**INTERNATIONAL TREATY ON MORATORIUM OF LARGE-SCALE AI CAPABILITIES R&D**

**Preamble:**

The Parties to this Treaty,

Recognizing the rapid advancement and potential risks associated with artificial intelligence (AI) technologies that have the capacity to transform various aspects of human society,

Acknowledging the need for responsible governance and international cooperation in the development, deployment, and use of AI to ensure its benefits are harnessed while addressing its potential challenges,

Mindful of the ethical considerations and potential socio-economic impacts that arise from the rapid deployment of AI systems, including issues related to privacy, security, fairness, transparency, and accountability,

Understanding that the development and deployment of AI technologies have the potential to shape global power dynamics, impact labor markets, and transform the way individuals interact, communicate, and make decisions,

Recognizing the urgent need to mitigate potential risks associated with the misuse or unintended consequences of AI systems, including those related to bias, discrimination, manipulation, and loss of human control,

Taking into consideration the perspective that it is a responsible and prudent course of action to temporarily pause AI development, contingent upon the establishment of adequate international governance and legal structures,

Acknowledging that the complex nature of AI technology necessitates comprehensive international cooperation and concerted efforts to ensure its development and deployment align with universal values, human rights, and global stability,

Emphasizing the importance of fostering innovation, collaboration, and knowledge sharing among nations to unlock the full potential of AI for the benefit of humanity, while ensuring its development adheres to principles of safety, transparency, accountability, and respect for human dignity,

Recognizing the value of a multi-stakeholder approach that involves governments, industry, academia, civil society, and other relevant actors in shaping the governance frameworks for AI,

Believing that an inclusive, transparent, and participatory process is essential to address the concerns and aspirations of different societies and cultures in shaping the future of AI governance,

Realizing that effective international governance structures should strike a balance between promoting AI innovation and safeguarding against potential risks, guided by principles such as human rights, fairness, non-discrimination, and sustainable development,

Understanding that the establishment of appropriate international governance structures for AI should be based on scientific research, ethical considerations, and comprehensive risk assessments, as well as taking into account the perspectives of diverse stakeholders,

Hereby agree to the following provisions:

**Article 1: Scope and Purpose**

1.1 This Treaty, recognizing the paramount importance of ensuring the responsible and beneficial development of artificial intelligence (AI) technologies, aims to institute a temporary pause on further advancements in AI until such time that robust and comprehensive international governance and legal structures are established. The primary objective of this pause is to address the complex ethical, safety, and socio-economic implications inherent in the development and deployment of AI technologies.

1.2 The Parties to this Treaty, understanding the transformative potential of AI and the opportunities it presents for innovation, economic growth, and societal progress, also acknowledge the critical need to foster an environment conducive to responsible AI development. Within the framework of this Treaty, the Parties recognize the importance of promoting and nurturing innovation, while ensuring that it remains firmly grounded in the principles of ethical conduct, transparency, accountability, and the protection of human rights and fundamental freedoms. This Treaty underscores the Parties' commitment to striking a balance between fostering advancements in AI and upholding the broader interests of humanity.

1.3 The Parties further recognize that responsible development of AI requires collaboration and knowledge-sharing among nations, as well as active engagement from various stakeholders including governments, industry, academia, civil society organizations, and the public. The Parties emphasize the significance of fostering an inclusive and participatory approach, ensuring that diverse perspectives, cultural contexts, and societal values are considered in the establishment of international governance and legal frameworks for AI.

1.4 In pursuing the goals of this Treaty, the Parties shall consider a comprehensive range of ethical, legal, and societal considerations associated with AI, including but not limited to: ensuring the protection of personal privacy and data rights, mitigating the potential for algorithmic bias and discrimination, addressing the challenges of AI in relation to labour markets and employment, promoting transparency and explainability in AI decision-making, safeguarding against malicious use and potential security threats, and preserving human control and autonomy in critical decision-making processes.

1.5 The Parties shall also take into account the evolving nature of AI technologies, recognizing the need for ongoing assessment, monitoring, and adaptation of governance mechanisms to effectively address emerging challenges and ensure the continued relevance and effectiveness of international frameworks for AI.

**Article 2: Shutdown of Large GPU and TPU Clusters**

2.1 Recognizing the potential risks associated with the refinement and optimization of powerful AI systems in large-scale computer farms, the Parties to this Treaty shall undertake decisive action to mitigate these risks. Accordingly, the Parties agree to initiate the shutdown of large-scale computer farms specifically designed for the purpose of refining and advancing AI systems.

2.2 The shutdown process shall involve the gradual decommissioning and cessation of operations in the identified large GPU (Graphics Processing Unit) and TPU (Tensor Processing Unit) clusters. The Parties shall collaborate to develop and implement an orderly shutdown plan, ensuring that all necessary technical, operational, and security measures are taken into account to minimize any adverse effects on ongoing AI research and development.

2.3 The Parties shall also engage in efforts to repurpose or redirect the resources, computational power, and expertise previously dedicated to the operation of these large GPU and TPU clusters. These efforts may include reallocating such resources towards alternative research and development endeavors that align with the principles of responsible and beneficial AI development, as well as facilitating the transition towards more sustainable and energy-efficient computing technologies.

2.4 The Parties shall maintain ongoing dialogue and collaboration to monitor and evaluate the impacts of the shutdown of large GPU and TPU clusters, including its effects on scientific advancements, technological capabilities, and the overall landscape of AI research. Such monitoring and evaluation efforts shall inform future discussions and decisions regarding the resumption of large-scale AI capabilities research and development in a safe, ethical, and accountable manner.

**Article 3: Prohibition on Training Models with Excessive Parameters**

3.1 Recognizing the potential risks and computational requirements associated with training machine learning models of excessive scale, the Parties to this Treaty agree to establish a prohibition on the training of such models. Specifically, the Parties shall prohibit the training of machine learning models or combinations of models that exceed a parameter count of 500 million.

3.2 The prohibition outlined in this Article seeks to address the concerns regarding the potential overfitting, computational inefficiency, and environmental impact associated with training models of excessive scale. By imposing limitations on model size, the Parties aim to strike a balance between fostering innovation in AI research and development, and ensuring responsible and sustainable practices.

3.3 The Parties recognize that the establishment of a parameter limit for training models is a dynamic process that necessitates ongoing evaluation and adjustment. As AI technologies and methodologies evolve, the Parties shall periodically review the parameter limit to ensure its continued appropriateness and effectiveness in aligning with the objectives of this Treaty.

3.4 The Parties shall establish mechanisms for monitoring and enforcing compliance with the prohibition on training models with excessive parameters. Such mechanisms may include reporting obligations, audits, and peer review processes to ensure the adherence of AI practitioners and organizations to the parameter limit specified in this Article.

**Article 4: Prohibition on Use of Quantum Computers**

4.1 Recognizing the unique and potentially transformative capabilities of quantum computers in the field of artificial intelligence (AI), the Parties to this Treaty agree to institute a prohibition on the utilization of quantum computers in any AI-related activities for the duration of this Treaty.

4.2 Quantum computers, with their extraordinary computing power and ability to process information in quantum states, have the potential to significantly impact the development and application of AI technologies. However, the Parties acknowledge that the current stage of quantum computing technology presents unique challenges, including the need for further research and development to address issues related to stability, error correction, scalability, and accessibility.

4.3 By refraining from employing quantum computers in AI-related activities, the Parties seek to ensure a level playing field and prevent any potential imbalances or unfair advantages that could arise from the premature deployment of quantum computing technology in the AI domain. This prohibition also aims to mitigate risks associated with the potential misuse or unintended consequences of nascent quantum AI systems, while providing an opportunity for comprehensive assessments of ethical, safety, and security implications.

4.4 The Parties understand that the prohibition on the use of quantum computers in AI-related activities does not impede the advancement of quantum computing research and development itself. Rather, it is a temporary measure aimed at fostering responsible and coordinated progress in the intersection of quantum computing and AI, with due consideration for the broader societal impacts and ethical considerations.

**Article 5: Moratorium on Large-Scale AI Capabilities Research and Development**

5.1 Recognizing the need for comprehensive governance frameworks to address the ethical, societal, and safety considerations associated with the development of advanced AI capabilities, the Parties to this Treaty shall impose a moratorium on large-scale research and development activities in this domain. The moratorium shall remain in effect until a consensus is reached among the Parties regarding the establishment of appropriate governance frameworks.

5.2 The purpose of this moratorium is twofold. Firstly, it acknowledges the necessity of a precautionary approach, ensuring that the rapid advancement of AI capabilities is accompanied by the establishment of governance frameworks that can effectively address the potential risks and concerns associated with these advancements. Secondly, it encourages a deliberative process among the Parties to foster dialogue, collaboration, and the exploration of various ethical, legal, and technical dimensions in shaping the future of AI research and development.

5.3 During the moratorium period, the Parties shall dedicate efforts to identify and evaluate the challenges and opportunities posed by large-scale AI capabilities. This includes but is not limited to assessing the potential impact on privacy, security, human rights, economic disparities, labour markets, and the overall well-being of societies. The Parties shall also endeavor to develop comprehensive frameworks encompassing ethical guidelines, transparency mechanisms, accountability measures, and risk assessment methodologies to guide the responsible development and deployment of AI capabilities in the future.

**Article 6: Criminalization of AGI and ASI Development**

6.1 Acknowledging the potential risks and unprecedented challenges associated with the development of Artificial General Intelligence (AGI) and Artificial Superintelligence (ASI), the Parties to this Treaty shall enact national legislation to criminalize the development of AGI and ASI until robust safety and ethical standards are established.

6.2 The criminalization of AGI and ASI development reflects a responsible approach to ensure that the development of such advanced AI systems occurs within a well-regulated framework that prioritizes safety, ethical considerations, and the protection of human interests. It recognizes the need for caution and prudence in the pursuit of AGI and ASI, given the potential for unintended consequences, risks of existential threats, and the ethical dilemmas that arise from their deployment.

6.3 The national laws enacted by the Parties shall establish clear legal prohibitions and penalties for individuals, organizations, or entities engaged in the unauthorized development, creation, or deployment of AGI and ASI technologies. The legislation shall define the scope of prohibited activities, outline the enforcement mechanisms, and stipulate the appropriate legal consequences for violations.

**Article 7: Establishment of International Oversight Body**

7.1 Recognizing the need for coordinated efforts and international cooperation in addressing the complex challenges associated with AI governance, an international body, known as the "AI Governance Council," shall be established to serve as the primary oversight and coordination mechanism for the implementation of this Treaty.

7.2 The AI Governance Council shall consist of representatives from each Party to the Treaty, ensuring equal participation and decision-making power among all Parties. The composition of the Council shall reflect a diverse range of expertise, including representatives from governments, academia, industry, civil society organizations, and other relevant stakeholders involved in the field of AI governance.

7.3 The AI Governance Council shall have several key responsibilities:

a. Assessing Progress: The Council shall regularly assess the progress made by the Parties in implementing the provisions of this Treaty. It will review and evaluate the adherence to the treaty obligations, exchange information, and identify areas that require further attention or improvement.

b. Conducting Research: The Council shall engage in research activities related to AI governance, including but not limited to the exploration of ethical frameworks, policy development, risk assessment methodologies, and best practices in AI regulation. The research conducted by the Council will contribute to evidence-based decision-making and the development of comprehensive AI governance frameworks.

c. Providing Policy Recommendations: Based on its research findings and assessments, the Council shall provide policy recommendations to the Parties on issues related to AI governance. These recommendations will aim to guide the Parties in developing and implementing effective policies, regulations, and standards that promote the responsible, safe, and ethical development and deployment of AI technologies.

d. Promoting International Cooperation: The Council shall foster international cooperation and collaboration among the Parties and other stakeholders in the field of AI governance. It will facilitate the exchange of knowledge, expertise, and best practices, and encourage joint initiatives, capacity-building programs, and information sharing to enhance the collective understanding and implementation of AI governance principles.

7.4 The AI Governance Council shall establish its own internal rules and procedures to govern its operations, decision-making processes, and organizational structure. It may establish working groups, committees, or expert panels to address specific areas of AI governance, ensuring the involvement of relevant stakeholders and the effective coordination of its activities.

7.5 The AI Governance Council shall regularly communicate its findings, recommendations, and progress reports to the Parties, promoting transparency, accountability, and collective learning in the field of AI governance. It shall encourage the active involvement of the Parties in its activities, seeking their input, feedback, and contributions to foster a collaborative and inclusive approach.

The establishment of the AI Governance Council, as outlined in this Article, aims to facilitate international coordination, knowledge exchange, and the development of harmonized AI governance frameworks. By leveraging collective expertise and fostering collaboration, the Council will support the Parties in addressing the multifaceted challenges of AI governance, promoting responsible AI development, and safeguarding the interests of humanity.

**Article 8: Enforcement and Compliance**

8.1 Recognizing the importance of effective enforcement to ensure the implementation and adherence to the provisions of this Treaty, the Parties shall establish robust mechanisms at the national level to enforce and monitor compliance with the Treaty's obligations. These mechanisms shall include monitoring, reporting, and verification measures that enable the Parties to assess the progress and compliance of each Party.

8.2 The Parties shall cooperate with each other and with the AI Governance Council to promote compliance with the provisions of this Treaty. This cooperation shall involve sharing information, experiences, and best practices on enforcement measures and facilitating mutual support among the Parties. The AI Governance Council shall serve as a platform for collaboration, facilitating dialogue and coordination to enhance compliance efforts.

8.3 The enforcement mechanisms established by the Parties shall encompass various aspects, including but not limited to:

a. Monitoring: The Parties shall establish monitoring systems to track and assess the activities related to AI development within their respective jurisdictions. These systems may involve data collection, analysis, and evaluation to ensure that the provisions of the Treaty are being followed effectively.

b. Reporting: The Parties shall regularly report on their progress in implementing the Treaty's provisions and achieving compliance. These reports may include information on policy developments, regulatory measures, research initiatives, and other relevant activities undertaken to fulfill the obligations of the Treaty. Transparent reporting mechanisms will enhance accountability and facilitate the sharing of experiences and lessons learned.

c. Verification: The Parties may establish verification mechanisms to verify compliance with specific provisions of the Treaty. These mechanisms may include inspections, audits, or assessments conducted by independent entities or through cooperative arrangements among the Parties. Verification processes will contribute to building trust and confidence among the Parties and ensuring the integrity of the Treaty's implementation.

8.4 The AI Governance Council shall play a vital role in facilitating cooperation among the Parties regarding enforcement and compliance. It will serve as a platform for sharing best practices, providing guidance, and coordinating efforts to enhance the effectiveness of enforcement mechanisms. The Council may develop common frameworks, guidelines, or standards to promote consistency and harmonization in enforcement approaches across the Parties.

8.5 In cases of non-compliance or violations of the Treaty's provisions, the Parties shall engage in diplomatic efforts, dialogue, and cooperation to address the concerns and rectify the situation. The AI Governance Council may assist in facilitating such diplomatic processes and providing recommendations for resolving disputes or non-compliance issues in a peaceful and cooperative manner.

**Article 9: Duration and Review**

9.1 Recognizing the dynamic nature of AI technologies and the need for ongoing evaluation, this Treaty shall remain in force until it is universally agreed, based on scientific evidence and ethical considerations, that the conditions for safe and ethical large-scale AI capabilities research and development have been met. The duration of this Treaty reflects the commitment of the Parties to prioritize the responsible advancement of AI technologies and ensure that adequate safeguards are in place before resuming large-scale AI capabilities research and development.

9.2 To facilitate continuous improvement and adaptation to emerging challenges and advancements in the field of AI, the AI Governance Council shall conduct periodic reviews of the Treaty's implementation. These reviews, conducted at regular intervals, shall serve as opportunities to assess the progress made in AI governance, examine the effectiveness of the Treaty's provisions, and identify areas that require further attention, amendment, or updating.

9.3 During the review process, the AI Governance Council shall consider a range of factors, including but not limited to:

a. Scientific Advancements: The Council shall assess scientific and technological developments in AI, considering new research findings, breakthroughs, and innovations. It will examine the implications of these advancements on the safety, ethics, and governance of AI technologies, ensuring that the Treaty remains aligned with the current state of knowledge and understanding.

b. Ethical Considerations: The Council shall evaluate evolving ethical frameworks and principles relevant to AI governance. It will consider ethical implications, societal impacts, and human rights considerations associated with AI development and deployment. The review process will aim to ensure that the Treaty reflects the highest ethical standards and fosters responsible AI practices.

c. International Cooperation: The Council shall examine the progress in international cooperation and collaboration on AI governance. It will assess the level of engagement among the Parties, the effectiveness of knowledge sharing, and the extent of harmonization in regulatory approaches. The review process will seek to strengthen international cooperation and promote convergence in AI governance efforts.

9.4 Based on the findings of the periodic reviews, the AI Governance Council may recommend necessary amendments, updates, or additions to the Treaty. These recommendations shall be presented to the Parties for consideration, with a view to enhancing the effectiveness, relevance, and adaptability of the Treaty in the face of evolving AI technologies and associated challenges.

9.5 The periodic reviews and potential amendments to the Treaty shall be conducted in a transparent, inclusive, and participatory manner. The Parties shall have the opportunity to contribute to the review process, provide input, and engage in constructive dialogue. The AI Governance Council shall ensure that the review process takes into account the diverse perspectives and interests of all relevant stakeholders, fostering a collaborative and inclusive approach to AI governance.

**Article 10: Entry into Force**

10.1 This Treaty shall enter into force upon ratification, acceptance, or approval by the Parties in accordance with their respective domestic legal procedures. Each Party shall complete the necessary internal processes required to give legal effect to the Treaty within a reasonable timeframe.

10.2 Any Party may, if necessary, withdraw from this Treaty by providing written notice to the AI Governance Council. The withdrawal shall take effect one year after the receipt of the notice. The withdrawing Party shall fulfill its obligations under the Treaty until the withdrawal becomes effective.

10.3 The AI Governance Council shall be responsible for receiving and acknowledging the notifications of ratification, acceptance, approval, and withdrawal from the Parties. It shall maintain an updated record of the status of each Party's participation in the Treaty and communicate such information to the Parties and other relevant stakeholders.

10.4 The AI Governance Council may facilitate the exchange of information and best practices among the Parties regarding the domestic legal procedures for ratification, acceptance, approval, and withdrawal. It shall assist the Parties in overcoming any challenges or obstacles that may arise during the process of entry into force or withdrawal, promoting a smooth and efficient implementation of these provisions.

10.5 In the event of a Party's withdrawal from the Treaty, the AI Governance Council shall assess the implications of the withdrawal on the overall functioning and effectiveness of the Treaty. It may engage in consultations with the withdrawing Party and other relevant stakeholders to address any concerns or potential impacts arising from the withdrawal, with the objective of preserving the spirit and objectives of the Treaty.

10.6 The withdrawal of a Party from this Treaty shall not affect the rights and obligations of the remaining Parties. The Treaty shall continue to be in force for the remaining Parties, and they shall uphold their commitments and continue to collaborate through the AI Governance Council to achieve the objectives of the Treaty.

10.7 Any Party that has withdrawn from the Treaty shall have the opportunity to rejoin the Treaty by following the procedures set forth for entry into force. The rejoining Party shall resume its rights and obligations as a Party to the Treaty upon its reentry into force.

IN WITNESS WHEREOF, the undersigned, being duly authorized by their respective governments, have signed this Treaty.

Done in [City], on [Date], in [Year].