Strasbourg, 20 November 2019

CDDG(2019)6
Item 7.2 of the agenda

EUROPEAN COMMITTEE ON DEMOCRACY AND GOVERNANCE (CDDG)

ARTIFICIAL INTELLIGENCE, DEMOCRACY AND GOVERNANCE:

A brief overview of ongoing work by other international organisations and fora

For information

Secretariat Memorandum
prepared by the
Directorate General of Democracy
Democratic Governance Department

Foreword

Without any pretence to be exhaustive, the present document provides a brief overview of the activities undertaken by other intergovernmental organisations in the area of artificial intelligence having a bearing on democracy and good governance. It is purely descriptive and does not provide either an assessment of the impact of these activities or an indication of the areas in which the Council of Europe could have an added value.

The international organisations that have been mapped include Council of Europe close and long-standing partners. In addition, information about the activities of the World Economic Forum have been included, given their relevance and long-term perspective.

For the reader's convenience, under the name of each organisation some key concepts have been listed. The same words are written in bold in the text that follows and correspond to key aspects or concerns for the organisation in question.

Table of contents

European Union (EU)

Key concepts: ethical framework; trustworthy AI; automated decision-making systems (ADM); e-government; digitalisation of the public administration

Basic approach

Amongst international organisations, the EU has set out the most comprehensive approach for dealing with Artificial Intelligence (AI), with an emphasis on economic growth.

The sense of urgency for taking the lead in this area is conveyed in the following passage from a European Commission communication: '*Like the steam engine or electricity in the past, AI is transforming our world, our society and our industry (…). It is one of the most strategic technologies of the 21st century. The stakes could not be higher. The way we approach AI will define the world we live in. Amid fierce global competition, a solid European framework is needed. The EU should have a coordinated approach to make the most of the opportunities offered by AI and to address the new challenges that it brings'.*[1] The EU's three-pronged approach on AI and robotics aims at:

1 COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS, Artificial Intelligence for Europe, Brussels, 25.4.2018 COM(2018) 237 final, pages 2-3.

- boosting research and technological competitiveness at international level;
- preparing for the socio-economic changes which will be brought about by AI;
- and setting out a legal and ethical framework, based on EU values and in line with the Charter of Fundamental Rights of the EU. This includes guidance on existing product liability rules, an analysis of emerging challenges, and cooperation with stakeholders, through a newly-established European AI Alliance, for the development of AI ethical guidelines.

The key documents underpinning the approach include:

- the April 2018 *Declaration of co-operation on Artificial Intelligence*, which as of today has been signed by all EU Member States;[2]
- the Commission's Communication of 2018 on *Artificial Intelligence for Europe*;[3]
- and the 2018 *Coordinated Action Plan*.[4]

Transversal issue: ethics

The EU's work on developing an **ethical framework** is of relevance for democracy and governance, being a cross-cutting issue.

The EU Commission deems the key requirements for **trustworthy AI** to include human agency and oversight; privacy and data governance; transparency; diversity, non-discrimination and fairness; societal and environmental well-being; and accountability.[5]

The EU has also set up two advisory groups which explore the ethical use of AI:

- the Ethics Advisory Group (EAG), under the independent European Data Protection Supervisor (EDPS), which is tasked to *'explore the relationships between human rights, technology, markets and business models'* and in 2018 published recommendations *Towards Digital Ethics;*[6]
- and the High-Level Expert Group on Artificial Intelligence which, in addition to formulating a definition of AI, has published the April 2019 *Ethics Guidelines for Trustworthy Artificial Intelligence*[7] and leads the wider-societal discussion forum called European AI Alliance.[8]

Notably, in its 2019 report, the EU Fundamental Rights Agency pointed out that the development of ethical standards must go hand in hand with a rights-based approach rather than being a substitute for it.[9]

2 https://ec.europa.eu/digital-single-market/en/news/eu-member-states-sign-cooperate-artificial-intelligence
3 COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS, Artificial Intelligence for Europe, Brussels, 25.4.2018 COM(2018) 237 final
4 https://ec.europa.eu/digital-single-market/en/news/coordinated-plan-artificial-intelligence, Brussels, 7.12.2018, COM(2018) 795 final
5 This is according to the April 2019 Commission Communication on Building Trust in Human-Centric Artificial Intelligence; The Commission's European Strategy Centre also has a 'strategic note' on 'The Age of Artificial Intelligence: Towards a European Strategy for Human-Centric Machines' from March 2018.
6 https://edps.europa.eu/data-protection/our-work/publications/ethical-framework/ethics-advisory-group-report-2018_en
7 https://ec.europa.eu/futurium/en/ai-alliance-consultation/guidelines#Top
8 The European AI Alliance is an AI HLEG-led societal forum for discussions on all aspects of AI development and its impact. For more information, see European Commission's Artificial Intelligence Policy.
9 https://fra.europa.eu/en/publication/2019/fundamental-rights-2019

Transversal issue: automated decision-systems

The debate around **automated decision-making (ADM) systems** is also relevant in relation to decisions taken by governments and public administration. A recent EPRS study highlights that while transparency and explainability allows for uncovering deficiencies, *'they do not guarantee the reliability, security and fairness of an algorithmic decision system'.*[10] In general, entirely automated individual decision-making, including profiling, is not allowed under the EU General Data Protection Regulation (GDPR)[11] unless: i) the use of algorithms is allowed by law and suitable safeguards are provided; or is ii) necessary to enter or perform a contract: i.e. there is no other way to achieve the same goal; or iii) the individual has provided explicit consent.[12]

E-government

The EU activities in the area of **e-government** are also relevant. The *e-Government Action Plan 2016-2020* aims at supporting the **digitalisation of the public administration**, with a view to increasing efficiency, openness and transparency; improving access; reducing costs; and promoting co-operation between EU member States and cross-border interoperability.[13]

The Action Plan does not have a dedicated budget or funding instrument. It will, however, help to coordinate funding sources that are available to member States through different EU programmes, such as the Connecting Europe Facility (CEF), the ISA² programme (Interoperability solutions for European Public Administrations), Horizon 2020, the European Structural and Investment Funds (ESIF), the Justice Programme and the Structural Reform Support Programme (SRSP).

In parallel, the EU Institutions have reached political agreement on the *Digital Europe Programme 2021-2027*, which will focus on five areas: artificial intelligence, high performance computing, cybersecurity and trust, advanced digital skills, and ensuring the wide use and deployment of digital technologies across the economy and society in order to strengthen European industrial technological leadership.14 The investment in artificial intelligence should total 2.5 billion euros and be channelled towards three objectives, one of which is 'building up and reinforcing the use of artificial intelligence by businesses and public administrations'.

10 http://www.europarl.europa.eu/RegData/etudes/STUD/2019/624261/EPRS_STU(2019)624261_EN.pdf
11 https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1532348683434&uri=CELEX:02016R0679-20160504
12 European Commission, Can I be subject to automated individual decision-making, including profiling?
13 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016DC0179&from=EN
14 https://ec.europa.eu/commission/sites/beta-political/files/budget-june2018-digital-transformation_en.pdf

Promoting e-government and e-administration are also at the core of the 2017 European Parliament's *Resolution on e-democracy in the European Union: potential and challenges* which, however, does not mention AI.[15] The European Parliamentary Research Service (EPRS), instead, has addressed the subject of artificial intelligence and democracy in relation to algorithmic accountability and transparency,16 algorithmic decision-making[17] and elections and data protection.[18]

Organisation for Economic Co-operation and Development (OECD)

Key concepts: societal expectations; public sector modernisation; policymaking; principles for responsible AI; AI Policy Observatory

The OECD's activity in the field of AI dates back to July 2014, when the OECD member States adopted the *OECD Council Recommendation on Digital Government Strategies*.[19] Behind this work lay the awareness that '*the multiplication of technological options raise challenges and risks for which governments must prepare. The new possibilities, and the changing* ***societal expectations*** *that arise from them, require governments to re-examine their governance approaches and strategies. Failures to do so could mean an accelerated loss of trust in government and a perception that it is out of touch with societal and technological trends. (…) The challenge is to integrate the use of digital technologies into* ***public sector modernisation*** *efforts. (…). Setting up more open approaches to* ***policymaking*** *and public service delivery requires governments to re-organise themselves around user expectations, needs and associated requirements, rather than their own internal logic and needs. To this end, digital government strategies need to become firmly embedded in mainstream modernisation policies and service design so that the relevant stakeholders outside of government are included and feel ownership for the final outcomes of major policy reforms'.*[20]

Work in this area continued in the following years, under the aegis of the *Going Digital Project*.[21] In 2019, the OECD held the *Going Digital Summit*,[22] during which it launched:

- the report *Going Digital: Shaping Policies, Improving Lives*,[23]
- the publication *Measuring the Digital Transformation: A Roadmap for the Future*,[24]
- and the *Going Digital Toolkit*, an online portal that helps countries assess their state of digital development and formulate a policy response.[25] Digital government is amongst the themes that are assessed.[26] A compilation of good practices in digital government is also kept up-to-date online.[27]

15 http://www.europarl.europa.eu/doceo/document/TA-8-2017-0095_EN.pdf
16 http://www.europarl.europa.eu/RegData/etudes/STUD/2019/624262/EPRS_STU(2019)624262_EN.pdf
17 http://www.europarl.europa.eu/RegData/etudes/STUD/2019/624261/EPRS_STU(2019)624261(ANN1)_EN.pdf
18 https://epthinktank.eu/2019/05/21/artificial-intelligence-data-protection-and-elections/
19 http://www.oecd.org/gov/digital-government/Recommendation-digital-government-strategies.pdf
20 http://www.oecd.org/gov/digital-government/Recommendation-digital-government-strategies.pdf, page 3
21 http://www.oecd.org/going-digital/project/
22 http://www.oecd.org/going-digital/summit/
23 http://www.oecd.org/fr/innovation/going-digital-shaping-policies-improving-lives-9789264312012-en.htm
24 http://www.oecd.org/publications/measuring-the-digital-transformation-9789264311992-en.htm
25 https://goingdigital.oecd.org/en/
26 https://goingdigital.oecd.org/en/theme/01/
27 http://www.oecd.org/governance/digital-government/toolkit/goodpractices/

In addition, in the same year, OECD member States approved the *OECD Council Recommendation on Artificial Intelligence,*[28] which sets out five complementary and value-based **principles for responsible AI**. These are:

- inclusive growth, sustainable development and well-being;
- human-centred values and fairness;
- transparency and explainability;
- robustness, security and safety;
- and accountability.

In 2019-2020, the OECD is planning to help countries implement an i**ntegrated policy approach** to the digital transformation, especially through further development of the ***Going Digital Toolkit*** (indicators, policy notes and innovative policy examples) and the organisation of national reviews.[29] It is also planning to launch the OECD AI Policy Observatory in the course of 2019: '*The Observatory will provide resources on AI public policy topics; AI policies and initiatives; trends and data; and practical guidance to implement the OECD AI Principles. It will include a live database of AI policies and initiatives that countries and other stakeholders share and update, enabling the comparison of key elements in an interactive manner. Moreover, it will be a centre for policy-oriented evidence, debate and guidance for governments, supported by strong partnerships with a wide spectrum of external actors'.* [30]

Organisation for Security and Cooperation in Europe (OSCE)

Key concepts: modernisation and greater efficiency of the public administration; better policy-making

The OSCE has not undertaken any substantive work in the field of AI.

In 2018, it adopted a *Declaration on the Digital Economy as a driver for promoting co-operation, security and growth*.[31] In this text, the members of the Ministerial Council of the OSCE committed themselves to, amongst others, strengthening co-operation in the area of good governance and to promoting connectivity, '*in order to maximise the benefits and mitigate the security risks associated with digital transformation*.' They also recognised that '*e-government and good governance play[ed] a crucial role in* ***modernizing and increasing efficiency in public administration*** *and contribute[d] to the promotion of* ***better policy-making****, transparency, integrity, accountability and the prevention of corruption*' and agreed to step up efforts '*to advance the digital transformation of the public sector as to offer more effective, accountable and user-centric public services'*.

28 https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449
29 http://www.oecd.org/going-digital/framework/
30 https://www.oecd.org/going-digital/ai/about-the-oecd-ai-policy-observatory.pdf
31 https://www.osce.org/chairmanship/405920?download=true

In January 2019, in the context of a meeting of the Economic and Environmental Committee, a representative of the then Slovak Chairmanship gave a presentation on *Harnessing the benefits of digital transformation from the perspective of state: Preparing for a Digital World,* which outlines the work of other international organisations and the need for action at OSCE level.[32]

United Nations (UN) and UNESCO

Key concepts: Internet Governance Forum (IGF); digital cooperation; SDGs; sustainable and smart cities; education; ethics

United Nations

Although the UN as such has not been a prominent actor on the subject of democracy and AI, its annual e-government development and e-participation indexes contribute to mapping progress in these respective areas.[33]

The United Nations University Centre for Policy Research (UNU-CPR), an independent think tank within the UN, has published articles on AI and Global Governance which, however, do not address democracy in great detail.[34]

The United Nations has, however, devoted great attention to the more general issue of the Internet. Since 2006, it has convened the **Internet Governance Forum**, a multi-stakeholder policy dialogue forum discussing Internet-related public policy issues.[35] Some of the issues that have been addressed by the Forum include: *Making Artificial Intelligence Work for Equity and Social Justice* (2017); *Artificial Intelligence and Inclusion* (2017); *Internet of Things, Big Data, Artificial Intelligence* (2018); *Artificial intelligence and collective intelligence* (2018); *Artificial Intelligence, Law, Ethics and Emerging Challenges* (2019).[36]

The UN's role in the field of AI and democracy may be set to become more prominent following the recent report of the UN Secretary-General's High-level Panel on Digital Cooperation.[37] The report indicates that in order to boost **digital cooperation** there is an '*urgent and growing need for a rethink on the web of interconnected mechanisms through which governments, civil society, technologists, and the private sector together manage digital cooperation. A patchwork of regulatory mechanisms, increased competition, and rapidly evolving security threats are preventing digital technologies from reaching their full potential to solve global challenges'*.[38] Three non-mutually exclusive approaches for improvement are offered by the panel:

32 https://www.osce.org/chairmanship/410114?download=true
33 https://publicadministration.un.org/egovkb/en-us/Data/Country-Information/id/82-Israel
34 The UNU-CPR article by Nicholas Wright, liberal democracy vs digital authoritarianism is an exception.
35 http://www.intgovforum.org/multilingual/
36 A full list can be found at: https://www.intgovforum.org/multilingual/search/node/artificial%20intelligence
37 The panel is co-chaired by Melinda Gates and Jack Ma. The Age of Digital Interdependence Report is available here https://digitalcooperation.org/panel-launches-report-recommendations/
38 Report *The Age of Digital Interdependence*, June 2019, https://digitalcooperation.org/wp-content/uploads/2019/06/DigitalCooperation-report-web-FINAL-1.pdf

- *enhanced and empowered Internet Governance Forum* to better reflect and incorporate typically underrepresented views;
- *distributed network of networks* that would allow a *fast and flexible platform to develop and test voluntary norms and principles intended to serve as guardrails at "internet speed"*;
- *new Digital Commons Architecture similar to the existing collective action in space, climate, and oceans to develop similar digital common goods — resources upon which digital technologies rely and which require global stewardship, such as internet protocols.*[39]

During an informal meeting of the UN General Assembly, in June 2019 the UN Secretary General indicated his intention to create a roadmap for the UN's involvement in digital technologies.[40]

In the area of governance, the UN is devoting great attention to the role that AI can play to achieve the SDGs, including goal 11 on sustainable and smart cities: it has already organised three annual AI for Good Global Summits[41] and some regional events on this subject.[42]

UNESCO

Within the UN system, the Educational, Scientific and Cultural Organization (UNESCO) has been particularly active, with an emphasis on harnessing the potential of AI to achieve the SDGs relating to **education** and the associated Education 2030 Agenda.[43]

39 See page 34 of the report The Age of Digital Interdependence: 'The proposed "Digital Commons Architecture" would aim to synergise efforts by governments, civil society and businesses to ensure that digital technologies promote the SDGs and to address risks of social harm. It would comprise multi-stakeholder tracks to create dialogue around emerging issues and communicate use cases and problems to be solved to stakeholders, and an annual meeting to act as a clearing house".
40 https://www.un.org/sg/en/content/sg/speeches/2019-06-10/independent-high-level-panel-digital-cooperation-remarks-general-assembly
41 https://news.un.org/en/story/2019/05/1039311
42 http://www.unesco.org/new/en/office-in-montevideo/about-this-office/single-view/news/artifical_intelligence_and_the_internet_of_things_in_latin_a/
43 See the 2015 Qingdao Declaration, Seize Digital Opportunities, Lead Education Transformation and the 2019 International Conference on Artificial intelligence and education. Other UNESCO publications include: the 2019 Working Paper on Artificial intelligence in education: challenges and opportunities for sustainable development; and the 2018 UNESCO Courier magazine's publication on Artificial intelligence: the promises and the threats

As regards **ethics**, UNESCO's Commission on the Ethics of Science and Technology (COMEST) has been tasked with formulating ethical principles for decision-making criteria, *which 'extend beyond purely economic considerations'*.[44] COMEST's most notable work so far includes a 2018 *Robotics Ethics* report[45] and a follow-up April 2019 *Preliminary study on the Ethics of Artificial Intelligence*.[46] The latter suggests a list of '*generic principles for the development, implementation and use of AI that could be included in a future Recommendation on the Ethics of AI',* including: explainability; inclusiveness; transparency; awareness and literacy; responsibility; accountability; democracy; and good governance.[47]

Other notable work in this area is *The ethical dilemmas of Artificial Intelligence* 2018 publication[48] by the network of lecturers within the UNESCO/Netexplo Advisory Board (UNAB)[49] and the March 2019 UNESCO high-level Conference on *Principles for AI: Towards a Humanistic Approach?*[50] with the goal to *raise awareness and promote reflection on the opportunities and challenges that AI and its technologies pose, especially with regard to transparency and accountability.*

World Economic Forum (WEF)

Key concepts: agile governance; checks and balances; use of AI in government; AI by public entities; trust; responsible AI

An as international organisation seeking to empower global leaders to shape the future for the better,[51] the WEF is the forum which has looked at the impact of AI on government with the longest perspective. It has focused on three main areas: re-imagining governance and the role of different stakeholders; current obstacles to the use of AI by governments; and developing responsible AI.

In 2018, the Center for the Fourth Industrial Revolution,[52] the WEF focal point for multistakeholder dialogue and cooperation on challenges and opportunities presented by new technologies, launched an ***Agile Governance*** *Project***,** with the aim of *re-imagining governance* in the context of new technologies, such as AI, blockchain, internet of things, drones, autonomous vehicles, precision medicine and robotics.[53]

44 'The Commission is mandated to formulate ethical principles that could provide decision-makers with criteria that extend beyond purely economic considerations.' Link here (home page).
45 https://unesdoc.unesco.org/ark:/48223/pf0000253952
46 https://unesdoc.unesco.org/ark:/48223/pf0000367823?posInSet=1&queryId=76d829de-c50c-4220-877c-4dd6ee379305
47 *https://unesdoc.unesco.org/ark:/48223/pf0000367823*
48 https://unesdoc.unesco.org/ark:/48223/pf0000367514?posInSet=19&queryId=76d829de-c50c-4220-877c-4dd6ee379305
49 Netexplo is an independent observatory that studies the impact of digital tech on society and business. It has been a UNESCO partner since 2011, https://en.unesco.org/netexplo
50 https://en.unesco.org/events/unesco-conference-principles-ai-towards-humanistic-approach
51 This is how the WEF describes as its vision http://www3.weforum.org/docs/WEF_Institutional_Brochure_2019.pdf
52 https://www.weforum.org/centre-for-the-fourth-industrial-revolution
53 https://www.weforum.org/events/world-economic-forum-annual-meeting-2018/sessions/agile-decision-making-in-the-fourth-industrial-revolution

As its *White Paper on Agile Governance* explains, *'As emerging technologies are shifting power away from governments towards companies and non-state actors, the traditional view of governance is also shifting and expanding as a concept. The dynamics of the Fourth Industrial Revolution, and the fact that the myriad of challenges facing humanity cannot be solved by any single sector alone, suggests that governance must become a multistakeholder endeavour. This shift in governance is also occurring because governments and policy-makers are finding themselves increasingly constrained to just being reactive to the speed of technological innovation. This creates a new role for the private sector and academia working alongside public officials to provide expertise on the technologies they are developing, their applications and potential consequences'.*[54]

In this sense, the White Paper recommends *'expanding governance beyond the government' to new forms of multi-actor collaborative governance of emerging technologies due to the need for new sources of authority*.

In the context of agile governance, civil society's role of ensuring **checks and balances** is bound to grow.[55] Non-traditional actors could be involved in governance in an institutionalised fashion through several tools, such as policy labs, regulatory sandboxes, introducing emerging technologies to increase agility in governance, promoting governance innovation, crowd-sourced policy-making, promoting collaboration between regulators, public-private data sharing, and direct representation in governance. The rational for this is that civil society, business and politicians all could have a common interest to intervene before the use of certain technological applications becomes too widespread.

The White Paper is complemented by the *draft Agile Governance Principles*,[56] which call on governments to:

- privilege outcomes over rules-based compliance;
- employ flexible action plans that can adapt to change;
- offer open and transparent collaboration with a wide range of citizens and interest groups, privileging participation over control;
- encourage and incorporate the self-organisation (over centralisation) made possible by technology by decreasing reliance on central governance unless it is the most effective level of governance.

A recent article published by the WEF acknowledges that use of **AI in government** has been slower than in the private sector and analyses the obstacles that, at the moment, stand in the way of a systematic or widespread recourse.[57] These are:

- poor capability of public organisations to handle and take advantage of the volume and variety of data they have at their disposal;
- lack of specialised technical staff and poor understanding of AI from the part of non-technical managers;
- rapidly-changing AI market;
- organisational culture which does not encourage innovation;

54 http://www3.weforum.org/docs/WEF_Agile_Governance_Reimagining_Policy-making_4IR_report.pdf
55 http://www3.weforum.org/docs/WEF_Agile_Governance_Reimagining_Policy-making_4IR_report.pdf
56 http://www3.weforum.org/docs/IP/2016/ICT/Agile_Governance_Summary.pdf The concept of agile governance echoes the concept of agile software development, and so do its principles https://www.agilealliance.org/agile101/
57 https://www.weforum.org/agenda/2019/08/artificial-intelligence-government-public-sector/

- slow procurement mechanisms not taking into account that algorithms are treated as intellectual property by providers.

As regards enhancing public **trust** in AI, another article by WEF argues that this would be possible if governments use AI for the benefit of their citizens while being transparent, effective and not overly intrusive.[58]

The WEF has also looked at ethical issues, publishing its *4 Steps to Developing Responsible AI*.[59] These are:

- good governance of AI based on fairness, accountability, transparency and explainability, with clear ethical standards and accountability frameworks;
- compliance with ethical AI design and transparency;
- monitoring with audit, algorithmic accountability, bias and security metrics;
- and reskilling by democratising the understanding of AI.

58 https://www.weforum.org/agenda/2014/06/governments-technology-trust
59 https://www.weforum.org/agenda/2019/06/4-steps-to-developing-responsible-ai/