**IEEE P802.15**

**Wireless Specialty Networks**

|  |  |  |
| --- | --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Specialty Networks (WSNs) | |
| Title | **IEEE 802 Criteria for Standards Development draft for P802.15.6a Amendment – Body Area Networks** | |
| Date Submitted | February 1st, 2021 | |
| Source | Ryuji Kohno,  Takumi Kobayashi,  Minsoo Kim Yokohama National University 79-5 Tokiwadai, Hodogaya-ku, Yokohama, 240-8501 Japan | Phone: +81-45-339-4115, 4116, 4117 Fax: +81-45-339-4113 Email: [kohno@ynu.ac.jp](mailto:kohno@ynu.ac.jp)  kobayashi-takumi-ch@ynu.ac.jp  minsoo@minsookim.com |
| Re: | Amendment of IEEE Std 802.15.6 Wireless Body Area Networks | |
| Abstract | Draft of IEEE 802.15.6a PAR | |
| Purpose | For discussion in IG-DEP | |
| Notice | This document has been prepared to assist the IEEE P802.15. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein. | |
| Release | The contributor acknowledges and accepts that this contribution becomes the property of IEEE and may be made publicly available by P802.15. | |

## 

# IEEE 802 criteria for standards development (CSD)

**Based on IEEE 802 LMSC Operations Manuals approved July 13th, 2018.**

## Project process requirements

### **Managed objects**

Describe the plan for developing a definition of managed objects. The plan shall specify one of the following:

1. The definitions will be part of this project: YES**.**
2. The definitions will be part of a different project and provide the plan for that project or anticipated future project.
3. The definitions will not be developed and explain why such definitions are not needed.

### **Coexistence**

A WG proposing a wireless project shall demonstrate coexistence through the preparation of a Coexistence Assurance (CA) document unless it is not applicable.

1. Will the WG create a CA document as part of the WG balloting process as described in Clause 13? YES**.**
2. If not, explain why the CA document is not applicable.

## 5C requirements

### **Broad market potential**

Each proposed IEEE 802 LMSC standard shall have broad market potential. At a minimum, address the following areas:

1. Broad sets of applicability.

This proposal addresses the multi-industry, multi-million dollar worldwide market for.

1. Multiple vendors and numerous users.

There is identified interest and support for the outcome of this project from individuals

affiliated with the following: 1) leading industry support and research groups, 2) Silicon manufacturers, 3) Medical device and equipment manufacturers, 4) Automotive devise and equipment manufacturers, 5) Environmental, Energy, and Consumer electronics equipment and manufacturers.

### **Compatibility**

802.1AC, and IEEE 802.1Q. If any variances in conformance emerge, they shall be thoroughly disclosed and reviewed with IEEE 802.1 WG prior to submitting a PAR to the Sponsor.

1. Will the proposed standard comply with IEEE Std 802, IEEE Std 802.1AC and IEEE Std 802.1Q?

NO.

1. If the answer to a) is no, supply the response from the IEEE 802.1 WG.

The amendment will comply with IEEE Std 802, but it cannot comply with IEEE Std 802.1Q and IEEE Std 802.1AC, because IEEE Std 802.15.6 uses 64-bit MAC addresses.

The review and response are not required if the proposed standard is an amendment or revision to an existing standard for which it has been previously determined that compliance with the above IEEE 802 standards is not possible. In this case, the CSD statement shall state that this is the case.

### **Distinct Identity**

Each proposed IEEE 802 LMSC standard shall provide evidence of a distinct identity. Identify standards and standards projects with similar scopes and for each one describes why the proposed project is substantially different.

This new project provides support for dependable medical applications .

### **Technical Feasibility**

Each proposed IEEE 802 LMSC standard shall provide evidence that the project is technically feasible within the time frame of the project. At a minimum, address the following items to demonstrate technical feasibility:

1. Demonstrated system feasibility.

Please describe deployed systems or application based on 15.6 BAN, like “proven by demonstration prototypes and implementation of medical applications currently deployed, etc.”

1. Proven similar technology via testing, modeling, simulation, etc.

See a)

### **Economic Feasibility**

Each proposed IEEE 802 LMSC standard shall provide evidence of economic feasibility. Demonstrate, as far as can reasonably be estimated, the economic feasibility of the proposed project for its intended applications. Among the areas that may be addressed in the cost for performance analysis are the following:

1. Balanced costs (infrastructure versus attached stations).

The proposed modifications do not add significant cost

1. Known cost factors.

The standard is built on 802.15.6 BAN base stations and remote medical devices at reasonable cost.

1. Consideration of installation costs.

There is minimal impact on installation costs.

1. Consideration of operational costs (e.g., energy consumption).

Complying 802.15.6 devices incur in minimal energy consumption costs by design.

1. Other areas, as appropriate.

None.