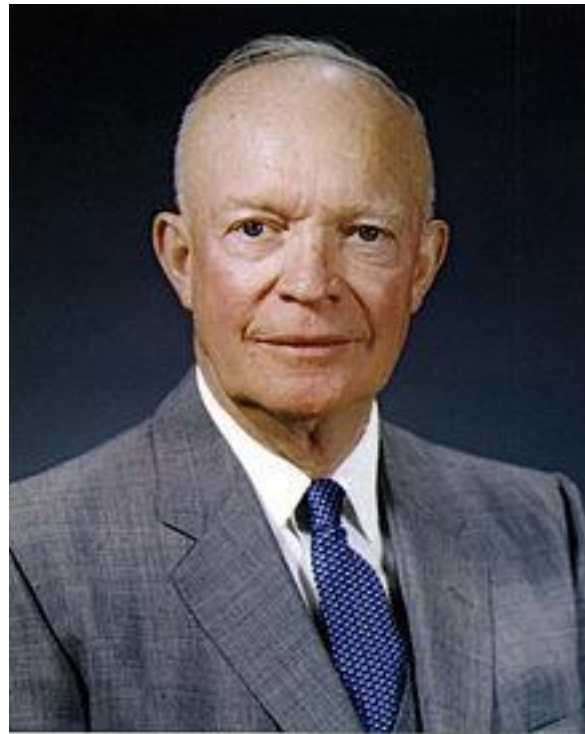# Emerging Technology TIGER TEAM

NBAC Face-to-Face(2019)
Update

Jalal Mapar
Chair
DHS-S&T, SES

Lain McNeill
Co-Chair

Plans are nothing; planning is everything.

Dwight D. Eisenhower

NIEM Emerging Technology Tiger Team (NET3)

Approach

- New Leadership
- Revised Strategy
- Results/Product Oriented
- Impact s. quantity

Actions

- Mission
- Goals: Short Term, Long Term
- Roadmap
- Execution based on teamwork, coordination, collaboration
- Communication, reach back, course correction *(as needed)*

Approach

MISSION:
- Promote NIEM as a Framework for Information Exchange for Emerging Technologies

NET3 APPROACH
- OODA

Near Term (6-9 months)
- Roadmap, Identify ETs and ET CoI, Brief ET CoI, Explore Pilot Opportunities

Long Term (12-24 Months)
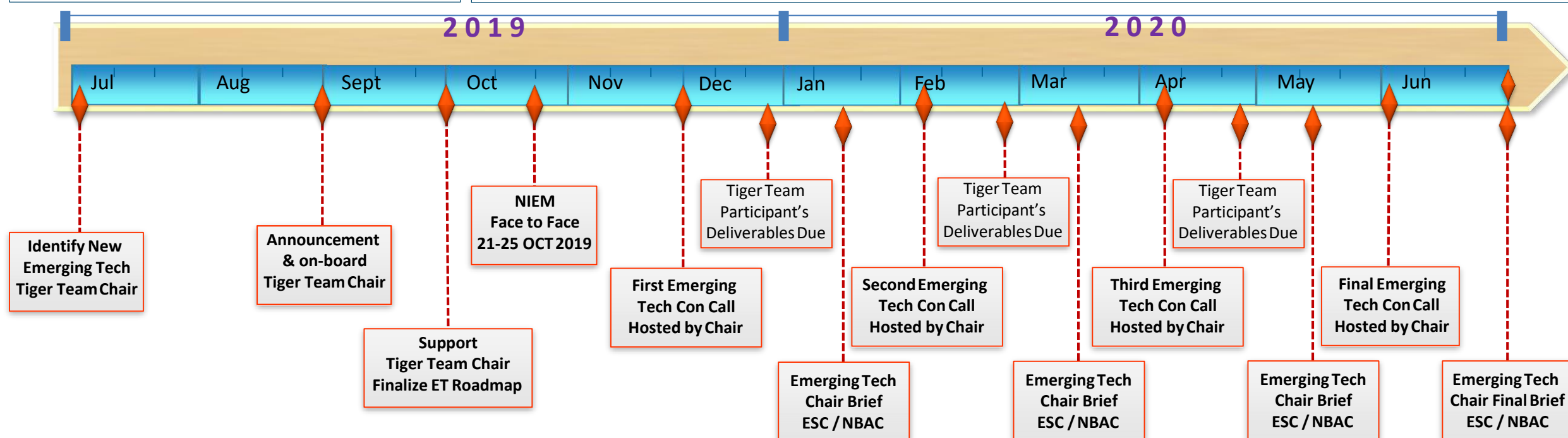- Partnerships, Collab/Coord, Pilots, Success/Impact/Metrics

NET³ Roadmap

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2019 — 2020 Timeline

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Technology Areas (Observe):

- **Artificial Intel, Machine Learning (AI/ML)**
- Quantum*
- Cyber / Network, IoT
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- Information/Data Infrastructure
- Identity
- *And many more …*

Tactical Activities (Orient) :

- User Community of Interest (CoI)
- **Select Committees, Forums, Events**
- Scenario Planning
- Operational Needs/Constraints
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- Mapping and Modeling and Simulation
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NIEM 5.0 Considerations:

- Reference Schema
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NET³
Roadmap: Technology Area

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Observe: American AI EO

AI EO

- Launched on February 11, 2019
- Directs Federal agencies to prioritize investments in AI R&D
- Focuses Federal Government resources toward developing AI technology; ensure next great AI inventions are made in the US

Five Major Principles

- Technological breakthroughs in AI
- Appropriate technical standards
- Train American workers in AI technologies
- Public trust and confidence in AI
- International engagements

American AI Executive Order

Objectives

- Promote *sustained investment* in AI R&D to generate technological breakthroughs

- Enhance *access to Federal data*/models/computing resources to increase their value for AI R&D

- *Reduce barriers* to the use of AI technologies to promote their innovative application

- *Set standards* for safe and trustworthy AI and reflect Federal priorities for innovation, public trust/confidence in systems that use AI

- *Train* the next generation of American *AI workforce* to ensure they are capable of taking full advantage of the AI opportunities

- *Engage with international allies* but protect the advantage of the US in AI against strategic competitors and foreign adversaries

NET³
Roadmap: Tactical Activities

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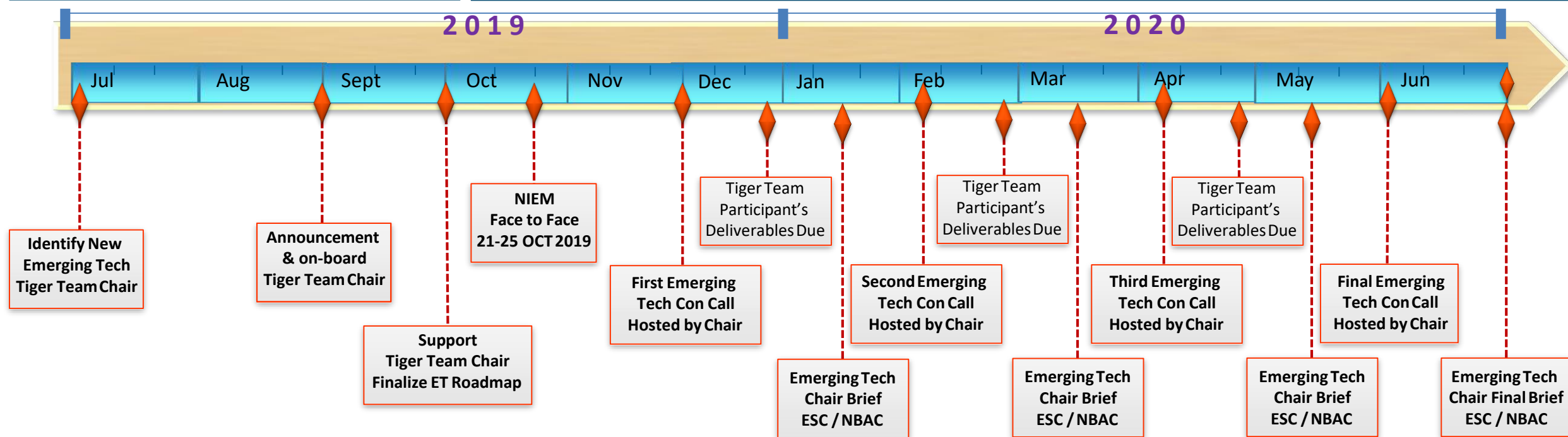**NBAC Monthly – Every 3rd Thursday of each Month**

NIEM Releases 5.0

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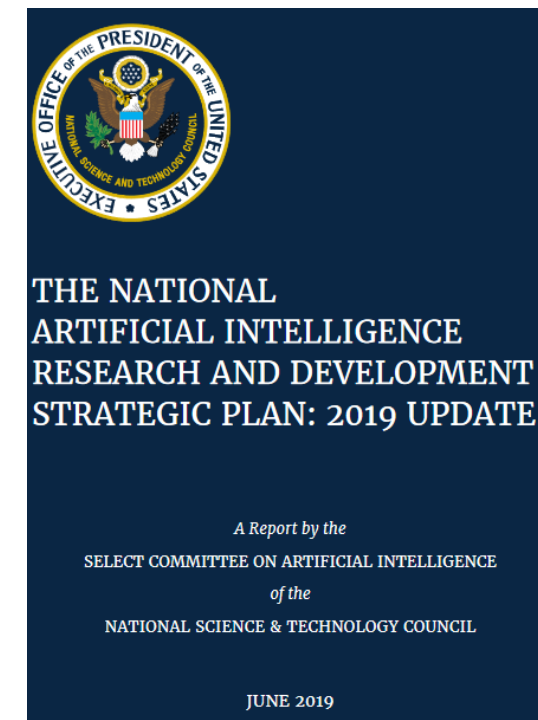- Data Standards for Confidence level (Indicator, Detection, and Threatlevels)
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AI-EO Section 4

- *… R&D agencies shall consider AI as an agency R&D priority …*
- *… Shall take this into account in budgets (2020 and beyond) …*
- *… R&D agencies shall budget an amount for AI R&D …*
- *… R&D agencies shall explore collaboration with non-Feds …*

NSTC/OSTP MALI-SC

- Monitor, watch, coordinate … share knowledge and best practices … AI/ML by the Federal Government … consult in the development of Federal R&D priorities in AI/ML

THE NATIONAL
ARTIFICIAL INTELLIGENCE
RESEARCH AND DEVELOPMENT
STRATEGIC PLAN: 2019 UPDATE

A Report by the
SELECT COMMITTEE ON ARTIFICIAL INTELLIGENCE
of the
NATIONAL SCIENCE & TECHNOLOGY COUNCIL

JUNE 2019

NET³
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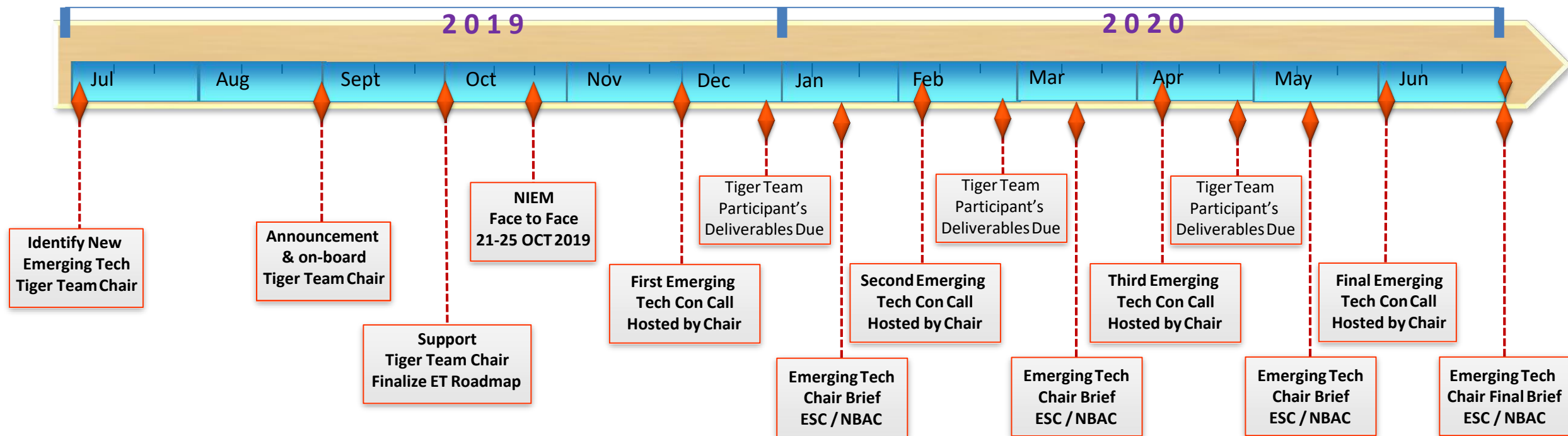
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Observe: Where / Who

Opportunity

- NIEM as an enabler for data/info exchange
- Complement other capabilities
- Coordinate/Collaborate with stakeholders

Approach

- Brief committees: NIEM 101
- Get connected to additional AI/ML communities
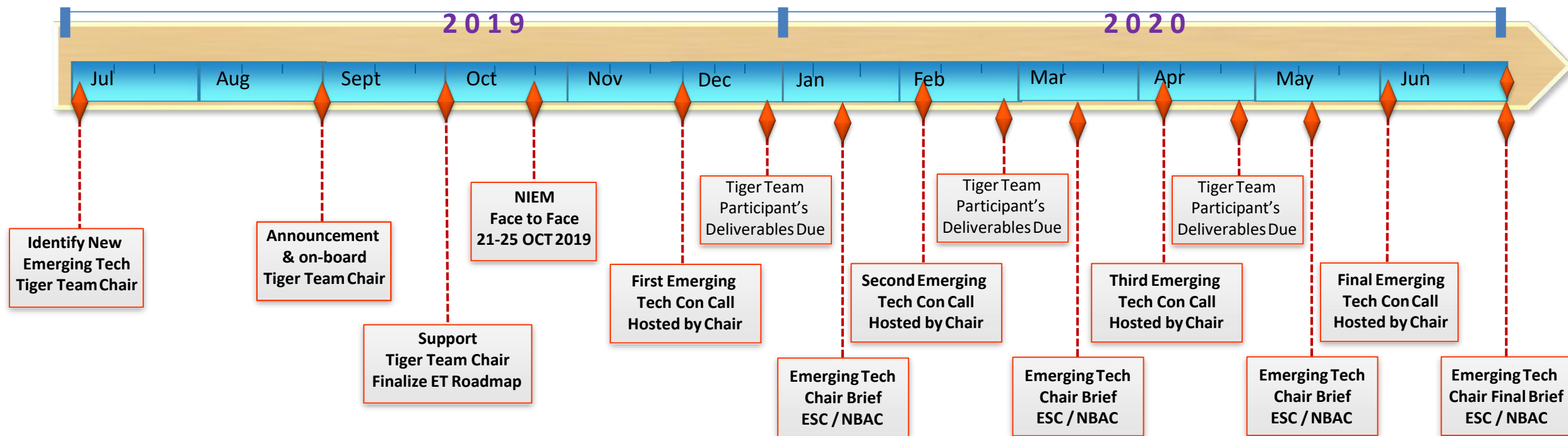- Identify potential Use Cases

NET³
Roadmap: Technology Area - Others

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Other Emerging Technologies

UAS, Identity, Quantum*, Cyber / Network, IoT, Bio Digital, Information / Data Infrastructure , Identity

- Long term vs. Short Term
- NIEM Value Proposition, Impact, Effectivity
- Emerging timeline & willing partners

Approach

- Think Big, Start small
- Demonstrate Value by focusing on a bitable chunk (AIML)
- Reuse NIEM 101 material to inform/educate other potential emerging technologies and partners

Upcoming

Orient

- Continue observing emerging technologies
- Continue Orienting towards partnerships and Use Cases
- Continue coordination and identify collaborators
- Plan for "Decide" step (Roadmap)

Approach

- NIEM ET3 team meetings
- Solicit help from members
- Execute the roadmap
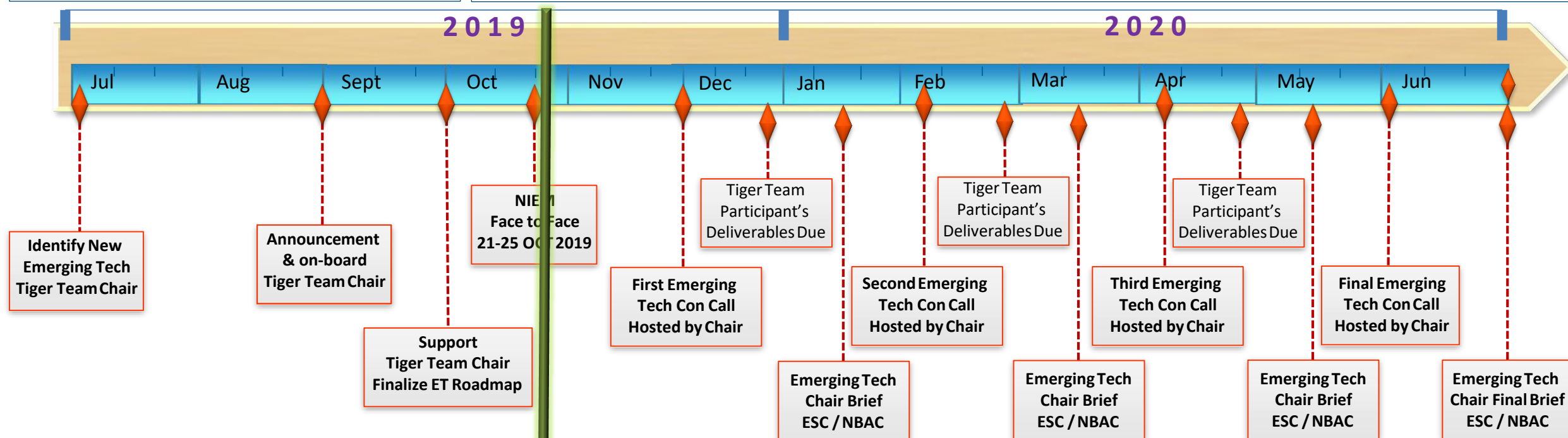
NET³
Roadmap: Point In Time

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If you don't know where you're going, any road will get you there

JOIN US

As part of the NIEM Emerging Technology effort, we are all committed to increasing the utility of NIEM for a broad and diverse audience. Identify stakeholders that impact your Emerging Technology exchange requirements and plans and invite them to participate into our Tiger Team.

- *Unique Attributes*

- *Existing Data Models & Exchanges*

- *Stakeholders & Exchange Partners*
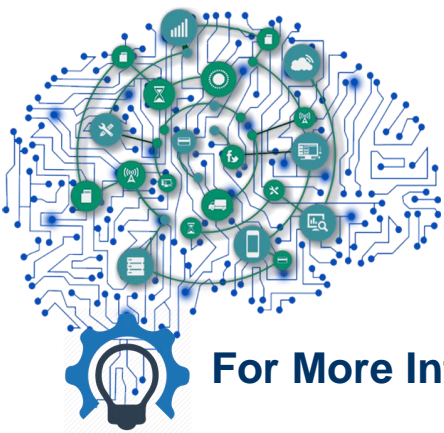
For More Information on NIEM Emerging Technology Tiger Team, please contact the NIEM PMO. www.NIEM.GOV