**Summary of International Standards**
**Specific Absorption Rate**
**Stuart Nicol Director Product Development APREL Laboratories.**

First internationally recognized and accepted standard is the IEEE 1528 "Recommended Practice for Determining the Peak Spatial Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communication Devices: Experimental Techniques."

This document was then harmonized with the,

IEC-62209 "Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures"
Part 1: "Procedure to determine the Specific Absorption Rate (SAR) for hand-held devices used in close proximity of the ear (frequency range of 300 MHz to 3 GHz)"

Due to harmonization both documents read the same and follow the exact protocols for SAR measurements. These are internationally recognized by most regulatory bodies as per the chart on page 2 of this document. Both of these standards primarily focused on SAR attributable to head exposure from RF fields and it was accepted that methodologies and protocols would need to be developed to cover body SAR.

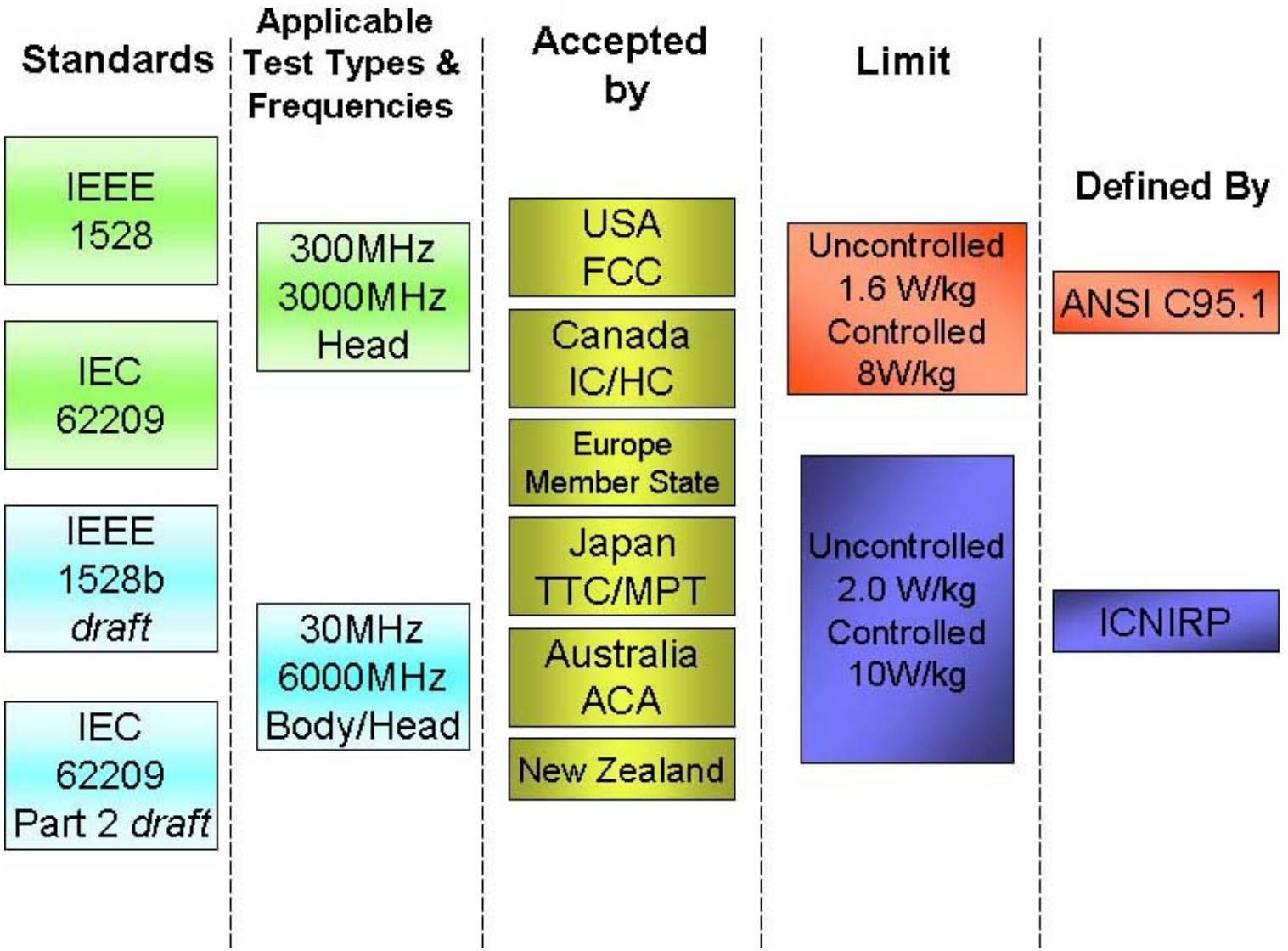
Because the two harmonized documents do not provide adequate coverage for emerging technologies it was agreed that both IEEE and IEC would harmonize in the development of an extension to the standard(s) to cover a larger frequency range with more measurement methodologies and guidance being included primarily for "body" SAR. The frequency range has now been extended from 30MHz up to 6000MHz.

These new documents are,

IEEE 1528b *DRAFT* "Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human head from Wireless Communications Devices: Measurement Techniques"

IEC-62209 "Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures"
Part 2 *Draft*: "Procedure to determine the Specific Absorption Rate (SAR) for hand-held devices used in close proximity of the ear (frequency range of 30 MHz to 6 GHz)"

At this time there is no concrete date as to when both the IEEE and IEC standards will be released which allow for the frequency extensions.

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