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May 18, 2009

Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re: ET Docket No. 08-59, GE Healthcare Petition for Rulemaking, to Allocate
the 2360-2400 MHz Band on a Secondary Basis for Operation of Wireless Medical
Body Area Network Service (MBANS)
Ex Parte Presentation

Dear Ms. Dortch:

On May 15, 2009, Paul Coss, Director of Marketing for Emergency Healthcare, and
Delroy Smith, Development Manager, R&D Patient Monitoring (by teleconference), both of
Philips Healthcare Systems, and the undersigned discussed issues in the above-referenced docket
with Julius Knapp, Chief of the Commission's Office of Engineering and Technology (OET) and
Ira Keltz, Ron Repasi, Bruce Romano, Geraldine Matisse and Mark Settle, all of OET. A
summary of the issues discussed was distributed and is attached.

This letter and attachment have been filed electronically in the above docket.

Respectfully,



David R. Siddall
Counsel to Philips Healthcare Systems

Attachment

cc: Julius Knapp
Ira Keltz
Ron Repasi
Bruce Romano
Geraldine Matisse
Mark Settle

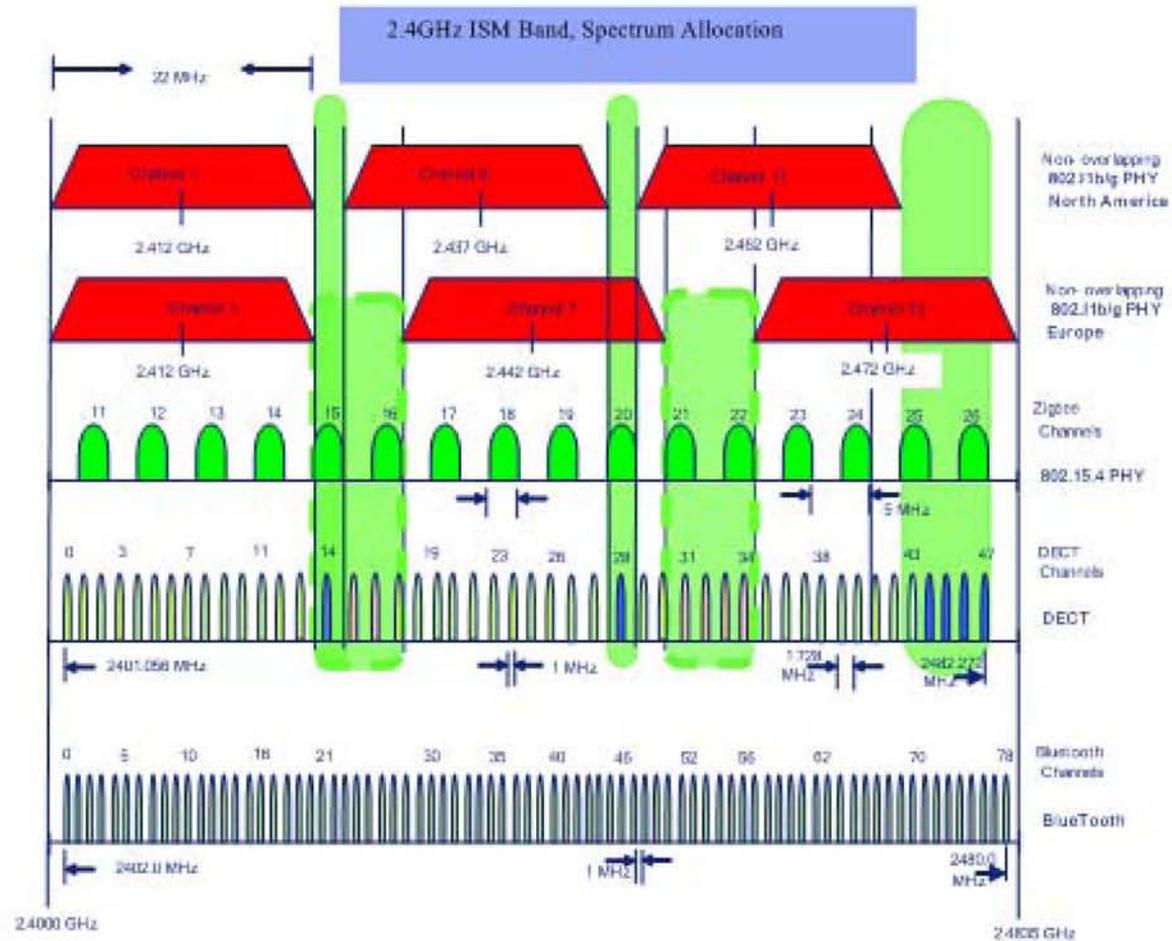
PHILIPS

sense and simplicity

MBANS Discussion

Paul Coss
Philips Healthcare
May 2009

- 2.4 GHz band already is saturated by higher-powered devices (typically 100 mW) used in hospitals, and will not support lower-powered (proposed 1 mW) MBANS devices



Monitored Beds in US

- 2008 statistics
 - 5,747 acute care hospitals in US
 - Acute care beds are short term care beds
 - 879,105 staffed beds
 - 56% are monitored
 - 492,298 monitored beds
 - Wireless body sensors would simplify patient care, and increase the number of parameters that can be monitored
 - 44% are unmonitored
 - 386,806 unmonitored beds
 - Rapid Response Team Use
 - 1500+ implemented
 - Reduction in unplanned ICU admissions
 - Reduction in codes

Survival Rates for cardiac arrests

- Out of hospital survival rates 6% to 20%
 - Not all studies use the same measures
- In hospital survival rates
 - Witnessed arrests – up to 48%
 - Non-witnessed arrests- as low as 1%
- There is a need to be able to monitor all patients in order to capture significant deterioration in condition
 - Heart Rate, Respiration, SpO2, NIBP, Temp, EtCO2,
- There is a need to do this inexpensively, easily and at a low cost
- The ideal “code” never happens
- The earlier intervention happens the more likely the outcome will be positive and the lower the cost

Rapid Response Teams

- In 2004, the **IHI** launched an ambitious plan to improve patient safety called the “100,000 Lives Campaign.” The idea was simple: implement six quality initiatives and save 100,000 lives in the bargain. Since then, the IHI has upgraded the effort to the “5 Million Lives Campaign,” adding another six initiatives the organization believes will save five million lives by December of 2008.
- A key part of the original plan—and an integral part of the new one as well—calls for hospitals to establish “rapid response teams” aimed at catching patients who are rapidly failing outside of the ICU before their condition worsens to the point where an ICU admission is necessary—or to get those patients to definitive care in the ICU as soon as possible to ensure an optimal outcome.

Joint Commission Patient Safety Goals

- Improve recognition and response to changes in a patient's condition
- From their website- Easy to Read Version
 - Watch patients closely for changes in their health and respond quickly if they need help
 - Create ways to get help from specially trained staff when a patient's health appears to get worse

Rapid Response Team Results

Measure	Before	After	Relative Risk Reduction
No. of cardiac arrests	63	22	65% (p=.001)
Deaths from cardiac arrests	37	16	56% (p=.005)
Number of days in ICU post arrest	163	33	80% (p=.001)
Number of days in hospital post arrest	1363	159	88% (p=.001)
Inpatient Deaths	302	222	25% (p=.004)

* Table adapted from Bellomo R, Goldsmith D, Uchino S, et al. [A prospective before-and-after trial of a medical emergency team](#). Medical Journal of Australia. 2003;179(6):283-287.

Identifying the patients

- Ideally the clinician and the patient's family identify a failing patient and the intervention occurs and the patient is rescued
- Unfortunately all too often this is not the case and the patient's condition worsens until they arrest or require urgent and drastic intervention
- The goal is a group of sensors that can easily, simply and non-invasively monitor key parameters and capture a patient's change in condition in time to "rescue the patient"
- MBANS
 - Medical Body Area Network Sensors
 - Appropriate radio technology to allow sensors to reliably and inexpensively relay their information so that clinicians can respond in a timely fashion
 - Software can be added to identify trends and alert care providers earlier than possible through observation

MBANS Initiative

Implementation of this technology will further the goals of the Obama administration to lowering healthcare costs and improving outcomes