

# FAA Aircraft Certification Service

## Globalization – What Does it Mean to Us?

Presented to: International Partners  
Global Manufacturing Conference

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Federal Aviation  
Administration



# Objective

**Discuss the regulatory challenges resulting from complex international industry business models and the FAA strategic globalization focus.**

**How is this relevant to the aviation safety work we do on a daily basis?**



# Drivers of Change

Numerous external forces affecting AIR's existing operations and processes are causing AIR to reexamine how it does business and how it is structured.

## • Globalization of Aviation

*• Industry is made up of an international web of networks and complex business arrangements that are challenging our traditional regulatory model.*

## • Industry Growth

*• Industry expands and contracts much faster than the FAA can ever keep pace.*



## • Velocity of Change

*• Technological advances and business model changes are precipitating higher rates of change and increasing the need for organizational agility and adaptability as our environment changes.*

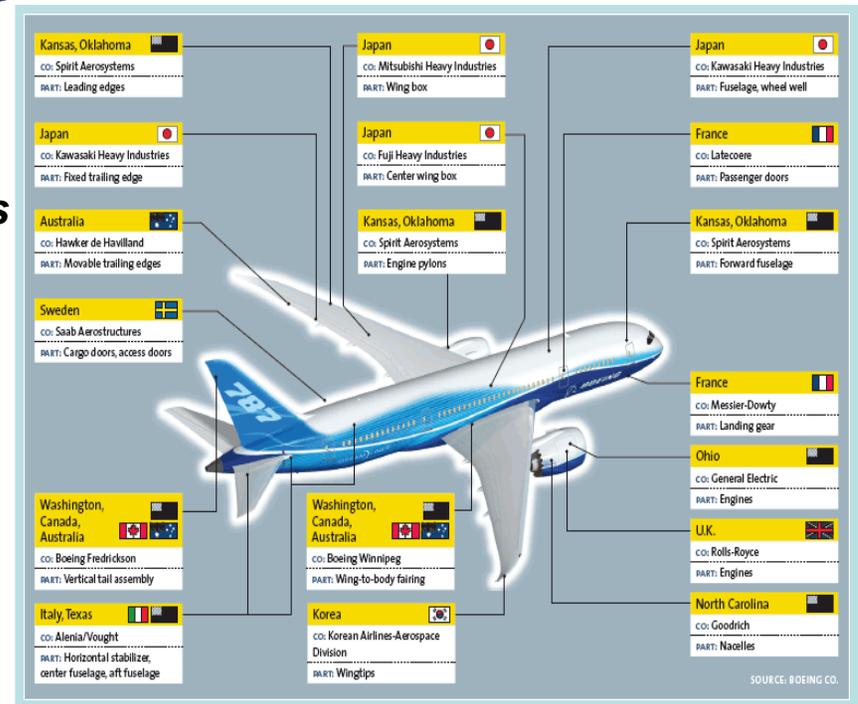
## • Heightened Expectations

*• The public, industry, and government entities continue to increase their expectations of us to do things faster and without error.*

# Drivers of Change

- Globalization of Aviation

- *Separate SoD and SoM for aviation products*
- *FAA PAHs seeking PC extensions abroad*
- *FAA PAHs with multi-tier international suppliers*

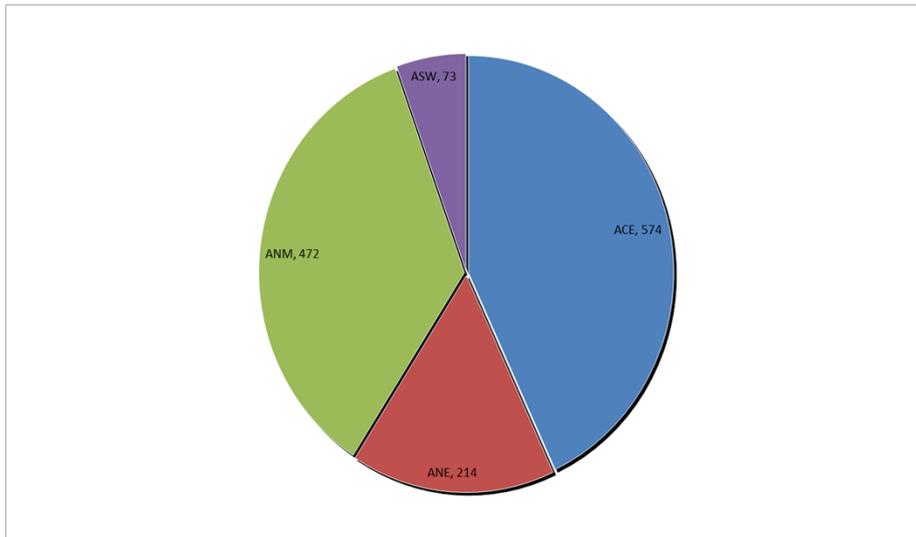


- *New States emerging as SoD/SoM*
- *Industry establishing complex business models*

# Drivers of Change

- **FAA validation requests (outbound) – increasing\***

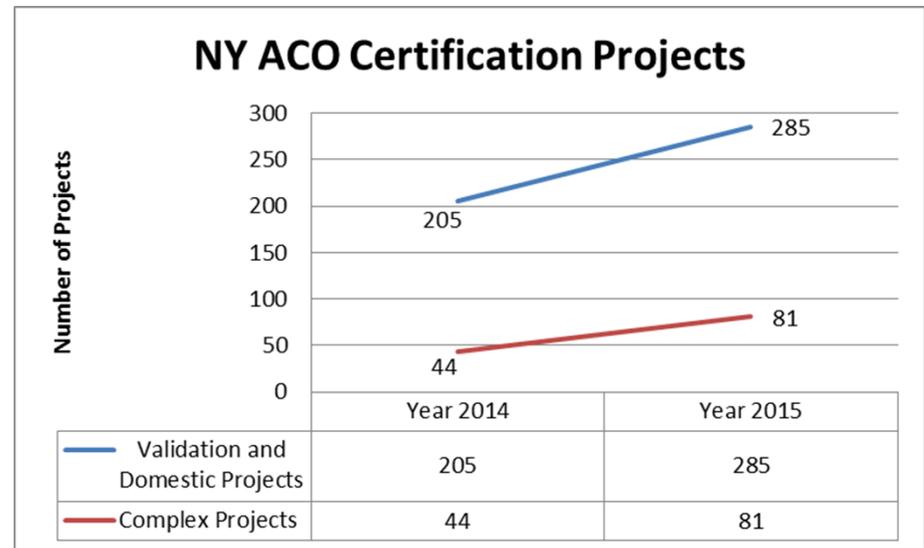
\* In 2014 FAA processed 700 outbound validation applications



## • Velocity of Change

- **FAA validation request (inbound) - increasing**
- **Growing number of SoD/SoMs**
- **Complex designs, e.g. composites**
- **Modification approvals, e.g. STCs**

- **States increasing LOI in validation**
- **Concurrent validation requests on the rise**
- **CAA SMS development /implementation**
- **CAA Regulatory system advancement**



# Drivers of Change

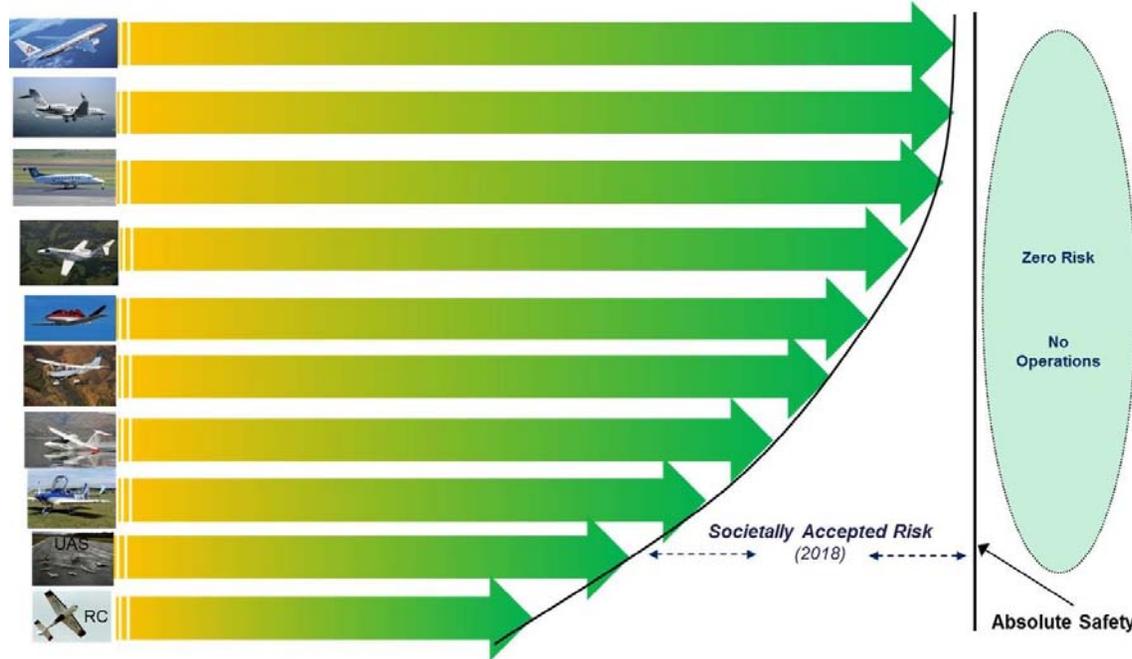
- Industry Growth



- ***Evolving business models – Revenue sharing (risk sharing)***
- ***States experiencing increase in aviation manufacturing expertise***
- ***International MRO business***



# Drivers of Change



## • Heightened Expectations

***Stakeholders demand agility and efficiency in this complex environment***

- ***U.S. GAO audit outcome of FAA validation process***
- ***Industry burden having to be responsible to multiple CAAs***
- ***Industry expectations of their authority when seeking foreign validation – Certifying authority representing their approvals in foreign validations***
- ***Differences among States in Risk Based Decision Making processes.***

# Vision

## *Old*

**Reactionary, leader-dependent decisions**

**One-in/one-out hiring, mixed application of the regulations**

**Rule-centric, enforcement-first approach**

**Lead by force, operating in silos**



## *New*

**Prioritize, predict, and prevent safety risk**

**Train, retain, and recruit the right skills for the right jobs**

**Enhance operational efficiency and embrace new technology**

**Lead through collaboration, example, and influence**

# Roadmap for Change

## FAA Strategic Initiatives

-  Risk-Based Decision Making
-  National Airspace System
-  Global Leadership
-  Workforce of the Future

## AIR:2018 Strategic Focus Areas

-  Safety
-  Organizational Excellence
-  Globalization
-  People

# FAA Strategic Priorities

## **PRIORITY**

**Make Aviation Safer and Smarter**

*Initiative: Risk-Based Decision Making*

*Sub-Initiatives:*

- Improve standardization, data access, and modeling integration
- Enhance decision making process
- Evolve the safety oversight model

## **PRIORITY**

**Deliver Benefits Through Technology and Infrastructure**

*Initiative: National Airspace System (NAS)*

*Sub-Initiatives:*

- Focus to achieve the benefits of NextGen
- Integrate new user entrants (unmanned aircraft and commercial space)
- Right-size the NAS

## **PRIORITY**

**Enhance Global Leadership**

*Initiative: Global Leadership*

*Sub-Initiatives:*

- Transform our internal structure
- Develop an integrated, data-informed approach to international activities
- Ensure global interoperability of NextGen
- Place international resources strategically

## **PRIORITY**

**Empower and Innovate with the FAA's People**

*Initiative: Workforce of the Future*

*Sub-Initiatives:*

- Leadership Development
- Skills Identification
- Skills Development
- Attracting Talent

## **AIR: 2018 – Change thru innovation**

### **Globalization - Vision**

**AIR provides leadership to achieve a consistent level of product safety across geopolitical boundaries.**

### **STRATEGIC PRIORITIES**

- Strong international relationships are in place with a network of partners.**
- The full benefit of global manufacturing and seamless transfer of products and approvals is achieved through collaboration with international partners and industry.**
- Safety initiatives are shared among international partners and promoted globally.**

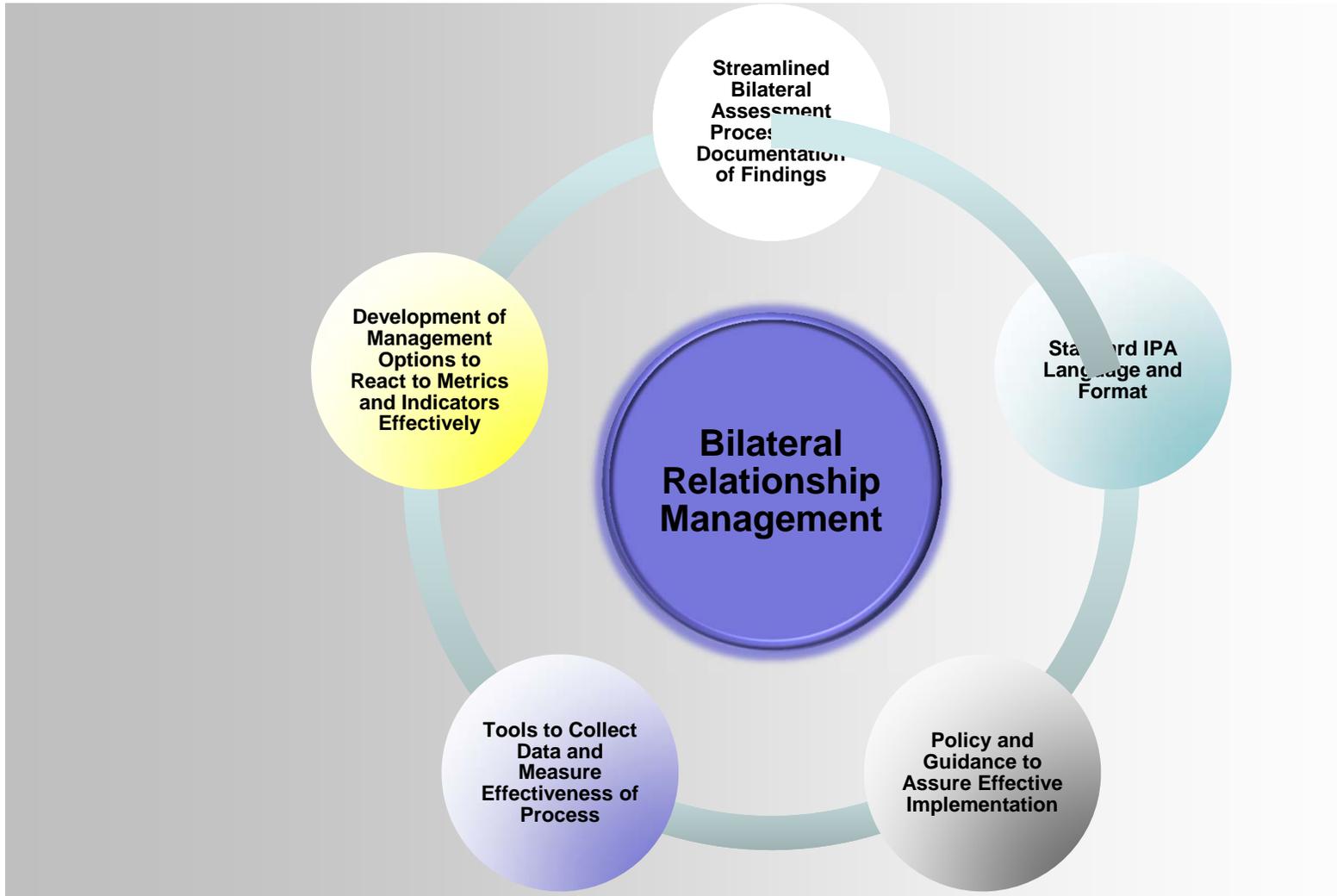
### **OUTCOMES**

- #1. Bilateral relationship management is conducted based on safety management principles.**
- #2. Improved global strategic alignment on regulatory framework, including certification (type, production and airworthiness) policy and continued airworthiness, demonstrated by a reduction in differences between the FAA and international certification systems.**
- #3. Effective and efficient oversight of global manufacturing is conducted by leveraging bilateral partnerships.**
- #4. Increased leveraging of bilateral partner's type certification system.**

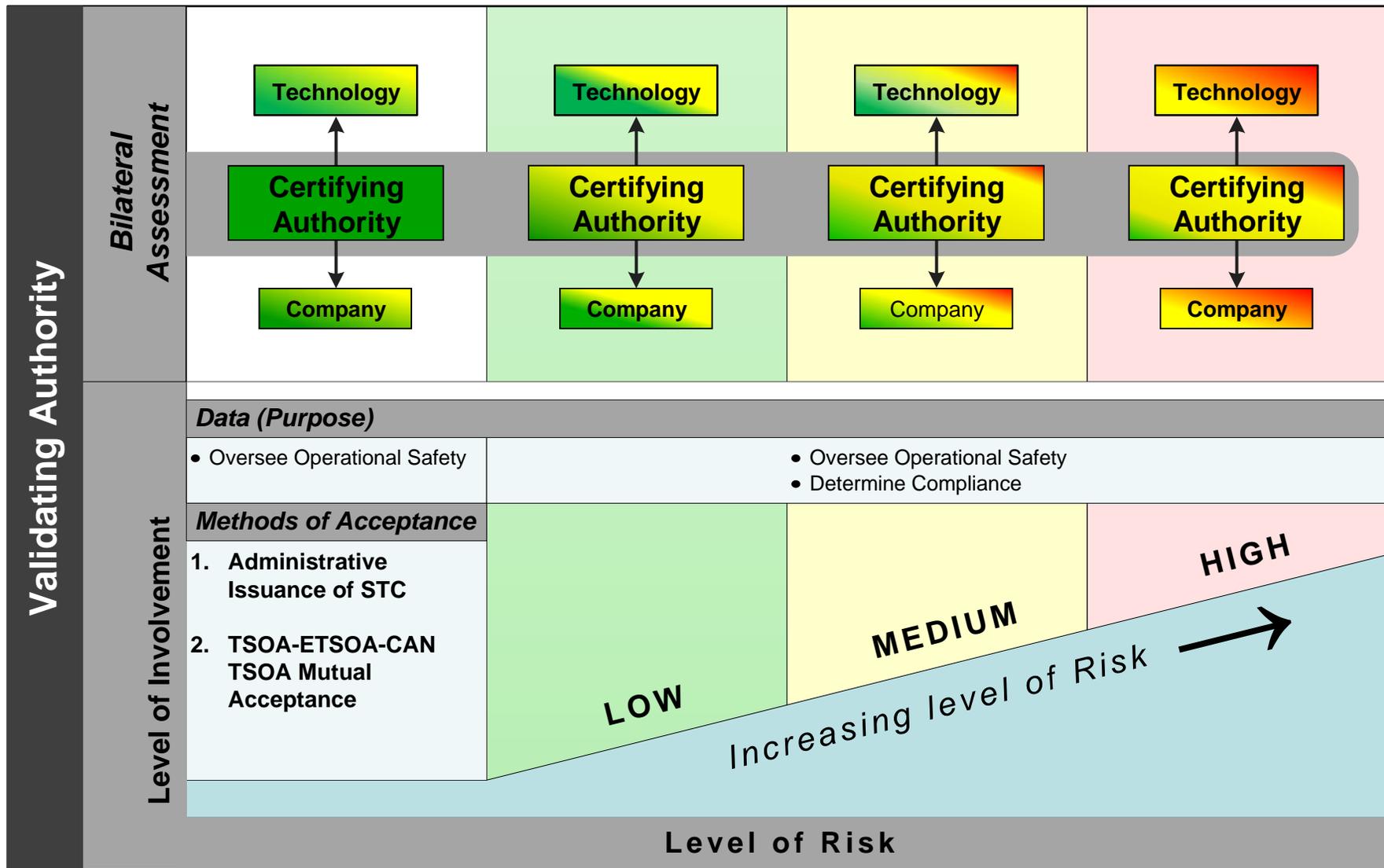
# AIR 2018: What does this mean?

- **We must evolve towards a risk-based validation model**
- **IPAs must have language to address SoD and SoM requirements separately**
- **Adding a formal structure to our Special Arrangement/Management Plan process**
- **Our Bilateral Relationship Management (BRM) process must be:**
  - Risk-based
  - Continuous
- **Training for all AIR personnel**
- **Proactively taking advantage of FCAA training/mentoring opportunities – *Invest now***

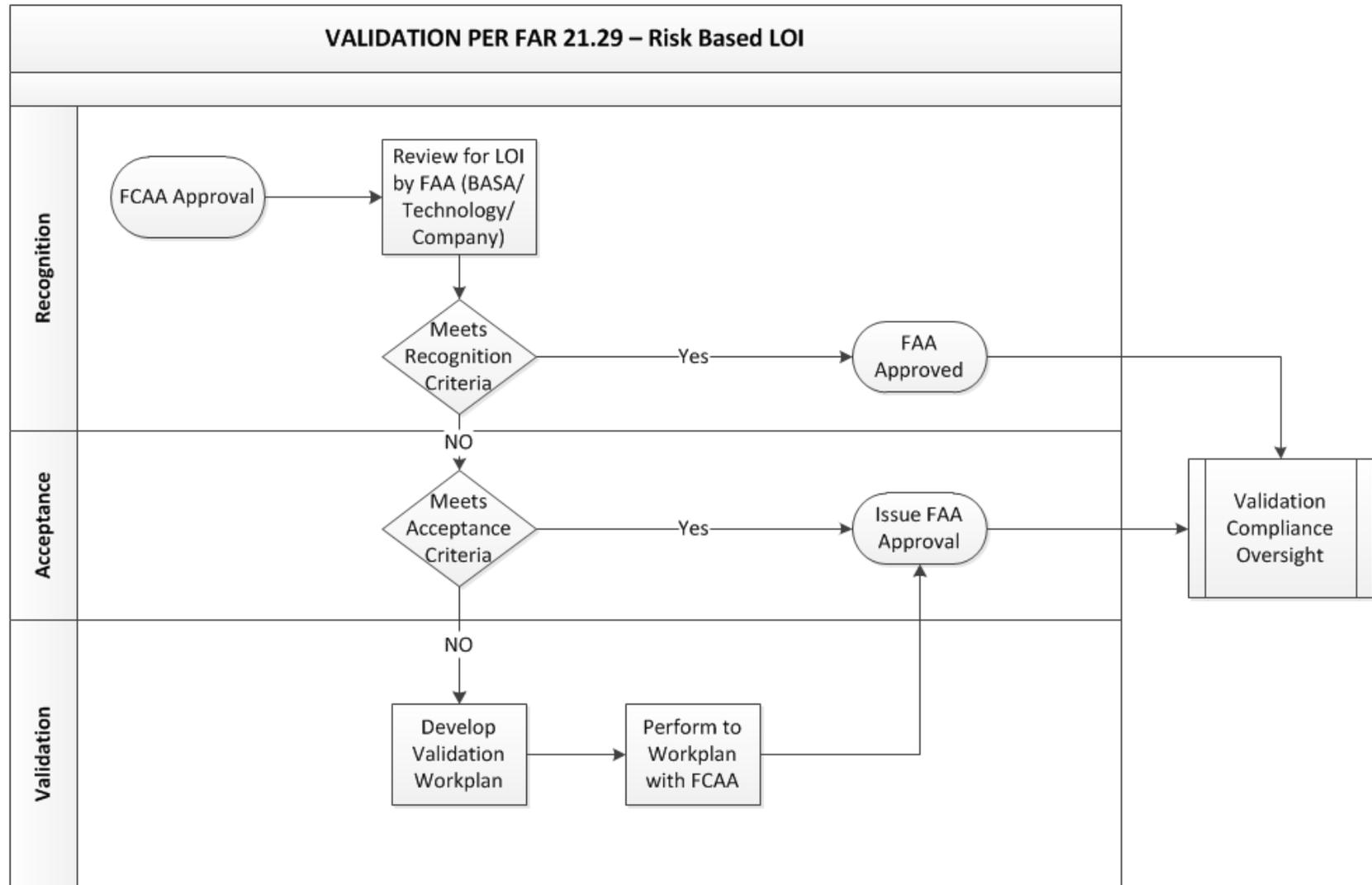
# Bilateral Relationship Management



# Risk-based Validation Model



# Risk Based Validation Model



# Bilateral Agreement – Standardized IPAs

- **Traditional IPA language assumes SoD/SoM are the same State**
  - Traditional IPA language assumes “*manufacture*” means the SoD and SoM are the same -Growing trend for split responsibilities among States
  - This does not proactively support growing business models that diversify design, parts manufacturing, and production among multiple State locations.
- **New IPA language allows for broad business models by industry**
  - Use risk-based assessment model to ensure each application is appropriately managed

# *Questions*

