IoT Advisory Board Meeting #12
April 2-3, 2024

IoT Advisory Board Meeting # 12 Outcomes

- Baseline understanding of the current state of the latest overall report draft

- Outside input to report - process

- Approval/rejection remaining and new recommendations for final report

- Understanding of ALL recommendations

- Approval/rejection process for findings report

- Review report findings

- Identify gaps in content, findings and recommendations

- Expectations for May meeting

Meeting announcements and logistics

- Speaking/Participation

- Send Barbara copies of everything you shared here today

- IoTAB to the Audience: Disclaimer

- Audience comments: please send to us

IoTAB member unavailability (who's out)

Day 1 (Tuesday)

Tom – out
Dan –
Maria – 11:30 – 12:30
Ranveer – various times
Steve – 3 – 3:45 pm

Day 2 (Wednesday)

Tom – after 12 noon
Maria – 11 -12, 1-3
Ranveer – various times
Steve – 12 – 1 pm
Mike – 12 – 1 pm, 2 – 3 pm
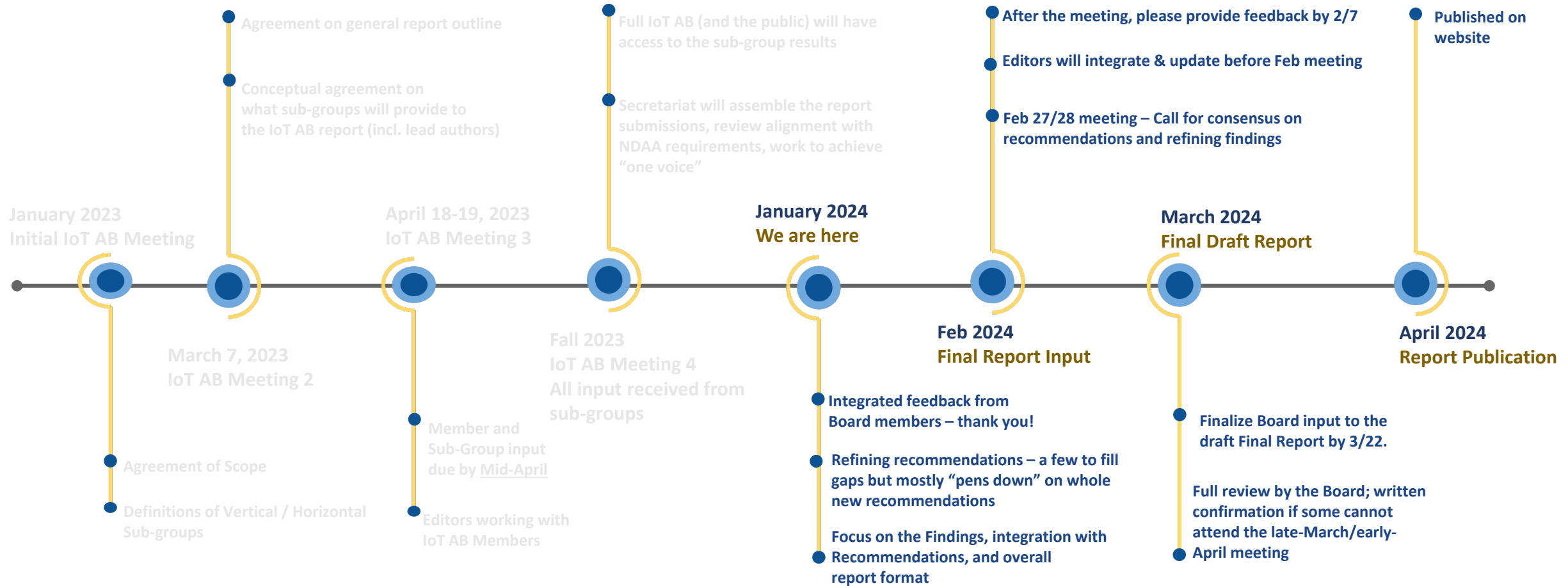Dan – out before 2 pm
Arman – out before 1 pm

Agenda

Tuesday – Day 1 – 11:00 AM to 5:00 PM

- Opening remarks and goals for the meeting (Mr. Chan and Mr. Caprio)
- Review report structure and changes from previous draft (Mr. Chan and Mr. Witte)
- Federal Working Group Informal Feedback (Mr. Witte)
- Discuss and make decisions on revised versions of enabling recommendations
    - Drones (Mr. Griffith)
    - E-Labeling (Ms. Reynolds)
    - Farm of the Future (Dr. Chandra and Mr. Bergman)
    - Federally owned and operated buildings (Mr. Tseronis and Mr. Griffith)
    - Government adoption of IoT for non-buildings (Mr. Tseronis and Mr. Griffith)
    - Government adoption of IoT for non-building operations (Mr. Chan)
    - Workforce (Mr. Chan)
    - AI (Mr. Chan and Mr. Griffith)
    - Domestic IoT Manufacturing Supply Chain (Mr. Griffith)
    - Stockpile of IoT devices for emergency use (Ms. Mehra and Ms. Coughlin) (Might be deferred to May meeting)
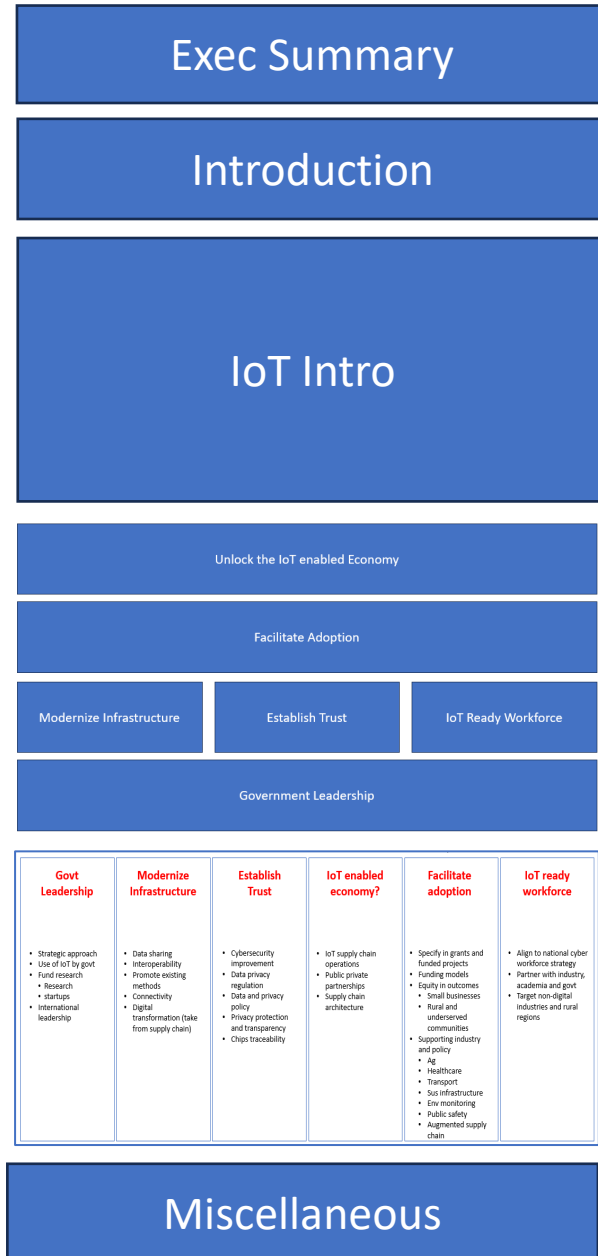
Wednesday - Day 2 – 11:00 AM to 5:00 PM

- Opening Remarks
- Finish decisions on recommendations
    - Supply Chain and Business Ecosystems (Mr. Katsioulas)
- Review report findings
    - Review will begin with supply chain related
- Review thematic content
- Identification of remaining gaps
- Review of Actions
- Close

Draft IoT AB Timeline to Complete Report Publication in April 2024

Agreement on general report outline

Conceptual agreement on what sub-groups will provide to the IoT AB report (incl. lead authors)

Full IoT AB (and the public) will have access to the sub-group results

Secretariat will assemble the report submissions, review alignment with NDAA requirements, work to achieve "one voice"

After the meeting, please provide feedback by 2/7

Editors will integrate & update before Feb meeting

Feb 27/28 meeting – Call for consensus on recommendations and refining findings

Published on website

January 2023
Initial IoT AB Meeting

April 18-19, 2023
IoT AB Meeting 3

January 2024
We are here

March 2024
Final Draft Report

March 7, 2023
IoT AB Meeting 2

Feb 2024
Final Report Input

April 2024
Report Publication

Fall 2023
IoT AB Meeting 4
All input received from sub-groups

Agreement of Scope

Definitions of Vertical / Horizontal Sub-groups

Member and Sub-Group input due by Mid-April

Editors working with IoT AB Members

Integrated feedback from Board members – thank you!

Refining recommendations – a few to fill gaps but mostly "pens down" on whole new recommendations

Focus on the Findings, integration with Recommendations, and overall report format

Finalize Board input to the draft Final Report by 3/22.

Full review by the Board; written confirmation if some cannot attend the late-March/early-April meeting

Report Structure

Section		Current	Target
Exec Summary			10 pages
Introduction	• 3 examples/future scenarios/stories/benefits • Impacts and call to action	4 pages	5 pages
IoT Intro	• IoT tech overview • Specific applications of IoT - consumer, industrial, medical, city • IoT transforms business models • IoT transforms business ecosystems • Current state of IoT • Future state of IoT	34 pages	15 pages

Unlock the IoT enabled Economy

Facilitate Adoption

Modernize Infrastructure	Establish Trust	IoT Ready Workforce

Government Leadership

- 6 themes
- 23 findings

64 pages

Govt Leadership	Modernize Infrastructure	Establish Trust	IoT enabled economy?	Facilitate adoption	IoT ready workforce

• Strategic approach
• Use of IoT by govt
• Fund research
• Research
• startups
• International leadership
	• Data sharing
	• Interoperability
	• Promote existing methods
	• Connectivity
	• Digital transformation (take from supply chain)
		• Cybersecurity improvement
		• Data privacy regulation
		• Data and privacy policy
		• Privacy protection and transparency
		• Chips traceability
			• IoT supply chain operations
			• Public private partnerships
			• Supply chain architecture
				• Specify in grants and funded projects
				• Funding models
				• Equity in outcomes
				  • Small businesses
				  • Rural and underserved communities
				• Supporting industry and policy
				  • Ag
				  • Healthcare
				  • Transport
				  • Sus infrastructure
				  • Env monitoring
				  • Public safety
				  • Augmented supply chain
					• Align to national cyber workforce strategy
					• Partner with industry, academia and govt
					• Target non-digital industries and rural regions

- 6 themes
- 22 key recommendations
- 81 enabling recommendations

110 pages   60 pages

231 pages   35 pages

| **Miscellaneous** | • Title, Table of Contents, Background, Members
• Abbreviations, Compliance Table, Appendix A, B | 19 pages | 15 pages |

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Themes:
- Unlock the IoT enabled Economy
- Facilitate Adoption
- Modernize Infrastructure
- Establish Trust
- IoT Ready Workforce
- Government Leadership

- 6 themes
- 23 findings

64 pages → 35 pages

231 pages

Govt Leadership	Modernize Infrastructure	Establish Trust	IoT enabled economy?	Facilitate adoption	IoT ready workforce

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FWG Feedback

General Comments
1. Need to ensure that the report has a very compelling theme such that federal agencies who will have to implement this will understand how to prioritize these needs over other technology investments that they have.
2. Concern over the fact that much of the content represents interesting topics, some good ideas, but knowing that readers have hundreds of other things to worry about, without some sort of really compelling argument, will see these as "just another unfunded mandate". A strong call to action is needed.
3. Some of the topics did not represent things that members felt were inherently US government-related activities, whether because of lack of authority or just the sense that those have not historically been a role that government entities filled.
4. All who have read the January report recognized that it was too long, both in page count and in items to consider. The next update will need to be much more easily consumed and understood. The end result must be under 150 pages with all appendixes (one member said the recommendations section should be limited to 20-30 pages, though that's a difficult goal).
5. Many readers could not really understand what the problem is that the Board is trying to fix. As above, many did not understand why the government should adopt many of these recommendations and, if they are worthwhile, why they have not already been taken on in private sector.
6. For many of the recommendations, there are not sufficient metrics or performance measures to define success. That may cause the report to have less merit, or could enable some not to fully achieve the intent of the Board.
7. Be cautious about using the terms standard or standardization. Be more clear about what the recommendation is. For example, when using the term "standards", does the Board really mean a formal "Standard" or does it just mean some other expectation?
8. Observation - less of a change request: there has already been a great deal of work in standards that doesn't seem to be reflected in the report.
9. There are references to IoT devices when it appears the Board means more than just the devices (e.g., IoT systems). Make it clear when the Board means "IoT systems or ecosystems" vs specifically devices.
10. Look for opportunities to better co-locate similar items.
11. Recommendations need to be concise, clear, and actionable. Having the USG "consider" is not an action or having the U.S. "lead" is not actionable because U.S. leadership isn't necessarily up to the U.S. – others would have to come along and accept our leadership.
12. In the introduction, IoT devices are described as always having a wireless connection between the sensor and processor. While this is probably the case for the majority of devices, presumably some are could be hard-wired or connected via wired technologies. Not sure if the Board is intending to limit the 'things' that comprise IoT to wireless devices.
13. Supply chain logistics as they relate to IoT seems to be under-represented.
14. There was some mixing of terms, supply chain logistics, supply chain management, and there's also third party logistics. Be specific and direct regarding what's meant: Is it the bigger supply chain logistics? Is it the piece of supply chain management? What is it and what are they doing with it?

Identify, advance, and prioritize only the most compelling recommendations

Shorten report length - consolidation, graphics, include only compelling recs

Clarity of terms used in recommendations

Content gaps
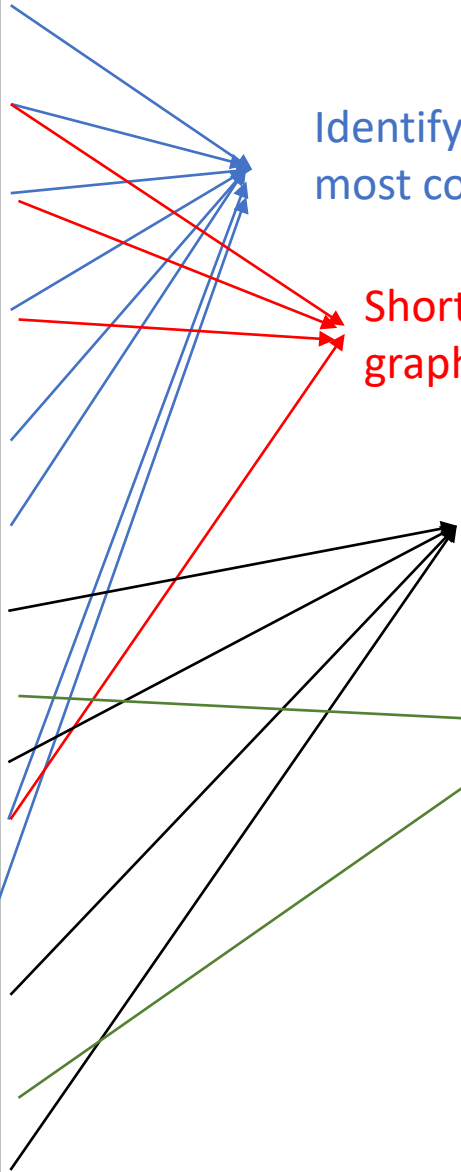
FWG Feedback

More Specific Considerations

Members had a negative reaction to the notion of the government "monetizing data". Some saw the message as "industry leading government" and felt that's probably the wrong message to send, and cautioned against doing so. That seems like a role for private industry. If the goal is for government to study and recommend ways to better encourage data sharing in an equitable way, it may be more palatable if we refrain from discussing monetization.

It seems that working group members recognized that may be a disincentive for those who are making money from closely holding data to share it. It makes sense to look for ways to encourage more collaborative data production and data usage, but tying it to money and funding may distract from the point.

There were many concerns about the government housing a repository and requiring non-government entities to share data.

There was some discussion about cases in the past there the government has asked to "own" the data. This seems to be different from the notion of a government data warehouse of some sorts where anybody can have access to it.

The crux seems to be about what data is publicly owned and paid for vs the government storing data of private orgs. Similarly, working group members felt that few private sector companies would be open to turning over their data to the government.

Be cautious of asking agencies to develop standards. They will often work with helping to monitor groups and help develop consensus standards for high-level things like Wi-Fi, but it is rarely an agency task to create standards.

There was a question about whether we need to call out AASHTO? There are many others, including those specific to transportation, and it may be better not to single any out.

The Board uses the term *autonomous vehicle*. For some, that specific term may be antithetical to the concept of connected and IoT. Consider pointing to automated vehicles or automated transportation. Autonomous to us talks about standing on its own, and so if there's an opportunity to change AV to automated vehicle versus autonomous, that would be helpful.

Regarding the narrow band satellite recommendation, there was some confusion. I believe that is recommended for removal; if it stays, be sure to be clear that the recommendation was **not** to promote new satellite specifically for AG IoT but rather to leverage existing satellite communications.

Review NTIA's release of the National Spectrum Strategy and the accompanying Presidential Memorandum for developments to consider incorporating into the report and recommendations.

Rather than speaking about "allocations" of spectrum, which would only apply to licensed spectrum, a more general reference to identifying all types of spectrum "that can be used" would be more appropriate.

There are many references to the cybersecurity labeling program, which is still only in the proposal stage at this point. A considerable number of questions/issues will need to be addressed in the (anticipated) final order, so the Board should use caution not to presume the Mark program is firmly established. There are a number of places in the "trust" section where they are recommending building off the cybersecurity labeling program to accomplish other goals. Members urge a little more cautious approach here.

Regarding the mark program, is the Board recommending a similar approach for industrial products and industrial devices? Is there a suggestion to extend the proposed program into the industrial space?

Regarding the stockpile of public safety IoT devices, as written, this is not an action that the federal government would engage in. The recommendation does not address specific interoperability challenges, and the 3 public safety entities listed have significantly different operational requirements. Interoperability is a concern, but having the federal government acquire devices brings up a myriad of implementational and logistical concerns.

We urge the Advisory Board to protect the integrity of the CET process by modifying the recommendation that IoT **must** be added back to the critical and emerging technology list. Agencies and White House offices prepare and update this list periodically through an NSTC-run interagency process. It would be inappropriate for an advisory board to insert their own favored technology to the list. I recommend a modification to: "Agencies and OSTP should **strongly consider** IoT for the critical and emerging technology list."
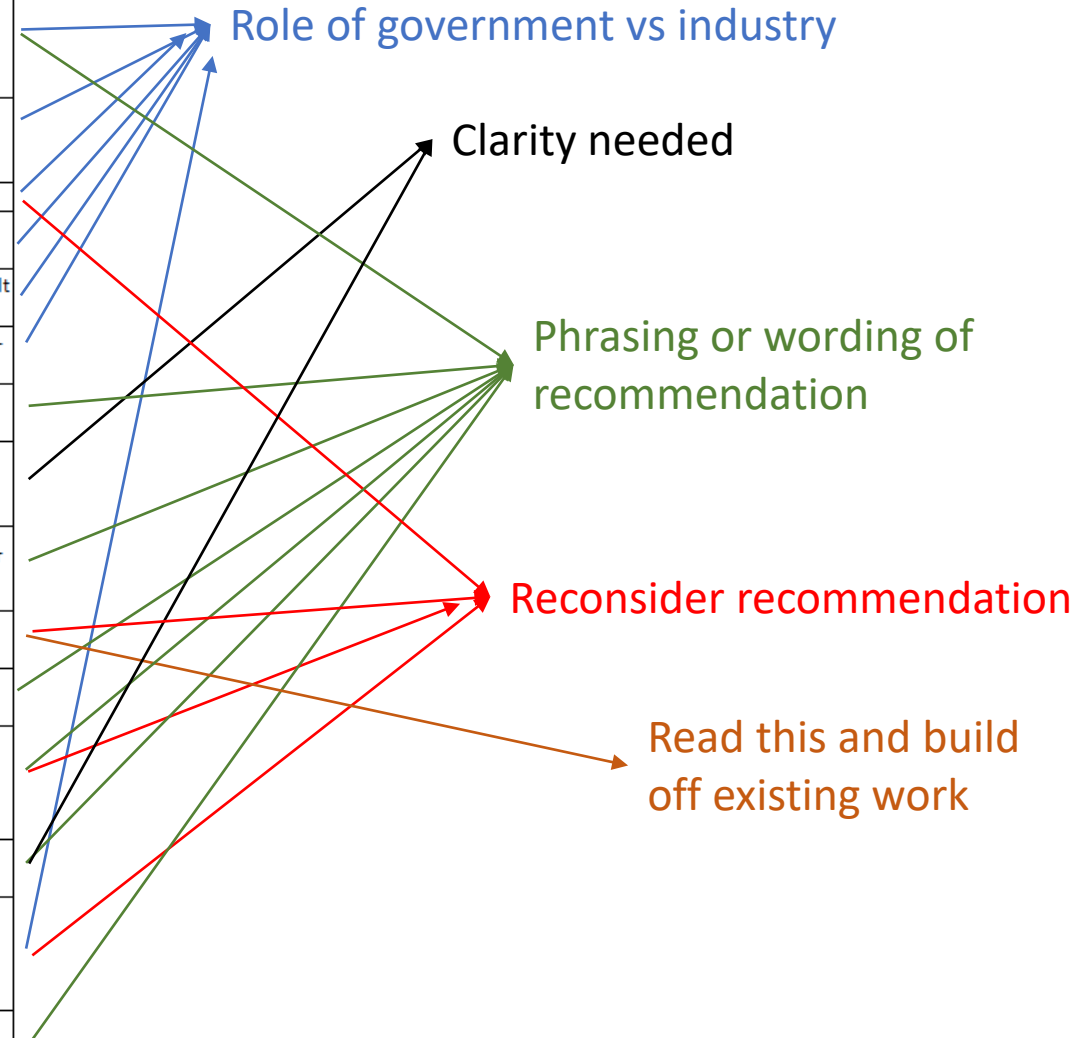
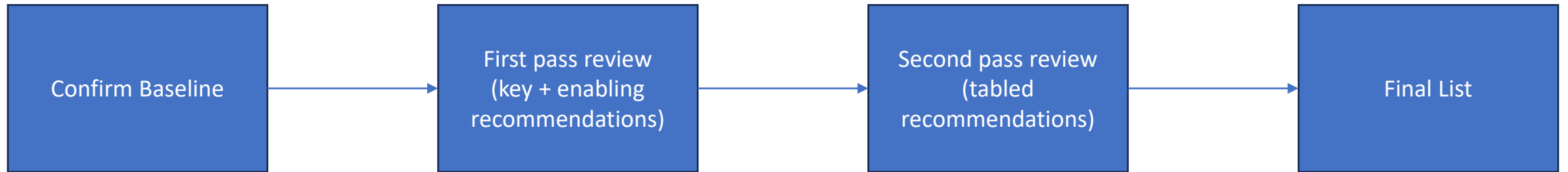Role of government vs industry

Clarity needed

Phrasing or wording of recommendation

Reconsider recommendation

Read this and build off existing work

Recommendations review process

Confirm Baseline	→	First pass review (key + enabling recommendations)	→	Second pass review (tabled recommendations)	→	Final List

Confirm Baseline
- Identify missing/omitted recommendations
- Confirm mapping of recommendations to themes, findings
- Confirm mapping of enabling recommendations to key recommendations
- Identify recommendations to be withdrawn

First pass review
- Identify recommendations requiring additional discussion (FWG and board) and move to second pass
- Rank recommendations 1-2-3
- Review and approve/reject key recommendations and enabling recommendations as a block
- Identify missing recommendations

Second pass review
- Review and approve/reject key recommendations and enabling recommendations as a block
- Identify missing recommendations

1 Recommendations that are strategic, bold, and will have the major impact and whose exclusion will cause someone to notice

2 Recommendations that are strategic "quick wins" – big impact, doable in the short term (existing infrastructure, etc.)

3 Recommendations that
- If we eliminate, no one will notice or care
- Risks confusing or masking the main recommendations ("forest for the trees")

Our process and how it is organized

Input

Findings

Recommendations

NDAA topics and charter

Internal expertise
Speakers
Research
Industry input

Finding	Key Recommendations
Industry adoption is slower than expected and hindered by a variety of challenges.	All
A lack of coordination at the national level is hindering IoT adoption and operation across the economy and industry sectors. [need writeup]	Strategic approach for IoT
The adoption and operation of innovative IoT applications are hindered by various existing policies and regulations at local, state and federal levels.	Funding models,
Equity in access, opportunities, benefits and outcomes is necessary for the sustainable integration of IoT into all aspects of the national economy and civil society.	Funding models,
Small businesses can reap significant benefits from IoT, but significant barriers hinder adoption.	Small business and startup
Small companies and startups are instrumental in developing many innovative and disruptive technology solutions and services, but face a variety of barriers in getting adoption.	Small business and startup
IoT enables new innovative business models which requires new business and technology platforms and ecosystems to support and scale it.	
Interoperability is a key challenge for IoT across multiple industries.	Interoperability, Standards development
A variety of connectivity challenges is hindering IoT adoption, operation and scaling.	Availability of connectivity
A lack of trust in IoT is a major barrier to widescale adoption.	Cybersecurity guidance, Data Privacy legislation, Data and privacy policy framework, Trusted arch.
Artificial Intelligence (AI) is critical to unlocking and accelerating the value of IoT.	Need an AI recommendation
There is an insufficient number of people in the current workforce with the technical, digital and analytic skills required to develop, integrate and deploy, operate and maintain IoT devices and IoT-enabled systems and applications.	Invest and promote education and workforce dev for IoT [around 4 areas – workforce recruitment, workforce development, Placement into industry, and retention]
Many barriers to IoT adoption due to legacy infrastructure, security, and interoperability require multi-stakeholder platform-based business ecosystem partnerships that align business incentives on high value end-to-end solutions.	

Finding	Key Recommendations
Disconnected supply chains with multiple stakeholders involved pose IoT adoption barriers. Industry specific partnerships using IoT for augmented supply chain logistics reduce risks, speed adoption and fuel economic growth.	
Digitalization of Enterprise Workflows is Foundational in Creating a Trusted Digital Thread for a Continuous Flow of Data Connecting Business Processes, Products, Assets, and Digital Marketplaces Across Value Chains.	
Digital transformation combining digitalization and organizational changes enables IoT product suppliers to become smart-connected suppliers offering new IoT applications and solutions that drive something-as-a-service revenue streams.	
Slow adoption of enterprise digital transformation is the main barrier to IoT adoption. Phased approaches toward creating a Digital First Business are emerging that leverage industry ecosystem partners to drive economic growth.	
IoT supply chain resilience requires a multinational stakeholder collaboration (app B)	
Precision Agriculture. IoT brings significant value to agriculture, but adoption is slow.	Ag IoT strategy
Smart cities and infrastructure. The development of smart cities in the United States is limited, uneven and slow to develop.	Facilitate IoT in smart cities
Transit and traffic: IoT is transforming transit systems and traffic management with real-time data analytics, intelligent traffic management, and predictive analytics to enhance efficiency, reduce congestion, increase safety, and improve overall transportation experiences.	Facilitate IoT in smart transit and transportation
IoT is transforming healthcare and is poised to revolutionize it, but significant challenges need to be addressed.	Facilitate IoT in health care
IoT supports environmental sustainability through real-time monitoring, optimizing resource usage, and facilitating data-driven decision-making across infrastructure and multiple sectors of the economy.	Facilitate IoT in sustainability and env monitoring

Finding	Key Recommendations
	International collaboration in IoT across supply chains
	Data sharing
	Funding models

Framework of Themes

Unlock the IoT enabled Economy
Realize and maximize the value and benefits of IoT

Facilitate Adoption
Accelerate adoption and remove barriers to IoT
consideration and adoption

Modernize Infrastructure
Standards and interoperability,
connectivity, digital
infrastructure, data sharing

Establish Trust
Cybersecurity, privacy,
supply chain integrity

IoT Ready Workforce
Workforce development and
empowerment

Government Leadership
Areas where government can take direct action, within its area of authority, to
accelerate IoT
(international, strategy, legislation, internal use, etc.)

- No national coordination
- Policies & regulations hinder
- Startup barriers

- Interoperability challenges
- Connectivity challenges
- Legacy infrastructure
- Digitalization of workflow
- Digital transformation

- Lack of trust

- Insufficient workforce

- Slow industry adoption
- Equity in access, oppties
- Small business barriers
- Startup barriers
- Disconnected supply chains
- Precision ag value
- Slow smart city adopt
- Value of traffic and transport
- Healthcare barriers
- Env Monitoring value
- Public safety value

- AI and IoT
- Other Tom findings

Govt Leadership	**Modernize Infrastructure**	**Establish Trust**	**IoT ready workforce**	**Facilitate adoption**	**IoT enabled economy?**
• Strategic approach for IoT • Small business and startup • International collaboration in IoT across supply chains	• Data sharing • Interoperability • Standards development • Availability of Connectivity	• Cybersecurity guidance • Data privacy legislation • Development of Data and privacy policy framework • Support trusted architectures	• Invest and promote education and workforce dev for IoT [around 4 areas – workforce recruitment, workforce development, Placement into industry, and retention] • Align to national cyber workforce strategy • Partner with industry, academia and govt • Target non-digital industries and rural regions	• Funding models • Ag IoT strategy • Facilitate IoT in smart cities • Facilitate IoT in public safety • Facilitate IoT in health care • Facilitate IoT in sustainability and env monitoring • Facilitate IoT in smart transit and transportation	• IoT supply chain operations • Public private partnerships • Supply chain architecture

- No national coordination
- Policies & regulations hinder
- Startup barriers

Govt Leadership

- Strategic approach for IoT
- Small business and startup
- International collaboration in IoT across supply chains

- Add IoT to CET list
- Improve interagency coordination
- Fund research, development, deployment and demonstration
- Upgrade legacy fed owned buildings and systems
- Specify IoT in federally funded projects
- Support research and development in IoT tech

- Polices, programs and funding to accelerate adoption of IoT by small businesses
- Accelerate adoption of IoT manufactured by small businesses and startups

- Create internationally compatible data minimization guidance

- Interoperability challenges
- Connectivity challenges
- Legacy infrastructure
- Digitalization of workflow
- Digital transformation

Modernize Infrastructure

- Data sharing
- Interoperability
- Standards development
- Availability of Connectivity

- Establish templates or best practices for policies for sharing, using, and licensing
- Collaborate with international allies to develop/support data sharing policies
- Establish data repositories for privately collected data

- Facilitate interoperability thru development of consistent taxonomy
- Support research and industry led standards for automated vehicles
- Promote/adopt standards for min baseline interoperability in smart transportation and infrastructure

- Advocate for standards in public safety IoT
- Data exchange standards for IoMT
- Standards for supply chain logistics, traceability and assurance
- Standards for IoT in supply chain management

- Make license, unlicensed spectrum available
- Increase funding and accelerate broadband in rural America
- Support satellite narrowband IoT

- Lack of trust

Establish Trust

- Cybersecurity guidance
- Data privacy legislation
- Development of Data and privacy policy framework
- Support trusted architectures

- Strengthen cybersecurity measures on IoT across supply chain networks
- Consider ways to highlight vulnerabilities applicable to IoT product developers
- Accelerate promotion and adoption of methods to make grid more resilient
- Support domestic IoT cybersecurity labeling initiatives
- Ensure adequate funding for cyber trust mark consumer education campaign
- Establish appropriate US representation re: international harmonization of IoT cybersecurity
- Promote existing standards and conformity assessment schemes for industrial IoT applications

- Include IoT in proposed comprehensive privacy legislation

- Promote privacy by design
- Establish clear policies for 3rd party data sharing
- Use plain language in privacy policies
- Develop and implement privacy transparency mechanisms
- Endorse universal opt-out signals
- Privacy info (Maroney stickers) on cars
- Add location tracking enabled notice to devices
- Promote use, deve, and implementation of Privacy Enhancing Technologies
- Follow NIST sanitization stds for govt automobiles before resale

- Incentivize multi-stakeholder alliances for trusted end to end solutions across supply chains
- Support collaborative IoT platforms that align stakeholder business incentives
- Encourage use of digital threads for connected supply chains
- Facilitate creation of business ecosystems that enable new business models and revenue streams
- Promote consistent levels of s/w identity documentation in trusted digital threads for s/w IoT supply chains

- Insufficient workforce

IoT ready workforce

- The federal government should integrate the needs of the future IoT workforce into existing initiatives and programs with industry, academia and state and local government efforts.]

- Promote continuing education, prof dev and vocational training in supply chain mgmt.
- Develop educational initiatives that include IoT, targeting workforce development, and enhancing business, govt, and consumer data privacy and trust

- The government should review the National cyber workforce development strategy and align and integrate any special or unique needs and considerations of the IoT workforce

- The federal government should create partnerships with industry, academia, and state and local government to create workforce around certain critical digital and non-digital skills, including cybersecurity, privacy, AI, data science, and systems integration, etc.

- The federal government should create partnerships with industry, academia, state and local governments and private investors to create workforce in industries that have traditionally not been digital, or have attracted significant digital talent (cities, industrial type industries like mining, construction, manufacturing, etc.) or in geographic areas that have struggled with recruiting people (rural areas, tribal lands, etc.).

- Slow industry adoption
- Equity in access, oppties
- Small business barriers
- Startup barriers
- Disconnected supply chains
- Precision ag value
- Slow smart city adopt
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Facilitate adoption

- Funding models
- Ag IoT strategy
- Facilitate IoT in smart cities
- Facilitate IoT in public safety
- Facilitate IoT in health care
- Facilitate IoT in sustainability and env monitoring
- Facilitate IoT in smart transit and transportation

- Encourage other funding models to sustain and support IoT projects
- Consider student loan forgiveness in exchange for providing critical skills to cities and agencies
- Develop programs and grants to allow underserved communities

- Farm of the future setup in land grant universities
- Regulatory guidance for drone industry
- Promote industry and SDO efforts for interoperability
- Facilitate small farm/ranch adoption of IoT
- Support enactment of federal right to repair legislation

- Support development of smart city and sustainable infrastructure reference models
- Support development of smart city and sustainability extension partnerships
- Facilitate adoption and equity of benefits for local govts, regional entities, etc.
- Facilitate smart community oppties for rural communities with broadband infrastructure, or funding for BB
- Promote industry and SDO efforts for interoperability
- Facilitate small and medium city adoption
- Facilitate equity in realization of smart city benefits

- National stockpile
- Agencies to specify need for project awardees to develop privacy and usage policies
- Federal RFI/RFPs to consider IoT, and marketing of service to users
- Establish program for local communities to purchase and use IoT for public safety

- Promote IoMT as enterprise priority, including by leadership teams
- Facilitate cybersecurity in smart medical devices and equipment
- Facilitate and support use and adoption of healthcare IoT in rural communities
- Facilitate adoption of AI in IoT through research, development and workforce improvement
- Enact HIPAA like protection for users medical data in mobile applications and IoT devices

- Support development of environmental data repositories
- Support development of low cost air quality sensors
- Establish nationwide IoT based water monitoring system
- Utilize IoT tech to facilitate carbon transparency across economic sectors
- Promote use of IoT to complement and support wide area environmental situational awareness in remote and sensitive areas

- Promote development and adoption of policies and funding methods that can accelerate smart, connected and electrified transportation technologies

- AI and IoT
- Other Tom findings

IoT Economy

- IoT supply chain operations
- Public private partnerships
- Supply chain architecture

- tbd

- Foster PPPs and promote network effects
- Subsidize initiatives for digital infrastructure supporting digital transformation
- Promote enablement and use of trusted digital threads, digital marketplaces and platform based business ecosystems

- Promote trusted AI-IoT platforms across circular supply chains and ecosystems

Report structure

Section	Purpose	Content
Executive Summary	Summary of content, findings and recommendations	• Introduction and overview • Summary of the most important content in introduction to IoT section • Table of findings • Table of recommendations
Introduction and overview to IoT	Brief "level setting" about IoT including overview, benefits, capabilities, vision and state of industry	• What can IoT do? • Specific "types" of IoT • Current state of IoT • The future of IoT
Findings	Discussion of opportunities and challenges we learned from speakers, research and sub team discussions. Findings should lead to recommendations	• General findings (cross industry) • Industry findings
Recommendations	Recommendations of the board based on input from speakers, team discussions and other sources. Recommendations should map to one or more findings.	Recommendations are organized into six themes • Government leadership • Establish trust in IoT • Modernize infrastructure • Connect and secure the supply chain • IoT ready workforce • Facilitate industry adoption
Other	Miscellaneous content that doesn't fit into above categories	• Introduction • Background • Glossary • Appendix content • Compliance matrix • IoT stakeholders

Paring down content (Target 150 pages)

- Consolidate

  - Redundant sections and content
  - Similar recommendations across industries

- Simplify

  - Cut anything that doesn't directly support the main recommendations, or is important, insightful or relevant
  - Cut anything that will "clutter" up the main messages, findings and recommendations
  - Cut anything that doesn't have any industry or data to support it
  - Cut anything that is "out of scope"
  - If you or the FWG can't understand it, simplify it or cut it
  - Identify content where it can be replaced by a graphic or infographic

- Retain
  - Identify the most important, impactful and "move the needle" recommendations
  - Cut or move to appendix "supplementary" recommendations

Recommendations categorization considerations
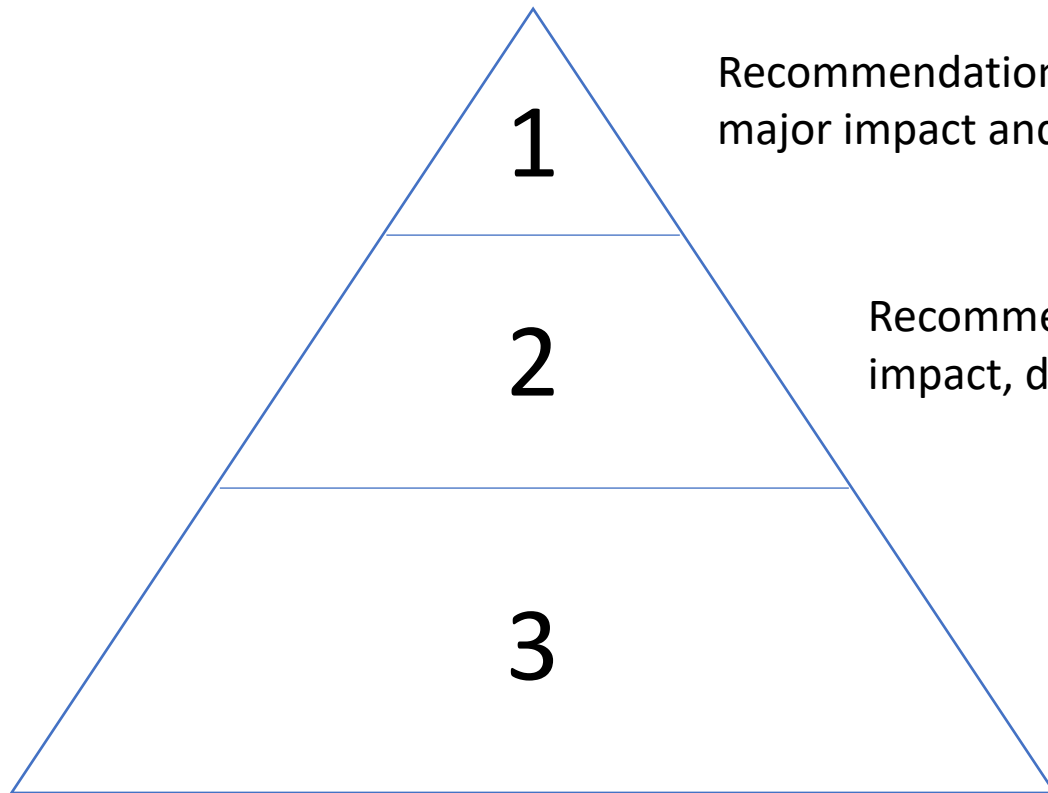
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Recommendations that are strategic "quick wins" – big impact, doable in the short term (existing infrastructure, etc.)

Recommendations that
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- Risks confusing or masking the main recommendations ("forest for the trees")

Meeting 11 (Feb 2024) Actions

Action	Who	When

Meeting 11 (Feb 2024) Actions

Action	Who	When

Planning – Next Meeting

Meeting #12 planning

- Next meeting April 2-3, 2024
- Virtual format
- TBD

Reminder

Please send to Barbara electronic copies of everything you shared here today.