IEEE P802.11
Wireless LANs

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| Annex ZA changes |
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Abstract

This document provides updated text for the following CIDs:

1013, 1071, 1109, 1137, 1196, 1197, 1198, 1200, 1294, 1296, 1297, 1326, 1451, 1452, 1538, 1539, 1540, 1541, 1542, 1638, 1639, 1658

This uses Draft P802.11aq\_D1.2 as a baseline.

# 4. General Description

#### *Add the following new clauses to 4.5.9*

#### 4.5.9.1 [#1361] Preassocation Discovery (PAD)

[#1658] [#1326] [#1137] [#1538] [#1638] PAD is used by STAs to perform preassociation discovery of information concerning services that are available in a BSS. [#1196] This information provides support for a STA’s network selection before joining the wireless LAN [#1197] [#1198].

**4.5.9.1.1 Architecture**

Figure 4.5aq shows the functional flow of MAC messaging and service information between the STA and the AP. [#1539] The proxy server, as shown in Figure 4.5aq, is a [#1451] logical entity that contain caches of information about services available in the BSS, for the STA to connect to after it associates with the AP. The proxy client, also shown in Figure 4.5aq, is a logical entity that initiates service discovery.

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Figure 4.5aq – Preassociation Discovery Architecture [#1452] [#1540]

##### 4.5.9.1.2 [#1297] Proxy

[#1294] [#1296] [#1541] [#1109] [#1071] [#1013] A proxy is required to exchange information with higher layers in both the STA and AP. [#1200] Within a STA this includes service discovery requests and responses to and from applications. Within an AP this includes service discovery requests and responses from the BSS.

[#1542] The proxy is used to encapsulate the service relevant information such as service name, service information and then exchange that information between the STA and AP. [#1639] As shown in Figure 4.5aq, preassociation discovery signaling is opaque to the service relevant information as this is handled by the proxies in the STA and AP.

#### *Remove the following clauses from Annex ZA and renumber*

# Annex ZA

(normative)

## ~~Pre-association Discovery (PAD) Protocol Additional Information~~

## ~~ZA.1 High-level Functional Diagram~~

~~The PAD protocol can help the user (STA), in pre-association state, obtain useful information from the AP about available services and access networks. This information can help the user decide whether or not to associate with the WLAN behind the AP.~~

~~Figure ZA-1 shows the functional flow of MAC messaging and service information between the STA and the AP. The PAD Proxy entities, shown in Figure ZA-1, are logical caches of information about network services and access network available for the STA to connect to, after it associates with the network.~~

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~~Figure ZA-1 – PAD protocol stack functional diagram~~

## ~~ZA.2 PAD Proxy Entity~~

~~The PAD proxy entity is required to pass information up to higher layer applications and for the PAD protocol to work.~~

~~It is assumed that there is proxy function in the network that maintains a list of services. The upper layer protocols are not exposed to un-associated STAs. The proxy is used to encapsulate the service identifiers and exchange that information to the STA. Therefore, PAD is opaque to the service definition and is handled by the proxy and the end non-AP STA itself~~~~.~~