THE GLOBAL AI POLICY LANDSCAPE

As a field of research, AI policy is in the very early stages. Only in the last few years have national governments formally considered and adopted policy frameworks that explicitly discuss "Artificial Intelligence."⁷ While government funding for work on Artificial Intelligence goes back to the mid-1950s, it would be many years before governments examined the consequences of this research. That gap is now closing. Governments around the world confront important decisions about AI priorities, AI ambitions, and AI risks. Much of this report concerns the current policies and practices of national governments.

In addition to national governments, many intergovernmental organizations are pursuing AI policies and initiatives. This section provides an overview of these organizations, listed in a simple A to Z. We also note the important work of technical associations and civil society organizations This section briefly summarizes these activities, as of late 2020.

The Council of Europe

The Council of Europe (COE) is the continent's leading human rights organization.⁸ The COE is comprised of 47 member states, 27 of which are members of the European Union. All COE member states have endorsed the European Convention of Human Rights, a treaty designed to protect human rights, democracy and the rule of law. Article 8 of the Convention, concerning the right to privacy, has influenced the development of privacy law around the world.

The COE Convention 108 (1981) is the first binding international instrument which protects the individual against abuses which may accompany the collection and processing of personal data and which regulates the transborder flow of personal data.⁹

In 2018, the Council of Europe amended Convention 108 and opened for signature and ratification the COE Modernized Convention

⁷ Marc Rotenberg, *AI Policy Sourcebook* (2019, 2020).

⁸ Council of Europe, *Who we are,* https://www.coe.int/en/web/about-us/who-we-are

⁹ Council of Europe, Treaty office, *Details of Treaty No. 108*,

https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/108

108.¹⁰ Article 9(1)(c) specifically addresses AI decision-making. As the COE explains, the "modernised Convention extends the catalogue of information to be transmitted to data subjects when they exercise their right of access. Furthermore, data subjects are entitled to obtain knowledge of the reasoning underlying the data processing, the results of which are applied to her/him. This new right is particularly important in terms of profiling of individuals."¹¹ Forty-two states have signed the protocol amending the Privacy Convention.¹²

Several new AI initiatives are underway at the Council of Europe, including at the Council of Ministers, the COE Parliamentary Assembly, and the recently established Ad Hoc Committee on Artificial Intelligence (CAHAI). Marija Pejčinović Burić, Secretary General of the Council of Europe, has said "It is clear that AI presents both benefits and risks. We need to ensure that AI promotes and protects our standards. I look forward to the outcome of the work of the Ad hoc Committee on Artificial Intelligence (CAHAI), . . . The Council of Europe has, on many occasions, demonstrated its ability to pioneer new standards, which have become global benchmarks."¹³

CAHAI

The COE Council of Ministers established the Ad Hoc Committee on Artificial Intelligence (CAHAI) in September 2019.¹⁴ The aim of the CAHAI is to "examine the feasibility and potential elements on the basis of broad multi-stakeholder consultations, of a legal framework for the development, design and application of artificial intelligence, based on the

¹⁰ Council of Europe, Data Protection, Modernisation of Convention 108, https://www.coe.int/en/web/data-protection/convention108/modernised

¹¹ Council of Europe, Data Protection, *Modernisation of Convention 108: Overview of the novelties*, https://rm.coe.int/modernised-conv-overview-of-the-novelties/16808accf8

¹² Council of Europe, Treaty Office, *Chart of signatures and ratifications of Treaty 223* (Status as of Nov. 22, 2020), https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/223/signatures

¹³ Council of Europe, Artificial intelligence and human rights,

https://www.coe.int/en/web/artificial-intelligence/secretary-general-marija-pejcinovic-buric

¹⁴ Council of Europe, *The Council of Europe established an Ad Hoc Committee on Artificial Intelligence - CAHAI* (Sept. 11, 2019), https://www.coe.int/en/web/artificialintelligence/-/the-council-of-europe-established-an-ad-hoc-committee-on-artificialintelligence-cahai

Council of Europe's standards on human rights, democracy and the rule of law."¹⁵

The Council of Ministers approved the first progress report of the CAHAI in September 2020.¹⁶

Council of Ministers

In September 2020 the COE Committee of Ministers approved the CAHAI progress report, which concluded that the "Council of Europe has a crucial role to play today to ensure that AI applications are in line with human rights protections."¹⁷ The Ministers asked the CAHAI to draft a feasibility study on a legal instrument that could "regulate the design, development and application of AI that have a significant impact on human rights, democracy and the rule of law." The COE Ministers also proposed that the CAHAI should examine "human rights impact assessments" and "certification of algorithms and AI systems."

Parliamentary Assembly

In October 2020, the Parliament Assembly of the Council of Europe has adopted a new resolution on the Need for Democratic Governance of Artificial Intelligence.¹⁸ The Assembly called for "strong and swift action" by the Council of Europe. The parliamentarians warned that "soft-law instruments and self-regulation have proven so far not sufficient in addressing these challenges and in protecting human rights, democracy and rule of law."

Commission for the Efficiency of Justice

In December 2020, The European Commission for the Efficiency of Justice (CEPEJ) adopted a feasibility study on the establishment of a

¹⁵ Council of Europe, *CAHAI* - *Ad hoc Committee on Artificial Intelligence*, https://www.coe.int/en/web/artificial-intelligence/cahai

¹⁶ Council of Europe, *Ad hoc Committee on Artificial Intelligence (CAHAI): Progress Report* (Sept. 23, 2020),

https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=09000016809ed062 ¹⁷ Council of Europe, *Ad hoc Committee on Artificial Intelligence (CAHAI): Progress Report* (Sept. 23, 2020),

https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=09000016809ed062 ¹⁸ Council of Europe, Parliamentary Assembly, *Need for democratic governance of artificial intelligence* (Oct. 22, 2020), https://pace.coe.int/en/files/28803/html

certification mechanism for artificial intelligence tools and services. The study is based on the CEPEJ Charter on the use of artificial intelligence in judicial systems. According to the CEPEJ, the Council of Europe, if it decides to create such a mechanism, would be a pioneer in this field.¹⁹

The European Union

Many institutions in the European Union now play a significant role in the development of AI policies and practices.

The European Commission

The European Commission is the initiator of EU legislation. AI was identified as a priority when the new Commission, under the Presidency of Ursula von der Leyen, was established in late 2019.²⁰ At that time, von der Leyen recommended new rules on Artificial Intelligence that respect human safety and rights.²¹

Von der Leyen's proposal followed remarks by Chancellor Angela Merkel at the G20 summit in 2019, who called for the European Commission to propose comprehensive regulation for artificial intelligence. "It will be the job of the next Commission to deliver something so that we have regulation similar to the General Data Protection Regulation that makes it clear that artificial intelligence serves humanity," Merkel stated.

In February 2020, the Commission published the white paper On Artificial Intelligence -A European Approach to Excellence and Trust for public comment. The Commission subsequently proposed several options for AI regulation. Speaking to the EU Ambassadors Conference in November 2020, President von der Leyen said, "European rules on personal data protection have inspired others to modernise their own privacy rules. We must now put special focus on the international transfer of data,

¹⁹ Council of Europe, *CEPEJ: Artificial intelligence and cyberjustice at the heart of the discussions* (Dec. 11, 2020)

²⁰ CAID Update 1.3, *European Commission Proposes Options for Ethical*, (Aug. 3, 2020), https://dukakis.org/center-for-ai-and-digital-policy/center-for-ai-policy-update-european-commission-proposes-four-options-for-ethical-ai/

²¹ European Commission, A Union that Strives for more: the first 100 days (Mar. 6, 2020), https://ec.europa.eu/commission/presscorner/detail/en/ip_20_403

particularly after a recent ruling of the European Court of Justice.²² And in remarks to the Council on Foreign Relations, she said "we must work together on a human-centric vision on AI - a global standard aligned with our values.²³

Following the U.S. election in November 2020, the European Commission developed a new framework for transatlantic relations. On December 2, 2020, the European Commission proposed a New EU-US Agenda for Global Change. The New Agenda covers a wide range of topics, but it is notable that the Commission states, "we need to start acting together on AI - based on our shared belief in a human- centric approach and dealing with issues such as facial recognition. In this spirit, the EU will propose to start work on a **Transatlantic AI Agreement** to set a blueprint for regional and global standards aligned with our values."²⁴ The Commission further states, "We must also openly discuss diverging views on data governance and see how these can be overcome constructively. The EU and the US should intensify their cooperation at bilateral and multilateral level to promote regulatory convergence and **facilitate free data flow with trust** on the basis of high standards and safeguards."

The European Parliament

As the Commission has delayed introduction of framework legislation for AI, the European Parliament has convened hearings and adopted resolution to outline the element of EU legislation.²⁵ One resolution urged the Commission to establish legal obligations for artificial intelligence and robotics, including software, algorithms and data. A second would make those operating high-risk AI systems strictly liable for any resulting damage. And a third resolution on intellectual property rights

²⁴ European Commission and High Representative of the Union for Foreign Affairs and Security Policy, *Joint Communication to the European Parliament, the European Council and the Council: A New EU-US Agenda for Global Change* (Dec. 2, 2020) (emphasis in the original), https://ec.europa.eu/info/sites/info/files/joint-communicationeu-us-agenda en.pdf

²² European Commission, Speech by President von der Leyen at the EU Ambassadors' Conference 2020 (Nov. 10, 2020),

https://ec.europa.eu/commission/presscorner/detail/en/SPEECH 20 2064

²³ Council on Foreign Relations, *A Conversation with Ursula von der Leyen* (Nov. 20, 2020), https://www.cfr.org/event

²⁵ CAIDP Update 1.12, *European Parliament Adopts Resolutions on AI* (Oct. 24, 2020), https://dukakis.org/center-for-ai-and-digital-policy/caidp-update-european-parliament-adopts-resolutions-on-ai/

makes clear that AI should not have legal personality; only people may claim IP rights.

The European Parliament adopted all of these proposals in sweeping majorities, across parties and regions. But even those proposals are unlikely to meet the concerns of civil society. As Access Now and EDRi said of the resolution on AI ethics, "They are cautious and restrained on fundamental rights, taking only tentative steps to outline the biggest threats that artificial intelligence pose to people and society, while also failing to propose a legislative framework that would address these threats or provide any substantive protections for people's rights."

The influential LIBE Committee has also highlighted concerns about AI and fundamental rights and AI in criminal justice.²⁶ In February 2020, the Committee held a hearing on Artificial Intelligence and Criminal Law, and examined the benefits and risks of AI, predictive policing, facial recognition, as well as the ethical and fundamental rights implications. LIBE worked in association with the United Nations Interregional Crime and Justice Research Institute (UNICRI), the European Union Agency for Fundamental Rights (FRA), and the Council of Europe (COE). In November 2020, LIBE issued an opinion concerning on AI and the application of international law.²⁷

In May 2020, the Directorate General for Parliamentary Research Services of the European Parliament published *The Impact of the General Data Protection Regulation (GDPR) on Artificial Intelligence.*²⁸ The study examines the tensions and proximities between AI and data protection principles, such as in particular purpose limitation and data minimization. And in June 2020 the European Parliament established a Special Committee

²⁷ European Parliament, Committee on Civil Liberties, Justice and Home Affairs, on artificial intelligence: questions of interpretation and application of international law in so far as the EU is affected in the areas of civil and military uses and of state authority outside the scope of criminal justice (2020/2013 (INI)), (Nov. 23, 2020),

https://www.europarl.europa.eu/doceo/document/LIBE-AD-652639_EN.pdf²⁸ European Parliament Think Tank, *The impact of the General Data Protection*

Regulation (GDPR) on artificial intelligence (June 25, 2020),

²⁶ CAIDP Update 1.8 *LIBE Committee of EU Parliament Examines AI Practices, Data Protection,* (Sept. 9, 2020), https://dukakis.org/center-for-ai-and-digital-policy/caidp-update-libe-committee-of-eu-parliament-examines-ai-practices-data-protection/

https://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_STU(202 0)641530

on Artificial Intelligence to study the impact of AI and to propose a roadmap for the EU. According to the decision of Parliament, the Committee should pursue a "holistic approach providing a common, long-term position that highlights the EU's key values and objectives."²⁹

The work of the European Parliament on Artificial Intelligence also intersects with the Digital Services Act, an initiative to overhaul the E-Commerce Directive which has been the foundation of the digital single market for the last twenty years.³⁰ At the end of October, 2020, European Margrethe Vestager said the proposed Digital Services Act package will aim to make ad targeting more transparent and to ensure companies are held accountable for their decisions.³¹ "The biggest platforms would have to provide more information on the way their algorithms work, when regulators ask for it," Vestager said.

The European Council

The European Council defines the EU's overall political direction and priorities.³² It is not one of the EU's legislating institutions, so does not negotiate or adopt EU laws. Instead, it sets the EU's policy agenda, traditionally by adopting 'conclusions' during European Council meetings which identify issues of concern and actions to take. The members of the European Council are the heads of state or government of the 27 EU member states, the European Council President and the President of the European Commission.

In June 2020, the Council of the European set out Conclusions for Shaping Europe's Digital Future.³³ Regarding AI, the Council stressed,

 ²⁹ European Parliament, Setting up a special committee on artificial intelligence in a digital age, and defining its responsibilities, numerical strength and term of office (June 18, 2020), https://www.europarl.europa.eu/doceo/document/TA-9-2020-0162_EN.html
³⁰ European Parliament, Digital Services Act: Opportunities and Challenges for the

Digital Single Market and Consumer Protection,

 $https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/652712/IPOL_BRI(2020)652712_EN.pdf$

³¹ Matthew Broersma, *New EU Rules 'Would Open Tech Giants' Algorithms To Scrutiny*, Silicon.co (Nov. 2, 2020) https://www.silicon.co.uk/workspace/algorithms-tech-giants-348707

³² European Council, Council of the European Union,

https://www.consilium.europa.eu/en/european-council/

³³ Council of the European Union, *Shaping Europe's Digital Future* (June 9, 2020), https://data.consilium.europa.eu/doc/document/ST-8711-2020-INIT/en/pdf

some "some artificial intelligence applications can entail a number of risks, such as biased and opaque decisions affecting citizens' well-being, human dignity or fundamental rights, such as the rights to non-discrimination, gender equality, privacy, data protection and physical integrity, safety and security, thus reproducing and reinforcing stereotypes and inequalities. Other risks include the misuse for criminal or malicious purposes such as disinformation."

And then in October 2020, the European Council issued conclusions on the charter of fundamental rights in the context of artificial intelligence and digital change.³⁴ "These conclusions are designed to anchor the EU's fundamental rights and values in the age of digitalisation, foster the EU's digital sovereignty and actively contribute to the global debate on the use of artificial intelligence with a view to shaping the international framework," the Presidency of the Council stated.

The Presidency recommended a "fundamental rights-based" approach to AI and emphasized dignity, freedoms, equality, solidarity, citizen's rights, and justice.³⁵ The Council urged the Union and Member States to "consider effective measures for identifying, predicting and responding to the potential impacts of digital technologies, including AI, on fundamental rights." The Council said the "Commission's announced proposal for a future regulatory framework for AI, should strengthen trust, strike a fair balance between the various interests and leave room for research and development and further innovation and technical and sociotechnical developments." The Council also acknowledged the work of the FRA on AI.

The Court of Justice of the European Union

Although the Court of Justice has yet to rule directly on AI policies, the Court will play a significant role as AI policies evolve and AI law is

³⁴ Council of the European Union, *Artificial intelligence: Presidency issues conclusions* on ensuring respect for fundamental rights (Oct. 21, 2020),

https://www.consilium.europa.eu/en/press/press-releases/2020/10/21/artificialintelligence-presidency-issues-conclusions-on-ensuring-respect-for-fundamental-rights/#

³⁵ COE, Presidency conclusions: The Charter of Fundamental Rights in the context of Artificial Intelligence and Digital Change, 11481/20 (Oct. 21, 2020),

https://www.consilium.europa.eu/media/46496/st11481-en20.pdf

adopted.³⁶ Judgments of the Court concerning data transfers will also impact the development of AI systems. In the Schrems II judgment earlier this year, the Court struck down the Privacy Shield framework that permitted the transfer of personal data from the European Union to the United States.³⁷ The Schrems II judgment will likely limit the collection and use of personal data for AI systems.

The European Data Protection Board

The European Data Protection Board (EDPB) is an independent European body, which contributes to the consistent application of data protection rules throughout the European Union and promotes cooperation between the EU's data protection authorities.³⁸

In a January 2020 letter to Sophie in't Veld, EDPB Chair Andrea Jelinek addressed "the appropriateness of the GDPR as a legal framework to protect citizens from unfair algorithms" and also whether the EDPB would issue guidance on the topic.³⁹ Jelinek responded that the GDPR is a "robust legal framework" to protect citizens' right to data protection, and highlighted several articles in the GDPR that would apply to AI systems, including Article 22, regarding the legal effects of automated processing, and Article 35, about the obligation to undertake Data Protection Impact Assessments prior to processing.

Jelinek also warned of specific challenges arising from AI. The "data maximization presumption of AI "creates an incentive for large and possibly unlawful data collection and further processing of data." She also warned that the opacity of algorithms (the "black box") can lead to lack of transparency towards the data subject and also "a loss of human autonomy for those working with algorithms." But Jelinek concluded that it would be

³⁶ CAIDP Update 1.1, *EU Privacy Decision Will Have Global Consequences*, (July 19, 2020), https://dukakis.org/news-and-events/center-for-ai-and-digital-policy-update-eu-privacy-decision-will-have-global-consequences/

³⁷ CJEU, *The Court of Justice invalidates Decision 2016/1250 on the adequacy of the protection provided by the EU-US Data Protection Shield* (July 16, 2020),

https://curia.europa.eu/jcms/upload/docs/application/pdf/2020-07/cp200091en.pdf

³⁸ EDPB, *Who we are,* https://edpb.europa.eu/about-edpb/about-edpb_en

³⁹ EDPB, Letter to MEP Sophie in't Veld (OUT2020-0004),

https://edpb.europa.eu/sites/edpb/files/files/file1/edpb_letter_out2020_0004_intveldalgori thms_en.pdf

"premature at this time" to issue guidance on what constitutes a "fair algorithm."

In a June 2020 letter to several members of the European Parliament about facial recognition and the company ClearView AI, EDPB Chair Jelinek stated "Facial recognition technology may undermine the right to respect for private life and the protection of personal data . . .It may also affect individuals' reasonable expectation of anonymity in public spaces. Such technology also raises wider issues from an ethical and societal point of view." But Jelinek failed to state whether the use of facial recognition in public spaces was permissible under the GDRP.⁴⁰

The European Data Protection Supervisor

The European Data Protection Supervisor is the European Union's independent data protection authority.⁴¹ The EDPS responsibilities include the mission to "monitor and ensure the protection of personal data and privacy when EU institutions and bodies process the personal information of individuals." In comments on the Commission's White Paper on Artificial Intelligence, the EDPS stated, "benefits, costs and risks should be considered by anyone adopting a technology, especially by public administrations who process great amounts of personal data."⁴² The EDPS also expressed support for a moratorium on facial recognition in public space, "so that an informed and democratic debate can take place and until the moment when the EU and Member States have all the appropriate safeguards."

Fundamental Rights Agency

The EU agency for Fundamental Rights is also examining the impact of AI. In 2018, the FRA launched a project on Artificial Intelligence, Big Data and Fundamental Rights to assesses the use of AI for public

⁴⁰ EDPB Letter Members of the European Parliament (OUT2020-0052) (June 10, 2020), https://edpb.europa.eu/sites/edpb/files/files/file1/edpb_letter_out_2020-

⁰⁰⁵²_facialrecognition.pdf

⁴¹ EDPS, *About*, https://edps.europa.eu/about-edps_en

⁴² EDPS, Opinion 4/2020, EDPS Opinion on the European Commission's White Paper on Artificial Intelligence – A European approach to excellence and trust (June 29, 2020), https://edps.europa.eu/sites/edp/files/publication/20-06-

¹⁹_opinion_ai_white_paper_en.pdf

administration and business in the EU.⁴³ A 2018 report explores discrimination in AI⁴⁴ and a 2019 FRA report examines facial recognition.⁴⁵

In mid-December 2020, the German presidency of the EU, in collaboration with the EU Fundamental Rights Agency and German Ministry of Justice and Consumer Protection, organized a conference on AI and the European Way.⁴⁶ The conference highlighted recent papers on AI policy from the FRA. The organizers reposted the 2018 FRA report on discrimination in AI and the 2019 FRA report on facial recognition. One paper also summarized FRA AI policy initiatives between 2016 and 2020.⁴⁷ The German Government also provided its comments on the Commission White Paper on AI⁴⁸ and the detailed 2019 Opinion of the Data Ethics Commission concerning algorithm-based decision-making, AI, and data.⁴⁹

High Level-Expert Group on Al

Following the launch of the Artificial Intelligence Strategy in 2018, the European Commission appointed a group of 52 experts to advice for its implementation.⁵⁰ The group members were selected following an open selection process and comprised representatives from academia, civil

https://ec.europa.eu/digital-single-market/en/high-level-expert-group-artificial-intelligence

⁴³ FRA, Artificial Intelligence, Big Data and Fundamental Rights (May 30, 2018), https://fra.europa.eu/en/project/2018/artificial-intelligence-big-data-and-fundamentalrights

⁴⁴ FRA, *Big Data: Discrimination in data-supported decision-making* (May 29, 2018), https://fra.europa.eu/en/publication/2018/bigdata-discrimination-data-supported-decision-making

⁴⁵ FRA, Facial recognition technology: fundamental rights considerations in the context of law enforcement (Nov. 27, 2019), https://fra.europa.eu/en/publication/2019/facial-recognition-technology-fundamental-rights-considerations-context-law

⁴⁶ Doing AI the European way: Protecting Fundamental Rights in an Era of Artificial Intelligence (Dec. 14, 2020), https://eu2020-bmjv-european-way-on-ai.de/en/

⁴⁷ *Policy initiatives in the area of artificial intelligence* (last updated Apr. 29, 2020), https://eu2020-bmjv-european-way-on-

ai.de/storage/documents/AI_policy_initiatives_(2016-2020).pdf

⁴⁸ Die Bundesregierung, Comments from the Federal Government of the Federal Republic of Germanyon the White Paper on Artificial Intelligence - A European Concept for Excellence and Trust, COM (2020) 65 final, https://eu2020-bmjv-european-way-onai.de/storage/documents/Federal_Government's_Comments_on_the_AI_White_Paper.pdf ⁴⁹ daten ethik commission, Opinion of the Data Ethics Commission (2019),

https://eu2020-bmjv-european-way-on-

ai.de/storage/documents/Data_Ethics_Commission_Full_Report_in_English.pdf ⁵⁰ European Commission, *High-Level Expert Group on Artificial Intelligence*, https://ac.auropa.gu/digital.single_merket/an/high_level_expert_group_artificial

society and industry. The High-Level Expert Group on Artificial Intelligence (AI HLEG) has produced four reports: Ethics Guidelines for Trustworthy AI, Policy and Investment Recommendations for Trustworthy AI, The final Assessment List for Trustworthy AI, and Sectoral Considerations on the Policy and Investment Recommendations.

G-20

The G20 is an international forum, made up of 19 countries and the European Union, representing the world's major developed and emerging economies.⁵¹ Together, the G20 members represent 85 % of global GDP, 75% of international trade and two-thirds of the world's population. According to the OECD, because of its size and strategic importance, the G20 has a crucial role in setting the path for the future of global economic growth.

In the last few years, and in collaboration with the OECD, the G20 has taken a leading role in the promulgation of the global framework for AI policy. At the Osaka summit in 2019, former Prime Minister Abe and OECD Secretary General Gurria gathered support for the OECD AI Principles from the G20 countries. The preparatory work for the 2020 summit in Riyadh provided the first opportunity to assess progress toward implementation of the OECD AI Principles.⁵²

In November 2020, the G20 Leaders Declaration addressed both Artificial Intelligence and the digital economy. On AI, the G20 nations said, "We will continue to promote multi-stakeholder discussions to advance innovation and a human-centered approach to Artificial Intelligence (AI), taking note of the Examples of National Policies to Advance the G20 AI Principles. We welcome both the G20 Smart Mobility Practices, as a contribution to the well-being and resilience of smart cities and communities, and the G20 Roadmap toward a Common Framework for Measuring the Digital Economy."⁵³

⁵¹ OECD, What is the G20? https://www.oecd.org/g20/about/

⁵² OECD G20 Digital Economy Task Force, *Examples of AI National Policies* (2020), https://www.mcit.gov.sa/sites/default/files/examples-of-ai-national-policies.pdf

⁵³ G20 Riyadh Summit, Leaders Declaration (Nov. 21-22, 2020),

https://g20.org/en/media/Documents/G20%20Riyadh%20Summit%20Leaders%20Declar ation_EN.pdf

On Digital Economy, the G20 said "We acknowledge that universal, secure, and affordable connectivity, is a fundamental enabler for the digital economy as well as a catalyst for inclusive growth, innovation and sustainable development. We acknowledge the importance of data free flow with trust and cross-border data flows." The G20 Declaration further said, "We support fostering an open, fair, and non-discriminatory environment, and protecting and empowering consumers, while addressing the challenges related to privacy, data protection, intellectual property rights, and security."

The G20 work on AI also followed from an initiative of the Japanese government that began at the 2016 G7 Ministerial in Japan, hosted by former Prime Minister Shinzo Abe, and an initiative of the Boston Global Forum. In a paper prepared for the 2016 G7 Summit, the BGF proposed a new agenda for Securing Cyberspace.⁵⁴

Global Partnership on Al

The Global Partnership on Artificial Intelligence (GPAI) emerged from the OECD Recommendation on Artificial Intelligence.⁵⁵ GPAI activities are intended to foster the responsible development of AI grounded in "human rights, inclusion, diversity, innovation, and economic growth."⁵⁶ The GPAI aims to "bridge the gap between theory and practice on AI by supporting cutting-edge research and applied activities on AI-related priorities." The GPA developed within the G7 under the Canadian and French presidencies. GPAI's founding members are Australia, Canada, France, Germany, India, Italy, Japan, Mexico, New Zealand, the Republic of Korea, Singapore, Slovenia the United Kingdom, the United States, and the European Union.

The GPAI held the Montreal Summit in early 2020.⁵⁷ The five key themes at the first GPAI meeting were the Responsible Use of AI, Data Governance, The Future of Work, AI and the Pandemic Response, Innovation, and Commercialization. The organizers of the Montreal

⁵⁴ The BGF-G7 Summit Initiative Ise-Shima Norms (May 9, 2016),

https://bostonglobalforum.org/wp-content/uploads/sites/4/2016/05/BGF-G7-Summit-Initiative-Official-1.pdf

⁵⁵ GPAI, The Global Partnership on Artificial Intelligence, https://gpai.ai

⁵⁶ GPAI, About GPAI, https://gpai.ai/about/

⁵⁷ GPAI, *Montreal Summit 2020*, https://www.c2montreal.com/en/lp/global-partnershipon-artificial-intelligence/

Summit included an AI Art Session to learn how AI will "advance art artistry."

Global Privacy Assembly

The Global Privacy Assembly is the global network of privacy officials and experts. The Global Privacy Assembly meets annually to discuss emerging privacy issues and to adopt resolutions. In recent years, the focus of the GPA has moved toward AI.⁵⁸

The GPA adopted a foundational Declaration in 2018 on Ethics and Data Protection in Artificial Intelligence.⁵⁹ The 2018 GPA 2018 Resolution on Ethics in AI emphasized fairness, vigilance, transparency and intelligibility, and measures to reduce unlawful bias and discrimination. In 2020, The Assembly adopted a significant Resolution on Accountability and AI that urged organizations deploying AI systems to implement accountability measures, including a human rights impact assessment.⁶⁰ The Privacy Assembly also urged governments to make changes to data protection law "to make clear the legal obligations regarding accountability in the development and use of AI." The 2020 GPA AI Accountability Resolution builds on a recent a recent GPA survey that identified accountability measures that are "very important or important for either AI developers or AI users."

In 2020, the Global Privacy Assembly also adopted a Resolution on Facial Recognition Technology.⁶¹ The GPA Resolution reiterated several key principles for data protection, such as fairness and transparency, but stopped short of endorsing a formal ban which had been urged by many

⁵⁸ CAIPD Update 1.15, *Privacy Commissioners Adopt Resolutions on AI, Facial Recognition* (Oct. 19, 2020), https://dukakis.org/center-for-ai-and-digital-policy/caidp-update-privacy-commissioners-adopt-resolutions-on-ai-facial-recognition/

http://globalprivacy $assembly.org/wp-content/uploads/2018/10/20180922_ICDPPC-40th_AI-Declaration_ADOPTED.pdf$

⁶⁰ Global Privacy Assembly, *Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wpcontent/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN.pdf

⁶¹ Global Privacy Assembly, *Adopted Resolution on Facial Recognition Technology* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Facial-Recognition-Technology-EN.pdf

human rights advocates at the 2019 conference in Tirana. More than 100 organizations and 1,200 experts recommended that "countries suspend the further deployment of facial recognition technology for mass surveillance" and "establish the legal rules, technical standards, and ethical guidelines necessary to safeguard fundamental rights and comply with legal obligations before further deployment of this technology occurs." The Assembly said it would consider the "circumstances when facial recognition technology poses the greatest risk to data protection and privacy rights," and develop a set of principles that could be adopted at the next conference.

The OECD

The OECD is an international organization that "works to build better policies for better lives."⁶² The goal of the OECD is to "shape policies that foster prosperity, equality, opportunity and well-being for all."

The OECD has led the global effort to develop and establish the most widely recognized framework for AI policy. This is a result of a concerted effort by the OECD and the member states to develop a coordinated international strategy. The OECD AI Principles also build on earlier OECD initiatives such as the OECD Privacy Guidelines, a widely recognized framework for transborder data flows and the first global framework for data protection.⁶³ OECD policy frameworks are not treaties, do not have legal force, and are not directly applicable to OECD member states. However, there are many instances of countries adopting national laws based on OECD policies, and a clear convergence of legal norms, particularly in the field of data protection.

Following the publication of the OECD AI Principles in 2019, the OECD continues extensive work on the adoption and implementation of AI policies.⁶⁴

⁶² OECD, *Who we are*, https://www.oecd.org/about/

⁶³ OECD, OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data (1981),

https://www.oecd.org/sti/ieconomy/oecdguidelinesontheprotectionofprivacyandtransbord erflowsofpersonaldata.htm

⁶⁴ CAIP Update 1.13, *OECD Report Examines Implementation of AI Principles* (Oct. 5, 2020), https://dukakis.org/center-for-ai-and-digital-policy/caidp-update-oecd-report-examines-implementation-of-ai-principles/

OECD AI Observatory

The OECD AI Observatory, launched in February 2020, provides extensive data and multi-disciplinary analysis on artificial intelligence across a wide range of policy areas.⁶⁵ According to the OECD, the AI Policy Observatory is based on multidisciplinary, evidence-based analysis, and Global multi-stakeholder partnerships.

National Implementation

The OECD has also published the first report that attempts to assess the implementation of the OECD AI Principles among the G-20 nations.⁶⁶ Examples of AI National Policies surveys "rationales and illustrative actions" for the 10 principles that make up the OECD/G-20 Guidelines on AI policy. The report was prepared by the G20 Digital Economy Task Force. Key observations from the Task Force report:

- G20 countries are moving quickly to build trustworthy AI ecosystems, though most initiatives are very recent
- Many national AI strategies address multiple G20 AI Principles simultaneously, which the OECD contends reinforce the strong complementarity of the Principles
- So far, few national policies emphasize Principles of robustness, security and safety, and accountability,
- Many national policies emphasize R&D, fostering a digital ecosystem, human capacity, and international cooperation

The Task Force also found that "there is potential for steering public research towards socially oriented applications and issues, and for leveraging R&D activities to make progress on issues such as accountability, explainability, fairness and transparency." The Task Force emphasized that there "is currently a critical window for G20 members to continue their leadership on AI policy issues and to promote implementation of the G20 AI Principles. Development, diffusion and use of AI technologies are still at a relatively early level of maturity across many

⁶⁵ OECD, AI Policy Observatory, https://www.oecd.ai/

⁶⁶ CAIP Update 1.13, *OECD Report Examines Implementation of AI Principles* (Oct. 5, 2020), https://dukakis.org/center-for-ai-and-digital-policy/caidp-update-oecd-report-examines-implementation-of-ai-principles/

countries and firms, and policy-making on AI is in an active experimental phase."67

OECD Secretary General Angel Gurria remarks at the 2020 G-20 Digital Economy Ministers Meeting in Riyadh also provide insight into the work of the OECD on AI.⁶⁸ Secretary Gurria, addressing the global challenges of the COVID-19 crisis, urged countries to "use digital technologies to build our economies back in a better way: more resilient, inclusive and sustainable." He also spoke about the need to bridge the digital divide, to shift to smart mobility practices, and to continue work on measurement of the digital economy.

As this year's G20 AI Dialogue showed," Secretary Gurria said, "AI's full potential is still to come. To achieve this potential, we must advance a human-centred and trustworthy AI, that respects the rule of law, human rights, democratic values and diversity, and that includes appropriate safeguards to ensure a fair and just society. This AI is consistent with the G20 AI Principles you designed and endorsed last year, drawing from the OECD's AI Principles."

The OECD ONE PAI

The OECD has also established a Working Group on Policies for AI (ONE PAI).⁶⁹ The Working Group is developing practical guidance for policymakers on a wide array of topics: investing in AI R&D; data, infrastructure, software & knowledge; regulation, testbeds and documentation; skills and labor markets; and international co-operation.

The ONE PAI leverages lessons learned by other OECD bodies, as well as analysis of national AI policies. The working group is focusing on the practical implementation of the OECD AI Principles throughout the AI policy cycle for:

• Policy design – focusing on national AI governance policies and approaches;

⁶⁸ CAIP Update 1.2, *OECD's Gurria Underscores AI Fairness at G-20* (July 26, 2020), https://dukakis.org/center-for-ai-and-digital-policy/center-for-ai-policy-update-oecds-gurria-underscores-ai-fairness-at-g-20-meeting/

⁶⁷ OECD G20 Digital Economy Task Force, Examples of AI National Policies (2020), https://www.mcit.gov.sa/sites/default/files/examples-of-ai-national-policies.pdf

⁶⁹ OECD, OECD Network of Experts on AI (ONE AI), https://oecd.ai/network-of-experts

- Policy implementation focusing on lessons learned to date through national implementation examples;
- Policy intelligence identifying different evaluation methods and monitoring exercises; and
- Approaches for international and multi-stakeholder cooperation on AI policy.

The OECD ONE PAI held five virtual meetings between June and September 2020 which provided "deep dives" into national experience in implementing AI policies in practice.

UNESCO

UNESCO has embarked on a two-year project to develop a global standard for Artificial Intelligence. UNESCO Director General Audrey Azoulay stated, "Artificial intelligence can be a great opportunity to accelerate the achievement of sustainable development goals. But any technological revolution leads to new imbalances that we must anticipate."⁷⁰

UNESCO recently published a draft Recommendation on the Ethics of Artificial Intelligence. UNESCO stated that the Recommendation "aims for the formulation of ethical values, principles and policy recommendations for the research, design, development, deployment and usage of AI, to make AI systems work for the good of humanity, individuals, societies, and the environment." The UNESCO draft Recommendation sets out about a dozen principles, five Action Goals, and eleven Policy Actions. Notable among the UNESCO recommendations is the emphasis on Human Dignity, Inclusion, and Diversity. UNESCO also expresses support for Human Oversight, Privacy, Fairness, Transparency Safety and Security, among and Explainability, other goals. Understandably, UNESCO is interested in the scientific, educational, and cultural dimensions of AI, the agency's program focus.

United Nations

The United Nations launched work on AI in 2015 with the General Assembly event Rising to the Challenges of International Security and the

⁷⁰ UNESCO, *Artificial intelligence with human values for sustainable development,* https://en.unesco.org/artificial-intelligence

Emergence of Artificial Intelligence.⁷¹ In 2015, the UN Interregional Crime and Justice Research Institute (UNICRI) launched a program on AI and Robotics.

International Telecommunications Union

In 2017 and 2018, the International Telecommunications Union (ITU) organized the AI for Good Global Summits, "the leading United Nations platform for dialogue on AI."⁷² Houlin Zhao, Secretary General of the ITU stated, "As the UN specialized agency for information and communication technologies, ITU is well placed to guide AI innovation towards the achievement of the UN Sustainable Development Goals. We are providing a neutral platform for international dialogue aimed at building a common understanding of the capabilities of emerging AI technologies." The 2018 ITU report *Artificial Intelligence for global good* focused on the relationship between AI and progress towards the United Nations' Sustainable Development Goals (SDGs).⁷³

UN Special Rapporteur

An extensive 2018 report by a UN Special Rapporteur explored the implications of artificial intelligence technologies for human rights in the information environment, focusing in particular on rights to freedom of opinion and expression, privacy and non-discrimination.⁷⁴ The *Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression* report defines key terms "essential to a human rights discussion about artificial intelligence"; identifies the human rights legal framework relevant to artificial intelligence; and presents preliminary to ensure that human rights are considered as AI systems evolve. The report emphasizes free expression concerns and notes several frameworks,

⁷¹ UNICRI, Rising to the Challenges of International Security and the Emergence of *Artificial Intelligence* (Oct. 7, 2015),

http://www.unicri.it/news/article/cbrn_artificial_intelligence

⁷² ITU, AI for Good Global Summit 2018, https://www.itu.int/en/ITU-

T/AI/2018/Pages/default.aspx

⁷³ ITU News Magazine, Artificial Intelligence for global good (Jan. 2018), https://www.itu.int/en/itunews/Documents/2018/2018-01/2018_ITUNews01-en.pdf

⁷⁴ UN Special Rapporteur, *Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression*, A/73/348 (Aug. 29, 2018), https://freedex.org/wp-content/blogs.dir/2015/files/2018/10/AI-and-FOE-GA.pdf

including the International Covenant on Civil and Political Rights and the UN Guiding Principles on Business and Human Rights.

Among the Recommendations, the Special Rapporteur proposed "Companies should make all artificial intelligence code fully auditable and should pursue innovative means for enabling external and independent auditing of artificial intelligence systems, separately from regulatory requirements. The results of artificial intelligence audits should themselves be made public." The report emphasizes the need for transparency in the administration of public services. "When an artificial intelligence application is being used by a public sector agency, refusal on the part of the vendor to be transparent about the operation of the system would be incompatible with the public body's own accountability obligations," the report advises.

UN and Lethal Autonomous Weapons

One of the first AI applications to focus the attention of global policymakers was the use of AI for warfare.⁷⁵ In 2016, the United Nations established the Group of Governmental Experts (GGE) on Lethal Autonomous Weapons Systems (LAWS) following a review of the High Contracting Parties to the Convention on Certain Conventional Weapons (CCW).⁷⁶ In November 2019,⁷⁷ the CCW High Contracting Parties endorsed 11 Guiding Principles for LAWS.⁷⁸ But concerns about future of regulation of lethal autonomous weapons remain. At present, some countries believe

⁷⁵ The Computer Professionals for Social Responsibility (CPSR), a network of computer scientists based in Palo Alto, California, undertook early work on this topic in the 1980s. CPSR History, http://cpsr.org/about/history/. See also David Bellin and Gary Chapman, *Computers in Battle Will They Work*? (1987).

⁷⁶ United Nations, 2018 Group of Governmental Experts on Lethal Autonomous Weapons Systems (LAWS),

https://www.unog.ch/80256EE600585943/(httpPages)/7C335E71DFCB29D1C12582430 03E8724

⁷⁷ Meeting of the High Contracting Parties to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, *Final Report* (Dec. 13, 2019), https://undocs.org/Home/Mobile?FinalSymbol=CCW%2FMSP%2F2019%2F9&Languag e=E&DeviceType=Desktop

⁷⁸ Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons System, *Report of the 2019 session of the Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems (Sept. 25, 2019)*, https://documents-dds-

ny.un.org/doc/UNDOC/GEN/G19/285/69/PDF/G1928569.pdf?OpenElement

that current international law "mostly suffices" while others believe new laws are needed.⁷⁹ Human Rights Watch provided an important overview of country positions on the future of banning fully autonomous weapons in August 2020.⁸⁰ Concerns over killer reports also arose at the 75th UN Assembly in October 2020.⁸¹ Pope Francis warned that lethal autonomous weapons systems would "irreversibly alter the nature of warfare, detaching it further from human agency." He called on states to "break with the present climate of distrust" that is leading to "an erosion of multilateralism, which is all the more serious in light of the development of new forms of military technology."⁸² The Permanent Representative of the Holy See to the UN called for a ban on autonomous weapons in 2014.⁸³

The Vatican

Pope Francis has emerged as a leading figure the world of AI policy. In addition to his statements on autonomous weapons, in November 2020 the Pope warned that AI could exacerbate economic inequalities around the world if a common good is not pursued. "Artificial intelligence is at the heart of the epochal change we are experiencing. Robotics can make a better world possible if it is joined to the common good. Indeed, if technological progress increases inequalities, it is not true progress. Future

fora/unga/2020/25Sept_HolySee.pdf

⁷⁹ Dustin Lewis, *An Enduring Impasse on Autonomous Weapons*, Just Security (Sept. 28, 2020), https://www.justsecurity.org/72610/an-enduring-impasse-on-autonomous-weapons/

⁸⁰ Human Rights Watch, *Stopping Killer Robots: Country Positions on Banning Fully Autonomous Weapons and Retaining Human Control* (Aug. 10, 2020),

https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and#

⁸¹ Stop Killer Robots, 75th UN Assembly (Oct. 30, 2020),

https://www.stopkillerrobots.org/2020/10/un-diplomacy/

⁸² Address of His Holiness Pope Francis to the Seventy-fifth Meeting of the General Assembly of the United Nations, *The Future We Want, the United Nations We Need: Reaffirming our Joint Commitment through Multilateralism* (Sept. 25, 2020), https://reachingcriticalwill.org/images/documents/Disarmament-

⁸³ Statement by H.E. Archibishop Silvano M. Tomasi, Permanent Representative of the Holy See to the United Nations and Other International Organizations in Geneva at the meeting of Experts on Lethal Autonomous weapons systems of the High Contracting Parties to the Convention, *On Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be Deemed to be Excessively Injurious or to have Indiscriminate Effect* (May 13, 2014),

https://www.unog.ch/80256EDD006B8954/(httpAssets)/D51A968CB2A8D115C1257CD8002552F5/\$file/Holy+See+MX+LAWS.pdf

advances should be oriented towards respecting the dignity of the person and of Creation."⁸⁴

Earlier in 2020, the Pope endorsed the Rome Call for AI Ethics.⁸⁵ The goal of the Rome Call is to "support an ethical approach to Artificial Intelligence and promote a sense of responsibility among organizations, governments and institutions." The Pope said, "The Call's intention is to create a movement that will widen and involve other players: public institutions, NGOs, industries and groups to set a course for developing and using technologies derived from AI." The Pope also said that the Rome Call for Ethics is the "first attempt to formulate a set of ethical criteria with common reference points and values, offering a contribution to the development of a common language to interpret what is human."⁸⁶

The key principles of the Rome Call are 1) Transparency: AI systems must be explainable; 2) Inclusion: the needs of all human beings must be taken into consideration so that everyone can benefit and all individuals can be offered the best possible conditions to express themselves and develop; 3) Responsibility: those who design and deploy the use of AI must proceed with responsibility and transparency; 4) Impartiality: do not create or act according to bias, thus safeguarding fairness and human dignity; 5) Reliability: AI systems must be able to work reliably; 6) Security and privacy: AI systems must work securely and respect the privacy of users. These principles are described as "fundamental elements of good innovation."

Technical Societies

Technical societies have also played a leading role in the articulation of AI principles. The IEEE led several initiatives, often in cooperation with government policymakers, to develop and promote Ethically Aligned Design (EAD).⁸⁷ The initial report *A Vision for Prioritizing Human Wellbeing with Autonomous and Intelligent Systems* was published in 2015. The

⁸⁴ Vatican News, *Pope's November prayer intention: that progress in robotics and AI "be human*" (Nov. 2020), https://www.vaticannews.va/en/pope/news/2020-11/pope-francis-november-prayer-intention-robotics-ai-human.html

⁸⁵ *Rome Call AI Ethics*, https://romecall.org

⁸⁶ Pontifical Academy for Life, Rome Call for Ethics (Feb. 28, 2020),

http://www.academyforlife.va/content/pav/en/events/intelligenza-artificiale.html ⁸⁷ IEEE Ethics in Action in Autonomous and Intelligent Systems,

https://ethicsinaction.ieee.org

IEEE published the second edition in 2017.88 In 2019 the IEEE issued a Positions Statement on Artificial Intelligence, concluding that "AI systems hold great promise to benefit society, but also present serious social, legal and ethical challenges, with corresponding new requirements to address issues of systemic risk, diminishing trust, privacy challenges and issues of data transparency, ownership and agency."89

ACM, an international society of computer scientists and professionals, has also contributed to the global AI policy landscape.⁹⁰ In 2017 ACM released a Statement on Algorithmic Transparency and Accountability, identifying key principles to minimize bias and risks in decision-making systems, algorithmic including transparency, accountability, explainability, auditability, and validation.⁹¹ In 2020, in response to growing concerns about the use of facial recognition technologies in public spaces, ACM released another statement addressing the unique issues of biometric data systems and the potential bias and inaccuracies that have significant consequences for violation of human rights.92

Civil Society

Europe

Civil Society organizations, particularly in Europe, are also shaping national AI policies and practices. Group such as Access Now have published detailed assessment of AI regulatory proposals⁹³ and a very

⁸⁸ IEEE Standards Association, *IEEE Releases Ethically Aligned Design, Version 2 to* show "Ethics in Action" for the Development of Autonomous and Intelligent Systems (A/IS) (Dec. 12, 2017), https://standards.ieee.org/news/2017/ead v2.html

⁸⁹ IEEE, Artificial Intelligence (June 24, 2019), https://globalpolicy.ieee.org/wpcontent/uploads/2019/06/IEEE18029.pdf

⁹⁰ Association for Computing Machinery, www.acm.org/public-policy

⁹¹ ACM, US Public Policy Council, Statement on Algorithmic Transparency and Accountability, (Jan. 12, 2017),

https://www.acm.org/binaries/content/assets/publicpolicy/2017 usacm statement algorit hms.pdf.

⁹² ACM, US Technology Policy Committee, Statement on Principles and Prerequisites for the Development, Evaluation and Use of Unbiased Facial Recognition Technologies (June 30, 3030), https://www.acm.org/binaries/content/assets/public-policy/ustpc-facialrecognition-tech-statement.pdf

⁹³ AccessNow, Mapping Regulatory Proposals for Artificial Intelligence in Europe (Nov. 2018),

recent report on "trustworthy AI."⁹⁴ AlgorithmWatch has drawn attention to controversies in the use of AI-based decision-making systems.⁹⁵ BEUC, the European consumer organization, has surveyed public attitudes toward AI,⁹⁶ and in October 2020 proposed specific AI rights for consumers.⁹⁷ Privacy International has examined the impact of AI in several context, including advertising, welfare, and migration.⁹⁸

The European Commission's White Paper on AI provided an opportunity for these groups to express their views on regulatory options. Several European NGOs said that the Commission has moved too slowly to establish a legislative framework and has placed too much emphasis on ethics rather than fundamental rights. Access Now and EDRi said that the Commission's "risk-based approach" fails to safeguard fundamental rights.⁹⁹ As they explained, "the burden of proof to demonstrate that an AI system does not violate human rights should be on the entity that develops or deploys the system" and "such proof should be established through a mandatory human rights impact assessment."

BEUC wrote "a strong regulatory framework is necessary" to "facilitate innovation and guarantee that consumers can fully reap the benefits of the digital transformation of our societies but are protected against the risks posed by AI."¹⁰⁰ The German consumer association vzbv

https://www.accessnow.org/cms/assets/uploads/2018/11/mapping_regulatory_proposals_for_AI_in_EU.pdf

⁹⁴ AccessNow, *Europe's Approach to Artificial Intelligence: How AI Strategy is Evolving* (Dec. 7, 2020), https://www.accessnow.org/eu-trustworthy-ai-strategy-report/

⁹⁵ AlgorithmWatch, Automating Society Report 2020 (Oct. 2020),

https://automatingsociety.algorithmwatch.org

⁹⁶ BEUC, *Survey: Consumers see potential of artificial intelligence but raise serious concerns* (Sept. 7, 2020), https://www.beuc.eu/publications/survey-consumers-see-potential-artificial-intelligence-raise-serious-concerns/html

⁹⁷ BEUC, *AI Rights for Consumers* (2019), https://www.beuc.eu/publications/beuc-x-2019-063_ai_rights_for_consumers.pdf

⁹⁸ Privacy International, *Artificial Intelligence* ("AI has the potential to revolutionise societies, however there is a real risk that the use of new tools by states or corporations will have a negative impact on human rights.")

https://privacyinternational.org/learn/artificial-intelligence

⁹⁹ Access Now and EDRi, *Attention EU regulators: we need more than AI "ethics" to keep us safe* (Oct. 21, 2020), https://edri.org/our-work/attention-eu-regulators-we-need-more-than-ai-ethics-to-keep-us-safe/

¹⁰⁰ BEUC, *BEUC's Response to the European Commission's White Paper on Artificial Intelligence* (June 2020), https://www.beuc.eu/publications/beuc-x-2020-

⁰⁴⁹_response_to_the_ecs_white_paper_on_artificial_intelligence.pdf

has also said that the EC recommendation is too narrow.¹⁰¹ Risky applications that can cause immense harm to consumers' self-determination would then most likely be out of the scope, such as insurance, e-commerce, and smart personal assistants like Amazon Echo/Alexa. The European Commission's plan also appears to include only machine-learning applications. This would exclude a range of expert systems, such as. the German credit scoring system "Schufa." According to vzbv, this is not technology neutral as it should be.

In the fall of 2020, more than a dozen NGOs in Europe joined together to ban biometric mass surveillance.¹⁰² The Reclaim Your Face coalition demands "transparency, red lines, and respect for humans," and has specifically objected to the deployment of facial recognition in Belgrade. According to the organizations, "ReclaimYourFace is a European movement that brings people's voices into the discussion around biometric data used to monitor the population. We question why these sensitive data are being used and raise the alarm on the impact on our freedoms in public spaces."¹⁰³

United States

In the United States, the AI Now Institute at New York University has organized important conferences¹⁰⁴ and issued expert reports¹⁰⁵ on several AI topics. The AI Now Institute also recently provided a statement to the New York City Council on discrimination in automated employment decision tools.¹⁰⁶ The Electronic Privacy Information Center (EPIC) has pursued several innovative complaints concerning AI with the US Federal Trade Commission,¹⁰⁷ provided comments on AI to federal agencies,¹⁰⁸

¹⁰¹ Vzbv, White Paper on Artificial Intelligence: Proposals of the Federation of German Consumer Organisations (May 11, 2020),

https://www.vzbv.de/sites/default/files/downloads/2020/06/18/20_06_11_vzbv_ec_white paper ai comment final.pdf

¹⁰² Reclaim Your Face, https://reclaimyourface.eu

¹⁰³ Reclaim Your Face, The Movement, https://reclaimyourface.eu/the-movement/

¹⁰⁴ AI Now Institute, *Bias*, https://ainowinstitute.org/symposia.html

¹⁰⁵ AI Now Institute, *Reports*, https://ainowinstitute.org/reports.html

¹⁰⁶ Dr. Sarah Myers West, AI Now Institute, *Ethical Implications of Using Artificial*

Intelligence and Automated Decision Systems, New York City Council (Nov. 13, 2020),

https://ainowinstitute.org/ai-now-city-council-testimony-fair-shot-act.pdf

¹⁰⁷ EPIC, In re HireVue, https://epic.org/privacy/ftc/hirevue/

¹⁰⁸ Fight for the Future, Ban Facial Recognition, https://www.banfacialrecognition.com

expert statements to Congress,¹⁰⁹ and pursued public release of materials concerning the activities of the National Security Commission on AI.¹¹⁰ EPIC has also pursued open government cases concerning the use of proprietary forensic techniques in the criminal justice system.

Fight for the Future, an independent NGO, organized a national campaign in the US to ban facial recognition.¹¹¹ Amazon also came under widespread criticism from many US NGOs in 2018 about the company's facial recognition system Rekognition.¹¹² In June 2020, Amazon agreed to "pause" the police use of its facial recognition software.¹¹³ IBM and Microsoft also agree to halt the development of facial recognition. According to MIT Technology Review, the decision "mark[s] a major milestone for researchers and civil rights advocates in a long and ongoing fight over face recognition in law enforcement."¹¹⁴

The Algorithmic Justice League (AJL) has advised the US Congress on AI policy¹¹⁵ and facial recognition technology.¹¹⁶ The AJL has also proposed the creation of a federal agency, similar to the FDA, to regulate

¹⁰⁹ EPIC Urges Congress to Regulate AI Techniques, Promotes 'Algorithmic Transparency' (Dec. 12, 2017), https://epic.org/2017/12/epic-urges-congress-to-regulat.html

¹¹⁰ https://www.epic.org/foia/epic-v-ai-commission/

¹¹¹ Fight for the Future, *Ban Facial Recognition*, https://www.banfacialrecognition.com

¹¹² Letter from Nationwide Coalition to Amazon CEO Jeff Bezos Regarding Rekognition (June 18, 2018), ttps://www.aclu.org/letter-nationwide-coalition-amazon-ceo-jeff-bezos-regarding-rekognition

¹¹³ Karen Weise and Natasha Singer, *Amazon Pauses Police Use of Its Facial Recognition Software*, New York Times (June 10, 2020),

https://www.nytimes.com/2020/06/10/technology/amazon-facial-recognitionbacklash.html

¹¹⁴ Karen Hao, *The two-year fight to stop Amazon from selling face recognition to the police*, MIT Technology Review (June 12, 2020),

https://www.technologyreview.com/2020/06/12/1003482/amazon-stopped-selling-police-face-recognition-fight/

¹¹⁵ Joy Buolamwini, *Artificial Intelligence; Societal and Ethical Implications,* United States House Committee on Science, Space and Technology (June 26, 2019),

https://science.house.gov/imo/media/doc/Buolamwini%20Testimony.pdf

¹¹⁶ Joy Buolamwini, Facial Recognition Technology (Part 1): Its Impact on our Civil Rights and Liberties, United States House Committee on Oversight and Government Reform (May 22, 2019),

https://docs.house.gov/meetings/GO/GO00/20190522/109521/HHRG-116-GO00-Wstate-BuolamwiniJ-20190522.pdf

facial recognition technology.¹¹⁷ And the AJL published a landmark report on AI bias - *Gender Shades: Uncovering Gender and skin-Type bias in Commercial AI Products*.¹¹⁸

¹¹⁷ AJL, Federal *Recognition Technologies: A Call for a Federal Office* (May 29, 2020), https://www.ajl.org/federal-office-call

¹¹⁸ AJL, Gender Shades: Uncovering Gender and skin-Type bias in Commercial AI Products, http://gendershades.org