State of Vermont

Artificial Intelligence Task Force

Established Pursuant to Act 137 (H.378) of the 2017-2018 Legislative Session

Meeting No. 15

Friday January 10th, 2019 1:40 – 4:10 p.m.

Montpelier Conference Room, basement level

Vermont Agency of Commerce and Community Development

1 National Life Drive

Montpelier, VT 05620

Members Present: Honorable John Dooley; John Cohn; Joe Segale; Mark Combs; Brian Breslend; Brian Cina; and Eugene Santos, Jr.

Members Present by Phone: Jess Vintinner; and Donna Rizzo.

Others: Henry Amistadi, Owner & Consultant of Operations Monitoring and Analytics LLC; and Devin Bates, Reporter for Local 22 & Local 44.

Members Missing: Jill Charbonneau; Milo Cress; Trey Dobson, MD; Christopher Herrick; and James Lyall.

Staff Present: Ryan Flanagan.

(1:40-1:41 p.m.) **Welcome, Review of Agenda**

- ❖ At 1:40 p.m., Presiding Chair John Dooley called the meeting to order.
- ❖ Presiding Chair John Dooley requested a roll call. Members present are noted above.
- ❖ Presiding Chair John Dooley inquired as to any additions or deletions to the agenda. Hearing none, moved on to the next agenda item.

(1:41-1:44 p.m.) **Acceptance of Previously Unapproved Minutes**

Presiding Chair John Dooley inquired as to any corrections or changes to the draft meeting minutes for December 6, 2019. Hearing none, requested a motion.

- ❖ At 1:42 p.m., Gene Santos moved to accept the December 6, 2019 meeting minutes as presented. John Cohn seconded the motion. Presiding Chair John Dooley inquired as to further discussion, hearing none requested a roll call for the vote. Most voted in favor and the motion passed. 6-0-2.

    - ❖ Aye: Honorable John Dooley; John Cohn; Joe Segale; Brian Cina; Jess Vintinner; and Eugene Santos, Jr.
    - ❖ Nay: None
    - ❖ Abstain: Brian Breslend; and Mark Combs.

(1:44-1:45 p.m.) **Public Comment**

Presiding Chair John Dooley inquired as to any members of the public present to provide public comment or announcements, hearing none, moved to the next Agenda item.

❖ From 1:45 to 2:06 p.m., the Task Force experienced technical difficulties. The meeting presumed once these issues were resolved.
❖ At 1:50 p.m., Henry Amistadi entered the meeting.

(2:06-4:07 p.m.) **Review, Discussion and Acceptance Final Report**

❖ (2:05-2:05 p.m.) **Cover Page**
   ❖ Members discussed proposed changes to the cover page. The one edit was to change the date to the submittal of the final report on January 15, 2020.

❖ (2:06-2:15 p.m.) **Table of Contents**
   ❖ Members discussed proposed changes to the table of contents. The group recommended changing the formatting, so it is consistent. This incorporated small changes in spacing and text fonts.
   ❖ Members also suggested making small changes to the titles of sections to make the titles more succinct.

❖ (2:15-2:19 p.m.) **Transmittal Letter**
   ❖ Next, members discussed proposed changes to the transmittal letter written by Brian Breslend. Small changes were made such as changing the Act Relating to Boards and Commissions, No. 16 (2019) to the Act Relating to Boards and Commissions, No. 61 (2019). This change was significant, as this act makes miscellaneous amendments regarding State boards and commissions, and previously extended the task force's deadline from June 30, 2019 to January 15, 2020.
   ❖ Additional changes such as changing, "The creation of incentives for the *establishment* of artificial intelligence industry in the state" to "The creation of incentives for the *further development* of artificial intelligence industry in the state," were made.

❖ (2:19-2:20 p.m.) **Executive Summary**
   ❖ Presiding Chair John Dooley inquired as to any changes to the executive summary section, hearing none, moved to the next Agenda item.

❖ (2:20-2:24 p.m.) **Introduction**
   ❖ Small changes were made to the introduction of the Task Force's final report. Changing word choice such as "The creation and use of artificial intelligence have grown *exponentially* in the state" to "The creation and use of artificial intelligence have grown *rapidly* in the state" was one of these changes.

❖ (2:24-2:51 p.m.) **Artificial Intelligence in Vermont**
   ❖ Next, the group discussed the definition in which it received testimony from Mike Cole, founder of Vermont STEMCorps. Cole voiced in an email correspondence that "the Merriam-Webster definition is undoubtedly the lowest common denominator and isn't adequate." Hearing this input, the task force read his full testimony and decided to make changes to the current definition.
   ❖ John Cohn voiced that the Task Force can either accept the current definition or adopt a similar EU Code of Ethics.

- ❖ Henry Amistadi told the group that it should focus on non-determination algorithms. The focus according to Amistadi should be on neural networks and other technologies that grow and refine themselves.
- ❖ John Cohn added that AI can be loosely applied so examples should be provided.
- ❖ By the end of deliberating, the group opted on a definition that read:
  - ❖ *Artificial intelligence (A.I.) systems are systems (usually software) capable of perceiving an environment through data acquisition and then processing and interpreting the derived information to take action(s) or imitate intelligent behavior given a specified goal. AI systems can also learn/adapt their behavior by analyzing how the environment is affected by prior actions.*
  - ❖ *"As a scientific discipline, AI includes several approaches and techniques, such as machine learning (of which deep learning and reinforcement learning are specific examples), machine reasoning (which includes planning, scheduling, knowledge representation and reasoning, search, and optimization), and robotics (which includes control, perception, sensors and actuators, as well as the integration of all other techniques into cyber-physical systems)."*

- ❖ At 4:06 p.m., John Cohn moved to accept the new definition of AI for the Final Report. Joe Segale seconded the motion. Presiding Chair John Dooley inquired as to further discussion, hearing none requested a roll call for the vote. Most voted in favor and the motion passed. 9-0-0.
  - ❖ Aye: Honorable John Dooley; John Cohn; Joe Segale; Donna Rizzo; Brian Breslend; Mark Combs; Brian Cina; Jess Vintinner; and Eugene Santos, Jr.
  - ❖ Nay: None.
  - ❖ Abstain: None.

- ❖ Joe Segale said that the definition should have UVM included on it since it was written in Donna Rizzo's class. He also said that definitions should be given to "deep learning" and "reinforcement learning" in footnotes.
- ❖ Small changes such as "*unmanned* technology" were changed to "*autonomous* technology" were also made.

- ❖ (2:51-3:15 p.m.) **Benefits and Risks**
  - ❖ Under the benefits and risks section, Henry Amistadi told the group that AI is more than just "improved efficiencies."
  - ❖ The group also agreed that the subsection, *Future of Work*, should include a link to testimony received from Stephanie Seguino, a UVM professor.
  - ❖ Last, Amistadi suggested adding an aspect of AI being a tool of empowerment, allowing people from the Northeast Kingdom to work from home. Joe Segale pointed out that people can already work from home, so the task force decided not to include this in the report.
  - ❖ At 3:15 p.m., Jessica Vintinner left the call and told the group to call her before the final vote.

- ❖ (3:15-3:33 p.m.) **Recommendations**
  - ❖ Some changes were made under the rationale of subsections to make them flow better.
  - ❖ Brian Cina told the group that the Code of Ethics should include something about democratic processes; this was a request of Mike Cole.

- ❖ (3:33-3:34 p.m.) **Conclusions**
  - ❖ Presiding Chair John Dooley inquired as to any changes to the executive summary section, hearing none, moved to the next Agenda item

- ❖ (3:34-3:42 p.m.) **Task Force Membership (Appendix B)**
  - ❖ The group next looked at the Task Force membership table to make sure names were spelled correctly, titles were appropriate, and there were no formatting errors. Titles such as doctor were substituted for professor. Engineers and planners inserted their title of professional engineer (PE) if appropriate.

- ❖ (3:42-3:48 p.m.) **Business and Economic Growth Incentives** (under "Recommendations")
  - ❖ Henry Amistadi, a member of the project, voiced that in the section "the ethical use of AI" is not a project. The group agreed and decided to change the sentence, stating that AI's use would be for the public good.

- ❖ (3:48-3:56 p.m.) **Increased Education and Outreach Programs** (under "Recommendations")
  - ❖ Amistadi also voiced that it should be written that the proposed permanent commission work with the Attorney General since regulation is possible. The group agreed on regulation being possible, but it opted instead to voice that the commission would work with "The State Government and other civic organizations," as it would fall within the Committees on Jurisdiction.

(3:56-4:07) **Additional Appendices**

- ❖ Last, the group looked at the other appendices which included *Full Task Force Meeting Agendas and Summaries* (Appendix C), *Public Hearing Attendance Lists & Summaries; Written Comment; Testimony* (Appendix D), and *Artificial Intelligence Investigations by State and Local Government; Federal Policy* (Appendix E).
- ❖ The group discussed if it was possible to include other testimony from people in Appendix D. Ryan Flanagan told the group that he would find previous testimony; however, he would need the person's approval as well. For now, the group opted with testimony from Mike Cole and Stephanie Seguino.
- ❖ At this time, John Cohn asked the group if it should include anything about the AI guidelines that were recently announced by the US government. Mark Combs voiced that group should not take on this task, as AI's policies change frequently. For Appendix E, the group agreed with keeping current AI policies from New York City, New York State, Alabama, Washington, and California.

(4:05-4:07 p.m.) **Vote on Final Report**

- ❖ At 4:06 p.m., John Cohn moved to approve the Final Report by the Task Force with the last changes made by Ryan Flanagan and Jessica Vintinner before submitted to the Senate Committee on Government Operations and the House Committee on Energy and Technology on January 15, 2020. Gene Santos seconded the motion. Presiding Chair John Dooley inquired as to further discussion, hearing none requested a roll call for the vote. Most voted in favor and the motion passed. 8-1-0.

  - ❖ Aye: Honorable John Dooley; John Cohn; Joe Segale; Brian Cina; Brian Breslend; Donna Rizzo; Mark Combs; and Eugene Santos, Jr.
  - ❖ Nay: None

❖ Abstain: Jessica Vintinner

(4:07-4:10 p.m.) Additional Business

❖ At 4:07 p.m., Presiding Chair John Dooley inquired as to any other business, there being none, requested a motion to adjourn.

At 4:10 p.m., the meeting adjourned.