

Document Number: RP-ENG-009

Company Policy**Hard Copies Uncontrolled - Verify Effective Date Prior to Use****Legacy Doc. Number:** 179-RP**Effective Date:** October 24, 2016**Function:** Engineering**Title:** Spectrum Management**Authorized By:** Vice President –
Engineering, Technology
and Mission Assurance

1. Status

- 1.1 Supersedes Raytheon policy RP-ENG-009 (179-RP), Spectrum Management dated October 9, 2014.
- 1.2 Policy revised as follows:
 - 1.2.1 As of February 2016 Company policy document numbers are updated to the new convention / codification; also, guidelines are renamed to policy instructions.
 - 1.2.2 Incorporates editorial clarifications.
 - 1.2.3 Added Sections 4.7 and 4.8 to clarify policies on application, maintenance, modification, termination and ownership of spectrum licenses and authorizations.
 - 1.2.4 Added Section 4.9 to address login information to FCC, NTIA and other similar systems.
 - 1.2.5 Added Section 4.10 to address marketing of radio frequency devices at trade shows.
 - 1.2.6 Updated Section 5.3.2 to address Electromagnetic Energy Exposure Control Plans (EEECP) and approvals to radiate.
 - 1.2.7 Updated Section 5.5.7 to clarify how required regulatory or technical changes will be implemented.
 - 1.2.8 Added Section 5.6.9 to address the business spectrum managers' responsibility to manage unlicensed and licensed operations inside Anechoic Chambers and Faraday Cages.

2. Purpose

- 2.1 Assures compliance with international and domestic statutory and regulatory requirements to obtain Radio Frequency (RF) allocations, authorizations, assignments, licenses, spectrum certifications and equipment authorizations for Company and customer programs, projects, and infrastructure.
- 2.2 Establishes organization, oversight and management structure for Company Spectrum Management activities.
- 2.3 Establishes funding responsibility for Spectrum Management efforts.
- 2.4 Provides implementation guidelines for execution of Spectrum Management efforts in business development, technology planning, and program execution.

3. Applicability

- 3.1 This policy applies to all organizations and personnel in Raytheon Company.

4. Policy

- 4.1 Spectrum Management principles are to be applied and enforced within Raytheon policy [RP-ENG-001 \(48-RP\)](#), Use of Integrated Product Development System (IPDS) Planning and Execution.
- 4.2 Requests for Proposal / Quotation (RFP / RFQ) and resulting quotations / proposals and subcontracts, and quotes must provide for Spectrum Management requirements and activities.
- 4.3 Intellectual Property associated with Spectrum Management activities will be controlled and protected in accordance with Raytheon policy [RP-OGC-016 \(271-RP\)](#), Intellectual Property.
- 4.4 Spectrum Management is a key consideration in future business and technology planning, as well as Company reorganizations.
- 4.5 All radios used to conduct Company infrastructure business (e.g., security, fire prevention, emergency services, EHSS, facilities, engineering support) will operate in a licensed radio service (e.g., Private Land Mobile Radio Service (47 C.F.R. Part 90)) or through a properly licensed commercial service provider. The use of unlicensed radio service (e.g., Multi-Use Radio Service (MURS), Family Radio Service (FRS)) is prohibited.
- 4.6 Radio Frequency (RF) operations in Anechoic Chambers and Faraday Cages will be conducted such that there is sufficient isolation of RF energy as to not cause harmful interference to other spectrum users.
- 4.7 Business Spectrum Managers will have exclusive authority to apply for, maintain, modify, or terminate any registrations (including Federal Registration Numbers or FRNs), licenses, authorizations, certifications, assignments or other approvals from the Federal Communications Commission (FCC), National Telecommunications and Information Administration (NTIA), or other U.S. or international spectrum regulatory authority (collectively “Licenses”) required by the Company. Business Spectrum Managers will determine the appropriate types of Licenses to obtain in consultation with the Office of General Counsel as needed. Business Spectrum Managers will minimize the number of FRNs and Licenses to the extent feasible.
- 4.8 The Company will hold all required Licenses for spectrum-utilizing equipment (i) that is owned by the Company (including during testing phases) or (ii) for which the Company is legally responsible pursuant to a written contract. Upon sale of equipment to a third party, the Spectrum Manager may assign its Licenses to the third party or request the third party to obtain its own License. In addition to holding all required Licenses, the Company will confirm that all spectrum-utilizing equipment it operates, if required, will have satisfied the applicable equipment authorization procedure, as documented by the manufacturer or vendor or pursuant to the Company’s own oversight, if necessary, before the Company operates it.
- 4.9 All login information to FCC, NTIA, or similar systems will be considered “Passwords” as defined in Company policy [RP-IT-003 \(183-RP\)](#), Electronic Communications, Internet and Intranet Acceptable Use, which classifies Passwords as “Raytheon Proprietary.” Passwords will not be shared with third parties except upon approval by the Business Spectrum Manager and the Office of General Counsel and in accordance with Company policy [RP-GSS-005 \(213-RP\)](#), Protection of Raytheon and Third Party Information.
- 4.10 Marketing and operation of radio frequency devices at trade shows prior to FCC equipment authorization, where required, must follow Title 47 Code of Federal Regulations Sections 2.803 and 2.805 and Company policy [RP-BD-001 \(14-RP\)](#), Company-Wide Participation at Trade Shows and Customer Events.

5. Responsibilities

- 5.1 The Corporate Vice President – Engineering, Technology and Mission Assurance (ET&MA), or delegate, has oversight of the Spectrum Management discipline.

- 5.2 The Corporate Vice President, General Counsel and Secretary, or delegate, will have primary responsibility for oversight and representation of Company-wide Spectrum Management legal matters.
- 5.3 Business Presidents will:
- 5.3.1 Establish and maintain appropriate Spectrum Management structures, policies, practices, procedures, training, spectrum management awareness communication programs, and metrics to implement this policy in their facilities and programs;
 - 5.3.2 Ensure that operators and users of radio frequency equipment in their Business comply with applicable international, federal, state, local, and Company policies, rules, and regulations, as well as terms, conditions, restrictions and / or stipulations of applicable frequency authorizations, assignments, and licenses;
- Note: *The possession of an approved Electromagnetic Energy Exposure Control Plan (EEECP) does not constitute an approval to radiate. A Federal Communications Commission (FCC) license, Federal Frequency Assignment or other written government authorization is also required. See Raytheon policy [RP-OGC-EHS-002](#), Electromagnetic Energy (Nonionizing) Exposure Control, and [Standard 05.22](#), Electromagnetic Energy Exposure Control, for further guidance.*
- 5.3.3 Hold Program Managers, Engineering, Operations, and other Functional staff accountable for compliance; and
 - 5.3.4 Select a Business Spectrum Manager who will serve as a representative to the SMC.
- 5.4 The Electrical Systems Council (ESC) will:
- 5.4.1 Provide oversight and guidance to the SMC;
 - 5.4.2 Select a SMC chairperson;
 - 5.4.3 Submit SMC Annual Report to ET&MA; and
 - 5.4.4 Provide advice and recommendations to Corporate that represent the consensus of the ESC and SMC.
- 5.5 The Spectrum Management Council (SMC) will be comprised of Spectrum Managers from each Business with a Corporate Legal and an ET&MA staff member as advisors. The SMC will:
- 5.5.1 Establish, and maintain a charter and program of work;
 - 5.5.2 Maintain this policy in support of ET&MA;
 - 5.5.3 Develop and maintain Company-wide Spectrum Management procedures and assets for IPDS;
 - 5.5.4 Coordinate Company-wide use of spectrum and provide guidance and support for Spectrum Management activities to the Businesses;
 - 5.5.5 Periodically review Spectrum Management activities, practices, audit results, and records;
 - 5.5.6 Coordinate Company Spectrum Management representation to industry and government forums;

- 5.5.7 Monitor domestic and international technical standard, legal, and regulatory changes that affect Company interests; recommend courses of action for approval by ET&MA; and assist ET&MA in the implementation of approved courses of action;
- 5.5.8 Work closely with the Corporate Industrial Hygiene (IH) Roundtable on RF safety issues;
- 5.5.9 Ensure consistency, compatibility, and harmonization of Company spectrum policy and advocacy positions. Resolve conflicting spectrum policy positions within the Company;
- 5.5.10 Prepare, maintain and deploy a standard training program for spectrum compliance matters across the Company;
- 5.5.11 Provide an annual report of activities to the ESC, including Business audit summaries; and
- 5.5.12 Participate in company merger, acquisition and divestiture activities as necessary to ensure spectrum regulatory matters are addressed sufficiently.
- 5.6 The Business Spectrum Managers (BSM) responsibilities include, but are not limited to:
 - 5.6.1 Managing certification and licensing activities within their Business;
 - 5.6.2 Supporting programs and facilities with technical and regulatory analysis;
 - 5.6.3 Managing and retaining records of frequency allocations, assignments, licenses, Radio Frequency Interference (RFI) complaints, reviews, audits, and assessments in accordance with Raytheon policy [RP-OGC-004 \(24-RP\)](#) Records Management;
 - 5.6.4 Conducting periodic frequency assignment and allocation analyses, reviews, audits, and assessments to verify compliance, notifying Business management, and implementing corrective action for any discrepancies identified;
 - 5.6.5 Investigating and initiating action to prevent or correct interference or noncompliance with applicable rules, regulations, and restrictions of the authorizing agency;
 - 5.6.6 Coordinating and approving spectrum planning for all radio or other wireless systems and equipment used to conduct or support Company business;
 - 5.6.7 Reviewing changes and modifications to previously certified spectrum-dependent systems and equipment to determine re-certification requirements under statute, regulation or company policy;
 - 5.6.8 Providing guidance and assistance regarding Spectrum Management and this policy to spectrum users; and
 - 5.6.9 Managing unlicensed and licensed operations inside Anechoic Chambers and Faraday Cages in accordance with Section 4.6 of this policy, and the requirement to ensure that RF Operations in Anechoic Chambers and Faraday Cages do not cause harmful interference to other spectrum users per the regulations and orders of the FCC.

6. Related Information

- 6.1 Policies

Document Number	Policy Title
RP-OGC-004 (24-RP)	Records Management
RP-OGC-EHS-002 (38-RP)	Electromagnetic Energy (Nonionizing) Exposure Control
RP-ENG-001 (48-RP)	Use of Integrated Product Development System (IPDS) Planning and Execution
RP-OGC-016 (271-RP)	Intellectual Property
RP-IT-003 (183-RP)	Electronic Communications, Internet and Intranet Acceptable Use
RP-GSS-005 (213-RP)	Protection of Raytheon and Third Party Information.
RP-BD-001 (14-RP)	Company-Wide Participation at Trade Shows and Customer Events

- 6.2 [Standard 05.22](#) Electromagnetic Energy Exposure Control
- 6.3 [International Telecommunications Union Radio Communication Sector](#)
- 6.4 [National Telecommunication and Information Administration Office of Spectrum Management](#)
- 6.5 [Federal Communications Commission](#)
- 6.6 Contact your Raytheon Business Spectrum Management Council member via email for questions, more information, local procedures, or interpretations at - mailto:spectrum_management@team.raytheon.com?subject=Spectrum_Management_Information.

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