Proposed amendment to table 7-8

Date: 2007-09-19

Authors:

Name	Affiliations	Address	Phone	email
Guido R. Hiertz	Philips	ComNets, Chair of Communication Networks, RWTH Aachen University, Kopernikusstr. 16, 52074 Aachen, Germany	+49-241-802-5829	hiertz@ieee.org
Dee Denteneer	Philips	Philips, HTC 37, 6515 AE Eindhoven, The Netherlands	+31-40-2749-743	dee.denteneer@philips.com

This version has been edited for publication as PDF file at ComNets, RWTH Aachen University.

Some animations may not be displayed correctly in PDF format.

Please see https://mentor.ieee.org/ for the original version in PowerPoint format.

Abstract

In Std. 802.11-2007, table 7-8 (page 80) in chapter 7.2.3.1 (Beacon frame format) describes the Information Elements (IEs) and their order of occurrence in a beacon frame. As 802.11s uses beacon frames that are sent independently of beacon frames for infrastructure BSSs or IBSSs, we propose to amend table 7-8 to explicitly describe the relationship between the presence of specific IEs and the setting of the Capability Information field element bits B0 and B1.

Proposed amendment (1)

Capability Information field bits B0 B1	00	01	10	11	
Order Information					Notes
1 Timestamp	Shall be present	Shall be present	Shall be present	undefined	
2 Beacon interval	Shall be present	Shall be present	Shall be present	undefined	
3 Capability	Shall be present	Shall be present	Shall be present	undefined	
4 Service Set Identifier (SSID)	Shall not be present	Shall be present	Shall be present	undefined	
5 Supported rates	See Notes	See Notes	See Notes	undefined	
6 Frequency-Hopping (FH) Parameter Set	See Notes	See Notes	See Notes	undefined	The FH Parameter Set information element is present within Beacon frames generated by STAs using FH PHYs.
7 DS Parameter Set	See Notes	See Notes	See Notes	undefined	The DS Parameter Set information element is present within Beacon frames generated by STAs using Clause 15, Clause 18, and Clause 19 PHYs.
8 CF Parameter Set	See Notes	See Notes	See Notes	undefined	The CF Parameter Set information element is present only within Beacon frames generated by APs supporting a PCF.
9 IBSS Parameter Set	Shall not be present	Shall be present	Shall not be present	undefined	The IBSS Parameter Set information element is present only within Beacon frames generated by STAs in an IBSS.
10 Traffic indication map (TIM)	See Notes	Shall not be present	Shall be present	undefined	The TIM information element is present only within Beacon frames generated by APs.

Proposed amendment (2)

Capability Information field bits B0 B1	00	01	10	11	
Order Information					Notes
11 Country	See Notes	See Notes	See Notes	undefined	The Country information element shall be present when dot11MultiDomainCapabilityEnabled is true or dot11SpectrumManagementRequired is true.
12 FH Parameters	See Notes	See Notes	See Notes	undefined	FH Parameters as specified in 7.3.2.10 may be included if dot11MultiDomainCapabilityEnabled is true.
13 FH Pattern Table	See Notes	See Notes	See Notes	undefined	FH Pattern Table information as specified in 7.3.2.11 may be included if dot11MultiDomainCapabilityEnabled is true.
14 Power Constraint	See Notes	See Notes	See Notes	undefined	Power Constraint element shall be present if dot11SpectrumManagementRequired is true.
15 Channel Switch Announcement	See Notes	See Notes	See Notes	undefined	Channel Switch Announcement element See Notes if dot11SpectrumManagementRequired is true.

Proposed amendment (3)

Capability Information field bits B0 B1	00	01	10	11	
Order Information					Notes
16 Quiet	See Notes	See Notes	See Notes	undefined	Quiet element See Notes if dot11SpectrumManagementRequired is true.
17 IBSS DFS	Shall not be present	See Notes	Shall not be present	undefined	IBSS DFS element shall be present if dot11SpectrumManagementRequired is true in an IBSS.
18 TPC Report	See Notes	See Notes	See Notes	undefined	TPC Report element shall be present if dot11SpectrumManagementRequired is true.
19 ERP Information	See Notes	See Notes	See Notes	undefined	The ERP Information element is present within Beacon frames generated by STAs using extended rate PHYs (ERPs) defined in Clause 19 and is optionally present in other cases.
20 Extended Supported Rates	See Notes	See Notes	See Notes	undefined	The Extended Supported Rates element is present whenever there are more than eight supported rates, and it is optional otherwise.
21 RSN	See Notes	See Notes	See Notes	undefined	The RSN information element shall be present within Beacon frames generated by STAs that have dot11RSNAEnabled set to TRUE.
22 BSS Load	See Notes	See Notes	See Notes	undefined	The BSS Load element is present when dot11QosOption-Implemented and dot11QBSSLoadImplemented are both true.

Proposed amendment (4)

Capability Information field bits B0 B1	00	01	10	11	
Order Information					Notes
23 EDCA Parameter Set	See Notes	See Notes	See Notes	undefined	The EDCA Parameter Set element is present when dot11QosOptionImplemented is true and the QoS Capability element is not present.
24 QoS Capability	See Notes	See Notes	See Notes	undefined	The QoS Capability element is present when dot11QosOption-Implemented is true and EDCA Parameter Set element is not present.
25 Vendor Specific	See Notes	See Notes	See Notes	undefined	One or more vendor-specific information elements may appear in this frame. This information element follows all other information elements.

References

- **Std. 802.11-2007**