

# **SPECIAL COMMITTEE ON ARTIFICIAL INTELLIGENCE IN A DIGITAL AGE**

## **Public Hearing on AI and the Data Strategy**

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### **AI and the “EU data strategy” and the “EU digital strategy for the next decade (digital Compass)”**

Kilian Gross, *Head of AI Policy Development and Coordination Unit, DG-CNECT, European Commission*

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### **AI and the data strategy**

#### **Panel I**

Jeremy ROLLISON, *Senior Director, Data Policy & Digital Inclusive Economy, Microsoft*

Gemma GALDÓN CLAVELL, *Founder of Eticas Foundation and Eticas Consulting*

Stefaan G. VERHULST, *Co-Founder and Chief Research and Development Officer of the Governance Laboratory (The GovLab) at New York University (NYU)*

Walter PALMETSHOFER, *Project lead, Open Data Incubator (ODINE), Open Knowledge Foundation, Germany*

#### **Panel II**

Luís Paulo REIS, *Professor, University of Porto, Portugal*

Louisa SPECHT-RIEMENSCHNEIDER, *Data law specialist. University Professor, External Scientific Advisor*

Thomas BOLANDER, *Professor of Artificial Intelligence (AI) at DTU Compute, Technical University of Denmark*

Sarah CHANDER, *Senior Policy Advisor at European Digital Rights, EDRI*

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**BRUSSELS**

**THURSDAY 30 SEPTEMBER 2021**



1-002-0000

**IN THE CHAIR: MIAPETRA KUMPULA-NATRI***Vice-Chair of the Special Committee on Artificial Intelligence in a Digital Age**(The meeting opened at 9.09)***Opening remarks**

1-004-0000

**Chair.** – Dear colleagues, I hope the connection is working now, and I am sorry for some technical problems getting started so I can lead your meeting from a distance. First we will start as normal with some housekeeping notes. Today I will chair on behalf of Dragoș Tudorache, our Chair, who due to personal restrictions cannot join us and I hope he will be back soon. I will be chairing the session until around 11.00 and after with my friend and colleague Radosław Sikorski has kindly promised to chair the rest of the meeting.

We can adapt the agenda for the meeting as proposed, I guess. That is good and then I propose as usual that unless any objections are raised, the agenda for this meeting is approved. We are familiar with this way of working.

The second part of the agenda is the Chair's announcements. However, before we proceed with our work today, I would like to take a moment to look back. Last week, on the 23rd, we marked one year of our AIDA special committee work, when it was officially set up. An eventful year, a year of changes and achievements for us as a committee as well as for Parliament.

In this one year of work, AIDA has held over 10 hearings, six ordinary committee meetings and a great number of webinars and info sessions. We have welcomed to our committee around 100 experts altogether; and that has really enlightened us with a lot of good knowledge around the sector of academia, industry, business, the medical sector, civil society, as well as in-house experts. We have heard from the European Commission and other EU institutions and other bodies as well. So that is quite remarkable and I thank you all for this work – also my colleagues, but also the staff and experts that have great dedication and motivation for creating a better understanding for us of the phenomenon of AI. They have deepened our knowledge not only in Europe, but also beyond the Union, an important endeavour and unconventional research and demystification of AI.

We will also see the debate on the new Commission proposal on AI and we will continue working together in the direction of setting the AI roadmap until 2030. We have already started to work on the AIDA report and look forward to seeing the draft soon. Thank you once again to everyone working for this committee and we can look forward to the next six months we have ahead of us.

For the third point on the agenda, opening remarks by the Chair, today the title is AIDA: AI and the EU Data Strategy. We have two sets of exchanges of views today, first with Kilian Gross, Head of Unit of AI Policy Development and Coordination, DG-CNECT, European Commission, and then we have eight representatives of industry and civil society structured in two panels of speakers.

The exchanges of views will be followed by question and answer sessions between Members and participants. I want to thank you, the guest speakers, for being here with us and also I would like to remind all guest speakers that the initial presentation is limited to five minutes except for the intervention from the European Commission, which is 10 minutes in the first part.

(inaudible) And Members will have a question time for two minutes. Unfortunately we have not scheduled follow-up questions this time.

The hearing will be webstreamed and interpreted into 13 languages altogether. Please make sure you choose your preferred language by using the audio channel selection at the top of your screen.

Also, there was a note on the agenda that my turn as Vice-Chair to have a note on data strategy. I was the rapporteur for the European Parliament on data strategy and it is my honour to have some words to open the debate on data and AI.

I like to see AI as a result of the triangular infrastructure. You need infrastructure, you need skills and you need data. First, to change the algorithm we need computers and connections to gather and move the data, so that's the infrastructure part. Second, you need people to tell those computers what to do, how to do it, and then also to be able to use it. So that's the skills. Lastly, you need the data to enable the computers to learn. Sometimes this third one does not get all the attention it needs: the data.

One way to think of the relation between the data and AI is that if AI algorithms are the engine, the data is the fuel. If we have the finest engine, it's useless if we do not have the necessary fuel. So this is why data should be at the centre of our attention when we are charting the path towards the European future of AI.

Last spring, our Parliament accepted the INI report for the data strategy. Seven committees and tens of MEPs have worked hard to come up with the European Parliament view on the data economy. I think we succeeded. The report defines the conditions for a fair and innovative data economy which will lead to better services, sustainable growth and quality jobs. It is a document we can be proud of and it now continues with the Data Governance Act, already on our table, and there is still the upcoming Data Act from the Commission, and our strategy already looks at those, also setting some hopes and guidelines we want to see.

So regulating data economy is not easy. There are tricky questions to be solved and interests to be balanced. On the one hand, it is important that, unless the data that is scattered around Europe, at this moment it's difficult to learn from each other. Data stays in silos in different countries. But even inside the countries and even inside the companies, there is unleashed potential to be used by businesses but also by civil society. So we have to change the mindset and look at the data around us.

On the other hand, we have to be careful how we unleash the data. We don't just want to open the floodgates and see what happens. We need to create an ecosystem of (inaudible) and rules and values, guiding our data policy and governance. We do not want to see only big players taking the data and stifling innovation. For businesses, it's to be safe, trustworthy, to share the data between partners is a promise of trust. We need to create trustworthy and transparent data economy that involves many SMEs as well.

Trustworthiness and transparency are especially important when we talk about the data created by human beings. It's important the protections we have won, like the GDPR are not lost in the AI age. We need to keep the humans in the centre. Personal control of who gets to use and share data must stay in the hands of the individuals. One example is health data. The COVID crisis highlighted even more the role of the need for high-quality, real-time data-sharing. However, on the other side of the coin is the very real question of privacy. Data from our health is perhaps the most intimate that we have and must be protected accordingly.

In addition to privacy, we also must keep in mind the bigger picture. Development of human-centric AI relies on high-quality data, so what is the quality of the data – it's not only a technical question, but also where and how it leads if it's biased. Think about the examples from the gender bias that we have debated a lot in Parliament as well.

So the path to truly European data economy consist of two parts. First up is technical. We need to create interoperable European databases. This makes it possible to leverage our common strengths to unleash European innovations. Second is political. We have seen the digital world dominated by some businesses only, and sometimes even authoritarian states. Europe needs to be a third alternative. The respect for our values and protect our societies. This requires that we sit down to decide on rules, what kind of data can be used by whom, and how, and on what terms.

I trust this can be done in a way that facilitates innovations and makes Europe flourish. We do not even need to do that alone. We have international cooperation going on. The latest one started yesterday. The Tech and Trade Council (EU-US Trade and Technology Council) transatlantic regulation with the US also has AI on their agenda.

As for me, 2020 is the European decade for the digital policy. In 10 years we could see Europe where farming data from Slovenia can help optimise use in Finland. Industrial data from factories in Germany will help cut waste in Romania, where control of data rests in the hands of individual, not in the hands of faceless corporations. So digital development is there to be set also by us and by business and the public sector. All are needed on board. This is why I'm extremely happy to have today to talk about the best way to combine data and algorithms for the benefit on Europe.

So this was my opening speech, and I'm very happy now to give the floor to the European Commission.

## **“EU data strategy” and “EU digital strategy for the next decade (digital Compass)”**

1-006-0000

**Kilian Gross**, *Head of AI Policy Development and Coordination Unit, DG-CNECT, European Commission*. – Thank you Ms Kumpula-Natri, and thanks for the invitation to speak to you in this important committee today on the topic of data and AI. I hope you can now all hear and see me, otherwise please signal this to me.

As the Chair has just pointed out, correct data are essential for AI, because indeed we need several ingredients to have in Europe a flourishing AI development and uptake. This is, first: data; second, computer infrastructure; and then of course skills. These are the three things we need in order to make Europe a cutting-edge hub for most advanced AI, which is clearly our objective. And as you know, at the same time we want to make this AI trustworthy.

It's our strategy that we have always kind of married data and AI and advanced with both strategies in parallel. We have tried to outline a little bit how the two topics interact in the Commission's policy. So you see, at the top, our starting point: Europe's digital future, and we had in February 2020 two important papers. We had an AI White Paper and we had a Data Strategy. So that was the first deliverable, if you wish, of this new committee, basically the outline of the policy objectives. So the first thing we did concretely were data and AI, because we think these are the two top priority topics, and both are completely, as the Chair has pointed

out, interlinked. In the White Paper we had basically the two work strands we had ever since on AI: we had the work strand on how to support AI, how to make it grow in Europe, and the other part is how to make it trustworthy wherever risks may occur. So this is a common thread in the EU policy on AI, and on the other hand, in the Data Strategy, we outlined already our future initiatives which we want to take in order to make Europe really the place of a data economy, in particular for industrial and business data.

Since then, both work strands have been followed up quite intensively and in parallel. On the AI White Paper, we followed up, as you all know, in April this year, on 21 April 2021, with two acts. We proposed a coordinated plan with more than 70 initiatives on how to boost the development and uptake of AI in Europe and, at the same time, we proposed an AI regulation setting clear boundaries for certain types of AI and clarifying how we could make AI trustworthy and safe in Europe. At the same time, on the data side, the Commission has been very, very active, so we have already proposed a data governance act which is now currently in negotiations, and we will propose this year a data act which would then complete the picture.

In the meantime, we have as well proposed our Digital Compass communication setting out our targets, our headline targets for 2030, and just recently, on 15 September, we published, with the Digital Decade policy programme, a decision outlining in detail how we want to go about this and how we want to achieve these different objectives.

If we do know a little bit more on the different deliverables I just mentioned, which show the interlink between data and AI, let's first have a look on the AI side of things. We have, as I mentioned, proposed an AI regulation and a coordinated plan. On the AI regulation I don't want to go here into detail because you are all very familiar, but it's perhaps just important to highlight or to recall some features which are linked, because we try here for the first time to give a definition of AI. You know we based ourselves on the OECD definition, which is the only internationally-recognised definition. We tried to set up a really risk-based approach, meaning that people only regulate as far and as is strictly necessary by the risks presented by a given AI system. So our regulatory level of intervention will strictly depend on the type and the level of risk.

We have light but effective requirements, because we want to have requirements which are operational, which have been tested by our high-level expert group in a pilot, where we know that they work and we know that they will make the AI reliable, so we want to have clear and very operational requirements. There will be a system of enforcement, because it's not a policy; the text is a legal text, so we will have ex-ante enforcement for high risk AI systems with an ex-ante conformity assessment, and we will have ex-post enforcement for the provisions, for instance, but also for the high-risk systems, because there, of course, market surveillance authorities will look after the operators. And we set up a governance scheme which should not be too heavy, which should leave a lot of margin for manoeuvre for the Member States, but we should as well ensure a strict consistency at European level by creating a new AI board where the heads of the national AI supervisory authorities should come together and discuss the consistency of the regulation, the application.

At the same time, we have delivered a coordinated plan which is, for us, equally important. This plan should help us to accelerate investment, meaning it should help us to achieve our overall target of 20 billion private and public investments in AI per year in the EU in the decade which has just started.

We are working again on the national strategies. We have done so already in 2018, where we asked Member States for the first time to propose national strategies on AI (we come back to this here), and we try to develop them further, to get synergies, to improve, to create best practice. We want to align the different AI policies in order not to duplicate, but to create

synergies and to become more effective. And for the first time, we have as well identified strategic sectors where we want particularly to focus on AI development, and I can name a few, like climate protection, mobility, health, just as an example, justice or law enforcement – everything where there is a particular use of AI to be made.

In parallel to this, we have, as you all know, proposed the Data Governance Act, and here the Data Governance Act is based on the key idea to provide a better access to sensitive public data. So it's about access, to make access possible of data access and re-use of sensitive public data. We want to facilitate and stimulate the creation of new neutral data players in Europe, which would be the spaces, the data spaces as we call them, where the data can be exchanged securely and in a trustworthy manner. We want to allow Europeans to gain more control of their data, because we think this is as well a question of strategic sovereignty that we have our own data economy, and we want to create a safe environment for those who are willing to share this data. This goes a bit together with this second point on new neutral data players. They should create spaces where data can freely circulate in a safe and trustworthy manner.

The second act, which will come later this year, probably in the beginning of December – the Data Act – is really about fairness. Here we want to make sure that the allocation of the economic value of the data is fairly attributed and allocated between the different actors in the value chain, and this concerns in particular fair data access processing and use in the business-to-business context, but this concerns as well fair, reliable and transparent data access and use in the business-to-government context.

On this slide now you see our famous graph of the Digital Compass, so our overall headline targets for 2030. As you see, we start with skills, because it is, of course, most important that we have at least 20 million ICT specialists by 2030. If you look now, we have around 7.8 million currently. We want to have basic digital skills among at least 80% of the population; now we are at 56. We want connectivity, a Gigabit for everyone – 5G in all populated areas; now we have, for instance, 5G in 59% of the areas. We want to have cutting-edge semiconductors and double the EU share in global production, currently at around 10%. We want Data and Edge Cloud: 10 000 climate-neutral highly secure edge nodes, and we want the first quantum computer, which will be ready by 2025. Currently, there is none in the EU.

On the business side, and this concerns in particular AI, we want to have an uptake of 75% of EU companies using Cloud, AI and Big Data. Regarding AI, currently we are at exactly 25%, so we still have quite a path to make. We want to grow, scale up and finance double the number of EU Unicorns. We want the late adopters, we want SMEs to reach at least 90% of them, to reach at least the basic level of digital intensity. And, last but not least, we want to work on the government side. We want to have key public services online, 100% (currently they are at 75%), we want e-Health 100%-available medical records, and we want that 80% of our citizens use digital identities.

On 15 September we got even more concrete, because we proposed our decision establishing the path to the digital decade, and we tried to explain to outline to you how we want to achieve these ambitious objectives. This will mainly be done through a yearly cooperation cycle where we will monitor and evaluate the progress leading to 2030. The Commission will develop EU-level trajectories for each target, together with the Member States, and the Member States, on their side, will then draft national trajectories and strategic roadmaps to attain their targets. So we all should really have a clear idea, a clear vision and a paper on how we are going to achieve the different targets. We will then have an annual cooperation cycle we will monitor based on the Digital Economy and Society Index (DESI). This is a well-established instrument which we will further elaborate and use, and it should allow us to evaluate the progress and provide recommendations to Member States in the annual Digital Decade Report, which will of course

be submitted to Council and Parliament, so you will see every year what we are doing and we will report back to you.

If we are unhappy, Member States will be asked to adjust their strategic roadmaps to adapt planned actions at national level, and we will address, in our Digital Decade Report, insufficient progress through joint commitments as well as through multi-country projects and action at EU level.

This is another important element in this digital policy programme, this multi-country project. And all this together should engage us in a cooperative dialogue to identify deviations from the projected trajectories. We think, like this, it creates a unbureaucratic but efficient governance instrument on how we want to achieve these objectives, and in the end, of course, the objectives will lead to exactly where I have started: to a flourishing data economy and then, as well, to a boost in AI based on this well-working European data economy.

1-007-0000

**Jörgen Warborn (PPE).** – Thank you Madam Chair, dear Miapetra, yesterday, top officials from the EU and the US gathered in Pittsburgh for the Trade and Technology Council, serving as a forum to coordinate approaches to tech, including, very importantly, AI and data. I greatly welcome this initiative. The impressive American tech development in the last decade should be a source of inspiration to spur Europe in the right direction. We need to learn from their mindset in order to increase our digital competitiveness. It would benefit our business climate to form a strong digital pact with the US, finding common ground on data protection, and establish free data flows across the Atlantic. Even better, a mutual understanding on artificial intelligence.

So my questions would be if you could shed some light on the outcomes of yesterday's discussions in the TTC (Trade and Technology Council). What is your assessment of our chance to agree on a concrete and binding agreement with the US in the field of AI and data?

And, given that you and the Commission have already presented a European AI Act, what do you say about our chances to merge with the Americans now? I find it a bit unfortunate that the EU didn't give time to first coordinate with the TTC before drafting our own legislation.

It is, of course, important that this doesn't lead to even wider discrepancies between us and the Americans, as we know that legal uncertainties, trade obstacles and complex regulations are among the biggest hurdles to overcome for small businesses turning digital.

So it would be very interesting to hear more on the Commission's plan moving forward.

1-008-0000

**Ibán García Del Blanco (S&D).** Good morning, Mr Gross. I found what you said very interesting. We knew of some of the issues you raised and are getting to know about others.

First, I won't pass up this opportunity to respond to the colleague who has just spoken. I don't think the European Union needs to wait for anyone, and nor do I think that it is in a relationship of subordination to the United States. In any case, for some time now the United States should have been doing what it had to do too, rather than just dealing, in its parliamentary business, with issues relating to defence, as there are many others matters that need to be resolved. I believe we can make progress in this direction, but we are not, of course, at the whim of the United States' political will. It will take more than that.

Second, you mentioned that you are also focusing on national-level strategies. You talked about giving impetus to artificial intelligence strategies. In your intervention today you concentrated on the use of data. I wonder whether you can us whether each EU country has a national strategy

on data and data administration? Do you also coordinate matters in this field at a national level or do you anticipate organising things at a European level and then coming to agreement with the Member States themselves?

1-009-0000

**Kilian Gross**, *Head of AI Policy Development and Coordination Unit, DG-CNECT, European Commission*. – Indeed, the TCC (Trade and Technology Council) is very important and we take it very seriously, and we have now a delegation as well from DG Connect with our Commissioner and our First Executive Vice-Presidents in Pittsburgh to negotiate and to discuss with the Americans, because we are grateful for the initiative that they want us now to enter this dialogue and to push for this dialogue. I think that's strictly needed.

I think it's too early, of course, at this stage already to say what will be the outcome of these talks, but we could see as well, in the run-up and in the preparation, that we have a lot of commonalities now with the Biden Administration regarding the ideas on how to address AI issues. So I think this is a very promising perspective.

We will follow up, of course, very closely and we see there is a large interest from the American side as well to understand what we are exactly doing and to see where we could closely work together, in particular regarding the methodology, how to make AI safe and what could be the requirements we could work on. So I think there are certainly work strands where we could closely cooperate.

We never planned the AI act to be protectionist or to close up our market; on the contrary, we want to be open. And as you know, we use this new legislative framework approach, so we work with, basically, the standards, and these standards are open to everybody, and we work as well with various international standardisation organisations.

So we are happy with this intervention of the U.S. We think this is the right way, and we will work together with European standardisation organisations and international standardisation organisations to get standards which are then open for all companies so that they can enter our market.

I may then turn to Mr Del Blanco. I think I replied already, partly, to his questions. I think now we have made our proposal, so it's for Parliament and the Council to negotiate this. We will go on. We will, of course, in parallel, have discussions with the US and the standardisation organisations.

I think this should not be about who is subordinating to whom, but we should try to find a cooperation mechanism where we integrate this. And I think there's a lot of common understanding as well on the international side as to how we could do that, because in the ideal case scenario, Europe could be a benchmarking setter and it could agree with international standardisation organisations to follow up on a lot of the standards, which we will require for our operators if they want to bring to the market high-risk AI.

You asked then for data strategies. To my knowledge, there is no requirement under EU law for specific data strategies. But of course, now in the strategic roadmaps, which Member States have to develop, they will have to integrate data as well, and they will have to tell us what they are going to do about that.

So I think that this new instrument – the Path to the Digital Decade, the Digital Policy programme – will allow us as well to have a more informed and structured discussion, and we will see much more detailed plans on this from the Member States.

1-010-0000

**Svenja Hahn (Renew).** Madam Chair, thank you, Mr Gross, for the exchange today. Thank you also for what the Commission has already presented, particularly with regard to the AI Act. We hope Parliament has swiftly rectified its internal differences as to which committee will be responsible and to what extent, so that we can really focus on our work.

Because I think that what we need is a legal framework for AI and data that will make Europe more innovative and successful in the digital age. And I believe that it is only if we resolve this – including in an international context – that we will succeed. That is why, especially with regard to yesterday's EU-US Trade and Technology Council, and to China, I am convinced that it should be democracies that set technical standards and an ethical framework. And that is why I think it is important that we remove barriers, particularly between the American and European technology markets, but that we also include others. Of course, digital and technological policies focus primarily on data.

Against this international background, I would like to ask you to incorporate two pieces of news related to the GAIA-X initiative. Firstly, we heard that Deutsche Telekom's subsidiary T-Systems was in the media about three weeks ago because together with Google it wants to create a cloud for Germany to guarantee German users data sovereignty. T-Systems stresses that this is a bilateral initiative and a building block for GAIA-X. However, other observers consider this to be a move away from the European cloud. I would therefore be interested in your assessment of this.

In any event, I believe it is centred not so much on Europe but more on Germany. So what is the Commission's assessment of Deutsche Telekom's joint GAIA-X project with Google? And secondly, how should we assess the Commission's European Alliance for Industrial Data, Edge and Cloud initiative for Gaia-X, and what role will it play?

1-011-0000

**Kilian Gross, Head of AI Policy Development and Coordination Unit, DG-CNECT, European Commission.** – Thanks, Ms Hahn, for your question. You asked first about this initiative of T-Systems to create a Cloud with Google. I have to say that I don't really see that we can comment on this now. We will take of course due note of this information and we will look this up, but I think it would be difficult for the Commission to comment in public on a commercial transaction of a company without having a really detailed background, so please excuse me but I cannot take a position now in public on this on this initiative. I take, of course, due note of this important piece of information.

You then ask about the European Alliance for Industrial Data, Edge and Cloud and Robotics. This is in our view, of course, complementary to Gaia-X. One thing is a Commission initiative, the other is about something which was brought up by the Member States, which the Commission supports. We don't think that they are mutually exclusive; I think they can mutually benefit from each other. We don't see this as a competition. This is not about one initiative in Europe to solve this problem of having enough data spaces – cloud – because I know Gaia-X goes much beyond a pure cloud concept. I think there is room for a number of these initiatives, and therefore we welcome this and we think they are complementary and should both be developed.

1-012-0000

**Damian Boeselager (Verts/ALE).** – Thanks a lot for taking the time to talk to us on this very pertinent matter. First of all, I have a very simple question, which is: when exactly do you expect the Data Act to come in?

The second point is on the question of competitiveness and data markets. I understand and I read from your slide as well that it's a question of fair value distribution on the profits generated with data sharing and data analysis, and I'm very much looking forward to that in the Data Act.

But we do see a high level of concentration in data markets, especially obviously in the data storage market and the cloud market. So what kind of initiatives is the Commission trying to propose, maybe also within the Data Act, to ensure that the future data markets are not so oligopolised but are more competitive than the current data markets we see?

And then maybe a third question independent from that. I've also been negotiating the RRF, and when I saw your Digital Compass I was asking myself whether the reporting of the RRF impact is aligned with the goals of the Digital Compass and how this is linked to each other, because, as you know, 20% of the RRF needs to be spent in each national recovery plan on digitisation.

1-013-0000

**Kilian Gross**, *Head of AI Policy Development and Coordination Unit, DG-CNECT, European Commission*. – Thanks a lot for the very good questions. The Data Act is now supposed to be adopted by the Commission – the proposal, of course, because we only do proposals; it's then up to you to decide whether this should become law – according to my information at the beginning of December of this year, so we will close in the first half of December. We will probably, if everything goes well, make the proposal.

We think that this is crucial. As I mentioned in my presentation, this is about fairness, it is about use rights, access rights, who should have the right to use the data, the question of property rights on data. So I think indeed this is a crucial element, because this will complement a bit our story, just to use this modern word of narrative, because with the data governance we have basically tried to stimulate, we try to open up the data rules with the Data Act. We will try to fix the rules to see who can benefit in this data environment from the data, who should be obliged to share, who should have access. So this will be a key element of this act.

We don't see any contradiction between the RRF and the Digital Compass – on the contrary. Because a lot of initiatives in the Digital Compass will require substantive investments, and the RRF should trigger these investments. And, as you rightly say, there's a minimum target of 20% digital. We, of course, in DG-CNECT, could imagine even more. We think it would be very useful for Member States to make use of this money, because this will really allow them to get more competitive and future-proof and innovative. So we see this as a minimum threshold, and we see that the RRF provides for great opportunities, in particular for cross-country projects which Member States could further develop, because this would really allow investment to be brought to a different level.

1-014-0000

**Geert Bourgeois (ECR)**. – Mr President, Mr Gross, I absolutely agree with the EU's goal of developing a thriving AI economy. We are lagging behind the rest of the world, especially in the area of data. That is why I advocate working together with the United States. I also have high hopes for the Trade and Technology Council. We do have to be careful that we do not over-regulate or mis-regulate (as opposed to the US approach, i.e. too little regulation). I am already hearing from specialists who fear that the fourth annex to the proposal for a regulation starts from the wrong premise. It is based on the system of supervised learning. That is at odds with the fact that new AI develops its own data. Do you share that concern?

Secondly, there is the issue of chip production. I hope that the EU will not embrace the outdated vision of going solo through the long investment process, spending billions in the process, but will instead agree with what has already been established by Intel and TSMC. We must focus on our strength, which is research and development, using institutes such as Imec, which is at the forefront of nanotechnology. My questions are as follows: What are the priorities in that regard? What system does the Commission want to develop when it comes to building an advanced system? And do you agree that we must invest in research and development as a priority and focus on an open strategic economy?

1-015-0000

**Kilian Gross**, *Head of AI Policy Development and Coordination Unit, DG-CNECT, European Commission*. – Thank you Madam Chair. I don't want to take too much of your time because I know that you have a very busy agenda and I'm already grateful that you listen to me.

On the question of supervised learning in Annex 4, I think the AI Regulation tries to be technology-neutral as far as the different strands of AI systems are concerned. You can see this if you look at Annex 1 of our regulation, where you find these three categories of AI techniques: you find the machine learning supervised, unsupervised and reinforced learning; you find, second, the symbolic reasoning and expert system; and you find, third, the statistical method and Bayesian systems. So I don't think that we are strictly limited to supervised learning. It is one of the techniques, which may constitute AI within the meaning of our regulation.

This being said, of course, what you mentioned is a fair point: that in the future AI may generate its own data. We have this already in expert systems, which basically generate data by – taking the example of the 'Go' game – where they basically played against themselves and produced their own data. This is fine, but it will, of course, have to become compliant with our data requirements, because we think if a system is structured correctly, then normally the data generated by these systems should also be correct. This is an important point, which we need to take into account, but it's clear that one of the features of AI in principle, beyond the generation of data, is, of course, that they are learning. Therefore we have to cover this in the regulation by looking, for instance, at the intended purpose and getting clear instructions of use for an AI system.

On the chips, I think you touched on a very important point. Indeed, it doesn't make sense to copy what already exists. We must be leading. I think that is the purpose of our initiatives: that Europe becomes a place where research and production of the most advanced chips takes place. For this, research is crucial, and I'm pretty sure that one of the focus areas of this new chip initiative – the Chip Act – which our President has announced in the State of the Union speech, will indeed be on looking at how we can boost the most advanced research and uptake of chips in Europe.

I think with this, I can conclude. I was very pleased to be here. I'm happy to come again at any point in time, because we think that this topic of Data and AI really requires all of our attention. Both are key for our common success, and therefore I think every debate which brings us more insight, like today, is most welcome. Thanks a lot for your time.

## **AI and the data Strategy**

### **Panel I**

1-018-0000

**Chair**. – Thank you, and as shadow rapporteur for the Data Governance Act with the rapporteur from the EPP, Angelika Niebler, we have concluded in the Committee on Industry, Research and Energy (ITRE Committee) on our opinions, so we are ready to take it to the plenary and for the trilogues, and then we are ready to start the trilogues as soon as also the Council has their opinion ready. So this is going smoothly forward, we hope.

So now we move immediately to the next part of our hearing with Industry and Civil Society. So I will take the opportunity to welcome four guest speakers for this first panel. I want to thank them for their presence and participation: welcome. And after the presentation there will be again questions and answers with the Members and panellists. So immediately I give the floor to the first speaker, who is Jeremy Rollison, Senior Director, Data Policy and Digital Inclusive Economy from Microsoft. Please, the floor is yours.

1-019-0000

**Jeremy Rollison**, *Senior Director, Data Policy & Digital Inclusive Economy, Microsoft*. – Thank you, and thank you for the chance to be here with you this morning. I hope I can address some of the points that were raised this morning and answer some questions.

To start off, I think this is an important opportunity: one that we see very similar to what many of the speakers have identified this morning. When we're talking about the importance of AI and what's important to the development of AI, I think the European Commission and others have identified some of these opportunities and challenges correctly.

The importance of data in that context probably can't be understated. We talked a lot about the value of data in that context, and Mr Gross mentioned earlier the economic value of data that we'll be examining in upcoming proposals. One important point that I think we always want to remember is it's not the value of the data as such but it's the insights and outcomes from that data analysis that power all of the benefits from data analytics that we'd be looking at, particularly in the context of AI. AI depends certainly on mountains of data, but also cloud computing technologies, processing power, algorithms, and skills and talent to be able to ask the right questions of the data, to assemble that data, to combine it with other datasets, and to interpret the patterns and insights. So it's a vital element of this. But access to those tools and technologies, access to the talent, is also one of the more important things to keep in mind, because the data as such may not have as much value unless it's analysed with the right tools, by the right people, with the right sets of questions – and toward the right aims. And I think that's an important part.

We talk about this data divide, and I wanted to spend some time addressing that today. It was mentioned earlier in one of the questions. There is an increasing concentration, or a risk of increasing concentration, of data into the hands of certain countries or certain companies. The data on that is actually pretty convincing, and in order to close that data divide so that the questions and AI technologies that are being developed don't find themselves biased towards certain sets of values or to certain objectives, to ensure that the benefits of AI and the benefits of data reach as widely as possible, we want to close that data divide. I think that's been outlined in the European Strategy for Data, and it's certainly a goal that we see across the globe with our customers and our research partners and others. And Microsoft wants to do its part.

I think a lot of what we're doing to address that reflects a lot of the objectives that the Commission has laid out for its Digital Strategy, both in the context of AI and with data more specifically, and a lot of that comes up to data sharing and open data, as we often refer to it. I think we believe that the most successful companies of the future are going to be those that are most open.

We've had our own journey in that space, where we've come up with many learnings from that and from an open source perspective, but it's very unlikely that any one company or one entity on their own has enough data at their disposal to be successful with AI. It's going to require collaboration and cooperation and access to data with other players. So data reuse in that context and availability of data is as important, as the Commission laid out earlier, once again particularly in the context of AI. But if you look at the reservations that companies or researchers or public sector bodies have in sharing data, we look at what we hear from

customers about, ‘well, the rules are unclear’, ‘I have privacy concerns’, ‘I’m worried about competitive impacts’, ‘I’m worried about divulging my trade secrets’ – all those are valid reasons. And the optimistic angle is that we do believe there’s technology now, whether encryption technologies, privacy technologies, platform technologies, that can mitigate some of those reservations. It’s thanks to some of the technologies that are there that we can facilitate data collaboration where certain players never have access to the raw data itself, but can run analytics and gather insights on top of ciphers and data that prevent either those privacy impacts or some of the trade secret and IP protections that, I think, very often still make folks wonder or make people reluctant to share data.

So we’re very supportive of the aims of the Strategy for Data. Anything that can foster greater data reuse and access to data is something that should be supported. I think the Commission has come up with some ideas there that we’re certainly supportive of, the more that we can make it clearer and the framework clearer for everyone to know what they’re allowed to share, how they’re allowed to share it and how can that be done most effectively? And the more we build up use cases for that, we can, hopefully, start to focus on a shift of that mindset, which again takes on all the more importance in terms of reaching some of the AI objectives that have been laid out.

We’ve launched an open data campaign to commit ourselves to leading by example in this space and have launched a number of collaborations with partners around the world and these complex different scenarios – we talk a lot about data sharing, and many folks think it’s opening up everyone’s data for everyone to use however they want. And there are scenarios where that makes a lot of sense, but it’s also one-to-one scenarios, one-to-many scenarios, closed-group scenarios. There’s a lot of B-to-B data sharing already going on in Europe, particularly from some of our most important customer segments in manufacturing and climate, in health, that’s leading to some tremendous outcomes. That shows the opportunity that we have here, and addressing the reluctance and reservations that people have in terms of sharing that data, a lot can be achieved through the legal frameworks, and we’re excited about some of the approaches the Commission has taken with the Data Governance Act and with the Data Act in terms of fostering that development further. Hopefully, if successful, this will close that data divide and make it easier for companies, researchers and citizens to benefit from data the same way that we’re seeing some of the more exciting outcomes from AI already. I will stop there and am happy to answer any questions further on.

1-020-0000

**Gemma Galdón Clavell**, *Founder of Eticas Foundation and Eticas Consulting*. – Hi, good morning. Thank you for the opportunity, the chance to represent here today the industry of responsible innovation around data and algorithmic auditing. We’ve all been witnesses of an explosion of data applications in the last few years: applications that run on personal data, on the information of European and global citizens. This explosion of data applications has been driven by consumer applications led by US companies.

These US companies use an optimised technology for advertising, for behavioural nudging, to increase revenue. These are the algorithms that have been taking part in our daily lives in the last few years. What’s happened recently is that these applications, these AI systems that have been developed for the consumer market, are being increasingly used in high-risk contexts.

We see the same algorithms that have been implemented by supermarkets being used in social services to decide who gets access to what, in education to decide which students need support in their studies, in health, in security or in work.

In this transition, a lot of things have happened. When you use an algorithm in an online supermarket, and the algorithm suggests that you, as a consumer, buy whatever people bought

in the past, if the supermarket makes a mistake and suggests that you buy something that you're not interested in, the consequences of that are not high stake. It's not a big problem if the algorithm gets it wrong.

But if, in a hospital, the algorithm suggests that you get the same treatment that most patients with your condition got in the past, if that's a wrong decision, this is a matter of life and death. So what's happened recently is that we've transposed the same low-quality AI, the same AI that does not care about its social or environmental impact, the same AI that is often just a glorified excel sheet that cannot account for complex human processes, the same AI that optimises for scalability and profit and not usefulness or compliance, this AI, this AI innovation driven by US companies, has been transposed, translated directly without control, and oftentimes without practical regulation, into high-risk contexts, and that's resulting in a huge crisis in technology around the world. No one would conceive that in the pressures around the pandemic, we would develop vaccines without going through clinical trials. And yet for technology, we keep allowing the technological industry to launch products that reach consumers and clients without any kind of oversight or control.

In my experience, AI in high-risk contexts requires better AI. We require new technologies and new business models. We require AI that is not biased, AI that allows for redress; AI that optimises for well-being and for solving problems, and not just optimising profit or scaling; an AI that is developed multidisciplinary. I keep seeing how we keep asking engineers to code a world that they do not understand. We cannot have good AI in the health sector unless doctors and patients are involved in the development of those systems. And that is not the market that we have at the moment.

So the EU has led a response to these developments at the regulatory level – we've seen at the beginning of this hearing there's a lot of activity and activism in regulating this space – but the EU is not managing or even intending to disrupt the market. So the EU has not yet promoted or supported a different kind of innovation market that understands that the AI that we need for high-risk contexts needs to be different from the AI we've inherited from social media and in the Silicon Valley model.

So the trust crisis that we have with technology at the moment proves that the Silicon Valley model is ready to be disrupted, but I'm afraid that the law alone will not do that. There is limited efficiency in promoting and passing laws that require better technology when no one's selling it. We require strong encryption, robust anonymisation, auditing methodologies, governance requirements, privacy by design, practical applications, but the market is not offering it. Civil society at the EU level – and by civil society, I mean everyone – so hospitals and schools and government – cannot buy better technology because the market is not offering it. So there's a need to go beyond regulatory leadership around responsible AI and promote a market that develops different technologies, that develops technologies that are at the level of the challenges that we are addressing in high-risk contexts.

So there's a space that is ready to be seized and there's a lot of people, there's a whole ecosystem of responsible innovation and practical ethics at EU level that is willing to help. It only takes political will.

1-021-0000

**Stefaan G. Verhulst**, *Co-Founder and Chief Research and Development Officer of the Governance Laboratory (The GovLab) at New York University (NYU)*. – Thanks so much Chair, and thanks to the distinguished Members of Parliament for inviting me to address the issues of data and AI today.

As mentioned, I'm Stefaan Verhulst. I'm the co-founder of GovLab but I'm also a member of the expert group to the European Commission on business-to-government data-sharing and also a member of the expert group to Eurostat on how to use private data for official statistics. And it is also within that context that I will provide some lessons learned and some suggestions moving forward, especially in the context of the forthcoming Data Act.

At GovLab our mission is to look into how we improve the way we govern, by which we mean how we go about making public policy decisions, such as the ones that we are talking about today, or how we define and design public services that can really improve people's lives, or how we deal with large public problems, such as climate change or economic inequality.

And we start from the premise that new technologies, and specifically data, has real potential to transform the way we go about governing. More specifically, we believe and we already have, of course, multiple examples and we already have multiple initiatives that have proven that the use of data (*inaudible*) not only makes governance more effective but also more legitimate, because it is more evidence-based and there is definitely more transparency on whether the objectives of the intervention are met.

Now, we do have a problem in order to make governance more data-driven or evidence-based. And the problem to a large extent in Europe, and globally (because we have a global footprint, including we do a lot of work in Europe as well), part of the problem is that at the moment, we have a massive asymmetry with regard to those that have access to data, to expertise – or computational power for that matter – and those that don't have access but need access in order to actually develop better governance solutions to the problems they have today.

And so in order to address this asymmetry, we really, as a society, have to have a more proactive approach to really think about how we provide access to data that matters and how we then, when we have access, reuse it in a responsible way, in a way that is aligned with European values within Europe, or fundamental rights as well?

And that is why, first of all, we had to think about not only in our policy approaches, not only how we go about preventing misuse – which obviously is a key concern, and I think some of the policy instruments that are discussed, they really have taken this on board – but we also have to start thinking about how we prevent misuses if we don't get the policy instruments and governance structures right, so that we have an opportunity cost of actually not using data for the things that matter in society. And that will require a new model of data responsibility, both within the private and the public sector – data responsibility not only in terms of handling risk of use, but also looking into what is the risk if I don't use the data to generate social impact, to respond to disasters or to help with the response and recovery of the pandemic, for instance.

So to that end, any policy instrument that we are discussing today should really think about new models (*inaudible*) and governance – data collaboration – because as was already mentioned, this is not just about open data, it's really about engaging with those that have data – or all the data subjects for that matter – around access and re-use of data in a responsible way, and that will require new kinds of partnerships, new kinds of structures and new kinds of models on how we go about accessing data.

We have called this 'data collaboratives' over the last few years. We have built a few data collaboratives; we also catalogued the existence of data collaboratives – and I think we have the largest repository at the moment of examples that we can point to on how this has been done. A key lesson learned is that there is no one way of doing this, and there's a lot of variability in doing this, but it can be done.

But lesson two is that we really only have seen the tip of the iceberg. Many of the initiatives are pilots, many of the initiatives are financially sustainable, and many of the initiatives quite

often don't take into account the concerns of those that are in the data. And so we need really a more systematic, sustainable and responsible approach to developing data collaboratives in order to promote, reuse and access data in a responsible and, of course, a way that aligns with fundamental rights as well.

And to that end, we not only need governance, innovation and technological innovation, which was also already mentioned earlier today, which indeed shows big promise for accelerating some of those data collaborations, but we also need a minimum of four interventions, and I will briefly highlight those interventions which, from my point of view, the forthcoming Data Act should really take seriously.

First, we need to strengthen the societal demand for data in a way that prioritises the kinds of data collaborations that we need. Clearly, we have already seen that the Data Governance Act allows for data spaces, but we need to really develop a bigger granularity of purpose. What is the question that matters to Europe that data should start answering that AI could start developing solutions for? And to that end, we need new methods to actually prioritise the purpose for reuse. And so here at GovLab we've developed an initiative called 'The 100 Questions Initiative', where we try to identify the 100 questions that matter that we have not answered yet. We could answer if we found a way to access data. And so one way to think about this is that the next instrument may want to look into establishing structures or establishing institutions that can actually prioritise and (*inaudible*) questions that (*inaudible*) to the Member States or to residents of the cities of Europe as well.

The second aspect that is going to be important to make data more systematic and sustainable and responsible is to also develop and fund within both the shareholders, but also within those (*inaudible*), and that function is what we call data stewards or (*inaudible*) stewards, because there is a lot of variability, naturally, to develop a solution to a request for data, and that requires a sophistication that we haven't seen within corporations or the public sector at the moment. And quite often, it requires a clear identified mandate. At the moment, many people are asking us quite often: who should we contact in an organisation with regard to the data? Most of the time I have to say: good luck finding out, because there is no function that really can respond to solicitations for data in the public interest. And so we need to really initiate that, and so one way to do this is basically requiring that at least there is a function – that doesn't have to be, anyway, an individual; it doesn't have to be a full-time individual, but there has to be a point of contact that has the sophistication to respond to requests as well. The third element is that, because we're talking about re-use of data, we really need to also establish the (*inaudible*) we use. And here we need really a more broader public debate about what kind of reuses are appropriate, are actually desirable, and what kind of reuses are really problematic or where there exists a high concern. And so we need new deliberative kind of mechanisms that could be citizens' assemblies in order to actually have that sophisticated deliberation about how you should structure the re-use of data and what kinds of re-uses would be desirable moving forward. And so here, a data assembly that could be at European level, could be at Member State level or could be at city level, would be desirable to actually establish that kind of social licence.

And lastly – and here I will end – we also need more data about the use of data. If we are talking about using data for evidence-based policy-making, then we also need to have data about data. And to a large extent, we really don't, quite often, know what is the potential impact of data collaboration. We don't know what works and what does not work, because a lot of the initiatives are not measured. And so if the next data act also makes sure that there is evidence-gathering on the impact of any intervention and especially the impact of re-usable data in both a positive and negative way, that would also make the data space actually more data-driven.

So with that, these are some suggestions on how we can really prevent the misuse of data in a manner that is responsible, systematic but also sustainable.

1-022-0000

**Walter Palmetshofer**, *Project lead, Open Data Incubator (ODINE), Open Knowledge Foundation, Germany.* – Thank you so much for having me and inviting the Knowledge Foundation to this intervention. I also want to thank the speakers before on pointing out the important issue of data.

The Open Knowledge Foundation is fighting for open knowledge and democratic participation by developing technologies and tools that strengthen the civil society – therefore, also the title ‘the promise of developing with, not for, the people’. I think this could be one of the really important and great strengths of Europe.

Having said that, I admire the approach of trying to achieve a forward-looking career and outcomes within the European digital decade with all the different policy frameworks. When we talk about the fast-moving, cross-cutting nature of digital technologies, it means that previously distinct regulatory regimes may become increasingly interconnected, for example in content competition, data protection and so on.

And it’s my understanding, according to statements from the European Commission, that the three main goals and promises of the EU in the digital domains are like strategic autonomy, creating an alternative to the US and China, as sovereign and as independent as possible, human-centric, which means for and by the citizen, as von der Leyen said, and the Fit 55 reaching minus 55 CO<sub>2</sub> output by 2030.

And for all those goals across the board, we need data. That’s my simple intervention about especially missing data, as Stefaan said before, and we are missing data since years, and without that data, it will be hard to reach that goal. Let me show you two examples where we clearly didn’t reach that goal in the last decade.

The first one would be public transportation: how to get from point A to Point B in Europe, across borders with public transportation. Imagine how convenient that could be, and also saving CO<sub>2</sub>. And we’re not even talking about real-time data, like with a bus or the trains really, but schedule data.

It’s still not possible in the year 2021, so my bet is somebody will be landing a rocket on Mars sooner than we have real-time data for public transportation in Europe. And if you don’t even get real-time data for public transportation in Europe where this data is standardised as it’s not personal content, it will be hard to get more difficult data like health data.

Then as another example, we have COVID-19 and health data. The pandemic hit us unexpectedly. Clearly we were not ready back then; it took weeks and months to get simple data aligned, like how many hospital beds are available, what kind of patients are there, how many in the ICU. Nowadays we are still struggling across countries about the patients – are they vaccinated in the hospitals or not?

So that missing data slows down the policy comparison across countries and also helps spread fake news. So we have 20 months into the pandemic where we failed. Same thing goes with the corona tracing app across borders, and there are plenty of other cases. And I think we need to find a way to accelerate the process of getting data.

In order then also to use the data for AI, which clearly that’s the goal, and I can clearly simply explain two ways where in the policy field we are currently struggling with getting data. One

is the Open Data Directive. By 16 July this year this should have been transposed into national laws – that didn't happen. So that means, since the laws are not there, the process of getting the data is not there. So we have another delay for months and years.

The other thing is on that Open Data Directive, the so-called list of high-value datasets. The high-value datasets are datasets which have the highest potential impact for society and the economy. It was used to get the high-value datasets out of the Open Data Directive in order to get the Open Data Directive done.

The high-value data list should have been in place since Q1 this year. It's still not there. We're still talking about getting the geo data because it affects some business interests and we're still talking about getting companies and company ownership data. Company and company ownership data will be really important for more transparency and anti-money laundering, not just for Europe, but also like for journalists across tracking money back in the European Union.

Both are delayed – delayed on purpose by industries and interest groups. And on one point, it's understandable that there's a certain trade-off between that and the argument, as before, that big companies are using data. But if you're not opening up the data itself, there's no data at all.

And what I've tried to explain before with the transportation data, the mindset that the culture of having, like, discussion still going on in 2021 is something that companies think they can sell the data – the schedule data, when the bus is running and getting money for it – while basically the income is fares and substitution by government.

So this closed sharing culture needs to be changed in order to bring Europe as a real third player up in the market. And I know I'm barking up the wrong tree here to a certain degree, but it would be really helpful if people of the Parliament take this issue seriously and address it and let it trickle down to the Member States. Because if you imagine if a new pandemic would come now, by the end of 2021, how are we ready to respond to this one? Do we have now the data for fighting a pandemic after 20 months in place, or not?

The other big thing would be how to fight the climate crisis. We probably need to act fast on that, since we have, like, one decade left on the so-called 'digital diktat' on reaching the climate goals and having a timeframe where the regulatory frame is not up to the task to respond to it. And I think it should be in everybody's head that we shouldn't be begging companies to share their data, which has a huge impact on society.

There used to be two great examples on city-level policy where it came down to opening up data from Airbnb regarding the rental situation, which is a huge topic in Europe, in cities, and also mobility data from mobility services to figure out where transportation is going and what can be done to reduce car traffic. And there was no framework: each city had to decide by itself. I think it would be great to have a strong regulatory framework to map quickly datasets on those things.

Other quick remarks would be that the Data Directive is still hurting innovation and small start-ups in Europe. We still don't have a decent broadband across Europe, even in European capitals. With that, it's difficult to get a digital decade. And for the Digital Governance Act, I recommend the suggestions by the My Data community, for human-centric approach. And for a human-centric AI framework, I recommend the statements from Algorithm Watch, combining with other civil society organisations.

So we need more training, professional research, concrete investment in data and people, especially in the area of AI, since Europe doesn't have military spending like what the other two players have. And if you take the third alternative – climate crisis – seriously, you need to

change the data culture or map the data: the promise of it developing with, and not just for, the people. I think that would be the strength of Europe.

1-023-0000

**Eva Maydell (PPE).** – Good morning, I was saying that I've noticed that there's clearly a common element in your presentation about the way we make use of the data that we have out there. But getting the insight of the data and putting them into a business or informing decision-makers is not that easy at times. It requires a certain data-sharing culture. The rules for data have to be there, require skills. So, my question goes to Stefaan Verhulst, but also if other panellists want to chip in.

Stefaan, in your research practice in The GovLab, what has been the main enabler to kick start and maintain the data-sharing initiative that can inform decision-makers? Do we need to change the questions that we ask so that they can be solved with data? And what else can you share with us from this project of yours?

1-024-0000

**Stefaan G. Verhulst, Co-Founder and Chief Research and Development Officer of the Governance Laboratory (The GovLab) at New York University (NYU).** – Great, thanks for the question, and yes, just having the data won't make a difference. Obviously, in order for data to be valuable, you need to go from data to insight, from insight to action, i.e. translate the insight into ways to actually make decisions and initiate actions. And indeed, one key quite often success factor is actually having a good understanding A, on what is the question that matters? and B, is that a question that we can answer, and if so, how? And what data do we need in order to make progress with the question? But then also early on within the data collaborative environment, having a clear understanding of what we shall do if we have the insight. Too often, what we see is that many of the data collaboratives are focusing on questions that quite often are hard to answer with data or questions that frankly doesn't matter because they start with data and look at what the data can tell us as opposed to starting from the question: what is it that we need to know, and then what is the data that we need to answer that question? But then also, what we see happening quite often is that, once the insight is being provided, then suddenly there is no audience to actually take the insight and translate it into action. And so we need end-to-end kind of data approaches to really make sure that we change the (*inaudible*) have a more sophisticated methodology of using data in decision-making as well. So, that's the shortest answer I can give for now, but happy to follow up. And we are actually also looking a lot more into how we turn insight into action, because that is the last mile of using data for policy-making that quite often gets ignored.

1-025-0000

**Chair.** – As we only have three other speakers, is there any other on the panel who wants to comment on this question from Ms Maydell? Just open your mic if you do want to, from the panel. It doesn't seem so, but later, at the end, I will give the floor to all the panel speakers so you may comment also on the questions that were not directed to you.

If you will allow me, I will pose a question myself. It is also for Mr Stefaan Verhulst. I know that some cities, for example in my home country, Finland, are trying to make use of the data. They also joined the movement to be able to deliver it respective to the individuals, and as the public sector has many registers on data, they know when I went to school, they know some of my health data, so they know about education and health. Maybe the bus company can be owned by public actors. So they have many registers. The question now arises that they might even see that I have not been to the doctor for a long time, and then my habits that I have may cause problems. Nowadays it's easy to maybe say that your child is now six-and-a-half and should start school in half a year's time, so nowadays they are using the text message to say please register your children to primary school if you want to, and that school is compulsory. So how do you see it? Should the municipality or public sector be the collaborative, or should there be some specific rule for public sector, or how would you elaborate thinking that there might be

knowledge that would save a life or could be very beneficial for an individual of the city, for example? Does this bring you some idea on how to take care, respecting the GDP or respecting also that some services are bought from the private side? How would you see a functioning city helping the citizens to get the best service and still be respectful of the data privacy and other aspects that we want to have in the data economy?

1-026-0000

**Stefaan G. Verhulst**, *Co-Founder and Chief Research and Development Officer of the Governance Laboratory (The GovLab) at New York University (NYU)*. – Thanks for the question, and indeed Finland has been a leader in this space as it relates to secondary use of data or the re-use of data for public interest purposes. Frankly we have a lot to learn from what's happening in Finland, within the cities and at the national level as well. But yes, I think you point to a really important question on what the role of local government with regard to creating data collaboratives is. From my point of view there is a tremendous opportunity here to develop city data collaboratives together with the private sector, but also with citizens and residents of the city, to really start indeed answering a few questions that would improve the well-being of residents in an equitable manner. Because I think key is, of course, making sure that we also deal with the vulnerable populations within cities that often are missing in the data. And so we have seen a range of efforts here, but again – what we do need is a clear understanding on what are the kinds of questions that we as a city want to address, and so that's where, for instance, also in New York City, we started an initiative around 100 Questions, for the other 100 questions that matter, because you do need to engage with citizens and residents on what are the kinds of questions that should be prioritised.

And then you need to start understanding what the data asset that resides within the city is, both within the public and the private sector, in order to make progress vis-à-vis those priority questions. That requires a clear understanding of who has data and that requires a clear point of contact, i.e. a data steward within corporations and organisations that can engage in actually identifying data sets that could help answer those priorities that have been listed by the public and by policy-makers as well. And to that end, quite often it's not just a data collaborative that you need. You really need a network of data stewards that on a regular basis you can engage in order to actually then develop this kind of infrastructure that can be leveraged.

Does that mean that this is a data pool where all data reside? Does this mean this is a data comment? Does this mean this is a bilateral? From my point of view it requires a clear understanding of what is the purpose and then what is fit for purpose. Because it's not always a data pool, it's not always a bilateral, and so we really need a sophistication to figure out what is fit for purpose in a way that deals with expectations of residents so then actually delivers the answers that matter in a manner that is systematic, ongoing – ideally, if needed – and also financially sustainable.

I think we have seen some cities that have tried to do this, but again I think there's a lot more sharing of what works among cities that needs to happen to scale this up. At GovLab we just launched yesterday a City Incubators initiative where we are actually helping cities to really establish data innovation approaches to reach that end, and I think it would be great to learn and see who in Finland we should invite, to share what has been done there as well.

1-027-0000

**Chair**. – Thank you for that. I could say some names, and I know some of the cities in Europe have been active, I think Barcelona and some other cities around.

1-028-0000

**Damian Boeselager (Verts/ALE)**. – Thanks a lot Chair. So first, maybe to Mr Rollison or to all of you, thanks a lot for taking the time. It was very insightful listening to your interventions, and a question, Mr Rollison, on interoperability.

I think it's clear that we have different service providers, and the question is, in the future data-sharing market, and that's also what the Data Governance Act is about, there will be a lot of transfer of data between different organisations, be they private companies or the governments. And so my question is: how would you best ensure the interoperability of different systems? Is it (a) by, you know, trying to push for industry standards as Ajax is trying to do or even building plugins like Ajax is trying to do it? Or would you say that there is some form of regulation, legal frameworks, standardisation needed that we should look into?

And on your points, Mr Verhulst, on the missed opportunities. I very much sympathise with the approach of saying that we should be innovation-friendly and not, you know, also (*inaudible*) in the industrial data revolution, as we have potentially done with the present data revolution. But still, I'm always wondering how we can ensure (and I asked this before) that there is fair access for all players, small and big, to the potential data that will be shared?

So how can we ensure that value-creation and data-sharing is fair and that there are different actors and the market doesn't concentrate too much?

1-029-0000

**Jeremy Rollison**, *Senior Director, Data Policy & Digital Inclusive Economy, Microsoft*. – I think it's a terrific question, and it comes back to one point that I wanted to make earlier. We do talk a lot about particular scenarios here or particular AI applications or use of data. But the scenarios and the opportunity, where I think the reason that we have such important debates about this is there are so many different scenarios that this captures, and it does require then a mind-set shift on the policy-makers' side, and we're talking about public sector data on the business-to-business side across the board. And I think that was a little bit of an answer back to the question that MEP Maydell mentioned earlier.

But to the question on interoperability, it's vital to this space. There are challenges, of course, when we're talking once again about those different scenarios that I mentioned – AI and the re-use of data in a manufacturing context or in a health context or in a climate context, the data formats and the proprietary formats from customers that are using these software solutions to develop their own tools. There's justifiable reasons for, many of the proprietary approaches they take for their own systems. But interoperability more broadly, I think the good news is there's a tremendous amount of demand for that in the market. So, if it's related to the use of our cloud – Microsoft participates in a number of international standards bodies and organisations to make sure that we do accommodate whatever format our customers would prefer to use, that anything they're doing on our cloud is interoperable with as many other clouds as they may be using or many other partners that they may be working with. So I think it's an absolutely vital part of that.

And you mentioned Gaia-X: a good example comes from Gaia-X – the Eclipse Dataspace Connector, which came about there to help facilitate data-sharing in many of the data spaces envisioned in the strategy for data. That's something that was built in co-op, driven by industry, built with partners within Gaia-X from across Europe, something that we are super supportive of and active on. So I think there are industry-driven standards that the Commission would like to see – that's happening in bodies like Gaia-X, it's happening at the ISO level, of course, when it comes to – and the importance of that relates not just to formats but taxonomies about the type of data we're talking about here.

So interoperability – no, I think it goes without saying it's a vital point of this. The good news is that it's something our customers demand already. The good news is that, if you want to be

successful in attracting that, you need to support as many formats as possible. So there's a lot of market demand, but there will always be, of course, proprietary approaches taken, and we see that from sector to sector. But no, I think you mentioned it really well. And particularly in groups like Gaia-X, there's an opportunity to drive more of these standards that can facilitate more and more of that interoperability that, indeed, in a data-sharing context particularly, is incredibly important.

1-030-0000

**Stefaan G. Verhulst**, *Co-Founder and Chief Research and Development Officer of the Governance Laboratory (The GovLab) at New York University (NYU)*. – Thanks for the question, and indeed, fairness should be a key principle and concern as it relates to generating data ecosystem, and I think there are a variety of ways to go about it. The first, I think, which I also referred to in my opening remarks, is to (*inaudible*) a way, a mechanism, (*inaudible*) what is the demand for data? Quite often we talk about those that need data don't have the data, but let's first express what is the data that is needed, especially among those groups that might be the smaller ones that don't have the capacity to express their needs and demand in fora that others might be able to do. So having a mechanism where one solicitation exists with regard to what is the demand for data and why it is that you don't have access to the data would be a first step to actually understanding the problem of fairness and who is being excluded and for what purpose.

The second one would be really about establishing more transparency, which also goes back to my remark on how we actually don't know much about (*inaudible*) data is being used, is being shared – or not shared, for that matter – because very often we don't really have evidence. So having better transparency (*inaudible*) system would help (*inaudible*) what are and who is being shared, but also if there are data stewards, you could have transparency with regard to how many requests have been refused, for instance, if you actually have the data, which (*inaudible*) that has some kind of an obligation expectation with regard to responding to solicitation and, for instance, publishing – we received many responses, so many requests – this is how they were handled and what was the procedure for actually handling the request. At the moment proceeds are not shared, there's quite often no understanding of how my question for access to data is handled. (*inaudible*) more transparency of that procedure through data stewardship would help.

Thirdly, lower the transaction cost. It's not cheap to access and re-use data, and that is both a result of technical investments that are required, but quite often it's expensive because you have to hire (*inaudible*) to develop data-sharing agreements, and if we tried to lower those transaction costs by, for instance, having data-sharing agreement templates, (*inaudible*) and that is being endorsed by the industry associations, for instance, or public sector – including, for instance, the European Parliament – for all the institutions, that would help. And lastly, fairness also needs to be embedded in terms of capacities and competencies, and again, it is interesting to hear that 'skills' is a clear element of the Digital Compass, but it also needs to be skills with regard to understanding how to actually formulate a request for data, how to then ingest it, but also, on the other side, having capacity to actually be able to respond in a sophisticated way for data to make available. Those are skills that at the moment are quite often not on the upskilling or reskilling or training curriculum, and so we really need to invest in actually building that cohort of data stewards as well.

1-031-0000

**Chair**. – Thank you. Do we now have a question from Susana Solís Pérez? Is the connection working for her now? (*negative interjection*) That's a pity, because she was prepared to pose her question. So she's not connected at all, so not without a picture, even? OK, then we apologise for this technical problem. And then it's time to, maybe we can have a round – we have a few minutes' time. So if the panel wants to have some closing remarks, we can have from everybody a word of one max two minutes. If we call the same order we had. So Rollinson,

Galdón, Verhulst and Palmetshofer, please have the floor for one or two minutes each and you can have the floor right after the previous speaker, but please stick to the time so we are ready for the next one in six minutes. Rollison?

1-032-0000

**Jeremy Rollison**, *Senior Director, Data Policy & Digital Inclusive Economy, Microsoft*. – Madam Chair, yes, and thank you, I'll stick to the time.

Further to the point I made earlier, again, I appreciate the opportunity to have this conversation, and it's one that I think we can all agree should happen more frequently and go into depth on some of this.

I would emphasise the different scenarios that come up in this context. We've talked a bit today about business-to-government data sharing. We talked a bit about business-to-business data sharing. We talked about some consumer applications. We could have conversations about industrial applications. We can have conversations around some of the exciting data-sharing that's already going on, which technologies are being used, which formats are being used. The opportunity is huge. But what the Commission started off by saying, that there is this perception and then a lot of data to support this growing data divide and greater access to data and the ability to re-use that data is one way of closing that divide.

It requires a mind-set shift, and that mind-set shift will come with support from legal frameworks, access to technology, development and access to talent and skills. As Stefaan mentioned earlier, asking the right questions of this data, understanding what challenges we want to address, but making sure that there is this mind-set shift occurring across policy-makers, across businesses, across citizens to understand the risks and understand the right type of questions and the opportunities that we can come up with. I wouldn't lose sight of the different scenarios that are there and the different needs that each of those scenarios and sectors and different situations may have. But the key word is collaboration. So I agree with a lot of the points that were made and happy to hopefully continue the conversation in the coming months.

1-033-0000

**Gemma Galdón Clavell**, *Founder of Eticas Foundation and Eticas Consulting*. – There have been several mentions of fairness, transparency and some of the principles around responsible innovation in AI, and I wanted to share with you some of the practical issues that we encounter when we are trying to develop products and services that cater to those interests.

So, for instance, the principle of data minimisation: we are finding that often times when we audit algorithms, when we work with industries and the governments in Europe and around the world, that we realise that responsible innovation is an added value and a competitive advantage. We find with data minimisation that if our clients minimise the data so they don't collect sensitive categories of data, we can protect vulnerable collectives and vulnerable groups. So if I don't know that you're a woman in a banking dataset, I can't protect you. I can't measure whether the algorithm is working fair for you. So now we are developing mechanisms by which the sensitive data would be collected by the auditors alone and not by the clients or the developers or the implementers of the algorithm. But we're trying to come up with these new governance mechanisms, but also technologies that can cater to those principles.

But sometimes some of the principles of data protection don't help us in our efforts to effectively and practically protect people in AI systems. The same with having a human in the loop: Europe is trusting that by having a human in the loop, we will have more responsible AI. In our experience, humans in the loop often reintroduce human bias into systems. So we may 'unbias' an algorithm, and then when the human intervenes, all the dynamics of the way they've been working in the past get reintroduced into the system.

So again, I think we need a lot more collaboration on what those new regulations mean in practice and how to innovate in practical and ethical solutions to the data challenges that we have.

We are currently teaming up with different civil society organisations in Spain, specifically, where we're based, even though we work internationally. But we are externally auditing systems and algorithms in banking, in health, in the world of work, in security – like in Spain, for instance, the risk for women that go to the police because of domestic violence, their risk is assigned by an algorithm, and it has never been audited, even though the Spanish law provisions that any automated decision system implemented in the public sector needs to go to an audit.

So we are trying to find ways to push for better compliance through practical means and practical ways of engaging civil society. And I believe there's still a lot that can be done in that respect. And as the previous speaker said, I'm very happy to continue this conversation in exchange.

1-034-0000

**Stefaan G. Verhulst**, *Co-Founder and Chief Research and Development Officer of the Governance Laboratory (The GovLab) at New York University (NYU)*. – Just to build upon what was mentioned there as well, I do agree, indeed, that we need a mind-shift, but also we need innovation in what we call data responsibility. And I already mentioned that we need to broaden the concept of data responsibility, both in terms of responsibility to protect, but also there has to be a responsibility to share when there is a clear public interest being presented, and doing that in a way that then respects fundamental rights and expectations of those that, of course, are in the data.

But then thirdly, we also have a responsibility to act, and it's going back to the earlier question with regard to how we actually go from insight to action. And I think it's not just good enough to spend a lot of time and energy in actually generating insight if then no one acts upon the insight and if there is no also kind of skillset to then actually take the insight and turn it into action. And again, COVID-19 has been a really important watershed moment to illustrate the need for access to data, illustrate the need to actually pose the right questions, because many questions were posed that didn't matter, ultimately, for the response and the recovery.

But we could have done a better way if we would have coordinated even and developed a list of the priority areas that we need to get better insight on, and let's work together – as opposed to the massive, fragmented responses that we have seen. But then also, quite often we've seen that we've had insight but then there was no kind of responsibility or accountability to actually then act upon the insight in a manner that improved the well-being.

And I think reframing and having a clear, broader notion of data responsibility, which we turn into also then a real new profession of data stewards that can handle those three kind of roles and responsibilities, is really what we also need to work towards.

1-035-0000

**Walter Palmethofer**, *Project lead, Open Data Incubator (ODINE), Open Knowledge Foundation, Germany*. – On the topic of data responsibility, I think what makes Europe in this case really nice, and was mentioned before, was Finland. In Finland, develop – knowledge (*inaudible*) on my data approach, that came from a completely different background than Germany, out of a culture where literally nobody thought about data privacy because historically there was no need for that. Compared to Germany, where everything is first – data privacy, data privacy, data privacy – out of a lawyer perspective. And if you combine those two approaches, like the one really almost not open-minded, like what could be done with the data because we just want to have fun, and on the other side, the German approach: follow it down for privacy. That would make a good approach. What we sometimes have here is the German

approach first, like, let's bring in the lawyers, let's kill everything, and then we open up a little bit. The fundamental beauty about the data strategy from Helsinki is that data is in the centre, and everything is data-related across the board. What other cities are doing, like a smart city approach, is a little bit data there, little bit data there and a little bit data here, and let's later figure out how it comes together – the so-called interoperability. The interoperability is technically, maybe, a little bit messy and complicated, but if it's a clear call like having access to O and API or laterally like having it open by default and then going down to little things, having interoperability by default, I think that would be the approach to this. And this is a cultural change which needs to trickle down across the different boards. So let's open up more data and also, as I said before, think about or care about privacy or the recommendations from an algorithm (*inaudible*) my data community. I think they're safe on those what should be concerned for the citizens.

1-036-0000

**Chair.** – I thank on my behalf the panel. Thank you very much, and I'm sure that many MEPs want to continue (*inaudible*) the second panel, which will be chaired by AIDA Member Radosław Sikorski, so I give him the floor. Thank you on my behalf for this morning.

1-037-0000

## IN THE CHAIR: RADOSŁAW SIKORSKI

*Member of the Special Committee on Artificial Intelligence in a Digital Age*

## Panel II

1-039-0000

**Chair.** – I'd like to take the opportunity to welcome four guests for the second panel. Thank you, speakers, for your time and participation, and after the presentations we will have a Q&A section. First to speak will be Mr Luís Paulo Reis. The floor is yours, sir.

1-040-0000

**Luís Paulo Reis, Professor, University of Porto, Portugal.** – I would like to talk a little bit about artificial intelligence and its correct use in public administration with emphasis on the correct use of data in public administration.

There are a large number of opportunities for using AI in public administration, because you have to process a huge amount of data, but also to solve very complex problems. And also, a significant role in the modernisation of and improvement of public administration can be made by AI by one side extracting obviously appropriate information from the available data, but also using it to help the decision-making process.

We need initiatives to open and re-use data. I fully agree with previous speakers and some of the ideas of the Commission to open data, because we really need to open up data and the free flow of data in order to be able to efficiently use AI for Europe and for public administration and government in Europe.

We obviously need transparency, acceptability, correctness, fairness and security on the use of AI, but we need to collect and process data, but also to solve public administration problems and other problems that demand a large amount of data.

So with opportunities of the advances of machine learning mostly, natural language processing, robotics and huge increment of the quantity and quality of data available, we are now in a moment in which we can really solve complex public administration problems. And also with

the increment of computational power, but also with new algorithms in several layers of artificial intelligence.

So we can solve problems in urban planning, transportation, traffic management and citizenship and the interface of the citizens with them, public administration and with the public sector. But think about the fact that AI is not only machine learning and data science and use of the data. It was mentioned before that we have deep reinforcement learning algorithms that generate their own data, and you have a huge amount of techniques of AI that are used to solve problems besides supervised machine learning.

We have to think that the data strategy may have to go behind only thinking about supervised learning. When we think of the ethics of using data and the ethics of the decisions, one of the interesting projects (there are a lot of them around the world) was the moral issue (*inaudible*) in which we tried to see what were the decisions of people with different skills, people of different countries and how will they decide problems, for example: will they spare a single person or five persons? And if that person was the President of the Republic, would they spare him or not? Females versus males, young children versus the old? And one of the interesting things that we discovered with this is that people all around the world decided (*inaudible*) in a completely different way. The Japanese tend to spare the elder, the French to spare the females; South Americans tend to spare young children first, and so on.

But our AI systems will have to decide this, and one of the things we need is a configurable AI: AI that is regulated for the European Union, but also that may be configured for a specific country and for a citizen, because I want my AI to decide in the same way I will decide. Obviously, in line with the regulations and so on.

So in conclusion, really, AI is growing steadily worldwide, with emphasis for machine learning, natural language processing, intelligent robotics, powered by these huge amount of data and computer power and the algorithms, but we need to open up data. We need a free flow of data: non-personal public-sector data, but also personal, anonymised data, because otherwise we will lose the race with China and with other countries that are really using data to solve global problems.

There is too much concern with data and sometimes no concern with the decision-making that the data will provide, even if the data is needed.

So we need really a kind of configurable AI in which we can configure the AI following our legislation, our country rules, with all our ethical and moral concerns.

One thing we need for sure is to use the data for the citizens and to respond to social problems, to address (*inaudible*) science's challenges, and we need specific funding for AI, for public administration and for creating a stronger Europe. We need funding for competitive projects in which public administration governments may get together with universities, research labs and companies, and develop joint projects that may not only solve a problem in Portugal or in Germany but may solve global problems in Europe for the correct use of AI in public administration.

1-041-0000

**Louisa Specht-Riemenschneider**, *Data law specialist. University Professor, External Scientific Advisor.* – Thank you very much for the honourable invitation to speak in this hearing. I will focus on data trustees and data access, and I hope I can be very clear on that.

First point, data trustees. Data trustees are the one instrument which could help to solve many problems we have at the moment with regard to digitalisation, but I think the data trustees

should be designed differently according to the problem they should solve. For example, our personal information systems, which are intended to effectuate data protection law by giving data subjects more and better control of their data, need other regulation than data clean rooms, which offer, for example, a secure environment for research with big data resources in the common interest.

The Data Governance Act, as it is now, tries much better to avoid one-size-fits-all solutions than its first draft, but still, it lacks incentives for the development of data trustees.

What is my point? My point is that, if you want data trustees, apart from the big tech companies, as much as I think they are necessary to solve many problems we have today, then the answer could not be only additional requirements for data trustees, but also incentives.

Why should a personal information management system, which could help us to solve the ineffectiveness of data protection law, be established? Why should it evolve if this means that it should only need additional requirements of the Data Governance Act?

And so first and foremost, we need a political discussion about the problems to be solved with data trustees and a discussion about which data trustees we want, and based on that, we need a regulation which includes both requirements for the safety of data trustees and incentives for their development. Such an incentive could be solving the legal uncertainty problems data trustees face with regard to data protection law.

And let me add one more thing: I still think that it's completely wrong that the Data Governance Act does not have a *de minimis* provision for start-ups, because with the additional obligations of Article 11, you hinder start-up trustees from emerging and, at the same time, you strengthen the market power of the big tech companies, which have no problem to comply with Article 11. That was my first point.

Second point: data access. When I speak of data access, I have to make clear that data access has different dimensions according to who should get access to data and for what reason. I would like to limit myself today to a dimension of data access that has been discussed far too little up to now: I mean data access for research purposes.

Data access for research purposes is one of the most important instruments we need to ensure to control algorithms which, for example, create content in the internet, block copyright-relevant content and expressions of opinion, and which therefore determine which data, which information the consumers get to know. Algorithms allow, for example, predictive policing and much more. And so I'd say that, improperly used, they could be a very serious threat to democracy, and we should be aware that we need instruments to control these algorithms and the use being made of them.

The key instrument to realise such a control of data access for research purposes, and I will explain very briefly why I think this is the case, because access to data for scientific purposes provides the conditions for regulating algorithms appropriately, because it allows us to understand how they work. So science has an intermediary function for policy. But of course, data access also for research purposes needs to be designed properly so it does not conflict with data protection law and trade secret protection, especially.

But I think, again, this is not complicated. When designing such data access rights, six main questions need to be answered, and I will answer all of these questions briefly in the following.

First and second question: who should get access, and for which purposes should access be granted? In my opinion, access should be granted in accordance with Article 13 of the Code of

Fundamental Rights to all scientists, not only to non-commercial science. A closed-purpose limitation for research for the common good is necessary. But if this is the case, if we have such limitations, such a purpose limitation, then the circle of those entitled to access data need not be restricted to non-commercial research.

Third question: who should decide about data access requests? Answer: a neutral authority to which data access requests must be submitted. And we have prototypes. A prototype could be the coordinator for digital service pursuant to Article 31 of the Digital Services Act, or Findata in the Finnish healthcare system.

Fourth question: how should the data be provided? By means of a secure server, as is the case, for example, in the *Forschungsdatenzentren* in Germany.

Fifth question: limitations. Limitations of data access should be, especially, data protection law and trade secret protection. And last but not least, the sixth question: should data access be compensated? Answer: yes. The compensation must not be prohibitively high, but it must be adequate.

Data access within these borders should be introduced in the Data Act with regard to horizontal guidelines, but also in the Artificial Intelligence Act with regard to AI-specific data access. Data access rights should be thought about in every new regulation which is introduced, and I really urge you all not to forget the importance of such data access rights for the further functioning of digitalisation of democracy and of society at all.

1-042-0000

**Thomas Bolander**, *Professor of Artificial Intelligence (AI) at DTU Compute, Technical University of Denmark*. – Thanks a lot for inviting me. The AI Act refers to the White Paper on AI that explains the goal to achieve the twin objective of promoting the uptake of AI and of addressing the risks associated with certain uses of such technologies. In other words, it's about harvesting the opportunities of AI, while at the same time avoiding the risks and pitfalls. My claim here is that both objectives are best addressed with the same single means, namely to develop algorithms with higher cognitive skills. Of course we also need to consider the potential need for more regulation, for more data, for more computing power, but my argument here is that the real bottleneck that we are currently facing is getting more clever algorithms.

Hence, if the EU wants to be in the centre of human-centred AI – human-centric AI built on trust, explainability, transparency and fairness – we also need to be in the forefront of developing such algorithms and the underlying theories all the way from basic research to commercial applications. And we don't get explainable, trustworthy, transparent, fair AI that adheres to European values just by having more data and larger computers. That would be like arguing that, if we want animals that are dependable and trustworthy and know how to act in agreement with human values and norms, we just need them to have super-large brains and be exposed to a lot of external stimuli. Of course, we have animals like elephants and whales that have larger brains than humans and can live longer, but they still lack the basic skills to interact fluently with humans and build our trust.

So the point here is that getting the right type of intelligence is more about the architecture of the brain than it is about its size or the amount of input that it gets, and by analogy, in AI it's also more about the architecture of the algorithms that we have than it's about the size of the computer or the amount of data we have. Of course, all three ingredients are crucial to make this work; it's just that the current bottleneck is the limited sophistication of the algorithms that run on our computers, and this limited sophistication is also the reason that we talk about issues like trust and explainability and transparency in the first place.

When we talk about these issues in AI, like trust, explainability, etc., it's all about getting the AI systems to adapt to how we humans conceive the world. We want an explanation that we can understand. We want a system that we can trust and that adheres to our values. So for human-centric AI to become a reality, we need systems that can relate to humans similarly to how we can relate to one another: that is, we need AI systems with some degree, at least, of social intelligence. To achieve higher levels of social intelligence in AI, we first need to have a better understanding of human social intelligence, since that understanding is crucial in order to build the computer models that we can then use to simulate it. And this calls for more interdisciplinary research.

The White Paper on AI also talks about ensuring that AI systems are trained on datasets that are sufficiently broad and cover all relevant scenarios needed to avoid dangerous situations. With our current methods and algorithms, I actually doubt that we will ever have enough data to cover all the relevant scenarios. I think rather the issue is that we need algorithms and systems that have the general cognitive skills to be able to interpret traffical situations, including unfamiliar ones. This also includes the ability to reason about the intentions of other road users, which again brings us back to the discussion about social intelligence.

So somehow, the overall conclusion here is that, unless the AI systems of the future are equipped with higher cognitive abilities like social intelligence and other issues – the ability to critically reflect on data and data sources – it's actually not likely that we humans will ever fully trust these systems, and probably in that case also we shouldn't.

1-043-0000

**Sarah Chander**, *Senior Policy Advisor at European Digital Rights, EDRI*. – Thank you very much for the invitation. My name is Sarah Chandler and I'm representing today European Digital Rights (EDRI). EDRI is a network of 45 organisations in Europe working to defend human rights and freedoms in the digital environment. EDRI has been really delighted to be invited to the committee, mainly because we've worked for a number of years now to propose solutions and AI policies that prioritise fundamental rights and safety, which we believe is really necessary to enable trustworthy AI systems and the data economy as has been really discussed today.

Before outlining some specific recommendations on the Artificial Intelligence Act, which I know that many Members in the room will soon start negotiating, I would just like to first make a general comment on some of the features of the ongoing debates of the data strategy and current AI policy, and in particular the policy goal of promoting AI uptake.

We heard from one of the previous speakers that this is one of the goals put forward in the white paper. We believe that promoting the uptake of AI should not be a policy goal in itself, especially in the absence of evidence of societal or economic benefits in specific cases and actually, in fact, a blanket approach calling for the use of more data, more AI systems could potentially overlook some of the nuances related to the very complex individual, but also economic and infrastructural, impacts of introducing AI systems into our society. Some of these impacts include (and many of them have already been raised) the fundamental rights considerations. Our previous Chair noted the need for the control of data to stay in the hands of individuals and rights under GDPR not to be compromised, but also broader fundamental rights considerations of non-discrimination, mass surveillance in our public spaces, but also we might see harmful mitigation or the access to essential public services from AI systems, and this has also already been mentioned.

But beyond the fundamental rights concerns, I also think that there are many other aspects or impacts of AI that are not currently addressed in many EU policy debates. One particularly is that the introduction of AI is often the result of the fundamental transformation of the public sector, so with increased dependence and control of private service providers. In this way it's

been under-explored, but we could also say that AI in the public sector could also bring in a form of privatisation of public services, which has really vast consequences for democratic accountability, democratic oversight of activities that were previously primarily public functions, public-sphere operations. This I think is a consideration that we really need to think about a little bit more. But also some of the broader economic and infrastructural and environmental impacts that AI systems can bring. So I really believe we cannot afford to ignore the costly production environments, the costly environmental impact that machine learning often requires, and we run the risk of doing this by promoting an expansionist model of AI and computational infrastructures.

We also need to think about how this promoting the uptake of AI policy goal could also inadvertently reinforce the dominance of Big Tech and the traditional providers of these computational infrastructures.

That being said, I will move to my recommendations. Really, in order for the EU to promote the right type of competition and innovation, it's absolutely crucial that the legislators here in the room today set the right parameters for AI systems and set the right frameworks for a European AI system and European regulation to do that. In order for it to be truly human-centric, I have four recommendations that I think the Members should consider in this room.

The first is that this AI Regulation – the AI Act – should really attempt to protect, empower and hold accountable the firms, organisations and also, particularly, public institutions as they adopt AI-based systems. Currently the AI framework has a lot of obligations and focus on the providers of high-risk AI systems. It poses many obligations on what they should do and the requirements they should meet in order to be compliant with the regulation. However, there's a lack of attention to the users, the deployers of high-risk AI systems.

From a human rights perspective, this is not the optimal approach, mainly because many of the potential impacts of AI systems, particularly on human rights, but also economic and infrastructural, they need to be assessed in the context of deployment. Questions like: how will the system be used? Whose lives will it affect, and how? – these questions and the framework to ask these questions are really left partially unanswered by the current AI Act. However, that can be improved, and it should be.

We think that legislators should introduce an obligation to conduct an impact assessment on deployers of high-risk AI before they deploy the AI system, including questions not just of human rights and data protection impacts but also questions on the environmental impact of the AI system and broader concerns about the public interest. For those that are looking more into the detail, there's some interesting language on this in Article 7 of the AI Act, where there is an obligation or a possibility for market surveillance authorities at the national level to explore the fact that even a technically-compliant AI system may also breach certain fundamental rights but also public interest.

We don't necessarily think the Market Surveillance Authority is the best entity to be doing this, but it does highlight that, in the context of use and deployment, there are some broader considerations that need to be addressed, and the AI framework needs to be better fleshed out for that to be done.

The second recommendation is that there needs to be better and full transparency to the public about AI systems. The AI Act makes some really important progress in terms of advancing the transparency of AI systems between providers and users, but also to some degree the transparency to the public in the public database. However, this public database must also include information for the public as to which high-risk systems are in use, not just which high-risk systems are on the market. I think this is necessary so that the people affected by AI systems can be better informed and also have the opportunity to enforce their rights.

The third recommendation is that we need to think about how AI policy should empower individuals, communities, but also civil society organisations to contest AI-based systems and the demand addressed. If we are going to have a truly trustworthy AI framework, people need to feel reassured as to how they can seek redress in the event that they are harmed by an AI system. Currently in the AI Act there is no mechanism by which an individual or a collective can use the AI system – the AI Act – to seek redress, and we think that this should be introduced. So not just a mechanism for individual or collective redress, but also potentially a mechanism by which individuals can flag a potentially harmful AI system to the National Supervisory Authority for investigation.

Lastly, and this is my final recommendation, is that legislators need to think about how they can set the appropriate parameters, put fundamental rights first and have a comprehensive framework for drawing red lines on harmful AI systems, so prohibiting uses of AI that violate fundamental rights and pose an unacceptable risk. We see that in the AI Act this has already started to be done. However, we think this needs to be very vastly increased and ameliorated.

To the question of bias and technical requirements: EDRi has recently shown in a report called *Beyond Debiasing: Regulating AI and its Inequalities*, authored by Seda Gürses and Agathe Balayn of the Technical University Delft. We highlight that many of these technocentric solutions like debiasing and the quality of data sets, the representativeness of data sets, are not only at this point technically immature to respond to the many human rights risks that civil society and also Members of this House have highlighted, but even if they were, it is not possible or sufficient to solve many of the social, political and legal problems presented by harmful or unacceptable-risk AI systems. In other words, there are some systems that more or better data simply can't fix.

In order to address this, we think that that Article 5 of the Act needs to be improved. First, of course, the use of remote biometric identification in publicly-accessible spaces needs to be comprehensively prohibited, but also, as the European Data Protection Supervisor (EDPS) has recently stated, there needs to be a general ban on any use of AI for automated recognition of human features in publicly-accessible spaces. But also there need to be some new prohibitions, so uses of AI in the field of law enforcement to purport to predict future behaviour, but also any uses of AI in the field of migration control that undermine the right to claim asylum need to be prohibited in the Act. Currently we do not see enough attention to these harmful uses, particularly because they are likely to impact some of the most vulnerable and discriminated against in our society.

I'll leave it here: that we do believe that Article 5 of the Act needs to be vastly improved, increased, in order to centre this human-centric approach, and I'll just conclude to say that I really believe that fundamental rights, data protection, but also these broader social, environmental, democratic concerns need to be better prioritised as the Parliament really takes on its work to negotiate the AI Act. So with that I'll leave and thank you very much for the invitation.

1-044-0000

**Chair.** – Thank you very much. I would like now to open the debate with the members of the committee, and I'm glad we have most group representatives physically here with us. First, the largest group – EPP – Maria da Graça Carvalho, please, the floor is yours. Two minutes.

1-045-0000

**Maria da Graça Carvalho (PPE).** – Thank you very much Chair. My question is addressed to Professor Luis Paulo Reis, but if the other speakers also want to comment, and it is about education. Education is a priority to ensure the success of the EU data economy. Data literacy will be critical to guarantee that citizens embrace the opportunities of data in the digital

technologies and become actors and have greater awareness and control over the information they share and understand the environment and its risks.

However, the digital skills gap prevents many companies, especially SMEs and public administrations, from doing the necessary transformation in a speedy way, and we need to have an ambitious strategy to bridge these gaps, both in terms of technology experts – data experts – but also addressing the widening divide in basic digital skills in the general population.

The Commission has put us ambitious goals to have, in 2030, 80% of the EU citizens equipped with universal digital education and competence and ensure that 20 million people are employed as ICT specialists, including 40% of women. All these three objectives are quite ambitious but very necessary.

So my question is: what are the recommendations to ensure that these targets become a reality? Because this mainly depends on the Member States: what is the advice to the Member States for this to be a reality?

1-046-0000

**Ivo Hristov (S&D).** – First of all, thank you for the interesting presentation. According to the Artificial Intelligence Act published in April 2021, the goal of artificial intelligence is to achieve the twin objectives of promoting the uptake of AI and addressing the risks associated with certain uses of such technology. The emergence of a new generation of digitally-manipulated media capable of generating highly realistic videos, also known as deepfakes, represents a significant challenge that needs to be tackled in the future AI legislative framework.

I share the view that deepfakes should be considered in a wider context of a changing media context in journalism, where fake news and manipulation of social media channels and the public distrust of scientific evidence have become standard practice. In the same vein, the use of micro-targeting together with deepfakes during electoral campaigns is proved to have a strong manipulative effect on political opinions.

When it comes to the future regulation of AI, it's important to note that even proved fake videos can have a lasting negative impact. That said, it is disappointing to note that in the Commission's proposal, only certain types of prohibited AI practices relate to the use of deepfake technology. In that sense, I believe that the European Parliament should take a strong stand for a broader regulatory approach that would allow mitigating these challenges in the long term.

As a member of STOA, I initiated a study aiming to assess the existing regulatory gaps in tackling deepfakes. The study outlines a set of policy options, such as the creation of legal obligations for deepfake technology providers, the extension of the list of special categories of personal data with voices and facial data, and the protection of personal data of deceased persons.

Having that in mind, I would like to ask the following question to Sarah Chander. When it comes to digital rights, how do you assess the impact of deepfakes on fundamental rights? How can we find a balanced regulatory approach that protects freedom of expression but also limits the harmful effects of deepfakes?

1-047-0000

**Luís Paulo Reis, Professor, University of Porto, Portugal.** – I believe one of the things we need for achieving the mission objectives is a life-long-learning approach in the European Union. We need really Master of Science and Bachelor of Science degrees targeted at digital competence and for reskilling. Otherwise it will be impossible. Also we need education targets for the future.

For example, one of the things we just did in Portugal, we created a new Bachelor of Science in AI and Data Science at the University of Porto, because we think that kick-starting a Bachelor of Science degree creates this kind of competence in the young people that go to university and really creates professionals that may reshape the future of artificial intelligence and data science in Europe. Otherwise it will be completely impossible.

So my advice on this is for the European Commission really try to promote lifelong learning but target the future in areas such as artificial intelligence, data science and on emerging areas related to these ones: natural processing, for example; robotics, intelligent robotics and several other areas related to that.

1-048-0000

**Sarah Chander**, *Senior Policy Advisor at European Digital Rights, EDRI* . – We would definitely agree that the approach in the Commission’s proposal to deepfakes is not necessarily optimal when it comes to the digital rights impact of – you’ve already said it – the impact on data protection, but also human dignity. Particularly when we have an impersonation generated of an individual, potentially without their knowledge but also without their potential control to prevent that, there is a particularly harmful impact on the right to human dignity.

Other considerations like freedom of expression also come in. So we know that we have this complicated aspect to balance. I think what has already been suggested is that there are a number of flaws with the Commission’s approach to deepfakes. Firstly, deepfakes is mainly only considered as a transparency requirement. So under Article 52, deepfakes in some context – the only obligation on them – they’re not categorised as high-risk-use cases under the Act but rather simply have a notification requirement, so that if you are encountering a deepfake, you need to be notified about it.

This potentially doesn’t address some of the manipulative consequences of the AI system but also the human dignity concerns that we already highlighted. There is a potential that, under Article 5, deepfakes could in some way potentially come under the manipulative article on Article 5 and then potentially be prohibitive.

However, as many civil society and many academics have highlighted, Article 5 – the prohibitions under Article 5 of the Artificial Intelligence Act – are very broad and potentially highlight some quite narrow scope of application, particularly in the terms of the manipulative provision – the duty to cause or likely to cause physical or psychological harm. Now, in the case of many deepfakes, proving that might be difficult in the case of an individual.

So you could also say that this article is not sufficiently broad enough to counter such manipulative uses of AI, and in terms of the consequences for democracy that you’ve already mentioned, this is potentially a massive gap in the Act.

But also I want to point to one other flaw, and something civil society has tried to grapple with, which is the general exclusion of the scope of social media algorithms in the Artificial Intelligence Act because of the expectation that most of this will be solved in terms of the DSA. So here we have, again, considerations not just of human dignity and privacy, but also the other flawed aspects of algorithms that potentially should be covered on the AI but also generate risks in the DSA are simply swept aside and kept in the framework of the DSA, meaning that many of them cannot be touched under the AI framework.

I think this is a question for regulators to think about a little bit more. There are many not just deepfakes, but there are many potential questions with social media algorithms that could potentially benefit from some of the protections, some of the frameworks offered by the AI Act, or at least something pushing towards some sort of a legal consistency between the transparency

and other requirements put forward in the DSA, but also the broader framework for high-risk AI systems that are put forward under the AI Act. So coming towards some sort of better solution in terms of legal consistency for that, I think, is a priority for legislators.

1-049-0000

**Sergey Lagodinsky (Verts/ALE).** – Thank you so much: great debate. Three points. One is a question to Ms Specht-Riemenschneider and Mr Bolander. Mr Bolander said that algorithms need to get smarter, and for that we need more data and more machine learning, but we generally agree that the question this raises is, of course, the use of energy which is necessary for that and the CO<sub>2</sub> footprint. How should we deal with that issue? This is something that is coming more and more, and frankly, even for me personally, is a dilemma.

Number two, a question to Ms Chander. Thanks for highlighting the user's side of the problem and especially using technology by the police, using products that basically have a huge impact on fundamental rights, and indeed the problem of privatisation of public functions. Do you have suggestions on what we, as legislators, could do to get this into balance, so on the one hand that we use AI technology but that it does not replace public actors with privately-structured and designed products?

As rapporteur on the Data Governance Act, my final question – maybe someone would like to answer that? – is on the data protection issues. If we want to create a market of data – which we need – and to enlarge and sort it out, how do we deal with issues of data protection, for example in terms of the possibility of de-anonymisation of data, if we have so many datasets that it is possible to de-anonymise them, and basically making data which we use outside of the scope of the data protection regulations? Bringing them back to the scope of data protection regulations is not possible anymore if we don't watch this carefully. What is your take on the Data Governance Act that we have negotiated, and do you think there will be any changes by Member States? Maybe you are following the debate.

1-050-0000

**Thomas Bolander, Professor of Artificial Intelligence (AI) at DTU Compute, Technical University of Denmark.** – Actually my argument is not more data and more machine learning but smarter algorithms, and smarter algorithms can also mean algorithms that need less data, right? – and less energy. Of course, the huge inspiration here is the human brain that uses 20 watts and we can do amazing things just based on that. For instance, one of the things that was mentioned in the White Paper is that there's an aim of only having AI learned from representative datasets in order to avoid, for instance, gender and ethnicity bias. That could mean that we need huge datasets, and sometimes if algorithms don't make the right decisions, we just try to solve that problem by throwing more data at them and train them more and hope for the best – right?

But the issue here is that humans can learn. Of course, there has been this discussion that sometimes we just introduce even more bias, but we can actually deliberately reflect on our decisions in order to avoid gender and ethnicity bias, even if we haven't been exposed to a representative dataset exactly because we might be able to reflect on the fact that the dataset is not representative, because we can reason about the source of the data, we can reason about the trustworthiness of the data and how well it fits our existing world – the model of the world. So we need to get closer to making AI systems do the same.

But in a way, I just completely agree with you that the road to success here is not making the computers use more energy and have more data, because this will never get us to the goal. The goal is to get something where you can reflect on a higher level and you can combine, for instance, deep learning with higher-order reasoning or symbolic techniques – and as I said, the ability to reason about the intentions of others and those techniques are not necessarily very

energy-hungry. They are just somehow more clever than the somewhat, let's say, naive algorithms we have today.

1-051-0000

**Sarah Chander**, *Senior Policy Advisor at European Digital Rights, EDRI* . – To be brief, I think pointing out the lack of obligations on users is paramount to address both the impact on fundamental rights in terms of harmful AI technologies being used by the police but also this question of privatisation.

So when it comes to the police uses, I think that's a really good test case for how far the AI Act will work. Currently, many policing systems are high risk under the Act, which means that they have to undergo a series of technical requirements, the providers of which have to undergo technical requirements, but the Act introduced no new obligations on deployers of AI systems, like the police themselves, for example, other than those already existing, of course, under the under the GDPR.

So this poses a particular problem, because we see impacts on presumption of innocence, particularly on AI systems that are purporting to predict future behaviour of people or groups. So the idea that we can predict crime before it has happened, I think, fundamentally undermines many EU values, particularly the presumption of innocence but also the right to good administration, the right to non-discrimination, fair-trial rights, etc.

So here I think we really believe that we need to expand Article 5 to include a prohibition on AI systems that purport to predict future behaviour of individuals. And this is currently up for debate next week in the plenary in the AI and Criminal Law Report. So I think that is something to pay attention to.

On the question of privatisation, I think there's two things. One is possible under the Act: that there needs to be a duty for deployers of AI systems to undergo an impact assessment. And that impact assessment needs to look at more things than just fundamental rights, privacy, etc. But they also need to look at the economic impacts of introducing an AI system – particularly in the public sector – but also the environmental impacts, also the broader infrastructural consequences of deploying an AI system in that context, and I really believe that Members should explore the potential to include some sort of obligation after that impact assessment has occurred as to whether that AI system is truly in the public interest.

I think this is one way to solve it. The other way – and I think this is much broader than the AI Act – is look at how legislators can support the public sector to develop its own AI systems, rather than relying on Big Tech service providers. This is a question of funding and infrastructure, not necessarily a legal question. But I really do believe that it's something that needs to be explored rather than relying on existing service providers which, of course, embed the dominance of existing large technology companies.

1-052-0000

**Alessandra Basso (ID)**. – I would like to thank the rapporteurs for their statements.

First of all, I would like to put a question to Professor Bolander. I have conducted some research on *social intelligence algorithms* and was surprised at how this type of artificial intelligence focuses predominantly on introspection in AI – i.e. on AI's capacity for self-analysis. This is without doubt a fascinating field, but the question is: are we confident that a self-sentient machine can also self-regulate its own behaviour and not become a threat to humans? Man, for example, has been studying his own mental processes for millennia, but this has not prevented him from often being his own worst enemy.

I would also like to ask Dr Chander a question. I have read the remarks on the *Artificial Intelligence Act* and on the risk of rules being adopted that enable the use of high-risk artificial intelligence such as facial recognition – a type of recognition which, if left in the hands of a system of self-checks places great power in the hands of those providing the service itself. I would therefore like to know whether it would not be better to have a more democratic form of oversight, via direct democracy perhaps, so that the public can decide whether or not to validate its use.

1-053-0000

**Thomas Bolander**, *Professor of Artificial Intelligence (AI) at DTU Compute, Technical University of Denmark*. – OK, thank you – a good question. It's true, at least some of the research is on introspection and self-analysis, but a lot of it is also about finding out how you can understand the mental state of humans. And of course, I see the worry here that, if you have a system that can somehow make models of the mental states of other agents, you might also be able to use that in order to manipulate other agents.

But I think that the crucial point here is that the goals and intentions – OK, now just to admit that there are risks involved and we have to take them seriously, but by default, we decide on the goals and intentions of these systems, and we would normally design them to be altruistic so that they are helpful to humans. And the current problem is actually that they don't know how to be altruistic, because they cannot take our perspective, they don't know what our goals are. And then we can say, I can explicitly tell you what my goal is, but then the robot, if it's a robot, doesn't understand what the acceptable ways are to achieve the goal, right? Because what acceptable ways there are to achieve a goal depends a lot on human culture and human values, and it depends on individuals. So the idea is that the robots should be better at understanding this: they simply learn from us humans. They learn from how we act in order to be able to solve our problems in a better way. So in other words, if they don't have the ability to take our perspective, then we will never get them to behave appropriately and do the right thing. And if they have the ability, yes, of course there's a risk that it can be misused and we have to deal with that threat. But I don't see this as a big current problem, because all these systems are programmed to just achieve the goals that we feed them with, and they don't seem to be able to break out of that in any reasonable timeframe.

1-054-0000

**Sarah Chander**, *Senior Policy Advisor at European Digital Rights, EDRI*. On the question of democratic oversight of these high-risk AI systems and particularly the fantastic example of facial recognition in the public space, I completely agree that the framework definitely needs to be bolstered in order to facilitate this oversight. Primarily, the AI Act, as it stands, really regulates the relationship between the providers of AI systems and the deployers of AI systems. So in this case of public facial recognition, that would be the private-company developer of an AI system and the police, for example. However, it doesn't so much regulate the relationship between the user and the deployer of the AI system and the people affected – us.

There are many ways, I think, that we could introduce better democratic oversight into these AI systems. One of them I've already mentioned is impact assessments. We need to have this sort of level of accountability of firms or organisations deploying AI systems, making that information about how they've assessed the need for that AI system, whether they've assessed that it's necessary and whether they've assessed that it's in compliance with fundamental rights, making that information available to the public. I think that's one mechanism.

The other, I think, is this ability for individuals to directly contest the use of such high-risk AI systems. We mentioned the potential for individual collective redress when an AI system

that is risky is used – potentially to contest it and to seek redress for the harm that I might have experienced, but also the ability to flag a potentially harmful system to a national authority. These things are not necessarily direct democracy, to use your words, and I think that I would really encourage more exercises or thoughts about how we could implement direct democracy. Of course, potentially there could not be a referendum for every potentially-risky AI system, but I do think that there needs to be a greater public debate on questions like predictive policing, on questions like facial recognition in the public space, on uses of AI systems like emotion recognition, lie detectors used on migrants at the border. I think all of those are really questions of public debate that we need to have.

On the question on this public question of direct democracy, I'll just do a final mention to EDRI's campaign, which is the Reclaim Your Face campaign. It's calling for a ban on facial recognition and other biometric surveillance in the public space, which we know infringes on our public privacy, on our rights and our ability to access the public space freely. We have currently reached over 60 000 signatures for that, and that is a campaign and a petition that was conducted with absolutely no targeted advertising.

So I think that shows the need for a better democratic oversight / direct democracy approach to some of these high-risk AI systems.

## Closing remarks

1-056-0000

**Chair.** – Thank you very much for a lively debate on a crucial subject that impacts our lives and raises complex ethical issues. We need to know much more about this. Thank you to our panellists for finding the time. Thank you, Members, for taking part. This concludes our hearing.

The next AIDA hearing will be in association with the Committee on Transport and Tourism (TRAN) and will take place on 11 October from 13.45 here in Spinelli, Room 1G3. Next, on Monday, 8 November, AIDA will organise an AI summit with the participation of national parliaments, and on Tuesday, 30 November, there will be a hearing on one of the subjects mentioned today, namely artificial intelligence and bias.

AIDA has also requested authorisation for an ad hoc delegation to Washington DC from 1-5 November. We will know the outcome of this request in the course of today. Thank you very much. Thank you to the technical staff, and to the translators today on the International Day of Translators.

*(The meeting closed at 12.00)*