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July 27, 2010

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

Re: ET Docket No. 08-59, Amendment of the Commission's Rules to Provide Spectrum
for the Operation of Medical Body Area Networks
WP Docket No. 07-100, Amendment of Part 90 of the Commission's Rules
Ex Parte Presentation

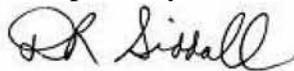
Dear Ms. Dortch:

On July 26, 2010, Dale Wiggins, Chief Technology Officer and Delroy Smith, Engineering Project Leader, Philips Healthcare, and the undersigned met in separate meetings with Louis Peraertz, Acting Legal Advisor for Wireless, International, and Public Safety, Office of Commissioner Clyburn; and Charles Mathias, Legal Advisor for Wireless, International and Public Safety, Office of Commissioner Baker.

In the context of discussing Mr. Wiggins' presentation at the Joint FCC/FDA Meeting on Wireless Medical Technology, the benefits of utilizing cognitive technologies to make better use of the radio spectrum resource were discussed and reference made to Philips' filings and positions in the above-listed proceedings. A copy of Mr. Wiggins' presentation is attached.

This letter is being filed electronically in the above dockets and copied by email to the named FCC participants consistent with the Commission's Rules.

Respectfully,



David R. Siddall
Counsel to Philips Healthcare

Attachment

PHILIPS

sense and simplicity

Current state of wireless health and lessons learned:

Advancing patient care with innovation
in wireless connectivity

26 July 2010 Dale Wiggins, Chief Technology Officer

Key products and services of Philips Healthcare

Providing comprehensive support

Imaging Systems



Interventional X-Ray
Diagnostic X-Ray
CT
MR
SPECT/CT
PET/CT
Ultrasound
Women's health

Home Healthcare Solutions



Sleep disordered breathing
Respiratory care
Home monitoring

Patient Care and Clinical Informatics



Patient monitoring
Clinical informatics
Cardiac resuscitation
ECG solutions
Ventilation

Services



Site planning and project management
Ambient experience
Education
Performance services
Maintenance

Inside the Healthcare Facility

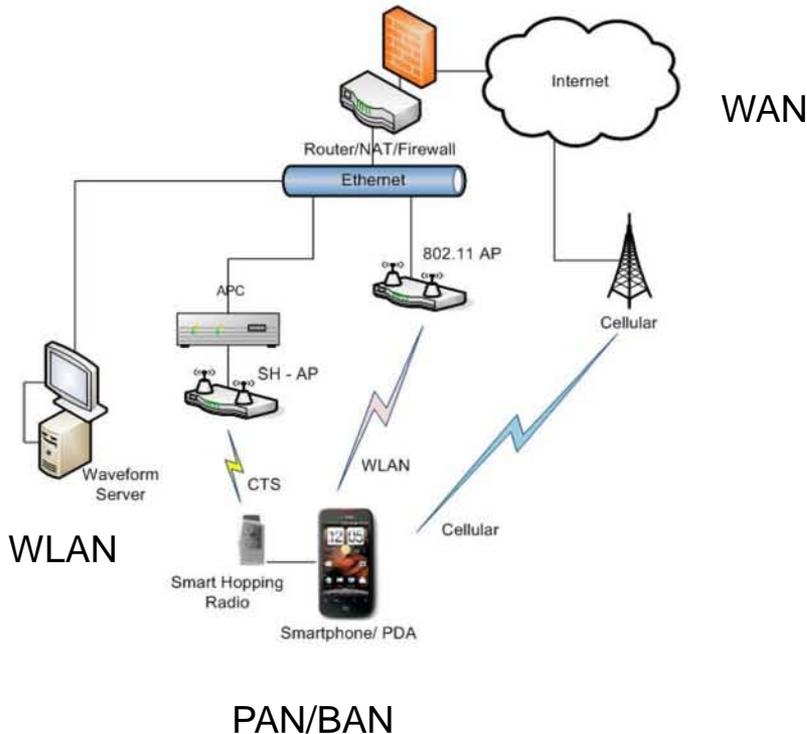
Ambulatory & Wireless Patient Monitoring: Why Wireless?



- Enables freedom of movement for patients, which speeds recovery and minimizes complications
- Provides immediate access to patient data for mobile Care givers
- Improves recognition and response to changes in a Patient's condition
- Enables immediate and seamless integration of patient data into EMR and Clinical Decision Support Systems
- Facilitates goal of monitoring every hospital patient seamlessly from ER to discharge and lowers cost of care

Extending Outside the Healthcare Facility

It's Complicated...



- Health and Well Being in the home
 - From exercise tracking to medical alerting services
- Monitoring in assisted living centers
 - From motion and temperature sensors to nurse call systems
 - Remote video consulting
- Smart phone medical applications over WAN/Wi-Fi links

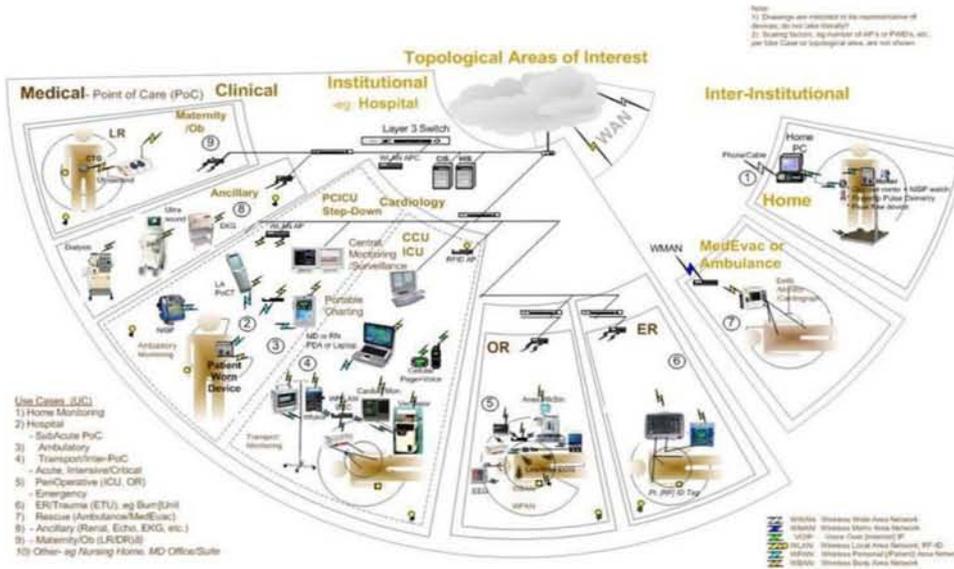


Wireless solutions are systemic in nature...

The wireless needs of healthcare are expanding

... Many types of devices to meet demand from variety of use models

IEEE p1073.0.1.1
Use Cases - Overview
31Aug04 Rev 3b



Variety of Use MODELS

- Primary monitoring, e.g. telemetry, and bedsides
- Secondary support monitoring, e.g. wireless bedsides to central station
- Intermittent monitoring, e.g. vital signs monitoring
- These models cannot be satisfied by one wireless solution
 - Primary protected spectrum
 - Secondary shared spectrum
 - Unlicensed ISM spectrum
 - Safety coexistence mechanisms

Multitude of DEVICES

- Telemetry & sensors need long battery life & lower data rate solutions
- Wireless bedside devices demand higher data rate solutions
- Application servers and databases

Conclusion...One size does not fit all

- Wireless use of medical devices is exploding
 - Hospital: Use of Wi-Fi in hospitals grew 60% last year*
 - Home: Interoperable personal healthcare solutions (continuaalliance.org)
 - Physician: Smart phones and tablet PC's
- Multiple wireless modalities of connectivity needed to meet multiple demands
 - Primary protected spectrum (WMTS)
 - Secondary shared spectrum (MBANS, WMTS proposals)
 - Unlicensed shared spectrum (Wi-Fi, smart hopping, etc.)
 - Licensed spectrum (WiMax, 3G, LTE)
- Challenges with today's technologies and approaches
 - 4G/LTE/WiMax must share spectrum with voice and data devices
 - Secondary use of idle spectrum, requested but not always granted
 - FCC Part 15 “must accept interference and capacity limitations”
 - Poorly defined shared authority for operation and safety of wireless medical devices

*<http://www.ama-assn.org/amednews/2010/07/12/bisb0712.htm>

Solutions...

Improve patient care and protect safety by encouraging innovation and providing sufficient spectrum

- FCC should allocate more spectrum to meet growing demand for wireless medical devices; doing so would improve patient care and provide seamless data into electronic health records (EHRs)
 - Allocate more spectrum for secondary use, including WMTS at 1.4 GHz and MBANS at 2.3 GHz
 - Settle ‘White Space’ reconsideration petitions to remove current uncertainty and promote investment
 - Rule on spectrum request for use by implanted devices
- Cognitive radio technologies dynamically adapts to the changing RF environment with spectrum sensing, analysis and decision making allows for safe and effective use of secondary spectrum

Solutions (cont.) ...

- FCC and FDA should draft and adopt joint memorandum of understanding concerning wireless devices to clarify FCC's jurisdiction over wireless medical spectrum matters and FDA's jurisdiction over wireless medical spectrum safety
- FDA should finalize and release draft wireless guidance for safety of wireless medical devices
- FDA and FCC should organize industry experts work-shops/groups and define support for applicable voluntary standards (IEC 80001-1)