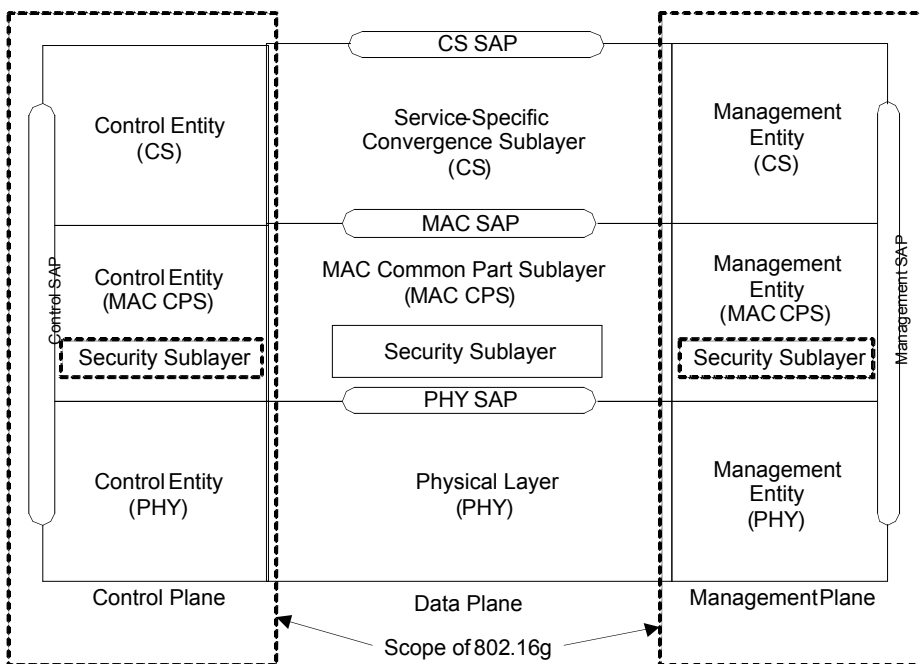
David Johnston, Intel Corporation

1 Introduction

Contribution C802.16g-05/010r1 provides an interface reference model for 802.16 management and proposes a stack diagram that outlines the scope of 802.16g.

This document clarifies the changes to the base document that 802.16g should make, assuming these models are accepted.

2 Proposed Stack Layering in DOC 010



3

4

Some observations:

This diagram does not describe the diagram that 802.16g would insert into 802.16-200x. Taking 802.16-2004 as an example, the diagram describes data and management planes, data plane interfaces and outlines the scope of 802.16-2004 as being limited to the data plane.

The diagram above separates out control and management planes. This may be an appropriate separation of function in 802.16g, however this separation of function is not expressed in the base document. As such, the control/management split may be considered a hierarchical split underneath the management plane as expressed in the base document.

The scope of 802.16g in the above diagram is limited by the PAR to management procedures and logically this would correspond to the dotted rectangle on the right hand side of the above diagram.

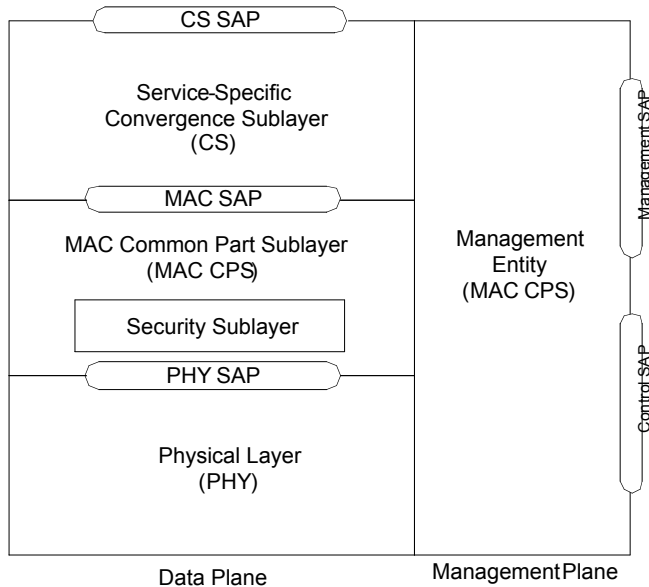
802.16g will create an amendment that leads to a specification with a scope encapsulating both data and management planes.

The internal separation of MAC, PHY and CS does not map to the data plane separation and implies that separate control and management SAPs for each layer are required.

Accordingly, the stack diagram in Doc 05-010r1 is appropriate for either informative material describing the scope and internal structuring of 802.16g, however the actual diagram in 802.16 that is proposed as a replacement for figure 1 in the base 802.16 would map this structure into the base document’s diagram.

Accordingly we might expect something along the lines of..

Replace figure 1 with:



Explanation:

This diagram maps both interfaces into the management plane in the base standard, while they may still hook into the separate control and management entities expressed in 802.16g.

The dotted line scope delimiter is removed, since the scope of the amended specification will encapsulate the whole of the stack, even though the scope of 802.16g is limited to the management side.

The dotted line separation of security management appears superfluous, given that the security management protocols obviously appear in the management plane along with all the other management protocols. With the network model and SAPs proposed, we might expect primitives related to security to appear on one of the management SAPs and map to the interface to the ASA in the proposed network model. Accordingly in the proposed diagram there is no separation of the security management entity.

5 SAP Functions

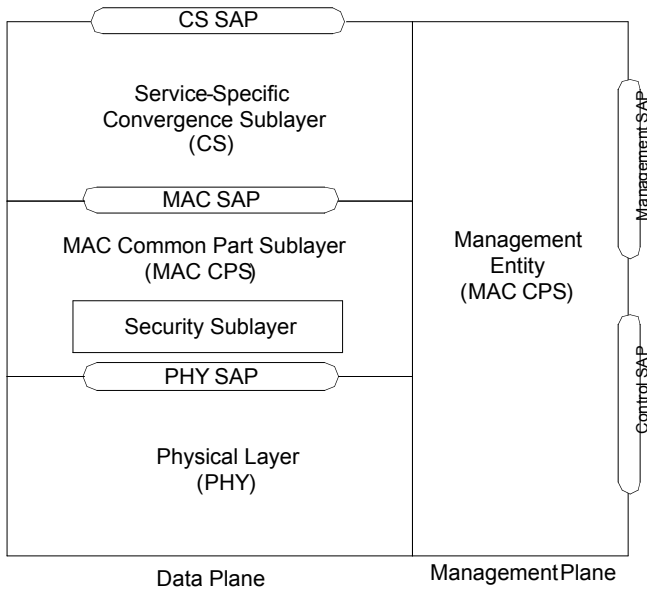
There is explicit signaling that is needed between the security management and AAA entities on the network. Therefore in the function lists for the SAP, it is proposed to include security primitives on the list for the control SAP.

6 Proposed Text Changes

Option 1

[Insert the following text into sections identified]

[Replace figure 1 with the following diagram]



14.4.1.1.2.1 Control SAP

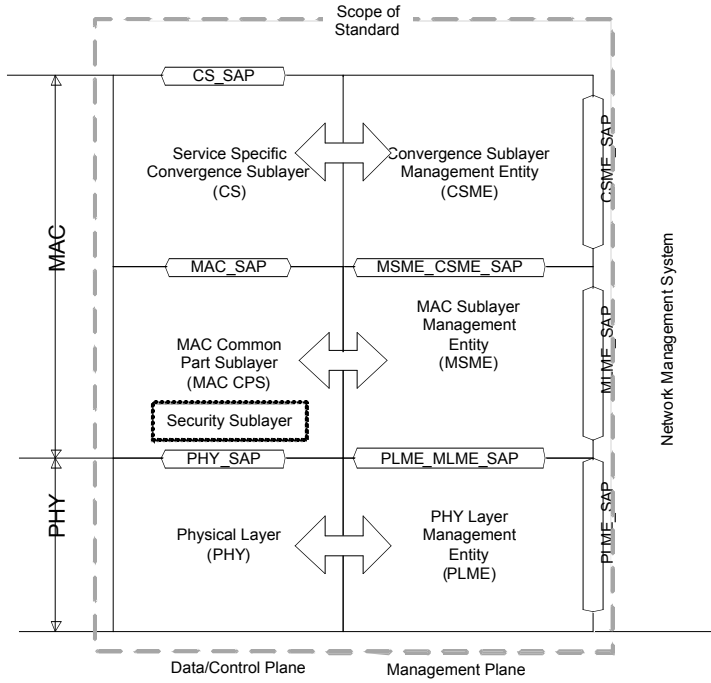
[Add a bullet item]

- AAA server signaling (E.G. EAP payloads)

OR

Option 2

[Replace figure 1 with the following diagram]



14.4.1.1.2.1 Control SAP

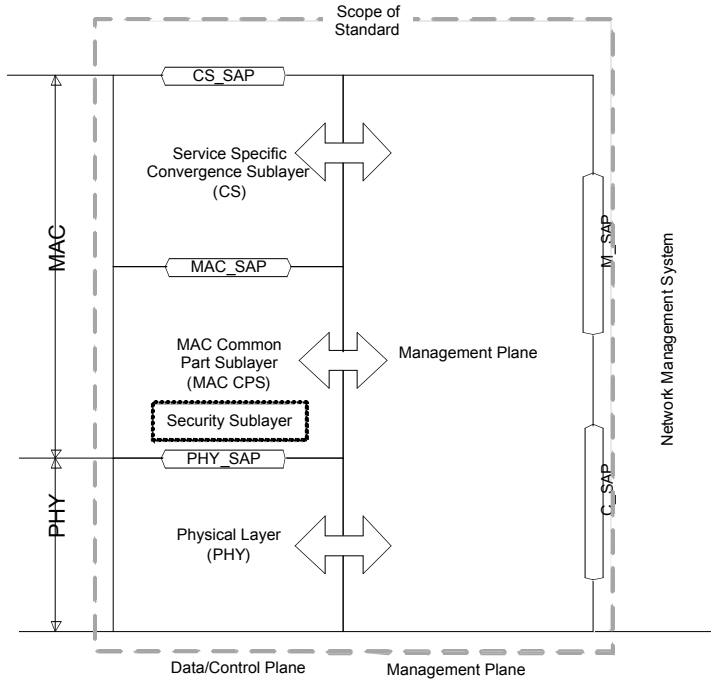
[Add a bullet item]

- AAA server signaling (E.G. EAP payloads)

OR

Option 3

[Replace figure 1 with the following diagram]



14.4.1.1.2.1 Control SAP

[Add a bullet item]

- AAA server signaling (E.G. EAP payloads)

7 References

[1] IEEE 802.16-2004 specification
 [2] IEEE P802.16g baseline document http://ieee802.org/16/netman/docs/80216g-04_03r1.pdf