# The real Al challenge: A 'geopolitics of ethics' makes it hard to agree on global rules, experts say

France, Canada and othes are pushing for some international 'rules of the road' for artificial intelligence. But differing cultures, industries and policies complicate efforts to develop a global approach, say international experts at a Science | Business conference.

## By Richard L. Hudson and Nicholas Wallace



Deciding how to regulate artificial intelligence is proving a tough task for lawmakers around the world. In fact, it may take a special AI system to figure it all out.

"We see the global community struggling to develop global solutions" for Al governance, said Andrea Renda, a researcher at the Centre for European Policy Studies, a Brussels think tank.

Indeed, more than 90 public and private groups around the world have published suggested guidelines for AI ethics - but there is no consensus yet on what, in concrete terms, governments should do about it. "It is not enough to focus on general principles," said Anna Jobin, an ETH Zurich researcher who has analysed guidelines.

Now, she said, "we need to work on implementation."

A step towards action was confirmed 30 October by French President Emmanuel Macron, who said France and Canada will fund "centres of excellence" for international Al policy work in Paris and Montreal, working with the Organisation for Economic Cooperation and Development.

He described it as an effort "to foster debate and hopefully reach a consensus on key issues, such as facial recognition." But the European Union, China, the US, Canada, Russia and other Al investors aren't in agreementyet on what to do exactly – and that could take some years to develop, if itever does.

The difficulties, discussed at a Science | Business conference on Al governance 23 September, boil down to one overarching issue: How to fashion policies that help humanity get the benefits of Al without the potential harm?

The benefits could be vast. Al could help doctors improve diagnosis and treatment, teachers train students more effectively or humanity manage climate change. Industry and the economy would South benefit: In Africa, researchers will start exploring whether AI can make mining more efficient.

But equally, AI could cause more "flash crashes" in financial markets, violate privacy on a massive scale, discriminate against minority populations or worsen social tensions.

"We need to make sure AI does not aggravate the digital divide," said Beeuwen Gerryts, a chief director in South Africa's Department of Science and Innovation.

Complicating the Al governance task is a difference in views around the world. Indeed, a "geopolitics of ethics" has started to appear, noted Jim Dratwa, an ethics specialist in the European Commission.

#### EU policy in the works

In Brussels, the Commission is rushing to fulfil a pledge by incoming President Ursula von der Leyen to develop the first comprehensive policy on Al ethics within the first 100 days of her tenure, expected to start 1 December.



Beeuwen Gerryts, Chief Director, Technology Localisation, Beneficiation and Advanced Manufacturing, Department of Science and Innovation, Republic of South Africa

Lucilla Sioli, director for AI and digital industry at the Commission's tech policy division, DG Connect, said that the AI work will be "part of an industrial policy, balancing regulation with the need not to stifle innovation in the market." A major priority, she said, is to get the benefits of Al - but avoid the potential harm that could turn people against Al. "Our main objective is to ensure deployment, not to slow it down."

Sioli said the framework will build on work by the Commission's High-Level Expert Group on Al. The group this year published ethical guidelines for AI development - for instance, that Al systems be "transparent" so people canunderstand how they work, and that there be "accountability" if something goes wrong.

The EU is betting that a head-start on ethics regulation could also benefit its global competitiveness: "Some say China has all the data, and the US has all the money. But in Europe, we have purpose," Commissioner Margrethe Vestager put it at an 8 October European Parliament hearing.In the Parliament, the concerns are palpable. "We are worried about the (potential) problems," said Maria Manuel Leitão Marques, vice chair of the European Parliament's Internal Market and Consumer Protection Committee, at the Science | Business conference. Among MEPs, "I fear a lack of confidence (in the technology) could be more important than optimism about the results" when deciding on legislation.

The key question, she said: "Is AI for good or evil?" To avoid a backlash, she said, ethical principles must be built into new AI systems. "We need to introduce ethics by design, to plan for AI for good from the beginning." If society is to see the benefits of AI, people must trust it. "How do we replace fear with enthusiasm, like in the early days of the Internet?"

## The Montreal principles

Canada is coupling investment in basic Al research with studies of ethical risks arising from different implementations of Al, said Rémi Quirion, chief scientist of the Province of Quebec. In 2017 researchers at the University of Montreal and partners began drafting one of the first global statements of ethical principles for AI - and it has become "a living document" that is being updated with input from others, as the technology and concerns change. For any resulting policies, he said, "we have to be engaging citizens" openly, rather than making top-level political decisions in isolation.

Quirion added that with Al applications so varied, it was important to have a focus area, which for Quebec is climate change. "Everyone wants AI, but they don't know what for," he noted.



Lucilla Sioli, Director, Artificial intelligence and Digital industry, DG Communications, Networks, Content and Technology, **European Commission** 



Manuel Leitão Marques, Member; Committee on Internal Market and Consumer Protection, European Parliament

Meanwhile, OECD work helped lead in May to "the beginning of a global policy benchmark" for "trustworthy" ΑI, said Karine Perset. administrator for AI policy at the OECD. The 36 OECD countries and six partners adopted a set of international standards for the responsible stewardship of trustworthy AI systems. Like the EU ethics principles, the OECD principles are "high level" and provide for flexibility to meet the test of time, she said. At a June meeting in Japan, the G20 nations also agreed to a set of ethical guidelines drawn from the OECD's principles. Next, the OECD is working on its AI Policy Observatory, to help countries implement the AI Principles by monitoring global AI trends, data, policies and case studies, as well as analysing policy and offering guidance to policy makers.



Rémi Quirion, Chief Scientist, Québec

That OECD effort, Macron said in October, will support a G7 agreement to set up a "Global Partnership for Al". The Canadian government in September announced plans to spend C\$15 million over five years on a related Montrealbased Al centre. And Macron said the sistercentre in Paris will open next year France's public ICT research organisation, INRIA. At the same time, the Saudi government is planning Al work as incoming G20 chair; and Japan, China, the US and other governments have been weighing in with plans of their own.

Part of the diplomatic problem lies in the sheer diversity of AI uses, from autonomous vehicles to market trading software, said Renda of CEPS.



Karine Perset, Administrator, Digital Economy and Artificial Intelligence Policy, OECD

These different uses not only throw up risks, they also present dilemmas on which different countries and cultures can disagree - for instance, what's more important: the right to know how an AI system is handling data about you and being able to seek redress for misuse, or deploying AI systems efficiently and accurately so society gets the benefit of them? "Is there a trade-off between accuracy and efficiency, vs. societal outcomes?" Renda asked.

Al also touches every policy area - never an easy situation for ministries accustomed to dealing with policy in silos. For instance, Al affects EU cohesion policy because it could worsen differences in digital development between Europe's richer and poorer regions. Further, experts at the Science Business conference said, it won't work for one region of the world to try to set policy on its own; action must be global.

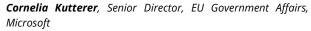
### No country an island

Indeed, Al industry leaders are starting to urge some global action, rather than risk seeing the world market divided up into conflicting legal regimes. Collectively, global investment in AI is expected to hit \$37.5 billion this year, according to market-research firm IDC. That makes it costly for industry if every government takes a different direction on regulation, fragmenting markets and creating unexpected liabilities.

"Legislators need to wake up to the ethical dilemmas this is creating", said Cornelia Kutterer, senior director for EU government affairs at Microsoft. Facial recognition is fraught with complications and needs a lot more consideration around how it should and should not be used, she said. For instance, do security objectives justify the digital processing of faces of innocent people, other than people suspected of crimes and persons of interest? At what point does a facial recognition system become acceptable for public use to ensure safety, and what are the implications of allowing it to be used everywhere? We need to have the rule of law enshrined in our fundamental rights governing how this technology is used, she said.

For all of these issues, said the Commission's Dratwa, there is a need for "mapping of different initiatives that are popping up all over the world," and building bridges between them.

The ultimate question, he said: "What kind of world do we want to live in together?"







Jim Dratwa, Head, European Group on Ethics, DG Research and Innovation, European Commission

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