



ONE AI Compute Task Force – Concept note

Why focus on AI compute?

Alongside data and algorithms, AI computing capacity ("AI compute") has emerged over recent years as a key enabler for AI and AI-enabled economic growth and competitiveness (Figure 1). While data and machine learning algorithms have received significant attention in policy circles at the OECD and beyond, the computational infrastructure that makes AI possible has been comparatively overlooked. Since understanding domestic AI compute capacity is increasingly critical to formulating effective AI policies and informing national AI investments, the OECD is focusing efforts on this area in 2021.

Figure 1. AI Enablers



How does this work fit in with implementing the OECD AI Principles and ONE AI?

The OECD AI Principles, adopted in May 2019, recommend that policy makers: "foster the development of, and access to [...] digital technologies and infrastructure." The Principles also instruct the OECD Committee on Digital Economy Policy (CDEP): "to continue its important work on artificial intelligence building on this Recommendation [...] to further develop the measurement framework for evidence-based AI policies."

To help implement the OECD AI Principles in policies and practices, the CDEP launched the OECD.AI Policy Observatory and formed a multi-stakeholder and multi-disciplinary OECD Network of Experts on Artificial Intelligence (ONE AI) early 2020 that formed three working groups focusing on: *i)* classifying AI systems, *ii)* implementing trustworthy AI and *iii)* identifying good practices for national AI policies.

In addition, the creation of a ONE AI task force on AI compute late 2020 or early 2021 will help the CDEP create a framework for understanding, measuring and benchmarking domestic AI computing supply by country and region. The task force will coordinate the broad engagement of key AI compute players and a data gathering exercise that ideally would be sustainable over time. This task force will also need to be mindful that the AI compute landscape is unusually dynamic with technical shifts on a frequent basis. To communicate about the outcomes of the OECD's engagement in this domain, an interactive visualisation on OECD.AI could feature the work of the task force. The targeted focus of the ONE AI task force on AI compute will complement the activities of the three ONE AI working groups.

This initiative will inform the CDEP 2021-2022 output area on "improving the understanding and measurement of AI adoption" for which CDEP is responsible, in liaison with the CDEP's Working Party on Measurement and Analysis in the Digital Economy (WPMADE) and if relevant also with the CDEP's Working Party on Communication Infrastructures and Services Policy (WPCISP).

The OECD AI Compute Task Force will be comprised of two or more co-chairs. Mr. Keith Strier, Vice President of Worldwide AI Initiatives at NVIDIA has indicated interest in co-chairing the task force. Another co-chair with complementary expertise will be identified. The Secretariat will invite policy makers and entities in charge of public computing infrastructure (e.g. the European Commission DG CNECT, the U.S. National Science Foundation) as well as key industry players from: large hardware providers (e.g. NVIDIA, Intel, AMD); cloud service providers (e.g. Amazon, Google, Microsoft, Oracle), original equipment manufacturers (e.g. Dell, HP, IBM); academia engaged in AI compute (e.g. Georgetown CSET); major data center operators (e.g. Basefarm, Cyxtera, CenturyLink); major consulting firms (e.g. Atos Origin, Accenture, PwC); and other experts on computing performance (e.g. OpenAI, MLPerf).

As with ONE AI, the task force will operate virtually for the time being and physical meetings will be envisioned in the future.