

Recent History of the Wireless Body Area Network (WBAN)

Examination of documented events leading to the development of WBAN show that it was done knowing that the intra-body band would have to be electrical. Lightning is a high power example of static electricity discharge and a single event can do lethal harm. Repetitive low power applications can also do harm. How is the nonconsensual use of this on us, not a crime against humanity? How can this be required as part of the Digital ID? Most recently, the intra-body band of WBAN may be used by autonomous drones that are exempt from the consequences of how they use it.

Introduction of Concept: The recent development of WBAN technology started around 1995 and there are September 1995 records of works by Thomas Guthrie Zimmerman as a student at the Massachusetts Institute of Technology (MIT) <https://dspace.mit.edu/handle/1721.1/29101>. Even in this early publication, he asserted that the intra-body band would have to be “electrostatic”. This went on to publications with the Institute of Electronic and Electrical Engineers (IEEE) <https://ieeexplore.ieee.org/document/5387211/authors#authors>.

Biosensor Development: Biosensor technology records go back as far as 1906 <https://www.sciencedirect.com/science/article/abs/pii/B9780323884648000105>. More recent publications go back to the 1950's and have grown to vast numbers of publications for various types of biosensors.

Nanotechnology Development: The National Nanotechnology Initiative was created in 2000 by President Clinton, before he left office <https://www.nano.gov/timeline>.

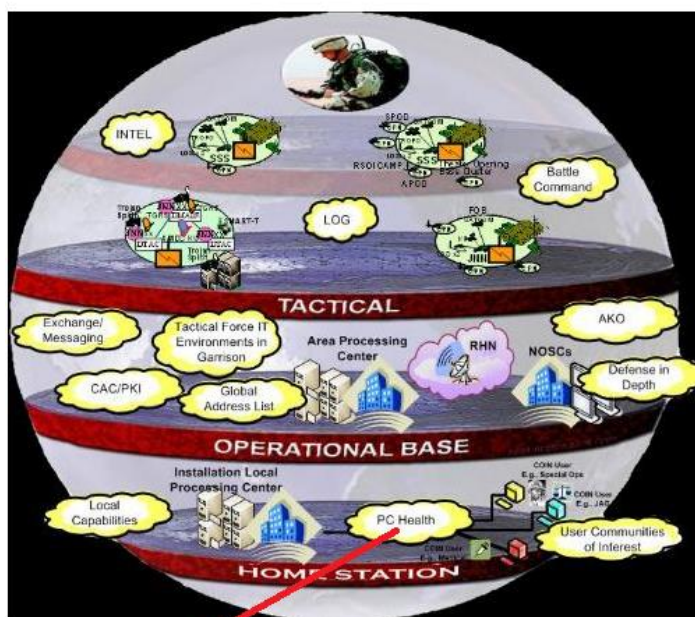
Global Information Grid (GIG) Development: The GIG supports Network Centric Warfare. The specifications for the GIG were published by the Department of Defense on September 22, 1999, and the assistant secretary of defense officially mandated it to be carried out on September 19, 2002 https://en.wikipedia.org/wiki/Global_Information_Grid. The GIG encompasses WBAN and the Medical Body Area Networks (MBANs).

IEEE Standards: IEEE Standard 802.15.4 for Wireless Personal Area Networks (WPAN) was first published in 2003 <https://standards.ieee.org/ieee/802.15.4/3388/>. IEEE Standard 802.15.5 for WPAN appears to have been first published in 2009. IEEE Standard 802.15.6 for WBAN was first published in 2012 <https://standards.ieee.org/ieee/802.15.6/5364/>.

Federal Communication Commission Rules: The Federal Communications Commission established spectrum for the use of the Human Body for telecommunications as Medical Body Area Networks (MBANs) in 2012 <https://www.fcc.gov/document/fcc-dedicating-spectrum-enabling-medical-body-area-networks>. They then developed rules https://transition.fcc.gov/bureaus/oet/ea/presentations/files/apr13/6d-MBANs_April_2013-SKJ.pdf that were finalized in 2014 https://transition.fcc.gov/bureaus/oet/ea/presentations/files/oct14/11-MBANs_Final-October_2014-SKJ.pdf.

Department of Defense (DoD) Directives: The DoD first issued Directive 3000.09 for Autonomy in Weapons Systems in November 2012 and most recently updated it in January 2023 <https://www.defense.gov/News/Releases/Release/Article/3278076/dod-announces-update-to-dod-directive-300009-autonomy-in-weapon-systems/> with an exemption for autonomous weapons https://cyberdefensereview.army.mil/Portals/6/Documents/2023_Summer/Erickson_CDR%20V8N2%20Summer%202023.pdf

Global Information Grid



Your Body - Wireless Body Area Networks (WBAN)