

## Working Group on Maintaining Global Leadership in National Security AI Application

### Summary of Conclusions Working Group Meeting Friday, April 26, 2019, 0830-1730

**Working Group Objective:** Identify concrete steps that the U.S. can take to maintain its global leadership in Artificial Intelligence (AI)/Machine Learning (ML) application relevant to U.S. national security and defense.

**Working Group Approach:** Through a comprehensive assessment and analysis of the current state of U.S. national security and defense AI applications and the global AI threat environment, develop recommendations to maintain U.S. leadership in the field, to include:

1. National security organization, policy, and governance
2. Acquisition and application processes and mechanisms
3. Funding and resource requirements

**Meeting Objective:** Gain a baseline of the current state of AI application for national security by the U.S. and key near-peer nations to develop a foundation for subsequent investigation.

#### Commissioners in attendance:

- Safra Catz, Chair
- Katharina McFarland
- (b) (6) (rep for Andy Jassy)
- (b) (6) (rep for Steve Chien)
- Jason Matheny (from 1 PM)

**Commissioners received briefs on:** The AI threat environment, the National Defense Strategy, the Department of Defense Joint Artificial Intelligence Center (JAIC) and Project Maven, DARPA's AI Next Campaign, and the IC Strategy for Augmenting Intelligence Using Machines.

#### Commissioners agreed:

- (b) (5)
- (b) (5)
- To hold additional working group meetings with key U.S. government stakeholders, with a near-term focus on the defense and intelligence communities.
- To hold full-day working group meetings going forward in order to maximize Commissioner time and minimize travel requirements.

**Commissioners noted several additional themes to incorporate into the Commission's work:**

- (b) (5)
- (b) (5)
- (b) (5)

**The Commission Staff will:**

- Prepare a framework outlining the working group's approach for Commissioners to present at the Plenary Session on May 20<sup>th</sup>. (Action: NSCAI Staff Member, (b)(6) / NSCAI Staff Member, (b)(6) by May 14<sup>th</sup>, 2019)
- Identify future briefers and organize the next working group meeting in the June timeframe. (Action: NSCAI Staff Member, (b)(6) / NSCAI Staff Member, (b)(6) by May 14<sup>th</sup>, 2019)
- Establish a library of current U.S. government policy documents on AI. (Action: NSCAI Staff Member, (b)(6) by May 31<sup>th</sup>, 2019)

## Working Group on Maintaining Global Leadership in AI Research

Summary of Conclusions

Meeting #1

8 May 2019, 1500-1700

**Working Group Objective:** Identify concrete steps the US can take to maintain global leadership in Artificial Intelligence (AI)/Machine Learning (ML) research and development, with a focus on research that strengthens US national security and defense.

**Working Group Approach:** Through a comprehensive assessment and analysis of the US and the global AI research landscape and its associated funding and policy mechanisms, develop recommendations to maintain US leadership in the field, to include:

1. prioritization of research areas
2. infrastructure investments
3. funding mechanisms
4. policy and governance changes
5. application accelerants

**Meeting Objective:** Gain a baseline for current state and key trends in AI research across global academic and commercial sectors and the US defense sector to develop a foundation for subsequent investigation, and begin to consider possible approaches to maintaining US leadership.

### Commissioners in attendance:

- Andrew Moore, Chair; Eric Schmidt; Eric Horvitz

### Commissioners discussed:

#### 1. Global AI research environment:

- (b) (5) [REDACTED]
- (b) (5) [REDACTED]
- (b) (5) [REDACTED]
- (b) (5) [REDACTED]

#### 2. AAAI/CCC 20 Year Roadmap for AI Research

- (b) (5) [REDACTED]

- (b) (5) [REDACTED]
- (b) (5) [REDACTED]

**3. DoD Investments in AI (FY 2012-2017)**

- (b) (5) [REDACTED]
- (b) (5) [REDACTED]

**Commissioners agreed:**

- (b) (5) [REDACTED]
- (b) (5) [REDACTED]
- (b) (5) [REDACTED]
- (b) (5) [REDACTED]

**The Commission Staff will:**

- (b) (5) [REDACTED]
- (b) (5) [REDACTED]
- Bring in US government representatives to brief the working group on the comprehensive picture of US investments in AI research and development through various mechanisms.
- Provide research on international AI strategies. (b) (5) [REDACTED]
- (b) (5) [REDACTED]
- (b) (5) [REDACTED]
- Follow up to engage subject matter experts for the group.
- (b) (5) [REDACTED]



## Working Group on Preparing Our Citizens for an AI Future *Summary of Conclusions*

NSCAI Offices In-Person Meeting #2 | June 7, 2019 | 0830 - 1600

**Working Group Objective:** Determine the current status of the AI workforce and recommend concrete steps the United States should take to build and maintain an AI workforce that can address national security and defense needs of the United States.

**Working Group Approach:** Through a comprehensive analysis and assessment of the U.S. national security AI workforce, develop recommendations to maintain U.S. leadership through AI in the national security apparatus, to include:

- Assessment of the current AI workforce
- Defining the role of the AI workforce
- Developing and recruiting an AI workforce
- AI talent management
- Mechanisms for implementation

### **Meeting Objective:**

Assess and identify talent management and education policies within the broad national security community.

### **Commissioners in Attendance:**

- Dr. Jose-Marie Griffiths (Chair)
- Dr. Bill Mark
- Mr. Bob Work
- Ms. Mignon Clyburn

### **Commissioners Received Briefings on and Discussed:**

- (b) (5)
- (b) (5)
- (b) (5)
- (b) (5)
- (b) (5)





**The Commissioners Agreed:**

- (b) (5) [REDACTED]
- (b) (5) [REDACTED]
  - (b) (5) [REDACTED]
  - (b) (5) [REDACTED]
- (b) (5) [REDACTED]
- (b) (5) [REDACTED]
- (b) (5) [REDACTED]

**The Commissioners Next Steps include:**

- (b) (5) [REDACTED]
- (b) (5) [REDACTED]
- (b) (5) [REDACTED]

**The Commission Staff will:**

- Research four specific areas that could result in a package recommendation:
  - (b) (5) [REDACTED]
  - (b) (5) [REDACTED]
  - (b) (5) [REDACTED]
    - (b) (5) [REDACTED]
      - (b) (5) [REDACTED]
    - (b) (5) [REDACTED]
  - (b) (5) [REDACTED]



- (b) (5) [REDACTED]
- Create a read ahead for the September working group meeting to frame the discussion.
- Invite and confirm government and non-government entities to provide briefings on the agreed topics for our next working group meeting in September.
- Follow up and engage with subject matter experts to continue staff education and identify potential future speakers.
- (b) (5) [REDACTED]



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## **Working Group on Maintaining Global Leadership in National Security AI Application**

### **Summary of Conclusions Working Group Meeting Tuesday, June 11, 2019, 0830-1700**

**Working Group Objective:** Identify concrete steps that the U.S. can take to maintain its global leadership in Artificial Intelligence (AI)/Machine Learning (ML) application relevant to U.S. national security and defense.

**Working Group Approach:** Through a comprehensive assessment and analysis of the current state of U.S. national security and defense AI applications and the global AI threat environment, develop recommendations to maintain U.S. leadership in the field, to include:

1. National security organization, policy, and governance
2. Acquisition and application processes and mechanisms
3. Funding and resource requirements

**Meeting Objectives:** 1) Deepen understanding of strategic competitors' AI application efforts, and 2) examine existing innovative programs and approaches within the U.S. government.

#### **Commissioners in attendance:**

- Safra Catz, Chair
- Katharina McFarland
- Andy Jassy
- Ken Ford
- Andy Jassy (SVTC)
- (b) (6) (rep for Andy Jassy)
- (b) (6) (rep for Steve Chien)

**Commissioners received briefs on:** Strategic competitor AI applications for national security and innovative U.S. government programs from the following entities: NGA, NSA, DARPA, and NRO.

#### **Commissioners agreed:**

- To develop a framework for assessing individual departments and agencies ability to adopt and scale AI applications and begin conducting research. (Action: Staff with Commissioner buy-in)
- To hold additional working group meetings with key U.S. government stakeholders, with a near-term focus on the Department of Defense labs and programs. (Action: Staff)

**Commissioners noted several key takeaways from the working group meeting:**



- (b) (5) [REDACTED]
- (b) (5) [REDACTED]
- The following areas should be examined for best practices:
  - (b) (5) [REDACTED]
  - (b) (5) [REDACTED]
  - (b) (5) [REDACTED]
  - (b) (5) [REDACTED]
- (b) (5) [REDACTED]
- (b) (5) [REDACTED]

**The Commission Staff will:**

- Prepare talking points outlining key takeaways for Commissioners to present at the Plenary Session on July 11<sup>th</sup>. (Action: Staff)
- Identify future briefers and organize the next working group meeting in the September timeframe. (Action: Staff)
- Continue developing a framework for assessing AI application efforts within individual USG departments and agencies and begin conducting research. (Action: Staff)



## Working Group on Ensuring International Cooperation and Competitiveness in AI

### Summary of Conclusions Working Group Meeting Thursday, June 20, 2019, 0830-1600

**Working Group Objective:** Identify non-military steps the United States must take to ensure it does not cede a competitive advantage to adversaries in AI, and identify common interests and opportunities for U.S.-led international cooperation.

**Working Group Approach:** Analyze the threat international actors pose to U.S. competitiveness, identify steps needed to ensure a level playing field for the United States and its allies, and diagnose areas that could benefit from global U.S. leadership on AI cooperation. This includes an analysis of:

1. Entanglement vs competition with adversaries
2. Engagement with allies and partners
3. AI norms, benchmarks, and standards
4. Regulatory impact and tech transfer

**Meeting Objectives:** Understand the national AI strategies of key U.S. allies and partners, (b) (5)

(b) (5)

. Identify potential areas of cooperation with allies and partners, (b) (5)

#### Commissioners in attendance:

- Jason Matheny, Chair
- Chris Darby
- Gilman Louie

#### Commissioners received briefs on:

- The OECD and G20 AI Principles – U.S. Department of State
- Japan's National AI Strategy – Embassy of Japan
- The United Kingdom's National AI Strategy – Embassy of the United Kingdom
- Australia's National AI Strategy – Embassy of Australia
- The European Union's AI Strategy – The European Union's Mission to the United States

#### Key Takeaways from the Working Group Meeting:

- (b) (5)

- (b) (5)
- (b) (5)
- (b) (5)
- (b) (5)
- (b) (5)
- (b) (5)
- (b) (5)
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- (b) (5)

**Commissioners agreed:**

- To focus the working group's scheduled September 16 meeting on (b) (5). The meeting will also feature a longer executive session in order to discuss the group's findings to date.
- To schedule another meeting in September, potentially jointly with the public-private partnerships special project, on (b) (5). Meeting could be in person or virtual.
- To a tentative plan in which the Working Group would develop a research memo outlining its findings in September. This would feed to interim report, which would be reviewed at the October plenary in advance of being finalized in November.

**The Commission Staff will:**

- Continue to meet with additional international reps at the staff level, and will report findings or refer key briefings to Commissioners. **(Action: Staff, ongoing)**
- Develop a research memo outlining the key findings of the Working Group to date, for review in September. **(Action: Staff, by September 16 WG meeting)**
- Identify future briefers for both September working group meetings, and schedule potential joint-meeting. **(Action: Staff by August 15)**
- Develop out-brief slides and talking points for June 11 plenary. **(Action: Staff by July 8)**



## Working Group on Preparing the National Security Workforce For An AI Future

Date: September 9, 2019, 0830-1730

Location: NSCAI Offices, Second Floor Conference Room

**Meeting Objective:** Assess and identify recruitment and hiring practices and create an interagency workforce framework.

### 0830 – 0900 Light Breakfast and Coffee

*Please arrive by 0845 at the latest to allow time to be ready to start by 0900.*

### 0900 – 0915 Welcome Remarks

Google Hangout:

Phone Call:

Speakers: (b) (6), NSCAI Director of Research and Analysis

### 0915 – 1015 Session One: [Unclassified] How can scholarships, internships, fellowships, and the reserve component attract AI talent?

Google Hangout: (b) (6)

Phone Call: (b) (6) PIN: (b) (6)

Questions:

- (b) (5)
- (b) (5)
- (b) (5)

Speakers:

- Carnegie-Mellon University ((b) (6))
- Scholarship for Service ((b) (6))
- Reserve Component ((b) (6))

### 1015 – 1030 Break

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**1030 – 1130 Session Two: [Unclassified] What hiring authorities and pay scales does the government use to attract STEM talent?**

Google Hangout: (b) (6)

Phone Call: (b) (6) PIN: (b) (6)

Questions:

- (b) (5)
- (b) (5)
- (b) (5)

Speakers:

- Office of Personnel Management ((b) (6))
- OSD P&R ((b) (6))
- Cyber Command ((b) (6))

**1130 - 1230 Session Three: [Unclassified] How do technical integrators hire, train, and model their AI workforce?**

Google Hangout: (b) (6)

Phone Call: (b) (6) PIN: (b) (6)

Questions:

- (b) (5)
- (b) (5)
- (b) (5)

Speakers:

- McKinsey ((b) (6))
- Lockheed Martin ((b) (6))
- Booz Allen Hamilton ((b) (6))

**1230 – 1315 Lunch**

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**1315 – 1415 Session Four: [Unclassified] DIB-JAIC-NSCAI Discussion of Interagency Workforce Framework**

Google Hangout: (b) (6)

Phone Call: (b) (6) PIN: (b) (6)

Speakers:

- Defense Innovation Board (Josh Marcuse)
- JAIC

**1415 – 1430 Break**

**1430 – 1700 Executive Session**

Google Hangout: (b) (6)

Phone Call: (b) (6) PIN: (b) (6)

Discussion Topics:

- 3 Key Takeaways
- 3 Next Steps
- Finalization of the statements of belief
- Agreement on Assessments in Memorandum
- Agreement on a draft list of recommendations
- Commissioner and staff way ahead
- (b) (5)

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