



# ***China Wireless Personal Area Network (C-WPAN)***

***Update of 60GHz & UWB Task Group  
18 May 2010***

全国信息技术标准化技术委员会  
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## China Wireless Personal Area Networks

**Title:** [Update of China WPAN 60GHz & UWB Task Group]

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**Abstract:** [Overview and update of China WPAN 60GHz & UWB Task Group]

**Purpose:** [For discussion purpose between China WPAN and IEEE 802]



# Outline

- Update of China WPAN 60GHz Task Group
- Update of China WPAN UWB Task Group



# Overview of China WPAN 60GHz Task Group

- Objective
  - The 60GHz Task Group for China Wireless Personal Area Networks (C-WPANs) has defined a project for a PHY, MAC and PAL operating in China's unlicensed 60GHz spectrum
  
- Welcome contributions from international players



# International Standards for 60GHz

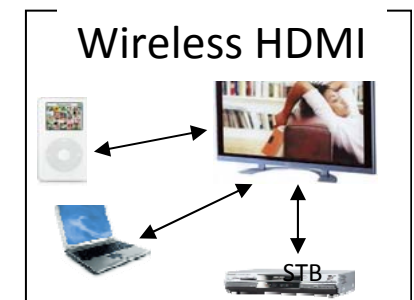
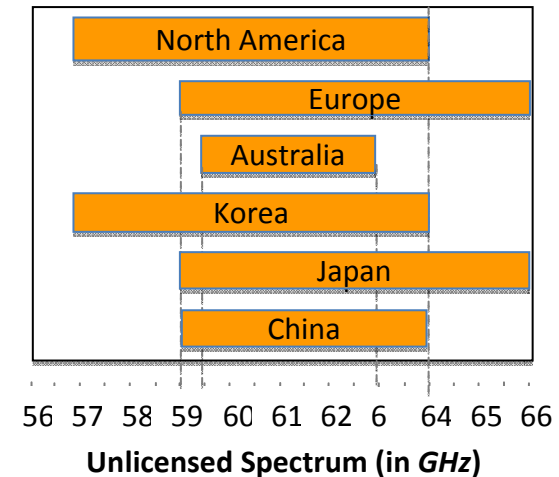
- ECMA – 387
  - Technical specification was published in December 2008
  
- IEEE 802.15.3c & WirelessHD®
  - The technical specification for WirelessHD was published in January 2008 – Silicon is available in the market (Sibeam is the only Silicon vendor)
  - The technical specification for IEEE 802.15.3c was published in September 2009, but no vendor has plan to implement it so far
  - WirelessHD is basically one mode of IEEE 802.15.3c (AV OFDM)
  
- IEEE 802.11ad (VHT60) & WiGig Alliance
  - In progress
  - The draft technical specification for PHY/MAC of WiGig Alliance has been submitted to IEEE 802.11ad in May 2010 as a complete proposal – attracted attentions from industries
  - The technical specification for IEEE 802.11ad to be released in 2012





# Some thoughts on China WPAN 60GHz Task Group

- Unlicensed 60GHz spectrum
  - China has approved spectrum from 59 GHz to 64 GHz
  - All different 60GHz standards have the same band plan, the approved spectrum in China fall into the second and third bands;
  - Special:
    - Bandwidth: TBD
    - Center Freq: TBD
    - Guard band space: TBD
- The primary focus of C-WPAN 60GHz Task Group is for Chinese market
  - Specific design will be considered to meet the special requirement from Chinese consumer companies
  - Primary focus will be home entertainment market, PC market and mobile market



Source: IEEE 802

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# Work Plan for CWPAN 60GHz Task Group

Date	Task
2009.06	Start of 60GHz Study Group
2010.03	60GHz Study Group converted to Task Group
2010.03	Work Plan for 60GHz Task Group
2010.06	Function Requirement Document and Call For Proposal
2010.09-2011.12	Proposal presentation and discussion
2012.03	First draft of technical specification for approval
2012.06-09	Expert Review and Comment resolution
2012.12	Final draft of technical specification and submission for final approval



# Member list for 60GHz Task Group

- Beijing University of Post Telecommunication (北京邮电大学)
- China Electronic Standard Institute (中国电子技术标准化研究所)
- China IWNCOMM Co., Ltd., (西电捷通)
- Fudan University (复旦大学)
- Haier (海尔集团)
- Hisilicon Technology Co. Ltd (Huawei Semiconductor) (海思半导体)
- Institute for Infocomm Research (新加坡资讯通信研究院)
- Institute for Microelectronic Chinese Academic Science (中国科学院微电子研究所)
- Lenovo (联想集团)
- Radio Monitor Center (无线电监测中心)
- RunXin Information Technology Ltd (广州润芯信息技术有限公司)
- South East University (东南大学)
- Tsinghua University (清华大学)
- Vinno Technologies Ltd (北京威讯紫晶有限公司)





## Next Step of 60GHz Task Group

- Define function requirement document and call for proposal – in June 2010
- Proposal presentation and discussion – from Sept 2010 – December 2011
- Welcome contributions from international players
- Liaison with international standardization body for 60GHz



# Overview of China WPAN UWB Task Group

- Objective
  - The UWB Task Group for China Wireless Personal Area Networks (C-WPANs) has defined a project for an enhancement to ISO 26907/26908 for a PHY and MAC operating in China's unlicensed UWB spectrum
- Main features
  - Dual Carrier Multi-band OFDM
    - Lead to lower implementation challenge;
  - Enhanced network throughput up to 2 Gbps;
  - Enhanced security protocol;
  - Efficient resource management;



# Status of UWB Task Group

- **Status** — final draft submitted for approval in March 2010
  - <Information Technology—Telecommunications and information exchange between systems—Wireless high rate ultra wideband MAC and PHY specification> - approval stage
  - <Information Technology - Telecommunications and information exchange between systems - Specific requirements Part XXX—MAC-PHY Interface for GB/T XXX> - approval stage
- **Schedule**

Date	Completed Tasks
2007.03	Start of task group
2007.09	Call for Proposal
2007.12 – 2009.06	Proposal Presentation and discussion
2009.09	First draft of UWB technical specification for approval
2010.02	Expert review and Comment resolution
2010.03	Final UWB technical specification and submission for final approval



# Member list for UWB Task Group

- ASTRI (HongKong) (香港应用科学技术研究院)
- Beihang University (北京航空航天大学)
- Beijing University of Post Telecommunication (北京邮电大学)
- China Electronic Standard Institute (中国电子技术标准化研究所)
- China IWNCOMM Co., Ltd., (西电捷通)
- Chongqing University of Post and Telecommunication (重庆邮电大学)
- Fudan University (复旦大学)
- Hisilicon Technology Co. Ltd (Huawei Semiconductor) (海思半导体)
- Institute for Automation Chinese Academic Science (中国科学院沈阳自动化研究所)
- Institute for Infocomm Research (新加坡资讯通信研究院)
- Institute for Microelectronic Chinese Academic Science (中国科学院微电子研究所)
- Institute of Microsystem and Information Technology in Chinese Academy of Science (中国科学院微系统所)
- Intel (英特尔北京)
- Lenovo (联想集团)
- Radio Monitor Center (无线电监测中心)
- South East University (东南大学)
- Tsinghua University (清华大学)
- Vinno Technologies Ltd (北京威讯紫晶有限公司)

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# Progress of UWB Task Group

- Details of meeting for UWB task group
  - Plenary meeting: 12 meeting since March 2007
  - Teleconference: 5 Teleconferences
  - Interim meeting: 3 meeting for comment resolution and final edition of the draft
  - Liaison with other international standard organization: communication with WiMedia
  
- Technical Proposals and Final Technical Specification
  - Technical Proposals: received more than 50 technical proposals for discussion
  - Comments: received more than 400 comments
  - Versions: there are more than 20 versions



## Next Step of UWB Task Group

- <Information Technology - Telecommunications and information exchange between systems - Specific requirements —Wireless high rate ultra wideband Test Specification> - **drafting stage**
  - To be completed in December 2010
- Low Power UWB technical specification is in progress
  - To be completed in December 2011





***THANK YOU!***

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