P1920.1

Submitter Email: kamesh.namuduri@unt.edu
Type of Project: New IEEE Standard
PAR Request Date: 22-Jan-2016
PAR Approval Date: 03-Mar-2016
PAR Expiration Date: 31-Dec-2020
Status: PAR for a New IEEE Standard

1.1 Project Number: P1920.1
1.2 Type of Document: Standard
1.3 Life Cycle: Trial Use

2.1 Title: Aerial Communications and Networking Standards

3.1 Working Group: Aerial Network Communications (COM/SDB/AerialNetworks)
Contact Information for Working Group Chair
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   None

3.2 Sponsoring Society and Committee: IEEE Communications Society/Standards Development Board (COM/SDB)
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4.1 Type of Ballot: Individual
4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 05/2017
4.3 Projected Completion Date for Submittal to RevCom: 02/2018

5.1 Approximate number of people expected to be actively involved in the development of this project: 12
5.2 Scope: This standard defines air-to-air communications for self-organized ad hoc aerial networks. The communications and networking standards are independent of the type of network (Wireless or Cellular or other) and are applicable to manned and unmanned, small and large, and civil and commercial aircraft systems.

5.3 Is the completion of this standard dependent upon the completion of another standard: No
5.4 Purpose: This standard enhances the situational awareness of aircraft to communicate in an ad hoc aerial network.

5.5 Need for the Project: As unmanned aircraft systems (UAS) are being integrated into the National Airspace (NAS) around the world, there is a need for enhanced situational awareness of manned and unmanned aircraft systems. As of now, there are no standards available for air-to-air communications and aerial networking. However, stakeholders agree on the need and benefits of aerial networks. The need for self-organized aerial networks in increasing the situational awareness of aircraft systems is also discussed in a working paper titled "Use of Self-organizing Airborne Networks to Monitor Commercial Aircraft Globally" presented in a recent meeting of the International Civil Aviation Organization (http://www.icao.int/Meetings/GTM/Documents/WP.10.Russian.Use%20of%20self%20organizing%20airborne%20networks.Revised.pdf).

5.6 Stakeholders for the Standard: International Civil Aviation Organization (ICAO), National Civil Aviation Authorities (such as the Federal Aviation Authority of USA), Airlines Electronic Engineering Committee (AEEC), National Communications Commissions (such as the Federal Communications Commission of USA), Aircraft Manufacturing Companies, and Commercial Airlines
6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: No
6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

7.1 Are there other standards or projects with a similar scope?: No
7.2 Joint Development
   Is it the intent to develop this document jointly with another organization?: No

8.1 Additional Explanatory Notes (Item Number and Explanation):