

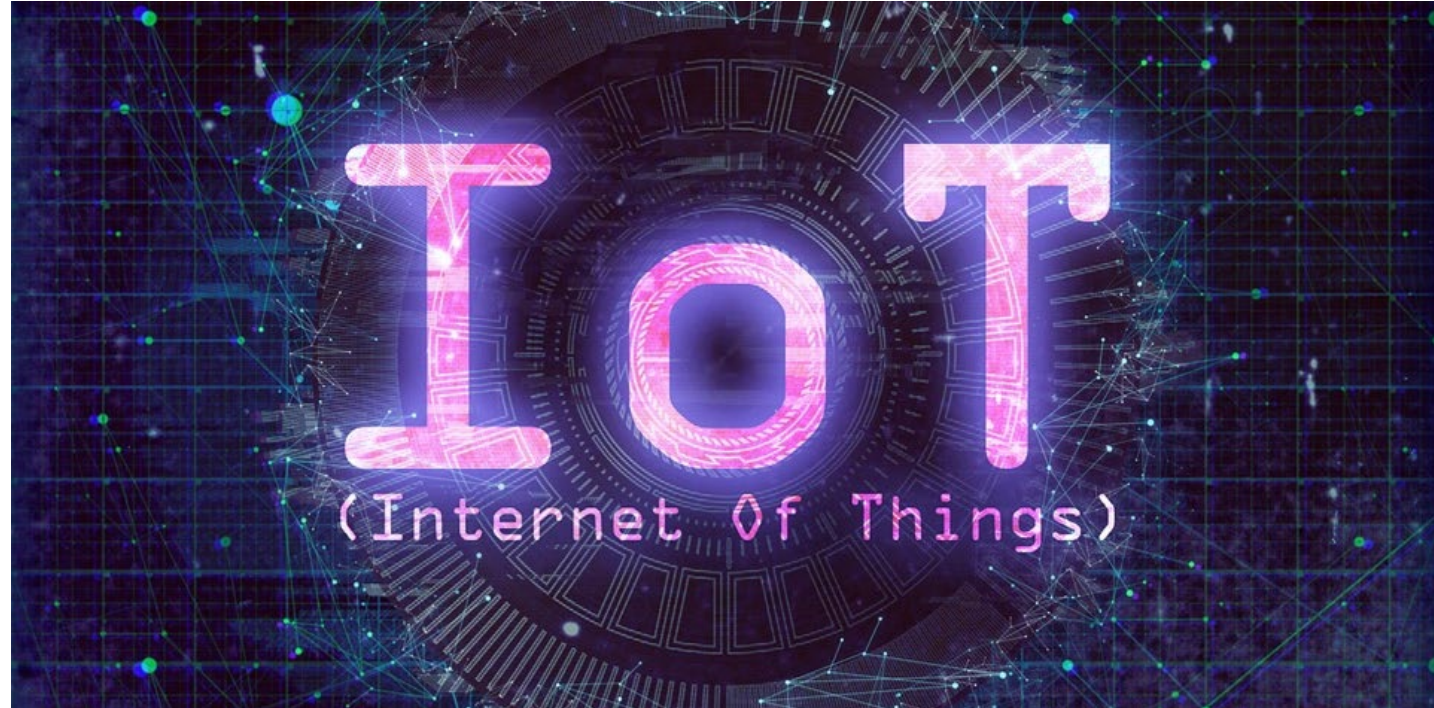
# Privacy Subteam Recommendations

July 2023

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**Internet of Things Advisory Board (IoTAB)**

# Summary of Recommendations – Privacy Subgroup

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R01 - Use Plain Language in Privacy Policies for IoT (approved)

R02 - Establish “Third-Party” Data Sharing and Data Use Policies (approved)

R03 - Create an IoT Privacy Framework for Innovation and Data Protection (approved)

R04 - Include IoT in US Federal Privacy Regulation Proposal Mike Bergman to review

R05 – Create Privacy Transparency for IoT (approved)

R06 - Create IoT-focused educational initiatives for workforce development and business, government, and consumer data privacy/trust (approved)

R07 - Promote the implementation of Privacy-Enhancing Technologies (PETs) in IoT systems (approved)

# R01 - Use Plain Language in Privacy Policies for IoT

Approved by the IoTAB July 2023

R01

Use Plain Language in Privacy Policies as part of the Federal Acquisition Regulation (FAR) requirements per the Internet of Things (IoT) Cybersecurity Improvement Act of 2020

- Improved understanding of Data Privacy policies for users, leading to more informed decisions when using IoT devices
- Enhanced public trust in IoT devices and related technologies
- Simplified policies may lead to increased compliance and reduced legal disputes

## Implementation

- Develop guidelines and best practices for organizations to follow when simplifying privacy policies
- Establish high-level guidance for evaluating and assessing the readability of privacy policies
- Coordinate with relevant stakeholders, including the private sector and business, government, and consumer data advocacy groups, to ensure widespread adoption

## Barriers

- Resistance from organizations that may perceive simplification as a limitation on their legal protections
- Possible challenges in defining the appropriate level of simplification while maintaining accuracy and comprehensiveness
- Monitoring and updating the simplification guidelines to account for technological advancements and emerging privacy concerns

## Agencies

- National Institute of Standards and Technology (NIST)
- Department of Commerce (DoC)
- The Office of Management and Budget (OMB)
- Office of the National Cyber Director (ONCD)

## Federal considerations

- Procurement: Create requirements for IoT providers to implement simplified privacy policies for government contracts
- Use National Cybersecurity Strategy Implementation Plan July 2013 - Initiative Number: 3.2.1 Initiative Title: Implement Federal Acquisition Regulation (FAR) requirements per the Internet of Things (IoT) Cybersecurity Improvement Act of 2020
- Use National Cybersecurity Strategy Implementation Plan July 2013 - Initiative Number: 1.1.1 Initiative Title: Establish an initiative on cyber regulatory harmonization
- Plain Writing Act of 2010" (Public Law 111-274)

# R02 - Establish “Third-Party” Data Sharing and Data Use Policies

Approved by the IoTAB July 2023

R02

Establish clear policies for third-party data sharing and IoT device data use

- Increased interconnectivity and data-sharing capabilities of IoT devices present significant privacy risks.
- Policies safeguard users' personal data and ensure transparency.
- Clear policies foster trust and encourage IoT adoption.

## Implementation

- Create guidelines on how to effectively communicate third-party data sharing and data use in privacy policies
- Implement public awareness campaigns about these policies to educate users about their data rights

## Agencies

- National Institute of Standards and Technology (NIST)
- Federal Trade Commission (FTC)
- Department of Energy (DOE)
- United States Department of Agriculture (USDA)
- Office of the National Cyber Director (ONCD)

## Barriers

- Resistance from IoT companies who rely on third-party data sharing for business operations
- Challenges in aligning these policies with existing privacy regulations and international data protection standards

## Federal considerations

- Policies & Frameworks: Work with industry leaders to establish data use guidelines for “Third-Party” Data Sharing and Data Use Policies
- Use National Cybersecurity Strategy Implementation Plan July 2013 - Initiative Number: 1.1.1 Initiative Title: Establish an initiative on cyber regulatory harmonization
- Use National Cybersecurity Strategy Implementation Plan July 2013 - Initiative Number: 1.1.3 Initiative Title: Increase agency use of frameworks and international standards to inform regulatory alignment

# R03 - Create an IoT Privacy Framework for Innovation and Data Protection

Approved by the IoTAB July 2023

R03

Develop an IoT Privacy Framework for Innovation and Data Protection specifically tailored to the unique challenges posed by IoT devices

- Provides a consistent, unified approach to Data Privacy and security in the IoT sector, reducing confusion and fragmentation for business, government, and consumers
- Several US States have passed comprehensive privacy laws, and several other states are in the process of advancing privacy legislation.
- Encourages innovation by providing clear guidelines and expectations for IoT device manufacturers, fostering a competitive and growth-oriented environment

## Implementation

- Incorporate lessons learned from existing privacy regulations, such as the CCPA and GDPR, to create a more effective and efficient framework
- Ensure that the framework is adaptable and scalable to accommodate the rapidly evolving nature of IoT technology and the Data Privacy Landscape

## Agencies

- National Institute of Standards and Technology (NIST)

## Barriers

- Balancing between protecting business, government, and consumers' Data Privacy and fostering innovation in the IoT sector
- Providing resources, guidance, and support to businesses for the adoption and implementation of the IoT Privacy Framework
- Reviewing and updating the IoT Privacy Framework to ensure it remains relevant and effective in addressing emerging Data Privacy challenges and technological advancements

## Federal considerations

- Partnership: Develop the IoT Privacy Framework in partnership with industry and privacy experts
- Working with US States: Collaboration with US States who have already passed privacy laws or are in the process of advancing legislation would be key for regulatory alignment
- Use National Cybersecurity Strategy Implementation Plan July 2013 - Initiative Number: 1.1.1 Initiative Title: Establish an initiative on cyber regulatory harmonization
- Use National Cybersecurity Strategy Implementation Plan July 2013 - Initiative Number: 1.1.3 Initiative Title: Increase agency use of frameworks and international standards to inform regulatory alignment

# R04 - Include IoT in US Federal Privacy Regulation Proposal

R04

Mike Bergman to review

Add IoT Data Retention Transparency: Establish guidelines for manufacturers to establish clear policies on how long business, government, and consumer data is retained

- Supports contemplated federal legislation e.g., American Data Privacy and Protection Act (ADPPA) H. R. 8152 legislation
- Adds IoT-specific language to the ADPPA related to IoT Data Retention Transparency
- Ensures that IoT device manufacturers share a consistent set of privacy standards, enhancing business, government, and consumer data trust and protection
- Facilitates innovation by providing clear guidelines and expectations for IoT businesses, fostering a competitive and growth-oriented environment

## Implementation

- Use contemplated legislation (e.g., the American Data Privacy and Protection Act, or ADPPA) addresses emerging Data Privacy challenges and technological advancements related to IoT

## Agencies

- Congress
- Department of Commerce (DoC)
- National Institute of Standards and Technology (NIST)
- Federal Trade Commission (FTC)

## Barriers

- Achieving consensus among stakeholders and state-level regulators on the most effective elements and practices to incorporate into the Federal Privacy legislation
- Ensuring compatibility with existing national and international privacy regulations
- Balancing between protecting business, government, and consumer Data Privacy and fostering innovation in the IoT sector
- Providing resources, guidance, and support to businesses for the adoption and implementation of the IoT specific guidelines

## Federal considerations

- Legislation: Support IoT addition to contemplated Federal Data Privacy legislation (e.g., the American Data Privacy and Protection Act, or ADPPA)

# R05 – Create Privacy Transparency for IoT

Approved by the IoTAB July 2023

R05

Develop and implement a privacy transparency system for IoT devices, using the “U.S. Cyber Trust Mark” for business, government, and consumer data for Connected Devices and other transparency programs as a guide

## Implementation

- Consider input from privacy experts, industry stakeholders, and business, government, and consumer data advocacy groups to develop privacy transparency, including content and design
- Develop guidelines and standards for privacy transparency, including required information, format, and or product information
- Encourage IoT device manufacturers to adopt privacy transparency and provide resources to help them align with the new recommendations

## Agencies

- Department of Commerce (DoC)
- National Institute of Standards and Technology (NIST)
- Federal Trade Commission (FTC)

## Barriers

- Ensuring broad adoption and compliance with the privacy transparency system across different industries and sectors
- Incentivizing IoT device manufacturers who may perceive privacy transparency as burdensome, costly, or restrictive
- Balancing the need for comprehensive privacy information with simplicity and ease of understanding for businesses, the government, and consumers

## Federal considerations

- Promotion: Publicize the benefits of IoT privacy transparency
- Partnership: Work with industry leaders to develop privacy transparency
- Use National Cybersecurity Strategy Implementation Plan July 2013 -Initiative Number: 1.1.1 Initiative Title: Establish an initiative on cyber regulatory harmonization
- Use National Cybersecurity Strategy Implementation Plan July 2013 - Initiative Number: 3.2.2 Initiative Title: Initiate a U.S. Government IoT security labeling program “U.S. Cyber Trust Mark”

## Justification

- Empowers businesses, governments, and consumers to make informed decisions about IoT devices based on their privacy features and practices
- Encourages IoT device manufacturers to prioritize privacy, fostering competition and innovation in privacy-enhancing technologies
- Enhances overall Cybersecurity and data protection by promoting greater business, government, and consumer data awareness of privacy practices

# R06 - Create IoT-focused educational initiatives for workforce development and business, government, and consumer data privacy/trust

Approved by the IoTAB July 2023

R06

Develop educational initiatives that include IoT, targeting workforce development, and enhancing business, government, and consumer data privacy and trust

- Increase in the understanding and safe use of IoT technologies
- Development of a highly skilled workforce capable of addressing IoT privacy challenges
- Boosting business, government, and consumer data trust and adoption of IoT devices and services

## Implementation

- Defining the scope and content of educational initiatives
- Identifying key target audiences (schools, universities, businesses, general public)
- Collaborating with educational institutions and industry leaders
- Ensuring the relevancy and practicality of the educational content
- Regularly updating the initiatives to keep pace with technological changes
- Workforce development to encompass personas, including manufacturers, Implementers, service providers, and workers.

## Barriers

- Difficulty in keeping up with the fast-paced advancements in IoT
- Challenges in reaching and engaging the targeted audiences
- Securing sufficient funding and resources

## Agencies

- National Institute of Standards and Technology (NIST)
- Office of the National Cyber Director (ONCD)

## Federal considerations

- Promotion & Education: Publicize the importance of IoT education and promote the adoption of educational programs for workforce development and business, government, and consumer data trust
- Use National Cybersecurity Strategy Implementation Plan July 2013 - Initiative Number: 4.6.1 Initiative Title: Publish a National Cyber Workforce and Education Strategy and track its implementation



# R07 - Promote the implementation of Privacy-Enhancing Technologies (PETs) in IoT systems

Approved by the IoTAB July 2023

R07

## Promote the implementation of Privacy-Enhancing Technologies (PETs) in IoT systems

- PETs protect privacy while extracting valuable insights from the vast IoT data
- They align with responsible data use without compromising user privacy
- PETs support broader U.S. goals of leveraging technology for societal benefits
- Their use fosters trust and promotes acceptance of IoT solutions
- Implementation of PETs can prevent data breaches and associated legal issues

### Implementation

- Ensuring robust security measures for PETs to prevent unauthorized data access
- Conducting comprehensive technical and ethical evaluations of PETs before their adoption
- Enhancing public understanding and Trust in PETs
- Encouraging interoperability between different PETs systems
- Establishing a framework for monitoring the effectiveness and impacts of PETs in IoT

### Agencies

- The Office of Science and Technology Policy (OSTP)
- National Institute of Standards and Technology (NIST)

### Barriers

- Limited technical expertise to understand, implement, and manage PETs
- Possible resistance from private sectors due to perceived risks or costs
- The complexity of developing universally accepted privacy standards for IoT

### Federal considerations

- Internet of Things (IoT) Cybersecurity Improvement Act of 2020
- The White House's Advancing a Vision for Privacy-Enhancing Technologies proposal (June 2022)
- Use National Cybersecurity Strategy Implementation Plan July 2013 - Initiative Number: 1.2.1 Initiative Title: Scale public-private partnerships to drive development and adoption of secure-by-design and secure-by-default technology