R2v3 Draft

Overview of Changes

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Agenda:

- About PJR
- Benefits of certification
- Tentative transition information
- Revision information (key changes and other related revisions)
- Certification Process
- Questions

- Welcome from PJR Headquarters:
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- Introduction of speaker

- Audience for today's meeting

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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

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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
- OHSAS 18001
- ISO 27001
- ISO 22000
- HAACP Compliance
- FSSC 22000
- e-Stewards®

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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

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Transition timeline for R2v3

- Current status of the Standard:
  - R2v3 Standard draft has been released. (A copy can be downloaded here: https://sustainableelectronics.org/r2v3)
  - SERI is reviewing the public comments received.
  - The final version of R2v3 is currently expected to be published in the 4th Quarter of 2019.

- Revised versions of the Code of Practices and the R2 Guidance document will also be released after the final version of R2v3 is published. An exact timeline for these releases have not yet been confirmed.

- Time for CB auditors to transition to the revised standard will be 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

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Transition timeline for R2v3

- A <u>tentative</u> Transition Plan has been released by SERI.

- PJR and all other Certification Bodies (CBs) will be required to obtain accreditation to R2v3 before accredited certificates can be issued.

- PJR will keep its clients updated regarding these topics. PJR will also issue a Transition Plan after the transition requirements are formalized by SERI and the final version of the standard is published. The Transition Plan will be made available to all impacted client organizations. PJR <u>may</u> also communicate an internal deadline by which transition audits must occur, in order to prevent a lapse in certification. Such a deadline would ensure sufficient time for corrective action response by the client, and certification review and decision activities by the Certification Body (CB).

- SERI will also release information regarding R2v3 training for CB auditors, internal auditors, and consultants, in accordance with the final release of the standard.

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Transition timeline for R2v3

- Facilities pursing <u>initial</u> certification to R2:2013:
  - will have 6 months after the release of R2v3 to complete their registration (Stage 2) audit. After this deadline, CBs will not be permitted to conduct registration audits to R2:2013.

- Facilities with <u>existing</u> R2:2013 certifications:
  - will be able to be recertified to R2:2013 <u>IF</u> their certificate expires within 12 months of the release of R2v3 (and their new R2:2013 certificate will reflect an expiration date of 3 years or 12/31/2022, whichever comes first), <u>OR</u>
  - will be required to upgrade to R2v3 at their next recertification audit (or sooner if they prefer) <u>IF</u> their certificate expires after 12 months of the R2v3 release (as long as the final transition can be completed by 12/31/2022).

- Final deadline for transition: ***<u>December 31st, 2022</u>***

- This Transition Plan staggers the transitions in order to give facilities at least one year to plan for transition, as well as to avoid overloading CBs with a high volume of facilities attempting to transition at the same time.
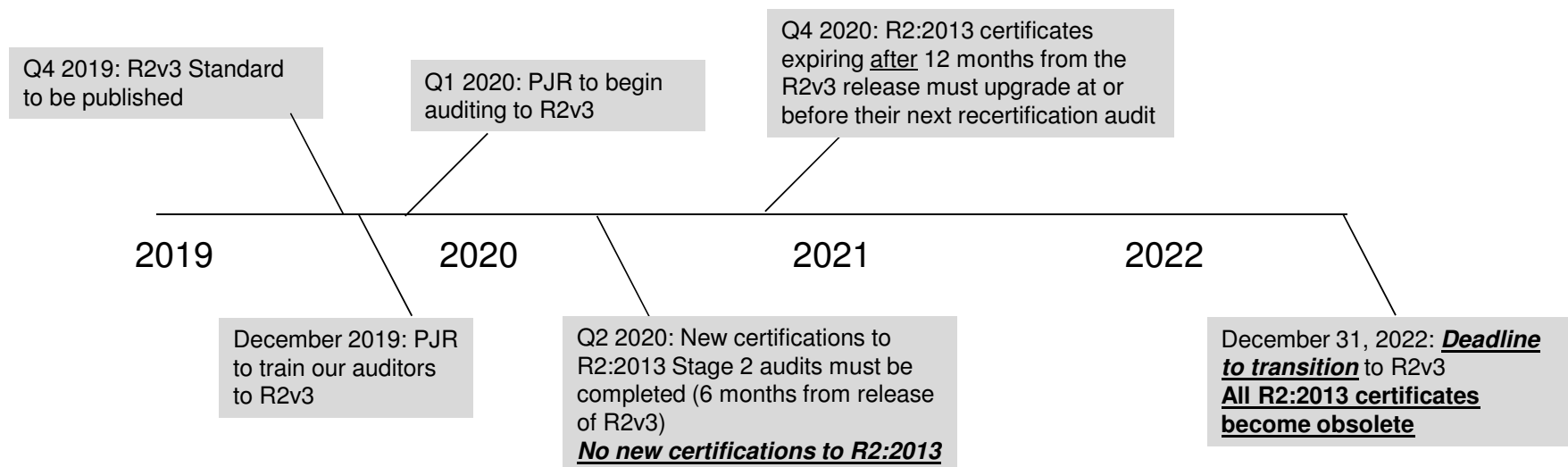
Transition timeline for R2v3

- Tentatively:

Q4 2019: R2v3 Standard to be published

Q1 2020: PJR to begin auditing to R2v3

Q4 2020: R2:2013 certificates expiring <u>after</u> 12 months from the R2v3 release must upgrade at or before their next recertification audit

2019   **2020**   **2021**   **2022**

December 2019: PJR to train our auditors to R2v3

Q2 2020: New certifications to R2:2013 Stage 2 audits must be completed (6 months from release of R2v3)
No new certifications to R2:2013

December 31, 2022: ***<u>Deadline to transition</u>*** to R2v3
<u>**All R2:2013 certificates become obsolete**</u>

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

<u>No changes have been made to the original intent of the R2 Standard.</u>

- 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

https://sustainableelectronics.org/r2v3

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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://sustainableelectronics.org/r2v3
  - 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, R2 Guidance, etc., or general auditing requirements
    - Revised versions of the Code of Practices and the R2 Guidance document will also be released after the final version of R2v3 is published. An exact timeline for these releases have not yet been confirmed.

- 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)

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Standard changes by section:
DEFINITIONS

- New or changed definitions
  - Brokering (new)
  - Control (new)
  - Data
  - Downstream Vendors (revised regarding Suppliers or equipment)
  - Evaluation Stage Category (new)
  - Focus Materials (revised Description specifics)
  - General Information (new)
  - Key Functions (removed)
  - R2 Facility (new)
  - Refurbishing (new)
  - Sanitization (new)

Standard changes by section:
Section 1 R2 CORE REQUIREMENTS

Standard changes by section:
Core Requirement 1—Scope

- All processes at the R2 Facility, "as well as any external processes and locations under the control of the R2 Facility and associated with its certification" must be audited and certified to R2
  - This must include:
    - all 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.

- 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 2—Hierarchy of Responsible Management Strategies

- No significant changes, as the intent of the Standard is unchanged

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

- Recognizes ISO 45001, which is to eventually replace OHSAS 18001:2007
  - The two OHS standards are interchangeable in the interim.

- Requires a process to periodically evaluate exposures to hazardous substances
  - Examples include: mercury, lead, beryllium, cadmium, PCBs, phosphor compounds, flame retardants, silica dust, chlorinated or brominated dibenzodioxins and dibenzofurans, 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:
  - safe drinking water,
  - restroom facilities with safe wastewater disposal, and
  - controls to prevent the consumption of food in areas which are not kept contaminant-free

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

- 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**_

- 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 <u>unless</u> 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 summary reports for all transactions <u>and</u> specifies required record contents (such as accurate dates, detailed descriptions, etc.) for all inbound and outbound "electronic equipment, components, and materials controlled by the R2 Facility"
  - Summary report has not been defined but will likely require all inbound and outbound quantities within a defined reporting period

- Total inventory levels must be maintained below the limits requirement to maintain conformity with applicable legal requirements, the R2 Facility's closure plan, etc.

- Cannot store equipment/components/materials "with a negative value" for more than 1 year
  - Exception: components which have been evaluated and inventoried per Appendix C—Test and Repair

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 written process for the evaluation, sorting, and categorization of materials, with prescribed subjects to be included within the process:
  - conformance to the hierarchy (Core Requirement 2)
  - application of the REC categories for functionality, cosmetic condition, and data sanitization
  - Identification of data storage devices
  - Instructions for determination of the reuse potential for equipment and components (based on condition, market value, etc.),
  - and any follow-up required when changing equipment categories

- Any equipment/components/materials inbound from a non-R2 supplier is to be treated as non-functional and data-bearing (and identified as per the REC)

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

- Data evaluations are to include any connected user accounts

- Identification requirements for equipment/components evaluated and found to be capable of reuse, as well as references to the applicable Appendix requirements

- Equipment that is processed for a customer who directs the downstream disposition and is <u>not</u> owned by the R2 Facility must be handled in accordance with Appendix F—Service Only

- Specific requirements for electronics/components evaluated and categorized as "Exempt Equipment," such as handling them separately from "Controlled Equipment," identification, justification for exemption, etc.

- Specific requirements for transferring functioning products (equipment/components that demonstrated functionality per the REC), such as packaging requirements, unique identification for sale and shipping records, verification of shipment legality (with documentation in a language understandable to the recycler), etc.

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

- Controlled Equipment is defined in the REC's Table 1
  - "includes any [all] equipment or material received by the R2 Facility that has not yet been evaluated for functionality or reuse potential, as well as items that have been evaluated and determined to either be Materials for Recovery or Equipment for Test and Repair"
  - May be evaluated and determined to be "Exempt Equipment" (6.(e)(1))

- Physical labels are not necessarily required (may also use bar codes or other means of identification/tracking)

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 not are not limited to: types of data storage devices accepted, general information that does not require sanitization, potential repopulation of data on devices, applicable contractual requirements (if applicable), applicable legal and other requirements <u>and</u> relevant policies/procedures to ensure conformance, methods for sanitization, etc.

- Requirements for a written data security plan

- Risk of theft and unauthorized access should be considered within the R2 Facility's security program

- 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 Manager

Standard changes by section:
Core Requirement 7—Data Security

- 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

- Contracts are required to be used (and enforced) to ensure transporters adhere to relevant security controls, when transporting data-bearing equipment/components

- Security controls for transport of data-bearing products, such as concealing packages' contents

Standard changes by section:
Core Requirement 7—Data Security

- Notifications to the supplier and recordkeeping requirements associated with data-bearing equipment/components received

- Devices may be shipped or transferred for data destruction to an R2-certified DSV per a written contract if in accordance with Appendix B—Data Sanitization, if the sanitization/destruction is not being conducted by the R2 Facility

- Requires notifications to suppliers:
  - upon a change in DSV responsible for processing data-bearing equipment/components from the supplier, and
  - when a security breach is identified (whether it is only suspected or has been confirmed)

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

- Alkaline batteries not containing mercury would be managed under Core Requirement 2—Hierarchy of Responsible Management Strategies

- Even lead-free circuit boards are considered Focus Materials

Standard changes by section:
Core Requirement 9—Facility Requirements

- Indoor storage and labeling requirements

- Adequacy of insurance coverage given the risks and scope of the R2 Facility's operations
  - Must include changes in operations, changes in processing volumes, etc.

- Closure Plan(s), financial instruments, and insurance coverage must be disclosed to SERI

- 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,
  - the size of all buildings owned/leased/used by the R2 Facility is less than 1,000 m², 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

- 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 transboundary shipments
  - Import/export compliance evidence must be in a language understood by the recycler <u>and</u> the auditor
  - Verification of a valid R2 certificate will satisfy due diligence requirements
  - Requires transparent communication regarding the Recycling Chain to suppliers and SERI

- 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
  - Security controls
  - Includes a Physical Destruction Methods table
  - Requires the Data Protection Manager verify the outputs of physical destruction, logical sanitization, and prescribed quality controls

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 or RIOS)
  - Requires a written "R2 Reuse Plan," with prescribed criteria to be included, such as documented instructions, competency requirements, safety checks, functionality test plans, effectiveness verification plans, return policy, etc.
  - Must process materials within 1 year of receipt
    - Tested, repaired and/or refurbished <u>or</u> 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

- 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 (above)
  - Details criteria and verifications required in lieu of testing, if the R2 Facility lacks the technical capability
  - Must demonstrate that the customer accepts the terms (lack of testing, etc.) <u>and</u> will only sell directly to an end-user (with a free, lifetime return policy)

Standard changes by section:
Section 2 R2 PROCESS REQUIREMENTS

- Appendix E—Materials Recovery
  - Additional EHS requirements for R2 Facility's performing materials recovery-related activities (shredding beyond hard drives, breaking, cutting, melting, chemical processing, etc. of FMs)

- Appendix F—Service Only
  - Applies to services performed for a customer while the R2 Facility does not own the equipment and the customer dictates the downstream vendors to be used
  - Must process such equipment/materials and send downstream within 3 months of receipt (unless storage is part of the contract), and storage of negative value equipment must be 1 year or less
  - DSVs are to be included and managed per Appendix A—Downstream Recycling Chain
  - Contract criteria and recordkeeping requirements

Standard changes by section:
Section 2 R2 PROCESS REQUIREMENTS

- Appendix G—Brokering
  - Applies to the sourcing of equipment/components without physically receiving or processing them in the R2 Facility (FMs are transported directly to the downstream vendor or end-user)
  - DSVs are to be included and managed per Appendix A—Downstream Recycling Chain
  - R2 Facilities certifying to this Process Requirement are required to maintain certification to a quality management system (such as ISO 9001 or RIOS)
  - Satisfies the insurance and closure cost financial instrument requirements of Core Requirement 9 as well as EHSMS requirements of Core Requirement 3

R2 Equipment Categorization (REC) document

- "The framework for evaluating equipment and categorizing its R2 condition throughout each step of the R2 process"

- Categories for cosmetic condition, functional condition, and data sanitization status to be used for electronics and components (either individually or in batches) to be used from the receiving process through post-processing activities

- Preferably the R2 Facility will utilize these exact categories, but it would also be acceptable to cross-reference their existing categorization system with those outlined in the REC document

- 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.

- Additional, non-mandatory categories will be listed in the R2 Guidance document

R2 Equipment Categorization (REC) document

- Common Equipment Categorization tables
    - Equipment is assumed to be non-functioning, unless or until testing effectively demonstrates functionality
    - Functioning equipment is not subject to downstream due diligence requirements

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

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

- Appendix B: Linkage with Functioning, Cosmetic and Data Sanitization Categories
    - Used for finished goods (processed and ready for reuse sale)

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Certification Steps

- Download the standard
  - Currently the draft can be found here: https://sustainableelectronics.org/r2v3
  - R2's Document Library (which will contain the final version, once released) can be found here: https://sustainableelectronics.org/r2-standard/r2-document-library
- Establish EHSMS documentation to meet R2v3 requirements
- Conduct training to EHSMS requirements
- Implement EHSMS requirements
  - Conduct an internal audit(s)
  - Conduct a compliance evaluation
  - Conduct a review of the system based on input(s) from the internal audit
- Contract with a Certification Body (CB)
- Complete Stage I and Stage II audits, and address any resulting nonconformities
    → Certification issuance

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Certification Process

The registration audit consists of two stages:

- Stage I:
    - On-site document review of your EHSMS (may be required to be submitted to PJR prior to Stage I)
    - Evaluates the readiness of your organization to move to Stage II

- Stage II:
    - Scheduled 30 to 60 days after the Stage I audit
    - On-site audit of your entire EHSMS
    - Any nonconformities will need to be resolved prior to certificate issuance

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Certification Requirements

- Surveillance audits
  - Scheduled at either six or twelve month intervals depending on the contract
  - Partial system audit

- Re-certification audit
  - On-site audit conducted prior to the third anniversary of the initial certification
  - Surveillance visits will then continue, as before, on a 3-year cycle

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Please type any questions you may have.

For additional technical information, please contact Stacey DeSantis or myself using the below contact information:

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