



# Annual Privacy Forum 2017

## A brief overview

DECEMBER 2017



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## 1. Introduction

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Electronic communication networks and interconnected digital services have become ubiquitous as they have permeated every fold of everyday life. At a time when automated profiling and electronic surveillance have become commodities, citizens and businesses alike may face limitations and threats when they have personal data processed or seek to protect their privacy on the internet or when using general communication services. Limitations in the transparency, the functionality and interconnectivity of online and communication services increase the risk of having personal data processed out of control of any accountable person or organisation or simply becoming exposed to all sorts of privacy threats.

The recalibrated legal framework in the EU as manifested by the promulgation of the General Data Protection Regulation (GDPR)<sup>1</sup>, is key in an effort to better control the processing of personal data. Additionally the recent EC proposal for a Regulation on Privacy and Electronic Communications<sup>2</sup> is expected to give new impetus to the way privacy is protected in electronic communications. Even the best legislative efforts cannot keep up to speed with the pace of innovative technology and business models that challenge the way personal data is processed and privacy is protected across the EU and beyond; therefore examining what is at stake and where threats originate from becomes of paramount importance.

In the light of GDPR and the recent EC proposal for a Regulation on Privacy and Electronic Communications, DG CONNECT, ENISA and the Law Faculty of the University of Vienna, Arbeitsgruppe Rechtsinformatikis organized the fifth edition of Annual Privacy Forum (APF) in Vienna, Austria on June 7 & 8, 2017.

The event encouraged dialogue with panel discussions and provided room for exchange of ideas in between scientific sessions. This two-day conference was well attended by more than 100 participants in addition to more than 70 viewers through the web streaming service.

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<sup>1</sup> <http://eur-lex.europa.eu/eli/reg/2016/679/oj>

<sup>2</sup> <https://ec.europa.eu/digital-single-market/en/news/proposal-regulation-privacy-and-electronic-communications>

## 2. Programme

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### 2.1 Invited speeches

Three keynote speakers were invited, namely Peter Fleischer, Google, Reinhard Posch, TU Graz & Austria Chief Information Officer and Rosa Barcelo<sup>3</sup>, European Commission. Their details are listed below.



Peter Fleischer has worked as Google's Global Privacy Counsel since 2006. Based in Europe, Peter is Google's longest serving privacy leader. He counsels Google teams on how to design privacy sensitive and legally compliant products. Peter has designed many of Google's privacy compliance programs. He has met with thousands of privacy officials and leaders worldwide. Peter has managed scores of regulatory actions around the world, and appeared before some of the world's highest courts.

Prior to joining Google, Peter worked for 10 years at Microsoft, as EMEA privacy leader and Director of Regulatory Compliance.

Peter is a graduate of Harvard College and Harvard Law School.



Reinhard Posch is chairman of the board of trustees of the non-profit foundation Stiftung Secure Information and Communication Technologies SIC which has been donated by Graz University of Technology. Reinhard Posch was also Chair of the Board of ENISA, the European Network and Security Agency. Reinhard Posch takes part in groups installed by the European Commission to elaborate ICT and security strategies (e.g. „Future Internet Visionaries“, RISEPTIS). Being a member of the "Rat der IT Weisen" he has provided advice to Commissioners Kroes and Sefkovic in the area of IT-Security to assist the implementation of the Digital Agenda.

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<sup>3</sup> The keynote of Ms. Barcelo was provided by a colleague of hers, due to last minute change in her agenda.



Rosa Barcelo works at the European Commission, in DG CONNECT (Unit H1 – Cybersecurity and Digital Privacy Unit) where she is Deputy Head of Unit. The Unit is responsible for the review of the ePrivacy Directive (2002/58). It is also competent for legislative, policy and R&I actions to improve network and information security, such as the NIS Directive. Prior to taking up this job, Rosa worked for the European Data Protection Supervisor (2006-2011) and in DG JUSTICE Data Protection Unit of the European Commission.

Rosa has worked as a private lawyer in the Brussels offices of Morrison and Foerster and DLA Piper where she advised clients on European privacy and data protection, electronic commerce and technology law. She also worked for some years in the academia (Belgium and Spain). She obtained her PhD in Law with a dissertation on electronic contracts and digital signatures.

## 2.2 Panel Sessions

Throughout the programme, four panel sessions were organized, targeting mainly topics and areas closely related to the Agency's activities for 2017. An overview of the sessions is presented hereinafter.

### 2.2.1 Privacy regulation in a global context considering new challenges like Artificial Intelligence

User interfaces - hardware and software - are produced for a global market. Artificial Intelligence (AI) tools with big data analytics allow more personalised services, resulting in a competitive advantage for respective companies. Therefore, privacy regulation must face these challenges and take into account that the global market must focus on privacy-friendly solutions. Ethics can play a strong role in this direction.

### 2.2.2 Towards a European Data Protection Certification Scheme

In the Recitals of GDPR it is stated that "In order to enhance transparency and compliance with this Regulation, the establishment of certification mechanisms and data protection seals and marks should be encouraged, allowing data subjects to quickly assess the level of data protection of relevant products and services". The objective of this panel was to identify and explore the challenges and opportunities of GDPR personal data protection certification mechanisms.

### 2.2.3 Practical Implementation of GDPR in Mobile Applications

In the course of the GDPR implementation, one very important aspect is the practical application of the specific data protection obligations (e.g. purpose limitation, data minimization, transparency, consent, etc.) into technical and organisational controls that can be used to achieve and/or assess compliance. The aforementioned concern is especially crucial in the area of mobile applications (apps). The objective of this panel was to discuss the current software development practices and challenges specific to app developers with regard to the processing of personal data and explore the level of practical implementation of GDPR.

### 2.2.4 Lawful Interception and PETs

With the increasing importance of information services in virtually every aspect of life, the need for strong protection mechanisms for private information arises. This need is addressed by a wide spectrum of tools providing confidentiality, integrity and anonymity, which play a key role in the prevention of cybercrime. On the flip side these tools can be adapted and used with criminal intent and then pose a critical impediment to the detection, investigation and prosecution of criminals across all crime areas. This leaves law enforcement with a conflict where cryptographic tools that are used to prevent crime are also used by criminals to engage in crime. Experts from ENISA, EUROPOL and Academia discussed how to find practical

solutions for this issue, reflecting the state of the art in electronic criminal investigations and what types of new evidence can be used in investigations.

### 2.3 Scientific Track

As in previous years, half of the conference agenda was dedicated to presentations of new ideas from research. To identify these new ideas, a call for papers was published in early 2017. This call was advertised by the programme committee (PC) members and published at relevant platforms, e.g. wiki-CfP<sup>4</sup>. The Program Committee (PC) presented in section B.2 was composed of senior academics, alongside legal and technical experts. The submission process was supported by EasyChair<sup>5</sup>. In total, we received 41 submissions in response to our call for papers. Each paper was peer-reviewed by at least four members of the Program Committee. On the basis of significance, novelty, and scientific quality, 12 full research papers were selected and were presented to the event. Revised versions of these papers were published as post-proceedings from Springer LNCS<sup>6</sup>.

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<sup>4</sup> <http://www.wikicfp.com/cfp/>

<sup>5</sup> <http://easychair.org/>

<sup>6</sup> <http://www.springer.com/cn/book/9783319672793>

### 3. Organisational overview

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APF17 has been significant as it has become the first ever edition that has been funding neutral to the Agency. While a modest amount of appropriations in the order of 20 000 EUR has been put at the disposal of the organisers as has been the case in the past, the efficient organisational practices of all parties involved has rendered the event very attractive for sponsorships. The private sector, clearly motivated by the prominence of GDPR repeated events in this period, has provided adequate financial support. In addition, certain costs have been covered via third party funding which is available through public services in Vienna, such as a dinner sponsored by the City of Vienna.

ENISA has been reviewing its approach towards the APF to (a) include private sector representatives as local co-organisers to complement academic ones and (b) encouraging local actors to support the conference in a way that it becomes self-sufficient in funding. Clearly for extraordinary costs and a precautionary measure it is recommended to retain the option to support the organisation budget with a modest sum as it has been the case over the years.

The next two editions of the APF are planned to be organised as follows:

1. In 2018, Barcelona, with the support of the Universidad Politecnica de Catalunya and Telefonica
2. In 2019, Rome Universita La Sapienza and a private sector partner TBD

Suitable arrangements have been made with for both cases.

## 4. Conclusions

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In conclusion, the 5<sup>th</sup> edition of the Annual Privacy Forum (APF) has been deemed successful as it managed not only to continue attracting well acknowledged experts in the areas of privacy and data protection but also to engage a large number of stakeholders and researchers. Within the two days, the organizers succeeded in promoting discussions and exchange of novel ideas, bridging the gap between research, business models and policy.

Building on top of the experience accumulated all these five years, it is safe to say that the next edition of the Annual privacy Forum, which is expected to take place in June 2017, will continue attracting multi-disciplinary experts, researchers and policy makers in the areas of privacy and data protection.

## Annex A: APF Programme

### A.1 Day 1 – June 7, 2017

DAY 1. WEDNESDAY JUNE 07, 2017		
8:00	<i>Registration &amp; Coffee</i>	
9:00	<b>Opening Remarks</b>	Dean Prof. Paul Oberhammer, University of Vienna Prof. Erich Schweighofer, University of Vienna Mr. Paulo Empadinhas, ENISA
9:15	<b>Opening Keynote</b>	Mr. Wojciech Wiewiórowski, EDPS
9:45	<b>Keynote</b> <i>"Technology and Privacy: how Google is preparing for the GDPR"</i>	Mr. Peter Fleischer, Google
10:30	<b>Networking Coffee</b>	
11:00	<b>Paper Session I</b>	
	The GDPR and Big Data: leading the way for Big Genetic Data?	Kärt Pormeister
	Towards a Privacy-preserving Reliable European Identity Ecosystem	Jorge Bernal Bernabe, Antonio Skarmeta Gomez, Nicolás Notario, Julien Bringer and Martin David
	Forget Me, Forget Me Not - Redefining the Boundaries of the Right to be Forgotten to Address Current Problems and Areas of Criticism	Beata Sobkow
	A Refinement Approach for the Reuse of Privacy Risk Analysis Results	Sourya Joyee De and Daniel Le Métayer
12:30	<b>Lunch</b>	
13:30	<b>Panel Session I : "Practical Implementation of GDPR in Mobile Applications"</b>  The objective of this panel is to discuss the current software development practices and challenges specific to app developers with regard to the processing of personal data and explore the level of practical implementation of GDPR.	<b>Panelists</b> - Ms. Marit Hansen, Unabhängiges Landeszentrum für Datenschutz - Mr. Arndt Gerdes, Huawei Technologies - Mr. Peter Kraus, EDPS - Mr. Peter Fleischer, Google  <b>Moderator</b> Ms. Athena Bourka, ENISA
15:00	<b>Networking Coffee</b>	
15:30	<b>Paper Session II</b>	

DAY 1. WEDNESDAY JUNE 07, 2017		
	A Gamified Approach to explore Techniques of Neutralization of Threat Actors in Cybercrime	Andreas Rieb, Tamara Gurschler and Ulrike Lechner
	Privacy by Design Data Exchange between CSIRTs	Erich Schweighofer, Vinzenz Heußler and Peter Kieseberg
	Mr X vs. Mr Y: the emergence of externalities in differential privacy	Maurizio Naldi and Giuseppe D'Acquisto
	Diffix: High-Utility Database Anonymization	Paul Francis and Sebastian Probst Eide
17:00	<p><b>Panel Session II: "Towards a European Data Protection Certification Scheme"</b></p> <p>The objective of this panel is to identify and explore the challenges and opportunities of personal data protection certification mechanisms, seals or marks focusing also on existing initiatives and voluntary schemes</p>	<p><b>Panelists</b></p> <ul style="list-style-type: none"> <li>- Ms. Jelena Burnik, Slovenian DPA</li> <li>- Ms Bojana Bellamy, CIPL</li> <li>- Mr. Sebastian Meissner, EuroPriSe</li> <li>- Ms. Irene Kamara, Tilburg University (TILT), Vrije Universiteit Brussel (LSTS)</li> <li>- Mr. José M. del Álamo, TRUESEC.EU</li> </ul> <p><b>Moderator</b></p> <p>Mr. Prokopios Drogkaris, ENISA</p>
19:15	<b>Dinner</b>	

## A.2 Day 2 – June 8, 2017

DAY 2. THURSDAY JUNE 08, 2017		
8:30	<b>Registration &amp; Coffee</b>	
9:00	<p><b>Keynote</b></p> <p><i>"Data protection issues into the context of modern technology environments"</i></p>	Mr. Reinhard Posch, TU Graz & Austria Chief Information Officer
9:45	<p><b>Keynote</b></p> <p><i>"ePrivacy Regulation proposal"</i></p>	Ms. Rosa Barcelo, European Commission
10:30	<b>Networking Coffee</b>	
11:00	<p><b>Panel Session III: "Privacy regulation in a global context"</b></p> <p>User interfaces - hardware and software - are produced for a global market. AI tools with big data analytics allow more personalized services, resulting in a competitive advantage for respective companies. Therefore, privacy regulation must face these challenges and take into account that the global market must focus on privacy-</p>	<p><b>Panelists</b></p> <ul style="list-style-type: none"> <li>- Ms. Caroline Goemans Dorny, Interpol (tbc)</li> <li>- Mr. Zoltán Précseányi, Symantec</li> <li>- Mr. Niko Härting, PinG</li> <li>- Mr. Maximilian Schrems, Privacy Activist</li> </ul> <p><b>Moderator</b></p> <p>Mr. Erich Schweighofer, University of Vienna</p>

## DAY 2. THURSDAY JUNE 08, 2017

	friendly solutions. Ethics can play a strong role in this direction.	
12:30	<b>Lunch</b>	
	<b>Paper Session III</b>	
	Towards a Principled Approach for Engineering Privacy by Design	Majed Alshammari and Andrew Simpson
	PrivacyScore: Improving Privacy and Security via Crowd-Sourced Benchmarks of Websites	Max Maaß and Dominik Herrmann
13:30	Privacy Data Management and Awareness for Public Administrations: a Case Study from the Healthcare Domain	Vasiliki Diamantopoulou, Konstantinos Angelopoulos, Julian Flake, Andrea Praitano, José Francisco Ruiz, Jan Jürjens, Michalis Pavlidis, Dimitri Bonutto, Andrés Castillo Sanz, Haralambos Mouratidis, Javier García Robles and Alberto Eugenio Tozzi
	Better Data Protection by Design through Multicriteria Decision Making: On False Tradeoffs between Privacy and Utility	Bettina Berendt
15:00	<b>Networking Coffee</b>	
	<b>Panel Session IV: "Lawful interception and PETs"</b>	
15:30	The EC3-ENISA joint working group on encryption invites to discuss practical solutions for the conflict where cryptographic tools that are used to prevent crime are also used by criminals to engage in crime. We will reflect the state of the art in electronic criminal investigations and what types of new evidence can be used during the investigations.	<b>Panelists</b> <ul style="list-style-type: none"> <li>- Mr. Philipp Amann, Europol EC3</li> <li>- Mr. Laurent Beslay, DG Joint Research Centre</li> <li>- Mr. Stephan Krenn, AIT</li> </ul> <b>Moderator</b> Mr. Stefan Schiffner, ENISA
17:00	End of Event	
18:00	<b>privacyhub.wien - Annual Privacy Forum – OCG</b> <b>Invited Talk: "Eine praxisnahe Einführung in die PrivacyScore-Benchmarking-Plattform"</b> (Practical Introduction to the PrivacyScore Benchmarking Platform)	Mr. Max Maaß Mr. Dominik Herrmann

## Annex B: Call for Papers

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### B.1 Call for papers text

In APF 2017 we invite papers presenting original work on the themes of data protection and privacy and their repercussions on technology business, government, law, society, policy and on law enforcement. An inter-disciplinary approach is high in demand to contribute to bridging the gap between research, business models and policy much like proposing new models and interpretations are.

#### Research - Opinion Papers

APF2017 seeks contributions from policy makers and implementers, Data Protection Authorities, industry, consultants, NGOs and civil society as well as law enforcement representatives. Opinion and interpretation papers are expected to reflect the views of the author(s). Submissions can be up to 8000 words long, excluding bibliography and appendices. Both research and opinion papers should deal with at least one of the following aspects:

- Implementation aspects of "by design" and "by default" paradigms
- Implementation and adoption of PETs in contemporary digital services
- Modelling of data protection and privacy requirements, such as:
  - Machine readable representations and automatic evaluation of policies
  - Enabling transparency: technological and organizational challenges
- Technical solutions for the enforcement and the implications of the subject's right, e.g. right to erasure, access and correction.
- Aspects of privacy impact and risk assessment
- Technical solutions for data portability
- Sustainable business models for privacy friendly online services
- Information and consent in online environments: practical solutions and implementations
- Privacy education, reliability and usability of PETs
- Trust services for the protection of personal data - privacy aware trust services (i.e. electronic certificates, signatures, etc.)
- Security measures for the protection of personal data
- Economics of privacy and personal data
- Legal, technical and organisational aspects of privacy and law enforcement
- Ethical conditions to the applicable framework
- Procedural issues
- Issues of transatlantic interest

#### Student Papers

In order to encourage participation of young researchers, the submission of papers by students is encouraged. These papers will be treated as thoroughly as full papers, but can be shorter (up to 4000 words) and reflect novel thinking that might not have been fully elaborated just yet.

#### Short Papers

In addition to student papers, short papers are invited as this call is open to anyone who has a sketch of an idea, opinion or a call for collaboration. Short papers should be up to 4000 words and should not overlap with work published elsewhere.

## Review and Publication

All submissions will be thoroughly reviewed by our PC members. We aim at minimal 3 average 4 reviews per Paper. Authors must submit their papers according to conditions and within the deadline communicated on the conference web site. Conference Chairs and Springer Publishers are currently negotiating the conditions for acceptance in Lecture Notes in Computer Science. Pre-proceedings will be published by the Austrian Computing Society and made available at the conference.

Submissions of original work are invited; papers must not overlap substantially with work already published or simultaneously submitted to a journal or a proceedings bearing venue. Submissions can be up to 8000 words long, excluding bibliography and appendices. Shorter submissions are encouraged, as described elsewhere. Submissions must be drafted in English and they currently need to comply with the Springer LNCS style guide, which can be found at:

- <http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0>
- [http://static.springer.com/sgw/documents/1121537/application/pdf/Springer\\_CS\\_Proceedings\\_Author\\_Guidelines\\_Jan\\_2013.pdf](http://static.springer.com/sgw/documents/1121537/application/pdf/Springer_CS_Proceedings_Author_Guidelines_Jan_2013.pdf)

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