



"In the middle of difficulty lies opportunity"

*Albert Einstein*

# SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

*Accelerating SOF Innovation*

**Ms. Lisa Sanders** *Director, Science and Technology*

**CDR Brian Sisco** *S&T Futures*

**SCIENCE & TECHNOLOGY** Engagements and Opportunities



# SOF Future Operating Concept

Geopolitics, socio-economic behavior, and technology will change in unprecedented ways with unprecedented speed.

Resurgent nationalism, changing demographics, and rapid technological advancement will drive political instability and competition for resources.

**An accelerating pace of change and innovation is the new normal.**

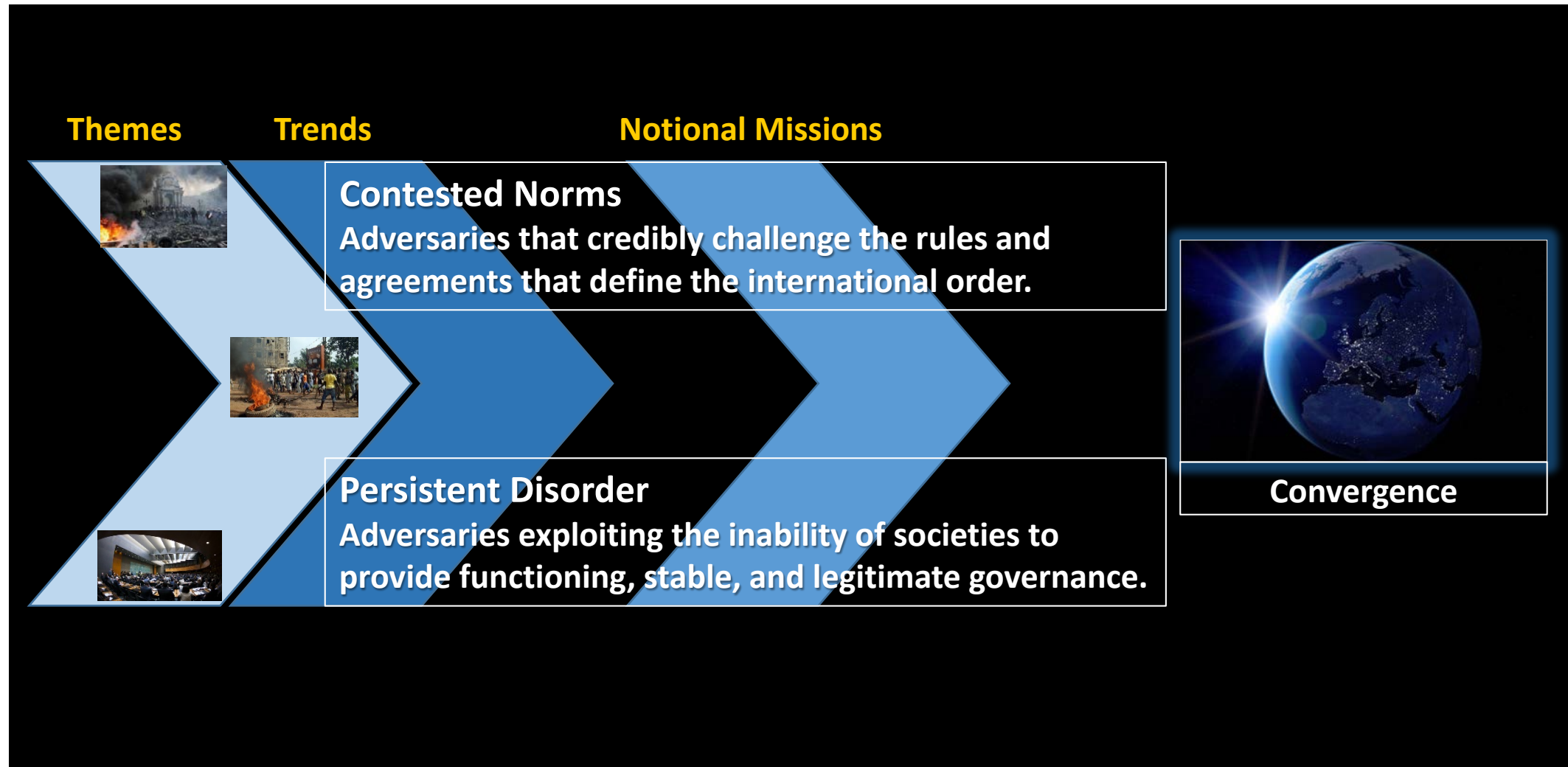
By 2030 all domains will be contested.

We will no longer have the luxury of dictating the terms of engagement based on technological advantage.

The battlefield will be reimagined and extend from our homes to deep in our enemies' homelands, into social media, cyberspace, and outer space.

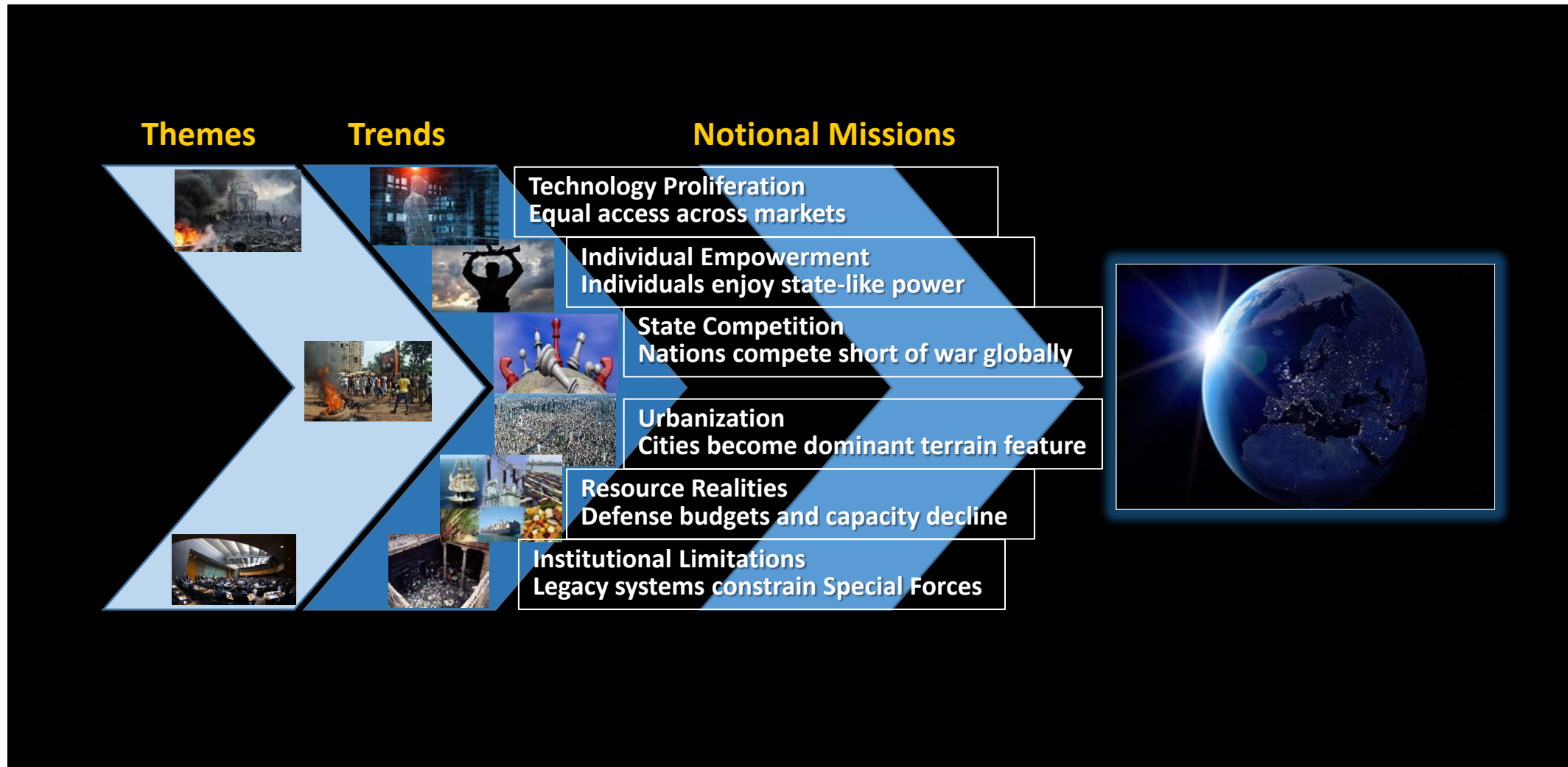
# Future Operating Environment

## Themes



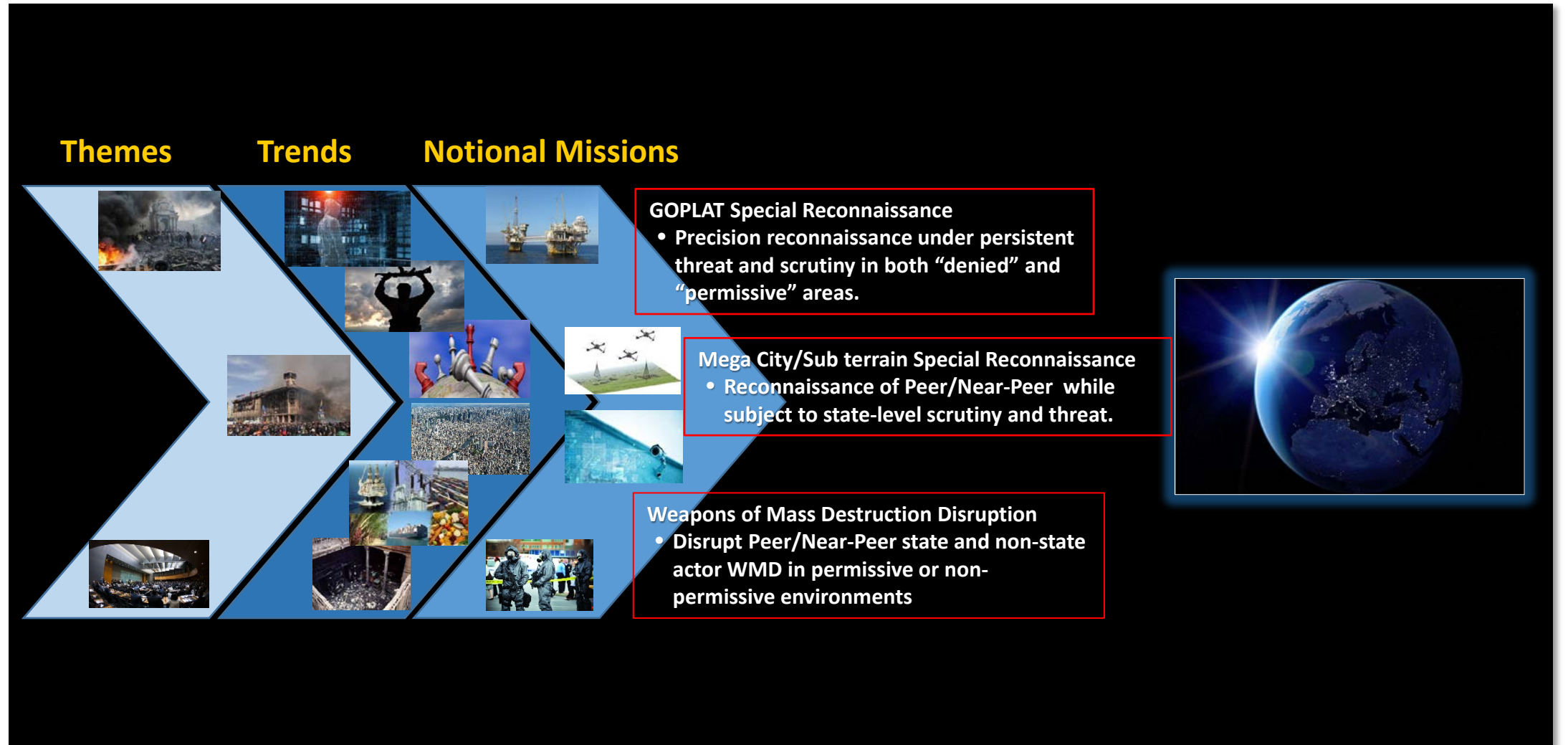
# Future Operating Environment

## Trends



# Future Operating Environment

## Notional Missions



# S&T Futures Process

## □ Results

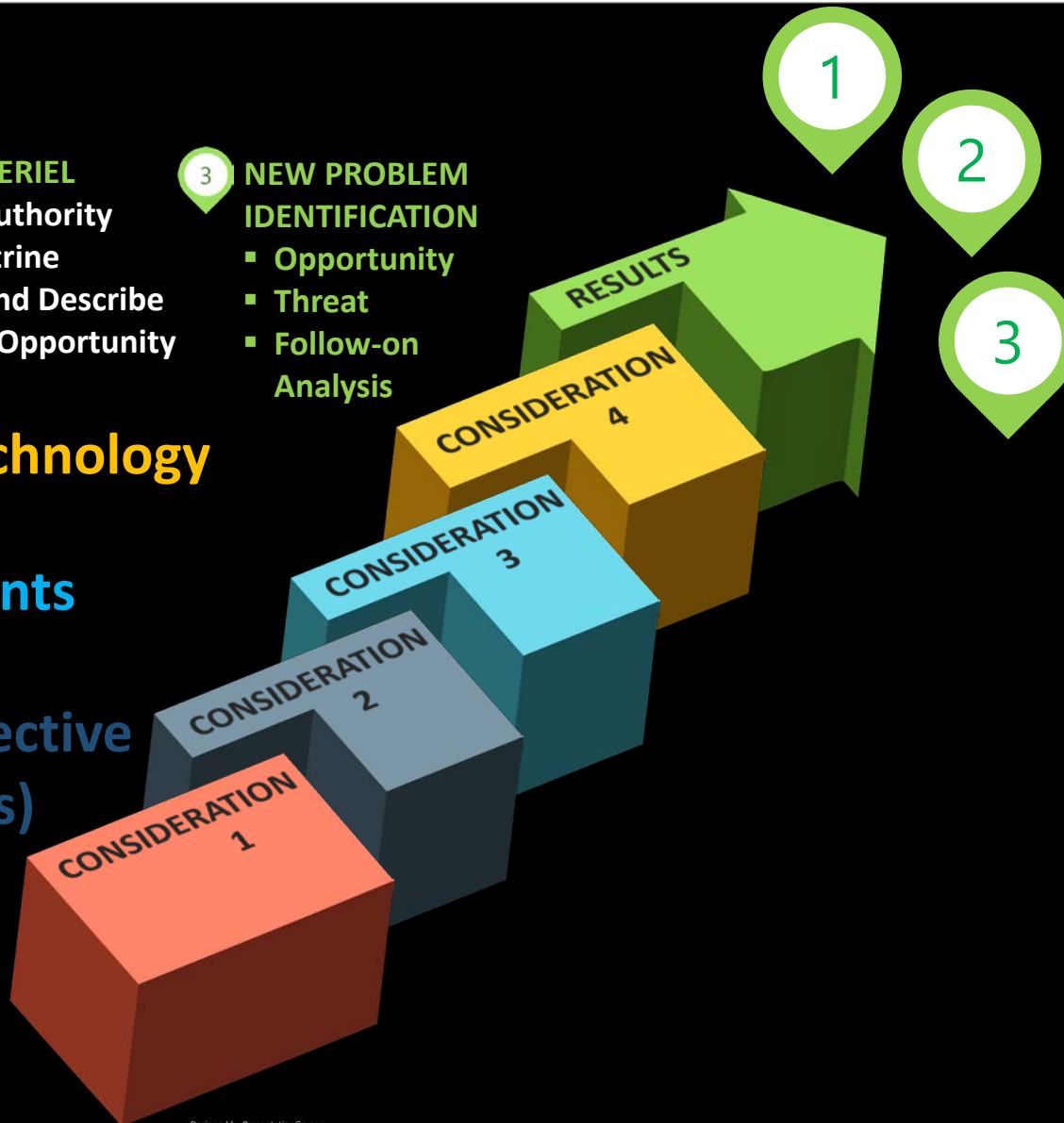
- |  |  |   |
|--|--|---|
| <p>1 MATERIEL APPROACHES</p> <ul style="list-style-type: none"> <li>▪ Leap Ahead</li> <li>▪ Asymmetric</li> <li>▪ Divergent</li> </ul> | <p>2 NON-MATERIEL</p> <ul style="list-style-type: none"> <li>▪ Policy, Authority and Doctrine</li> <li>▪ Assess and Describe Impact/Opportunity</li> </ul> | <p>3 NEW PROBLEM IDENTIFICATION</p> <ul style="list-style-type: none"> <li>▪ Opportunity</li> <li>▪ Threat</li> <li>▪ Follow-on Analysis</li> </ul> |
|--|--|---|

## □ Rapidly Changing Technology

## □ Changing Environments

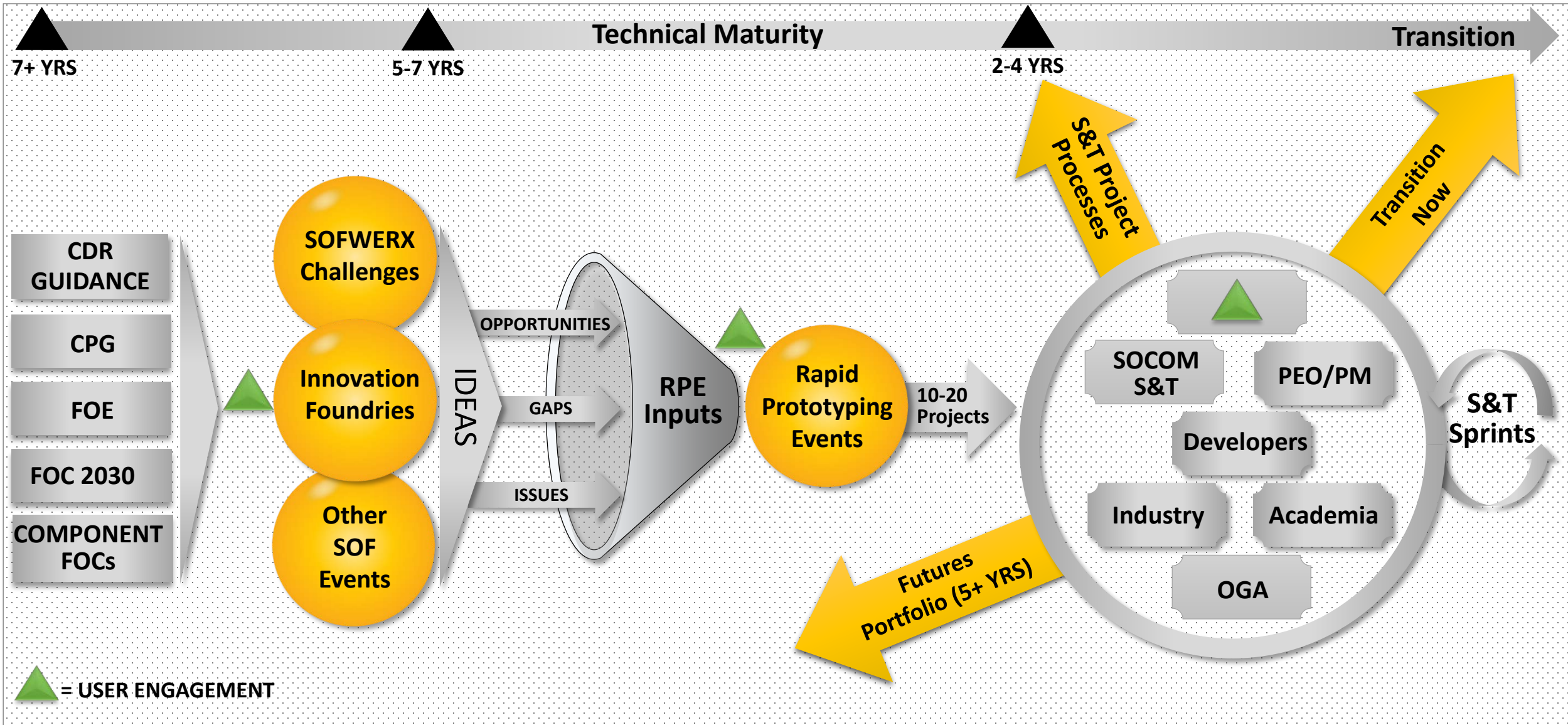
## □ Varying Mission Objective (Measures of Success)

## □ Changing Strategic Conditions



Designed by PresentationGo.com

# Transformation to Transition



# Innovation Foundry (IF)

- **Conducted IF3 Event: 23-25 April 2019, Austin TX, Special Reconnaissance (SR)**
- **Time Horizon: 7-15 years in the Future**
- **Reference Missions**
  - Maritime
  - Mega City
  - Subterranean
- **Results**



**Design Thinking Activity Linked to SOCOM Enterprise Needs**



# Innovation Foundry (IF) 4.0

- August 2019, Location TBD
- Interested?
- Link: <https://www.socom.mil/st/Pages/futures.aspx>



**Design Thinking Activity Linked to SOCOM Enterprise Needs**

# SOF Modernization

## ❖ Capability Focus Areas

- Biotechnologies / Human Interface
- Next-Generation Intelligence, Surveillance & Reconnaissance (ISR) / Tactically Relevant Situational Awareness
- Network & Data Management
- Next-Generation Effects/Precision Strike

## ❖ Cross Cutting Technology Areas

- Hyper-Enabled Operator
- Next-Generation Mobility

# S&T POCs

## Capability Focus Areas:

---

**Next Generation Intelligence, Surveillance, & Reconnaissance (ISR)/Tactically Relevant Situational Awareness**

Contact: Lead-Dr. Conrad Lovell, [conrad.lovell.civ@socom.mil](mailto:conrad.lovell.civ@socom.mil)

---

**Network & Data Management:**

Contacts: Lead-Jamila Patterson, [jamila.patterson@socom.mil](mailto:jamila.patterson@socom.mil); Barton Graham, [barton.graham@socom.mil](mailto:barton.graham@socom.mil)

---

**Biotechnologies/Human Interface:**

Contact: Lead-Douglas Simpson, [douglas.simpson@socom.mil](mailto:douglas.simpson@socom.mil)

---

**Next Generation Effects/Precision Strike:**

Contact: Lead-Jack Plessinger, [jack.plessinger@socom.mil](mailto:jack.plessinger@socom.mil)

---

## Cross Cutting Technology Areas:

---

**Joint Acquisition Task Force (JATF) Hyper-Enabled Operator (HEO)**

Contacts: Lead-COL Alex Maccalman, [alex.maccalman@socom.mil](mailto:alex.maccalman@socom.mil); LCDR Allison Moon, [allison.moon@socom.mil](mailto:allison.moon@socom.mil)

---

**Next Generation Mobility**

Contact: Lead-James Griffin, [james.griffin@socom.mil](mailto:james.griffin@socom.mil)

---

## Enablers:

---

**Futures**

Contact: Lead-CDR Brian Sisco, [brian.sisco@socom.mil](mailto:brian.sisco@socom.mil)

---

**Technical Experimentation**

Contact: Lead-Dan Bernard, [dan.bernard@socom.mil](mailto:dan.bernard@socom.mil)

---



# QUESTIONS?

