

**IEEE P802.11**  
**Wireless Personal Area Network (WPAN)**

**Call For WPAN Applications and Usage Scenarios, WPAN CFA**

**Date:** July 24, 1998

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**Abstract**

During the IEEE 802 LMSC Plenary in La Jolla, CA July 6<sup>th</sup> to 10<sup>th</sup>, 1998 the Wireless Personal Area Networking (WPAN) Study Group discussed and agreed to distribute a Call for WPAN Applications and Usage Scenarios. This is the WPAN Call for Applications (CFA). Later in this CFA is a list of information that should be included in your application description.

The previous Wearables Standards Ad Hoc Committee and the current WPAN Study Group have discussed and generated numerous submissions, as well as items specific to applications and uses, for WPANs. This material can be found on our anonymous ftp site in the following documents:

DOCUMENT	TITLE	SUBDIRECTORY
Cleveland-Minutes.DOC and Application-Matrix.DOC	Wireless Personal Area Networking Application Matrix (Ian Gifford, M/A-COM)	Cleveland Dec 2 1997
-98/216 or 82167-Application-Summaries.PPT	WPAN SG Application Summary (Pat Kinney, Intermec)	Utrecht May 4-8 1998

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Please submit your application descriptions to the WPAN SG Chairman, Dick Braley, at **Error! Bookmark not defined.**, by August 28 1998, which is prior to the next IEEE 802.11 Interim Meeting.

The IEEE 802.11 September meeting will be held during the week of September 14-18, 1998 at:

**Westford Regency Inn & Conference Center**

**219 Littleton Road**

**Westford, MA 01886**

**Reservations: 978-692-8200**

**Fax: 978-692-8240**

Note: The WPAN SG Meeting starts on Tuesday September 15<sup>th</sup>, 1998 at 8:30am and goes through Wednesday September 16<sup>th</sup>, 1998 to the Working Group Plenary. A WPAN Agenda will follow as we near these dates.

### Information to be Included in the Application Description

In order to specify the physical (PHY) and medium access control (MAC) layers of the WPAN network it is necessary to give a detailed list of the network requirements. In order to completely specify the network requirements it is first necessary to describe the potential WPAN applications in detail. This dependency of the specifications is illustrated in Figure 1 where we see applications drive network requirements, which in turn drive the PHY and MAC layer specifications.

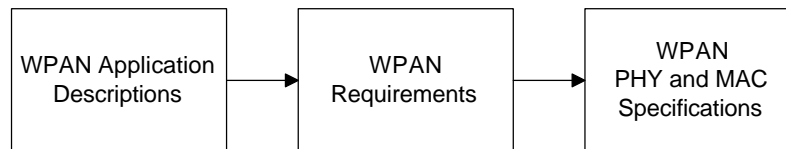


Figure 1: Illustration of specification dependencies

This document is a call for *WPAN Application and Usage Scenarios*. These scenarios need to be given in enough detail so that from a set of these descriptions we can completely specify the WPAN requirements.

The following is a list of some the material that should be included in a description of your WPAN application:

1. How many devices are in this personal area network (PAN)?
2. What are the types of devices in the network (e.g. PDA, bar code scanner, printer, etc.)?
3. Describe how the network is initiated.
4. How do devices attach and detach from the network. Is human intervention required?
5. Describe the traffic flow of the data.
6. Describe the type of data that flows in each branch of the network.
7. How much data is typically in each message?
8. How often are messages sent?
9. How much latency in the message transfer is acceptable?
10. Describe the network topology.
11. Is there a master node where are of the data flows into and out of, or do devices communicate peer to peer?
12. Does this PAN have to interface to a larger network (e.g. an 802.11 network)? If so, how should these two networks be connected?
13. If two PANs are in range of one another how should they interact?
14. Will there be a need to send data between two (or more) PANs? If so, how should they connect?
15. What is the type of data that would flow between two PANs? How often would they communicate?
16. How should these two PANs connect when they are within range? Should they configure themselves into one network or only communicate between master, for example?

If anyone has additional application characteristics that they feel should be included in the list please add them.