PHILIPP GASPARON:

Hello from Brussels. My name is Philipp Gasparon. Welcome to the Unilateral Conduct Working Group. Our mission is to examine the challenges of analyzing unilateral conduct of dominant firms and firms with significant market power.

Before starting the panel on remedies, the co-chairs would like to present the various work streams of the group to you. Together with the colleagues of the CCSA of South Africa and of the JFTC of Japan, we will present to you our multi-annual project on dominance in the digital era, our webinars, and workshops. After that, we will also give you some feedback on how colleagues of various agencies throughout the ICN have used guidance documents produced by the Unilateral Conduct Working Group in their daily work.

Last year we launched our multi-annual project on dominance in the digital era. We started with a survey on the assessment of dominance for significant market power in digital markets. The aim of the survey was to collect information on your experience of assessing dominance in digital markets and to find out whether these markets require particular considerations or assessment techniques.

We also wanted to know where the specific guidance on the issue is needed. We published a report in July. It is available on the ICN web page. I would like to thank the many agencies and NGAs that responded to the survey. Your active contribution allowed us to gain a good overview on the experience and current thinking in various agencies.

Our report covers a number of issues. What are the typical characteristics of digital markets? What is the relevance of market shares in these markets? And what are typical barriers to entry and expansion, and do they require specific considerations in this context?

The findings of the report are valuable, both as a stock taking exercise and because they provide orientation on the issues that may need to be deepened, and on which further guidance is possibly needed. By the way, a majority of responding agencies confirmed that they would like such further guidance.
We will have the opportunity to discuss the report with you in a dedicated session on the 27th of October. Please pencil that date in and do join us. We also plan to hold webinars on the topics. For example, on the relevance of market shares, the metrics to use, how to compile them. We think that this will help us to build solid ground for future possible guidance. So there are many opportunities for you to join in and to contribute to this project. We are, therefore, looking forward to continue working together with you all.

**NONKULULEKO MOEKETSI:**

Hello from South Africa. I am Nonkululeko Moeketsi from the CCSA. On behalf of the Unilateral Conduct Working Group coaches, I am excited to share some highlights from this past year webinars. Three webinars were held this past year. The first webinar, held in October, focused on governance in two-sided platforms. Speakers from the Russian Federation, Brazil, United States, and the DigiComp shared the difficulties, challenges, and learnings of their respective jurisdictions in assessing dominance in two-sided platforms.

This topic was so well received that the coaches decided to hold a second installment in December to allow for more agencies and engineers to share their experiences. This time, speakers from Mexico, Turkey, Germany, and an NG of the European Commission took us through different court decisions and cases which involved two-sided platforms. The third webinar was on the vertical restraints project. The discussion centered around vertical restraints, remedies, and explored how best to address market harm in the digital era. This webinar was a culmination of a three year long project that was initiated by the Working Group in 2016. The aim of this project was to examine the effects of various types of vertical restraints, their implications for competition in relevant markets. We are very grateful to A triple C, who led this project and hosted the webinar.

In the 2020-2021 year, we have planned to hold at least three webinars on issues of mutual interest that arise in analyzing unilateral conduct. As already explained by our colleague of the DigiComp, we will be holding a webinar on the assessment of dominance in digital markets project. And we envisage to hold webinars on enforcement in the pharma sector with specific reference or focus on the latest developments in patent settlements and excessive pricing, on the
abuse of dominance in the regulated sectors, and finally, the abuse of superior bargaining position in the digital age. We certainly hope that you'll join in on the discussions and look forward to your participation. Thank you.

[TRADITIONAL JAPANESE MUSIC]

REI YAMADA:

Greetings from Tokyo. I am Rei Yamada of the Japan Fair Trade Commission. On behalf of Unilateral Conducto co-chairs, I'm very pleased to tell you a few words about the Unilateral Conduct workshop organized every ICN year. The regular ICN Unilateral Conduct workshop was held last November in Mexico City and was kindly hosted by the Federal Economic Competition Commission of Mexico, COFECE. 144 delegates, including ICN [INAUDIBLE] agencies and NGAs representing 32 jurisdictions participated in the workshop.

The plenary sessions of the workshop focused on other issues surrounding the assessment of unilateral conduct in [INAUDIBLE] markets. In the plenary session [INAUDIBLE], recent developments in market definition and market power of district platform markets, thinkers from the EU, Portugal, Italy, and the US discussed the challenges of the competition authorities facing the [INAUDIBLE] and analyzing digital platform markets.

Specifically, the speakers discussed the characteristics of multi-sided platforms, what [INAUDIBLE] needs to be defined and how their market's definition departs from defining traditional one-sided markets and the alternatives [INAUDIBLE] issues dealing with [INAUDIBLE] priced products, both when defining markets and when assessing market power. The [INAUDIBLE] plenary [INAUDIBLE] recent theory and practice in digital markets. Speakers from the US, Australia, Japan, [INAUDIBLE], and the [INAUDIBLE] shared experience with finding the [INAUDIBLE] from their respective jurisdictions.

In addition to the plenary sessions, the workshop [INAUDIBLE], discussing various topics regarding competitively digital practical markets using [INAUDIBLE] third case scenarios. The plenary systems and the breakout systems gave another opportunity to practice [INAUDIBLE] to share experience, express doubts, and address questions and importantly, learn from each other. There is a great
organization that the world hospitality [INAUDIBLE]. The workshop was a great success and a memorable event.

Now, let me turn to the next workshop which is planned to take place in India in March 2021. We [INAUDIBLE] Competition Commission of Indian, CCI, for their kind and generous offer to host the event. [INAUDIBLE] we are reflecting on the content of the workshop with CCI. Other details will be notified shortly. We hope to see you [INAUDIBLE] India next time. Thank you very much.

**NARRATOR:**

An implementation story. Use of UCWG guidance documents. Colleagues of competition authorities in ICN, for example, say, the ICN Unilateral Conduct Workbook is a valuable resource for ACCC staff, including those investigating competition issues in digital markets. The Workbook's guidance on key concepts in the assessment of dominance is especially helpful for staff undertaking unilateral conduct investigations for the first time.

CADE finds the UCWG work of great relevance and has been consulting its work products as a reference in the investigation of abuse of dominance. The ICN Unilateral Conduct Workbook, for instance, was an excellent source when we conducted internal studies about digital markets including aspects linked to unilateral conduct. We strongly recommend ICN and members to consult the UCWG work products and engage in the group's activities.

AGCM staff find the ICN recommended practices to be very useful as they remind us that the analysis of dominance does not stop with the assessment of market shares but includes conditions of entry and expansion, affecting the durability of market power, as well as other criteria such as buyer power, economies of scale and scope or network effects, and access to upstream markets or vertical integration.

The various viewpoints of other competition agencies concerning the hypothetical cases which were provided in the "Vertical Restraints Multi Year Project 2016-2019" were useful for our law enforcement.

The UCWG documents have allowed us to gain perspective on the application and enforcement of competition policy in different regulatory context and jurisdictions, thus improving the quality of our own analysis.
The ICN Recommended Practices on the assessment of dominance or substantial market power constitute a very insightful guidance for our case handlers on how to approach the finding, or lack, of dominance, especially in complex cases.

Thank you. Enjoy the Unilateral Conduct Working Group plenary on remedies.

JAMES HODGE:

Good morning, good afternoon, and good evening to everyone in the session. On behalf of the Unilateral Conduct Working Group co-chairs, South African Competition Commission, European Commission DGCOM, and the Japan Fair Trade Commission, I would like to welcome everyone to the plenary session. My name is James Hodge. I'm the chief economist of the South African Competition Commission and moderator for today.

The plenary today picks up from the opening address by Professor Herman Kenn, namely the issue of remedies in digital market unilateral conduct cases. That this topic was chosen in a sense indicates the evolution we've taken in understanding digital markets, the conduct that may harm competition, and now seeking to understand the remedies that may address that conduct and ensure fair competition prevails in digital markets. Remedies in digital markets is now central to the debate, and the efficacy of these remedies is going to, in a sense, test and determine how effective our enforcement efforts are in these markets going forward.

But much as digital markets have challenged us in understanding their dynamics and also the conduct and behavior, so they are going to challenge us in terms of remedial design, implementation, and enforcement. Some of the same behavioral biases, complexities that shape conduct and consumer behavior will have to feed into the remedy situation too.

But to help us navigate this topic we have a stellar panel, all from jurisdictions that are generally taking the lead on enforcement in digital markets. So we have Olivier Guersent, the Director-General Competition from the European Commission, we have Katharine Kemp from the legal faculty of the University of New South Wales in Sydney, Australia, we have Andreas Mundt, president of the [INAUDIBLE] Cartel in Germany, of course the ICN chair, and Christine Wilson,
Commissioner at the US Federal Trade Commission. We're going to start with some opening observations from each of the panelists in respect to their recent experience on cases and the remedies in those cases, before tackling some of their more knotty themes in terms of remedies and the implementation. So, Olivier, if I may start with you.

OLIVIER GUERSENT:

Thank you. Thank you very much, James. First of all, I'm very glad for the opportunity to participate in this panel. Remedies are clearly among the most interesting and challenging topics in [INAUDIBLE], especially when dealing with the digital economy. Of course, not only, but in particular. And remedies are one of the main parameters to assess the effectiveness for enforcement. And that is why, as stressed several times by [INAUDIBLE], this is an area where the commission is committed to make as full as possible use of its powers.

You know that we have in the Commission a long standing [INAUDIBLE] varied experience on antitrust enforcement in the digital sector. It comes back as long as the IBM case in the early '80s, of course, the Microsoft cases in the 2000s to which I was personally closely associated, and most recently the Google cases. We have a number of pending investigations on Amazon, Apple, and others.

Our decisions concern many different types of conduct on markets and this diversity is reflected in the variety of remedies. Interoperability obligation in Microsoft One, as we call it, the browser [INAUDIBLE] screen in Microsoft 2, equal treatment obligation in Google shopping, and I could continue. A long list. What I would like to do today quickly is to share a couple of takeaways for a more [INAUDIBLE] so far.

And the first takeaway is that it is clear that there are no one size fits all in the remedy area. The identification of the right remedy is a very complex case by case assessment and it requires taking into account possible efficiencies and of course balancing the interests of all the parties affected, including the infringer. So competitors, business partners, and of course, customers and consumers.

Even if certain abusive practices are common to digital and non digital markets, in identifying the remedy I think we learned that we have to take into account the specificity of the relevant market and a couple of specificities that are clearly
idiosyncratic to digital markets. Obvious examples are the presence of multi-sided businesses and markets. For example, zero price markets, which are quite specific in the digital economy. An effective remedy in a multi-sided market must factor in the impact and the interplay across the different sides and should not unduly affect the interaction between the different sides and the possible benefits accruing to each side through this interaction.

And for zero price markets, when we decide how to comply with an infringement decision, companies might even decide to change their business strategy. For example, when they're confronted with the requirement to untie services, a company might decide to start charging for a service that was previously offered for free when it was tied to another one. So in the short term, this could be perceived as negative effect for the affected users. But we think that this should be balanced against the medium and long term positive effects that we can expect from increased competition in the tight market.

I have a second observation, which is about the timeliness of intervention. And this is another characteristic of digital markets. They are characterized by extremely very important network effects and they are fast moving markets that are prone to tipping. So time is of the essence. And for that reason we might have to make more use of two tools.

First is interim measures. As you may know, the Commission has not been using interim measures for almost 20 years. And it's in a digital case, in the Broadcom case, that we did it for the first time very recently. So what we do is we carefully analyze in each case whether the imposition of interim measures would be appropriate, and if it is, we will not hesitate to decide on them in suitable cases. Interim measures can also serve as a test for the remedies in the final decision. And they may also increase the party's incentive to cooperate, including by trying to reach an agreement rather than going for a confrontational solution and risking interim measures.

Despite these advantages, however, we believe that interim measures must still be used with caution. They're not a shortcut. Their purpose is not as such to speed up the proceedings but to avoid that we create a situation in which the damage is irremediable, so that would deprive any final decision of its
effectiveness. And secondly, interim measures may not be suited for cases in which we test novel theories of harm or very, very complex cases. Finally, they may be very intrusive, and if wrongly taken, they may [INAUDIBLE] innovation, especially in these fast moving markets where future developments might be difficult to predict. So there is a difference--

**JAMES HODGE:** [INAUDIBLE]

**OLIVIER**

Yes? [INAUDIBLE] be fine.

**GUERSENT:**

I'm going to stop you there. We're going to come back to the issue of interim measures and to pick up your point about interesting and challenging cases, I'm going to ask Andreas if you could then proceed to discuss your experience. We've all been watching with interest your Facebook case, for instance.

**ANDREAS**

Yeah. Thank you very much, James, and thanks for having me on this panel. And I must say, as the chairman of the ICN steering group, I'm so very happy that this all runs so smoothly. As Olivier's just said, remedies of course are a key parameter for assessing the effectiveness of competition enforcement. Because competition enforcement is not about building cases and very sophisticated series of harm. But of course, this is very important in the analytical framework. No doubt about that.

But in the very end, if we have an impact on market, if we have an impact on what is happening in the area of competition, I mean, this is measured by the effectiveness of the remedies that we impose as competition agencies. And I believe we have two tasks, and this is very evident and obvious in the digital economy. We must keep markets open. Markets must always remain open for competitors. And we must prevent consumer harm.

So if we look for the appropriate remedy in a certain case, we have to take a close look if we fulfill, if we achieve, these two goals. I think we have a significant record of imposing remedies in digital cases in the digital economy. I remember very early on when we prohibited price parity clauses to the hotel online booking services HRS and Booking. We did the same with regard to price parity clauses that Amazon had imposed on the dealers that made use of the Amazon
Last year we had a huge case against Amazon where we obtained very far reaching improvements for those dealers, again, who were making use of the Amazon marketplace. And we-- in each of these cases, we saw that it was not so easy to find an easy-- it was not so easy to find a good remedy.

Some agencies believe in fines. Fines, in a way, are a remedy too if you want to put it this way. Personally, I do not believe so much in fines. I think, especially in the digital economy when you deal with huge companies with very deep pockets, in the very end, these companies just price it in. So the fine in the very end is just a price.

So what we need to do, in fact, is we; have to look for remedies that change behavior of a company in the long run or that change anti-competitive parameters of the underlying business case. And this is maybe even more promising. I'm not talking about business cases, I'm talking about changing anti-competitive elements of business cases.

And that takes me to the Facebook case that we have been dealing with for quite a while now and that has just been confirmed in the preliminary proceeding by the Federal Supreme Court. Because here; you can see that we were also looking for the right remedy to deal with the anti-competitive behavior of Facebook as we assessed it. We all know that one of the reasons for dominance in the digital economy is the gathering of data. And if you want to tackle dominance that is data related, you should tackle the data gathering of that company. That must be a remedy and you must think in this direction.

At the same time, we found that Facebook is harming the consumer through its, well, limitless gathering of the data of the consumer, of the user. So if you want to change both these issues you have to deal with data. And this led us to the remedy that in the very end we imposed on Facebook by saying, you have to keep the data that you collect on Facebook, on the affiliates of Facebook like Whatsapp or Instagram, and maybe even most important, the data that you collect off Facebook, on third party platform, you have to keep all that data separate if the user does not agree to combine it. And what is important, even if
the user disagrees, to combine all this data is still allowed to use to make use of Facebook services.

So I think that is really a tailor made remedy to the fact that in the digital economy where data is everything, you must deal with the question with a fact, how do I give that gathering, of collecting that gathering of data by Facebook and other countries and other companies, how do I shape a framework for this gathering? Because what we know from our economists and from experience, only if you combine data of a person, of a user from various sources and you get the full profile, you need to make use of that data the way it is made use of today.

So I think what we have done in the Facebook case was really go for a tailor made remedy. I'm very happy to say that the Federal Supreme Court and Council has upheld this case in the preliminary proceeding. I think it's really worthwhile raising that ruling by the court. Not because it has upheld our decision but one can learn a lot about courts and what they think about these cases in a digital economy.

There were no serious doubts that our market definition was right. Market definition we always know is not an easy task in this area. There was no doubt that Facebook holds a dominant position in that market. There was no serious doubt that Facebook had abused its dominant position by using the terms of service prohibited by the [INAUDIBLE]. And as regards the remedies, and that is even more important for me, the; court has found that it does not constitute an undue hardship for Facebook to implement the changes to its business model before the decision had become legally binding.

Olivier has talked about interim measures. Interim measures, in order to get far reaching improvements or changes, are a difficult issue. This was not an interim measure that we have imposed here, but we can proceed before the ruling of the court becomes real-- legally binding. Which means that we can maybe speed up the proceeding to a certain extent. And what is even more important, the court agreed with the remedies that we have imposed which might entail that they have to keep the data separate.
To conclude, remedies in this area have to be very much tailored to the case and to the theory of harm that is in place. I think that is most important. And what is even more important, that you change the behavior of a company in the long run and that you make its behavior more competitive and that you change these aspects of the business model that are anti-competitive into competitive ones. Thank you.

JAMES HODGE: Thank you very much, Andreas. I think we're all following that with interest. We're also following in the US the different hearings by the FTC and Congress which also probably tapped in this thorny issue of remedy and whether the action is warranted. And to pick up what Olivier said, whether some of the remedies anticipated have unintended consequences that may themselves impact on consumers. So Christine, if I can bring you in here to share some of the US experience and that at the FTC.

CHRISTINE WILSON: Thank you. It's good to be with you today. Thanks to everyone at the ICN and the FTC and DOJ for all of their work to transition this event from a brick and mortar event to a virtual one. As an observer of the proceedings the last couple of days, it appears to have run seamlessly but I know a lot of work went into it behind the scenes. But kudos to Andreas and to Makan and Joe and to all of the folks who worked on this.

So I had the privilege of serving as chief of staff to FTC chairman Tim Muris when he helped launch the ICN in 2001 and so I've watched over the years with pleasure and with pride as the ICN has grown and wrestled with increasingly sophisticated issues under its auspices and it's great that today the ICN is wrestling with cutting edge issues regarding competition in digital platforms in other technology markets. Like many jurisdictions around the world, the United States has also devoted substantial attention to these issues, as James mentioned. The FTC held a series of hearings in 2018 and 2019 to examine whether new technologies and evolving business practices might require adjustments to the Competition and Consumer Protection Law and Policy. Panels addressed the potential for exclusionary conduct by digital and technology based platform businesses, the framework to evaluate acquisitions of potential or nascent competitors, big data algorithms, and other tech related topics.
As Chairman Simons described on Monday, the FTC also created the Technology Enforcement Division within the Bureau of Competition to address markets in which digital technology is an important dimension of competition. The FTC currently is conducting a study on prior acquisitions not reported to the antitrust agencies under the pre-merger notification statute. We're analyzing information from five large tech firms, Alphabet including Google, Amazon, Apple, Facebook, and Microsoft. This study will deepen our understanding of large tech firms acquisition activity and help us determine whether potentially anti-competitive acquisitions of nascent or potential competitors are flying under the radar.

And the United States Congress has also been active in this area. The Antitrust Subcommittee of Judiciary Committee of the US House of Representatives has conducted a series of hearings examining online platforms and market power. The House Committee plans to release a report and recommendations later this month. And so we are all eagerly awaiting that report. And of course, it has been widely reported that the Department of Justice and the FTC have ongoing investigations of digital platform companies.

In my remaining time, I'd like to highlight some key topics in limiting principles that I keep in mind when considering unilateral conduct cases involving digital markets and the remedies that will be appropriate. At the highest level, let me just say at the outset I believe the current competition law framework in the United States is well suited to the task of analyzing dynamic tech markets. The Sherman Act and the Clayton Act have broad and flexible standards that are informed by ever evolving economic analysis.

And the touchstone of antitrust enforcement in the US is the consumer welfare standard. Because this standard accounts for price, quantity, quality, choice, and innovation, it facilitates sound antitrust enforcement even as markets evolve. So while the underlying statutes have broad and flexible standards, they are bounded by economic analysis and its evolution as we become more sophisticated in that field.

I believe privacy should be considered as a non-price aspect of competition, perhaps an important one. But I also believe, at least based on the way the laws in the United States are crafted, antitrust and consumer protection should remain
distinct. But I do believe and I've been an ardent advocate for federal privacy legislation in the United States. Consistent with application of the consumer welfare standard, our focus should be how conduct affects consumers, not competitors. Standing alone harm to competitors is not a basis for antitrust intervention.

Consistent with the Supreme Court's decision in *American Express*, an analysis that looks at effects on only one side of a multi sided market is incomplete. As Olivier said, it's appropriate to take into account benefits and efficiencies as well as harms arising from the conduct at issue, including what's happening on all different sides of the market. By way of example, consumers can benefit from network effect. So the existence of a platform with relatively stronger network effect does not necessarily imply the need for stronger anti-trust enforcement.

And on a related note, while many digital markets exhibit network effect, and while there are points at which tipping may occur, a winner-take-all assumption does not describe most internet platforms. In the unilateral conduct space, I believe competition agencies should rely on ex-post enforcement and not [INAUDIBLE] rules or regulations. But we'll get more into that in a bit.

With respect to remedies specifically, first, let's consider the principal goals of remedies. In the United States, three central goals of unilateral conduct remedies in government cases are terminating the defendant's wrongful conduct, preventing its reoccurrence, and re-establishing the opportunity for competition in the affected market. And so, of course, the efficacy of different remedial measures, which we'll talk about in a bit, should be assessed under those three goals. With respect to remedies, begin with the end in mind is a good cautionary tale for us. The availability of a viable remedy should factor into case selection. If a viable remedy isn't available to address the conduct and create an opportunity for competition in the affected market, then efforts to establish liability are unlikely to be justified. As others have said, the proposed remedies should match the theory of harm and be narrowly tailored to address unlawful conduct and proven harm.

And then one final note, as an overarching theme, competition enforcers, I believe, should approach the task of challenging unilateral conduct with humility.
There is economic literature in the United States that teaches that section two enforcement rarely enhances consumer welfare. Professor Hovenkamp touched on this issue in his opening remarks on day one of this event. I'll talk a little bit more about that during this panel. But with that I'll close. I look forward to an interesting discussion. Thank you.

JAMES HODGE: Thank you very much, Christine. And certainly wise words. I'm going to now bring in Katharine from Australia. And Australia has launched a number of inquiries, and of course, the ACCC has a consumer protection element as well. And that has seemingly shaped their approach to digital markets and remedies as well. Katharine, over--

KATHARINE KEMP: Thanks, James, and thanks to the organizers for including me in the panel. Today, you're right, Australia has taken a different path in its attempts to address the conduct of the digital platforms. The Australian Competition and Consumer Commission has not brought a case against a major digital platform under our misuse of market power law, which is our equivalent of your abuse of dominance or monopolization laws. And there are not quite as many opportunities for these cases in Australia as there are in Germany or the EU because our law focuses on exclusionary conduct and doesn't recognize exploitative abuses.

The ACCC has made a number of proposals to use a variety of regulatory tools to curb the exercise of market power by these platforms. And the most significant development has been the ACCC's wide ranging digital platforms inquiry in 2018, '19 with the final report in July last year. The digital platforms inquiry was informally known as the Google Facebook inquiry with a heavy focus on those two firms. It actually originated from a broadcasting inquiry as a result of concerns about the future of Australian news and journalism. But the final report included very substantial chapters on consumer issues, including the problematic collection and use of personal data and digital advertising, particularly the competitive dynamics of the ad tech sector.

The ACCC made a number of recommendations in its final report which included broad changes to Australia's privacy law, which has for a long time being criticized as providing weak protection for data subjects, a proposed data privacy code that would specifically apply to digital platforms given the special risks that
they pose to data privacy, actions under the consumer law for misleading or deceptive conduct and unfair contract terms, and a voluntary news media bargaining code that would aid news businesses in bargaining with the platforms for remuneration for their news content.

Last week there was another development when Apple became the third major platform to clearly enter the ACCC's sights. The Commission released its issues paper on app marketplaces last Tuesday. The issues paper seeks the views of stakeholders on a range of issues, which essentially go to the power of Google and Apple as the major operators of app marketplaces and looks at the ability of consumers and developers to bypass these app stores and the effect of the dual roles of these firms as both the keepers of the platforms and players on the platforms. The ACCC will be making a report to the government on those issues in March next year. And that inquiry is part of the longer five year digital platform services inquiry which the ACCC has now been directed to undertake from 2020 to 2025.

I'll finish now by mentioning the news media bargaining code which was proposed following the ACCC's digital platforms inquiry and which has proved to be highly controversial. Negotiations for a voluntary code stalled in April leading the treasurer to direct the ACCC to draft a mandatory code which would force the platforms to enter negotiations, mediation, and if necessary, arbitration over what they should pay registered news businesses for journalistic content, essentially. Which currently appears, generally, without payment on these platforms.

I'll explain Google and Facebook reactions to that draft code a little later. Safe to say that they argue that it threatens their ability to continue to supply services of the same quality in Australia. But I think this case is an example of the extent to which solutions to unilateral conduct issues in digital markets are playing out well beyond antitrust circles. A couple of years ago, *The Economist* magazine commented in this area that the antitrust establishment is like a clergy that after decades of obscurity finds itself blinking on the world stage. I think what we're seeing here is that, more than ever, that clergy needs to be able to explain its ways to a broader audience and to adapt to a new world. Thanks, James.
Thank you very much, Katharine. I think it is interesting how our different jurisdictions are taking different approaches. And probably if we canvassed the ICN members, we would find even more diversity. One area I wanted to come back to and was raised by Mr. Hovenkamp in the opening, and I think, Christine, you raised it as it was one of the criteria even enforcement action, and that's the viability of a remedy and the efficacy of different medial measures.

Professor Hovenkamp stated that structural remedies, he felt, had a poor record in the US, and we know in the Microsoft case there was initially a call for structural remedies but it evolved into behavioral remedies. And I suppose the question that this raises, Christine, is, is are these effective? Did they achieve some of the desired outcomes? And we raised-- I think it was raised earlier-- that monetary fines are not necessarily effective and Andreas made at that point. But I think that is also some of the criticism that the FTC came in for for the $5 billion [INAUDIBLE] Facebook fine, which seems enormous, but may be in their context, less so. Christine, if you could just touch on what are effective remedies in this space.

Sure. So as you know, the DOJ did seek structural relief in the Microsoft case. The Appeals Court found that structural relief, which is designed to eliminate the monopoly altogether, requires a clearer indication of a significant causal connection between the conduct and creation or maintenance of the market power. That's a quote from the Court of Appeals. But the thrust of that is, in other words, that the closer proposed relief gets to the structural and of the remedial spectrum, the greater the need for a sufficient causal connection between the anti-competitive conduct and the firm's dominant position.

Interestingly, it appears structural remedies have been less favored in unilateral conduct cases where they would require structural change to an existing unitary firm that may not have grown by acquisition. So the source of the firms antitrust violation may not have a nexus with the structure of the firm, which would call into question whether divestiture is the appropriate remedy. In addition, and I think Olivier mentioned this, structural remedies may undermine productive efficiencies that otherwise could be achieved by the firm. That's also the case with behavioral remedies. If we have behavioral remedies that are perhaps
overly broad and then chill pro competitive conduct. But if the goal is to terminate the wrongful conduct and prevent its recurrence, behavioral remedies may be able to achieve that goal in a more tailored way.

Specifically, with respect to the efficacy of the relief and Microsoft, the reviews are mixed. You can read a lot of different commentators who say a lot of different things. We had a panel on this in the FTC hearings and there are people who were mixed in there reviews. There's one assessment that notes that many of the subsequent competitive developments in the area are actually unrelated to the decree. There were three emerging technologies that threatened Microsoft's position in desktop operating systems, including smartphone operating systems, cloud computing, and virtual appliances, and those do not appear to owe their emergence to the antitrust remedies.

But one thing that folks on the FTC panel did mention repeatedly is that there is some benefit to having the quote antitrust cops looking over a company's shoulder and essentially causing the company itself to self censor even in ways that are not forbidden by a decree to make sure that it doesn't once again raise the ire of the authorities. Unfortunately, that could also chill pro competitive company-- conduct by the company that is under decree.

And then let me just, in closing, touch on monetary remedies. You are correct, the Federal Trade Commission reached a settlement with Facebook in 2019 to resolve allegations that the company violated its existing order with the FTC and committed other violations involving consumers' privacy. The settlement imposed a $5 billion penalty, which is the second largest civil penalty ever imposed by the United States in any context following Deepwater Horizon where, obviously, the environment was-- that suffered catastrophic effects. But the order didn't stop at $5 billion in civil penalties. It imposed significant conduct relief that essentially required Facebook to overhaul the way that it viewed consumers' privacy and handled consumers' privacy literally from top to bottom with a new committee on the board and responsibilities at every single level of the company, including requiring Mark Zuckerberg to certify quarterly that he and the company are in compliance with the FTC's order.

And so I'm going to be a lawyer. I'm going to say on the one hand, on the other
hand, and I'm going to say I agree monetary remedies alone are probably not
going to give us the results that we are looking for but I do believe they can have
a significant deterrent effect. The $5 billion was approximately 9% of Facebook
2018 revenue and approximately a quarter of its 2018 profit, which is significant
even for a large company. But in the end, the monetary penalty together with the
overarching injunctive relief together, I believe combined to provide effective
relief in that [INAUDIBLE].

**JAMES HODGE:** Thank you. And I think you picked up on the behavioral side with the difficulties
that are faced and always the intrusion that it requires into the actual business
processes and operations. And Olivier, I'd like to pick up with you this issue of
almost design and enforcement in areas where, arguably, it's deep into the
company's systems and monitoring may be difficult, and the solutions maybe
suggested by the companies without necessarily strong vetting and
understanding of their ability to succeed. So this may be in cases of self
referencing, the ability to detect and monitor and enforce compliance, but also
other areas where Europeans have been present in terms of just app stores now
and you're looking at Apple and also Amazon in that regard. So maybe you can
just sketch for us some of the challenges in design and monitoring of these types
of remedies.

**OLIVIER GUERSENT:** Yes. Thank you, James. Well, I think it's-- I would not surprise you if I tell you that
we have a number of complainants that have been questioning the effectiveness
of the remedy implemented by Google, for example, to comply with the shopping
decision. But before addressing this specific point, and I think it's important to
remember two things. When you assess the effectiveness of the remedy, you
must first consider, what is the objective of the remedy? And for us the objective
of a remedy, of any remedy, is to re-establish the competitive process. And it
should create new realistic commercial opportunities.

But it is, of course, for the market participants to take up these opportunities. So I
don't think any authority in the world can guarantee a specific market outcome. I
don't think we should even try to, frankly. So it's not the task of the remedy's
policy to provide compensation, either, for the damages suffered by individual
competitors. So I think it's important to keep these few principles in mind.
Secondly, the benchmark for assessing the effectiveness of the remedies is the decision. So, notably, how the illegal conduct is defined in the decision, the reason why the conduct has been found to be illegal, and they want us to compare the situation before and after the implementation of the remedy. I also consider that the remedy, and in particular in case of behavioral remedies, is not a one-off exercise, it is a lasting iterative process. And it is also normal that the market uptake of remedy is gradual, especially when you face a long lasting infringement.

So with this in mind, to date, our assessment and monitoring of that steps in Google, for example, has taken to comply with its obligation have shown good positive developments in terms of market uptake. The take up of the complaints mechanism by rivals of Google shopping substantially increase. In June 2018, only one third of shopping units included at least one rival, and around 6% of clicks in the unit went to one of those rivals. [INAUDIBLE] that accurately available showed that 83% of shopping units including at least one of [INAUDIBLE] rival and around 47% of clicks go to those. So by definition, during the period of abuse, there was no [INAUDIBLE] from rivals in the shopping unit.

So in other words, I think it’s fair to say that what you try to do is, of course, to put an end to the behavior that prevented competition from happening. And secondly, trying to restore a balance of incentive, which you hope will make more market participants called to take up the opportunities that are offered. You’re never sure, point one, and it always takes time, point two, and the longer the infringement has been lasting, the longer the time to restore normal competitive situation.

JAMES HODGE: Thank you, Olivier. Andreas, you’ve already mentioned the Facebook case and the issue of consumer data and the specification of how it may be used. I assume you’re now at the point where you’re needing to design the specificities of that and also monitor and enforce it going forward in the context of data privacy, consent, and maybe consumer behaviors which influence how consumers respond, which affect the efficacy of that decision. So maybe if you can give us some insights into what the [INAUDIBLE] Cartel [INAUDIBLE] is thinking in respect of specific design. And we also understand there may be legislative changes in
ANDREAS MUNDT: Yeah. Thank you, James. Well, if you take a look at the Facebook case and the remedy which says that Facebook shall keep the data separate, of course that is a behavioral remedy. But it also has-- I always put it this way-- it has a little bit of a structural touch. Let's put it this way. I always called it to a certain extent an internal divestment of data.

So that leads us to the question, what can we do at all when it comes to data? What options do we have as competition agencies to deal with data related dominance or data related harm to the consumer? And I think, in fact, we have three options. One option is the restriction of the use of data, the restriction of the gathering of data. This is an option we went for in the Facebook case. A second option would be an obligation to facilitate portability or the interoperability of data. And a third option would be to grant access to certain data.

But if you look at these options, you see they are not easy to fulfill. There is a lot of discussion, especially in the political sphere, about granting access to data. And this is also an essential part of the 10th Amendment of the German Competition Act that is under way in the legislative process right now. I'm afraid this is not easy to implement in practice to a certain extent because to grant access to data you have to know grant access to which data. And maybe even the competitor that is asking for access to data is not aware of the fact what kind of data is in place and to which data he might ask for access in advance.

Another issue are consumer interests with regard to data protection. You have to take that into account if you grant access to certain data. So I think this might be an option in certain cases to grant access, but-- sorry-- I'm really sure this is not easy to implement. If you look at the third action, that is portability or interoperability of data, I think, in general, data portability then might be useful. It makes it easier for the consumer to switch from one provider of service to another provider. But there are certainly limitations, too. If you look at the digital economy, the first challenge is there must be a provider you can switch to. Sometimes it's not so easy to find one in a monopolized or oligopolized environment.
The second thing is, portability does not guarantee interoperability. So if you take that as a remedy, you must think it through and not leave it to the fact of portability. You must also look at the fact of interoperability maybe in order to facilitate multi [INAUDIBLE] between competing services. So when it comes to remedies, I think it is always a balancing act for a competition agency between finding sufficient safeguards for designing remedies for concretizing a cease and desist order and shaping options to be granted by the company. Because this is usually the way we do it. We ask companies to propose remedies in order to stop certain behavior and see what works best.

So we have to balance this and that is not always easy. Besides the fact that it is not easy, we all know that to monitor behavioral remedies over time. And I think this is a new challenge also with regard to the skills and staff that we have at hand to be able to monitor these behavioral remedies in the future.

**JAMES HODGE:** Yes. And I think that last point you made is of particular concern to smaller jurisdictions such as my own where the skill set and resources required to monitor may be beyond what we have and capabilities we have at the moment. But I think you make a good point about how these may need to be almost collaboratively developed alongside the company in order to determine.

But I suppose, Katharine, turning to you, this is in some ways how the codes of practice are being developed in the Australian context. Well, there are sometimes, as you pointed out, that collaboration breaks down and it becomes no longer a voluntary code but more one imposed. But maybe, if you can, just touch on how the ACCC is approaching these. It has deliberately avoided enforcement of competition law it seems and gone the consumer legislation or market inquiry route in codes. Do you see that as more effective in establishing conduct changes that are required to keep markets competitive?

**KATHARINE KEMP:** We’re certainly having a mixed experience using these regulatory tools rather than the misuse of market power provisions. As for the code, the main code that’s under consideration in Australia at the moment is the news media bargaining code which was originally intended to be a voluntary negotiated code,
and of course now has become a mandatory code. We've seen that this has become very controversial and that the platforms have essentially responded with PR campaigns, that Google published an open letter to Australians where it pointed out that it's free services are at risk as a result of this code, and the CEO of Facebook published a blog post saying that Facebook would ban Australians and news media publishers in Australia from posting news content if this code became law.

The ACCC has taken a fairly measured approach in response, issuing a statement about what it saw as some misleading statements in Google's open letter and Google has updated that letter since to tone down some of the old statements that it made. I think when it comes to consumer legislation, the ACCC here has brought several actions in respect of digital platforms and particularly looking at ways that they've allegedly made misleading statements in their terms of use or their privacy policies or in the way they use their interfaces and settings that may mislead consumers about their actual data practices and the consequences of those data practices.

I guess the question is, with actions under consumer protection legislation, is whether it's problematic because it's tempting to bring a misleading conduct case which might get at symptom rather than addressing the core problem. I think we're seeing those kinds of situations in some cases in the United States where the FTC has brought proceedings in respect of misleading statements in privacy policies. And that can simply lead to the dominant firm changing its privacy policies to say we will track you everywhere. And then what has changed?

But on the upside for the consumer protection cases, I think we can at least say that they are necessary even if they are not sufficient. And more than that, privacy abuses and concealed data practices can also be seen as part of the cause of entrenched dominance and not only as a symptom of dominance. While dominant firms are able to conceal their true data practices and the consequences of those practices from consumers, they are able to continue that pervasive collection of consumer data to reinforce and extend their market power across markets.
So to the extent that stopping misleading practices creates a stumbling block for this method of extending market power, I think we should be very glad to have consumer protection among the regulatory tools at our disposal, and we will find out the fate of Australia's collaborative process and, ultimately, mandatory codes in the not too distant future I expect.

**JAMES HODGE:** Thank you, Katharine. And that's-- I think we're certainly all going to be watching that publicity battle. But I think you've raised a very important point, which is the difference between cause and symptoms and are we treating the cause or the symptom. And Christine earlier raised this in terms of Microsoft and the test around structural remedies and the intrusive remedies. But it does strike me that in some cases the conduct often relies on behavioral biases of consumers and so maybe consumer law can be effective at addressing some of the core features that allow the exploitation or the gathering of data.

Christine, I'm also going to turn to you because we've heard now, in numerous cases from European Commission representatives, about the desire to increasingly use interim measures in order to, in a sense, stop conduct whilst an investigation is going on. And I think more recently, the Broadcom case occurred where the EU did stop certain policies being enforced while it completed the investigation. Maybe you can provide the US perspective on interim measures.

**CHRISTINE WILSON:** Sure. So to do this I want to take a step back and talk a little bit about retrospectives that have been done of unilateral conduct cases to determine whether the remedies there worked. And Olivier raised-- Olivier raised the question of how you determine whether a certain remedy was effective. Studies have been done in the United States to determine whether prices fell or output increased or competition resumed in a market to determine whether an intervention in the market and a section two remedy, whether behavioral or structural, was effective at promoting consumer welfare, which of course, is the touchstone of antitrust here in the United States.

And interestingly, these retrospectives have found that remedies frequently failed to achieve the desired goal of improving consumer welfare. This finding applies both to cases involving structural relief, including forced divestitures, and behavioral relief. In other words, injunctive relief. Of course, the one major
exception is AT&T. But there-- we've talked about intrusive remedies-- Judge Green essentially oversaw the AT&T decree and was very much involved in making, essentially, day to day decisions for the company. And I don't know that antitrust regulators want to become Judge Green on a routine basis.

Interestingly, there was a study, a specific study I want to mention by Crandall and Ken Elzinga, who reviewed 10 separate conduct remedies imposed on firms charged with monopolization. They found little evidence that any of them contributed favorably to consumer welfare. And the reason they concluded as they did, they decided, after looking at all of the evidence, antitrust authorities often failed to understand the determinants of market structure. Without a firm grasp of the economic forces that are driving changes in market structure, the agencies, of course, couldn't design relief that results in increased competition, lower prices, and consumer benefit.

And so for that reason, I think first of all, the agencies should be reluctant to design complex remedies to remedy conduct that, one, it doesn't fully understand, and two, in markets where the trajectory of change is difficult to predict. Now, that's talking about remedies following a complete investigation and litigation and an order from the court, typically, that imposes relief. I think these outcomes provide a cautionary tale, particularly for interim measures.

If history demonstrates, remedies in unilateral conduct cases have been at best irrelevant and at worst inflicted harm on consumers, then I worry that imposing interim measures before an investigation is completed increases the likelihood that we may harm rather than benefit consumers. So absent full information and a complete understanding of the competitive dynamics in a market, which you would get in a more detailed way as an investigation progresses, any interim measures may further distort competition. And, absent a litigated finding of actual consumer harm, no remedies may even be warranted.

And then, in the United States we have the added consideration that imposing interim measures may present due process issues. Currently, we could obtain interim relief only by agreement. For example, a hold separate order that is entered into voluntarily by the FTC and respondent, for example, or by going to court to get an injunction or a temporary restraining order. So I guess, in
conclusion, I would say, no, we do not have the ability, essentially, to get interim measures in the same way, but given our history of section two enforcement, I'm not sure that it would be a wise idea in terms of enhancing consumer welfare.

JAMES HODGE:

Thank you. You reminded me of an important point around impact studies of remedies and the need for these studies to help develop our understanding of what is effective and improve, in a sense, our work on remedy design. And I think we're playing with some quite innovative remedies at the moment in digital markets and I would encourage at least our academic [INAUDIBLE] and other agencies in the audience to take this up and give us more feedback relatively quickly because I think that would help the process.

Just moving to, again, types of remedies and toolkits. Olivier, I think we've heard in the very first session from Commissioner Vestager, and also we see in the special advisors report, "Competition Policy for the Digital Era," that there's a belief that the toolkit you currently have is not sufficient to bring about competition in digital markets, or at least preserve competition where competition currently exists. So there's been a fair push for [INAUDIBLE] regulation and we also heard about market inquiries. Is this going to be a growing direction for the European Commission? Maybe if you can enlighten us on that.

OLIVIER GUERSENT:

Thank you. Well, first of all, I'd like to-- I think I agree with Christine. I mean, and as I said in my introductory remarks, in a way, what you need is you need to have the broadest possible range of tools. And you should be very careful in which one you choose because no one comes without downsides, basically. So in a number of cases a cease and desist would be the best possibility because it allows to have remedies that can evolve with time. In other cases, you may need interim measures.

As I said, we have used it once in 20 years. So it's not terribly often. We plan to use it more if necessary but not to make it our bread and butter either. In the same way, for your question, James, what we see is that, of course, in these markets they are very, very complex in which you need to crunch huge amount of data in order to build and sustain your theory of harm. Very, very often in the presence of very strong network effects, if and when, finally, you establish a
practice and you have not reverted to interim measures, it's too late. The damage is done and mostly cannot be remedied.

So this is where we're coming from. Of course, I mean, there is still a-- I mean, the central place is for the implementation of traditional antitrust rules. We intend to intensify rather than anything else in this field. But we believe that there may be a case for identifying practices that has been proven in numerous cases as basically always harmful and to incorporate them in a kind of restrictive practices regulation, if you wish, or a fair training regulation. So we're working on this together with our colleagues from DigiConnect that are in charge of digital and try to see whether such a thing exists, in particular in the area that forms. And if yes, which are the practices that would fall into that category. And if we make a positive determination that would translate into a draft legislation that will need to be debated by all [INAUDIBLE] legislators.

Now, and secondly, there are also cases in which you also need to-- when you see that a company-- a structure of market for many reasons is not prone to a competitive outcome and without any clearly identifiable anti-competitive practice. And we believe that, in this case, it may be useful that the European Commission has in the toolkit something that resembles the possibility that the UKCNA has, and a number of other colleagues around the world, to go for what we call a new competition tool, which is the identification of those market structures that do not allow competition to work in a normal way, identify why it does not, and have the possibility to remedy it.

We see the two as complementary. Because in one case, of course, it's something very clear, very well defined, very narrow, and you have the possibility of punitive action. On the other type is something that you see it doesn't work but you need to deeply understand why and for this you need a full market investigation.

JAMES HODGE: Thank you, Olivier. I think what is clear is that, in response to challenging digital markets and challenging issues, different jurisdictions are taking different approaches in order to address it. And I think what is going to be interesting over the next few years is to see how effective are these different approaches, whether there are unintended consequences as we are warned about by the eminent Professor Hovenkamp, and whether some approaches may be more
effective than others. So we've had in this session the difference between the Australian market inquiry and code approach rather than enforcement, we have an increasing regulatory approach within Europe, we're trying to preserve competition rather than this force against dominant platforms before it's too late, and of course, we have, at the moment I think, more of an evolving field in the US where we wait to hear from the outcome of these hearings and the reports to see which direction they'll be taking over.

I think, if I am just to wrap up, I think we've all benefited from the insights. I think that the debate is certainly not over. I think this is probably going to be an area which dominates much of the digital market debate going forward. And I think it would greatly benefit from studies of how effective these remedies are. Are there unintended consequences so that we can collectively learn about what actions may be beneficial or not?

I think it has also raised the issue of bringing in other toolkits even if it is just data privacy as at a federal level in the US and the combination of those. But I think some of the principles espoused by the different panelists certainly will help guide us when looking at cause or symptom and looking at areas such as the size of the market and the broader effect.

So in closing, I'd like to thank the panel for their insights. I've certainly benefited and I'm sure all the agencies out there globally have benefited from this. Those at the coalface are having to deal with these thorny issues and apply their intellect to problem solve. Some may work, some may not, but I think it's a process that we have to go through in order to learn and to improve competition law enforcement globally. So thank you very much and thank you to the audience as well.

UNIDENTIFIED CO.

Welcome to ICN Virtual Studios again. Thank you for spending time with the ICN this week. Today, we have introductions and panel discussions from the UNL REPRESENTATIVE: Conduct Cartel Working Groups. If you've enjoyed what you've heard this week, I have good news. Discussions of timely topics will continue within the ICN after the conference on Tuesdays through September and October. See the end of the conference agenda for specific topics and scheduling to mark your calendars for
Finally, remember, the ICN is at work year round. This year's projects are in their early stages, ripe for participation, input, and volunteers. Work plans are posted on the website, along with working group contacts. So get involved. Also, tune in tomorrow for a preview of the upcoming ICN third decade exercise, a year long review of everything ICN. Take care, everyone.

JOZSEF SARAI: Co-chairs of the two subgroups of the Cartel Working Group field present you in the framework of this P&I session. Colleagues from the Chilean, Hungarian, and Turkish competition also [INAUDIBLE]. I am Jozsef Sarai representing the Hungarian Competition Authority and having been the co-chair of subgroup [INAUDIBLE] until this May. I will provide you with a brief introduction to the general [INAUDIBLE] of the working group.

The Cartel Working Group was set up in 2004. According to our mandate, the Cartel Working Group is to address challenges of cartel law enforcement including the prevention, detection, investigation, and punishment of cartel conducts, both domestically and internationally, over the entire range of ICN members with differing levels of experience and resources, focusing, first the fall, on hardcore cartels directed at price fixing, big rigging, market sharing, and output restrictions. The Cartel Working Group is quite specific in the sense that it is the only working group within the ICN which has had two subgroups from the outset of its operation. The legal framework subgroup that is separate fund addresses the legal and conceptual challenges of cartel law enforcement, focuses on the policy level issues related to cartel conduct.

Over the past 50 years, subgroup one has dealt with topics such as definition of hardcore conducts, effective institutions and penalties, obstruction, interaction of public and private enforcement, fine setting, settlement, and has given increased priority to leniency issues in recent years. Since around 2009, subgroup one has been organizing [INAUDIBLE] on various topics such as the criminalization of cartel enforcement, cartel [INAUDIBLE], [INAUDIBLE], compliance and leniency policies.

Subgroup one relies, to a great extent, on the contribution of NGAs to its activity.
Stemming from its name, enforcement techniques, subgroup two is more agency related. Subgroup two aims to improve the effectiveness of cartel law enforcement by identifying and sharing specific investigative techniques, and by advancing the information sharing and education agenda of international cartel workshops.

In the past 15 years, subgroup two has been responsible for the elaboration of various chapters of the anti cartel enforcement manual on topics such as investigative strategy, [INAUDIBLE] techniques, searches, rates, and these inspections and digital information gathering, to name a few. In addition to organizing the international cartel workshops, subgroup two elaborated the ICN framework for the promotion of the sharing of no confidential information in cartel cases and has ran, from the outset, the anti cartel enforcement template, which is a very valuable source of information about the cartel regimes of the ICN member institutions.

For the next ICN year, the Cartel Working Group will be co-chaired by the French authority, [FRENCH], the Italian AGCN, and the Russian Federal Anti Monopoly Service. Subgroup one is co-chaired by the Hungarian GBH and the Turkish [INAUDIBLE], while subgroup two is co-chaired by the Chilean [SPANISH] and the Dutch ACM. And now, I give the floor to our Turkish and Chilean colleagues who will report you about the work products achieved by the working group in the past and about our work plan for the next ICN year. Thank you very much.

Hello, everyone. My name is [INAUDIBLE] and I am currently [INAUDIBLE] Competition Authorities co-chair of Cartel Working Group subgroup one. 

And I am Richard Finders, the head of external relations and competition at [INAUDIBLE] departments of the Turkish Competition Authority. Today, together with [INAUDIBLE], we will be talking about last year's work product of ICN Cartel Working Group.

[INAUDIBLE] please, begin with the first work product of Cartel Working Group titled as "Guidance on Enhancing Cross-Border Leniency Cooperation."
Sure. This guidance treatment was created to assist national agencies in coordinating with one others in case of a joint [INAUDIBLE] application across multiple jurisdictions and it covers topics such as communication between agencies, coordinating joint interviews, and also it includes some practical tips for managing confidentiality waivers.

Maybe those are [INAUDIBLE] second work product. In 2019, together with our colleagues from Hungarian Competition Authority, we held several webinars on topics such as leniency, damages, claims in cartel cases, detecting and assessing the bidding cartels, the extent of information sharing between competitors, and using presumptions in detecting participation in cartels.

Having said that, we would like to take this opportunity to thank our colleagues in Hong Kong Competition Commission as well as JFTC for holding some of these webinars at Asia-Pacific [INAUDIBLE] times in order to foster further participation.

[INAUDIBLE] Cartel Working Groups third work product was 2019 cartel workshop. This workshop was held in Brazil with the team cartels in the age of data driven economy. And some of the topics discussed in this workshop were antitrust liability for software based infringements, intelligence and screening tools, effective leniency and evidence assessment in digital era. We would like to thank our colleagues in Brazil and competition agency co-chair for this excellent workshop.

Cartel Working Group also continue to promote sharing of non confidential information between member agencies and encourage the use of frameworks request procedure documents in order to make sure that both the requested and the requester understand the expectations and the nature of the information that can be requested by using this framework. Also, our working group continues to maintain the database of current contact person of the participating agencies and encourages sharing of experiences. We also expect to foster pick up the phone kind of relationship for improved cooperation between member agencies.

And lastly, we need to mention that Cartel Working Group subgroup two has been updating the anti-cartel enforcement template and has supplemented--supplemented questionnaires in a new chapter on private enforcement.
Currently, there are 41 templates which you can access from ICN's website.

RICHARD FINDERS: I think these are all of our products of Cartel Working Group and we think that we will be producing even better works in the coming ICN year with your participation. We hope to see you in our upcoming events and we wish you a happy and healthy year.

UNIDENTIFIED CO. REPRESENTATIVE: Goodbye

RICARDO RIESCO: Hello. My name is Ricardo Riesco. I am the national economic prosecutor of the Fiscalia Nacional Economica, which is a Chilean competition agency. Our institution is one of the co-chairs of subgroup two of the Cartel Working Group of the ICN, alongside with the Netherlands ACM. I will give you a brief summary of the projects in the cards for the Cartel Working Group over the next year.

Subgroup one of the Cartel Working Group will be working on three main projects. Their first project, is the ICN member survey on trends and developments in anti-cartel enforcement in the second decade of the ICN. The survey report of 2010, which was presented at the 9th ICN annual conference, conveyed great interest. Therefore, the survey will be repeated next year in order to capture changes in cartel enforcement over the last 10 years and also to analyze the progress that has been made in the fight against cartels. A final report based on the findings of the survey will be presented at the next year's ICN annual conference.

The second project that will be developed by subgroup one is called crisis cartels and horizontal cooperation in the time of COVID-19. It's a neat project that intends to explore issues and challenges faced by the competition agencies during this pandemic. These challenges include the evaluation of so-called crisis cartels, which are likely to be formed in an effort to stabilize businesses and to prevent exit from markets hit by a severe downturn. They also include the ex ante assessment of temporary horizontal cooperation projects that may be necessary during these difficult times to provide goods and services-- for example, in the health sector-- that might otherwise not be available.
The third project of subgroup one are six webinars on the anti-cartel legislation and different enforcement topics. There will be follow ups of three previous webinars that were very successful. These are damages claims in cartel cases, how to detect and assess billing cartels, and finally, compliance. There will also be three new topics which are leniency perspective from the private bar, how to [INAUDIBLE] cartel cases, and crisis cartels and horizontal cooperation in the time of COVID-19. In order to accommodate as many members as possible, two or three of these webinars will be replayed during Asia-Pacific friendly times.

Regarding subgroup two of the Cartel Working Group, it also has three projects for the next year. The first is the ongoing big data and [INAUDIBLE] which focuses on the impact of the digital economy in cartel enforcement. After collecting existing knowledge on the subject, a scoping paper was produced that outlined the main aspects of the potential role of data both as a vehicle for collusion and also as a tool for detection. The scoping paper was circulated, the input of a number of agencies and NGAs was gathered in several rounds of consultations, and was finally completed and approved by the steering group last May. In the following year, the Cartel Working Group will revise and update some of the chapters of the Anti-Cartel Enforcement Manual on digital evidence gathering or investigative strategy in line with the content and findings of the scoping paper.

Subgroup two's second project is the cartel workshop that will, hopefully, take place in Portugal. The dates are yet to be determined subject to the situation stemming from the COVID-19 pandemic. Last but not least, the third project to be developed by subgroup two is divided in two parts. The first is the implementation of the ICN framework for the promotion of the sharing of non confidential information, also known as the ICN liaison. In 2015, this framework was established as a means to give agencies a place of start in building stronger relationships and sharing information. The plan for the next year is to maintain and encourage the use of the framework by promoting it among the Cartel Working Group members.

The second task is to update and circulate relevant material of the anti-cartel enforcement template project. These templates provide information on legislation concerning anti-cartel enforcement by ICN members. They also
provide information about the applicable rules to file for leniency or to file a complaint in one or more jurisdictions. As you may have noticed, it's a busy year ahead for the Cartel Working Group of the ICN. We are sure by working hard on all of these topics will provide useful insights, information, and tools to help competition agencies with our daily fight against cartels. Thank you.

DAVE ANDERSON: Hello, everyone. Good morning, good afternoon, good evening, and welcome to the Cartel Working Group's plenary session on big data and cartelization. Thanks so much for tuning in to this final working group plenary session for this historic ICN conference. I'm happy that you could join us for this dynamic discussion of this hot topic inspired by the working groups scoping paper on big data and cartelization that we published earlier this year.

Our discussion among this great panel you have here before you is coming live from Rome, Athens, Paris, Moscow, Washington DC, and from, amazingly, warm and sunny Brussels where I am today. I'm Dave Anderson, I'm an NGA for the European Commission and I'm at Bryan Cave Layton Paysner. I'm delighted to moderate this session with this distinguished group of agency leaders so well known to everyone out there. And they've all been engaged in the subject that we're talking about today. They put up with my questions in preparation for this panel. Thank you so much for being good sports. We've got a really wonderful panel coming up. They're all experts and competition enthusiasts, to be sure.

Let me introduce them. We've got Gabriella Muscolo, Commissioner from the Italian Competition Authority. Gabriella, welcome. Good to see you. We have Ioannis Lianos, the president of the Hellenic Competition Commission there in Athens. Good to see you. Richard Powers, deputy assistant attorney general from the US Department of Justice, antitrust division in Washington. Hey, Richard. Isabelle de Silva, president of the French Competition Authority down the road from me here in Paris. And Andrey Tsyganov, to our east, deputy head of the Russian Federal Antimonopoly Service, [INAUDIBLE]. Welcome, everybody, and thanks for spending so much time on this issue with us.

So just to kick off, everyone would have heard over the past couple of days during the conference a bit about the subject of big data and algorithms and
cartelization. But today we're going to take a deeper dive into the subject to bring it to life, see what our panelists think and see what's going on. To be sure, and panelists will talk about this today, there are benefits and efficiencies for economies delivered by the power of algorithm, harnessing that big data, and to gain those benefits.

And we use these daily. Algorithms help power our online searches, our ride sharing apps, our dating apps. And today we'll focus in particular on when companies use them to price dynamically. That will be focus for us today. But in our brief time, and we'd like to talk a lot more about it, we are going to be focused on the issue of horizontal collusion. This is the cartel working group involving algorithms. So for example, cases where competitors might use algorithms to directly collude, where they might possibly use a third party site to get involved in a hub and spoke kind of situation, or thirdly, and most scary to me, the idea of autonomous algorithms, or robot, learning to collude on their own. They do it without any human intervention.

A dystopian world of computers, famously noted by executive vice president of the commission Vestager and her hitchhiker’s guide to the galaxy speech on algorithms in Berlin in 2017, she said, don't panic. But I was there and I did panic a little bit. And that really led me to really kind of look into this issue more and working with my clients on it and talking to agencies about it. And also with the Cartel Working Group who've done such good work on it.

And the interest has really grown and I've seen it a lot. There's a lot of computer science out there. There's a lot-- some science fiction I've seen. But mostly, a lot of earnest and sincere research leading to more questions and more requests for more research and views, including in our scoping paper. And this research that I've done has led me to try to track what agencies have done around the world and as a background to what we're doing today I'd like to show you this slide, if we could put it up, which shows the what's going on around the world in one page with regard to horizontal collusion and anti-trust enforcement. If that slide could go up that would be great. And if not I'll just talk through it. It's the maps. Thank you very much.

The point is not for everyone to read it. It's quite a detailed slide and I'm happy to
send it to you. But it's to show you sort of a heat map, that there's a lot going on. I first created this map three years ago, not long after the Berlin speech by Commissioner Vestager, and it didn't have much on it. And it really, in the last two years, it's really, really grown. And if we kind of take a tour with me from your homes and your offices and other places around the world, [INAUDIBLE] ICN. Well, look around.

We have a series of enforcement cases, actual agency enforcement cases. So starting-- the first one I could find was really by the Brazilian [INAUDIBLE] in 2010 and Dryden schools case. The next one I could find was Department of Justice, Richard, your case in the Tompkins Posters case. I think you'll talk about a bit later. We have, following on from that, a UK posters case by the CMA. In Russia, I've seen [INAUDIBLE] cases that Andrey will talk us about-- talk to us about a bit later and also a new case.

We've seen some cases that were explored but dismissed or exempted. Luxembourg and India on the map, in particular, very interesting cases. We have a couple ongoing cases in Spain and in South Africa involving algorithmic collusion issues. But mostly, what we've seen agencies do around the world is really try to look into the issue [INAUDIBLE]. Studies, research, legislative proposals, advocacy. So here in Brussels, executive vice president Vestager, her Berlin speech kind of kicked it off here for everyone, and the new competition tool, if you look in the press release, talks about tacit collusion being one of the things they're worried about.

Isabelle, hopefully we'll talk a little bit later about the Franco German study, which was a great one. I highly recommend it. I have it here for people. It's a great piece, lots of information, really helpful. The UK also did a study, Portugal did a study, very good, mentioned yesterday. Upcoming, the Dutch are doing one. In Greece, Ioannis will hopefully talk about the sector inquiry that they're looking at. And in Russia, also advocacy that they're doing there. So a lot of activity in this space.

And so I tried to-- oh, and then we also have on the left side some of the third-- some of the multilateral bodies. OECD did a great paper upfront, great paper by Bricks, two actually that Ioannis will talk about, UNCTAD, and of course, our ICN
scoping paper. So I tried to make some conclusions, and we can take this slide off now, about this. About some trends and schools of thought and my research and discussions with agencies led me to really come up with what I called the three C's, three camps.

First of all, the first camp is the concerned camp, those that see algorithmic collusion and the whole issues being a big scary problem, including robots, new legislation needed, and even on the extreme, is this a threat to capitalism? The next camp is the confident and content camp. They see lots of benefits, no presumptions of concern, but if there are issues, we have the tools. And we've even seen, on the extreme, we have bigger problems than this. What about block chain?

And then the third C, the curious camp. This is the biggest one. Which is, this is new, it's complex, there are benefits and issues and we're looking at it and we're studying it to see what to do. So the three C's. And this wide variety of views globally makes it a great ICN project. This is why I'm so glad the working group took it up in the scoping paper. So I hope that that background gives everyone a-- sets the stage, provoke our discussion.

And I'll first ask our panelists in this next section, basically, at which camp are you in question. Do you see yourselves in your agency and your view in one of the three C's, concerned, confident, or curious? And they've all been great sports and have been willing to go with that and also give us some background through that question as to what their agency and what they're looking at. And then the second part we'll engage in a series of questions and answers on some of the big topics that have been raised and that are in the scope of the paper.

So as part of that kick off, the which camp are you in-- and also, for everyone at home, for all the agencies and for all everyone watching-- ask yourself as well. Which camp do you think you might be in? And does that view change after you've heard from all of our speakers today who are all very persuasive people. So anyway, Isabelle, if I could turn to you to get us started. You and your colleagues, and looking at this issue in great detail, as I mentioned from the paper, tell me, where are you in this debate?
ISABELLE DE SILVA: Sorry. I [INAUDIBLE] the mic. Once again, hello, everyone, and I'm very glad to be participating, although I would have preferred to be in Los Angeles. That is obvious, but it is very good to have this occasion to see the colleagues and having this exchange.

So to answer your question, I am clearly in a curious camp. This doesn't mean that I cannot be confident and concerned on some of the topics that you mentioned, but I do believe that we have some tools and that I will elaborate on that. But that we also need to do a lot of investigation and knowledge gathering. I think that explains why you mentioned so many studies, so many sector enquiries. And I do really think we need to have more information about how companies are dealing with algorithms and big data.

And I think one key message for us is that algorithm are crucial to many business strategies today in the world. So I would say not all algorithms are important from a competition point of view, but they may be really the heart of the service when you think about Google search. It's all about a fantastic algorithm that has drawn to Google so many revenues. And in some cases, also, the algorithms are important because they define the way the company is going to interact with its customers, with its providers, suppliers, or with its competitors. So those are the type of algorithm we'll be looking at. The same with big data.

So maybe I will say that, for us, the priority is twofold. It's really about knowing what is going on in the business, why companies are using such and such algorithm and how do they manage this algorithm. And second, we feel the need to have a bit of conceptual analysis of algorithm and how they interact with competition laws. So maybe one comment on many of the studies that have been done and why they have been useful, in 2016 we had a big study about competition law and big data. We also had those joint studies with the CMA and the one you mentioned with the [INAUDIBLE], and I really think that on those type of conceptual paper it's important to have a dialogue with other agencies or to use it within the ICN.

So that's why I think that the paper that we did in this Cartel Working Group
about big data is really an event of some magnitude because there had never been this type of international paper being discussed by agencies, by NGA, and we really want to also be helpful to the companies in the end. So maybe one last word about why I think we need some curiosity and we need some thinking. Although it's really to give some tips to companies about which questions they should ask themselves. And when we did an event about our study on algorithm, I was telling a company representative that it used to be that the IT manager would be in the room and wouldn't meet very often with the board members because he was only needed to set up a system.

Today that's not possible. You need to have the people creating algorithm be in a [INAUDIBLE] meeting at the very high level and wonder if maybe the algorithm that I'm creating or that I'm changing, maybe tomorrow, may create a liability for my company because I will have a competition procedure against me. So really, what we are thinking that we need to invest in this knowledge, but we also have some legal tools and I will come back to that in a moment. Thank you.

**DAVE ANDERSON:** That's great. Thanks. And look forward to talking to you. We have a compliance section at the end that I know that you're going to pitch in to. And I totally agree that point about bringing the IT folks into the compliance section. I took a coding class to understand how we were going to possibly, as lawyers, help companies audit. And it really is algorithms are built. They're built by humans. I hope we don't get the colluding robot part but I think that's another debate. Anyway, Isabelle, thank you so much for kicking us off. I really appreciate it. Ioannis, I have you next here coming out of Greece. Your camp and your initial remarks.

**IOANNIS LIANOS:** Thank you very much. Dave, I would classify myself in the curious and attentive camp. I think it's an important issue, although I think there are even more important issues to delve into. Like, for instance, algorithmic pricing by dominant firms. But in any case, I think it raises some very interesting questions. I mean, the 1950 Alan Turing study, his seminal article, with the question, can computers think? In paraphrasing this question, this panel I think is asked to delve into the question if algorithms computers can collude.

And I think it's interesting because the language game of antitrust law, which has so far involved humans and their firms, now faces the introduction of computers,
algorithms as new players in this game. So the use of algorithms, I think, in modern digital economy is well documented, and the proportion of algorithmic firms is, of course, something that varies from jurisdiction to jurisdiction. In Greece, actually, the Hellenic Competition Commission has started a process this year of mapping the use of algorithms by Greek companies, focusing first in the e-commerce sector in the context of the sector inquiry that we launched actually a few months ago. But we also explore in more detail the different types of algorithms that may be used in other economic sectors.

I think it is important here to distinguish between, first, the use of algorithms to monitor and enforce existing coordination strategies, and the situation, secondly, under which pricing algorithms can lead to coordinated outcomes, even when each firm is using their own pricing algorithms without communicating with their rivals. I think the first issue is something that can be dealt by existing alone. The question is about what we do for the second issue and how prominent as a risk that is.

I mean, there is, actually, I think, a lot of theoretical work, and now increasingly more empirical work, that puts forward some possibilities that companies may unilaterally through this self adaptation learning develop collusive activities. And I guess, if competition authorities there should fill in this gap, that is something that needs to be discussed more generally also at the [INAUDIBLE] level.

So in Greece, actually, we had a discussion on this issue because we had a recent law commission that was in charge of reform of competition law, and the law commission discussed various options including an ex ante obligation of notification of these algorithms and possible audit of algorithms. So certain types of algorithms, in particular, of the learning type. Or even the possibility of algorithm considered as last blast factors for collusion.

However, we decided that the current level of knowledge and the positive effects of algorithms for consumers and innovation, did not really require such ex ante regulation, at least for the time being, or even the revision of definition concerted practice. And actually, we also have tools like the new competition tools that the commission is now putting forward in Article 11 to broadly deal with such situations.
Therefore, I think that what we simply propose was to somehow enable the competition authority to map possibly the use of algorithms. And there is a specific provision that enables that. We mentioned algorithms in our Article 40, at least a proposed one. So we think that this provision will provide as a possibility to engage with market contexts and with the algorithms, facilitate collusion or may facilitate collusion, and eventually take formal action through our article level, which is like the new competition tool that the commission is now suggesting.

**DAVE ANDERSON:** Great. And I want to come back to you on-- I hope you engage with us on the tacit collusion question. I find that one to be very, very interesting one. And also on the tools as we get more into the debate. So thank you. So we have two for curious and attentive. Moving on to Russia, Andrey, your agency has some of the most experience in the world with actual enforcement cases so maybe I can guess where you might be coming down. But thanks for letting us know. What camp do you see yourself in and thanks for some opening remarks.

**ANDREY TSYGANOV:** Thank you. Thank you, Dave. First of all, I'm happy to be in LA, at least virtually. Such a brilliant [INAUDIBLE] here. And you know that the fight against cartels and other agreements restricting competition in the digital era is one of the key areas of the Competition Enforcement Worldwide, and given the relatively high level of cartelization in the main sectors of Russian economy in recent years, the fight against cartels has become one of the priority areas for be Federal Antimonopoly Service as well.

For instance, in this [INAUDIBLE] for economic security of the Russian Federation approved by the presidential decree in 2017 for the [INAUDIBLE] until 2030, the prevention of cartels was included among the main tasks of the state in the field of ensuring economic security of the country. And today we see that digital technologies are actively used not only in the positive dimension, but also for monopolization, both for markets and the cartel conspirators.

And digitalization has made its own adjustment to the ways of forming and maintaining cartels. In the era of artificial intelligence, digital platforms, blockchain, big data, the companies-- big, small, and medium sized-- increasingly
use different programs, algorithms, and other electronic tools, including those based on machine learning, in order to simplify cartel collusions and to make it more-- less detectable. And you just mentioned our practice. Yes, we have a good practice in cartel law enforcement in our country and we have a growing number of cases involving the use of price algorithms and other electronic tools.

For instance, in 1990, the Federal Antimonopoly Service, together with our original officers, initiated more than 400 cartel cases. And more than 80% of cartel cases are bid rigging. Thank you our high qualifications and high quality judicial practice and high level of standards of proof, only 3% of decisions that FAS made were overturned by [INAUDIBLE]. And taking into account the real risks the algorithms pose and what is confirmed by our statistics and a lot of papers, through all of the [INAUDIBLE] I was for [INAUDIBLE].

Digital cartels is a big problem and we need some solution. The only thing where we are in curious camp is just one subject. Until now, we don't understand the real role of blockchain in facilitating tacit collusion inside local group of participants on the basis of their own hidden [INAUDIBLE] everybody else rules. And in this field, we need further investigation and more examination of the real practice.

And I'd like to cover, shortly, two kinds of cartels in the practice of the Russian Competition [INAUDIBLE]. First one is the price algorithms and cases related to use of them. I want to mention just one example. This year, just months ago, the Federal Antimonopoly Service has revealed a big cartel case, which is not only-- which not only contained the digital signs and the use of special programs, but also, it's the first case of the cartel to be organized on the stock exchange.

Federal Antimonopoly Service found two [INAUDIBLE] and very, very important oil traders having taken part in a cartel on this-- on the stock exchange for oil and oil products [INAUDIBLE]. And the cartel was organized more than two years ago. And the investigative process itself was very interesting because it included the [INAUDIBLE] to understand in details how the stock exchange works and what kinds of evidences we can get from it.

For instance, the Federal Antimonopoly Service examined more than two million
lines of information that have been kept in the Russian stock exchange database. And it was interesting from these kind of our practice. What is important? One of the main consequence of this cartel that I should note that the price hold on the exchange rate platform is an indicator for market prices for the most of Russian market participants, and therefore, such collusion a priori effect general price depreciation on the oil and oil product market.

There is also this case consideration is [INAUDIBLE] administrative liability of parties of the cartels and criminal pace is in the process nowadays. It's not only the [INAUDIBLE] algorithm case in our history of law enforcement. And one short example is the classic bid rigging case. It's not an example, it's just a statistic.

As I mentioned before, more than 80% of the cases of anti-competitive practical agreements in Russia are bid rigging, and auction robots can be a sort of a special software installed on the user's computers or they work with our cloud servers which implements deliberately illegal functionality. And the task of the Federal Antimonopoly Service is the proof-- is to proof that this functionality is not for the growing efficiency of the market but only, and specially, for managing of the cartel behavior.

From 2019 to 2000-- from 2015 to 2019, we analyzed that almost in 20 cases of the bid rigging violation of competition law, the participants use their auction robots. And these tenders held in various regions of the Russian Federation from movements from the north to Pakistan on the south. So it's very important-- important program and to solve this problem we used new technology, first of all, and we used a huge number of [INAUDIBLE] events. And we developed the international corporation with our products because the world is so small and we need to cooperate in detection and fighting against international cartels. Thank you.

**DAVE ANDERSON:** Thanks, Andrey. So it sounds like you're mostly concerned, some curiosity. Gabriella, we have some camp diversity now with Andrey's point. Which is nice to see. How about Italy?

**GABRIELLA MUSCOLO:** Thank you, Dave. Good morning, good afternoon, or good evening, everybody. I am very happy to be digital with you, although, I would have been even happier
to be with you in person in LA. The attitude of the Italian Competition Authority towards big data and [INAUDIBLE] collusion is a curious one. This is why the Italian Competition-- oh, sorry. Together with the communication regulator and the data protection authority conducted a study on big data, a study covering not only cartels but all other areas of competition policy.

On the relationship between big data and algorithms, the joint study knows that businesses are increasingly resorting to algorithms as well as analytical tools needed to extract relevant and new information [INAUDIBLE] sets on the collection of vast amounts of data that today users provide. The joint study recognizes that the combination of data will algorithms could generate efficiencies, both pro competitive and pro consumer, provided that algorithms are transpiring.

However, the widespread usage of algorithms could also pose anti-competitive rates by making it easier for firms to achieve and sustain [INAUDIBLE] collusion. It is facilitated by [INAUDIBLE] transparency, both data availability and analysis that data processing of the digital environment. Insofar, these pricing algorithms follow mechanically the instructions of the program [INAUDIBLE], we are still on traditional grounds. The firms that remain effectively in charge of strategic choices, a collusion may only be achieved by yet some form of explicit [INAUDIBLE] agreement between the firms themselves.

However, we the advent of [INAUDIBLE], new types of algorithms have emerged and they are based on artificial intelligence and machine learning. These algorithms are often called black box algorithms, as their actions cannot be easily understood or explained by humans by reading their code or instructions. And for these types of algorithms, collusion might be an unintended consequence of their learning and application. Therefore, these black box algorithms expand the gray area between a lawful explicit collusion, a lawful [INAUDIBLE] collusion. They raise challenges for competitive authorities in terms of qualifying the agreement, finding evidence, and determining antitrust liability. And I stop here for now and thank you for your attention.

DAVE ANDERSON: Thanks, Gabriella. You bring up some great points about that gray area, which I hope we get the chance to get into some more. So Richard, we're in, in baseball
lingo, we're in the bottom of the ninth now. The score is three curious plus an extra, one concerned, no yet for content confident. Which of the three C camps gets your vote? Especially giving that DOJ also had one of the earliest enforcement cases?

RICHARD POWERS: Well, first of all, good morning or good afternoon to everyone and thank you for the opportunity to address the International Competition Network and to be here with all of you. So turning to the topic at hand, algorithmic collusion, we have seen, as you alluded to, we have seen early signs of this problem. And although it's too early to know its scope, we expect to see the use of algorithms for collusion with increasing frequency. And to the question as to which camp I'm in, I put myself in the intent confident camp but I'm increasingly curious about the issue.

At a high level, the US legal standard for criminal antitrust violations remains constant. It requires proof beyond a reasonable doubt of an agreement among two or more competitors to fix prices, rig bids, or allocate markets that occurs and/or affects interstate or foreign commerce. While algorithms, similar to other technological developments, may present new challenges as we enforce a statute that was written in 1890, so far at least we feel equipped to conduct-- to confront such challenges without major changes in our enforcement. A criminal prosecution is typically limited to bid rigging, price fixing, and allocation agreements.

And the Antitrust Division has significant experience prosecuting antitrust conspiracies carried out by a range of means and methods, and that could include the use of pricing algorithms. US law is also well equipped to prosecute collusive agreements reached and facilitated through intermediaries. In the context of algorithms, if an intermediary, such as a programmer or a platform, facilitates a conspiracy among competitors to use a common pricing algorithm for the purpose of fixing prices, under US law we could prosecute both the competitors and the intermediary who facilitated the illegal agreement.

Moreover, the doctrine of respondeat superior allows the Division to prosecute companies for the acts of employees and agents. In the context of collusion facilitated by algorithms, a US law would allow the Division to prosecute
companies for antitrust violations committed by employees and agents on behalf of the company. As a result, although the Sherman Act is over 130 years old, our legal regime has proven adaptable to prosecuting those who engage in and benefit from collusion, whatever the means or method.

In addition to our-- to the flexibility of our legal framework, we are committed to ensuring that our ability to detect new methods of collusion evolves with the times. In November of 2019, the Division spearheaded the launch of the Procurement Collusion Strike Force, an inter-agency partnership to safeguard taxpayer dollars by deterring, detecting, and prosecuting antitrust crimes and related schemes that undermine the government procurement process. Through the Strike Force, the Division is facilitating an inter-agency dialogue on the use of data analytics to detect collusion that affects public procurement.

The Division is also committed to educating its attorneys and economists on machine learning, artificial intelligence, and blockchain technologies. As the Division's assistant attorney general, Makan Delrahim has mentioned, the Division attorneys and economists recently enrolled in classes to develop a basic but critical understanding of how businesses implement these technologies and what effect they may have on competition. And I should note that this included attorneys from our criminal sections.

In addition to ensuring our ability to understand and detect novel methods of collusion, we are committed to a policy framework that incentivizes deterrence and detection of antitrust crimes however effectuated. For example, through a policy change last year, we have taken steps to further recognize corporate compliance. Just as the role for corporate compliance programs in deterring price fixing that occurs in the traditional smoke filled rooms, there is a role for corporate compliance programs effectuate-- in preventing collusion effectuated by algorithms. And to put a finer point on this, and given the level of discussion around this topic over the last few years, a company might have a hard time persuading us that it had an effective compliance program if it didn't account for the types of risks associated-- can be associated with pricing algorithms and similar tools. And this failure contributed, at least in part, to the criminal anti-competitive conduct at issue.
So when asked which of the three camps we fall in, I think it's hard to put us squarely in a single bucket. We are confident in our tools and ability to take on evolving forms of collusion because of the flexibility in our legal framework to adapt to novel means and methods of collusion, prosecute intermediaries, and hold companies accountable for the acts of their agents. However, there is still much to see and learn about algorithmic collusion and we remain committed to continuously educating ourselves in this developing area. So I look forward to further discussion today on this interesting topic.

**Dave Anderson:** Thanks, Richard. Appreciate it. And thanks everyone for your willingness to vote and for your, should I say, your innovation in choosing categories. It was very creative and rightly so because this is an area which is new and does need, I think, probably all three camps. It needs us all to be concerned, it needs us all to be confident and looking to our own tools and to our own compliance and to our own advocacy, and also very curious because there's a lot more to learn going forward. So thanks, everybody, on that. Thank you as well.

We are moving on now to the second part of our panel which is a quick round of five Q&A's. These are questions which come out of the scoping paper which have come from agencies that I've talk to that the co-chairs wanted us to make sure that we talked about. The first one is really going back to a bit of the general points of, is there a problem and what's going on? Second one will be looking at tool kit liability, kind of legislative part of it as well. The last-- the next compliance and advocacy. Some of the points that Richard just mentioned just there.

The next one on cooperation, international and domestic, which also relates to the procurement aspects of both you, Richard and Andrey, talked about. And detection and tools, which everybody wants to talk about. You're all enforcers. No shocker there. So let's get going on that. Gabriella, just looking at the big picture, start our discussion stemming off of your introductory remarks, for me, especially trying to advise companies in this situation, which for some of them is quite new and the question of do we have a problem and you can algorithms collude, you know, that kind of general aspect, thanks for agreeing to help kind of kick us off on this first part. That, is there a problem? And interested in get a
couple minutes from you and then we'll look to Richard and Ioannis for some quick comments after you.

GABRIELLA MUSCOLO: Thank you, Dave. I would like to raise the issue of transparency of algorithms again and then briefly share [INAUDIBLE] experience with algorithms and their relevance in our economic context. Blackbox algorithms are very complex. They are functioning very [INAUDIBLE]. Hence, the crucial question is, what standard of transparency is appropriate to deal with the trade off between the benefits of algorithms and the risk of algorithmic tacit collusion?

The Italian Competition Authority has so far no experience with algorithmic collusion but has dealt with algorithms in consumer protection cases due to it's dual competence. In such cases, the Authority intervened to increase the level of transparency of price comparison websites in presenting their results for a more informed consumer decision making process which have pro competitive-- also pro competitive effects.

Our experience in consumer protection shows that the [INAUDIBLE] of transparency, which, on one hand, they benefit consumers while on the other hand may facilitate and make more stable explicit collusion. Even [INAUDIBLE]. Indeed, as for competition future cases, when thinking of simpler cases of basic algorithms used as a tool to implement explicit collusion, we are concerned-- now we are not curious, we are concerned-- that collusion conducts that were typically confined to illegal police [INAUDIBLE] in highly concentrated markets, may arise also markets which do not [INAUDIBLE] but facilitated collusion.

This is very relevant in the Italian context where, first, most of the businesses are small medium enterprises and, secondly, almost half of traditional [INAUDIBLE] sanctioned by the Competition Authority occurred in segmented markets. And I stop here.

DAVE ANDERSON: OK. Great. So Richard and Ioannis, just a quick 30 second comeback comment to Gabriella's high level comments, particularly, are there-- is there a problem? Richard, how about you first?

RICHARD POWERS: Yeah. So I think as I alluded to in my opening remarks, I think we see this as being at the early stages of the problem, and our Amazon poster's case that was
mentioned earlier from several years ago, a case from several years ago, is an example [INAUDIBLE] case. However, I think our argue is this is likely the tip of the iceberg in terms of the means and methods that can be used to engage in this type of collusion.

That said, we haven't seen anything yet that was beyond our current set of legal tools. But that shouldn't lead us to complacency. I think the most-- the more important first step before we're getting to legal fixes is ensuring that we were able to detect this type of conduct and being able to better diagnose the actual problem. I think data, analytics, and compliance will be important to us on this front in addition to traditional [INAUDIBLE] leniency and whatnot.

DAVE ANDERSON: That's great. And we'll get to that at the end for sure. Ioannis, how about you? 30 second comment.

IOANNIS LIANOS: Three brief remarks. The first one, I agree with Gabriella. The problem is when you have wide adoption of algorithmic pricing with companies, which might raise issues also in context where you don't have very concentrated markets. So that is a concern.

Secondly, the reinforcement learning algorithms, I think, is a problem. And from that perspective, that could probably become even more important with [INAUDIBLE] of things and the use, basically, of algorithms in day to day, basically, different types of activities. And the third issue is about our super technology of leniency policy that have been maligned for such a long time. And we obviously will discuss about new type of protection tools. There, I will say, there is an issue with regards to self-learning algorithms because there you don't really have-- supposedly managers are not aware of the near collusive outcomes that algorithms sustain to learning over time. So there's no one, basically, to do the reporting with regards to leniency.

There's less of an issue with regard to the situation where you have explicit collusion already exists supported by algorithms because you there might-- you have a human factor. And there, I think, with regards to a third party facilitated algorithm collusion, we'll need to revise the design of leniency programs by extending liability to third party facilitator and then allowing also facilitators to
apply for leniency. I think these are the three points I wanted to make.

DAVE ANDERSON: All right. Some more innovation. Well done. Great. So that's the kick off. Next is probably the question that I think everybody really is-- enjoys long detection. I like this question. So many issues that are alive for all of us as enforcers and as companies looking to comply. The issue is, when we talk about algorithmic pricing and collusion concerns, do we need new tools? Do we need revised laws? What about the definition of an agreement, addressing it in the new tech world? Do we have the tools, as Richard was saying, are we OK there? Have we done it before?

And then you have the question-- I hope folks-- I would love if folks want to dig into this briefly. Explicit versus tacit. Probably pretty clear when they're using an algorithm to do director to do the hub and spoke like has been talked about, but what about the issue of tacit? You can call it tacit collusion, interdependent pricing, conscious parallelism, whatever is your flavor. In most countries, it's not illegal because we want competitors to make sure that they watch and react to the marketplace. So maybe, Gabriella, goes back to your transparency point, is changing, but it's a big point in the big data debate.

And then we talked a lot about liability, as you just said, Ioannis and Richard, too, who's on the hook? The companies that are using it? The programmer, the supplier, both? Is it strict liability? Do you need to be aware of it? And as Richard was talking [INAUDIBLE] certainly in the compliance area, making sure. Just a brief few points there. If folks want to take some shots at that. Isabelle, how about you. Is there a need for reform or is there other things you're thinking about in France?

ISABELLE DE SILVA: Thank you, Dave. I think that this is one of the crucial question of today. I think when you think about a classical case like the poster case in the US and the UK, the legal framework is easy to apply. The difficulty will be to detect this collusion. So that's the issue of how do agencies detect this type of classical collusion through algorithm.

But I think another issue is the tacit collusion that you mentioned. And also another fascinating question is, how do you deal with an algorithm that has
evolved and indulged in collusion without this being in the original algorithm? So that is about reinforcement algorithm that you have [INAUDIBLE]. So my answer to this, based on the French and European legal framework, is that a company should be liable for anything that the algorithm is going to do.

So I would take the comparison [AUDIO OUT] that the robot that Isaac Asimov wrote [INAUDIBLE] about very brilliantly. If you create a robot and the robot goes all day you always find a human. And so that human, that company, should be liable for anything that the algorithm is going to do. So this is about collusion that [AUDIO OUT] evolve even if it was not in the original coding of the algorithm. I think tacit collusion is another issue, and maybe in that case it's really being debated in Europe and we are-- have been quite cautious in our joint study with the [INAUDIBLE] on this issue. And maybe just some quick notes for the future.

This type of conduct might be a way to apply the new competition tool, all the digital services acts, that are being discussed right now. Maybe the answer will not be in the ex-post application of competition law. Maybe if we see some really critical ways in which algorithms are being applied, this might be dealt with by transparency obligations, like we already have in the platform to business regulation in Europe. This might be something that might look-- might be looked at for the new digital services act. This is about maybe thinking about broadening our legal framework if we find that there is a crucial type of conduct that we are not able to catch.

DAVE ANDERSON: All right. So strict liability sounds pretty tough. Tacit, prospect something new and new tools, that sounds very interesting. So Ioannis, how about you? You talked to me about the liability question, in particular, but how about for your two minutes? Where would you like to come on down-- come down on?

IOANNIS LIANOS: I think that when you have actually a algorithm that has been deliberately designed by software engineer in-house in a company or a third party to coordinate prices, obviously, in this case, you have a liability for full damages for- and you have to find that. But I think things become even more complex because usually these algorithms are made by highly specialized companies that basically gather data from multiple sources and they provide commercial solutions for their clients.
And usually, direct participants are basically not doing themselves the algorithm but they are getting a license from a supplier. And in a quite interesting paper I've been reading lately by the [INAUDIBLE], they actually put through the idea that since the software suppliers here are the market players that design the source of the harm, this will be also an argument in favor of assigning financial ability to them as well, as, obviously, the user company of that specific algorithm. Now-- and in that case, we'll obviously need to expand that liability, and we have actually in the EU the case concerning [INAUDIBLE] which enables the commission and national [INAUDIBLE] authorities to find liable facilitators of cartels.

Now, the question, however, is if we can move towards some form of strict liability. And there, I would say things are a bit more complex because usually strict liability is appropriate when only unilateral precaution by the injurer is possible. And basically, the idea is that you have to be able to identify certain class of activities very clearly which the activity level changes by the potential injurers will be the most efficient way to prevent accidents. And therefore, you have somehow to determine these class of activities.

And that is something I would say that we'll have to do a lot of work because we'll have to define if there are any types of algorithms that may be good from a social welfare perspective to limit the use, and in this context only, to impose strict liability. But then the question is it will move to a negligence system for the rest. The question is how that might affect innovation. And to a certain extent, one might say that you have also to somehow see that the users-- I mean, the sophisticated companies here-- they also have to [INAUDIBLE] to take precautions in this context when they use these specific algorithms.

And so, in my perspective, you need to set an example to have a more thoughtful and cautious approach by finding out in which cases you have to apportion the damages or apportion actually the harm between the users and the software engineers and companies that produce these algorithms. I would say, a good analogy is that of a self driving car. The designer of the self-driving car, obviously, they have to have some form of duty to comply to certain standards. But then, obviously, the people who drive the car also have to incur some
responsibility and be cautious. Otherwise, it will not be-- they won't have an incentive to be cautious.

And I think that will help us to have a more rounded approach that will preserve also innovation and will drive direct innovation towards, basically, ways that help firms to be-- to take more effective precaution and incentivize producer innovation that will be-- a producer in terms of algorithm innovation-- that will somehow avoid the risk of algorithm being used for collusive activity.

**DAVE ANDERSON:** All right. Great. Those are very considerate points and, Richard, how do those play for you guys or is it a completely different issue when you're looking either at liability or whether or not your toolkit is what you want?

**RICHARD POWERS:** [INAUDIBLE] are so, I think our view is that US law is well equipped to prosecute collusive agreements reached and facilitated through various means and methods such as platforms and algorithms. With respect to intermediaries, over the years the Division has investigated and prosecuted what I've referred to as hub and spoke conspiracies cartels where one of the conspirators acted as the coordinator of the cartel and facilitated the dissemination of the information, including bidding information to other co-conspirators.

And I can imagine a scenario where this type of intermediary or facilitator role is played by providers of algorithms or some other technological platform in the future. And because of this, the Antitrust Division is adapting its methods of protection and working to leverage available tools to better uncover this type of situation. In terms of liability, in addition to the individual conspirators potentially facing prosecution, as I've mentioned in my opening remarks, the doctrine of respondeat superior allows the division to prosecute companies for the acts of employees and agents. And specifically, corporations may be held criminally responsible for hardcore conduct engaged in by employees or agents if they were acting within the scope of authority or parent authority and for the benefit of the corporation, even if such acts were against corporate policy or express instructions.

However, it's important to remember the distinction between independent business decisions and collusion. The key element we need to prove is the
existence of an agreement or common understanding between horizontal competitors. Adopting the same or similar prices or pricing algorithms absent an agreement or common understanding between the competitors would not suffice for criminal prosecution under US law.

**DAVE ANDERSON:** Yeah. That's a really important part of the toolbox and it's been talked about over here in Europe, too, about the definition of an agreement in this kind of situation. So, Gabriella, you've heard from two of your fellow European enforcers and from Richard across the pond. 30 second reaction on this question on toolkit liability?

**GABRIELLA MUSCOLO:** Yes. Yes, Dave. A very brief comment. Italy's case law and the Italian Competition Authority practice has shown that the concept of concerted practices is flexible enough to capture anti-competitive agreements occurring in a new environment. However, in my opinion, the main challenger would be how to define and prove the meeting of wills in the context of intelligent robots [INAUDIBLE]. And competition authorities might be called to develop new detection methods to detect these new forms of interactions. Thanks.

**DAVE ANDERSON:** Great. Thank you. All right. So let's move on to our next subject, briefly, on compliance and advocacy. This is a really new area for agencies and the private sector as well. And certainly all the discussion and the different views as we looked around the map certainly makes it difficult currently and so I think the ICN is a great place for us to talk about convergence and harmonization and make sure we're all using similar tools. We hear about compliance by design, and I've talk to my clients about code accountability-- you know, you will be responsible for this, which is what we've heard so far-- or contractual clauses with your suppliers.

So what are agencies doing to talk to business and to the private sector about its views in this emerging area? What sort of things are you doing or telling the private sector with regard to compliance, in particular, advocacy? And Andrey, could we start with you for two minutes to hear about what the FAS has been doing because I think you've been out there working with private sector on this exact point.
Thank you, Dave. Just a brief comment. Of course, any competition authority always pays much attention to competition measures, especially when it deals with such a serious violation of antimonopoly cartels. And recently, the Federal Antimonopoly Service issued a number of methodological recommendations aimed to or at rising awareness among business consumers and experts about the peculiarities of detecting and preventing cartels in digital age in accordance with Russian competition law.

[INAUDIBLE], last year the Federal Antimonopoly Service developed the recommendations on practices or in the use of information technologies in trade, including those related to the use of price algorithms. Yes. This a very long name but it's very easy to understand. We do it with together with our nonprofit partnership corporate lawyer association. These recommendations were approved by the FAS methodological council and FAS [INAUDIBLE]. And, actually, it's an official document. It reflects the official position of the Federal Antimonopoly Service.

The recommendations explain such terms as price algorithms, online platforms, program products, and so on, so forth, and describe both accepted legal practices and unaccepted or illegal practices of use such as price algorithms that include collusions, price coordination with proposed to restrict or eliminate the [INAUDIBLE]. And these official recommendation are placed on our website then and everybody can read it and know the position of the FAS.

One of the most important, from our point of view, conclusion of this recommendation is that the use of robots, algorithms, or monitoring systems itself should not be considered as a violation in the absence of other evidences of collusion or any other unacceptable agreement. Secondly, just months ago-- it's a fresh, fresh copy just from the printing-- the recommendation on the detection prevention of cartels and other anti-competitive agreements in the digital economy. It's a book. It's a book prepared together with our training and methodology center in [INAUDIBLE]. It's a practical handbook for our staff and for everybody who is interested in this topic.

This set of recommendations expand the-- and explain the terminology of what are digital cartels, what are the digital evidences, and we try to make a sort of
classification of these kind of evidences from digital evidences. Used by FAS for last few-- for four or five or six years. And besides what is new in this recommendation, we try to identify the typical parameters of bid rigging that includes the well-known characteristics of markets and behavior on the market on the base of [INAUDIBLE] on cartels.

And last but not least, we include more than a dozen of practical cases of both detection and investigation of bid rigging and other cartel cases made by the Federal Antimonopoly Service and our regional office. In addition to it, of course the advocacy measures that we use includes [INAUDIBLE]. I should mention it. The excellent presentation both [INAUDIBLE] digital reports, yes, made by the group of experts headed by Ioannis Lianos, last year during the [INAUDIBLE] competition conference in Moscow just a year ago in September last year.

Secondly, we have a lot of conferences. In each of these conference, the digital problems and the problems of detection of cartels are one of the topics of discussion. And finally, now there is ongoing public discussion on so-called [INAUDIBLE] antimonopoly package of law. It's a digital package of law that should just be our legal practice with the design of the digital economy. And the model where we have a set of amendments to the competition law on the strengthening of the fight against cartel. In both of these cases, public discussion is very important for dissemination of our views through our proponents and opponents as well. Thank you.

**DAVE ANDERSON:** And the thing that warms my heart, Andrey, about your recommendations exercise is you did work and get comments from the private bar and the private sector, which is great, because it shows that kind of connection and you get a chance, as Isabelle said, you know, trying to make sure that we understand where the private sector is coming from when we have these new rules. And I have read your document. I had my office in Moscow translate it for me so I think it is very useful. It's on the map as well.

So, Richard, you talked before-- you know, of course, the DOJ has gone through a change in its compliance policy and procedure. That was very, very noted and welcome, I think, globally. What are you telling companies or how are you adapting or maybe adjusting this or-- and are you using it for your-- both your
compliance programs and what you're talking to private sector about?

RICHARD POWERS: Sure. So I think one of the things we're saying, one of the main ways for companies to comply with competition laws in the algorithm world, is to invest in effective anti-trust compliance programs that are designed in such a way to adjust to these types of developments. And as you mentioned, I think as folks know, we made our change where we-- a year ago-- where we now credit corporate compliance programs and consider it at the charging stage as well the sentencing stage. I won't rehash the discussion about that but that's something we are looking at now.

I think I would just point to two parts of the guidance that was made public. So we made public the guidance to our prosecutors so you can see sort of the questions they'll ask. And the one of the factors our prosecutors look at is anti-trust risk assessment techniques. And the discussions in this factor contain a number of questions. I'll just quickly point to a couple of them.

One, is the company's antitrust risk assessment current and subject to periodic review and have there been updates to the antitrust policies and procedures in light of lessons learned or marketplace legal, technological, or other developments? Another factor is periodic review monitoring and auditing. Again, there are questions that are designed to get at, how are companies thinking through and addressing these issues, including are they talking to the relevant business units? It's not just an academic exercise. Are you talking to the business units about the analogies that they're using.

So I think we-- our guidance makes clear, and part of our message is, we see a role for compliance programs to help companies stay ahead of these issues that could arise in the algorithm world. And I think another way to say it is I think a head in the sand approach to the compliance risks here could result in no credit for compliance and a company facing, potentially, indictment and criminal conviction.

DAVE ANDERSON: Great. Thanks. So we've had such a great time talking about such great issues. We're a bit behind on time. I would propose that we skip our section on cooperation and just to note that, particularly Andrey, at the beginning you
mentioned that, in particular, that is very important. And Isabelle, you said, too, that scoping paper talks about it and it's very important that this is going on. And it's both domestic with regard to your own agencies and other agencies, which we'll talk about in a second, but also through the multilateral framework that we have here at the ICN.

And if OK with the group to finish off our section on detection, which everybody wanted to talk about so I want to make sure that we leave time for that, a enforcers favorite discussion, and we talked about in the scoping papers and talked about yesterday as well. If everybody wouldn't mind trying to maybe shorten their interventions maybe so that we can get-- so we can finish because we have a train coming up behind us with the last section going on today. Gabriella, would you mind starting us off? Your views, quickly, as with regards to what your agency is looking at on detection investigation tools with regard to turning it around. What can agents-- what are agencies doing with regard to using algorithms and big data?

**ISABELLE DE SILVA:**

Thank you, Dave. Briefly, one minute. The Italian Competition Authority considers big data [INAUDIBLE] as an additional instrument in its proactive enforcement to [INAUDIBLE] the cartels, both online and offline. The Authority is investing in other mining tools in two ways, assessing data for analysis and increasing the IT capabilities.

In relation to data collection in the public procurement area, article three of the memorandum of understanding signed by our Authority with the authority for supervision of anti-corruption, allows us to assess the national database of public conducts. This data is being to develop a successful screening test in relation to public [INAUDIBLE]. We respect that [INAUDIBLE] capabilities of an authority unlike some other agencies do not create a digital unit, not hire a data scientist and set up a working group [INAUDIBLE].

All of this work implies the need for acquiring or assessing data for the analysis and for developing the test for detection. Similarly, to what has happened in the public procurement area. All this work also raises the issue of resources. In future, we might need additional data scientists. And we will see what will happen. Thanks.
DAVE ANDERSON: Thanks, Gabriella. Ioannis, in Greece, you were talking about an intelligence platform and some other things you're thinking about doing. Could you tell us briefly about your look on this question on detection?

IOANNIS LIANOS: Absolutely. So a couple of points. First is that we are now in the process of changing our law, and one of the issues I think we face is usually the limits we have under the current EU case law on fishing expeditions. And from my perspective, and this is also what we have been putting forward, we included provisions that enable competition authorities to continuously monitor markets through electronic screening tools for mapping purposes only. That's actually one of the issues.

Secondly, we now put in place in our new structure a new forensic IT unit, as well as the position of the chief technology officer, which is actually data scientist with his team. And also, we have been using big data in our day to day investigations. So we have concluded the first step of the investigative work in public procurement sector with regards to hospitals procurement where we actually use a number of-- we actually extracted data using APIs and [INAUDIBLE] software to analyze, basically, more than 150,000 contracts in a period of three months. And actually identifying five companies that we will be investigating further.

And finally, we are now at the last stages of putting in place a new agency intelligence platform where, actually, we have-- we are harvesting data for more than 1,200 products from-- daily, actually-- from the prices from supermarkets, local markets, as well as fuels, station services in the country. We have developed actually screens, specific screens, for excessive pricing and cartels.

And I wish I had the time to present that in more detail. We'll, obviously, do a proper presentation and we'll post it on YouTube because I think that it is a quite innovative platform that could be of interest for other competition authorities as well.

DAVE ANDERSON: Great. Isabelle, Andrey, and Richard, would you all be able to give me your view quickly? I'm under some pressure.

ISABELLE DE: Yes. Thank you. Oh, sorry. Am I--
DAVE ANDERSON: Yeah. Go ahead, Isabelle. Yes. Go for it.

ISABELLE DE SILVA: I just needed to wrap up. I will not tell you a lot about what we are doing because I think this is more of interest for agencies. We have created a new digital economy unit from which we expect a lot more expertise. But maybe my last word would be for companies. How can they anticipate a compliance risk in relation with algorithm? And my first recommendation would be to look at those papers that you mentioned. You promoted the Franco-German study on algorithm. Thanks a lot. You had [INAUDIBLE] on the paper on big data that is shorter. But the message is really that there are compliance risk associated with algorithm. So IT people should talk to lawyers inside the company and find a common language, and maybe those companies that rely heavily on algorithm, they should look at when they change or create an algorithm, what are the objectives but also what are the effects of this algorithm? Because, for example, the Google shopping case showed that a lot in this case was about the effect the new algorithm had had on other companies that had been affected by Google. So this is really a new way to look at things. Something-- really a new landscape for companies and they really must invest the necessary time to avoid liability when it is not warranted. Thanks a lot.

DAVE ANDERSON: Yeah. Great point. Great point. Andrey and Richard, any quick last points from you guys on this point before we wrap up?

ANDREY TSYGANOV: Yes. Very short. Everybody knows the FAS big digital toolkit. And I can tell you that he is growing up and, nowadays, we can use the systematic detection of bid rigging by analyzing the many open data sources, including unified informational systems-- that's a governmental system of Russia data-- or the federal tax service, social networks, and so on, so forth.

And we also not only can to detect bid rigging but also to track the interconnection of the legal entities and even of a physical person that we suspect to check the activities of this persons in the known period. And we use the multi parameteral system of law structural indexes and behavioral signs. And
The most interesting thing in this project is that we work on the special tools of detection of cartels in cooperation with our [INAUDIBLE] colleagues. Last year, we organized a sort of a [INAUDIBLE] group of-- on cartels and we managed to organize to phrase by phrase meanings before the Corona. And we are in the process of comparison of Russian big digital kit and Brazil [INAUDIBLE], for instance. It's very interesting.

DAVE ANDERSON: Super. Super. And, Richard, last word to you.

RICHARD POWERS: I think I'll yield my time to the PCSF showcase that's following this for anybody who's interested in learning about what we're doing in the US on the detection front. I encourage everybody.

DAVE ANDERSON: Thanks. All right. Well, in conclusion, as the scoping paper notes, we have a lot more work to do in this area. And I think, if anything, this panel showed exactly that. The debate is going, research is thriving, and there's a lot to talk about. So the Cartel Working Group, we continue.

Thanks to this great panel and to their teams. And I was honored to moderate this debate. And to thank everyone and the co-chairs as well for doing such a great job, and to DigiComp and the ICN community for letting me be involved the last 20 years as one of the NGAs. Look forward to the third decade. And this is really the best public private partnership I've ever been involved in. So don't go away. Stay tuned for the DOJ's procurement collusion strike force showcase, as Richard mentioned, up next. Take care everyone. Thanks, everybody.

ISABELLE DE SILVA: Thank you.

ANDREY TSYGANOV: Bye bye. Thank you.

IOANNIS LIANOS: Bye.

RICHARD POWERS: Bye.
Hello, everyone, and welcome to the Procurement Collusion Strike Force showcase. We're really happy you could join us. Usually I'd go left to right introducing our panelists, but since I have no idea what the layout on your screen is, I'm probably going to just do this alphabetically. So I'll start with our AAG, Makan Delrahim. No stranger to this audience. Makan is the Assistant Attorney General for the Antitrust Division at the US Department of Justice and he oversees the Division's enforcement of the antitrust laws, including our criminal cartel enforcement program. Earlier in his career, from 2003 to 2005, he served as the deputy assistant attorney general overseeing the Division's appellate, legal policy, and international section.

Up next is United States Attorney, Nick Hanna. Nick is the chief federal law enforcement officer for the Central District of California. Nick's office prosecutes the entire range of federal crimes and he also defends the United States in civil action and represents the government's interests in tax matter. Up next, Kevin James. Kevin is currently the chief of legislative affairs in the LA mayor's office, but until very recently, Kevin served as the president of the LA Board of Public Works, a role he held for about seven years, making him one of the longest consecutively serving presidents in the history of the Board. Kevin is also a former assistant United States attorney.

David Scott. David is the section chief of the FBI Public Corruption and Civil Rights Section where he oversees the FBI's public corruption, international corruption, civil rights, and international human rights program. David's experience, as you can imagine, runs the gamut from organized crime and counterterrorism to public corruption and white collar criminal matters. Prior to joining the bureau in 2003, David was an infantry officer in the United States Army.

I'm Tee St. Matthew-Daniel. I'm your moderator today. I'm also the acting director of the Procurement Coalition Strike Force and one of the assistant chiefs in the Antitrust Division's New York office. I am thrilled to be moderating this showcase with this impressive panel of speakers. We had originally planned this discussion for the in-person conference ICN 2020 in LA, and although we're now virtual, we're still very much planning to keep the focus on the strike force in action in LA. So, to kick up today's showcase, I will hand things over to Makan to provide an
Tee, thank you so much for that and thank you for your leadership the last seven, eight months continuing the great work that the PCSF has done. Before we get started into any of the substance of today's discussion, I just want to take a moment to personally thank my colleagues, my friends and colleagues, across the government in all different levels of the government for joining me today on this important discussion.

The strike force is an important initiative for us at the Antitrust Division and it wouldn't be possible without the US attorneys, the chief legal officers in the United States in each of our districts across the country, as well as our colleagues in the investigative agencies-- the FBI, the Department of Defense's Investigative unit, amongst the other agencies-- and then also at the state and local level. And we couldn't have asked for anybody better than Kevin to be part of the PCSF given his background as a former federal prosecutor, but also the head of one of the largest agencies that doles out public works money and contracts at the local level. And one of the cities in the United States happens to be Los Angeles, my hometown.

So I know that there is a lot of interest within the international enforcement community. I've heard it from my colleagues internationally and at the OECD about the Strike Force initiative. We're almost a year into this and I'm just incredibly pleased that we're showcasing the PCSF alongside the ICN 2020. I want to give a few overview remarks and then turn to our panel discussion to it and hope to address some of the other questions anybody in the audience would have. If we could go to the next slide.

As many of you know, we launched the PCSF in November of 2019 as a partnership consisting of prosecutors from the Antitrust Division, and significantly from 13 of the criminal offices within the Department of Justice located around the United States-- in the US, they're the United States attorneys, they're, effectively, the attorney generals of each-- for the federal level-- of each of the 94 districts across the country-- as well as investigators from the various law enforcement agencies, including our important partnership, our sister agency, the Federal Bureau of Prisons.
We established the PCSF because our experience investigating cartels in various industries shows that the public procurement space is particularly vulnerable to collusion. And antitrust violations result in significant financial harm to the American taxpayers. Frankly, taxpayers all around the world. You've probably experienced this as well. Roughly one out of every $10 of federal government spending is allocated to government contracting. By reducing illegal and anti-competitive collusion in procurement, the PCSF's effort could save US taxpayers tens of billions of dollars each year.

The overall concept is really to leverage the combined expertise and resources of each of the partner prosecutors and agents to better help detect, deter, and investigate and, ultimately, prosecute the hardcore antitrust conduct and the related schemes that often go hand in hand with sometimes the collusive activities, whether that might be public corruption or other types of illegal activity at the federal, state, and local level. The next slide.

Before the pandemic, the PCSF was launched as a virtual strike force. It was not because we anticipated the virus coming over. It was really intended to maximize the efficiencies we have and really harness the strengths at each of the level of government that we already have. We have not relocated the Antitrust Division personnel to new locations like some other task forces out there do. Nor have any of our strike force partners relocated their own personnel. Instead, we've always been-- the idea has always been for us to mobilize the resources at existing locations to achieve the best results we can for the taxpayer.

The PCSF prosecutors and partner agents collaborate for more effective outreach and investigations. Combining the forces that we all have, they, first, conduct targeted outreach and training to federal, state, and local government procurement officials and law enforcement regarding antitrust risks in the government procurement process. Second, we jointly conduct procurement related criminal investigations and prosecutions. And third, to facilitate the collaboration across the law enforcement community in developing and using data analytics to identify signs of potential criminal collusion in available government procurement data for further investigations.
We have run a recent pilot with the help of one of the major database partners within the law enforcement community to begin testing that concept of identifying that. And we're looking forward to learning more and really deploying that potential we would have for big data to help us as yet another prosecutorial tool to identify collusive activity. The next slide. As I mentioned earlier, it's-- the PCSF is a partnership with our colleagues across the US Attorney's office, the FBI, the Offices of the Inspectors Generals across multiple federal agencies, including the Department of Defense, the Justice Department Office of Inspector General, US Postal Service Inspector General, the GSA, and many others. Next slide.

Geographic footprint, I wanted to just touch base and show where the current organizational model is. It's a district based organizational model to conduct outreach and training so that we can best help train those folks at the frontline of contracting to identify the red flags. And second, to conduct the joint investigations and prosecutions. But as this map that you see shows, the PCSF has a national reach. Our initial 13 partner federal district spanned the country from coast to coast, from northeast in New York and Philadelphia to the southeast in Atlanta and Miami, and all the way to the west, of course, Los Angeles, Sacramento, and cities in the Midwest-- Chicago, Detroit, Dallas, and Ohio. Next slide.

For each of the 13 districts, the PCSF partners have designated personnel who serve as the liaisons. The Antitrust Division has designated current trial attorneys that will work as liaisons. And the teams are made up with-- of them, the US attorney has a designated assistant US attorney, the FBI has a designated Special Agent, and each office of Inspector general has a designated agent. Our district based model recognizes that one size doesn't fit all, we know that just from experience, and empowers each district to create working partnerships with agencies-- federal, state, or local-- in their district to conduct tailored outreach and investigations. And that's precisely what we have done.

We're going after cartels that cheat taxpayers in government procurement like never before because we are doubling our efforts and having the force multiplier with our partners and the US attorney's offices to help us do that. In just 10 months, despite extraordinary challenges posed by the pandemic, the 13 PCSF
district teams have opened almost two dozen active grand jury investigations, led dozens of training program for thousands of criminal investigators, data scientists, and procurement officials from nearly 500 federal, state, and local agencies.

I'm happy, again, and honored to be speaking today with my friend, the United States attorney for the Central District of California, Nick Hanna. I know Nick will be discussing some of the accomplishments of the team in his district and, again, my hometown of Los Angeles. Interested to hear-- I'm very interested to hear his perspective as well as FBI perspective from Dave and Kevin's unique perspective as a longtime procurement executive and former federal prosecutor. With that, we can take the slides down, if you may, and I'd like to hand it over to our moderator, Tee. And thank you again.

**EYITAYO "TEE" ST.** Great. Thank you, Makan, for that overview. I want to turn now and to pick up on the idea that you touched on that collusion and bid rigging does come at a significant cost to taxpayers. And Kevin, I wanted to get your sense. From your experience serving as the LA-- president of the LA Board of Public Works, can you describe for folks the sort of the real world impact. What keeps you up at night when you're thinking about collusion and bid rigging and the impact it's having on the city taxpayer funded projects?

**MATTHEW-DANIEL:** Well, Tee, thank you for the question and, Makan, thank you for the invitation. It's great to be on with my longtime friend and colleague, our US attorney Nick Hanna. And David, it's good to see you as well. And just from the City of Los Angeles, as one of the largest-- the second largest department in the City of Los Angeles, the Department of Public Works, with almost 6,000 employees, you can imagine with the kind of projects that we do, our procurement is significant. And clearly, especially when you look at the budget cuts that have basically enveloped our administration, added costs because of these activities is something that you worry a lot about.

Let me answer the question by way of an example. And this is going to be-- this is an example, something that obviously happened-- Makan and I talked about it some years ago, as a matter of fact-- it involves some of our smaller contracts but it also is illustrative of what can happen with just some common sense for
procurement officers who are paying attention to what's happening right under their nose versus some of the more complicated issues that make this strike force so important for some of even the larger contracts we deal with. Right after we were coming out of the Great Recession, in the early years of the Garcetti administration, 2013 or so, the City still had no in-house tree trimming crews. So this is a very important service for the community, is getting your trees trimmed. And very important to the electeds that shape our policy in the city of Los Angeles. But because of the Great Recession and early retirements and layoffs and moving members around from our department, we didn't have any crews. We were contracting-- all of that very important neighborhood beautification and environmental service, we were contracting it out.

And as budgets started to be restored, more money was put back into tree trimming so we were issuing annual tree trimming contracts for work really all over the City of Los Angeles. And while we issued several contracts, we only had a few what I would describe as regular contractors that we would see on the contracts that we would repeatedly let out. And one morning during a Public Works Commission meeting-- and in the City of Los Angeles, our governance is a little unique when it comes to contracting-- with our full time Public Works Commission, we open all of the bids in a public hearing. So one morning we were opening bids for a number of different tree trimming contracts in a few different areas around the city. And as the bids came in, a couple of things that we noticed, that the two of our more frequent contractors ended up bidding the exact same amount to the dollar for different sections of the city.

Now, I was the only former USA on the board. Actually, at that time I was the only-- the attorney. But it was something that not only I'd noticed. We thought it was very strange that you would have two different contractors that would end up on the same exact bid amount for different contracts. And so we looked a little further into the bid summary sheets that we had. We discovered that the contracts, that one of them was where the-- they were the-- one of them was the low bidder. The other was listed as a subcontractor. So that was just another example of what was alarming.

And because communities-- and of course right then as the president of the
board, I wanted to deny all the bids. Which we could do. But because communities were desperate for this critical neighborhood service, we decided, reluctantly, to go ahead and award the contracts. Again, in the grand scheme of things, these are not our largest contracts. We were still spending several million dollars per year, though, on this service. And so these contract-- but we also knew that we were likely paying more than we should be, the taxpayer was paying more than they should be, so I made a-- I frankly said on the public record that it looked like some of our contractors had potentially gotten together and colluded. It looked like we were apparently victims of price fixing, bid rigging, even bid rotation when you look at the subcontracting as well.

And part of our problem was that the contracting community in this area knew that because the city had no in-house crews, we couldn't compete with them. And they also knew it was very unlikely for us to throw the contracts out because it was such an important service. So in many ways, they [INAUDIBLE]. Our solution at the time was to immediately send all of the bid information documents over to our labor unions that we work with because I knew they would be very interested in this because they were interested in rebuilding our in-house tree trimming staff. So they would be interested in what was happening. And they have a research team and so they dug into these contracts and these bids and made a determination as to how much money we could save if we brought folks in-house.

They issued a report. I used that report a few weeks later in front of the budget and finance committee and the city council to convince the council budget and finance committee, and indeed, subsequently, the full council to give us just-- give me one tree trimming crew. Just one in-house. Because then the contractors won't necessarily know which contracts we could throw out all bids for and it would give me at least that option to throw out all bids and still get the service.

Now, my goal was to just bring the contracting costs down to a reasonable amount for our taxpayers. This is something, by the way, that the LA Times looked into, followed up-- followed up on. And by the way, it worked.

Finally, and so what we've done, we have since rebuilt the in-house tree trimming crews in the City of Los Angeles. We only contract now for tree trimming around
street lighting. I expect that to change again, though. With COVID, we know that-- and I've just been in conversations with the mayor about furloughs, he has instructed us to come up with plans for layoffs-- so it is a bit of a rerun of what happened back with the Great Recession. And so contractors that might be a little shady are going to see opportunities with government entities like ours to potentially take advantage of us.

So there were a number of reasons that we were vulnerable. But we-- and we used kind of a rag tag solution, but in early discussions with Makan, when I learned about the PC-- the PCSF, that's welcome music to our ears because we have a resource that we can go to that we know about for some of the less obvious but much larger, more complicated contracts.

**EYITAYO "TEE" ST.** Great. Thanks, Kevin. That was just such a really vivid picture of what it looks like from the procurement executive's perspective. And like you said, it's tree trimmers today but it could be something of a much higher dollar value. And the attention to detail, I just love that. You listed off so many of what we consider the red flags. And we're going to circle back to that when we start talking about how to structure the outreach and training.

But right now I think I want to bring in Nick and then Dave and talk a little bit about how they're seeing things from the law enforcement perspective. So, Nick, let me start with you. Could you just give us an overview of your office and the critical role that the Central District of California is playing in the Strike Force.

**NICK HANNA:** Sure. Thank you, Tee, very much for the question, and thank you, Makan, for inviting me to this panel, and our fellow panelists, it's a real honor to be here with everyone today. So let me tell you a little bit about our district and how we're structured. Just to back up a bit, for those that don't know, in the United States we have both a state and a federal criminal justice system. On the state side, each state has an attorney general and then local prosecutors. And then, as Makan indicated, on the federal side there are 90-- the country is broken up in the 94 federal districts and each federal district has a United States Attorney who is appointed by the president and serves as the chief federal law enforcement officer for that district.
In California, there are four federal districts. My district, the Central District of California, is the largest district by population, not only in the state but also in the country. We cover an awful lot of ground. We cover the Los Angeles metro area, Los Angeles city and county, plus the six surrounding counties. In total, we have about 20 million people in our area of responsibility, which is about half the state of California. So it's a very-- it's the largest district by population.

The office itself that I run is the second largest US attorney's office in the country after the office in Washington DC. We have about 270 attorneys who are designated as assistant United States attorneys. And in that role, we prosecute all federal criminal violations for this district. We represent the United States in all civil matters, either affirmative or defensively, and we represent the United States in all tax matters.

The district itself, the LA metro area, is the second largest metropolitan economic zone in the United States after the New York, New Jersey metropolitan area. And it is a massive area of government spending, both state and local, but also federal government dollars pouring into this district for various projects. There are major defense contractors in this area-- Northrop Grumman, the Jet Propulsion Lab is in this district-- there are major public and private universities-- UCLA, USC, Cal Tech-- that get significant government funding for various projects. We have one of the largest school districts in the country. There are massive public works projects here, including the Los Angeles subway project. There are major military installations including Ben Berg Air Force base which is sort of the west coast hub for space exploration. Two of the largest seaports, LA and Long Beach, and major public spending on health care.

So when you think about all of that activity, all of that economic activity, all that government activity in this district, you can see that there are a lot-- a lot of government dollars pouring into this area and a lot of opportunities for criminal elements to engage in procurement fraud, bid rigging, kickback schemes, and other efforts to siphon off some of that money. And so we've got-- we've got a big job out here and we've got our hands full.

EYITAYO "TEE" ST. Thank you, Nick. In terms of the structure in the Central District, can you just talk folks through a little bit about how it is, how it works with the assistant United
DANIEL: States attorneys and how many IG partners-- office of Inspector General partners-- the local district team has built and put together?

NICK HANNA: Sure. So let me start with before the strike force, before PCSF. Our office handled collusion cases kind of on a one off basis as they were brought to us by investigating agencies. So we work with all of the federal investigating agencies and also local agencies where there may be a violation of federal law. Those cases would come into the office to our major fraud section and there was no overall strategy with respect to procurement, government procurement related cases.

When Makan came to me with the idea for the PCSF, I immediately recognized that this was an excellent strategy and a way to organize ourselves. We have had great success in this district with other strike force-- the other, you know, the strike force model-- in the health care fraud area but also in the international narcotics and money laundering area. So we are used to having strike forces and this model made a lot of sense to me as something that we could bring to bear all of the elements of the federal government.

So my district was one of the 13 founding districts for the PCSF. We created a district team. I assigned two federal prosecutors to assistant United States attorneys to head it up for our district. They principally are working with the Antitrust Division in Washington, the FBI, the US Postal Inspection Service, and the Defense Criminal Investigative Service is kind of the initial core nucleus of the team. But since we started, we have expanded and we brought-- in we have brought in a number of other federal agencies into the mix. I think we're up to a total now of 11 federal agencies that are part of the district strike force, including the NASA Office of Inspector General and the Air Force Office of Special Investigations. So they are now part of the team.

In terms of the mechanics, the team meets bimonthly, the purpose of which is to discuss case studies, to share information, to share experiences, and to build that knowledge base and that expertise, and to draw on and understand within all of the different federal agencies here in this district who is best positioned, who may have information, how to share that and educate that information throughout the system. Now that we have-- once we had our sort of structure and
our partners in place, we began to do significant outreach. Outreach and training. We go out and talk to the broader community, we have training sessions for procurement officers and contracting officers to explain to them what are the red flags they should be looking at, who should they be reporting to, what are the right reporting mechanisms.

And really what we want to do is get the word out that we are active in this area, we are investigating in this area, we've pulled together as one team. And I think that has been extremely productive. And the next step from that is to then start getting referrals and moving forward in that regard with specific investigation.

**EYITAYO "TEE" ST.** Thanks, Nick, for that. Let's bring Dave into this conversation. So, Dave, the FBI obviously needs no introduction to any audience, but can you talk to us and tell us a little bit considering the FBI's long history of partnering with the Antitrust Division and the US attorney's office in LA, can you just identify the unique skills and capabilities that the Bureau brings to the strike force?

**MATTHEW-DANIEL:** Sure. Thank you, Tee. And I'll just say, it's an honor to be included among my colleagues here on this panel. There are some unique skills and capabilities that the FBI does bring to this strike force. First, and this is more of a capability, and Makan spoke to this earlier, is the geographic presence. So the FBI brings a physical presence and offices to all 13 PCSF districts. And our geographic footprint across all of the 50 states and the US territories has proven invaluable, and our partners have relied on us even more during this trying time of the COVID-19 that we're all experiencing with the travel restrictions, flight restrictions. It's even hard just to get out and conduct basic interviews.

So in the US, the FBI has 56 field offices and then 380 resident agencies. Now, those resident agencies could be anywhere from a single agent in a small office to a couple of hundred agents in a medium sized office. But that gives us that geographic presence where we can assist in any of the PCSF cases across the nation. And then internationally we have 63 legal attache offices that we commonly call legats and then more than two dozen smaller sub offices in the key cities around the globe. And those provide coverage for more than 180 countries, which some of you all are watching from, the territories and islands. So each office is established through the mutual agreement with that host country
and it's situated in the US embassy or consulate in that nation.

So when you add that world wide geographic presence with our regional teams of the select FBI agents, the Antitrust Division attorneys, the assistant United States attorneys, and then the offices of the Inspectors General, it does provide a tremendous capability. And then the PCSF has developed the specialized groups of the dedicated individuals, like those we've mentioned in the Central District of California, specifically in LA, and those agents and those attorneys are well positioned to meet the threat within their areas of responsibility.

In terms of skills, a lot of people think that antitrust cases, cases that fall under the PCSF, are going to be handled differently from other cases. But in fact, most of these cases are handled just like any other criminal investigation for the FBI. So we with our partners, and you'll hear me often refer to the partnership with the PCSF, we treat these just like any other case. We've got undercover operations, we have surveillance, we have an extensive financial analysis. So those are some of the capabilities and skills that we bring to the game.

**EYITAYO "TEE" ST.** Great. Thanks, Dave. Let me ask you this. For those in the audience that are thinking about the PCSF concept and thinking, well, if I want to pitch something similar to the FBI's counterpart or their closest counterpart in my jurisdiction, what would be the key selling point of the FBI partnership-- the PCSF partnership from the FBI perspective? What do you see as the value add for you in combating collusion and corruption at home and abroad?

That's a good question. I think that the value add, the key selling point for the PCSF, is the partnerships. What I mentioned a minute ago. The International Corruption unit that we have here with the FBI has taken the progressive steps to combat threats. And in part through the partnerships with DOJ Antitrust, who is equally aggressive, equally progressive, they tackle those antitrust violations and anti-competitive behavior and they directly interact with the public in the private sector in a variety of forms. So it's giving us-- we're able to encourage the self reporting and we're giving greater recognition of illegal conduct by various industries and we're fortunate to have DOJ Antitrust, and all of our partners, as partners.
So the relationship with DOJ Antitrust is a special one, and it's initiated and maintained through continuous efforts from all of our agents and attorneys. And we've got one shared goal for all of this and that's to provide an opportunity for the real time information sharing and cooperation. And I think that's a key selling point is just this cooperation, this partnership that's going to move us forward on the antitrust investigations and the prosecutions.

In regard to how it got started and how it-- or how it helps the FBI to combat the collusion and corruption, I think it helps to go back and look at how it was started. And Nick hit on this but the FBI was a co-founder of the International Contract Corruption task force back in 2006 with the goal of addressing contract fraud concerns. And a lot of those concerns originated with overseas US government spending during the wars in Afghanistan and Iraq. And as many of you know, these cases typically involve bid rigging, collusion, conflicts of interest, bribery, contract extortion, and then just collective and individual conspiracies at all different levels.

So the FBI, another selling point-- we've got agents like Nick mentioned and Makan mentioned as well-- we have agents that are sitting in the various offices and the 13 offices that are dedicated to this. And in the LA field office alone, we have an agent dedicated to work international contract corruption task force cases with Army CID and their major procurement units. And we've had successes just in recent years between that Army CID unit and our antitrust cases involving tens of millions of dollars with Korean companies selling fuel to US forces in the Republic of Korea.

So any time you have the misuse of US funds overseas, it poses a threat to the US and other countries by promoting this corruption within the host nation and then at home and abroad. So I guess the selling point, to go back to your original question, is just this partnership that allows us to prevent the damage of diplomatic relations and inadvertent supporting of insurgent activity, and then it potentially strengthen criminal and terrorist organizations. So these partnerships allow us to eliminate any collusion and any anti-competitive behavior.

**EYITAYO "TEE" ST.** Got it. Thanks, Dave. I just want to put in a plug. I noticed you talked a bit about the career field investigation and I think that just shows how the PCSF, the model
DANIEL: we've built, works for everything from tree trimmers to career fields. And that in and of itself is a strength of the partnership.

So I'd like to switch focus a little bit and talk about the PCSF and the department's response to the COVID pandemic. Because I know this was one of the areas where the relationship and the partnership has really-- has really proven critical for so. So, Makan, I'll start with you. Could you tell us a little bit about the PCSF outreach efforts across the country in response to the pandemic.

MAKAN DELRAHIM: Sure. On that last point, the Korea fuels was a perfect example, and also an important point for me to highlight the international reach. I mean, the antitrust laws obviously have extraterritorial reach, and the other laws like the Foreign Corrupt Practices Act and other laws that are enforced by Nick and investigated by Dave and his colleagues and others, obviously affect that. And the US government engages in contracting activity as shown by the Korea fuels where the Pentagon is buying fuels in South Korea and there were six companies who fixed prices there is a good example to show that this is not just limited to within the United States but any of those agencies could be affected by a foreign supplier, bidder. And COVID is a great example because one of the challenges has been suppliers from abroad and supply chains not related to antitrust. But it just highlights that the type of bidding and the type of activity is international in nature, just a function of a global economy now.

So we have been working with all of our partners to make sure that we are responsive to the devastation caused by COVID pandemic, and including making sure that any bidding in response to the spending and the necessary supplies for COVID is not subverted through bid rigging and collusive activity. Just in the last six months, since the presidential declaration of COVID-19 national emergency, the strike force has updated its website and tips center to include reporting specific to the COVID-19 procurement. We have onboard agents and investigators from several new in-district working partners including Department of Homeland Security, Office of Inspector General, the Air Force Office of Special Investigations, among several others that have been engaged. Of course, the Department of Homeland Security through the Federal Enforcement Management Agency-- that's a part of Homeland-- has been leading the federal
efforts of coordinating a lot of the activities. So they’re an important partner for us.

Successfully-- we have also successfully delivered virtual training to groups of varying sizes leveraging the technology for interactive training experiences. We’ve also in this last six months completed over three dozen training programs on antitrust crimes and collusion risk in procurement, grant and program fundings. And we started rolling out a series of other training programs tailored to the specific needs of agencies on the front lines of COVID-19-- of the COVID-19 response, including the Centers for Disease Control and Prevention, FEMA, as I mentioned before, which is part of Homeland Security, and the Bureau of Prisons, all of which we have faced unique challenges and, frankly, without the partnership of the strike force, we may not have been as well prepared to respond to the unique challenges that would come about.

And I a semi joked about it, but in creating the PCSF, we broke up the Antitrust Division's monopoly on antitrust enforcement for the first time in our history. And I think it’s something that our international enforcement agency partners can take a look as an example and see if they could leverage the important tools and expertise that other partner agencies could have within their jurisdictions to help better enforce the law and police competition.

EYITAYO "TEE" ST. All right. Thanks, Makan. Dave, let me ask you this. The FBI obviously does a lot of outreach with the PCSF and-- I guess, in addition to the PCSF. How is the FBI leveraging the partnerships and the relationships at the national level and in each of the 13 districts to more effectively respond to the COVID-19 pandemic?

MATTHEW-DANIEL: Sure. Great question, Tee. COVID-19’s affected us all and so the FBI has looked to our PCSF partners and we’ve sort of supercharged the outreach efforts, if you want to call it that, to our procurement professionals at the federal, state, local agencies. Basically to put all of them on alert for bid rigging and other crimes that could target public procurement.

A lot of our contacts, our points of contact, for each of the offices for the PCSF's national partners meet biweekly to discuss the strategy for detecting, investigating, and prosecuting those antitrust crimes. And in a parallel, it's
interesting, we, soon after the pandemic began and shortly after the presidential declaration of the national emergency, the FBI established a COVID-19 working group comprised of representatives from all 56 FBI field offices and a total of 500 participants from the Department of Justice. And so that's looked to find-- it looks at the big picture. It looks to determine across criminal activity what is coming out of the COVID-19 pandemic.

The PCSF, I anticipate, that we will receive abundant referrals from the COVID working group for years to come. And we've used that as a way to sort of outreach and to get our message out there to a lot of the FBI field offices who don't-- aren't one of those 13 but just to get the message out there about antitrust and the PCSF. So I don't think that the repercussions of COVID-19 are going to-- they're not going to end anytime soon for sure, and so we've got to anticipate and prepare to address all of the emerging criminal schemes that we've seen in conjunction with all of our partners at the federal, state, local, private sector, nonprofit, and community partners. All those partnerships are going to be key in combating the COVID-19 results moving forward.

**EYITAYO "TEE" ST.** All right. And because you know Dave wouldn't give himself a shout out, I'll note that one of the things the FBI has done in addition to sort of plugging PCSF with the COVID-19 working group is in the form of internal training for the PCSF. So the FBI recently led a witness interview training just to give the partners in the PCSF some best practices on advancing our investigations in the era of social distancing and to keep the ability to just keep talking to people and obtaining evidence that way. And so that's one of the areas of expertise that you all bring to the table and we definitely appreciate it.

So I guess, taking a step back and talking more generally about outreach and training. I know Makan had mentioned the PCSF website and we keep a lot-- we host a lot of resources and information on there about the Strike Force, what we do, there's information for the general public, there's even a short video that explains the crimes that we prosecute. And we talk a lot about red flags. So now I'm going to circle back to Kevin because he started us off with this story about the tree trimmers and I started seeing red flags popping up everywhere. Kevin, let me ask you this. From your procurement leader perspective, thinking about
all the demands on procurement and contracting professionals, the demands they're dealing with right now, how does the PCSF or a similar initiative in another jurisdiction, how do we get your attention? How do we get you to engage with us so that we can actually train people on the red flags of collusion and other schemes in the procurement space?

**KEVIN JAMES:** Thank you, Tee. And first of all, you reference part of the challenge that we have and the need for PCSF in your question because you recognize that procurement officers, particularly with looming budget cuts, are only going to get busier. And it's that workload that makes it harder for you to spot some of these red flags that you referenced.

The partnership is critically important. What your team has built, and what Makan has built, around the country and indeed beyond our borders, is how you get to folks in leadership in procurement positions like myself. The best thing to do is just approach us with a brief message of how you can help. And right now, the buzz word that we all like to hear is we can save you money in your budget. And that's going to get folks attention. And a key issue for us is saving taxpayers money and being more efficient and effective in how we operate.

And let me just say, your office has not been shy at all. I mean, we have-- I've been already on a number of calls with your team that's-- it's been from San Francisco, we've talked about working with the LAUSD-- that's our large school district, by the way, a lot of acronyms here-- and our metro which handles our public transit system as well as the proprietary departments in the City of Los Angeles. The largest own municipal utility in the country, our Department of Water and Power, as Nick mentioned earlier, the Port of Los Angeles, and Los Angeles world airports. All of these entities are large procurement agencies, and because of your approach and the way that you approached the City of Los Angeles through this partnership, you now have access to leadership in all those agencies who can then bring all of the procurement officers to the training program.

**EYITAYO "TEE" ST.** Great. And, Dave, what's your take? I'll put the same question to you. So now we know how to get our foot in the door. We say, we're here to help, we're here to save you money. And now we're in there. What are your practical
DAVID SCOTT: It's a great question and it's often difficult to get that message to stick and to resonate. And I think it all comes down to the effective outreach. And it goes back to what I've said with the partnerships. Rather than just one agency or one person pushing out this message, it's got to be a collective effort across the partnership and across the Strike Force.

I've talked to the team just this morning here in DC with the Strike Force and it was brought to my-- they made the point that outreach is done at any given time and it often results in someone reaching out months or even years down the line with concerns about something they find suspicious. So I think outreach should be viewed as a marathon and not a sprint. Many of the smaller agencies are going to get pushback from their management because outreach is resource intensive. It takes time and there's often not immediate tangible results. But again, it's a marathon, not a sprint and it's important to know that outreach really does pay off in the long run.

So to get that message across, we've just tried to expand our messaging, not only through the FBI but through all of our other partners within the Department of Justice and through the procurement professionals at all levels. We're working with all of the offices of the Inspectors General, as we've mentioned before, and we also meet with the attorneys bimonthly as part of a working group. So we've got outreach opportunities through the FBI's private sector partners and those who are through the highly impactful groups such as FBI's infraguard, the FBI's Citizen's Academy, and the local domestic security alliance counsel entities in each of the districts. So that outreach is very effective through all of those entities as well.

And then, finally, Tee, I think in regard to getting the message to stick, I'm a big believer in that saying that most of you probably heard before, that when you finally get tired of saying the message and pushing the message out, people are just then starting to hear you and understand. We've seen that with the COVID working group. We've met every single Thursday since March when this all started-- so now going on seven months-- and it gets old us to keep getting on to
virtual training and virtual meetings and keep pushing that message out every single Thursday. But we can see the results coming in. So the results speak for themselves. So people are getting the message through that repetition and the message is resonating.

KEVIN JAMES: Tee, can I add one thing--

EYITAYO "TEE" ST. Sure.

MATTHEW-DANIEL:

KEVIN JAMES: --that I think is really important from-- we are familiar with much of our contracting base. And something else I think is very important, and this came up a bit back in November with the kick off, the launch of the Strike Force back in DC, this has-- just the fact that our procurement officers are being trained by your team in the City of Los Angeles and with our partner agencies, word gets out about that. That has a deterrent effect. We're not playing around with this. We're serious about it.

The tree trimming example I used was small but it provides some obvious red flags. But it sends the message that if we're focusing on that on tree trimming contracts, you better believe that we are digging deeper on the multibillion dollar contracts that come through the City of Los Angeles. And just the existence of the Strike Force and the training elements that happen in a city government like ours and word spreads, that's part of the process and the puzzle as well.

EYITAYO "TEE" ST. Thanks, Kevin. That's so true. And I guess just to piggyback on that, and what Matt was saying as well, the PCSF has put a lot into outreach and training. It's not easy to replicate the human interaction and the energy of a normal training or a normal outreach meeting when you're in the same room with people. It's difficult but it's not impossible. And we really-- we've come a long way I think in the last several months just getting more comfortable using the technology. And everything-- you use polls, you use animation, you try to throw in a video or just anything you can to just hold the attention, keep people engaged.

And then we try to tailor the training as well. So the training that we offer contracting professionals is not the same training that we offer a group of new
agents that haven't worked a procurement collusion or antitrust or procurement fraud case, right? So there's different content depending on your audience. It's also not the same training that we offer the data scientists that are working on data analytics, which is near and dear to my heart, and is exactly where we're going next.

So this is a public broadcast so we're limited in what we can disclose about data analytics and what we're doing there. But as Makan mentioned in the overview, this is just a big part of what the PCSF is focused on. From the very start, we've been working with multidisciplinary teams all across the federal government, state partners as well, just working to improve the use of data analytics in the procurement space to facilitate better sharing of lessons learned and best practices. The General Services Administration, GSA, is the key-- the OIG there-- is key PCSF partner because that's the source of a lot of centralized procurement data for federal government-- for the federal government. And so collusion analytics is a big push for us.

I will say that it's not-- the PCSF's goal is not to build one model that fits every agency, but the goal is to build a collusion analytics capacity across all levels of the government. So to that end, we've hosted several training programs virtual in the new normal aimed at educating data scientists and analysts on antitrust concepts, trying to break down what we consider the red flags of price fixing and bid rigging and allocation schemes, and then working with them to translate those concepts into queries that they can actually run through the data that they have. And then they can test drive and they can build these models. So that has been the objective, right? It's to-- we see analytics as the way to generate leads and then the investigators and the agents, they're going to investigate these leads and they're going to determine whether or not price fixing or bid rigging actually occurred.

And so that's how we've been approaching it with our IGs, our OIG partners. But I did want to bring David in here because I know he can share a little bit about what the FBI is doing in the procurement space.

**DAVID SCOTT:** Sure. Thanks, Tee. The FBI, just like any other agency or any private sector company, is not immune to big data problems. And it's a problem for all of us
and we've got to learn to grow with and better leverage technology if we're going
to effectively meet that threat. So we've got to be proactive.

Our federal OIG partners have made great strides in using that analytics for fraud
violations. And as you mentioned, the PCSF is providing a forum for data
scientists across the OIG community and training to collaborate on collusion
analytics for identifying potential antitrust violations. I was talking to Deputy
Assistant Attorney General Powers last night, and if you all heard his talk earlier,
he's talking about analytics from an algorithmic perspective which just shows
how big this issue is and how rapidly it progresses.

So the FBI is involved in this high priority effort and has invested in developing
our own internal data analytics capabilities to address procurement--
procurement fraud and corruption, specifically. That same FBI data analytics
team is collaborating with the PCSF to refine any of our existing tools to better
identify the red flags that we've all spoken of. For example, and obviously we
can't go into too much detail, but we've worked with our Army CID colleagues to
analyze extensive suspicious financial data to help identify those red flags and
identify potential military personnel engaged in contract fraud and collusion.

So, Tee, mean you said it well. Big data is an issue for all of us and we've got to
just work collectively and aggressively to be able to deal with it.

**EYITAYO "TEE" ST.** Thanks, David, for that. So we're starting to draw to the end of this panel. Time's
just flown right by. But before we leave, I do want to touch base with Nick and

**MATTHEW DANIEL:**

Makan and get some final thoughts and reflections on the PCSF's first year. So I'll
start with you, Nick. How would you assess the first 10 months of the
Procurement Collusion Strike Force?

**NICK HANNA:** Thanks, Tee. You know, I think we've made great strides, I will say. I mean, COVID-
19, obviously, has made it even more challenging. But I think, even in this
environment, we've made good strides. As I think about it, the first step was
really creating the team and bringing into the fold as many relevant federal
agencies as possible so that we can leverage on their expertise and have enough
resources and manpower in order to do the outreach, do the training, and handle
the cases that are ultimately generated from that.
The next step was the outreach part. We've spent a lot of time talking with the California authorities, for example, the California antitrust authorities. Billions of dollars right now are being spent, for example, on PPE in regard to COVID, to make sure that when they're seeing cases that might merit a federal interest that they would refer them to us and other local authorities. The training piece, we've spent an awful lot of time on. We view that is really a value add that we bring to entities, such as the City of Los Angeles, that we can sit down with their procurement and contracting officers and tell them what to look for, what are the current schemes, what are some of the best practices, what red flags are out there so that we can sensitize them and help change the culture a little bit and give them points of contact. And I think that's been very valuable.

The next step for us is prosecution. We have a number of cases under investigation now. We're expecting more through this referral pipeline that we've created, and that's really the next step is that we investigate and bring these cases and increase the deterrent effect. By generating momentum, bringing more and more cases, and really indicating to the public at large in the contracting community that whatever practices have been going on need to stop and that we are out there and aggressively focusing on them. So that's sort of the next piece. I think we have the foundation, we've laid the groundwork, the next piece is really to bring the cases.

**EYITAYO "TEE" ST.** All right. Thanks, Nick. Makan, from the very start, you've been just a tireless supporter of the PCSF, heavily invested in getting us up and running. Like Nick said, that's the first piece. But sort of taking a step back, do you feel 10 months in that the Strike Force is achieving the mission that we set out last November? And how do you see that mission fitting into the broader picture of what the division is doing in the cartel space?

**MAKAN**

**DELRAHIM:**

Thanks, Tee, and I think as Nick, Kevin, Dave said, we've been pleased, frankly. Kevin will remember, I was nominated for this position and I was sitting in my little office at the White House when Kevin came in for a meeting on infrastructure that was being held. And we talked about it and I mentioned the idea, the concept, that this is an issue that I just don't know enough about. I was familiar with an OECD paper that was issued-- the Organization for Economic Cooperation
and Development, which is familiar to the antitrust folks-- that had said there would be an upwards of 20% savings if collusion was taken out of the public procurement space.

Which to me, I did the quick math, which wasn't very complicated, but it turned into we're talking tens of billions of dollars of just savings in the US alone at the federal level. And I said, Kevin, you're the public official, you're here involved with trillions of dollars of new infrastructure spending. What do you think of this? He goes, you know, I was just sitting in a meeting-- and I don't know if it was tree trimming or it was sidewalk development or something-- and he goes, I think, and this was not very scientific, but heavily animated by lots of experience, I think there'll be 30% lower cost to me and the LA Public Works if you guys just announced such a strike force.

And so to me, the success is not going to be ultimately measured in the number of months in prison by those who transgress the folks like Nick and Dave and their colleagues and our prosecutors like you, Tee, at the federal level, but it is the activity that they don't even engage in which will, I think, be the positive effects of the Strike Force. I mean, we have-- I mean, we can go through a lot of the numbers about the outreach we have done. And in that process we have learned from federal and state contracting officials who have said, whoa, I didn't know to think about this as an issue and can you guys come help us in developing the procurement process in the first place, in the instance, so that we ask about this.

One federal agency said, our programs-- and they have a lot of money that they spend in this area-- dates back to the late '50s for their procurement documents and red flag issues. And so we're also helping them in the front end. We have-- there have been more than 5,500, as of last week, individuals that have received training just in the last six months alone to help identify. These are, as I mentioned before, data scientists, auditors, procurement officials.

The partnership and the investigations that we have had are now over 100 federal, state, and local and district workers. So I thought it would take three years to reach this area. Now, we did a lot of planning with partners, with Nick, with Jason Dunn in Colorado, with Kevin at the local level, with state officials, with
the FBI to put this in motion. And it took two years to do the planning to the point where we announced it last November.

But I think that by any measure the response and the effectiveness of something like this totally virtual, despite that COVID challenges, has been very successful. And I'm just looking forward to not only more deterrence but the detection and the prosecution and the disruption that this strike force is conducting. And looking for, hopefully, new opportunities with the FBI's International Corruption unit and the legats around the world to working with them to identify perhaps international partnership opportunities. And also training of our colleagues around the world. I think the more we do that and create a culture of competition and fair conduct, the less our taxpayers will be subject to the vagaries of collusion.

**EYITAYO "TEE" ST.** Well said. Thank you, Makan. Before I sign us off, I just wanted to check if Kevin or Dave have any final thoughts they want to share.

**MATTHEW-**

**DANIEL:**

**KEVIN JAMES:** Thanks, Tee. Really just-- I think Makan did such a great summary of what has occurred and all the work that's gone into this. We just look forward, from the City of Los Angeles, to it having a very long life that will save our taxpayers lots of money and save the city and our auditors lots of headaches. So we really appreciate the partnership and the interest of everyone that took the time to join into the panel today.

**MAKAN**

**DELRAHIM:** I say-- and before Dave goes off there is that we talk about and semi joke about tree trimming. Being from Los Angeles where we're seeing some serious and unfortunate fires around, the trimming, the leaves, those and deforestation and the brushes clearing, and Nick can attest to this living there, those are serious business and the contracts are significant out there, I'm willing to bet, for the city of LA. But those are really important because they have real implications to all of our lives out there.

**DAVID SCOTT:** And, Tee, I'll just say, Kevin said it well, Makan's closing was perfect and we do want to collaborate more overseas internationally. We want to collaborate with all of our partners and get the message out there as a deterrent. So we're open
to any of that. So if anybody has questions, we're happy to discuss further. And thank you. It's been an honor being a part of this discussion and thank you to all of my colleagues on board as well.

**EYITAYO "TEE" ST.** Thank you. Thank you, David. Before I sign off, I just want to say that the

**MATTHEW-DANIEL:** accomplishments that Nick and Makan have highlighted today, they would not be at all possible without all the awesome prosecutors, the line prosecutors at the Department of Justice to the trial attorneys at Antitrust Division and the AUSA's across the country and the awesome special agents that we have designated for the district teams. It's all of their hard work.

And it's, like Makan said, challenging times so we're all-- we're just really grateful to have such great partners and everybody you know doing their part to make the PCSF work but also to save taxpayers and protect competition in the procurement space. Before I sign off, I just want to again thank our panelists. Makan, Nick, David, and Kevin, this has been an awesome conversation. And then I want to thank the folks that are joining us today. Wherever you are around the world, we hope you're safe and we hope you enjoyed this conversation.

And if you have any questions about the PCSF, you can send your questions to our mailbox, PCSF@usdoj.gov. Again, that's PCSF@usdoj.gov. And again, thank you for joining us at the Department of Justice's showcase for the Procurement Collusion Strike Force at ICN-- alongside the ICN 2020 conference. Thank you, everyone. Stay safe.

**MAKAN**

Thank you.

**DELRAHIM:**

**EYITAYO "TEE" ST.** Bye Bye.

**MATTHEW-DANIEL:**