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**EUROPEAN COMMITTEE ON DEMOCRACY AND GOVERNANCE  
(CDDG)**

**ROUND TABLE ON  
ARTIFICIAL INTELLIGENCE AND THE FUTURE OF DEMOCRACY  
(Strasbourg, 20 September 2019)**

**For information**

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

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## Summary

To mark International Day of Democracy, on 20 September 2019 the Directorate General of Democracy organised a Round Table on Artificial Intelligence and the Future of Democracy, bringing together the highest Council of Europe officials, experts, Council of Europe staff and members of permanent representations.

Despite increasing attention being devoted to artificial intelligence, the broader issue of its implications on the functioning of democracy and political and administrative decision-making processes remains largely unaddressed. This event offered participants the opportunity to reflect on these matters, which it is not premature to address given the pace of technological development.

**Virginia Dignum**, Professor of Social and Ethical Artificial Intelligence at the University of Umeå and member of the European Commission High Level Expert Group on Artificial Intelligence, demystified misconceptions about artificial intelligence: what it is and what it can or cannot do. Artificial intelligence is a system, a tool. Whether the system works in a legal, responsible and ethical way depends on those who make it. This tool is there to be used but *how* it should be used, taking into account *which values and how to balance them*, are matters for the societal context to decide. Bias is inherent in human behaviour and is sometimes embedded in artificial intelligence systems. However, it is possible to redress this problem looking at the way artificial intelligence systems are trained as well as at the source and kind of data they use.

The relation between artificial intelligence and democracy can be looked at in two ways: one is how to ensure the democratic governance of artificial intelligence; the other is how to use artificial intelligence to improve the democratic process. However, also in this regard, some questions should be answered: an *autonomous democracy* in which AI systems determine the next decisions or electoral results on the basis of people's past behaviours is technically possible but is it what we want? Professor Dignum mentioned some policy efforts which have been made by the European Union, the OECD and others in terms of providing guidelines and principles for artificial intelligence. She also mentioned certification as a possible way to regulate artificial intelligence.

In his presentation, **Jan Ziesing** from the *Fraunhofer Institute for Open Communication Systems (FOKUS)* explained how artificial intelligence is already been used in public administration. Drawing a parallel with self-driving cars, Dr Ziesing showed that there are different levels of automation that can be used, the most frequent being *assisted automation*: steps are performed by employees but AI support features are used to help them to perform their tasks, especially at the preparatory stage. According to German law, automated decision-making can be used only when there is no margin of discretion and when the decision to be made is yes or no. In all cases, it should be possible to opt out, to re-evaluate the process and to explain how the decision was taken.

This is a problem for autonomous systems as AI machines learn by themselves forming a black-box which is not transparent. FOKUS has found no examples of use of final decision-making by AI. It is also interesting to see what people think about artificial intelligence: in a 2017 survey, FOKUS found that most people think of AI as an improvement and that the fear of it making wrong decisions is amongst the least of their concerns.

From his perspective as a social scientist, **Paulo Savaget** highlighted that AI and new technologies could present threats to democracy as well give a positive contribution. Amongst the latter, for instance, they could be used for mobilising voters' engagement, for allowing voters and politicians to make well-informed decisions, for enhancing pluralism and the active participation of people who were

marginalised. Even the positive impact of translation tools on spreading knowledge and information should not be underestimated.

Dr Savaget mentioned that technological development had led to a movement supporting open data and that a lot of countries were making data available online. This created the preconditions for auditing, and for greater transparency in the public sphere, as shown by the example of the "Operação Serenata de Amor" in Brazil.

In concluding the Round Table, Snežana Samardžić-Marković, Director General of Democracy, recalled that only a few days earlier the Ministers' Deputies had decided the setting up of the Ad Hoc Committee on Artificial Intelligence (CAHAI). The Directorate General of Democracy would contribute to the important work to be conducted by the CAHAI to examine the feasibility of a Council of Europe legal framework on artificial intelligence. At the same time, the Round Table showed that it was crucial for different committees and bodies of the Directorate General – working on democracy, equality and non-discrimination, culture and education, and many other subjects – to take account of the impact of artificial intelligence in their respective areas of work.

## OPENING SESSION



### Ambassador Răzvan Rusu, Chair of the Ministers' Deputies Rapporteurs' Group on Democracy (GR-DEM)

Good morning. Welcome to the Round Table on Artificial intelligence and the future of democracy. Today we are gathered here, members of permanent representations and Council of Europe staff, to hold a reflection on the impact of technology on our societies and try to imagine how our democracies will evolve.

As Chair of the rapporteurs' Group on Democracy I have happily accepted the invitation by Ms Snežana Samardžić-Marković, Director General of Democracy, to moderate this Round Table, which is intended to mark the international day of democracy. Thank you very much, Snežana, for the initiative of organising this event. Later we shall listen to your remarks in the concluding session.

Democracy should never be taken for granted. We should protect it, based on Council of Europe values and principles, using foresight to identify new opportunities but also challenges.

Today's event will give us food for our future work. It will also offer us an opportunity for greater understanding of the epochal changes that are unfolding in front of us, at an unprecedented speed, and their consequences on our daily lives.

Without any further delay, I would like to start the opening session of the Round Table.

It is an honour for me to welcome Marija Pejčinović Burić, Secretary General of the Council of Europe. Secretary General, you took up your functions two days ago and despite your already busy agenda you have found the time to join us. Thank you very much. It is my pleasure to give you the floor.

## Marija Pejčinović Burić, Secretary General of the Council of Europe

Mr Chairman, Distinguished Ambassadors, Ladies and Gentlemen,

It is a great pleasure to be here.

Shortly before arriving here I was asked if I wanted to speak at this event given that this is only my second full day as Secretary General.

Without hesitation, I said yes.

The issues around the future of Artificial Intelligence are important and urgent.

And the same should be said for the Council of Europe's potential to assist.

So, I had no doubt that this is where I should be.

Today's event is of course in recognition of the United Nations International Day of Democracy.

And promoting and consolidating that democracy is central to our Organisation's work.

Together with human rights and the rule of law, these are the three interdependent and mutually reinforcing pillars that comprise our mandate.

It is our duty to ensure that they can withstand the pressures that come with new and evolving challenges.

Among these, Artificial Intelligence is front and centre.

And it is already with us – changing the information that we receive, the choices that we make, and the ways in which our societies function.

Bias embedded in algorithms can result in discrimination based on gender, race, sexual orientation and so on.

Just as the under-representation of minority groups in datasets can lead to increased inequality.

And as we move forward, AI is likely to play a greater role in the way that governments and public institutions operate, and the way in which citizens engage with the democratic process too.

The limits of AI are beyond our current understanding.

But it is clear that it presents both many benefits and the potential for problems.

We need to ensure that Artificial Intelligence promotes equality, inclusion and the highest of democratic standards.

So, I welcome this initiative by the Directorate General of Democracy to take stock of the issues at this Round Table.

And I also welcome last week's decision by our Deputies to approve the terms of reference for the Ad hoc Committee on Artificial Intelligence.

Following the conclusions of the May Ministerial Session in Helsinki, CAHAI will:

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

I look forward to seeing this develop.

It sits alongside other specific work including, for example, our upcoming focus on the impact of digital transformation on democracy and good governance.

And I know that this is something that you will also discuss here today.

The Council of Europe has a fine history of pioneering new standards, often in complex and technical areas.

I am therefore interested to hear whether there is more that can be done on AI, at an intergovernmental level, and with a transversal approach.

After all, this may well become a defining issue of our times.

Those of you who listened to my remarks at the Committee of Ministers this week will have heard me speak about the importance of working closely with other international organisations.

This is about bringing talents together of course but, equally, it is about avoiding duplication.

On this topic, we are open to co-operation with the European Union, the OECD, the United Nations – and others.

Yes, we have a unique pan-European legal space and standard-setting capacity.

But other organisations have their own focus, and we should work together where appropriate - and in the interests of citizens across Europe.

After all, a democracy should serve the interests not just of society as a whole, but also the individuals who live within it.

Artificial Intelligence cannot be an exception to that rule.

Thank you.

## Ambassador Jean-Baptiste Mattei, President of the Ministers' Deputies

Secretary General, Director General, Chair of the Steering Committee on Democracy and Governance, Ambassadors, Ladies and gentlemen,

It is a pleasure for me to be with you today to open, together with Ms Marija Pejčinović-Burić, the newly elected Secretary General of the Council of Europe, this Round Table on artificial intelligence and the future of democracy.

As you know, this is a subject to which the French Chairmanship of the Committee of Ministers has chosen to attach considerable importance. Beyond the hype surrounding artificial intelligence and algorithmic techniques, these technological innovations deserve our full attention as they challenge the existing framework of our legal instruments and the values that we at the Council of Europe hold dear: human rights, the rule of law and democracy.

While we can expect to derive considerable benefits from artificial intelligence in many areas, the ability of this technology to facilitate the collection of information and personal data, and their processing for the purpose of distributing targeted content, profiling users or facilitating individual choices, raises questions.

There are implications for the exercise of the rights enshrined in Council of Europe conventions, first and foremost the European Convention on Human Rights, whether it be the right to respect for private and family life, the right to freedom of expression, assembly, association, the right to information or the right to elections under conditions which ensure the free expression of the opinion of the people, to take only those rights most relevant to the theme of today's Round Table.

In particular, these developments call into question the exercise of democracy. The ability of citizens to freely access a wide range of information is now under threat from the vast potential for distributing targeted information or spreading false information via websites or social media. Public confidence in the reliability of information, wherever it comes from, is diminishing as a result, and this is having knock-on effects on the credibility of institutions and public discourse but also other institutions essential to democracy, not least the press. Spreading hate speech and disrupting elections are now possible on a large scale and are sometimes done for foreign policy purposes. The fairness of our electoral processes is also being questioned.

The Council of Europe and its member states have a responsibility to find appropriate answers to these issues, reconciling the various requirements of democracy and the rule of law, and to rethink our regulations. France is particularly conscious of this, having introduced legislation to combat the manipulation of information in December 2018. The new law imposes obligations on the biggest digital platforms, requiring them to disclose any sponsored content, identify the sponsors and report the amount of remuneration received if it exceeds a certain level. The legislation also introduces an urgent judicial procedure to combat the dissemination of inaccurate or misleading information or allegations likely to manifestly affect the integrity of the vote and that are deliberately, artificially or automatically distributed on a large scale via the internet.

Under the aegis and with the support of the French Chairmanship of the Committee of Ministers, the Council of Europe is also working to develop responses that would enable us to preserve and strengthen our democratic systems in a digital and information environment that has changed forever. That has been the focus of the Venice Commission, in its recent study on digital technologies and elections, or the Steering Committee on Democracy and Governance, which has undertaken to prepare a report on disinformation and electoral campaigns. The Helsinki high-level conference on the impacts of artificial intelligence development on human rights, democracy and the rule of law has likewise helped states and international experts to move forward on these issues. The 2019 edition of the World Forum for Democracy will focus on the relationship between information and democracy.

These issues are also being addressed at international level. As you know, France hosted the G7 Summit in Biarritz from 24 to 26 August. Several initiatives were presented on this occasion to promote a digital transformation that is open, free and safe and developments in artificial intelligence that respect human rights, democracy and the rule of law. Internet actors have also signed a charter for a free, open and safe internet to guard against hate content. This is part of the process that began in Paris last May with the Christchurch Appeal to prevent the internet from being used for the purposes of terrorism and violent extremism. The G7 also unanimously supported the Information and Democracy Partnership, an initiative launched by Reporters Without Borders and presented at the Paris Peace Forum.

We must go even further and delve deeper into these phenomena, whose reach and implications we have yet to fully grasp. Receiving the presidents of the supreme courts of Council of Europe member states last week, the President of France emphasised the need to push ahead, within the Council of Europe, with the task of building a "legal framework for artificial intelligence".

That will initially be the role of the Ad Hoc Committee on Artificial Intelligence, which is due to start up soon. Considerable progress has also been made in areas such as data protection and justice, with the publication of the European Ethical Charter for the Use of Artificial Intelligence in Judicial Systems, work that will continue at the Conference of Ministers of Justice on 14 and 15 October.

In the field of democracy, we also need to be able to identify innovative solutions that respect our standards and enhance the quality of democratic life. That is the goal of today's Round Table and I hope that, besides affording us an opportunity to make observations and raise issues, it will also offer practical ways forward. Thank you for your attention and I wish you every success in your discussions.

<b>ROUND TABLE</b>
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Virginia Dignum

***Artificial intelligence, democracy, ethics***



*Professor of Social and Ethical Artificial Intelligence at the University of Umeå in Sweden and Associated Professor at the Delft University of Technology in the Netherlands. Her current research interests focus on responsible artificial intelligence. She has been involved in several international initiatives on policy and strategy guidelines for AI research and applications. She is a fellow of the European Artificial Intelligence Association (EURAI) and a member of the European Commission High Level Expert Group on Artificial Intelligence.*

Thank you, Chairman. Thank you all for being here. It is my pleasure to participate in this Round Table today.

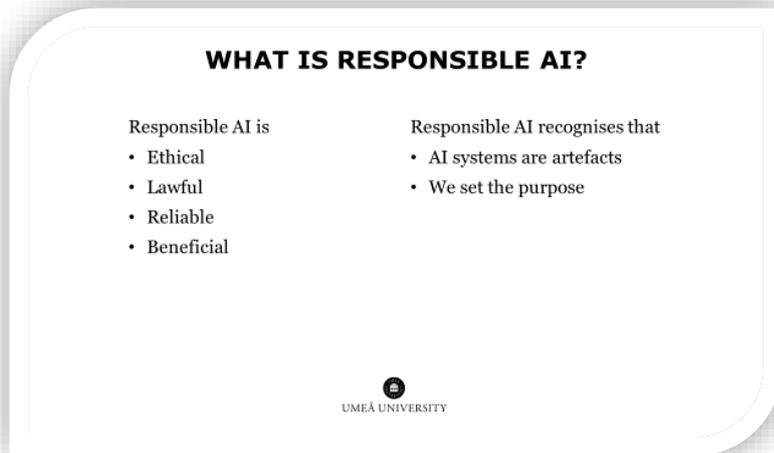
In order to speak about democracy and AI, about the impact of artificial intelligence on democracy and how we can use artificial intelligence in a responsible way, I would just like to start very briefly by going back to what we mean exactly when we talk about artificial intelligence.

Maybe we can first start with what is not AI. It is not an algorithm: algorithms are just recipes and like anyone who has baked a cake knows the result - your cake - is not only based on the recipe but also on your own skills and mostly on the quality of the ingredients that you use. Artificial intelligence is not machine learning: there are many techniques which are needed to make AI systems work and machine learning is just one of the many. It is not data: data is important but the ways that we use the data, when we use the data, who decides which data to use and how to integrate many different types of data, those are the most important questions to consider.

Artificial intelligence is a system, a piece of software, a tool, which is able to learn, to act and to reason about what is being learned and what is being done. It is a system which interacts with us. It does it often autonomously and it is adapting as it learns. AI is not intelligence: there is a lot that the systems which are being developed now are not able to do. They are not able to do the things which we consider so simple. AI is not able to understand context, or it is very difficult to try to explain to an AI system the context in which it is operating. AI does not really understand meaning. Indeed, AI systems are able to understand when there is a cat, a dog or a wolf in a picture, and they do it very well, but they will do it through completely different ways from human intelligence. They still will not know what a wolf or a dog is because they might be just identifying that difference by counting the number of green pixels on the pictures.

But what AI can do very well is to identify patterns and it will identify patterns in any type of data you give it. It will extrapolate those patterns to new data and will take actions based on those patterns. If AI does not understand context and meaning, this is potentially quite dangerous because it will extrapolate and use patterns with counting numbers of green pixels in pictures and start making decisions based on that.

So, what is responsible AI? What are all these efforts being done around the world in terms of understanding what means doing artificial intelligence in a responsible way?

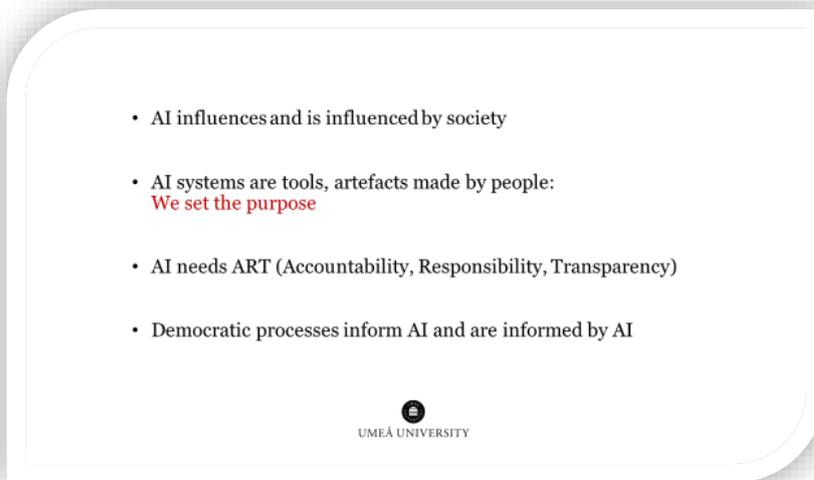


It is AI that is aligned with law, it is AI that should be aligned with ethics and ethical and moral practices of the communities and societies where it is being used. It is AI that should be reliable, we should have the robust systems that don't crash and don't start working strange for whatever reason and it should be beneficial for all of us.

It is also important to recognise that AI systems are artefacts. They don't happen to us. We make AI happen. AI is shaped by the decisions of people who engineered those systems; it is not magic. It is not something that comes out of outer space and on which we don't have any control over. It is very important to recognise that these are artefacts and that we set the purpose for those artefacts. We, as societies and as engineers, make the systems.

AI could do a lot and the main question here is what AI *should* be doing. *Who* should decide and *which values* should be considered? Here is where we start looking and seeing the connections to democratic processes.

We look at it in many ways. We look at it in the process by which we design the systems. We look at it by the behaviour of the systems that we develop, and we look at it by the way these systems are being developed in terms of the regulation and certification that are behind the introduction of these systems. By looking at the design, we should take into account the principles of accountability, responsibility and transparency. AI is a tool. We cannot make a tool responsible for anything. We cannot make a tool accountable for anything. What we have to realise is that the AI is inserted in a social-technical system. There are societies behind it.



In terms of the behaviour of the systems, we hear that AI will do things autonomously and we wonder whether we can or cannot make systems which reason and act ethically. Remember how simple these systems are. What mostly they can do is to identify patterns, so this type of questions is actually referring to us. Also,

when we talk about the autonomous activities of a system, these are very simple. We want autonomous cars to autonomously decide whether they should go through this street or that street depending on the traffic. We do not want autonomous cars to have the autonomy to decide for us *where* to go. These are the discussions which we need to have as societies and not just something that we leave for the engineers to decide about. The technology is there to be used but how it should be used is a matter for the societal context to decide.

This brings us to the issues of democracy and society. If we want AI to be aligned with our values, we should start thinking *which values* and, moreover, *whose values*. Who are the “we” that I have been talking since the beginning of my presentation? Is that the developers, is it our governments, is it everybody, something that we would like to consult with the whole world and decide which values we want to embed in our systems. How are we going to do this, how are we going to use democratic process to guide, to involve and to decide how we want artificial intelligence to be used in our societies for the benefit of our societies. There are many sources from which we can take values: we can look at the society, we can look at all the stakeholders involved, we can look at the laws, and we can look at ethics. However, what is morally acceptable is not always legally allowed or socially accepted.

How do we behave when we are faced with this type of dilemmas? It can be very easy to implement a system. We can implement simple decisions, like in case of doubt go left or go right, but the problem here is that our decisions on this type of ethical dilemmas are not something that meets all conditions, all situations and all contexts. How are we going to ensure this is a very important discussion that we need to have. And who decides who is being consulted in this type of discussions and how can we make trade-offs between conflicting values. For instance, can we balance fairness and privacy, fairness and energy use? Those are the questions we really need to start thinking about. Those are important questions for which we don't have answers yet.

I see the relation between democracy and AI in two different ways. On one end, we can think about making AI decide in a democratic way, which might seem reasonable. For example, we can ask people what a self-driving car should do in a given situation. We can aggregate all the results of an experiment which involved for instance five million people and then we can decide in the case of this type of situations, the majority said that the car should kill the people on the left or kill the people inside the car and we just build self-driving cars according to that. When we have this type of decisions, it is very easy to implement the systems. Whether we like black and white decisions and whether we like the results of those decisions, those are the questions that we have to address.

On the other hand, we can use AI systems to help improve our democratic process. But there we have issues like filter bubbles, information bubbles and the consequences of this for the democratic process. In many countries there are systems which you can use before the elections which tell you, more or less, according to your opinions, what would be the best party to vote for. That helps us a lot but on the other hand, we are relying on what other people have answered to that system before and on the aggregating of those opinions to suggest something to others. If we as voters rely on this type of systems and we do not look anymore what exactly the parties are doing, then we are taking the decision of the system as our own decision.

When it comes to direct democracy, we can use AI and internet technologies, but do we want to get into some kind of autonomous democracy? If we do enough consultations and referendums for all types of questions, we can build an AI system which based on this past behaviour is able to determine the next behaviour. Is that what we want? In that case, we can function without parliaments, without all democratic processes because AI will be able to tell us what the best next step is. We probably don't want that. These are the questions we really need to look at.

On the issue of bias, it is inherent in our behaviour, it is something which we need to have in order to be able to make sense of the complex world around us. However, AI and bias can lead to stereotyping and prejudice. It has a lot to do with the system, the way we train these artificial intelligence systems. If I only show triangles to my system, the system will never be able to choose the square. Bias also has a lot to do with the sources of data, and which data has been chosen.

I would like to mention very briefly some examples of policy efforts which have been done in the world in terms of providing guidelines and principles for artificial intelligence. Probably you know many of them. I am a member of the *High-Level Expert Group on Artificial Intelligence* of the European Commission [1] which published the *Ethics Guidelines for Trustworthy AI* in June 2018. [2]

EU HLEG	OECD	IEEE EAD
<ul style="list-style-type: none"> <li>• Human agency and oversight</li> <li>• <b>Technical robustness and safety</b></li> <li>• Privacy and data governance</li> <li>• <b>Transparency</b></li> <li>• <b>Diversity</b>, non-discrimination and fairness</li> <li>• <b>Societal and environmental well-being</b></li> <li>• <b>Accountability</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>benefit people and the planet</b></li> <li>• respects the rule of law, human rights, democratic values and <b>diversity</b>,</li> <li>• include appropriate safeguards (e.g. human intervention) to ensure a fair and just society.</li> <li>• <b>transparency</b> and responsible disclosure</li> <li>• <b>robust, secure and safe</b></li> <li>• Hold organisations and individuals <b>accountable</b> for proper functioning of AI</li> </ul>	<ul style="list-style-type: none"> <li>• ensure that A/IS do not infringe <b>human rights</b></li> <li>• take into account the full effect of A/IS technologies on <b>human well-being</b>.</li> <li>• assure that designers, manufacturers, owners and operators of A/IS are <b>responsible and accountable</b></li> <li>• ensure that A/IS are <b>transparent</b>?</li> <li>• <b>extend the benefits</b> and minimize the risks of AI/AS technology being <b>misused</b>?</li> </ul>
 <p><b>regulation</b></p>	 <p><b>observatory</b></p>	 <p><b>standards</b></p>

I am also a member of the IEEE [3] *Global Initiative on Ethics of Autonomous and Intelligent Systems*, [4] which works on the elaboration of ethical design standards for engineers.

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

2 <https://ec.europa.eu/futurium/en/ai-alliance-consultation/guidelines#Top>

3 The IEEE is the Electrical and Electronics Engineers, the world's largest technical professional organisation for the advancement of technology: <https://www.ieee.org/>

4 <https://standards.ieee.org/industry-connections/ec/autonomous-systems.html>

### Recommendations for trustworthy AI – Main issues

1. Empower and protect humans and society
2. Take up a tailored approach to the AI market
3. Secure a Single European Market for Trustworthy AI
4. Enable AI ecosystems through sectoral multi stakeholder alliances
5. Foster the European data economy
6. Exploit the multi-faceted role of the public sector
7. Strengthen and unite Europe's research capabilities
8. Nurture education
9. Adopt a risk-based governance approach to AI and ensure an appropriate regulatory framework
10. Stimulate an open and lucrative investment environment
11. Embrace a holistic way of working



There are many strategies and positions, many lists of principles and everyday more are being developed. They all are very concrete and very explicit in the types of principles, the types of values, the types of requirements we want to see in AI systems. It

is easy to come up with principles, requirements and values but it is very difficult to move from endorsement to compliance. In addition, the guidelines produced by different bodies are not so different from each other. The European Union, the OECD and the IEEE, they all talk about the same things and these are the things about which none of us can disagree, no one in the world wants unethical AI or irresponsible AI. How we will implement this, those are the complex steps and that is why the European Union is thinking about regulation. We as the High-Level Expert Group have advised on what type of regulation could be done. This is why IEEE is coming with technical standards for engineers to use and it is why the OECD has an observatory to see what is happening.

### CERTIFICATION AND REGULATION

- Taking an ethical perspective
  - Service/product differentiation
- Regulation and certification
  - Needed to ensure trust and public acceptance
  - When, what, how?
- Responsible AI and competitiveness go hand in hand
  - Principles and regulation are drive for transformation




It is also good to look at the role of certification. If I go to the supermarket and I buy eggs, if I look at eggs, they will look the same. I trust the certifications mechanisms behind eggs to tell me whether this egg comes from a free-range farm or not etc. We can think of the same type of trust certificates for AI systems. We can think about the fair-trade AI systems which get this

type of certification and which then gives people the choice and ensures that trust and acceptance is there, so people should not have to be afraid or concerned by the issues.

The point is that we are the ones responsible to ensure that the systems are made in a responsible way. We have in democratic societies like ours the duty to take this responsibility seriously. Thank you!

Jan Ziesing

## Artificial intelligence and public administration

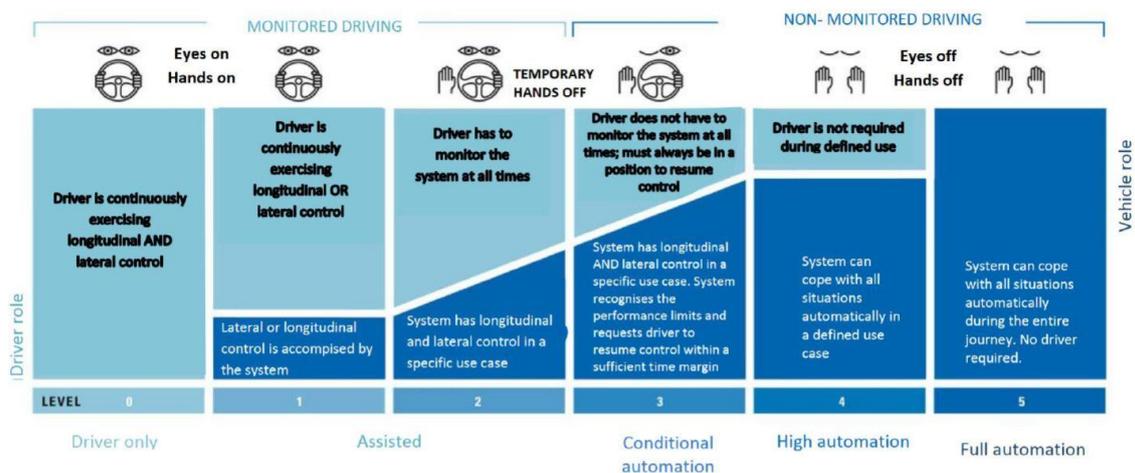


Jan Ziesing has 10-year experience in working on digitalisation of the public sector and especially public administration. His main expertise is in the area of innovation management, identity technologies, the transfer of research results into the application and the development of digitalization strategies. He works at the Fraunhofer Institute for Open Communication Systems (FOKUS), in Berlin, where he leads the "IT-Processes & Secure Infrastructures" group in the Digital Public Services competence centre.

Thank you very much Ambassador, thank you very much for inviting me.

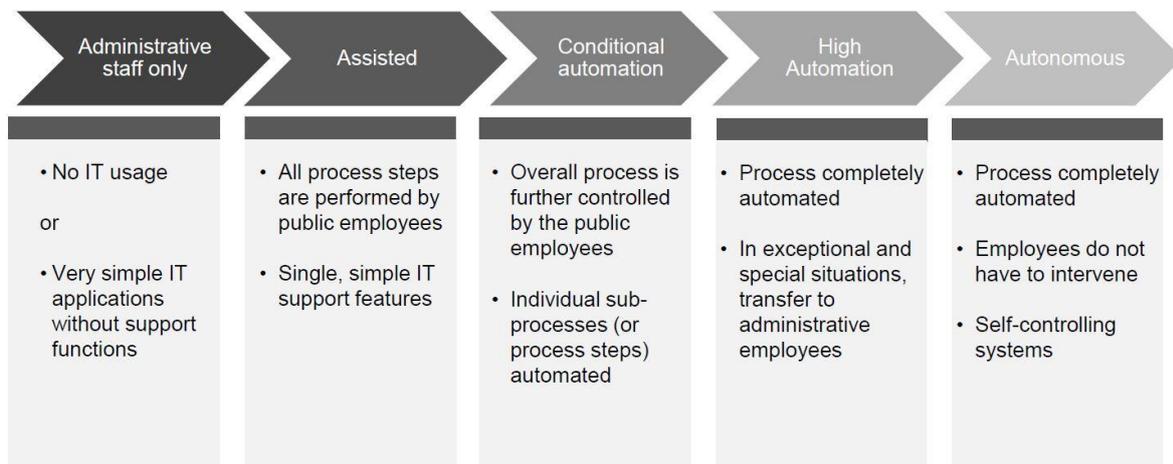
I will be more concrete and dive into one topic, the topic of artificial intelligence in public administrations. When we think today about artificial intelligence, we often think of automation. For example, if you ask people on the street, what is the most important application for artificial intelligence currently or the most thrilling, most of them will answer self-driving cars. There are a lot of parallels between self-driving cars and AI and public administration. For example, the motivation behind self-driving cars and automated administrations are similar, we have a lot of traffic jams, we have a lot of queues and processing time. We have a high environmental impact, in the traffic sector but also in the public sector, we print a lot of paper, we have a lot of postal services and there is something that we can save.

### Different levels of vehicle automation



The use of time in the case of a car driving me, is the same as the reduction of routine activities, so for an example putting a stamp on the paper is not something you need a human for. Automation helps there to save time for more high-level activities. Probably the most important factor, people hope that self-driving cars will reduce traffic accidents and maybe automated decisions can also reduce the number of wrong decisions. However, that is a big question.

### ...transferred to administrative processes



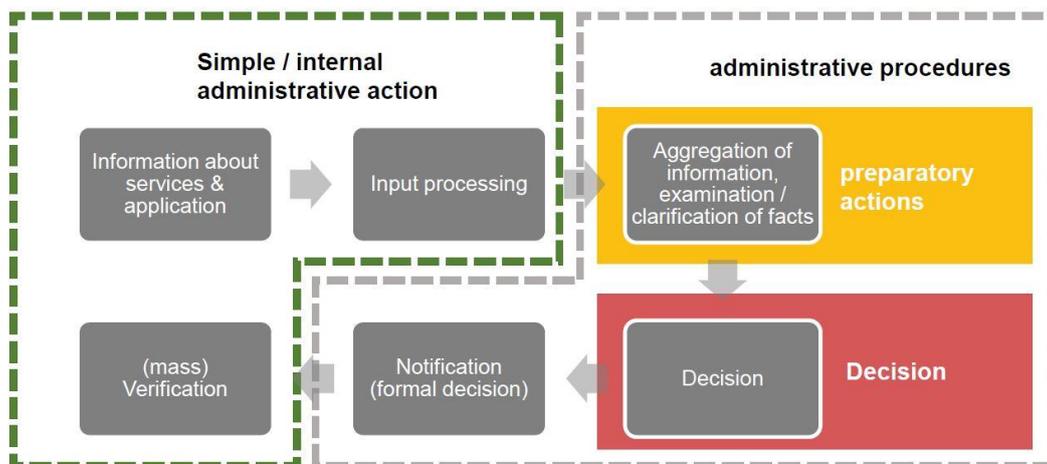
To draw some parallels, I will show you the different levels of vehicle automation. On the left, you have the basic level, where the driver is taking responsibility of the car and doing everything by himself and on the right side you have the full automated vehicle where the driver can close his eyes and take his hands off. In between those you have a lot of different steps. For an example, in the assisted step, the car will help you with controlling the vehicle, it will give you some hints, guidelines or help you in some minor way. In conditional automation, the car will already perform some minor tasks and in the higher automation you can basically keep your hands off and your eyes closed but you should monitor the car because it is not 100% safe yet and it might not be in all contexts.

If we bring that to public administrations, we see that today only very few public administrations are not using any IT or have very simple IT solutions. Most already operate in the assisted level. Process steps are performed by public employees, but single support features are there which help the public employee to perform services. The same goes for conditional automation, we also see quite a few examples where entire process steps are automated and we even see some smaller examples for higher automation where complete process steps and services are automated. What we do not see so far is autonomous systems where the system is learning by itself.

For high automation, we have some rare examples in public administration. For instance, the local parking permit in the city of Aachen where you just say, "I want a parking permit, I am living there" and the system will check it and if it is true, you can just print at home your local parking permit and nobody will ever look at the process.

In Germany there is the possibility to fully automate administration processes and there is legislation for that. However, the conditions are that there should not be any margin of discretion, and automation can only be used if it is a yes or no decision, with no in between. There must be a possibility to opt out for the citizen, there must be a right to reevaluate the process and there has to be a transparent logic. Lastly, it should be possible to explain how the decision was taken. That is a problem for autonomous systems: AI machines learn by themselves and, somehow, they form a type of a black-box which is not transparent. As they work a lot with probabilities, they are not always deterministic, so it is difficult to be able to explain how the decision was made and being able to re-evaluate the decision-making process.

### Autonomous decisions - An AI traffic light for public administration

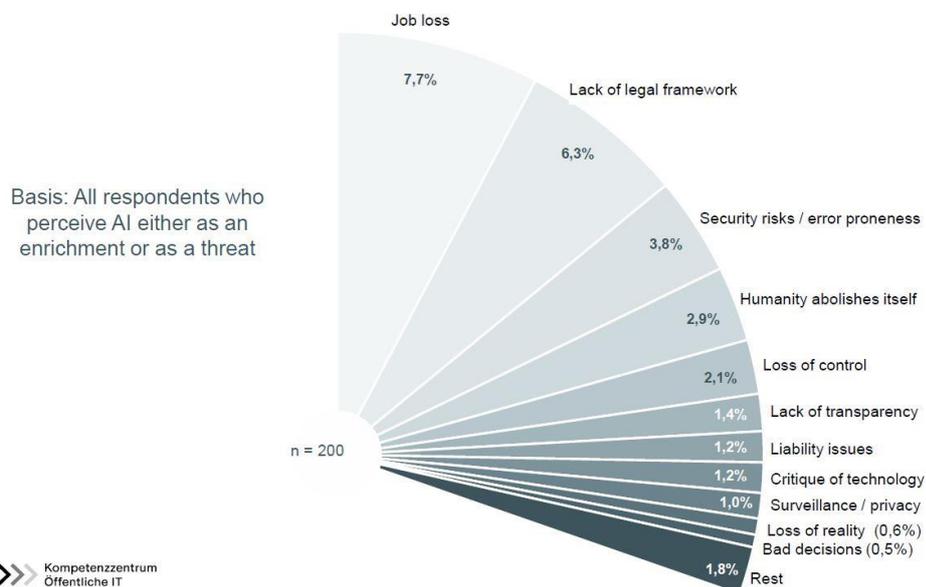


We see already now decisions which are taken by artificial intelligence in the public sector in Germany and I will explain to you a process which is very typical. So, in the beginning, you have the information about the service, then you have the input process where the citizen is going to the administration and asking for the service. The public servant will gather all the information and examine it. Then the decision will be taken, the citizen will be notified and probably, after that, the verification will be done.

In the information domain, for example, the city of Berlin has recently introduced a virtual citizen assistant who is like a chat bot and it will give you all kind of information. In the input process management, for instance, the federal office of migration and refugees in Germany, the AI is classifying application documents to see whether they are urgent or not. Of course, no decision-making is being done and this only serves as help to the post office to correctly assign the papers. It is important to mention that it was successful in 90% of the cases. Also, the federal office of migration and refugees uses an AI tool to carry out dialect recognition in asylum procedures. By giving a spoken sample, the system can determine with very good probability the origin of an asylum seeker and help the public servant to reach a decision. Something similar is being done in the risk management and tax system in Germany. We do not know how exactly they are using AI, but we know that they are picking certain cases out of the large sum of cases for in-depth analysis. In the area of mass verification, we also have anomaly detection applications.

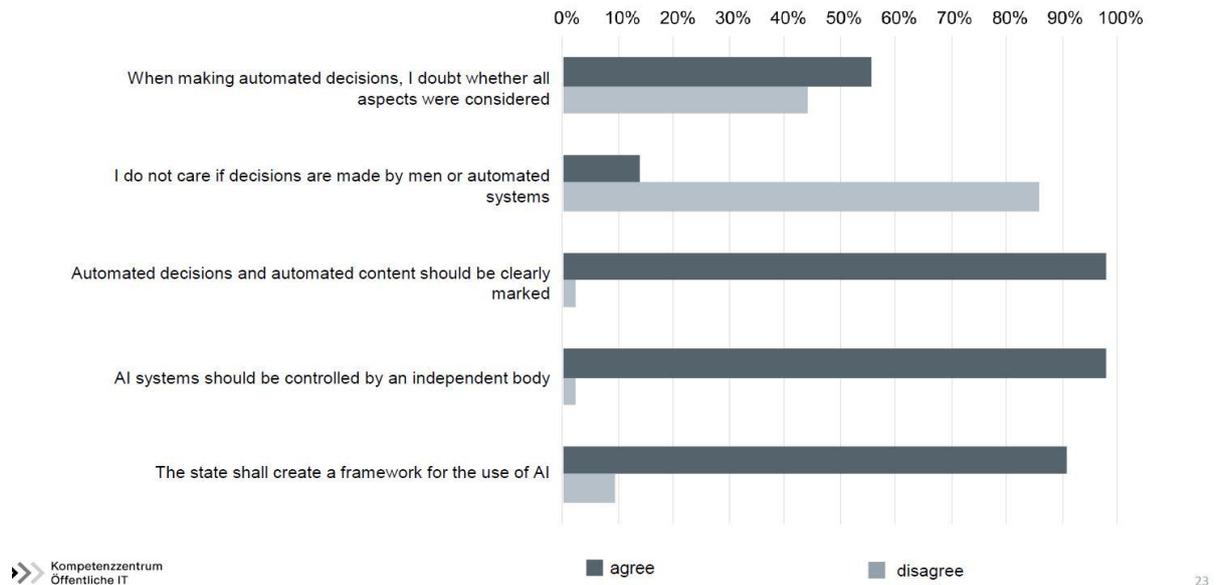
What is quite interesting is that the box for decision-making is empty because that is the part raising legal issues. We have found no examples of use of final decision-making by AI. The situation in the public sector right now is that AI is used in simple, internal, preparatory administrative actions.

### Reasons to see AI as a threat



FOKUS also asked citizens what they think about artificial intelligence and if they trust it, with a survey which was carried out in 2017. 57% of the respondents said that they had already used AI systems, most of them found the system helpful and a lot of them would recommend the system to a friend. 82% expected that AI would change a lot in the following years. We also asked them if they perceived AI as an improvement, as a danger or threat and most answered that they perceive it as an improvement. However, FOKUS also wanted to know what the reasons are to fear AI because that is one of the points which calls for action. Most people are afraid of job loss, the lack of legal framework being the second most important concern. What I found interesting is that bad decisions are not a point of interest for the citizens.

## Trust is good, control is better



When asked how they would like to interact with robots in the future, the results were that the participants love AI for simple tasks, most notably for domestic help. But if you talk about your boss being artificial intelligence or giving your child to a robot for care, basically no one can imagine that that is a good idea. The easier tasks, the more likely humans will accept it to be carried out by AI. People want AI to help but people don't want AI to take over their lives. That is what you can read out of these charts. The basic message is that trust is good, but control is better. When it comes to autonomous decisions, then some people really doubt that all aspects are considered, and they are in favour of the state creating a legal framework for the use of AI. Thank you very much!

Paulo Savaget

## **Artificial intelligence, participation and accountability**



Lecturer at the Durham Business School and the Lead Researcher for the Skoll Centre's System Change Observatory at the University of Oxford. Paulo Savaget holds a PhD from the University of Cambridge, funded by the Gates Foundation, where he formulated and explored the concept of Sustainability Hacking. He has over 10 years of professional experience, working not only as a lecturer and researcher, but also as a consultant and entrepreneur. For his work, he has been granted the IBM Business of Government Award, the Oldham Award from the

University of Sussex, and the Green Talents Award from the German Ministry of Education and Research.

Hi everyone, thank you! It is a pleasure to be here.

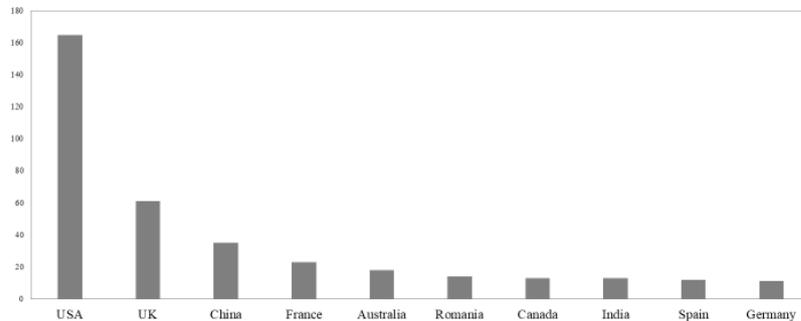
My research was funded by the Gates Foundation. Pursuing my interest in artificial intelligence, I started by doing what most academics do when they don't really know what they are talking about or what they want to study. I started doing a literature review. I tried to find some interesting examples of political participation and more specifically of civil society engaging in political matters by using artificial intelligence. I did not find many, but I will cover that a little bit later.

	Negative Prospects	Positive Prospects
AI-based Technologies for Democracy	<ul style="list-style-type: none"> <li>Facilitate <b>centralization of control</b> over ICT;</li> <li><b>fake vocal political support</b> on social media;</li> <li>spread <b>false messages</b> to create the illusion of public support and <b>manipulate citizens</b></li> <li>reinforce <b>'filter bubbles' and institutionalizes deep-rooted prejudice</b></li> </ul>	<ul style="list-style-type: none"> <li>Permit <b>marginalized people</b> to join the democratic process;</li> <li><b>engage voters</b> and help them be more informed about key political issues;</li> <li>increase people's voices and <b>make sure their claims are heard</b> by elected representatives;</li> <li><b>auditing</b> for transparency</li> </ul>

Reviewing literature on the prospects of artificial intelligence for political participation and accountability, I found that some were negative, some other were positive and some other were in between that spectrum. Amongst the negative, a lot of questions are being raised regarding

centralisation of control, fake political discourses and narratives, bubbles that can be spread online and have contributed to the political polarisation which we have seen recently in many different countries. Amongst positive prospects, there are how people that are often marginalised can be involved through these technologies, how voters can be engaged, how to make sure that different claims are being represented especially from minority groups and how can we start auditing for transparency. I also started a bibliometric study on papers that were published by academics on artificial intelligence and I found it very striking how the curve looks. Artificial intelligence is pervasive, but it also requires many complementary technologies. There was a spike around the 1980s with the

development of technologies related to AI but other things were lacking like online repositories, like Google Flow or GitHub that support the development and the diffusion of technologies related to that.



**Geographical location of authors**

As regards geographical location, you can see that research is highly focused on the US. There are a lot of publications in the UK as well. It makes sense given the US invests a lot and especially in terms of Silicon Valley which uses these technologies and especially companies

like Google, Facebook... And in the UK, this is due to some of the origins of AI which can be traced back to the developments made by Turing. China is, of course, massively investing as well and you see some European countries, for instance Romania as an interesting result. Most of the key words in these publications are related to something technical. They are used in a technical context of how we can develop AI through computational programs, and they are not that much about how we want artificial intelligence to be used. How it should be incorporated by prevailing political systems etc.

I am not a computational geek, so I was interested in AI from a more social science perspective. As Virginia and Jan have already mentioned it, artificial intelligence is mostly used with a deductive reasoning. Deductive is for an example what a doctor does: analysing your body and your medical history he or she is going to ask many questions and find out what the specific problem is. For example, the problem is your kidney. From the general, the body, to the specific - the kidney. Most users of AI use this kind of reasoning. That, of course, poses many problems, for instance self-driving cars, if an accident is unavoidable and you have two children on one side and three old people on the right side, the algorithm is going to choose who to kill, how can we choose that? It is a discussion on ethics, can we rely on the decisions without this being regulated and with just letting people come up with these algorithms that deeply change society and impact social welfare? Some of these questions are very influenced by power plays.

The main applications, especially the most recent ones, are more inductive because they start from the specific and then they generalise. For example, if you use inductive reasoning here in this room and you want to analyse the world's population based on this sample, you start looking at the specifics. You might end up with the observation that the world is primarily white. This kind of AI use can have implied biases and reinforce prejudice or racism. That is something we have to be concerned about. And abductive reasoning is something in between because, as Virginia said, artificial intelligence is not doing a great job but there is something being developed right now with this idea of trying to find a way in between and trying to integrate the specifics and generalisations.

Let's focus on the reasoning of AI. From that we can also understand the prospects, the biases and the main challenges for society and for diffusion of these technologies which are very pervasive.

To start with, I think it is important to not have a deterministic view. AI is not going to save all the world's problems and it is not necessarily evil either. The important thing here is that it is pervasive and that it is going to influence many different sectors. We have to be aware, to design and integrate these discussions into the political framings. This is a curve that I like presenting on technological diffusion which is called the hype cycle. AI might have already gone through the peak of inflated expectations, that was around the 1980s. I do not know if you remember these movies about how everything is going to be controlled by robots, etc. And then there is a phase of disillusionment when people say no, it is not really a thing, it will not be used... I think that with AI, we are in this slope of enlightenment which means that many things are being developed and are being taken on by many different organisations, political sectors, public administrations, large companies, small companies etc.

There are many examples in politics of AI being used. Some positive and some negative. Positive are, for an example, translation tools in countries like India where that is very important given the fact that there are more than twenty official languages. Also, some positive ones are the applications which help voters to become better informed and to help provide content for policy makers to make better informed decisions. In terms of the negative ones, there are, for an example, bots which are used in elections. That has been already reported by many academics in many studies. There is also the resonance effect that causes the brutalisation of behaviour and it is also something that we see in many countries with this polarisation and the rise chauvinism and populism.

Many questions arise from this, from how these emerging technologies are going to be integrated in the political regimes. More specifically what I was interested in is political participation and how the civil society can start using artificial intelligence to improve its engagement with political systems. There is a great movement for open data, open government partnerships and a lot of countries are making now data available online. So how can the civil society start using that data for public auditing for an example. As I mentioned before, there is a growth of these complementary platforms, such as these online repositories like GitHub where you can start a project and people can help you from everywhere in the world.

After examining the literature, together with a colleague from the Ministry of Science and Technology in Brazil, we found a case which we considered extremely interesting and which might be showing some possible directions for the future. It was called "Operação Serenata de Amor". A group of computational geeks, eight geeks to be more specific, started this project trying to get receipts that were available thanks to the open government partnerships and the open data movement in Brazil. The receipts of public expenses had to be uploaded but the judicial system did not have the capacity to analyse those receipts because it is a gigantic volume of data. The geeks realised the opportunity of engaging with the political administration through the development of an artificial intelligence robot that could start analysing that data and find irregular expenses with reporting it back to the judicial system. At the beginning they were a group of eight; after six months, more than 500 people around the world joined the project. Most of them were anonymous, they integrated themselves without needing physical spaces and with just using online media. One of them describe it to me that they used to work sitting on the sofa, so they called it sofa activism.

In six months, counting from the moment they started crowdfunding, they got something like 20000 dollars. They found 8000 suspicious expenses of Congress people. To start with, they were focused on the lower Congress house in Brazil and they found suspicious expenses with many of them being reported back and investigated resulting in the exposure of a half of Congress members in Brazil. This shows a potential, not only for political participation of the civil society but also what artificial intelligence can do with open data and that is also can be used by public administration. This was an autonomous organisation that was not formalised. This example can shed light on opportunities for future engagements.

There are few trends that we observed from this case. Funding can be very decentralised and allows for this kind of mobilisations and engagements of the civil society. Platforms like crowdfunding and many organisations like the Open Society Foundations, which is funded by George Soros, invest massively in this. From our example, at some point, the participants also started to sell services on the side of the project so they could raise money through for-profit services in order to do the non-profit part simultaneously. Therefore, there are many models which can be deployed for funding.

<b>Focal Areas</b>	<b>Dominant Traits</b>	<b>Descriptive Features</b>
<i>Funding</i>	Decentralized	Crowdfunding Third sector and individuals In-parallel for-profit services
<i>Governance</i>	Horizontal	Ethics and clear goals Organizational culture Workflow Curate and review Partnerships
<i>Human Resources</i>	Diverse	Multidisciplinary Sofa activism Safety net
<i>Operations</i>	Lean	Fill gaps "Small is beautiful" System flow Pilot and experiment Immediacy, practicality and malleability
<i>Public Relations</i>	Openness	Funding accountability Open code Legality and liability Report findings
<i>Scaling up</i>	Distributed	Replicability Adaptability Skill over

In terms of governance, it is essentially horizontal. People that are normally engaged with AI, from the civil society, are the people who distrust authority, so they are like mavericks trying to change the system from the outside. They have a feeling that the system should be more horizontal and that they should have a better say. That has many implications in terms of ethics and goals, how they work, how they create the content as well, how they prevent polarisation and how they prevent misbehaviour. There are many challenges associated even for the civil society when doing something in a very decentralised manner.

The human resources, the motivations they have were very diverse. It is was essentially multidisciplinary. Some people were from social sciences and most of them could code. Also, for an example, a woman reported to me that she joined because she felt that by working online, she would not face misogyny as she faced in her previous job. The operations were very lean, they had a very open relationship with the media and the way that they scaled up was essentially distributed as well because it can be easily replicable. These algorithms can be applied in many other contexts, in many other countries, but also for different public expenses in the same country. They only require some minor changes.

1. Does civil society desire all kinds of political participation?
2. What changes is AI likely to cause for public bureaucracies, including (but not restricted to) job losses?
3. What forms of political participation are best with AI? What forms are not well-suited?
4. What are the main challenges and bottlenecks constraining civil society from organizing itself to deploy AI for political participation?
5. What are the impacts of AI-based technologies on secrecy and national security?

Many questions arise from this, ranging from secrecy and national security, from what we actually desire in terms political participation and in terms of how it is going to change public bureaucracies.

I will leave you with this. Thank you and I hope you enjoyed it!

## DEBATE

### Contribution by Ms Meglena Kuneva, Head of the European Union Delegation to the Council of Europe

Thank you Răzvan. Dear colleagues, I would like to make a short intervention on artificial intelligence for at least two reasons. First, I am very proud to share with you what the European Union is doing about artificial intelligence and the second reason is that we are going to make our bi-annual programme together with the Council of Europe where AI will be one of our priorities. For me it is very important to hear what the intentions about artificial intelligence are and how it can be instrumental in our common endeavours.

From what I heard, I understood that there are areas and questions on which we all agree and there are areas which still must be tackled. What we agree on is that artificial intelligence might have downsides which are not intrinsic to it, but they are very much related to the questions of how we are going to use this technology.

What we can do? This is one more example that AI is one of those opportunities which are marked with the word global. It is about globalisation. There is no country and no multilateral organisation which can cope alone with artificial intelligence. We need to do it together.

The sense of urgency is very important for all of us. The EU has set up a High-Level Expert Group on Artificial Intelligence Ethics Guidelines for Trustworthy AI and the European Union Artificial Intelligence Strategy stresses that AI systems should be accountable, explainable and un-biased. We also believe that essentials for achieving trustworthy AI are respect of the law, human agency and oversight, human autonomy and privacy and data governance. The transparency and traceability of AI systems should be ensured. We also have a lot of concerns about diversity, non-discrimination and fairness. Are we prepared for this? I think we are. Profiling and targeting are nothing new, for instance that consumers are being targeted and the EU found a way to regulate and at the same time not to impede positive tendencies.

We can talk a lot about democratic processes and artificial intelligence, but I would like to mention that for the European Union the security issue is very important. We have security concerns not only related to how we secure elections and our information flow but also security in a very classical way. As you might see from the distribution of the new portfolios of the new Commission, the questions related to artificial intelligence are spread in more than one and that is how it will be tackled in the next five years.

I would like to open the subject about ideological confrontation on artificial intelligence. All the technical issues are very important, but I would like to make a political pitch on this issue because I believe this is equally important. According to Freedom House, at least 18 countries in the world are building AI based mass surveillance systems, including countries like China, Zimbabwe and Uzbekistan. The way in which we address government use of AI is translating an ideological divide between democratic politics and authoritarian regimes. That is why I think that keeping AI under the roof of democracy will give all of us a tremendous strength. We are on the good side.

The process of dealing with AI is global and I believe we can make the next step. Our future plans include imagining the Council of Europe together with the EU being in the lead of tackling the problem of artificial intelligence and giving the hope that through artificial intelligence we can make our democracies stronger, our education stronger and our social policy stronger.

We shouldn't be short of ambition to have European continent in the lead, and fortunately enough, we are good partners, the Council of Europe and the European Union. German philosopher Leibniz had a favourite line, just one word, "Calcuemus!", let's calculate. We could be a standard bearer, for our continent but also for the world, let's make the best of our strength, of our experience, of our technological support and of our democratic values and make the world a better place. I am sure that the European continent in the lead is good news for the world.

## Questions

**Peter Andre, Chair of the European Committee on Democracy and Governance (CDDG), Council of Europe:**

Our Committee is already working on AI and would like to look at the topics discussed in the present Round Table in its next terms of reference. What kind of AI tools could be developed to foster citizen participation in formal decision-making processes, if any?

- ✓ Would it be possible for future political decisions to be supported by agent-based modelling?
- ✓ In the context of the EU's expert group on AI, what are the benefits and disadvantages of voluntary guidelines relative to more binding legal frameworks, especially in such a fast-moving technological field?

- ✓ Within the Parliamentary Assembly of the Council of Europe, Mr Deborah Bergamini, a member of parliament from Italy, is preparing a report on Democratic governance of AI. One of her main concerns is the concentration of power in the hands of few big private actors which are beyond democratic oversight. What do you think about this issue?

**Jan Kleijssen, Director, Information Society – Action against Crime, Council of Europe**

Professor Dignum asked the question ‘whose values?’. For us at the Council of Europe it is clear: it is values underpinned by the European Convention on Human Rights and our other treaties. The Council of Europe had already done considerable work in the area of AI. There was an impression that the global South was excluded but in the context of the Council of Europe an effort was being made to include also these regions, for instance in the case of the cybercrime convention which had a global outreach. Like Professor Dignum I strongly believe that artificial intelligence is an artefact. But what about when it comes to synthetic biology?

- ✓ How artificial intelligence can empower citizens to have a better control of the decisions made on their behalf?
- ✓ What safeguards should the Council of Europe develop within its work on governance and political practice in terms of cognitive autonomy and automated decision-making?
- ✓ What do you think about types of social activism such as “sofa activism” and phenomena such as social media trials?

**Claudia Luciani, Director of Human Dignity, Equality and Governance, Council of Europe:**

With the establishment of the CAHAI, the Council of Europe would examine the feasibility of a legal framework on artificial intelligence. What are the possibilities for creating such a framework and certifying artificial intelligence? Can the Council of Europe certify some AI applications? What are the pros and cons of regulating specific areas ?

## Replies

### Paulo Savaget

As regards the tools and mechanisms for political participation, I think there are many ways in which the political institutions can drive political engagement of the civil society. I certainly believe there is an open space for more active participation beyond elections. One of the ways is the auditing of political administrations which I find very promising. And especially in terms of open data and the commitment of most European countries to have data available online, there are good mechanisms in place for fostering auditing and access to information.

On the agent-based modelling, one of the open questions which remains is related to ethics, because when you do modelling, you usually have vested interests. With artificial intelligence, that gains magnitude. We need to deconstruct these models in order to discuss the ethics, the values, what is being integrated within these models and what is not, what are the biases and problems that are going to derive from that.

When we talk of cyber security, we can see all the damages and problems caused by cyber-attacks and certainly some government action is required. On the other hand, some groups could consider constraints as a violation of their rights. Therefore, cyber security is important, but the question is how to balance security concerns and the possibility for people to engage with data in different ways, what is ownership of data and who should have access to which kind of data.

Regarding sofa activism, there are some positive and negative aspects about it. For instance, there is a lot of concern in terms of trials by social media. Will this kind of decentralized activism be used in ethical or unethical ways?

When it comes to empowering people, I agree that artificial intelligence can make decisions which can help us but, at the same time, it can disempower us from taking decisions which are important for us. We have to tread lightly. We have to define the boundaries better and I think it is still in the beginning of the process but many discussions like this are going to be held until we have answers for all these questions.

### Jan Ziesing

I agree that open data is helping democracies to be more transparent, to better include and involve everybody. In terms of what can be done, we need to look at the data quality and ensure that data is computable and machine readable so that programmers are able to easily conduct analysis. Also, we see a deepening divide in terms of data literacy. We should invest more in education and raise awareness of how data is used and analyzed.

I believe that we need to tackle challenges, such as where is the data, who is holding the data, how we gain access to data and how to have equal starting conditions for people creating AI and working with data.

On the synthetic biology and bio-enhanced systems, I think we are still quite far from that technology. What we do with AI today, such as pattern recognition, is quite different from strong AI that can compete with humans.

I think that the Council of Europe could take the role of defining guidelines and criteria but I do not think that the Council of Europe should do the certification process – at least not alone. This is because that would be a very dynamic process and a lot of recertification would have to be done. I think that the Council of Europe is better off with defining criteria.

## Virginia Dignum

Speaking of the work of the High-Level Expert Group on Artificial Intelligence and its guidelines for the ethical use of AI, the relation to regulation is not a direct one. The Expert Group is not a regulatory body. It is an advisory body which has recommended regulation, mostly regarding applications of AI and not AI as a whole. We can and should be looking at regulating AI in specific applications in certain sectors. That relates to the idea of certification. The issue here is that these systems evolve rapidly so we have to look at a much more dynamic certification, which is in itself a challenge.

In relation to which values and whose values, of course, human rights are the values to consider in all cases. However, the issue here is how we take into account all human rights at the same time. The resources that our societies have at their disposal are not always enough to ensure that they are all taken into account at the same time and sometimes we do have to make a choice between one or another. If we leave this choice to machines, we need to have some overarching values which determine which ones they should choose.

The certification of democratic processes is a very important issue. More and more, democratic practices will be supported at least, if not replaced, by automated processes and it is indeed very important to have a certain type of certification about what exactly has been taken into account, who has been involved in these decisions, what type of data was considered etc. I cannot imagine a better place than the Council of Europe to deal with this kind of certification.

The issue of cyber-biology is a challenging and little explored. My glasses enhance my capabilities and I still see them as an object. We need to have much deeper research and knowledge about what we mean by bio-enhanced components and how can we isolate what that system is doing and what human are doing.

## CONCLUSIONS

### Snežana Samardžić-Marković, Director General, Directorate General II – Democracy



Thank you all for being here. Let me first thank the chair of the GR-DEM, Răzvan Rusu, for sponsoring this event and chairing it. I would like to thank also Jan Kleijssen and his team for being those who pushed forward the issue of artificial intelligence in the Council of Europe. I am grateful to Claudia Luciani and her team for suggesting the topic of AI and the future of democracy. My special thanks also to the experts. Your contributions were rich and gave rise to a lively debate.

There are three main reasons why this discussion today was so revealing. First, the digital age and emerging technologies such as artificial intelligence already demand on us to make choices about the future of our democratic systems. Secondly, it is obvious that we need to raise awareness of the broader impact that artificial intelligence and automated decision-making can have on the functioning of democracy, on good governance and society at large. The Directorate General of Democracy will join other parts of the Organisation that have already started to work on artificial intelligence, to look more in-depth into these matters within its area of expertise. The third element that I take from this discussion is that dealing with artificial intelligence is not black and white and therefore hard work is in front of us.

When Virginia asked who are those who should make decisions, in the Council of Europe these ‘we’ are the 47 Member States. And not only. The Council of Europe is not merely an intergovernmental organisation but also a multi-stakeholder platform which includes members of parliament, representatives of local and regional authorities, civil society and many others who can be involved in the decision-making process in different ways.

On the issue of certification, I agree that giving certificates to something which is ever-evolving would be extremely difficult. But we already have a very good example here in the Council of Europe, namely the European Directorate for the Quality of Medicines (EDQM) which not only sets the standards through its intergovernmental activity but also issues certifications. Its work could give us food for thought.

Many issues raised today touch on aspects of the work of the Council of Europe and should be addressed in a transversal way – ethics, accountability and transparency. The newly-established CAHAI will look into the feasibility of developing a legal framework for artificial intelligence. This will be a daunting task. But, in parallel, there is a lot of operational work that can be done in the Directorate General for Democracy. AI will have a tremendous impact on the way public authorities are constituted, and Virginia spoke about it when she explained the effects of filter bubbles and the impact on elections. AI will change the way in which citizens are involved in decisions and Paulo talked about new types of social activism. Lastly, artificial intelligence will affect the way public authority is exercised and Jan elaborated on this through very interesting and concrete examples.

The social and cultural impact of artificial intelligence should also be considered. Take the example of a simple cultural activity like watching a TV series at home in the evening after a long working day: you turn the TV on and then algorithms tell you what to watch. On the one hand, this technology helps us to make a decision. But what is the real impact of these practices for European citizens? Do citizens have the right to choose what they want to see and not necessarily what algorithms have decided that they should be watching based on demographic criteria, such as age, race, civil status, sex, etc.?

What about creativity? What about pluralism? Diversity is inherent to democracy. There are independent authors who create films not because they will bring profit but because they have something to say. This kind of freedom of expression must be protected. And so must minorities and minority views. This is a mission for the Council of Europe.

The opportunities offered by artificial intelligence for the public good should be harnessed, while its downsides should be prevented and tackled. For instance, AI may perpetuate discrimination and inequality through gender, race and other bias embedded in algorithms. One of our strongest instruments to directly address this kind of discrimination is the European Commission Against Racism and Intolerance (ECRI), a monitoring body.

Jan mentioned data literacy, Virginia mentioned voting support apps, Paulo mentioned sofa activism and open data. We heard that the quality of open data is important, but I believe it is crucial how people interpret data. For that we need education. Education will determine the way in which our societies are able to handle the huge technological change we are experiencing. We have to empower our citizens through education and enable them to take responsibility of their digital lives. The Council of Europe and the Directorate General of Democracy will continue working hard to develop understanding, critical thinking and to teach about our values and principles.

To conclude, it is imperative to strike a balance between the ambitious opportunities offered by artificial intelligence and the need to ensure democratic oversight and accountability of public institutions. States need to equip themselves to respond to the broader implications of AI on the very fabric of our societies. The Council of Europe should work hand in hand with its member States to help them ensure a human-centric approach to artificial intelligence, promoting effective participation, robust democratic institutions, adapted education and appropriate tools to combat and eliminate discrimination in all its forms.

I have high expectations from the CAHAI, from the CDDG and other intergovernmental committees, other Council of Europe structures and mechanisms, to deal with this terribly interesting challenge, the game changer as we called it. With the help of our friends, experts, we are on a good way to sail, not only troubled waters, but to sail further.

Thank you very much!