

Aerial night view of a city with a drone flying over it. The drone is illuminated with blue and red lights. The city below is lit up with streetlights and building lights, showing a complex highway interchange.

## The 5<sup>th</sup> International Conference on EMF and 5G 5 G and the law

**Jordi Mongay Batalla**

Warsaw University of Technology - Profesor, National Institute of Telecommunications - Director of Research

**Justyna Wilczynska-Baraniak**

Ernst & Young Law - Associate Partner, Advocate, Leader of the Intellectual Property and Technology Team



“

I have heard that the 5G network causes ...  
The development of mobile  
telecommunications networks in the era  
of disinformation - technology, health,  
regulations and education.”

# Capabilities of 5G network



## New radio interface

Supports mass communication and more efficient use of radio band resources



## New architecture

Supports mass communication and spectral efficiency



## More precise location services



Higher speeds

Up to 10 Gbps



More connections

1 million/km<sup>2</sup>



Mobility

Up to 500 km/h



Higher transfers

10 Tb/s/km<sup>2</sup>



Low latency

As low as 1 ms



Battery life

Up to 15 years

# Benefits of developing 5G networks and services

## Industry 4.0

- ▶ Cableless industry
- ▶ Private networks

## Vertical integration

- ▶ Automotive
- ▶ Transport
- ▶ Clothes - IoT

## Autonomous cars

## Environmental protection - IoT

## Agriculture

## Smart Cities

- ▶ Smart Parking
- ▶ Security - Smart transport
- ▶ Traffic management
- ▶ Street lights

## Energy management - IoT

## Smart buildings

- ▶ Energy consumption
- ▶ Security
- ▶ Comfort

## E-health

## Education

## Smart entertainment

- ▶ VR/AR
- ▶ Gaming
- ▶ TV / Streaming

# Law and development of new 5 G applications

## Examples of use cases



### Remote control of robots

Remote control of robots and automation



### Ongoing Video Monitoring

Ongoing video monitoring with AI analysis.



### Autonomous production management

Digital communication of factories 4.0

# Law and development of new 5 G applications

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1. Guidelines from antitrust authorities on restrictive practices (in particular in the area of cooperation agreements and information exchange) including automation of information exchange in business transactions
2. Form of contracting and declarations of will made by artificial intelligence
3. Liability for damage and harm caused by devices or software
4. Ensuring proper application of personal data regulations to implemented 5G solutions and respecting the principles of privacy law
5. Cybersecurity
6. Intellectual property - SEP



# Thank you!

**Jordi Mongay Batalla**

Profesor at Warsaw University of Technology  
Director of Research at National Institute of  
Telecommunications

[jordi.mongay.batalla@pw.edu.pl](mailto:jordi.mongay.batalla@pw.edu.pl)

**Justyna Wilczyńska-Baraniak**

Advocate, Associate Partner, Leader of  
the Intellectual Property and Technology  
Team at EY Law

[justyna.wilczynska-baraniak@pl.ey.com](mailto:justyna.wilczynska-baraniak@pl.ey.com)



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