

TESTIMONY OF:

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RF COMMUNICATIONS DIVISION

HARRIS CORPORATION

BEFORE THE UNITED STATES HOUSE OF REPRESENTATIVES

COMMITTEE ON ENERGY AND COMMERCE

HEARING ON:

CREATING AN INTEROPERABLE PUBLIC SAFETY BROADBAND NETWORK

MAY 25, 2011

GOOD MORNING, MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE. FIRST, LET ME THANK THE COMMITTEE FOR INVITING ME TO TESTIFY ABOUT KEY STEPS THAT MUST BE ACHIEVED RAPIDLY TO DEVELOP AND DEPLOY A TRULY INTEROPERABLE PUBLIC SAFETY WIRELESS BROADBAND NETWORK (PSWBN).

LET ME BEGIN BY INTRODUCING YOU TO THE HARRIS CORPORATION. HARRIS IS AN INTERNATIONAL COMMUNICATIONS AND INFORMATION TECHNOLOGY COMPANY SERVING GOVERNMENT AND COMMERCIAL MARKETS IN MORE THAN 150 COUNTRIES. HEADQUARTERED IN MELBOURNE, FLORIDA, THE COMPANY HAS APPROXIMATELY \$6 BILLION OF ANNUAL REVENUE AND MORE THAN 16,000 EMPLOYEES — INCLUDING NEARLY 7,000 ENGINEERS AND SCIENTISTS. HARRIS IS A LEADING GLOBAL SUPPLIER OF SECURE RADIO COMMUNICATIONS PRODUCTS AND SYSTEMS, AND EMBEDDED HIGH-GRADE ENCRYPTION SOFTWARE, FOR THE MILITARY, GOVERNMENT, AND PUBLIC SAFETY. HARRIS IS A PIONEER IN THE DEVELOPMENT OF INTERNET PROTOCOL (IP) BASED NETWORKS FOR PRIVATE RADIO AND BROADBAND APPLICATIONS, AND SUPPLIES INDUSTRY-LEADING NARROWBAND, MULTIBAND, AND BROADBAND NETWORKS, SERVICES, AND DEVICES.

I SERVE AS THE CTO OF HARRIS CORPORATION'S RF COMMUNICATIONS DIVISION, AND I ALSO CHAIR THE FCC'S EMERGENCY RESPONSE INTEROPERABILITY CENTER (ERIC) PUBLIC SAFETY ADVISORY COMMITTEE

(PSAC) SECURITY AND AUTHENTICATION WORK GROUP. I HAVE SPENT MOST OF MY CAREER BRINGING ADVANCED TECHNOLOGIES TO PUBLIC SAFETY, HOMELAND SECURITY, NATIONAL DEFENSE, AND OTHER MISSION CRITICAL MARKETS. IN THESE ROLES, I HAVE LEARNED HOW LEVERAGING CONTINUAL TECHNOLOGY INNOVATION CAN HAVE A PROFOUND IMPACT ON OUR NATION'S ABILITY TO PROCURE AND DEPLOY STATE-OF-THE ART PRODUCTS AND SERVICES FOR THESE MISSION-CRITICAL MARKETS. I HAVE ALSO SEEN THAT A ROBUST SUPPLY CHAIN FOSTERED BY APPROPRIATE BUSINESS MODELS AND MULTI-SOURCE PROCUREMENT PRACTICES MUST BE IMPLEMENTED TO ENSURE THAT ALL LEVELS OF GOVERNMENT WILL PROCURE THESE CAPABILITIES IN A COST-EFFECTIVE MANNER.

TODAY, SMART PHONES, SUPPORTED BY A VAST ECO-SYSTEM OF APPLICATION PROVIDERS, HAVE UNLEASHED THE CAPABILITIES OF MODERN 3G AND 4G WIRELESS BROADBAND NETWORKS. THESE CAPABILITIES LITERALLY ARE REVOLUTIONIZING THE SOCIO-ECONOMIC STRUCTURE OF THE WORLD.

HOWEVER, OUR NATION'S FIRST RESPONDERS, CHARGED WITH PROTECTING LIVES AND PROPERTY, ARE NOT YET ABLE TO TAKE FULL ADVANTAGE OF THIS CAPABILITY. PUBLIC SAFETY FINALLY MUST BE ENABLED TO LEVERAGE BROADBAND TECHNOLOGY IN WAYS THAT WILL SIGNIFICANTLY ENHANCE THEIR ABILITY TO PERFORM THEIR MISSIONS. IT IS TIME FOR OUR NATION TO BUILD THIS HARDENED NATIONWIDE INTEROPERABLE WIRELESS BROADBAND NETWORK ON DEDICATED SPECTRUM IN THE 700 MHZ BAND. WE SUPPORT THE

REALLOCATION OF D BLOCK SPECTRUM TO PUBLIC SAFETY AND WE COMMEND CONGRESS' CLOSE EXAMINATION OF THIS CRITICAL ISSUE.

TWO KEY INGREDIENTS - POLICIES OPENING THE 700 MHZ BROADBAND SPECTRUM TO PUBLIC SAFETY AND THE AVAILABILITY OF BROADBAND TECHNOLOGY - ENABLE CONSTRUCTION OF A NATIONWIDE INTEROPERABLE PUBLIC SAFETY BROADBAND NETWORK. IT IS NOW TIME TO FINALIZE TWO IMPORTANT ELEMENTS: GOVERNANCE AND PROCUREMENT.

THE PSWBN, PROPERLY DEPLOYED, WILL SERVE FIRST RESPONDERS AND GOVERNMENT AGENCIES CHARGED WITH THE PUBLIC SAFETY MISSION, WHICH INVOLVES STATE, LOCAL, FEDERAL, AND TRIBAL ORGANIZATIONS.

ESTABLISHING A GOVERNANCE STRUCTURE TO ENSURE NATIONWIDE INTEROPERABILITY AMONG THESE ORGANIZATIONS IS ESSENTIAL. WHILE WE AS A NATION MUST PROVIDE NATIONWIDE INTEROPERABILITY, CARE MUST BE TAKEN TO ENSURE THAT THE OPERABILITY REQUIREMENTS UNIQUE TO INDIVIDUAL STATE, LOCAL, FEDERAL, AND TRIBAL ORGANIZATIONS ARE ALSO SATISFIED. FOR EXAMPLE, THE CITY OF LOS ANGELES, BY VIRTUE OF ITS SIZE, POPULATION, AND GEOGRAPHIC LOCATION HAS NEEDS THAT DIFFER FROM A SMALLER IN-LAND LOCATION SUCH AS BEND, OREGON. A KEY GOAL IN CREATING A RELEVANT GOVERNANCE STRUCTURE FOR ALL IS TO ENSURE THAT THESE STAKEHOLDERS HAVE SIGNIFICANT PARTICIPATION IN THE ESTABLISHMENT PROCESS AND OPERATION OF THE GOVERNANCE STRUCTURE.

THE ACTIVITIES OF THE FCC IN PAST AND ON-GOING RULE MAKINGS ARE TO BE APPLAUDED AND CAN SERVE AS A MODEL FOR GOVERNANCE IN MATTERS OUTSIDE THE JURISDICTIONAL AUTHORITY OF THE FCC. A GOVERNANCE ENTITY MUST OVERSEE ALL PHASES OF THE NETWORK LIFECYCLE; DESIGN, IMPLEMENTATION, OPERATIONS, AND MAINTENANCE. THE GOVERNANCE ENTITY MUST ENSURE IMPLEMENTATION OF A PROCUREMENT MODEL THAT ENSURES THE ACHIEVEMENT OF NATIONWIDE INTEROPERABILITY.

IN THIS REGARD, WE MUST FINALIZE A REGULATORY FRAMEWORK AND DETERMINE WHAT INTEROPERABILITY MEANS AS A THRESHOLD MATTER. CONSIDERABLE TIME AND EFFORT HAS BEEN SPENT DEFINING INTEROPERABILITY FROM TECHNICAL AND OPERATIONAL PERSPECTIVES. HERE WE WANT TO DISCUSS WHAT INTEROPERABILITY MEANS FROM THE PERSPECTIVE OF GOVERNANCE AND PROCUREMENT. INDEED, TECHNICAL AND OPERATIONAL CONSIDERATIONS ALONE WILL NOT YIELD THE DESIRED OUTCOME.

WE CAN DRAW FROM MANY EXAMPLES OF SUCCESS IN THE COMMERCIAL WORLD. AS CONSUMERS AND USERS OF COMMERCIAL TELECOMMUNICATION PRODUCTS AND SERVICES, WE UNDERSTAND THIS ISSUE. IT MEANS WE CAN PURCHASE THESE ITEMS IN AN OPEN AND COMPETITIVE ENVIRONMENT – OUR EXPECTATIONS DRIVE THE NEED NOT ONLY FOR INTEROPERABILITY, BUT EVEN MORE, FOR INTERCHANGEABILITY. WE CHOOSE THE DEVICE THAT SUITS OUR

NEEDS, ON THE NETWORK THAT PROVIDES THE SERVICE WE REQUIRE, IN A HIGHLY COMPETITIVE AND INNOVATIVE OPEN MARKET. MARKET DEMANDS DRIVE COMMERCIAL SERVICE PROVIDERS TO DELIVER INTEROPERABILITY. IN TURN, COMMERCIAL SERVICE PROVIDERS DRIVE INTERCHANGEABILITY THROUGHOUT THEIR SUPPLY CHAIN TO ENSURE UNINTERRUPTED AVAILABILITY OF COMPETITIVE AND INNOVATIVE PRODUCTS. THEIR BUSINESS SUCCESS REQUIRES HAVING MULTIPLE SOURCES WITHIN THEIR SUPPLY CHAIN. THIS IS THE MODEL THAT SHOULD GUIDE THE GOVERNANCE STRUCTURE AND PROCUREMENT PROCESS FOR THE PSWBN. IN THIS WAY, INTEROPERABILITY BECOMES THE OUTCOME, NOT JUST A MANDATE.

INTEROPERABILITY THEREFORE SHOULD BE THE CAPABILITY FOR PUBLIC SAFETY ORGANIZATIONS TO PROCURE THE BUILDING BLOCKS OF THE NETWORK AND DEVICES THAT ARE INTERCHANGEABLE AND CAN BE USED TOGETHER REGARDLESS OF BRAND OR NETWORK LOCATION. THIS DEFINITION WILL ALLOW EVERY FIRST RESPONDER TO COMMUNICATE ACROSS THE NATION AND WILL DRIVE SUPPLIERS TO THIS INDUSTRY TO PRODUCE HIGHLY INNOVATIVE AND COST-EFFECTIVE PRODUCTS THAT PUBLIC SAFETY AGENCIES CAN PROCURE AND DEPLOY WITH CONFIDENCE – THAT WILL “PLUG AND PLAY”. CREATING THIS MARKET DYNAMIC WILL REQUIRE FUNDING MECHANISMS THAT DRIVE THE PROCUREMENT PROCESS TO ENFORCE THIS PROCUREMENT MODEL.

FINALLY, IT IS VITAL TO ENSURE ECONOMIC VIABILITY FOR THE PSWBN. THE NEED FOR FEDERAL FUNDS TO LAUNCH THIS INITIATIVE IS WELL UNDERSTOOD. ALSO UNDERSTOOD ARE THE CHALLENGES IN DOING SO UNDER CURRENT ECONOMIC CONDITIONS. HERE WE WANT TO BRIEFLY DISCUSS HOW THOSE CHALLENGES CAN BE ALLEVIATED.

- (1) THE BENEFIT OF LEVERAGING TECHNOLOGY SUPPLIED BY A VAST ECOSYSTEM OF MANUFACTURERS WILL GENERATE LONG-TERM SAVINGS ON AN ON-GOING BASIS. THIS DIFFERS MARKEDLY FROM THE RATHER LIMITED SUPPLY BASE AVAILABLE TO PUBLIC SAFETY TODAY FOR CONSTRUCTING ITS MISSION CRITICAL NETWORKS.
- (2) FULLY REALIZING THOSE SAVINGS WILL REQUIRE MANDATING COMPETITIVE BUSINESS PRACTICES AS DISCUSSED EARLIER. PROCUREMENT OF NETWORK ELEMENTS, WHERE ECONOMIES OF SCALE CAN BE REALIZED, WILL ENABLE IMPLEMENTATION OF BEST COMMERCIAL PRACTICES THROUGH MULTI-SOURCING.
- (3) BUILDING THIS NEXT GENERATION PUBLIC SAFETY NETWORK ON 4G TECHNOLOGIES WILL ENABLE CONVERGENCE – A SINGLE NETWORK WITH DEVICES THAT CAN SERVE THE NEEDS FOR VOICE COMMUNICATION AND A MYRIAD OF MISSION-CRITICAL APPLICATIONS. THE COST SAVINGS FROM CONVERGENCE WILL BE LARGE AND WILL FURTHER ENSURE LONG-TERM ECONOMIC VIABILITY OF THE PSWBN.

IN CONCLUSION, THE PUBLIC SAFETY BROADBAND NETWORK WILL BRING UNPRECEDENTED CAPABILITIES TO OUR NATION'S FIRST RESPONDERS AND GOVERNMENT AGENCIES THAT SUPPORT THE PUBLIC SAFETY MISSION. BUILT UPON A COMPETITIVE MARKET AND THE LATEST BROADBAND STANDARDS, AND SUPPORTED BY A LARGE EMERGING ECO-SYSTEM, THE PSWBN WILL ENABLE NATIONWIDE INTEROPERABILITY TO BECOME A REALITY.

ONCE AGAIN, MR. CHAIRMAN, I APPLAUD THE COMMITTEE'S LEADERSHIP ON THESE ISSUES AND GREATLY APPRECIATE THE OPPORTUNITY TO TESTIFY TODAY. I LOOK FORWARD TO FURTHER WORKING WITH YOU TO MAKE THE INTEROPERABLE PSWBN A REALITY.

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