# Feasibility of a Unilateral AGI Monopoly

In practice, trying to keep AGI entirely within one nation faces steep obstacles. Cutting-edge AI needs vast distributed resources (computing power, hardware, talent and data) that span many countries. For example, major semiconductors and AI chips are produced by Taiwan, the Netherlands, Japan, South Korea, etc., making a purely domestic supply chain impossible csis.org. Intelligence leaks and open research further erode secrecy. Moreover, security analysts note that if one state attempted an outright "AGI grab," rivals would likely act to counter it – even plotting cyber or physical sabotage of that project national formula and concentrate power deterrence deterrence leading AI experts caution that such aggressive secrecy would undermine public trust and concentrate power dangerously national looks infeasible and organized that any apparent lead is quickly chased down by competitors, so a long-term hegemonic lock on AGI looks infeasible and concentrate power dangerously infeasible and concentra

# **Economic and Market Forces Driving Diffusion**

Global economics tend to push AI toward diffusion, not monopoly. Powerful AGI would be enormously valuable for any economy, so market pressures favor sharing. For example, the U.S. government has already moved to **limit** exports of advanced AI chips to rivals (creating tiered caps on who can buy cutting-edge GPUs)<sup>reuters.comreuters.com</sup>. But this "Framework for AI Diffusion" shows that keeping one country on top is a bargaining tool, not a perfect barrier. In reality, major AI value chains are multinational: Taiwan's TSMC and South Korean Samsung make chips under U.S. designs, ASML in the Netherlands supplies vital lithography equipment, and Europe and Japan make key components control of the control of the components control of the components control of the components control of the control

## **Alliances and Collective Countermeasures**

Smaller powers and allies are likely to band together if threatened by a single AGI superpower. Indeed, governments are already exploring coordinated AI strategies. In late 2023 U.S. legislators proposed a "Five AIs Act" to formalize collaboration among the Five Eyes nations (US, UK, Canada, Australia, NZ) on procurement, testing, and evaluation of advanced AI thedefensepost.com. NATO's recently adopted AI strategy likewise emphasizes that AI's scope "is too vast for any single actor to manage alone," stressing that allied cooperation is needed to retain technological edgenato.int. Likewise, analysts argue that **like-minded democratic countries** should work together to uphold shared AI norms. A Georgetown CSET report notes that as China and other powers pursue AI advantage, a broad alliance of democracies must "set international rules of the road" and deepen cooperation cooperation computing resources for joint R&D, interoperable AI standards across allies, or even a shared AGI research consortium. These alliances serve as counterweights, since a coalition of small nations could combine efforts to replicate or counter any single country's AGI capability thedefensepost.comnato.int.

# **Historical Analogies of Strategic Technology**

History shows that no country retains exclusive control of a valuable technology forever. For example:

- **Nuclear Weapons:** The U.S. was first, but within years the Soviet Union and others developed nukes, and today several states have nuclear arsenals despite the Non-Proliferation Treaty. Proliferation was hard to stop completely, illustrating limits of control.
- The Internet and Global Networks: The ARPANET began in the U.S. military/academic sphere, but open protocols and commercial value led to rapid worldwide adoption in the 1990s. No nation "owned" the internet; sharing standards made it universal.
- **Global Navigation (GPS and GNSS):** The U.S. created GPS and eventually offered it globally (turning off selective signal degradation in 2000<sup>ndupress.ndu.edu</sup>). Even so, other powers built their own systems (Russia's GLONASS, Europe's Galileo, China's BeiDou) so they wouldn't be dependent on U.S. satellites<sup>ndupress.ndu.edu</sup>. As one defense analysis notes, "other countries nonetheless have moved forward with developing their own GNSS so as not to rely on the U.S. system"<sup>ndupress.ndu.edu</sup>. These analogies suggest that once AGI's benefits become clear, multiple countries will seek their own versions or at least access, making a permanent monopoly unlikely.

# International Pressure, Norms, and Governance

Global institutions are already working to shape how AGI is shared. In 2023 the UN General Assembly passed a resolution on AI calling for states to develop "safe, secure and trustworthy AI" and to broaden participation apcorg. Civil society urged that this include closing the "digital divide" and involving developing nations in AI governance In parallel, world leaders at AI summits have agreed on cooperative commitments. For example, the UK's 2023 AI Safety Summit produced the **Bletchley Declaration**, in which nations agreed that "no single part of society can address the impacts of [AGI] alone" and pledged to collaborate on safe AI development "ovukgovuk". Meanwhile, international consortia have formed to guide AI. The OECD-hosted *Global Partnership on AI (GPAI)* now includes dozens of countries working on AI policy and safety based on shared democratic values "nwikipedia.org". Regional frameworks also influence access: the EU's AI Act and proposed multi-lateral agreements (e.g. on chip exports cis.org) aim to spread benefits and reduce risks. Together, these global norms and bodies create pressure toward **distributed** use of AGI – encouraging open research, ethical standards, and even equitable benefit-sharing – rather than an entrenched national monopoly.

## **Possible Role of AGI Itself**

It is sometimes speculated that an advanced AGI, if aligned to human welfare, might steer humanity toward cooperation. In theory a superintelligence with a long-term perspective could "realize" that global stability and human progress are maximized if its power is shared under safeguards. For instance, a benevolent AGI might advocate regulatory standards or joint ventures that diffuse

capabilities internationally. (This is highly conjectural and depends on the AGI's goals and values.) Nonetheless, the possibility has been raised that a cooperative AGI system could become a force for distributing knowledge rather than hoarding it, especially if developers encode pro-social incentives.

# **Risks of Monopolization and Mitigations**

If one country did hoard AGI, the risks would be grave: it could distort global trade, erode sovereignty, or even wield AGI for coercion and asymmetric warfare. To prevent such outcomes, analysts draw on arms-control analogies. For example, proposals for **AI non-proliferation** call for strict controls on key inputs – like novel chips and model weights – to prevent small actors from misusing AGI and an analogies. Similarly, the idea of "mutually assured AI malfunction" suggests each state could threaten sabotage of another's AGI program to deter a monopoly and an another's action would be hard, partial measures (export rules, red-team audits, licensing) could raise costs for any would-be monopolist. In practice, international treaties or verification bodies (analogous to nuclear inspectors) might be developed to audit AGI development and ensure no one side secretly overwhelms the rest. Strong norms and alliances also serve as a check: if one country abuses AGI dominance, others could impose sanctions or countermeasures. Overall, while the danger of exploitation is real, a combination of deterrence, oversight and shared norms provides tools to mitigate it.

### **Conclusion**

A wealth of strategic, economic and historical evidence suggests that even if one country reaches AGI first, it will struggle to hold onto exclusive advantage over the long run. The "first-mover" may gain a temporary lead, but globalization inexorably spreads knowledge. As one expert put it, the stakes are "too vast for any single actor to manage alone," necessitating collective approaches nato.int. Experience shows that valuable tech – from the bomb to the internet to GPS – eventually diffuses across borders (often because competitors rapidly catch up or demand access) ndupress.ndu.edunato.int. In this spirit, most analysts believe the natural pull of markets, the rise of counter-alliances, and the pressures of international governance will encourage broad sharing of AGI capabilities. In short, a lone AGI superpower is unlikely to remain unchallenged: economic incentives and geopolitical forces will almost certainly drive AGI into global circulation over time gcrinstitute.orgrand.org.

**Sources:** Authoritative analyses and historical case studies, including recent RAND and CSET reports, international news, and Al governance documents<sup>rand.orgreuters.comndupress.ndu.edugov.uken.wikipedia.org</sup>, among others.

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