IEEE P802.11  
Wireless LANs

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| 802.11  GLK ESS Removal | | | | |
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**Abstract**

This submission is an attempt to solve the GLK ESS definition issue.

Remove the GLK ESS from Draft P802.11ak\_D1.5-06 with redline

History:

r0 – initial submission

r1 – new submission - remove option 1, use draft D1.5-06 as baseline, correct figures 4-13b & 4-13c

#### Remove the GLK ESS definition and occurrences from the draft

#### *Remove the GLK ESS definition in 3.2:*

## 3.2 Definitions specific to IEEE Std 802.11

#### *Modify 4.3.23.4.3as follows:*

##### 4.3.23.4.3 GLK infrastructure BSS

An example GLK infrastructure BSS is shown in Figure 4-14b (infrastructure BSS with GLK links). The MAC service to the bridge ports is provided via the Internal Sublayer Service SAPs shown. These multiple Internal Sublayer Service SAPs are logical entities implemented by a convergence function specified in 802.1AC.

Although transmissions by an AP are typically received by all STAs associated with that AP, the service provided by a GLK infrastructure BSS may be considered as separate point-to-point links between the corresponding Internal Sublayer Service SAPs (provided by the GLK AP and GLK convergence function) and each associated GLK STA. Provision of such apparent point-to-point links is natural for MPDUs with an individually addressed RA. In order to provide such apparent point-to-point links for group addressed frames the GLK AP transmits them so that they are accepted by an arbitrary subset of the associated GLK STAs. Such selective transmission is provided through the GLK SYNRA addressing facility (see 4.3.23.3 (Selective reception of a group addressed frames)).



**Figure 4-13b—Infrastructure BSS with GLK links**

Figure 4-14c shows, as an example, the data plane of an ESS and GLK BSSs.



**Figure 4-13c—Example of the data plane of an ESS with GLK BSSs**

#### *Add a paragraph <TO BE WRITEN> to describe the mobility service for GLK links illustrated with MAY BE (see comment) the figure below:*

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#### Figure xxx – Mobility Service for GLK links

#### *Modify 4.5.3.4 & 4.5.3.5 as follows*

#### 4.5.3.4 Reassociation

***Change text as follows:***

Association is sufficient for no-transition message delivery between IEEE Std 802.11 STAs. Additional functionality is needed to support BSS-transition mobility. The additional required functionality is provided by the reassociation service. In an ESS with a DS, reassociation is one of the services in the DSS.

For GLK links, reassociation is one of the services of the IEEE 802.11 General Link convergence function service.

The reassociation service is invoked to “move” a current association of a STA from one AP to another. In an ESS with a DS, the reassociation service informs ~~this keeps~~ the DS ~~informed~~ of the current mapping between AP and STA as the STA moves from BSS to BSS within ~~an~~ the ESS.

For GLK links, the reassociation service informs the 802.11 General Link convergence function of the current mapping between the GLK STA and the GLK AP as the STA moves from BSS to BSS with in the GLK ESS. The convergence function destroys the existing GLK link and establishes a new GLK link. The GLK AP and the GLK non-AP STA each coordinate with their IEEE 802.11 General Link convergence functions so that the convergence function destroys, disables, or maintains the existing Internal Sublayer Service SAP. If the convergence function destroys or disables the Internal Sublayer Service SAP, the function then creates or enables a new Internal Sublayer Service SAP. The service then maps these SAPs to each end of the new GLK link. This process allows updates of point to point virtual LANs (see IEEE Std 802.1AC). Reassociation also enables changing association attributes of an established association while the STA remains associated with the same AP. Reassociation is always initiated by the non-AP STA.

#### 4.5.3.5 Disassociation

***Change text as follows:***

The disassociation service is invoked when an existing association is to be terminated. In an ESS with a DS, disassociation is one of the services in the DSS.

For GLK links, disassociation is one of the services of the IEEE 802.11 General Link convergence function service.

For a non-GLK STA, the act of becoming disassociated invokes the disassociation service, which voids any existing STA to AP mapping know to the DS, for the disassociating STA. ~~In an ESS, this tells the DS to void existing association information. Attempts to send MSDUs via the DS to a disassociated STA will be unsuccessful.~~ How the information provided by the disassociation service is managed within the DS is not specified by this standard. For a GLK AP, disassociation removes or disables the corresponding Internal Sublayer Service SAP being provided by that GLK AP. The 802.1Q bridge uses this information to disable bridging for the non-AP STA.

For a GLK link, the disassociation service informs the 802.11 General Link convergence function that the GLK STA has disassociated, which destroys the GLK link. The GLK AP and the GLK non-AP STA each coordinate with their IEEE 802.11 General Link Convergence function so that the convergence function destroys or disables the Internal Sublayer Service SAP that was previously mapped to the destroyed GLK link. This process destroys the previously existing point to point virtual LAN (see IEEE Std 802.1AC) between the GLK STA and the GLK AP. Attempts to send MSDUs via a destroyed point to point link will be unsuccessful.