R2v3

Overview of Changes

PERRY JOHNSON REGISTRARS PJR

Austin Matthews
EHS Program Manager

- Welcome from PJR Headquarters:

  755 W. Big Beaver Rd, Suite 1340

  Troy, MI 48084

  Phone: 1-800-800-7910

- Introduction of speaker

Agenda:

- About PJR
- Benefits of certification
- Transition timeline details
- Revision information (key changes and other related revisions)
- Certification Process
- Questions

About PJR

- ***PJR is one of the leading Registrars in the world***

- A few countries where PJR has certified companies to various standards:
  - Australia
  - Brazil
  - European Union
  - Japan
  - India
  - Malaysia
  - Mexico
  - Singapore
  - Thailand
  - United States

https://cdn.pixabay.com/photo/2013/07/12/12/54/world-map-146505_960_720.png

About PJR

PJR is accredited to grant certification for:

- ISO 9001
- ISO 14001
- AS 9100, 9110 & 9120
- ISO/TS 16949
- **Responsible Recycling (R2)**
- RIOS
- ISO 13485
- SQF
- TL 9000
- ISO 45001
- ISO 27001
- ISO 22000
- HAACP Compliance
- FSSC 22000
- e-Stewards®

PJR has achieved accreditation to R2v3!

Benefits of certification

- Commitment to responsible reuse and recycling of electronics and components
- Improving the organization's EH&S performance
- Framework for meeting customer and/or regulatory requirements
- Management commitment and employee engagement
- Providing a competitive advantage and/or improved public image
- Potential financial benefit(s)
- Achieving strategic objectives and/or stakeholder requirements
- Integration with other business management systems

http://3.bp.blogspot.com/-DmgUSy4c5-Y/UaHxJ5qeKnI/AAAAAAAADNE/XhSUJ6o4tPc/s1600/computer.jpg

Transition timeline for R2v3

- R2v3 Standard was published on 7/1/2020. The final version can be downloaded at https://serir2.org/. The REC has been published and can be accessed here as well. The R2v3 Transition Plan has been released via SERI COP Advisory 22, found at https://sustainableelectronics.org/sites/default/files/Advisory%2022%20-%20Transition%20Plan%20to%20R2v3_0.pdf, as of 10/5/2020.
- A revised version of the Code of Practices has been released, and can be found at https://serir2.org/document-library/.
- SERI is maintaining their website Knowledge Base in lieu of a formal Guidance Document.
- Time for CB auditors to transition to the revised standard has been built into the transition process, so that audits may be conducted to R2v3 in a timely manner.

https://lovingmorethanone.files.wordpress.com/2011/01/change.jpg

Transition timeline for R2v3 (ctd.)

- R2v3 Transition audits can be conducted up to 50% virtually, per SERI Advisory 22, with no additional criteria. Advisory 24 allows fully-virtual Transition audits, to be conducted by trained auditors, with additional requirements applied to the audit and non-integrated audit time for R2v3 (if applicable).
- The transition timeline staggers Transition audits in order to give facilities time to plan, as well as to avoid overloading CBs with a high volume of facilities attempting to transition at once.
- PJR and all other Certification Bodies (CBs) are required to obtain accreditation to R2v3 before accredited certificates can be issued.
- PJR published a Transition Plan to its website. As with many previous standard transitions, PJR included an internal deadline by which Transition audits are recommended to occur, in decrease the likelihood of a lapse in certification: **3/30/2023**. This accounts for certification decision-making activities conducted after the audit concludes.

Transition timeline for R2v3 (ctd.)

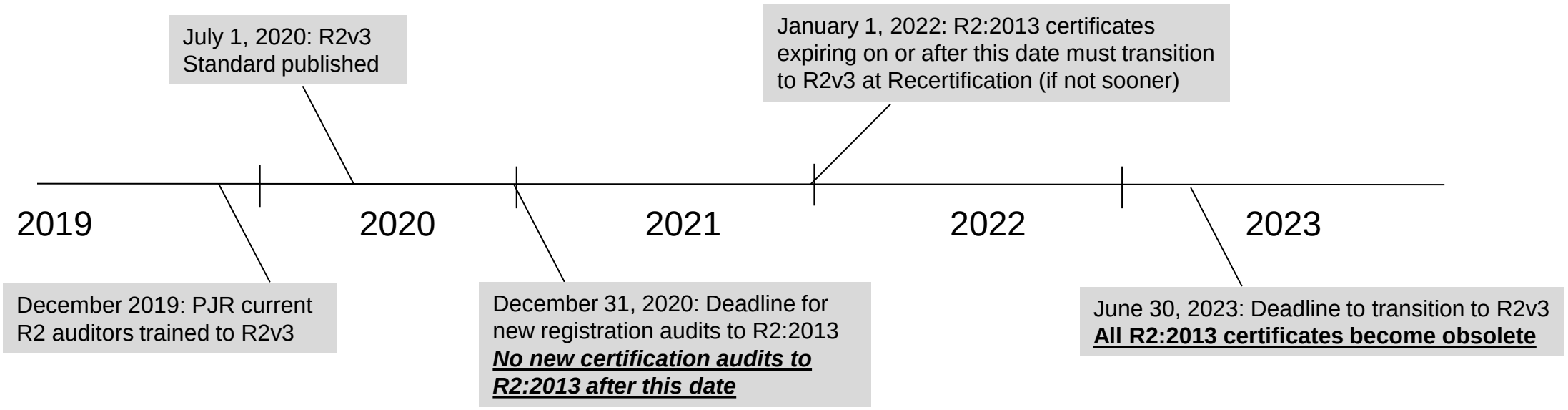
- Facilities pursing initial certification to R2:2013 had until 12/31/2020 to complete their registration (Stage 2) audit. Since 1/1/2021, CBs are no longer permitted to conduct registration audits to R2:2013, and all new registration audits (Stage 1 and Stage 2) must be to R2v3.

- Facilities with existing R2:2013 certifications expiring on or before 12/31/2021 will be able to recertify to R2:2013 ***if***:
  - their R2:2013 recertification audit is completed before 1/1/2022,
  - All NCRs (both minor and major) from the recertification audit are closed/verified before certificate issuance, ***and***
  - the new R2:2013 certificate expires by 6/30/2023.

- Clients may transition to R2v3 during any audit within their cycle, however the Transition Audit time will be equivalent to R2v3 Stage 1 and 2 audit time to cover all Core Requirements and all applicable Process Requirements, **and** will restart the 3 year certification cycle for that particular standard.

- Final deadline for transition: 6/30/2023 ***(All R2:2013 certificates will expire.)***

Transition timeline for R2v3



Why was R2:2013 revised?

- To account for SERI's lessons learned, R2 Technical Advisory Committee (TAC) feedback, and public comments (including customers, auditors, CBs, etc.)
- To reflect the diversity of the industry
- To reinforce effective implementation of Standard requirements and/or ensure the intent is achieved
- To clarify language and any sources of confusion
- In general, standards are often revised to ensure continued market relevance, compatibility with other standards and/or management systems, to ensure ease of use and implementation, provide inclusive coverage of or application to a wide range of sectors, flexibility for application to organizations of different sizes, and to be unambiguous (for ease of understanding, translation, etc.)

Key changes in R2v3

No changes have been made to the original intent of the R2 Standard.

- Division of the Standard into “Core Requirements” and “Process Requirements”
  - The “Process Requirements” are found within Appendices, and all Process Requirements applicable to the R2 Facility’s scope must be included in the R2 Certification
- Greater emphasis on reuse, with an increase in prescriptivism regarding data security, testing, and repair processes
- Clarification of requirements which were not understood or ineffectively implemented
- Changes to the order, grouping and number of provisions (which are now found under the “Core Requirements” referenced above)
- The creation of an “R2 Equipment Categorization” (REC) document
- Requiring a certified QMS for certain Process Requirements

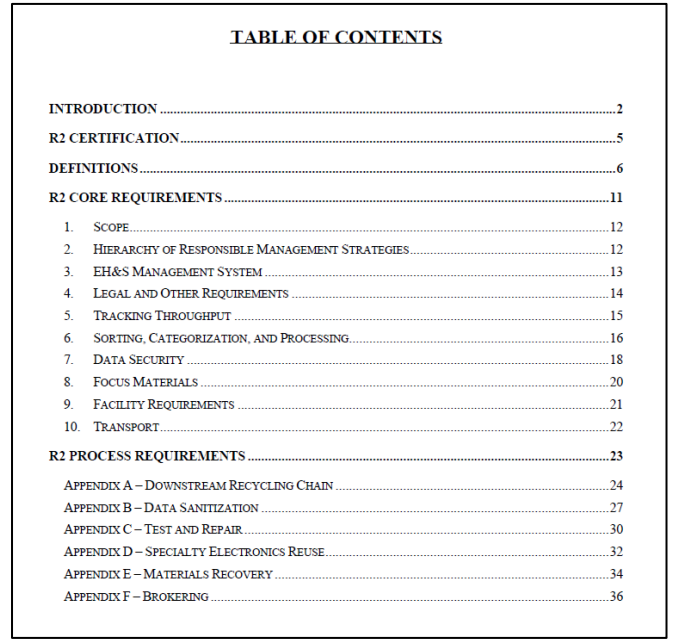


TABLE OF CONTENTS

https://serir2.org

Standard changes by section:
INTRODUCTION

- No significant changes to the comprehensiveness, legality of trade of electronics, conformity or applicability

- "R2 Equipment Categorization" (REC) document
  - A copy can be downloaded here: https://serir2.org/.
  - The REC is to be used in conjunction with the Standard, and provides an outline of requirements for evaluation of electronic equipment and components (as well as categorizing the equipment/components based on their condition). The categories identified in the REC either need to be incorporated into the R2 Facility's process(es) and procedure(s) or be utilized via a cross-reference between these requirements and the R2 Facility's existing process categories.

Standard changes by section:
R2 CERTIFICATION

- No significant changes to the auditability of related R2 documents, the application of the R2 Code of Practices, etc., or general auditing requirements
  - A revised Code of Practices has been released.

- R2 certificates will list the Process Requirements that apply to each R2 Facility, along with any applicable Allowances (as defined by the R2 Code of Practices)

Standard changes by section:
DEFINITIONS

- New or changed definitions
  - Brokering (new)
  - Control (new)
  - Data (new)
  - Downstream Vendors (revised regarding Suppliers)
  - Evaluate (new)
  - Focus Materials (revised Description specifics and clarification of when tracking requirements stop)
  - General Information (new)
  - Key Functions (removed)
  - OEM (new)
  - R2 Controlled Streams (new)
  - R2 Facility (new)
  - Recycling (revised)
  - Recycling Chain (revised)
  - Refurbishing (new)
  - Reuse (new)
  - Sanitization (new)
  - Scope (revised)
  - Supplier (new)
  - Test and Repair (new)
  - Unrestricted Streams (new)

Standard changes by section:
Section 1 R2 CORE REQUIREMENTS

Standard changes by section:
Core Requirement 1—Scope

- R2 audits and certification shall include all:
  - "used electronic equipment, components, and materials managed,"
  - "processes and activities undertaken at the facility,"
  - "external processes, activities and locations under the control of the R2 Facility and associated with its certification" (if any),
  - Core Requirements (Section 1), and
  - any applicable Process Requirements (Section 2), given the R2 Facility's scope of operations
- Services outside of the facility but still related to a facility's operations may include off-site collection, mobile data destruction, services performed at a customer's site, etc.

Standard changes by section:
Core Requirement 1—Scope

- R2 certificates will need to reflect:
  - The scope of operations,
  - All applicable R2 Process Requirements,
  - Any applicable R2 Code of Practices Allowances (if any), and
  - “All legal names and legal entities associated with the certifiable activities operating at or in conjunction with the R2 Facility”
- R2 Facilities will be required to publicly communicate a current (and ongoing) list of all other locations that are:
  - not certified to R2,
  - “owned and/or operated by the R2 Facility,” and
  - “used to manage used or end-of-life electronic equipment, components or materials.”

Standard changes by section:
Core Requirement 1—Scope

- Cannot have been identified by SERI within 24 months of certification in a list of those organizations found to have marketed R2 certification deceptively or fraudulently, participated in illegal acts or activities, etc.

Standard changes by section:
Core Requirement 2—Hierarchy of Responsible Management Strategies

- No significant changes, as the intent of the Standard is unchanged
- R2 Facilities are to evaluate/sort equipment, components and materials per their policy and Core Requirement 6, and direct items for processing (as practical) for reuse (first choice), materials recovery (second choice), and finally disposal (last choice).

Standard changes by section:
Core Requirement 3—EH&S Management System

- Recognizes ISO 14001 and ISO 45001, or RIOS
- Requires a process to periodically evaluate exposures to hazardous substances
  - Examples include: mercury, lead, beryllium, cadmium, PCBs, phosphor compounds, flame retardants, silica dust, and hexavalent chromium
  - Industrial hygiene monitoring program requirements for high risk activities such as materials recovery
- Specifies minimum accommodations and requirements on behalf of workers, such as:
  - provide sanitary facilities, and
  - controls to prevent the consumption of food/drinks in areas which are not kept contaminant-free

Standard changes by section:
Core Requirement 4—Legal and Other Requirements

- Requirements to document applicable legal requirements for export, transit and/or import to demonstrate legality of international shipments applies to:
  - Equipment, components and materials transferred by the R2 Facility directly, and
  - "R2 Controlled Streams, including shipments made by downstream vendors, to final disposition or the first R2 Facility"
- Requires prompt corrective action(s) to address any compliance violations
- R2 Facilities are required to notify their CB if they receive a notice of violation (requiring action and/or follow-up with the issuing agency) ***within 30 days***

Standard changes by section:
Core Requirement 4—Legal and Other Requirements

- Child and forced labor is prohibited
  - Reference the International Labor Organization (ILO)'s definitions of these terms
  - Essentially: circumstances where workers cannot leave at will or terminate employment if they wish
- Prison labor is prohibited unless workers are compensated (beyond room and board) and are taught skills to be used to obtain employment upon release
- Specifies non-discrimination policy requirements and criteria

Standard changes by section:
Core Requirement 5—Tracking Throughput

- Requires a summary report be maintained for all transactions for all inbound and outbound materials controlled by the R2 Facility (whether “through physical possession, title, or other contractual agreement”)
  - Note: Summary report has not been defined but will likely require all inbound and outbound quantities within a defined reporting period
- Specifies required record contents (such as accurate dates, detailed descriptions, etc.) for all inbound and outbound materials
- Total inventory levels must be maintained below the limits required to maintain conformity with applicable legal requirements, the R2 Facility’s closure plan, etc.

Standard changes by section:
Core Requirement 5—Tracking Throughput

- Cannot store “R2 Controlled Streams”/materials with a negative value for more than 1 year. Exceptions:
  - Components which have been evaluated and inventoried per Appendix C—Test and Repair, or
  - Where permissible, items are stored beyond the timeframe due to a lack of a response from the relevant “governing authority” for export where the permit/authorization application(s) was submitted within the appropriate timeframe

Standard changes by section:
Core Requirement 6—Sorting, Categorization, and Processing

- This section is significantly restructured
- Refers to the R2 Equipment Categorization (REC) document
- Requires a documented process for the evaluation, sorting, and categorization of “controlled and processed” materials, with prescribed subjects to be included:
  - conformance to the hierarchy (Core Requirement 2)
  - application of the REC categories (or maintain a correlating list of existing categories to those in the REC) for functionality, condition, and data sanitization
  - Identification of data storage devices
  - Instructions for determination of the reuse potential for equipment and components (based on condition, functionality, and market value)
  - any re-evaluation steps when changing the R2 Controlled Stream category through processing

Standard changes by section:
Core Requirement 6—Sorting, Categorization, and Processing

- All materials are to be managed and further processed as an R2 Controlled Stream per R2 requirements, unless:
  - it was processed and categorized by another R2-certified facility (in which case the REC category provided can be utilized),
  - it was processed and categorized by another facility not certified to R2 and the R2-certified Facility has a documented/implemented process for evaluating, sampling, and verifying the categorizations provided,
  - it can be proven through "appropriate test and/or verification records to be sanitized and functional," or
  - it is no longer an R2 Controlled Stream (per the definition of the term).
- All equipment/components are to be evaluated for data, with their corresponding status identified per the REC.
- Data evaluations are to include any "connected user accounts and services."

Standard changes by section:
Core Requirement 6—Sorting, Categorization, and Processing

- Control any equipment/components that may contain data per Core Requirement 7
- Equipment or components not permitted to be reused, sold or donated per “written and binding commercial agreements” are still subject to the requirements of Core Requirement 7 and Appendix E—Materials Recovery.
- Identification requirements for equipment/components evaluated and found to be capable of reuse, as well as references to the applicable Appendix requirements
- Specific requirements for electronics/components evaluated and categorized as an Unrestricted Stream (per the REC), such as handling them separately from R2 Controlled Streams, justification for classifying them accordingly, tracking records maintained (including any reason for return), etc.

Standard changes by section:
Core Requirement 6—Sorting, Categorization, and Processing

- Specific requirements for transferring functioning products (equipment/components that demonstrated functionality per the REC), such as:
  - identifying the REC (or equivalent) categories for Functioning Product, Data Sanitization Status, and Cosmetic Condition or a detailed description of the cosmetic condition to the buyer (which at a minimum is to include the physical appearance, any damage, and any missing parts),
  - unique identification for sale and shipping records,
  - verification of shipment legality (with documentation in a language understandable to the recycler) prior to each international shipment,
  - packaging per Core Requirement 10, and
  - providing the return policy to prospective buyers (prior to sale) per Appendix C—Test and Repair.
- Physical labels are not necessarily required (may also use bar codes or other means of identification/tracking)
- No significant changes to Collectible and Specialty Electronics requirements

Standard changes by section:
Core Requirement 7—Data Security

- Requires a Data Sanitization Plan be maintained, with procedures to address subjects prescribed within the Standard
  - Examples include but are not limited to: security controls (including “declarations of secured areas dedicated to data sanitization with access limited to authorized individuals”), types of data storage devices accepted, types of data to be sanitized, general information that does not require sanitization, applicable legal and other requirements and relevant policies/procedures to ensure conformance, records to be maintained to demonstrate the effectiveness of sanitization and verification, etc.
- Requirements for a written data security policy, including assigning a competent Data Protection Representative
- Risk of theft and unauthorized access should be considered within the R2 Facility’s security program

Standard changes by section:
Core Requirement 7—Data Security

- Requires levels of security permissions for controlled access (employees, visitors, contract workers, etc.) relevant to the equipment received, nature of data managed, legal/other requirements, etc., to be authorized by the Data Protection Representative
- Written acknowledgements are to be maintained for those granted security authorization, addressing their individual responsibility to prevent the release of data, report theft or data breaches, etc.
- Requires an incident response procedure for the investigation of potential or actual breaches of data and/or security, as well as to ensure the notification of regulators, suppliers, interested parties, etc. as relevant
- Requires a defined process to demonstrate the destruction process(es) are 100% effective

Standard changes by section:
Core Requirement 7—Data Security

- Devices may be shipped or transferred for data destruction to a DSV per a written contract if verified according to Appendix A—Downstream Recycling Chain, if the sanitization/destruction is not being conducted by the R2 Facility
- Requires annual (at a minimum) “internal data security and sanitization audits” to validate the data sanitization processes, to be performed by a “competent and independent auditor”
- Requires a process for providing information to suppliers upon request, including:
  - changed DSV(s) responsible for processing data-bearing equipment/components from the supplier, and
  - security breaches

Standard changes by section:
Core Requirement 8—Focus Materials

- Requirements to demonstrate the Recycling Chain's expertise, capacity, planned methods and capabilities needed to process FMs
- Requires a downstream recycling chain flowchart when not the final point of processing (per Appendix A—Downstream Recycling Chain requirements, and to include international movements through final disposition or the first R2-certified tier)
- Alkaline batteries not containing mercury would be managed under Core Requirement 2—Hierarchy of Responsible Management Strategies, along with print cartridges.
- Even lead-free circuit boards are considered Focus Materials

Standard changes by section:
Core Requirement 9—Facility Requirements

- Indoor processing is required, except in instances where outdoor operations have been assessed for risk and release potentials controlled.
- Indoor storage and labeling requirements for R2 Controlled Streams, including indoor storage of all items for reuse (unless intended for outdoor use)
- Appropriateness of insurance coverage given the risks, size, and scope of operations
  - including changes in operations, changes in processing volumes, etc.
- Closure Plan is to include the use of “appropriate commercial businesses to manage” any electronics (etc.) under their control.

Standard changes by section:
Core Requirement 9—Facility Requirements

- Exceptions for the requirement to hold a financial instrument(s) for closure costs in the event of abandonment:
  - If the total closure costs are less than $10,000 US dollars, and
  - the size of all buildings owned/leased/used by the R2 Facility is less than 1,000 m^2, and
  - the R2 Facility never accepts equipment/materials containing mercury, CRT glass, lithium primary batteries, or polychlorinated bi-phenyls

Standard changes by section:
Core Requirement 10—Transport

- Package for transportation securely per Core Requirement 7 and in compliance with Core Requirement 4 (as applicable)
- If transporting data-containing equipment/components:
  - implement defined security measures,
  - track shipments (as appropriate given the sensitivity of the data and any supplier requirements),
  - enforce contracts with the transporter(s) requiring the same, and
  - utilize further security and packaging controls, such as obscuring the contents of the packages and averting access during transport.
- Requires the accuracy of codes, descriptions, and declarations in compliance with any applicable regulatory requirements for shipping documents and labels for transport

Standard changes by section:
Section 2 R2 PROCESS REQUIREMENTS

- Appendix A—Downstream Recycling Chain
  - Outlines FM Plan and due diligence requirements, including the verification of import/export legality for international shipments
  - Import/export compliance evidence must be in a language understood by the recycler and the auditor
  - Requires the R2 Facility to "track and demonstrate the complete downstream recycling chain of all R2 Controlled Streams to final disposition" or register the managed portion of the downstream recycling chain with SERI
  - Requires transparent communication regarding the Recycling Chain to suppliers
    - Submission to suppliers of recycling chain DSVs for that supplier's R2 Controlled Streams is also required upon request and upon changes in DSVs (prior to shipment), adhering to confidentiality agreements/requirements (if any).

Standard changes by section:
Section 2 R2 PROCESS REQUIREMENTS

- For an R2v3-certified DSV, verification of a valid R2 certificate will satisfy due diligence requirements
  - This includes ensuring the certificate is active/valid, confirming the scope of certification, inclusion of Process Requirements (as applicable), etc.
- For a non-R2v3 DSV (including R2:2013 certified DSVs), there are no significant changes to due diligence requirements beyond updating the verbiage to reference the applicable sections and/or Appendices in the revised Standard and/or the REC, except:
  - additional due diligence requirements are detailed (as well as in Appendix A 8(d)) for instances where a DSV is to perform data sanitization on the R2 Facility's behalf.

Standard changes by section:
Section 2 R2 PROCESS REQUIREMENTS

- Appendix B—Data Sanitization
  - Lists additions to be made to the Data Sanitization requirements of Core Requirement 7
  - Traceability requirements for each data storage device
  - Training and competency requirements
  - Prescribed security controls (and requires testing/maintenance of said controls)
  - Includes a Physical Destruction Methods table
  - Requires video recordings of physical destruction, and the retention of those recordings for a minimum of 60 days
  - Specifies data sanitization software requirements and maintenance, as well as criteria for a 5% (at a minimum) sample size to be verified un-recoverable by a competent/independent party
  - Requires prompt corrective action and appropriate handling of nonconforming product where sampling identifies issues
  - The Data Protection Representative is to approve the devices for release, subsequent to the required verifications.

Standard changes by section:
Section 2 R2 PROCESS REQUIREMENTS

- Appendix C—Test and Repair
  - R2 Facilities certifying to this Process Requirement are required to maintain certification to a quality management system (such as ISO 9001, RIOS, etc.)
  - Requires a written “R2 Reuse Plan,” with prescribed criteria to be included, such as documented instructions, competency requirements, safety checks and investigation plans (specified procedures within the Standard), functionality test plans, effectiveness verification plans, return policy, etc.
  - Must process materials within 1 year of receipt
    - Tested, repaired and/or refurbished or components are to be evaluated and inventoried as repair parts
  - Test result records are to be maintained for all functions for each uniquely identified item

Standard changes by section:
Section 2 R2 PROCESS REQUIREMENTS

- Appendix D—Specialty Electronics Reuse
  - R2 Facilities certifying to Appendix D—Specialty Electronics Reuse Process Requirements must also be certified for Appendix C—Test and Repair (and have a QMS)
  - Details criteria and verifications required in lieu of testing (if the R2 Facility lacks the technical capability), including:
    - verifications from the prior user that the unit has no known defects,
    - visually inspecting to ensure no physical damage or missing parts are evident,
    - verifying unique identifier information is accurate,
    - data sanitization per Appendix B—Data Sanitization (when applicable),
    - etc.

Standard changes by section:
Section 2 R2 PROCESS REQUIREMENTS

- Specialty electronics which fail these verifications are to have the reusable parts harvested per Appendix D, and the remainder processed as an R2 Controlled Stream per Core Requirement 6.
- Specialty electronics which pass these verifications are to be categorized as Verified Specialty Electronics per the REC, and meet specified tracking, packaging and labeling criteria within the Appendix.
- Verified Specialty Electronics for reuse may be stored indefinitely, provided they continue to have a positive resale value/reuse market.
- Sale of Verified Specialty Electronics is to be limited to a customer's request for a specific part number/unique identifier. (This should be corroborated on the sales receipt/record of sale.)
- Must demonstrate that the customer accepts the terms in Appendix D 4(c) (lack of testing, etc.) and will only sell directly to an end-user (providing evidence of such upon request, and with a free return policy)

Standard changes by section:
Section 2 R2 PROCESS REQUIREMENTS

- Appendix E—Materials Recovery
  - Additional EHS requirements for R2 Facilities performing “destructive dismantling” (dismantling not limited to parts harvesting for reuse purposes) and materials recovery-related activities, as applicable, such as:
    - Hazard and risk assessments performed and documented on a regular basis by a trained individual, with minimum criteria specified within the Appendix,
    - Maintenance of appropriate controls for dismantling (example: battery removal),
    - Appropriate “pollution liability insurance, guaranteed reserves, or government guarantee to cover potential environmental incidents” (per Core Requirement 9), and
    - Evaluation of the materials recovery process(es) output stream(s) per the REC and Core Requirement 6

Standard changes by section:
Section 2 R2 PROCESS REQUIREMENTS

- Appendix F—Brokering
  - Applies to the sourcing and control of equipment/components/materials delivery directly to a DSV and ensuring all R2 requirements applicable to the R2 Controlled Streams are met
  - R2 Facilities certifying to this Process Requirement are required to maintain certification to a quality management system (such as ISO 9001 or RIOS)
  - DSVs are to be included and managed per Appendix A—Downstream Recycling Chain
  - The brokering R2 Facility is responsible for:
    - providing evidence of conforming to Core Requirement 4,
    - utilizing the REC and managing the transport of the R2 Controlled Streams throughout the recycling chain,
    - both data security and physical security of equipment/components/materials throughout transport per Core Requirement 10,
    - Core Requirement 5 tracking throughput conformance, and
    - providing the seller and/or transporter the Core Requirement 10 packaging requirements prior to shipment.
  - Core Requirements 3 (EHSMS) and 9 (insurance and closure costs financial instrument) are satisfied/not required if the R2 Controlled Streams never pass through the broker's facility.

R2 Equipment Categorization (REC) document

- “The framework for evaluating electronic equipment, components, and materials, and categorizing their R2 status throughout each step of the R2 process”
- Categories for cosmetic condition, functional condition, and data sanitization status to be used for Functional Products, Collectible, and Specialty Electronics post-processing
- Assigned statuses are to be accepted by other R2 Facilities
- Preferably the R2 Facility will utilize these exact categories, but it would also be acceptable to cross-reference an existing categorization system (if equivalent) with those in the REC
- Not all categories will apply to all R2 Facilities; only relevant categories are expected to be used
- Categories do not replace descriptions required for contracts, regulatory compliance, etc.

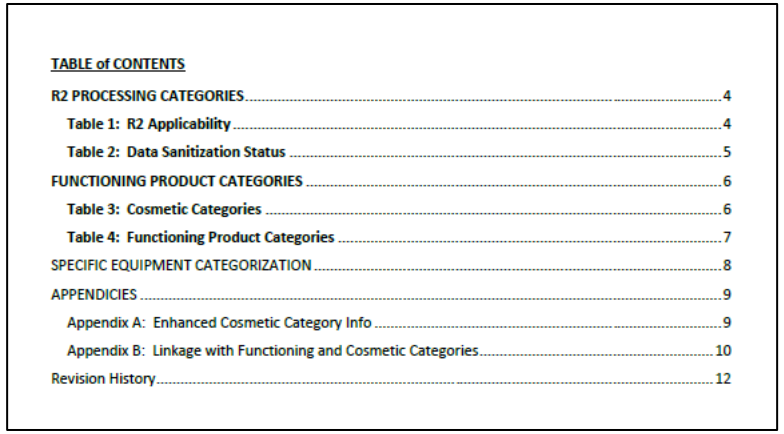


TABLE of CONTENTS

R2 Equipment Categorization (REC) document

- R2 Processing Categories
  - Applicable to all equipment/component/material streams
  - Materials are received in an “unknown state until sorted, evaluated and further processed.”
  - To be controlled per R2 Standard requirements until the R2 Facility has confirmed they are not an R2 Controlled Stream (per the definition of the term and the R2 Applicability table)
  - Table 1: R2 Applicability
    - Planned returns include: warranty returns, recalls, returns to the individual owner, failed equipment, errant shipments, shipment damage, and nonconforming equipment (all of which are defined within the REC)

R2 Applicability

R2 CONTROLLED STREAMS *R2 evaluation and processing required*	
Unevaluated equipment, components & materials	Core Requirement 6
Unsanitized devices/media	Core Requirement 7
Equipment/components for test & repair	Appendix A, C, or D
FM containing equipment/components	Appendix A, E, or F
Focus materials	Appendix A, E, or F

UNRESTRICTED STREAMS *No further R2 processing or DSV verification*	
New equipment/components in unopened, original OEM packaging	Not R2 applicable
Non-electronic equipment	Core Requirement 2
Non-focus materials	Core Requirement 2
Planned return equipment/components*	Non-R2 applicable return

R2 Equipment Categorization (REC) document

- Table 2: Data Sanitization Status

Data Sanitization Status	
PRE-SANITIZATION *Requires Data Evaluation and/or Sanitization*	**NON-DATA** *Sanitized or free of data storage media*
Not Evaluated – Presence of data unknown	Non-data device
Contains Data – Sanitization required	Evaluated as not containing data
	Sanitized through physical destruction of data or device
	Sanitized with software

- After equipment has been sanitized, tested, and its functionality confirmed, it moves to the Functioning Product categories found in Table 4

R2 Equipment Categorization (REC) document

- Functioning Product Categories
  - Applicable to tested and confirmed Functioning Products, and Collectible/Specialty Electronics
  - Table 3: Cosmetic Categories
    - Utilized for identifying both physical appearance and cosmetic condition

Category	Cosmetic Description
C0	Not categorized
C1	Damaged (For materials recovery)
C2	Used Poor – Heavy use and age - Cosmetic blemishes are significant, such as multiple heavy dents, may require repair - Damages to latches, hinges, keyboards, etc. are prevalent - Critical parts are missing
C3	Used Fair (Moderate use and age) - Cosmetic blemishes are consistent with wear, including multiple dents, discoloration, and light to heavy scratches - Damage to latches, hinges, keyboards, etc. - Some parts, panels, bezels, or covers may be missing
C4	Used Good - Cosmetic blemishes include scratches and/or other surface imperfections from consistent use, but equipment is in good condition overall - Minor wear of labeling may be visible - Small dents and small areas of discoloration may be present from the removal of tags - No damage to latches or hinges, nor any missing parts, panels, bezels, or covers
C5	Used Very Good - Cosmetic blemishes include minor scratches and/or other surface imperfections from consistent use, but equipment is in good condition - Minor wear of labeling may be visible - Minor dents and areas of discoloration from the removal of tags - No missing parts
C6	Used Excellent - Overall excellent cosmetic condition - May have light scratches or other minor blemishes from normal wear - Minor cosmetic blemishes have no impact on the system's overall functionality or performance - Fully cleaned with all non-original labels removed - No missing parts
C7	Certified Pre-Owned (Seller or Manufacturer Refurbished) - Used equipment that has been fully restored to like-new condition with warranty - Fully cleaned and cosmetically repaired with no blemishes - No missing parts
C8	Unused - New, out of box, unused equipment removed from original packaging with no signs of wear or alteration
C9	New Open Box - New, unused equipment in original packaging where factory seals have been broken - No signs of wear or alteration

R2 Equipment Categorization (REC) document

- Table 4: Functioning Product Categories
  - Utilized for identifying functionality and defective/missing parts (if any)
  - Note: R2 downstream controls do not apply to Functioning equipment/components

Category	Product Functionality Description
F1	**Collectible or Specialty Equipment** (*Core Requirement 6.(e)(3)(A)*) · Collectibles are rare, vintage, and no longer manufactured or supported by the OEM · Specialty equipment are rare and specialized equipment not generally available in retail · May have broken or missing parts
F2	**Verified Specialty Electronics** (*Appendix D*) · Verified removed from operation with no known defects in functionality · No physical damage or defects · No corrosion · No missing parts · Part numbers and serial numbers verified accurate
F3	**Key Functions Working** (*Appendix C – Test and Repair*) · A subset of the primary functions of the device that an ordinary user of the device expects to function are verified working through manual or software tests · Software may not be loaded or configured · Hardware required for key functions to be tested may have been removed after testing (e.g. Hard Drive) · May be missing components or parts not essential to key functions · Secondary functions may not be tested or working · May not include Focus Materials (e.g. Battery) that are not working or not tested · All missing components or parts will be listed for each item
F4	**Hardware Functional** (*Appendix C – Test and Repair*) · All hardware is tested and verified working through manual or software tests · No missing or damaged components or parts · Software not loaded or configured · No hardware defects
F5	**Refurbished** (*Appendix C – Test and Repair*) · All functions tested and verified working through software tests · Loaded and configured with legally licensed software for full operations · Software test results are available · No hardware or software defects
F6	**Like New** (*Appendix C – Test and Repair*) · All functions tested and verified working through software tests · Repaired with OEM original parts · Loaded and configured with original manufacturer's legally licensed software for full operation · Meets OEM specifications for full original functionality · Software test results are available · Zero defects

R2 Equipment Categorization (REC) document

- Specific Equipment Categorization
  - Currently blank; SERI may adopt alternative categories as needed in the future

R2 Equipment Categorization (REC) document

- Appendix A: Enhanced Cosmetic Category Info
  - Ranging from C0 (not categorized/evaluated yet) through C9 (new open box)

Category	Title	Description	Visual Appearance	Label Condition	Dents & Scratches	Discoloration	Missing Parts	Latches & Hinges Damaged	Cleaned (Inside/Outside)	Packaging
C0	Not Categorized	Not yet evaluated or categorized	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
C1	Damaged	Not Reusable	Poor	Poor	Major	Major	Yes	Yes	No	None
C2	Used Poor	Missing critical parts	Poor	Poor	Major	Major	Yes	Yes	Yes	None
C3	Used Fair	Missing non-critical parts	Fair	Fair	Moderate	Moderate	Yes	Yes	Yes	None
C4	Used Good	No missing parts	Good	Good	Minor	Minor	No	No	Yes	None
C5	Used Very Good	Minor imperfections not affecting functionality	Good	Good	Minor	Minor	No	No	Yes	None
C6	Used Excellent	Refurbished equipment in like-new condition	Excellent	Excellent	None	None	No	No	Yes	No Factory Packaging
C7	Certified Pre-Owned	Like New	New	Excellent	None	None	No	No	Yes	No Factory Packaging
C8	Unused	Not in original packaging	New	Excellent	None	None	No	No	Yes	No Factory Packaging
C9	New Open Box	In original unsealed packaging	New	Excellent	None	None	No	No	Yes	Unsealed Factory

R2 Equipment Categorization (REC) document

- Appendix B: Linkage with Functioning and Cosmetic Categories
  - Used for finished goods (processed and ready for reuse sale)
  - Includes Collectible or Specialty equipment (F1), Verified Specialty Equipment (F2), and a range from Key Functions Working (F3) to Like New (F6)

Product Functionality Description	Cosmetic Category
F1 – Collectible or Specialty equipment · Collectibles are rare, vintage, and no longer manufactured or supported by original manufacturers · Specialty equipment are rare and specialized equipment not generally available in retail. · Inspected and determined to be viable for reuse or parts. · May have broken or missing pieces. · Data sanitized or free of data storage media	C6 – Used Excellent C5 – Used Very Good C4 – Used Good C3 – Used Fair
F2 – Verified Specialty Equipment · Verified removed from operation with no known defects in functionality · No physical damage or defects · No corrosion · No missing parts · Original part numbers and serial numbers verified accurate · Data sanitized or free of data storage media	C7 – Certified Pre-Owned C6 – Used Excellent
F3 – Key Functions Working · A subset of the original functions of the device that an ordinary user of the device expects to function are verified working through manual or automated tests. · Software may not be loaded or configured · Hardware required for key functions to be tested may have been removed after testing (e.g. Hard Drive) · May be missing components not essential to key functions. · Secondary functions may not be tested or working. · May not include Focus Materials (e.g. Battery) that are not working or not tested. · All missing parts or cosmetic damages will be listed for each item. · Data sanitized or free of data storage media	C6 – Used Excellent C5 – Used Very Good C4 – Used Good C3 – Used Fair
F4 – Hardware Functional · All hardware is tested manually or with diagnostic software and verified working · No missing or damaged components or parts · Software not loaded or configured · No hardware defects · Data sanitized or free of data storage media	C6 – Used Excellent
F5 – Refurbished · All functions tested with diagnostic software · Loaded and configured with legally licensed software for full operations ready for the user. · Electronic test results are available. · No hardware or software defects · Data sanitized or free of data storage media	C6 – Used Excellent
F6 – Like New · All functions tested with diagnostic software · Repaired with OEM original parts · Loaded and configured with original manufacturer's legally licensed software. · Meets OEM specifications for full original functionality. · Electronic test results are available. · Zero defects · Data sanitized or free of data storage media	C7 – Certified Pre-Owned

Other related changes

- The R2 Code of Practices contains requirements for client organizations, Certification Bodies such as PJR, and Accreditation Bodies. Some key changes and/or requirements (compared to R2:2013) include but are not limited to:
  - Contract/readiness reviews are required prior to Stage 1 and R2v3 transition audits, to ensure eligibility of a Candidate Facility for R2v3 certification. (This constitutes PJR's "Contract Validation" process.)
  - Changes were made to the certification structure for multiple facilities or locations, as well as the addition of a requirement to sample each facility/location during every audit (multi-site sampling is no longer permitted).
  - Up to one Surveillance audit per 3-year cycle may be audited virtually.
  - Evidence of correction for both minor and major NCRs will be required within a specified timeframe (60 days) in order to avoid suspension.
  - Remote (virtual) or on-site revisit audits will be required to verify effective implementation of corrective actions for all NCRs (both minor and major) within a specified timeframe in order to avoid suspension.
  - R2 Allowances have been removed and cannot be applied to R2v3 certifications.

Certification Steps

- Download the standard
- Establish EHSMS documentation to meet R2v3 requirements
- Conduct training to EHSMS requirements
- Implement EHSMS requirements
  - Conduct an internal audit
  - Conduct a compliance evaluation
  - Conduct a review of the system based on input(s) from the internal audit
- Contract with a Certification Body (CB) and submit any pre-qualification information required for the contract review/“Contract Validation”
- Complete Stage I and Stage II audits, and address any resulting nonconformities

  → Certification issuance

Registration Audit Stages

1. Contract Validation (off-site)
   - Typically 0.25-0.5 days
2. Stage I:
   - Document review of your EHSMS framework
   - Evaluates the readiness of your organization to move to Stage II
   - If NCs are identified, they must be resolved before the Stage II can proceed
3. Stage II:
   - Typically scheduled 30 to 60 days after the Stage I audit (must be completed within 6 months)
   - On-site audit of your entire EHSMS
   - If NCs are identified, they must be resolved before certificate issuance
   - Note: R2v3 Stage 2 time must be on-site.

Certification Requirements

- Surveillance audits
  - Scheduled at either six or twelve month intervals depending on the contract
  - Partial system audit
  - A maximum of one of two surveillance audit years is permitted to be conducted virtually per the COP

- Re-certification audit
  - On-site audit conducted prior to the third anniversary of the initial certification (cannot be virtual per the COP)
  - Surveillance visits will then continue, as before, on a 3-year cycle

Please type any questions you may have.

For additional technical information, please contact PJR using the below contact information:

Austin Matthews

EHS Program Manager

Phone: (248) 358-3388

Email: amatthews@pjr.com

For a quote, please contact the Sales Department at:

1-800-800-7910