



High Level Policy Hearing: 'Building a European Data Economy'

European **Political
Strategy** Centre

Transcript

Tuesday, March 28 2017

Held at: Salle 11, 11th Floor Berlaymont, 14h00 to 16h00

European Commission, Rue de la Loi 200

Participants:

MODERATORS:

ANN METTLER, Head, European Political Strategy Centre

And

MARIO MARINIELLO, Digital Adviser to the European Political Strategy Centre

PANELISTS:

Ciro CATTUTO, Scientific Director, Institute for Scientific Interchange Foundation

Aija LEIPONEN, Associate Professor, Applied Economics and Management, Cornell University

Gerald SPINDLER, Professor for Civil Law, Commercial and Economic Law, Comparative Law, Multimedia and Telecommunication Law, University of Goettingen

Maurice E. STUCKE, Professor of Law, University of Tennessee [by videoconference]

Peter SWIRE, Huang Professor of Law and Ethics, College of Business Georgia Institute of Technology [by videoconference]

Christiane WENDEHORST, Professor of Law, University of Vienna

PROCEEDINGS

1 **ANN METTLER**

2

3 Good afternoon and welcome to this hearing convened by the European Political Strategy Centre on
4 'Building a European Data Economy'. My sincerest apologies that we are starting late, we were
5 trying to connect with one of the external experts, Professor Swire from the Georgia Institute of
6 Technology. Hopefully we will still manage to do so, but this explains the delay. My name,
7 particularly for the colleagues joining us from abroad, is **Ann Mettler**. I am the head of the
8 European Political Strategy Centre, the European Commission's in house think tank. I am joined on
9 my left by **Mario Mariniello**, Digital Advisor to the EPSC. This hearing is organised to contribute to
10 the European Commission's consultation on the data economy and everything that is being said
11 here today will be transcribed and submitted to this consultation.

12 Let me first of all say how delighted I am to welcome such a high level group of experts who will
13 help us today shed light on the data economy. They are in alphabetical order, **Ciro Cattuto**, Head
14 of Data Science Laboratory [Scientific Director] ISI Foundation. **Aija Leiponen**, Associate Professor
15 of Applied Economics and Management at Cornell University. **Gerald Spindler**, Professor of Civil
16 Law, Commercial and Economic Law, Comparative Law, Multimedia-and-Telecommunication Law at
17 the University of Goettingen in Germany. Professor **Maurice Stucke**, Professor of law at the
18 University of Tennessee who is joining us via video link. Hopefully with us soon is **Peter Swire**,
19 Huang Professor of Law and Ethics at the College of Business, Georgia Institute of Technology. And
20 lastly, Professor **Christiane Wendehorst**, Professor of Law at the University of Vienna. As you can
21 see, four of our experts are in the room, and one and hopefully soon two, of the others are joining
22 us from the US

23 Now before I ask the invited guests to briefly introduce themselves and their work, allow me to
24 make a few announcements. The hearing will last about two hours and each speaker will have a
25 certain amount of time to address each question. The time limit will be announced when the
26 question is posed and one minute prior to your time being up, we will show you an orange sign and
27 when your time is up we will show you a red sign, so at that time I will really then have ask you to
28 wrap up. Some of the experts have said well, I mean, I need a little bit more time for one question
29 and I think in principle that would be fine as long as you then subtract some time for some of the
30 other questions that you will answer so we can more or less stay on track with the time table.

31 As I said before, the hearing will be on the record and a full transcript of the hearing will be
32 submitted as a contribution to the public consultation on data. The experts have received the
33 questions in advance in order to allow them to prepare well their answers. We have invited a few
34 colleagues from the European Commission to join us as observers and they are the people sitting
35 behind me and the people sitting to the side of me. However given the format I would appreciate if
36 our Commission guests can be in full listening mode for the duration of the hearing. There will be
37 an opportunity to interact with the guests, later at the networking coffee that we are organising,
38 after the hearing is over.

39 And with that, let's go to the first question for which you have a maximum of one minute please,
40 one minute. So the question is:

41 ***'Please state your name and affiliation, please flag any potential conflict of interest you***
42 ***might have and please describe your background and your experience in dealing with the***
43 ***Data Economy from a public policy perspective'***.

44 We first go to Doctor Cattuto, one minute or less please.

45

46 **CIRO CATTUTO**

47

48 Good afternoon, thanks for having me here, my name is **Ciro Cattuto** I am the Scientific Director of
49 ISI foundation, which is a non-profit privately funded research institution in Torino, Italy and New
50 York City, USA. My background is in physics, I have a PhD in Physics, I founded and lead Data
51 Science Laboratory at my institution. Most of my work focuses on using digital data, in particular
52 proxies of human behaviours to inform models, ideally predictive models, for health and infectious
53 disease dynamics. I work with sensors, I work in data science, and more recently I have been
54 investigating with my research team the impact of data science for public good and international
55 development.

56

57 **ANN METTLER**

58

59 Very good, thank you so much. Second is **Aija Leiponen**. Professor Leiponen, one minute or less
60 please.

61

62 **AIJA LEIPONEN**

63

64 Thank you, I'm **Aija Leiponen** from the Dyson School of Applied Economics and Management at
65 Cornell University. I study and teach Innovation and Technology Strategy. I have been teaching
66 digital business strategy for fifteen years at Cornell. My interest in innovation has been particularly
67 in digital industries, and have studied communication technologies in particular. For the last three or
68 four years, I have studied the underpinnings of data markets and innovation in the data economy
69 with colleagues at Imperial College London. So a lot of this work has been centred in the UK.

70

71 **ANN METTLER**

72

73 Excellent, thank you so much. Third is **Gerald Spindler**, Professor Spindler please.

74

75 **GERALD SPINDLER**

76

77 My name is Gerald Spindler, from the University of Goettingen, Germany. I'm a lawyer as well as an
78 economist. I'm actually a Professor in the faculty of Law in Goettingen. I have been doing, as you
79 have heard, comparative law as well as corporate law as well as everything which is related to
80 Internet; in particular liability issues and intellectual property, for example, as well. There is no
81 conflict of interest, as far as I've seen. My background is that I, have been, more or less in the
82 Internet industry since 1996, the very beginning of the first problems of liability of Internet
83 intermediaries. We've done the 2006/2007 review of the e-commerce directive for the European
84 Commission. We are actually carrying through different European projects, funded by the European
85 Commission, such as data protection and intellectual property rights, and I have been consulting
86 also the German government which I hope is not a conflict of interest.

87 [Laughter]

88 **ANN METTLER**

89

90 Thank you so much. Then fourth is Maurice Stucke, I hope I pronounced that correctly. Professor
91 Stucke, over to you please.

92

93 **MURICE E. STUCKE**

94

95 Yes, my name is Maurice Stucke I'm a Professor at the University of Tennessee. I'm also co-founder
96 of the Konkurrenz Group, a law firm. I worked for many years at the US Department of Justice, in
97 their anti-trust division. More recently I have been the co-author of two books on Big Data. First is
98 'Big Data and Competition Policy' and the second is 'Virtual Competition'. There are no conflicts.

99

100 **ANN METTLER**

101

102 Excellent, thank you so much. Then last, but not least, is Christiane Wendehorst. Professor
103 Wendehorst, over to you.

104

105 **CHRISTIANE WENDEHORST**

106

107 Thank you very much. My name is Christiane Wendehorst, I am Professor of Private Law at the
108 University of Vienna, and currently also the Vice-President of the European Law Institute (ELI). I
109 teach private law, and my research focus has recently been on the challenges posed by
110 digitalisation, *inter-alia* the Internet of Things, artificial intelligence and the data economy. Like
111 Professor Spindler I have also given advice to the German government, which I do not consider to
112 be a conflict of interest. I cannot see any other conflicts of interest. I am currently leading a joint

113 project between the ELI and the American Law Institute, together with colleagues from the US on
114 how to adapt laws to work in the data economy. Thank you very much.

115

116 **MARIO MARINIELLO**

117

118 So, let me now read question two. This is about the context and each speaker will now have three
119 minutes to reply. And the question is:

120 ***'What are your general views on global trends linked to the emergence of the Big Data
121 paradigm? And what is your assessment of the European Union's progress towards a data
122 economy?'***

123 And this time we start with Professor Leiponen.

124

125 **AIJA LEIPONEN**

126

127 **Regulation issues in non-personal data, primarily, I view it as an innovation problem.** I
128 think Europe has a lot of challenges in creating services and technologies around data that are
129 currently not there. The policy challenge is to create a governance system that would provide
130 optimal incentives for innovation and creating that data economy. We know that the technological
131 frontier is moving very fast, particularly in software-based analytics, including artificial intelligence
132 techniques. And we know a little bit of where that may be headed, but it's evolving very rapidly right
133 now.

134 **In the future, or the near future, much more of the data that is currently being collected
135 will actually be analysed and utilised for decision making.** Currently, overall, globally, we
136 collect a lot of data and store a lot of data that is actually never touched afterwards. So once we
137 develop and adopt a lot more of the analytical tools, more data will be utilised for decision-making.
138 And when that happens, more routine decision-making will be automated, and that might include
139 decisions in such areas as recruitment, investment, or administration. So a lot of activities where
140 there is repetition can be automated, whereas human judgement will be critical in other areas such
141 as where creativity or emotional intelligence, caring for other humans, will be important. So that's
142 going to be the human specialty.

143 **We should be thinking about this not necessarily as a data economy but as an
144 intelligence economy, where data are strongly complementary with analytical
145 techniques, artificial intelligence and software accompanying those tools.** Basically what
146 we need is training datasets for intelligence, and we need intelligence in applications and
147 algorithms to make sense of the data. Those things have to go together.

148 At this point, **I see few areas where there are likely to be data monopolies, but I think
149 control and market power in that intelligence economy will be in platforms and in the**

150 **intelligence technologies.** And data will be the fuel that keeps the system running. And where I
151 see **European weakness, is particularly in the adoption and application of computer**
152 **science, advanced techniques in computer science, in commercial applications.** Not
153 necessarily of the leading edge science, but the application of those ideas in commercial settings.

154

155 **MARIO MARINIELLO**

156

157 Okay, thank you very much. I'm just told by Ann that Professor Swire can hear us, but we cannot see
158 him...

159

160 **PETER SWIRE**

161

162 Yeah, sorry, the video, I wasn't able to make it work. I apologize.

163

164 **MARIO MARINIELLO**

165

166 Yeah, sorry, sorry also from our side. I suggest we will continue to answer to the second question,
167 and then you will be able to reply to the first question which is essentially introducing yourself
168 altogether. So we will cover from there. We now go to our next speaker, who is Professor Spindler.

169

170 **GERALD SPINDLER**

171

172 Thank you. There is something to add, from a more legal point to what my colleague Leiponen
173 already stated, from a more economic point of view. It surely is **the interplay with artificial**
174 **intelligence, which will play as a technology an eminent role in the coming years.** As we've
175 seen already in the other discussions, there is a close connection between Big Data, data and
176 upcoming algorithms, artificial intelligence, etc. **So the impact of data analytics on our society**
177 **is very clear, and you can see it in every sector - be it logistics, be it insurance, be it**
178 **healthcare, etc. And even in the so-called, well this is a typical German notion, industry**
179 **4.0,** which means a very strong collaboration, cooperation between however independent partners
180 in closed networks. These networks are based on a common platform or sharing of data. So, the
181 impact of data analytics and algorithms is very clear here.

182 So what is the role of public policy in the data economy? As an economist, I have to state that I
183 **strongly believe that the state should only intervene when there is a market failure.** That
184 is to say, markets are best suited to adopt a fine-tuned solution, and only then, when that doesn't
185 sort out, we have to step in. So **we really have to do a lot of empirical work** on that in order to

186 see whether there is a market failure or not. But then surely, we have to intervene, be it in anti-trust
187 law or whatever.

188 What are European strengths and weaknesses etc.? I think, contrary to what industry is always
189 saying, **data protection could really be some of the advantages that we have in creating**
190 **trust for the people using Internet, services, etc.**

191 **One of the weaknesses** for sure is, and this is just an example, of the European Union the
192 scattered landscape concerning the regulations being in place at the national level and concerning
193 in particular the copyright law, this is absolutely the **inflexibility we have of copyright law.**

194 **MARIO MARINIELLO**

195
196 Thank you. Professor Stucke, over to you.

197

198 **MAURICE E. STUCKE**

199
200 Yes, we are looking at these issues from a competition policy perspective, and we are looking both
201 back and looking forwards. Looking back, we're increasingly realising in the US, the failures of US
202 competition policy over the past thirty years. In April 2016, the White House issued an executive
203 order and report on the state of competition in the United States, and the report identified several
204 disturbing trends, since the 1970s. **Competition appears to be decreasing in many US**
205 **economic sectors**, including a decade's long decline in the number of businesses being started and
206 the rate at which workers are changing jobs. At the same time, many industries are becoming more
207 concentrated, with profits increasingly falling in the hands of fewer firms. So **the solution is more**
208 **competition**, which judicially **means more robust anti-trust enforcement.**

209 Looking forward, what does this mean with the data-driven economy, and what does this mean for
210 building a European data economy? My short answer is this: **We want to ensure that we have**
211 **the policies in place to maximise the benefits of a data-driven economy, while mitigating**
212 **the risks.** So the goal should not be simply to maximise the number of cloud service providers in
213 the US or the number of super platforms to compete against GAFAs: Google, Amazon, Facebook or
214 Apple. Rather **the goal should be to promote a data-driven economy that is inclusive, that**
215 **protects the privacy interests of the citizens, promotes citizens' well-being and promotes**
216 **a healthy economy.** Here Big Data and big analytics can promote competition and our welfare by
217 making more information, more easily available and providing easier access to markets. But we
218 can't assume uncritically that we will always benefit.

219 At times, Big Data and big analytics can be used to defy competition. As we discuss in our books,
220 **Big Data and big analytics can lead to anti-competitive outcomes such as innovative**
221 **ways for companies to collude, innovative ways for companies to price-discriminate,**
222 **innovative ways for dominant firms to abuse their position, and anti-competitive data-**
223 **driven mergers.** I will touch on these topics in response to the subsequent questions. Thank you.

224

225 **MARIO MARINIELLO**

226

227 Great, thank you very much. Professor Swire, can you hear me?

228

229 **PETER SWIRE**

230

231 Yes I can. Can you hear me?

232

233 **MARIO MARINIELLO**

234

235 Yeah, we can loud and clear. If you could be so kind as to also address the first question now,
236 introducing yourself first and then address the second question that I just read?

237

238 **PETER SWIRE**

239

240 Yes, thank you very much. And thank you for the opportunity to participate in this. In terms of my
241 background, today I'm the Huang Professor of Law and Ethics at Georgia Tech Sheller College of
242 Business. I also have appointments in the College of Computing and in public policy. I have been
243 working on privacy and Internet issues for more than twenty years. In 1998 I wrote a book on EU-
244 US data protection and that led up to my participation in the Safe Harbour negotiations in 2000
245 when I was President Clinton's chief counsellor for privacy. During that time I also worked on many
246 other issues, I was the White House coordinator for the Health Insurance Portability and
247 Accountability Act (HIPAA) medical privacy rule and went through 50,000 public comments and
248 came up with a rule that's been, I think, pretty stable and successful.

249 I have continued to work on many of these topics for many years. In 2013, after the Snowden
250 revelations came out, President Obama named me one of five people for the Review Group on
251 Intelligence and Communications Technology, sometimes called the National Security Agency
252 Review Group. And so in that realm I got to see a lot about the intelligence community collection of
253 Big Data and related things. I also, and we will get to this later in the discussion, have written a long
254 law review article about Data Portability under the EU proposed, at that point, proposed general
255 protection regulation, but we'll get to data portability later in the discussion. So, I come to this with
256 a lot of experience in privacy and cyber-security in European data protection, but also I've been
257 trying to understand Big Data in various parts of my research.

258 So, that is background, the question is what are the strengths and weaknesses of the European
259 Union in connection with Big Data? And I think that there is a challenge in the economy. **The data
260 protection regime in Europe sometimes is seen as having the protective principle, which
261 is the idea that there is a presumption against processing of data under General Data**

262 **Protection Regulation and other directives.** The presumption is to protect fundamental human
263 rights. Many times I agree, there should be more care and attention to these protections than US
264 law gives. But **I think when it comes to Big Data, it means there's a sort of initial**
265 **presumption against using data.** In the United States the presumption is that it's okay to use Big
266 Data, and in China even more so, I think, if we look at where new possibilities of work come from.

267 And so, that initial leaning towards protection rather than initial leaning towards processing data
268 plays into the question of **who gets to be first mover for innovation, and in many parts of**
269 **the information economy** for reasons that, I think, that reports of the EC show, **first mover is**
270 **often who can achieve scale, often get an advantage.** Then there's network effects, there's
271 tipping, cascades and all the rest. And so, for information processing industries, I think it's been true
272 for the last set of years, 10-15 years, that **few of those that have ended up on a global scale**
273 **succeeding have come from Europe.** And first movers have tended to come from the United
274 States, and in some instances China. That's not a comfortable conclusion for Europe, because
275 fundamental rights and data protection have become such important projects to what the European
276 Union means. I think if you're going to have a realistic discussion about Europe and Big Data, if
277 Europe is rarely the first mover, it's going to be a difficult challenge.

278 Now, one of the big shifts is that a lot of the activity, again as shown in the EC reports, in the next
279 period of time is going to be about Big Data where personal data is either not there or is not the
280 leading thing, when you think about industrial robots, or machine tools, or some of the fantastic
281 tooling done in Germany and many other countries. And so **how to take Europe's traditional**
282 **strength in these areas and succeed in an era where sensors have become pervasive and**
283 **cheap?** That's a challenge of how to not have the presumption against data, and I think it's an
284 uncomfortable discussion, because we'd like there to be trust, and we'd like there to be
285 fundamental rights protection. But, I think realistically, looking at the economic effects, Europe will
286 be missing something important if it thought that trailing, not being first mover, wasn't a big
287 problem. I'll stop there, Thank you.

288

289 **MARIO MARINIELLO**

290

291 Thank you very much. Exactly on time [chuckle]. Professor Wendehorst.

292

293 **CHRISTIANE WENDEHORST**

294

295 Thank you very much. I think data-driven innovation is expected to have a huge impact on almost
296 all aspects of society and the economy. And it has already been mentioned that it's not just the
297 data economy. The Internet of Things, Artificial Intelligence, all these link together, and data is
298 probably key to everything. **It may also mean that we will have to rethink much of what we**
299 **have taken for granted for quite a long time, and reconsider the way the law and the**
300 **economy works.**

301 Europe, as Professor Swire has just pointed out, has started bracing itself for the new era with the
302 General Data Protection Regulation, and data protection has an international reputation for being
303 extremely strong in the EU. Now don't get me wrong, I am a consumer lawyer, and **I believe data**
304 **protection is an extremely important value.** And when I am discussing with my US colleagues I
305 frequently get the message: 'Well sometimes we wish we had something like European data
306 protection.'

307 **However, even if it is a strong and important signal internationally, it is of course not**
308 **precisely a signal pointing towards Europe as the world hub for the data economy.** Just
309 look at the European Data Protection Supervisor statement of two weeks ago, which was indirectly
310 comparing any economic transaction with regard to personal data to trade in human organs.
311 [chuckle]. This is the kind of attitude that is transported internationally. So **I believe that a major**
312 **challenge Europe will have to face, is to reconcile personal data protection - which must**
313 **remain extremely strong, don't get me wrong on that - with the goals of the data**
314 **economy.**

315 I am firmly convinced the two need not contradict each other, but it will not be easy to get the
316 balance right. The data economy is a particularly difficult area where to regulate. This has several
317 reasons: it is extremely innovative, fast-moving, and it is opaque because data are intangible,
318 invisible, not registered, and often secret. So I think a lot of challenges are lying ahead. Personally I
319 believe that we may be **well advised not to rush things**, rather to wait how things develop,
320 maybe to **make some changes in contract law, to focus on competition law, including on**
321 **strong enforcement** - small changes that may have big effects, but not to rush things in order not
322 to impede the European data economy. Thank you very much.

323

324 **MARIO MARINIELLO**

325

326 Thank you very much. Dr. Cattuto.

327

328 **CIRO CATTUTO**

329

330 Thank you. I'd like to share a few comments in general on global trends related to the adoption of
331 data technologies. What we are going to see going forward, I think, is a series of unprecedented
332 technical capabilities, starting from a capability to quantify and measure reality. I would say that, if
333 we should sum it up, the revolution driving the data economy will be that **the digital image of the**
334 **world, the digital image of reality, will track reality closer and closer in terms of**
335 **granularity, resolution of individual behaviours, timeliness.**

336 So, this is one trend. The second trend is a **push towards decentralisation and distribution.**

337 **The Internet of Things will drive this forward very fast.** Simultaneously, the adoption of
338 machine learning technologies and Artificial Intelligence. Artificial Intelligence meant in the soft

339 form, in the form of advanced machine perception - not general AI. This will create a series of
340 intelligent, semi-intelligent, or smart agents, powering products and services, and these agents will
341 be endowed with part of our agency as citizens, institutions and consumers, and they will engage in
342 transactions on our behalf.

343 So we are looking at measurability, quantifiability, decentralisation, autonomy. All of this will
344 converge on creating a landscape where **we will have more and more algorithmic capability**
345 **and algorithmic decision making in the loop of society**, in the loop of the systems of society.
346 **And these kinds of capabilities will span the public sector and the commercial sector,**
347 **because they are fuelled by the same data, and because they tackle the same kind of**
348 **challenges.**

349 Another thing that will happen looking forward is the **vanishing of the perception of interaction**
350 **with these technologies.** All of the touch points with technologies will vanish because we will
351 have more and more ambient technologies and more and more ambient intelligence due to the
352 Internet of Things, which means that **many boundaries between the public sphere and the**
353 **private sphere will be blurred** in their definition. We'll be giving commands to our personal
354 devices in public spaces that can recognise us as citizens, as individuals.

355 So, in all this, the impact of analytics is transformational, because, and I agree with the colleague
356 about this, **their value lies in intelligence.** The analytics are really what allows us to transition
357 from data to a signal, a high-level signal upon which we can take a decision. **And eventually the**
358 **data economy is about an ecosystem of high level signals that are actionable in our**
359 **capability to use them to take decisions about our market systems.**

360 Now I believe, and this is my **key point here, that market forces alone will not deliver the**
361 **full impact of these technologies.** Because the impact needs to be aligned with the mission, the
362 priorities and the values of the people and the institutions taking the decisions. So it's very close to
363 the top of the organisation using the data, so market forces will deliver products, will deliver
364 enablers, but the way we use data through analytics to take decisions, that eventually will be a
365 missed opportunity for the public sector unless we use legislation, regulation and a variety of other
366 means, moral suasion, corporate responsibility, all the means we have to encourage institutions and
367 organisations to allow this market to benefit the public sphere. So, to sum it up, I believe that
368 **public policy strongly needs to encourage, facilitate, and incentivise the creation of**
369 **shared data assets as well as the public impact of data on research and on public**
370 **interest in general.**

371

372 **ANN METTLER**

373

374 Very good, thank you so much. We now come to the third question, for which you will have five
375 minutes to answer each, and the question is:

376 ***'Based on your professional experience and research, do you believe that the European***
377 ***Commission is right to deploy a set of initiatives beyond what has already been done,***
378 ***such as for instance the General Data Protection Regulation, beyond that aimed at***
379 ***improving policy and legal framework for the data economy, in particular as regards***
380 ***access to data for use, reuse and transfer and ensuring the free flow of data inside the***
381 ***EU? Please provide your assessment of the European Commissions' proposed initiative***
382 ***and indicate which areas of intervention should be prioritised and why?'***

383 So again, five minutes. And we start with Professor Spindler please.

384

385 **GERALD SPINDLER**

386

387 Thank you. I think your questions and the more specific questions are divided in three sections. The
388 first is aiming at the data protection regulation. The second, at data localisation and, third, access to
389 data, which will then be more discussed in part 4 of the core questions.

390 So firstly, **concerning the General Data Protection Regulation, I think there is a huge**
391 **amount of non-personal data there in the world, depending largely on the definition of**
392 **what personal data is. And there the lines are still blurred and we still need some more**
393 **guidance on that.** To be realistic, it can only be done by the institutions which have already been
394 established by the General Data Protection Regulation, in particular the European Data Protection
395 Board, today the Article 29 Working-group. But there could be substantial support by the European
396 Commission, given for example, **guidance or research projects in order to develop standards**
397 **when we talk about anonymised data, which is out of the range of the General Data**
398 **Protection Regulation, and this is absolutely necessary.**

399 The second part, where the European Data Protection Board could be a substantial help as well as
400 the Commission is to define **the tricky question of consent** - of consent to data processing -
401 which is quite opaque in the General Data Protection Regulation, well of course due to political
402 discussions, and especially concerning the so-called tying clauses. So there is much that has to be
403 specified under the General Data Protection Regulation and concerns some sub-legal innovations
404 that you can do without rising or stirring up too much discussion on the political element.

405 So, secondly, concerning the data localisation, I can just state that of course under the European
406 Treaty, there is always the need to justify restrictions on the free flow of data such as **issues of**
407 **sovereignty, of national security which may start here, which may be qualified as a**
408 **justified restriction. However, everything else, even in tax law etc. I would be extremely**
409 **doubtful whether this could be a justification for data localisation.**

410 Third point, access to data, I would really like to move this to my part of the answer for the core
411 question number 4 because I think it is strongly related to the other question which goes more into
412 detail, so I spare a bit of my time for that.

413

414 **ANN METTLER**

415

416 Indeed, we'll add it then to question number four. So, next up is Professor Stucke please.

417

418 **MAURICE E. STUCKE**

419

420 Yes **I agree with the initiatives, with a couple of caveats** that I will touch upon in response to
421 question four.

422 As a general matter, data is a key input in the data-driven economy. A lot of attention has been
423 paid on personal data, but **non-personal data can be critical as well**. Companies are
424 increasingly undertaking data-driven strategies to obtain and sustain a competitive advantage. As
425 we discuss in our book 'Big Data and Competition Policy', firms are already securing significant
426 returns from their Big Data investment. So you need to consider holistically how you can promote
427 this data-driven economy and the ability of EU firms to compete in this economy. The European
428 Commission Staff Working Document, dated January 2017, identifies several important
429 mechanisms. One key avenue **to improve the free flow of data is to improve the current**
430 **legal institutions. This would involve clarifying issues of ownership rights of non-**
431 **personal data. It would also include streamlining the ease with which parties can**
432 **transfer data via contracts.**

433 The second key avenue **is removing welfare reducing governmental restraints on the free**
434 **flow of non-personal data**. One concern you identify is data localisation. You want to ensure that
435 any current or new data location restrictions are justified. I would encourage you to **ask these**
436 **three questions. First, whether the national governments' expressed interest is**
437 **substantial. Second, whether the state action directly promotes that substantial interest,**
438 **and third, whether the state action is more extensive than necessary to promote that**
439 **substantial interest.**

440 Even if you improve the legal institutions, and even if you remove the unnecessary public
441 governmental constraints on the free flow of data, I agree with Ciri, that **you cannot necessarily**
442 **assume that market forces will efficiently allocate the non-personal data. So one area of**
443 **intervention that deserves more attention is the role of competition policy in promoting**
444 **the free flow of data**, and how **market power can impede the free flow of data**. Normally
445 when we think of market power we think of prices, namely a firm's ability to raise price above the
446 competitive level. But in a data-driven economy, firms can exercise market power by collecting
447 more data than they otherwise could at a lower price than what they would otherwise pay, and they
448 could also restrict others from accessing this data. One example would be farmers, and a few
449 powerful farm equipment manufacturers. Farmers create the raw data, but the data automatically
450 goes to the manufacturer: since it's non-personal data, the General Data Protection Regulation does
451 not apply. Nonetheless the data remains in the manufacturer's silo, and this can adversely affect

452 public welfare. So you need to consider then, **what are the factors that can lead to market**
453 **power. One factor may be anti-competitive data-driven mergers; second are abuses by**
454 **dominant firms.** Dominant firms have the data and use exclusionary means to prevent others
455 from accessing the data. **Third, are vertical private restraints,** for example, manufacturers limit
456 the extent to which others in the supply chain can distribute the non-personal data. For example,
457 the farmers here can only provide their non-personal data to the tractor manufacturers and no one
458 else. **Fourth would be anti-competitive actions by key gate-keepers that affect sellers**
459 **upstream.** And two areas that I would encourage you to examine are **e-monopsony** and **e-**
460 **scraping;** we are currently looking at these issues as well. **Fifth and finally would be how**
461 **market forces themselves can limit the free flow of data.** This would involve examining at
462 least **four data-driven network effects** which I will expand upon in response to question number
463 four. Thank you.

464

465 **ANN METTLER**

466

467 Thanks a lot. Thank you so much. Next up is Professor Swire, please.

468

469 **PETER SWIRE**

470

471 Yes, thank you. I have five points which I will make briefly.

472 **The first is that the emphasis of the single market for flows of data seems to me a very**
473 **good idea,** clearly an emphasis of this entire effort, because many of the barriers to flows of
474 information turn out to be, if not pre-textual, not convincing on closer examination.

475 A second point in the list of questions has to do with the important categories of non-personal data.
476 And that's clearly the case, but the **non-personal and personal increasingly get mixed.** So think
477 about the car industry, where Europe has very strong car manufacturers. Historically that wasn't an
478 area that involved much personal data about the individual car except who bought it, but the
479 connected car is going forward and we are doing projects in my class this semester about this. A lot
480 of the innovation, a lot of the leadership in the auto industry going forward, is going to be data
481 related, both safety related for vehicle to vehicle information but also it's going to go to the
482 person's individual activities whether it comes to music or where they drive or whatever. And so that
483 means that the non-personal is going to get mixed with the personal much more pervasively and
484 that sectors that never thought of themselves in the privacy area now have a lot bigger concern.

485 **The third point then comes to the topic of de-identification,** so once there is machine data
486 and other data about cars for example. Then we do have **some risk if there is public release of**
487 **the data, that people can use each of those data points as clues that might in some**
488 **cases re-identify people.** So one thing in my own work, I have emphasised is, **public release**
489 **often does have privacy risks but instead you can create organisational structures where**

490 **people have contractual permission.** So for instance, in New York City, they have a Big Data
491 initiative for the city where the agency that does the analytics contracts with each of the data
492 sources, keeps them confidential, and doesn't keep the data after that. And that allows a Big Data
493 initiative on a one-off basis for each project, but it allows you to respect the medical rules or other
494 rules for each databases. And those kinds of **organisational controls I think will be**
495 **increasingly important** in order to merge data, because if you just put it up on the web, this re-
496 identification problem is so pervasive.

497 **The fourth point has to do with data localisation and law-enforcement access.** This is an
498 area where a major research project, we're having a conference here at Georgia Tech on April 18th,
499 and Bruno Gencarelli, who is Head of Unit for data protection will be the key-note speaker, and with
500 DG Justice. There are very hard data problems facing police because of encryption and data at rest,
501 in the cloud in foreign countries, and data in transit, because they cannot do wire-taps increasingly.
502 **And so, police are feeling much more pressure to hold data locally.** It's an enormous
503 pressure, I think growing over time. So, reform and mutual legal assistance seems to be a much
504 bigger part of the problem for data localisation than many have recognised, and we're talking about
505 ways to fix that.

506 **And fifth I do have a proposal for institutional change, or institutional thought for the**
507 **European Union and its various committees.** It has to do with **finding ways for data**
508 **protection experts, economists, Big Data experts, and others to engage each other in a**
509 **more systematic way.** When I worked in the White House, they had what is called the clearance
510 process and so we had the privacy people in the room with the Department of Justice, and - in the
511 room if we needed to - with the National Security Agency. My experience **in Europe**, including
512 during the negotiation of the privacy shield, was that **there is not the same kind of systematic**
513 **and intense engagement between the experts in these different pieces.** They are seen as
514 different projects, and that means that there is sometimes a lack of understanding or a lack of
515 ability to weigh off the reasonable requests of different perspectives. And so a better mechanism
516 across subject matter expertise, I think, might be important and in the absence of that, the
517 independence of the data protection commissioners doesn't give them much reason to find ways to
518 get to outcomes that both protect privacy and achieve other goals. **So institutional reform to get**
519 **the perspectives together**, I think, is a **much bigger issue than I have heard discussed**
520 **previously in the European discussion.**

521

522 **ANN METTLER**

523

524 Thank you so much. Then we go to Professor Wendehorst please.

525

526 **CHRISTIANE WENDEHORST**

527

528 Thank you very much. Looking at the European Commission's data plan and priorities as they

529 emerge from the documents dated 10th of January, a central differentiation is made between
530 personal data on the one hand and non-personal data on the other. While I believe this is really a
531 central differentiation one has to make, I also see problems. And some of the problems relate to the
532 facts that have already been mentioned, i.e. that **the divide between personal and non-**
533 **personal becomes blurred. The definition we have under the General Data Protection**
534 **Regulation is extremely broad, so that means that data that maybe considered**
535 **anonymous today can well be considered as personal data tomorrow. So the line between**
536 **the two is a moving target.**

537 That is also a problem with data relating primarily to a business. We are always speaking about
538 machine-generated data, and machines are often used in businesses. However, **also business**
539 **related data may under certain circumstances be personal data**, e.g. if they relate to a
540 particular person running a small business - I know this is disputed but it not entirely clear to what
541 extent we are seeing some General Data Protection Regulation restrictions here.

542 Then there is **Member State legislation that includes legal entities in the scheme of data**
543 **protection**. This is not the case under the General Data Protection Regulation, but it is the case at
544 national level. And I agree with Professor Swire that personal and non-personal data gets mixed.
545 When you look at car data, these are arguably all personal data. The reason why there is a good
546 reason for working with personal data is that **anonymisation reduces the analytical value of**
547 **data**. So non-personal data do exist but the line is difficult to draw and the line may be moving.
548 This means **uncertainty for businesses**.

549 What are the conclusions to draw from all this? Well, first of all, I agree with Professor Spindler that
550 we need more guidance, and that it is probably something for the Article 29 Group or for whomever
551 to provide more guidance as to what counts as anonymisation. But then, speaking about the data
552 economy **I think it is wrong to say from the outset we can never include personal data in**
553 **anything like the data economy**. I think that would be the wrong signal. The US and China and
554 other countries do not have these restrictions, **and I do not think Europe should say that from**
555 **the outset**. So, the idea should rather be to find ways how to reconcile strong data protection and
556 the goal of having a vibrant European data economy.

557 Some of the possible approaches have already been mentioned by Professor Swire. **I would like to**
558 **add one further suggestion by myself, which I am aware may be controversial and which**
559 **I call 'data trusteeship'. The idea is that we support the development of sophisticated**
560 **Personal Information Management Systems, also called PIMS, and that those**
561 **sophisticated PIMS may receive a mandate from data subjects to exercise those data**
562 **subjects' rights under the General Data Protection Regulation, plus rights under copyright**
563 **law**. This mandate would be partly non-exclusive, partly exclusive and the data trustees, as I call
564 them, would be in a position to, make transactions with third parties on behalf of the data subjects,
565 but according to **standardised directions** given by the data subjects - like "no profiling", "only for
566 this and that purpose", etc. - and in the interest of the data subjects.

567 I believe this could, if designed well, create a win-win situation. Why would it be a win situation for
568 the data subjects? Well, the data subjects would have a single point of contact and they would have
569 an entity that really has the technical knowledge to assess whether purposes-limitations are kept.
570 May I run one minute over? [chuckle]. Data trustees would have the **technical knowledge to**
571 **really assess the way data are used and they would be in a position to build up**
572 **bargaining power and to operate in the interest of data subjects.** On the other hand, I think
573 this would be a win situation for the data economy, because it would mean **personal data are not**
574 **from the outset excluded from the data economy, rather it can be part of the new data**
575 **economy in a way that respects data protection and respects fundamental rights of data**
576 **subjects.** Looking at the time, I will not say anything on data localisation. Thank you very much.

577

578 **ANN METTLER**

579

580 Excellent, thank you so much. Next is Doctor Cattuto, please.

581

582 **CIRO CATTUTO**

583

584 I would like to comment on the fact that in the data economy **there is a huge untapped**
585 **potential of usage of non-personal data for decision making,** mostly, right now, due to silos.
586 Non-personal data allows the creation of valuable data assets that can be assimilated to maps. If
587 you think of topographic maps, they represent knowledge about space, and this knowledge is
588 shared and enables decision making about space, and movement in space. In the data economy, Big
589 Data sources will afford exactly the same. We will use mobility maps from mobile phone data,
590 energy consumption, data, etc., to map out poverty or welfare. We will use financial transactions at
591 points of sale to draw the map of a hidden geography of who buys what products at which location.

592 So there is a huge possibility of measuring several different behaviours that have to do with society
593 and its systems in society, enabled by the availability of data sources. This is equivalent to
594 switching on a "telescope" pointed at ourselves. Commercial actors can close the entire chain from
595 the data to the value they extract, but these assets should be created and shared, so **I am happy**
596 **to see that there are provisions in the documents you have shared with us on using**
597 **regulation and legislative pressure to actually create these assets. These assets are**
598 **valuable at the level of an entire ecosystem. So, the logic that we need to imbue into this**
599 **is enabling an entire ecosystem by creating shared data assets which represent a shared**
600 **view of reality, available in real time and at a high resolution.**

601 We also **need to avoid the emergence of a gap in intelligence capability, in insight on**
602 **reality, between commercial actors that create and manipulate these data, and public**
603 **authorities and agencies** that are tasked with managing the reality described by the data. It is
604 true that data markets will probably partially bridge this gap, probably. Industrial data from data
605 markets will generate some of this value. But I believe that we need to give higher priority to

606 addressing this informational asymmetry, and **this justifies, I believe, specific regulation**
607 **targeting non-personal data, and the use of non-personal data for public interest and for**
608 **scientific research funded by the public.**

609 Here in Europe we are quite ahead on the research side; when we speak of computational social
610 science, network science and everything that has to do pre-competitively with the modelling and
611 forecasting of behaviours at an aggregated level. This research was supported extensively in
612 Horizon 2020 and FP 7, and I think we should capitalise on this in bridging the aforementioned gap.

613 About the difficult line that might be drawn between personal and non-personal data, it is true that
614 there are always risks of re-identification, and as we become better and better with algorithms
615 these risks actually increase, but **I think we have to take a proactive approach there and**
616 **actually invest into developing further technologies that can help us have guarantees on**
617 **the risks of re-identification.** In particular, there is research on blockchain technologies,
618 distributed ledgers, the use of homomorphic encryptions, the use of dynamically aggregated or,
619 adaptively aggregated data, the use of surrogate data, synthetic data modelled after the original
620 data. **There is a portfolio of technologies and technical possibilities that we can and**
621 **should use.** We should foster reflection on adopting these technologies, so that we can effectively
622 use data science and unleash the public value it can generate downstream.

623

624 **ANN METTLER**

625

626 Excellent, thank you so much and the last one in this round is Professor Leiponen, please.

627

628 **AIIJA LEIPONEN**

629

630 Thank you. I will focus on the creation of the industrial Internet of Things. I hear my colleagues
631 have already addressed already a lot of other issues, and those are important too, but I'm just
632 going to be focusing on this one. **If we focus on non-personal data, much of the industrial**
633 **Internet data maybe non-personal.** If you think of let's say manufacturing operational data,
634 production data, or logistical data in the Internet of Things. There is a lot of it. How valuable is it?
635 It's probably valuable to the organisations that collect it and analyse it. **How valuable it is**
636 **outside those organisations is not known because we haven't done that much and this is**
637 **work in progress in a lot of industrial Research and Development projects.**

638 **It seems that potential data sharing arrangements might be created through some kinds**
639 **of data pools.** This is perhaps analogous to patent pools which would include a consortia of firms,
640 that after some multilateral contractual arrangements share their operational information. Having
641 talked to a lot of companies and scientists involved in these initiatives, it is clear that **we don't yet**
642 **understand the competitive implications of this, which would need to be studied. If**
643 **industrial players set up data pools, what are the competition implications?** From a more

644 practical perspective, when companies set these up, what they are wondering about is what
645 happens, even if they manage to set up the consortium and write the contracts, what happens to
646 the data that has already been shared if the consortium breaks apart? There is uncertainty about
647 the rights to control the data, beyond the functioning consortium, when there is a contractual
648 breach, and how to prevent third parties from using the data.

649 There are problems also in just setting up those contractual arrangements. How to write it up in the
650 first place? There is a big learning curve there. Companies do not know how to go about doing that
651 and contractual templates might actually be helpful. Reasonable contractual practices, and also
652 reasonable monitoring and auditing practices to track where the data is being used in that
653 consortium, might also help companies get over the hurdle of setting up such arrangements.

654 **Jumping into the General Data Protection Regulation, one of the questions was whether**
655 **it does make a difference, and I do think it does make a big difference. From an economic**
656 **perspective it's very costly. It is a very costly piece of legislation. There is a lot of**
657 **implementation cost for companies dealing with personal data, or data that can be**
658 **viewed as personal data. And it will probably influence innovation, probably encourage**
659 **innovation in certain directions. Probably towards data security applications and away**
660 **from personal data services. That has a long-term dynamic implication.**

661 One example that I heard recently from the Finnish context concerned a telecommunication
662 equipment firm that requested to licence data from a telecommunication network operator firm to
663 train their algorithms related to a set of services they would like to offer. The telecom operator
664 dealing with personal data was not comfortable selling or licencing those data to the equipment
665 developer because there is uncertainty or they did not know how that personal aspect of the data
666 will be viewed legally, so they declined that deal. Ex-post attempting to obtain specific consent from
667 individuals in that dataset would have been impossible. So, innovation in this case is prevented by
668 the General Data Protection Regulation. Whether that's good or bad, whether there could have been
669 some potential harm that might have resulted from that Research and Development project, is an
670 open question. Somebody would need to look into that, but it doesn't seem obvious to me. On the
671 other hand, there might be growing demand in other parts of the world for privacy regulation and
672 privacy technologies in which case the European providers of those security technologies might
673 actually benefit from that, and try to become leading providers of those technologies and services.

674 **Just one word about localisation restrictions, which I think are going to be rather futile.**
675 **I don't think they provide a lot of protection, but in some cases, super sensitive data**
676 **might benefit from that extra protection, but they would need to be studied case by case**
677 **to justify for restrictions.**

678

679 **MARIO MARINIELLO**

680

681 Thank, thank you very much. I will now read question four as with the previous question, you will
682 have 5 minutes to reply. So:

683 ***'The Commission intends to engage in dialogue with stakeholders to improve the EU***
684 ***framework for data access. The following goals are pursued: improve access to***
685 ***anonymous machine-generated data, facilitate and incentivise the sharing of such data,***
686 ***protect investments and assets, avoid disclosure of confidential data, minimise lock-in***
687 ***effects. Do you agree with these goals and what would be in your view the best way to***
688 ***pursue them? Which ones should be prioritised, and if any, what other objectives should***
689 ***the European Commission aim to achieve and why?'***

690 So this time we start with Professor Stucke. Here you go.

691

692 **MAURICE E. STUCKE**

693

694 Ah, yes, if I could take at least one or two additional minutes for this question and take that from
695 question number five.

696 **I agree with the Commission's goals with a couple of caveats. One caveat is that the**
697 **goals should be broader than minimising lock-in effects. The goal should be to minimise**
698 **anti-competitive distortions in the marketplace.** This broader goal would address additional
699 barriers to the flow of data. One potential barrier that I mentioned previously are these data-driven
700 network effects. Data-driven network effects are not necessarily bad. In fact, users' utility increases
701 as other people use the product. But **with these data-driven network effects, strong firms**
702 **can become even more powerful until they dominate the industry.** This area is tricky
703 because you can't fault a firm for getting larger because of these network effects, but you still
704 want to explore how you can promote competition and the free flow of data in markets with these
705 data-driven network effects. This will be particularly important with the **rise of these digital**
706 **personal assistants.** You may see them in commercials already. Amazon is offering, *Alexa*, Google
707 is offering, *Home*. Since these digital butlers will be a key gatekeeper of the data collected from the
708 smart technologies in our home, one concern is the super platforms' abusing their dominant
709 position in limiting access to this data.

710 **You also want to examine anti-competitive distortions in the marketplace, as I**
711 **mentioned earlier. One area would be data-driven mergers and in particular, vertical**
712 **mergers,** where let's say the largest user of a particular type of data acquires a leading supplier of
713 data. You also want to look at mergers that fall outside the traditional paradigm of competition
714 policy. Suppose Google if they were to acquire Twitter. That wouldn't historically be a horizontal
715 merger, as the companies do not directly compete; nor is it a vertical merger, nor is it a
716 conglomerate merger. Nonetheless, these types of data-driven mergers can have a negative impact
717 on the free flow of data.

718 **Another area you want to consider are abuses by dominant firms and these abuses can**
719 **take various forms.** One would be exclusive dealings to prevent rivals from accessing critical
720 data, second would be exclusionary practices that prevent rivals from achieving scale and thereby
721 collecting data. Third would be dominant firms leveraging their data advantage in a regulated

722 industry to another market. Fourth would be dominant firms increasing their customers' switching
723 costs. In order to maintain its data advantage and prevent rivals from achieving scale, a monopoly
724 can make it harder for its customers to switch. If customers are then locked-on, locked-in rather,
725 the monopoly can continue to acquire the data, and maintain its power. **The General Data
726 Protection Regulation helps address this but you still have the concern of dominant firms
727 using other tactics to make it harder for customers to switch, which data portability
728 won't necessarily remedy.**

729 **And the fifth area of potential abuse would be vertical integration by a dominant
730 platform operator** such as when Google vertically integrates and starts competing and they have
731 a 'frenemy' relationship with these apps.

732 **My second caveat is that the ultimate aim is not to improve the free flow of data *per se*
733 but to improve overall welfare; so you also have to consider any potential anti-
734 competitive risks in increasing the free flow of data.** One concern is that promoting the free
735 flow of personal information can **facilitate price discrimination**. Another concern that we explore
736 in our book 'Virtual Competition' is how increasing the free flow of ordinary market data in some
737 industries can **facilitate tacit collusion**. And I'm not talking here about sensitive internal business
738 records. Rather, tacit collusion is fostered by increased market transparency, generated by the free
739 flow of ordinary data collected by the Internet of Things, and artificial intelligence. Companies then
740 can see what their rivals are doing, they can also see what customers are doing. In some markets,
741 this increase in market transparency can foster tacit collusion. The important thing here is that
742 **tacit collusion is beyond the reach of EU and US competition law, but the outcome is bad.**
743 Namely, consumers end up paying more or getting less than they would otherwise get in a
744 competitive market. **So you want to ensure that the free flow of data ultimately promotes
745 welfare, and that the company's interests in collecting and using data are aligned with
746 society's interest.** Thank you.

747

748 **MARIO MARINIELLO**

749

750 Thank you very much. Professor Swire.

751

752 **PETER SWIRE**

753

754 Yes, thank you. And first I'd like to say that the discussion of competition law that we just heard
755 was I think very far more sophisticated in discussing issues related to portability, than the
756 discussions that I was able to find, at least in public, in connection to the General Data Protection
757 Regulation data portability provision. The next question is more about portability, but the comments
758 we just heard are a much fuller anti-trust explanation of what's relevant than I have seen
759 previously, and I really appreciate those remarks.

760 In terms of question four, and I'll turn to portability more a little bit later, a first point is that
761 **removing barriers to sharing information doesn't mean there will be sharing of**
762 **information.** We've seen this in cyber-security, where the United States has gone through rounds
763 of efforts to eliminate barriers for sharing for cybersecurity purposes. If we share for cybersecurity
764 purposes, that can be helpful because we can spot the bad guys who are attacking us. **But, you not**
765 **only have to get rid of barriers but you have to have some incentive to share, and often**
766 **self-interest means that a company doesn't find any reason to share the information.** So
767 you can't just think that magically sharing will happen if barriers are removed. You're going to have
768 to look at the incentives of each player to see what they are going to do with it.

769 **The second point that I'd like to say is that in the Staff report and the other reports, I**
770 **felt that there was a tension between two different views that maybe haven't fully**
771 **surfaced, and one view you might call the intellectual property side of data, which is how**
772 **do we ensure that companies get their rewards for their investment,** and that can be a sui
773 generis database protection, or it can be trade secret protection. And in that view the idea is we
774 want to have companies getting proprietary yields from when they invest in data. **But there is**
775 **another view which is quite different which is that the more open, the better, which is**
776 **going to be that we think it's going to be the best outcome for society if in general there**
777 **is going to be more data in the data pool for everyone to play with.** And I didn't see a very
778 clear explanation of when each of those goals would apply. In the abstract each of those sounds
779 good; openness is good, and also reaping the rewards of your investment is good. So I can't resolve
780 the answer as to when each is better but I think, I sound like a Professor at this point, **more**
781 **research is needed to delineate when the intellectual property approach is more**
782 **important or when the data pooling is more important.**

783 One possibility **where data pooling is important is to consider that essentially you're**
784 **creating public records. Records that are going to be available for everyone in the public.**
785 There has been quite a gap historically, between public records in the United States and public
786 records in many countries in Europe. The US has leaned towards having more information in public.
787 You can find out how much my home was sold for, and who holds my mortgage in the United
788 States. In many European countries that wouldn't be public. And, **so one approach when you**
789 **think you want to have more data be open is to explicitly decide that some category of**
790 **data is public data and at that point, privacy rules wouldn't apply because it is open.** And
791 some countries in Europe have broader public record rules. Sweden does historically around income
792 and various other things. So, I think those are the points for here, I think I'll come back to data
793 portability later but I do want to appreciate the remarks we just heard about the wider range of
794 anti-competitive practices to have concerns about here than just lock-in. Thanks.

795

796 **MARIO MARINIELLO**

797

798 Thank you very much. Professor Wendehorst.

799

800 **CHRISTIANE WENDEHORST**

801

802 Thank you. The **empirical data we have seem to suggest that there is a tendency that data**
803 **are kept within the company and are not shared with others and this is seen as being a**
804 **problem.**

805 Let me make three remarks on this. My first remark is this: **you can't have your cake and eat it.**
806 When we discuss data protection, we say that keeping the data within the company is what we
807 want, what is precisely the ideal. We want to have a clearly defined purpose and want the data to
808 be in one place, and as a matter of principle we do not so much like them to be passed on, and
809 passing them on needs justification. So there are two potentially conflicting goals, and we have to
810 reconcile them.

811 Second remark, **I think competition law is really the area to deal with the emerging issues.**
812 Building up monopolies is not a new phenomenon. Vertical integration is not a new phenomenon.
813 We've had that for decades, if not centuries, also outside the data economy and we know how to
814 deal with such developments. It may at times be difficult, but we know in principle how to deal with
815 it. And there are some court decisions like IMS Health, Magill, Huawei etc., which show that in
816 principle, competition law also works in the data environment. We **may have to consider some**
817 **changes, for example when it comes to merger control it may be not sufficient to only**
818 **look at turnover figures, so we may have to make some adjustments here and there, but**
819 **in principle I think competition law is the key to our solution.**

820 Having said this, there are certainly some **additional measures** which I would like to recommend.
821 **One is the development of standard contracts, standard licences, with guides on how to**
822 **use them.** This would not be coercive, it would just be something that would be offered to
823 businesses in Europe and they can make use of it or not which would be beneficial in particular for
824 SMEs. Then **I could imagine targeted harmonisation of data contract law, clarifying the**
825 **role that is played, for example, by property law and possibly introducing some sharing**
826 **obligations for data analytics carried out in the name of the public interest,** a little bit like
827 in the 2016 copyright proposal, but of course also different.

828 Just my third and last remark. **I am very sceptical when it comes to introducing something**
829 **like a data property right at this point.** I think this is definitely immature as it might have a
830 disruptive effect on the data economy, and it would be difficult to control and to define. **It might**
831 **achieve just the opposite of what we want to achieve.** Thank you.

832

833 **MARIO MARINIELLO**

834

835 Thank you very much. Doctor Cattuto.

836

837 **CIRO CATTUTO**

838

839 Yeah, thanks. Overall I agree with the goals to improve access to data. **Currently, especially for**
840 **research and for the value it can generate downstream, the barriers seem to have to do**
841 **with uncertainties about the liabilities in sharing data; the costs of post-processing data**
842 to make it available to researchers; or **when the data cannot be moved, the risk of giving**
843 **third parties access to one's secure infrastructure.**

844 In general, on creating this compositionality that unleashes value from data, **there is a general**
845 **perceived imbalance from the commercial sector between the risks and the benefits of**
846 **sharing data, and I think the imbalance is real. There is uncertainty. There is also, as it**
847 **was pointed out by the colleague, a general lack of standard contracts that can be used**
848 **as blueprints for setting up data-sharing agreements.** Right now data sharing happens more
849 often than not in a point-to-point fashion, and this leads to delays and extra efforts, that would be
850 avoided if we had blueprints for this kind of agreement. Moreover, point-to-point arrangements
851 tend to discourage replication which is a huge problem for research because you end up with point-
852 to-point relations and generally one-off results than the community cannot replicate. And **this is a**
853 **recipe for bad quality science - lack of replicability overall.**

854 So in general, anything that we can do in order to lower these barriers for research and for
855 commercial actors alike will be valuable. There should be, I believe, a **stronger focus on improved**
856 **access to machine-generated data to support the excellence of European science.**
857 **European science has actually moved fast on the underpinning knowledge needed to**
858 **extract value from data and now it needs to be empowered with the right level of data**
859 **access.** I would like to **call for a sort of 'Big Science' vision for European data science.** There
860 is already a strategy fleshed out for communication networks and high-performance computing,
861 that is the foundational layer. **I think it would be interesting and important to flesh out the**
862 **strategy for a fully European ambition of research enabled by data that might be**
863 **commercially held at the origin.** These **data, as mentioned above, provide information**
864 **about processes that are core to the functioning of civil society, so it is important that**
865 **we create these value chains.**

866 One of the questions was **whether there is a gap between the private and social value of**
867 **data owned by private firms. In respect to social welfare I believe this gap is actually**
868 **there and should be addressed.** Incentives will go a long way, but I think that it **would be very**
869 **valuable to have a library of collaboration patterns around data.** There are experiments and
870 projects along these lines in the US, one in particular comes to my mind, the Data Collaboratives
871 project by the New York University Governance laboratory, GovLab. What they do, which I find very
872 useful, and could be replicated, is to **create a library of success cases where data were**
873 **shared** between public stakeholders, commercial actors, government, non-profits, etc. Such a
874 library of success stories could, on the one hand, inform policy making by pointing out what works,
875 what does not, what are the friction points, whether there are some regularities there that could be

876 captured and turned into policy. On the other hand, it would generate awareness about blind spots.
877 By mapping out data sharing exercises, it might be possible to see that some value we expect to be
878 generated is not generated, and this can pose targeted questions and lead to a call for action.

879 In general I find that in this discussion about the data ecosystem there is a **blind spot about the**
880 **potential use of data by philanthropies and foundations**. Europe has got a very rich
881 ecosystem of foundations. Next month, at the annual general assembly of the European Foundation
882 Centre there will be a session about data science for philanthropy, which is not just about reasoning
883 on how to evaluate the impact of philanthropic actions by using data, but it's also an opportunity to
884 be proactive in funding interventions that bring together different types of actors with the goal of
885 sharing data. This is another way to incentivise, for public interest, interactions and data exchanges
886 which otherwise the market would not generate. Thank you.

887

888 **MARIO MARINIELLO**

889

890 Thank you. Professor Leiponen.

891

892 **AIJA LEIPONEN**

893

894 Thank you. I will jump right into the discussion of market, potential market failures in data. **I think**
895 **we can easily imagine that there will be market failures in data, but we don't know**
896 **where they will be**. So, because of the non-rivalrous nature of data, there is, with very high
897 likelihood, opportunities to use the same data elsewhere in the economy. But those trades might
898 not happen because of uncertainties in the marketplace and difficulties of knowing what the
899 potential uses might be. **And ex-ante regulation for those eventualities would be very risky**
900 **and would be difficult to see how that could be done**.

901 On a general level **I can see potential for incentivising firms to share their data through**
902 **some kind of Fair, Reasonable And Non-Discriminatory licencing or some other**
903 **mechanisms** when that's associated with, for example, Research and Development investment
904 subsidies. So if there is a research programme, a Research and Development programme, that is
905 incentivising technology development in a particular area that might be combined with some
906 expectations for sharing data that is being created as a side-product of that Research and
907 Development. **But if there is aggressive legislation to share data that private actors**
908 **already hold, that creates an incentive to not continue to hold those data**. Data sharing
909 requirements can backfire, and we would need to know when they do so; when we should expect
910 firms would prefer to get rid of their data rather than share it.

911 **The value of data, as that of other forms of intellectual property, is largely determined**
912 **by the context in which it is used. Therefore there is unlikely to be an open market and**
913 **prices for data, in any meaningful way. Unfortunately I think these kinds of markets will**

914 **be riddled with and implemented with price discrimination - that will be an inherent part**
915 **of market formation.** If most trades will be bilaterally negotiated, there will almost by definition
916 be price discrimination.

917 We're dealing with markets where there is probably going to be large fixed costs to create the data
918 assets and low or zero marginal cost, and **so we cannot fall back on the very traditional anti-**
919 **trust analyses to deal with this market.** More likely we will see price discrimination strategies
920 for companies creating data assets trying to find who is willing to pay for these assets or services.

921 I would also note that **data is usually an intermediate input;** it's not a final output, so it goes
922 through a production process to create more value out of it. You mentioned data value chains, and
923 that's an important perspective into understanding how value is created in the data economy. There
924 can be many steps, and the original data resource can be manipulated many times in different
925 ways, and subsequent outcomes can be again manipulated in other ways for many potential
926 markets, and so, that's just the nature of this input, and the nature of the asset. We have to keep
927 that in mind when we think about markets for data.

928 Some specific initiatives that I've seen in those communications from the Commission; **I've seen**
929 **producer rights mentioned as a potential approach to strengthen the data holders' rights**
930 **in commercialising their data.** In some cases I can see that might enhance the benefit of sharing
931 their data when there is a reason to engage in sharing or selling data, or licensing data, but the
932 data holder is concerned about incomplete contracts, including third-party implications, and long-
933 term implications. **But I would also be very concerned if such producer rights were**
934 **associated with the ability to block competitors who independently create similar**
935 **datasets and then are not allowed to commercialise those.** And I don't know how to deal with
936 that problem, legally.

937 Another initiative I have seen is the rights of users, especially device owners to their own user data.
938 Who should have rights to that? Is it the manufacturer, or is it the user? Device owners themselves
939 have rights to that. And **there are likely to be innovation implications associated with that**
940 **decision. Incentivising the owner of the device to utilise their own data and potentially**
941 **share it with third parties might enable them to enter into that industry. I believe this is**
942 **a situation where they may potentially be reasons to share those data.**

943 **One last thing I want to mention is that distributed ledger technologies, blockchains and**
944 **such, might facilitate some of these rights issues in the future.** Probably not in every
945 situation and every industry and every case, but these technologies are worth considering in the
946 data market. **The Commission could find ways to support the development and application**
947 **of such technologies in the data markets.**

948

949 **MARIO MARINIELLO**

950

951 Thank you very much. So our last speaker, Professor Spindler.

952

953 **GERALD SPINDLER**

954

955 Thank you, and I can easily join confirming what has been said before, but I will just try to add
956 some aspects to that. I think there are two flip-sides of the same coin, as Christiane Wendehorst
957 has already pointed out, we are confronted with a question of access or use on one side and
958 protection on the other side, which is mentioned here in your core question.

959 First let's have a look at the acts, at the use side concerning intellectual property rights. As I already
960 mentioned, there is already in the Parliament the proposal on text and data mining of the
961 Commission and which is really crucial for anything to make use of already existing data. **If it's**
962 **really true that this is a limitation to cover use of existing data and texts then we should**
963 **affirm that the mere use of data does not infringe intellectual property rights; otherwise**
964 **it would have a huge impact of anything concerning algorithmic and data etc.** because
965 then you need a licence which the publishers are already trying to invoke.

966 **Secondly, Database Directive, and here we are confronted with the problem of what is**
967 **protected in the Database Directive. Usually only the structure of the database is**
968 **protected, but also collecting the data if there is a substantial investment.** So what is then
969 collecting, according to the European Court of Justice? It is not only about collecting existing data;
970 it's also about adding something substantial. So how about now sensors which are collecting data;
971 is that protected or not? So, **we have to clarify that** and it could be easily done in just amending
972 the Database Directive which also needs to be amended, concerning other issues, like access to
973 data.

974 **Thirdly, we have the Know-how Directive which could affect the notion of industrial data**
975 **here, but it is not, as somebody said, an intellectual property right, we really have to be**
976 **careful here. It's not tradable in the traditional sense of intellectual property rights.**

977 **So there are a lot of legal uncertainties still there in the room which could easily be**
978 **solved in the next coming years without stirring up a debate which would lead to the**
979 **very bottom line.**

980 Secondly, **concerning more general ownership of data, we shouldn't introduce anything**
981 **like that.** It has already been mentioned by my colleagues from the economics side that it is very
982 hard to here create property rights in an economic sense, in strict delineating the border lines, or
983 what about similar datasets etc., as Christiane Wendehorst already really pointed out that this could
984 blur all the lines between intellectual property rights and anything else. **For me, the basic**
985 **question is: are we talking mainly about business to business contracts, is there really a**
986 **market failure?** Are industries in other countries which also do not know what property right on
987 data, are they failing completely? **I haven't seen that until now; as an economist I would say**
988 **that there is a prima facie proof that obviously the markets are working,** somehow.

989 So next point then is antitrust law, and I mostly agree with my colleagues, this is one of the core
990 issues; however I am a little bit more sceptical. If we take a closer look to the so called more
991 economic approach in **anti-trust law, it shows us that most of the cases are pending for**
992 **years and years and this may lead to the very problem that anti-trust law may step into**
993 **too late.** Let us, imagine a Small Medium Enterprise trying to fight again, against one of the
994 dominant market player on a private legal basis then it will easily end up two three years later, with
995 the absolutely bankruptcy of the Small Medium Enterprise. Of course there are some prominent
996 cases in anti-trust law, but **usually anti-trust law steps in too late. It's an ex-post solution**
997 **which may not in an economic sense really work out.**

998 So, moreover, concerning the economic effects, **I just wanted to call in mind that we are here**
999 **faced not with a static competition issue, but a dynamic competition, and this is really**
1000 **very hard to assess how dynamic competition inter-temporal allocation of resources as**
1001 **has been called in economics, can be here assessed.** We are confronted here with very
1002 dynamic business models which vanished over time; think of the old Microsoft debate in the
1003 nineties and this is not on the table anymore, concerning that.

1004 And this leads me to the next point, **what is the definition of markets**, what is the dominant
1005 market player? We have learned a lot and sure we have to take into account dominancy concerning
1006 data and some, but I think **we still need a lot of research** also from the economic part of, to
1007 assess that.

1008 So what would then be the solution to my mind? It could be thought of **an introduction of**
1009 **something like in the Software Directive as already mentioned, or in the Database**
1010 **Directive, such as an extended right to have an interface, a right to have access to the**
1011 **data, but which is then as some sort of a negative part of 'property rights', not a**
1012 **tradable right in the sense of intellectual property rights but to have the right to access**
1013 **like in the software to the code in order to establish the secondary market.** And it could be
1014 combined with Fair, Reasonable And Non-Discriminatory licenses for example.

1015 Last point, concerning the platforms, it is absolutely interesting to see that there are no platforms
1016 obviously really working now, and we are facing this data now for more than ten years. Then the
1017 question surely arise of what are the reasons perhaps, if there is a market failure, what are the
1018 potential reasons for that. You named a lot concerning the platforms or patent pools etc. but it is
1019 not about the comparison with patent pools because these are referring to real property rights. **We**
1020 **should more look into pools of know-how, sharing know-how, this could be combined with**
1021 **post-contractual obligations and guarantees etc.** And there, **the Commission could play a**
1022 **role in establishing standards and standard contracts for them, such blueprints contracts**
1023 **in order to establish these kinds of platforms which then can be to overcome the market**
1024 **failure.**

1025 Last but not least, and also referring to what Christiane already said, **I'm in favour to extend the**
1026 **unfair terms and conditions directive concerning Small Medium Enterprises, in particular**

1027 **by introducing on the blacklist something about data licence agreements and**
1028 **intellectual property licence agreements in order to overcome market failures.** Thank you.

1029

1030 **ANN METTLER**

1031

1032 Thank you so much. The fifth question deals with non-personal data portability and inter-operability.
1033 You will have five minutes to answer. The question goes:

1034 **'The European Commission intends to address issues of portability and inter-operability**
1035 **for non-personal data. Do you support that initiative and why? In your view what are the**
1036 **best ways forward to facilitate switching and to prevent lock-in while minimising the risk**
1037 **of undermining investments in the data value chain?'**

1038 So we'll start off with Professor Swire please.

1039 **PETER SWIRE**

1040

1041 Thank you very much and as I mentioned earlier I wrote a paper on data portability as proposed for
1042 the General Data Protection Regulation, and much of the analysis would apply here to non-personal
1043 data. So, before getting into the anti-trust points I made there, the idea that we should address
1044 market failures and not others, that's something that I would take. The fact that anti-trust cases
1045 happen too slowly and ex-post, I agree with that, and I agree with many of the points Professor
1046 Stucke made. However, **the anti-trust analysis I did to the right of data portability was**
1047 **much more sceptical as an anti-trust measure.** So, if you look at anti-competition law in the
1048 EU, trying to help out consumer welfare, **there's at least three ways that the right to data**
1049 **portability in the General Data Protection Regulation departs a great deal from EU**
1050 **competition law. The first is that it applies to small, medium and moderate sized**
1051 **enterprises in addition to dominant firms.** So, at least as I read it, if you are two or three
1052 people writing a software app, they would have to write portability in from the start. There's not any
1053 real plausible anti-trust case that they are locking in or whatever. So attention to dominant firms is
1054 what people are talking about, but the rule applies across the board even to Small and Medium
1055 Enterprises. **That seems over broad, it discourages investment in small firms that don't**
1056 **have time to go write extra software and, and there's often difficult interoperability**
1057 **problems when you write software.** So the over application of it even to small firms is the first
1058 point.

1059 The second point is that **it really makes the rules about lack of portability into a per se**
1060 **violation instead of the rule of reason approach which is usually taken for exclusionary**
1061 **practices.** We have heard reasons why refusal of supply or denial of access or whatever might be
1062 there for dominant firms, but **there's a lot of possible efficiency reasons not share data.** One
1063 that gets used very often is to say 'I'm not going to share my data with you for cybersecurity or
1064 privacy reasons, because I think it would be a risk in those ways'. Sometimes those are a pretext,
1065 it's not really a cybersecurity argument, it's an anti-trust exclusion problem. But sometimes the

1066 cybersecurity argument is a good one about not sharing the data. And so, a *per se* rule, instead of a
1067 rule of reason, seems very different from European competition law. I think I combined my second
1068 and third points.

1069 The other things I'd say is that in the questions there's discussion about **promoting standards for**
1070 **interoperability and standard formats. I think that there is a role for public policy and**
1071 **standards bodies and it can increase interoperability and create benefits. But I, would**
1072 **caution, and come back to this point, of not requiring non-dominant firms to have a**
1073 **regulatory burden out of all this.** If the companies comply really with that it could be really
1074 difficult and expensive to do the software, and that's the point that doesn't seem to be widely
1075 discussed, as the right to data portability was considered, for General Data Protection Regulation.
1076 Thanks very much.

1077

1078 **ANN METTLER**

1079

1080 Excellent. Thank you so much. Next is Professor Wendehorst please.

1081

1082 **CHRISTIANE WENDEHORST**

1083

1084 Thank you very much. When it comes to portability of non-personal data I would like to differentiate
1085 between two scenarios which I think are often confused. The first scenario is a contractual scenario
1086 in which data are held by contracting partners, for example a cloud service provider or they are held
1087 by the producer of goods or of digital content which a person has acquired, such as by a car
1088 manufacturer, or by another business that cooperates with the contracting partner or the producer.
1089 The person running the car, or the person using the cloud service, has **a contractually protected**
1090 **interest in those data**, e.g. to get their e-mail back when they want to switch the provider, to get
1091 customer or financial data required for running a business back, including when the person is not
1092 satisfied with the service, and so on. In these cases **portability and interoperability are crucial**
1093 **and must be provided for, and they would in many countries already be protected by**
1094 **contract law - for many reasons, including facilitating switching. They would even go**
1095 **beyond what we have in Article 20 General Data Protection Regulation** because they would
1096 not be just for the raw data, (c.f. what the Article 29 Group has just clarified), but also for refined
1097 data where this is what is required. I believe we need something for this contractual scenario if
1098 there are indeed problems in practice, which I appreciate there are. I can repeat what Gerald
1099 Spindler has said: **we need unfair contract terms control, we need lists of unfair contract**
1100 **terms that are specifically addressing data issues and we may need new contract rules**
1101 **that work for multilateral environments and that take data issues into account.** So where
1102 data are required by a person to get what that person was entitled to expect under a contract,
1103 interoperability and portability - no matter whether data are personal or non-personal, no matter
1104 whether the person entitled is a business or a consumer - are absolutely crucial and must be
1105 addressed.

1106 **But then there is the second scenario**, where **data are collected solely for some other**
1107 **than a contractually protected purpose**, e.g. the manufacturer of a machine that has nothing to
1108 do with weather conditions collects weather data, and the only interest, which the person owning
1109 the machine could have in getting the data back would be to use them as a bargaining chip for the
1110 potential next provider. In this case, **I think the situation is very different**, and **we need a**
1111 **really strong justification for going into the direction of an equivalent to Article 20**
1112 **General Data Protection Regulation**, in this second scenario. Of course, as I have recommended
1113 data trusteeship I should have some sympathy for an equivalent to Article 20 General Data
1114 Protection Regulation because that would allow for a uniform approach to personal and non-
1115 personal data, but, from another point of view, **I think there would be serious side effects**. It
1116 might discourage businesses from creating innovative collections of data, it might endanger
1117 investment, and as Professor Swire has pointed out, it might be a disproportionate burden on Small
1118 Medium Enterprises. So **in the second scenario I do currently not see a sufficiently strong**
1119 **case for going into the direction of an equivalent to Article 20 General Data Protection**
1120 **Regulation**. Thank you very much.

1121

1122 **ANN METTLER**

1123

1124 Thank you. Next up is Doctor Cattuto please.

1125

1126 **CIRO CATTUTO**

1127

1128 Thank you. I will just add a quick comment, since most of the comments I had have been pretty
1129 much covered by what has been said until now, in particular by Professor Swire. Just one comment
1130 on standards: achieving standards is certainly something that the EU has to work towards, also as a
1131 way to level the ground for competition, but in **dealing with global players, imposing**
1132 **standards and making them binding will lead, I think, to a protectionist approach to**
1133 **standards, and eventually, I think, it might incur the risk of raising barriers for the entry**
1134 **into the market of smaller players of SMEs in particular**.

1135 **Standards, especially in the Internet of Things domain, will emerge out of the interaction**
1136 **of market players**. Most of these players, whether we like it or not, will be global players, they will
1137 not be European players, and probably they are already dominant players. And they have all the
1138 technical and pragmatic means of making their standards successful. So I think that engaging in
1139 dialogue is important, but **relying on binding standards will just alienate opportunities for**
1140 **our market and will create a barrier to entry into the market**.

1141 The other challenge here, especially in the Internet of Things domain, **is that data portability**
1142 **meant in terms of provisions to extract, move and import into other systems, data**
1143 **generated by sensors can be technically very difficult to achieve. This might impose a**
1144 **heavy burden on the data generator, or it might expose, on sharing the data, competitive**

1145 **intellectual property assets of the data generator.** We are reasoning about systems where
1146 the sensor will be just one part of the valuechain, but the sensor itself might incorporate a
1147 significant level of intelligence, and might be endowed with technical capabilities that are advanced:
1148 sharing the raw data it generates might significantly expose a lot of the intellectual property and
1149 endanger investment on part of the data generator. I think this is a huge challenge and this just
1150 calls for more research in this direction. Thanks.

1151

1152 **ANN METTLER**

1153

1154 Excellent, thank you so much. Next is Professor Leiponen please.

1155

1156 **AIJA LEIPONEN**

1157

1158 Okay, thank you. I'm trying to focus on switching costs and lock-in in non-personal data settings and
1159 in particular, within **industrial settings**. And **it does not seem to me that switching costs are**
1160 **a huge issue in that space**. The portability of data from one industrial setting to the other is
1161 probably not what is driving the decisions or influencing the competitive outcomes in that area, so...
1162 Personal data switching costs may be a whole different issue but in the industrial setting I don't see
1163 that as quite a central influence in the competitive outcomes.

1164 There was a question about welfare effects related to data portability on multisided markets. It is
1165 well known that multisided markets may concentrate market power very substantially, but
1166 sometimes they're also the only way to realise network effects; and these network economies are
1167 quite central to communication networks. **And so we need to deal with the market power as it**
1168 **arises with the network effects, but it is not clear to me that portability will solve that**
1169 **problem of network effects increasing market power for platform providers.**

1170 **Data standards I think are a big issue.** This seems a very mundane and technical issue but it is
1171 actually difficult to address in many industrial sectors. **Standards appear to be quite**
1172 **fragmented across industry verticals and even across organisations**, as large organisations
1173 may have their own legacy formats and ways of processing and storing data. And for that reason I
1174 would be, **I would encourage any efforts to create open European or global standards**
1175 **around data perhaps for storage and exchange**. One possible area where I see that to go
1176 forward with that is applying, developing such standards and applying them for public sector data
1177 within the European Union and **making public sector data available according to those open**
1178 **standards. This might generate use and innovation around the data** and adoption of those
1179 standards and formats at the same time. Open and standardised public data would potentially
1180 enable innovative start-ups in using both the standards and the data to enter the data economy.
1181 And one interesting part of that picture is the 5G, so called 5G standards that are more at the
1182 network level may also play a role. There's also some fragmentation of the network standards

1183 themselves. And I'm not sure how to go about harmonising all that, creating one big Internet of
1184 Things, but fragmentation is always a problematic in communication networks.

1185

1186 **ANN METTLER**

1187

1188 Very good. Thank you, next Professor Spindler please.

1189

1190 **GERALD SPINDLER**

1191

1192 I think I can be brief because I mostly agree, let's say, to what my speakers before had said. **First**
1193 **of all I'm very sceptical about any welfare effects of some sort of standardisation,**
1194 **because usually, if there is really a need for standardisation, the industry will call for it.**
1195 They will just give a mandate to the standardisation organisations and mostly they do not need
1196 some support or stirring by the Commission. Even though you would identify some form of market
1197 failure, then it would be a question why shouldn't we mandate the European Committee for
1198 Standardisation (CEN) for example with these standards, so that industry can go for it.

1199 And I just wanted to pick up what my Finnish colleague already said and she was absolutely right:
1200 we have to do our homework concerning standards in the states and I can just tell you the mess.
1201 We have in German administrations that some agency cannot communicate with some other
1202 agency because they are applying for example different standards. But how to overcome that
1203 problem? That would be highly difficult for the European Commission, as you won't tell German
1204 administration which standards they have to apply! But this is just a factual problem which we are
1205 facing there. And so it really would be to say bluntly **it is quite a joke if we are now trying to**
1206 **establish standards for industry and we are not able to do it, at home, even in our own**
1207 **state at the federal level.**

1208 So I have my doubts if efforts in standardisation are really necessary, in particular by State
1209 intervention. If so, standards also should be related **to Information Technology security**
1210 **questions.** If we are going to establish standards for data which are to be transmitted (but also of
1211 course for software etc.). We have to care for security standards as well. **So standards yes, but in**
1212 **other areas than here, because usually platforms (for example in industry), are creating**
1213 **them themselves.** I'll just call to your mind, for example, the banking networks which established
1214 over decades these interoperability standards for data between, because they had a need for that.
1215 Exchanging financial data, they established worldwide networks, creating a standard for that. So I
1216 do not see really here a need, and in contrast, there could be detrimental effects to the welfare.
1217 Take for example trading platforms with reputation systems; if you just make it all interoperable as
1218 far as people from E-bay - I have to believe it, I cannot verify it but it's true then their asset - their
1219 core asset in the networking platform is their reputation system. So if you transfer that, to other
1220 systems, to other platforms then they would lose a lot of their investment there. If it is true that
1221 statement, I just cite it here. Thank you.

1222

1223 **ANN METTLER**

1224

1225 Very good. Thank you so much, and last Professor Stucke please.

1226

1227 **MAURICE E. STUCKE**

1228

1229 Okay. **To the extent that data-driven network effects and market power are at play,**
1230 **increasing portability may lower switching costs and entry barriers, and also reduce**
1231 **quality differences among products.** But, like Peter I would encourage you to look beyond data
1232 portability. **Promoting data portability will not necessarily remedy every anti-competitive**
1233 **distortion in the market place, and one may need other more finely tuned measures to**
1234 **promote the free flow of data.**

1235 One example is **anticompetitive scraping.** One complaint now before the European Commission
1236 against Google is that it scrapes content from rivals and posts that content on its own websites.
1237 Consumers, as a result, remain on Google's websites and Google collects the consumer data. Now,
1238 allowing consumers to port their data won't necessarily prevent or remedy this anticompetitive
1239 scraping, which adversely affects companies upstream. **Another example involves one of the**
1240 **four V's of Big Data, namely velocity;** one illustration is the real time geo-location data for
1241 turn-by-turn navigation apps such as Google's and Waze's navigation apps. **The velocity in**
1242 **collecting and processing data is key. Even if you allow consumers to later port their**
1243 **geolocation data, that won't be of much help to rival navigation app providers. To be**
1244 **competitive in some markets, rivals may need access to that geo-location data at the**
1245 **same time.**

1246 **So one thing you may want to consider in some of these markets where velocity is key is**
1247 **to shift from an ex-post to an ex-ante framework,** whereby for example, individuals can elect
1248 ex-ante the simultaneous collection of their data from their own data locker. And I would say, the
1249 broader point, to follow what Gerald Spindler mentioned, is that **anti-trust won't always be a**
1250 **good solution,** particularly from an ex-post perspective. **What is required is greater**
1251 **coordination among competition, privacy, and consumer protection officials to identify**
1252 **the necessary preconditions for both privacy competition as well as a competitive data-**
1253 **driven economy overall.** Thank you.

1254

1255 **MARIO MARINIELLO**

1256

1257 All right [cough], thank you very much. So this is our last question, to gather your bottom lines, and
1258 each speaker will now have just one minute to reply. So:

1259 ***'In a nutshell, what is your main message to the European Commission, regarding what***
1260 ***should or should not be done about the data economy?'***

1261 Please.

1262

1263 **CHRISTIANE WENDEHORST**

1264

1265 Thank you, well one minute, that's difficult. **I think this session has shown the importance of**
1266 **interdisciplinary research.** We need to know about the technical possibilities, we need to know
1267 the economic impact, we need to have legal perspective and **if in doubt we should probably**
1268 **take a cautious approach: start with minimum invasive measures and see what the**
1269 **effects are and not rush things with something the effects of which we cannot foresee.**

1270 Thank you very much.

1271

1272 **MARIO MARINIELLO**

1273

1274 Twenty seconds! [chuckle]. Doctor Cattuto, please.

1275

1276 **CIRO CATTUTO**

1277

1278 **The data revolution hinges critically on data reuse for purposes not anticipated**
1279 **originally, so we need additional measures to maximise data use and reuse for public**
1280 **interest and to level the ground between public actors and commercial stakeholders in**
1281 **terms of the intelligence and decision-making capabilities that might have public**
1282 **interest.** And, of course, we need to achieve this while, at the same time, **protecting the**
1283 **investment** of commercial stakeholders.

1284 **On the science side, we have an opportunity to improve the competitiveness of European**
1285 **science by introducing incentives and legislation for accessing non-personal**
1286 **commercially held data for fundamental and applied research in a number of**
1287 **interdisciplinary research domains.**

1288 Finally **I believe that we need a big science vision for European Data Science. Shared**
1289 **digital facilities** for processing, cross-mining, analysing data, that can support the work of a broad
1290 interdisciplinary community to advance our scientific knowledge as well as to improve crucial
1291 functions of the EU. Thanks.

1292

1293 **MARIO MARINIELLO**

1294

1295 Thanks, Professor Leiponen.

1296

1297 **AIJA LEIPONEN**

1298

1299 Thank you. I have three points at this point to make. I think **it's important at this point to**
1300 **understand the complementarities and the systemic nature of digital network data,**
1301 **software and algorithms, models and intelligence, and connecting the network itself.** It's
1302 a very complex value network and **if we don't understand where value is created,** what are the
1303 drivers of investment and innovation around data in that value network, **ex-ante regulation can**
1304 **backfire** and destroy those incentives.

1305 **The key issue is encouraging European investment into software-based, data-driven**
1306 **services and perhaps products, and I would encourage policymakers to deal with market**
1307 **power issues later through competition regulation, rather than trying ex-ante to**
1308 **influence the sharing of the benefits of the data economy before the benefits have even**
1309 **been created.**

1310

1311 **MARIO MARINIELLO**

1312

1313 Thank you very much. Professor Spindler.

1314

1315 **GERALD SPINDLER**

1316

1317 Once again I can easily join the statements of Christiane Wendehorst and Professor Leiponen. **First**
1318 **of all we need a step-by-step approach, not too invasive. This has to be flanked by a lot**
1319 **of empirical research as well as economic and informatics research.**

1320 Secondly, if we look at short-term and mid-term solutions, first in that which could be in the
1321 Parliament [outcome on] **text and data mining should be carefully scrutinised,** once again
1322 concerning for example commercial data mining. Then we have to look at the standard terms and
1323 conditions Directive adding here something to the blacklist. This goes as well for the unfair
1324 competition Directive. There you can easily add clauses to the blacklist.

1325 **Concerning antitrust, the Commission itself could do a little bit more concerning the**
1326 **definition of markets, concerning data without changing anything in the antitrust law.**

1327 Then thirdly but not least, it is **creating or introducing some sort of interfaces like in the**
1328 **software Directive and the database Directive combined with the Fair, Reasonable And**

1329 **Non-Discriminatory Licence** argument there. And last, **standards should be established - but**
1330 **this goes beyond what you are asking here - in IT liability and security**, which really there
1331 has been, there is really need for doing something. Thank you.

1332

1333 **MARIO MARINIELLO**

1334

1335 Thanks. Professor Stucke.

1336

1337 MAURICE E. STUCKE

1338

1339 Yes, the aim here should be to develop an inclusive data-driven economy that benefits more than
1340 1% of the population. **One thing that we heard today is that** you cannot assume that market
1341 forces alone will yield the benefits of the data-driven economy while mitigating the risks. **Another**
1342 **thing that you heard today is that** you cannot assume that one agency can do the job. **Just as**
1343 **you need to break down the data silos and the geographic silos, you also need to** break
1344 down, as Peter Swire mentioned, the silos of the governmental agencies. **Here you need greater**
1345 **coordination among the privacy, consumer protection and competition authorities. The**
1346 **good news is that the efforts of the European Data Protection Supervisor in seeking to**
1347 **launch a digital clearing house for enforcement in the EU digital sector. That's a positive**
1348 **step.**

1349

1350 So **in a nutshell, the goal for a data-driven economy should be an economy that's**
1351 **inclusive, protects the privacy interests of its citizens, protects the citizens' overall**
1352 **wellbeing, and also promotes a healthy democracy**, because the interests here at stake go
1353 beyond our pocketbook. Thank you.

1354

1355 **MARIO MARINIELLO**

1356

1357 Thank you very much. Finally, Professor Swire.

1358

1359 **PETER SWIRE**

1360

1361 Well, thank you first of all for this outreach, and for your thoughtful process in writings that the
1362 group, the staff and others have done. My first point was going to be the importance of **better**
1363 **coordination of the data economy, competition and data protection officials**. And - we just
1364 heard that from Professor Stucke - I think **getting concrete ways of achieving multiple goals**
1365 **is really important** and the example from Finland is just one of, I think, probably many examples.

1366 **And it's difficult because privacy has the fundamental rights status in Europe and so is**
1367 **very difficult almost to talk about any limits on that. But without that it will be very**
1368 **hard to achieve any progress on that here.** And the reason is that **there is a presumption**
1369 **against processing** when it comes to personal data. And then the **broad definition of personal**
1370 **data becoming increasingly broad means that almost anything can start to seem to be**
1371 **personal data, and that leads to a broad presumption against processing data for a wide**
1372 **range of settings, so that's really a fundamental tension that will need to be resolved.**

1373 One thought on ways to perhaps address it is to **think more about how to do sharing but under**
1374 **strict organisational controls, not with public posting of data,** but perhaps in the Finland
1375 example there could have been a very clear contract that would be used for research purposes.
1376 **Research is a word that many people favour for many good reasons, and having a more**
1377 **extensive set of organisational controls to permit research that will enable innovation**
1378 **might be one way to frame both data sharing and data protection goals.** Thank you very
1379 much.

1380

1381 **ANN METTLER**

1382

1383 Excellent, thank you so much. This brings us to the end of this hearing. I want to warmly thank all of
1384 our experts, we covered a lot of ground. I think we learned very much. We are deeply grateful. I
1385 want to just quickly reiterate the process, which is that in the coming days, everything that was said
1386 here today will be transcribed and would then be submitted to the public consultation on data that
1387 is ongoing. Just to say, we had some very good colleagues around the table, they've been very
1388 patient. We'll be serving coffee now and I would encourage our external experts as well as our
1389 colleagues to perhaps stick around for a few minutes because you will certainly have some
1390 questions of your own.

1391 Before I let you go, there are two people I need to thank. It's firstly Mario Mariniello, who organised
1392 all this and secondly, another colleague who was in the room earlier, but now I don't see her. Her
1393 name is Cristina Ruiz and she did all the heavy lifting on logistics and putting everything together. A
1394 lot of work goes into it so I want to warmly thank those two colleagues and perhaps we give a
1395 round of applause.

1396 [Applause]

1397 Mostly, of course I want to thank our external guests, our experts. You've done a lot to enlighten us
1398 today and I can really only warmly thank you for your contributions, for making the effort of being
1399 here.

1400 We will now serve coffee so it will be an opportunity to actually say goodbye to Professor Swire and
1401 Professor Stucke. So I'll wave goodbye to you. But before you log off, please also a warm round of
1402 applause for our external experts.

1403 [Applause]

1404 Thank you so much, this concludes the hearing.

1405

1406 ***The text reported herein has been obtained through manual transcription of an audio recording*
1407 *taken during the hearing. The text has been adapted with some stylistic corrections in order to*
1408 *facilitate the comprehension by readers, following the speakers' feedback. No substantive addition or*
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