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Findings and Recommendations

# Closing the Loop: Agile Approaches to Emerging Technology Legislation

Presented by Jodi Kuhn, Executive Director

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Study context

# Research Questions

1. What are the **key hurdles or challenges** in regulating emerging technologies, such as artificial intelligence?

2. What **regulatory approaches** could address these challenges? And what is the **role of legislatures** in these approaches?

3. Which, if any, of the studied approaches are being or could be **applied in Virginia**?

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# Key Concepts



## REGULATION

Any rules that are formalized and binding on regulated entities. The study uses this colloquial definition and focuses on the roles of legislation / legislatures.



## EMERGING TECHNOLOGIES

Technologies characterized by rapid development, novelty, and uncertainty in trajectory, risks, and impact.



## AGILE GOVERNANCE or REGULATION

Borrowing the "agile" concept from software development, agile regulation encompasses a variety of adaptive and iterative approaches to rule-making.

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Agile Approaches to Legislation

# Policy Process: Linear to Loop

## Traditional, *status quo* rule-making

### Before

- Evidence/ information gathering and analysis
- Policy development/ testing
- Consultation
- Possibly: experimentation

### During

- Refining/finalizing rules, drafting legislation
- Implementation by covered entities

### After

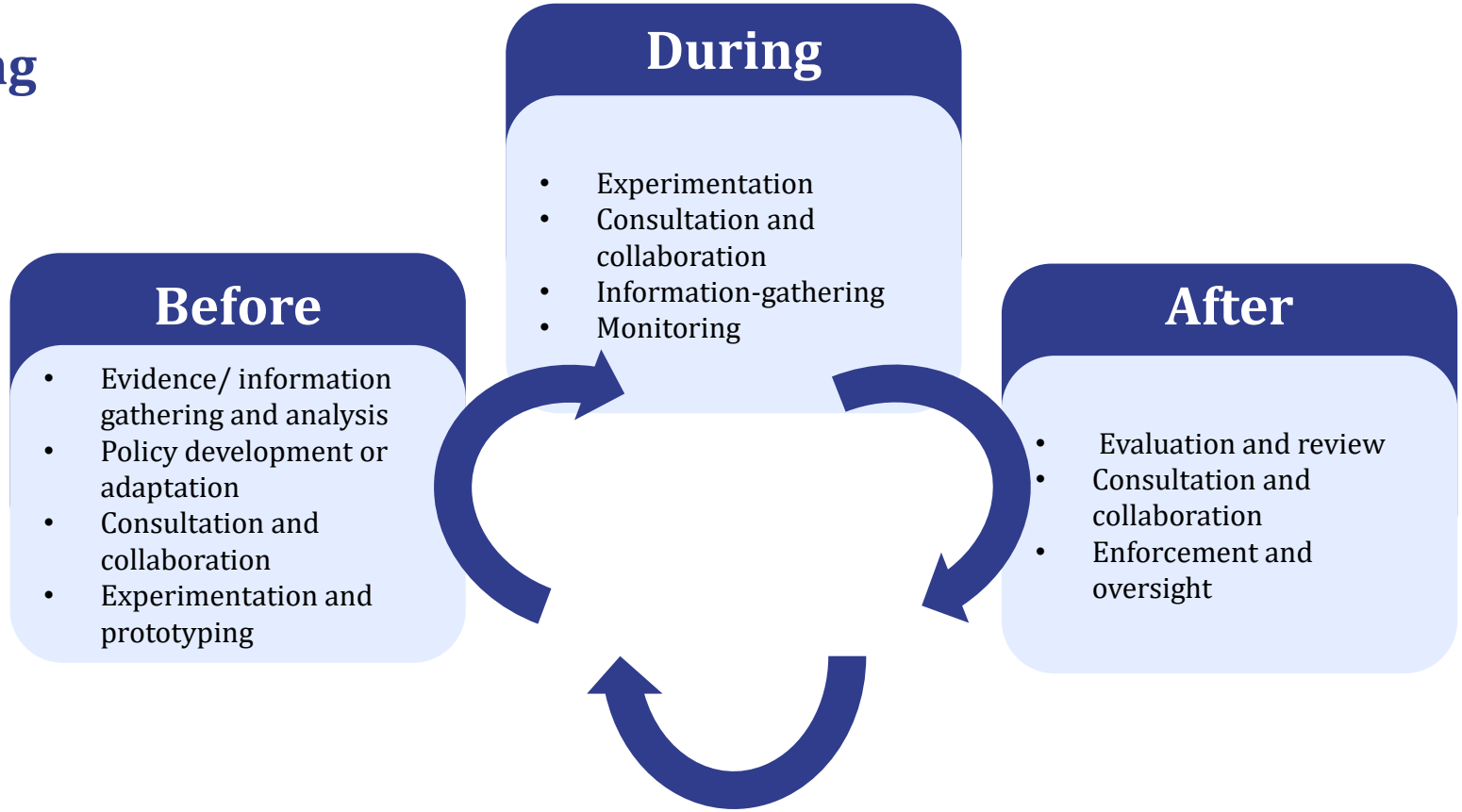
- Enforcement
- Oversight of compliance

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Agile Approaches to Legislation

# Policy Process: Linear to Loop

## Agile rule-making



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Agile Approaches to Legislation

# Agile Policy Instruments

## Anticipation

- Horizon scanning
- Strategic foresight analysis
- Regulatory impact analysis
- Studies / exploratory research
- Financial assurance mandates

## Experimentation

- Pilots
- Sandboxes
- Policy labs
- Policy prototyping
- Experimental clauses
- Workgroups

## Flexibility

- Principle-based provisions
- Safe harbors
- Management-based regulation
- Kill switches
- Voluntary standards / self-regulation

## Monitoring

- Adverse incident reporting
- Transparency / reporting requirements

## Learning

- Programmed or scheduled review

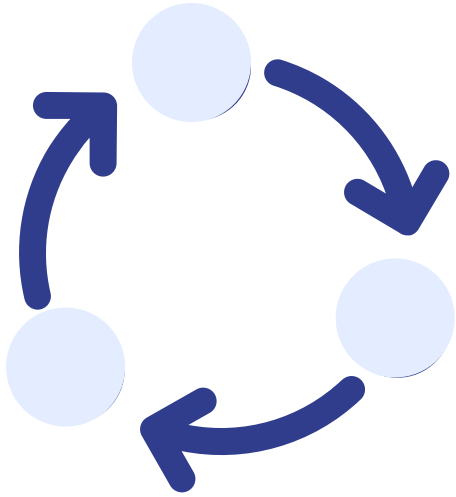
## Adaptation

- Sunrise clauses / conditional enactments
- Sunset clauses

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# Closing the Loop



*Technology policies can **close the loop** by defining at the outset **methods of evidence generation, responsibilities for oversight, evaluation, and policy iteration** and **timelines** for experimentation and feedback into the policy process.*

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# 1. Build capacity for agile regulation

**Policy Option**

Introduce budget amendments to build out the oversight and enforcement capacity of existing agencies, such as the Office of the Attorney General.

**Policy Option**

Ask JCOTS to convene a workgroup to study where additional oversight responsibility should be situated within the state government.

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# 2. Provide resources on best practices

**Policy Option**

Ask JCOTS to produce a one-page brief for DLS, Committee chairs, and caucuses with JCOTS-endorsed best practices for emerging technology legislation.

**Policy Option**

Consult JCOTS staff on strategies for answering key policy questions and continuing progress around the loop when legislation is facing considerable roadblocks or at risk of failing.

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# 3. Adopt agile JCOTS practices

**Policy Option**

Ask JCOTS to produce a standard framework for preparing a policy concept for bill drafting.

**Policy Option**

Ask JCOTS staff to develop briefing notes for bills that address how the proposed legislation closes the policy loop and highlights any areas for further development.

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# Thank you

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Findings and Recommendations

# Independent Verification Organizations for AI Oversight in Virginia

Presented by Jodi Kuhn, Executive Director

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Study context

# Research Questions

1. In which domains and **under what conditions** does an IVO model provide superior, equivalent, or inferior oversight for AI systems in Virginia, **compared with alternative governance mechanisms**?

2. What **metrics and indicators** are most appropriate and **practically usable** to assess AI systems for safety, robustness, fairness, explainability, privacy, security, and accountability?

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# Findings



### IVOS FILL A GAP

Most valuable where the state can't test AI systems and deployers won't. Less needed where strong oversight already exists.



### TRUST IS IN THE DESIGN

Credibility depends on who pays for and picks the verifier, what it can see, and what happens after a finding.



### TESTING ISN'T READY

Methods for testing AI quality are still maturing. Without them, verification risks becoming a tick-box exercise



### CERTIFICATES GO STALE

AI systems change constantly. Findings need expiration dates and clear triggers for re-verification.

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# Three Policy Scenarios

## 1. No Immediate Adoption

**What:** Continue gathering evidence while test methods, standards, and evaluator supply mature.

**Tradeoff:** Leaves Commonwealth buyers relying on vendor self-attestation.

## 2. Limited IVO Pilot

**What:** Test independent verification in selected higher-risk public-sector procurements or deployments.

**Tradeoff:** Limited coverage; a pilot built on document review would test the wrong thing.

## 3. Risk-Based Hybrid Model

**What:** IVOs or direct oversight for higher-risk systems; hybrid or internal approaches for lower risk.

**Tradeoff:** Depends on a contested "high-risk" definition; greatest cost and coordination demands.

*The evidence supports **moving forward** with a limited, risk-based IVO pilot **scoped to higher-risk AI**, designed carefully and evaluated as it grows.*

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JCOTS Recommendation

# Implement a Risk-Based IVO Pilot

*JCOTS recommends VITA implement a **limited, risk-based IVO pilot**: independent verification for **selected higher-risk public-sector AI**, and lighter-touch oversight where risk is lower or strong oversight already exists.*

**HIGHER RISK**
**IVO verification pilot**

**MODERATE RISK**
**Hybrid oversight** (not tested in the pilot)

**LOWER RISK**
**Internal compliance** (not tested in the pilot)

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# 1. Take a targeted, test-first approach

| Overall Approach | Risk-Based Scope | Evaluate Before Expanding |
| --- | --- | --- |
| Move forward with independent verification as a targeted governance option for higher-risk AI, rather than applying it to all AI systems. | Limit IVO requirements to clearly defined higher-risk applications. Use less intensive mechanisms where risk is lower or effective oversight already exists. | Evaluate implementation and performance, such as through an applied pilot, before considering broader statewide requirements. |

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# 2. Build in safeguards for credibility

| Evaluator Competence | Independence & Payment | Evidence Access | Real Testing |
| --- | --- | --- | --- |
| Establish minimum technical and domain-specific qualifications for organizations and individuals conducting verification. | Protect independence with a payment and assignment model (e.g., rotation, random assignment, pooled fee) so entities can't pick their own verifier. | Define what system information and evidence an IVO is entitled to access when conducting verification. | Require meaningful operational testing where appropriate, not documentation or self-attestation alone. |

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# 3. Keep verification current

| Re-Verification | Consequences & Appeals | Proportionality | Alignment & Reciprocity |
|---|---|---|---|
| Set validity periods and triggers for re-verification after material system changes, with runtime monitoring where warranted. | Define what follows an adverse finding: remediation expectations, disclosure rules, and opportunities for review or appeal. | Keep fees and obligations proportionate for small businesses and localities; allow findings to be reused or shared. | Align with the NIST AI RMF and related standards; consider mutual recognition with other jurisdictions. |

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JCOTS Recommendation

# Why a Pilot?

*The public and government want protections against AI models that could cause **catastrophic harm**, so tech companies are not **grading their own homework**. Because safety testing is still an emerging field, JCOTS recommends **a narrow pilot** to build the evidence Virginia needs to effectively incorporate independent audits into statute.*

**TWO PROTECTIONS**
**Liability + Safety testing**

**IVO FOCUS**
**Safety testing to mitigate risk**

**NEXT STEP**
**A narrow pilot**

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Recommendations

# For Commission Action

**1** **Take a targeted, test-first approach**
Targeted to higher-risk AI, not all systems; evaluate as it expands.

**2** **Evaluate safeguards for IVO independence & credibility**
Evaluator qualifications, independent payment and assignment, evidence access, operational testing.

**3** **Evaluate how to keep verification current and actionable**
Re-verification triggers, consequences and appeals, proportionate costs, NIST alignment and reciprocity.

## Motion

That JCOTS recommend a limited, risk-based IVO pilot and endorse Recommendations 1–3, as presented or as amended by the Commission.

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# Thank you