Unofficial Notes

The Hogan Lovells 5th Annual Winnik Forum:
Internet of Things: The Legal Challenges & Opportunities

November 1st, 2016
Washington, D.C.

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Executive Summary

On December 1, 2016 Hogan Lovells hosted their 5th Annual Winnik Forum, named after a former partner, Gary Winnik, who died in 2012. This year's event, held in Hogan Lovells newly remodeled DC offices, focused on the Internet of Things ("IoT") - a promising but poorly understood area of potential growth in the telecom sector. Give the recent headlines about data breaches and the potential for nearly ubiquitous IoT devices, it shouldn't be surprising that many of the remarks touched on security and privacy related matters.

The various speakers struggled with the two competing notions. On one hand, the massive increase of sensors and data transmission on critical devices seems to require regulation to protect the public from those with malicious intent and/or bad product design. The sheer volume of devices and the often increasing sensitive nature of the data could create significant privacy as well as health and safety concerns. On the other hand, speakers did not want to handcuff innovation with rigid rules that might well be outdated by the time they are implemented.

After a full day of discussion, the second to the last panel (see Section I: Protecting your Privacy in the IoT), seemed to offer some light towards a possible solution – at least with respect to privacy. They seemed to universally acknowledge that the traditional "notice and consent" model about how data is used is not practical given the number of sensors a person is likely to encounter in daily life. One idea involved looking to more developed social norms for guidance. Another was simply to simply assign greater liability to those who misuse or fail to appropriately protect data. This would let IoT uses figure out how to implement processes to prevent these problems with minimal need for regulatory micro-managing. The final panel, (see Section J: IoT International Considerations) however, largely blew-up any hope of simple solutions, by highlighting the complex international coordination needed.

Overall, the Hogan Lovells 5th Annual Winnik Forum was quite productive. The event was focused on legal issues, understandably, as it was sponsored by a law firm. Nonetheless, we were somewhat concerned about what we saw as an implicit acceptance by the speakers of a rapidly exploding IoT industry. We saw little acknowledgement of significant internal challenges companies face to implement organizational changes needed to act upon data from IoT-type sensor data. This issue may have a massive effect on the industry – will it explode with massive growth sustained for years? Or, will it prove to be like the Internet in the late 1990s - a bubble of early enthusiasm that burst, only to steadily grow in later years? The answer to this question will likely drive the level and nature of services, including legal, needed by the sector in the forthcoming years.

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Summary Notes

A. Welcome Remarks

<u>Michele Farquhar</u>, Partner, Hogan Lovells
- Hogan Lovells is focused on IoT and has a working group on the subject

B. Opening Keynote Speaker

<u>Ambassador Daniel Alejandro Sepulveda</u>, Ambassador and Deputy Assistant Secretary and U.S. Coordinator for International Communications and Information Policy, Bureau of Economic and Business Affairs, Department of State
- Offering Office's perspective on IoT
  - First things worked in vertical silos that are now breaking
    - Now "super clusters" of IoT devices that can be implemented globally
    - Want devices to collaborate to give info to government
  - Impact of IoT is in the hundreds of billions (of dollars) in various sectors the next ten years
    - Devices generate lots of data
    - Need to integrate general data, such as local air quality to a device to warn someone with asthma etc.
    - Need to get the right resources to the right people while protecting privacy etc.
      - Need to balance needs of industry to have data to develop new and better technology
  - Many silos (health, energy etc)
    - Need to have interoperability across devices and sometimes data to allow it to respond to changes
    - But don't want to impose technology constraints
    - (Armand's comment – There are often commercial reasons for not having interoperability (e.g. locked cell phones). So it's not clear how we get interoperability without regulating technology)
    - Digital economy has smaller role in "high friction" vs "low friction" states
      - Try to have "regulatory humility" while protecting safety etc.
      - Need to take into consideration the global implications of US regulatory actions
        - Talking about not just IoT, but the whole Internet (see recent denial of service virus)
      - Internet is particularly important during crisis
  - Methods
    - Try to use experts
    - Try to impose mandates on limited basis
    - Try to achieve consensus

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Q&A

- Large focus on infrastructure issues, including internationally
- Lots of information sharing with Europe
  - G-7 and G-20 are getting more important and more focused on digital ministerials
    - Privacy is always an issue
  - ITU is becoming more important
    - 2012 lead to a divide between developed and undeveloped countries – has been somewhat patched-up
  - Regulators are searching for a purpose – have less power (more diffuse) with global internet vs. prior regulation over local telecom industry. And public interest mandates are less clear
    - Should try to modernize government and industry and have public policies to encourage digitalization
    - Should open direct investment etc (more controversial)
    - Need to use power at ITU to support satellite to countries with challenges such as landlocked, islands etc via satellite
  - Goal is to connect who world
  - Data localization is mostly one of law enforcement
    - Countries don't want to deal with the US to get data for law enforcement
    - But data localization breaks economies of scale
    - Some arguments that developing countries aren't getting benefits of money from traffic leaving the country
      - (Armand's comment: Some countries are very focused on keeping money internal, see the Algeria vs. Vimplecom/Orsacom dispute)

C. The Security Challenges of the Internet of Things (IoT)

Panel Description: The IoT presents unprecedented opportunity and unprecedented risk. Our panel of experts will discuss if cybersecurity is keeping pace with the threats from cyber criminals and what both companies and private citizens need to know in order to protect themselves.
Moderator:
Harriet Pearson, Hogan Lovells
Panelists:
Austin Carson, Legislative Director, Rep. Michael McCaul;
Lisa Hayes, VP of Programs & Strategy, Center for Democracy & Technology;
Julie Kearney, Vice President, Regulatory Affairs, Consumer Technology Association; and
Travis LeBlanc, Chief, Enforcement Bureau, Federal Communications Commission (FCC).

Harriet Pearson
- Regulation is device specific
- Consumer facing issue as volume of devices gets larger

- o Consumers (50%) are concerned about cyber security on IoT
- Most industrial devices are not connected to the Internet
- Many devices are not on Internet and have their own tight processes
- US litigation environment is different (more active)
  - o Laws around data protection and damages is very strong in the US
  - o Do we need stronger legal incentives?
- Encryption is also important

Julie Kearney
- Any new technology has risks and benefits
  - o Goal is to try to make people's lives better – often very personal devices
- Lots of working groups – CTA and NTIA and others on standards
  - o Need to work on best practices and education
- Maybe some security certifications like the UL stamps on consumer products
- Increased funds spent on security

Travis LeBlanc
- These issues have been under discussion for years
  - o Think of no more keys for hotel rooms
  - o 500 million devices existed 15 years ago (many still there)
  - o 50 billion devices in 4 years – huge increase
- Many devices are health-related or vehicle or home-use
  - o Most small companies don't have dedicated networks and rely on networks
- DYN attack still allowed people to use their data, so the consumers had no notification or incentive to fix
  - o Hardware manufactures already have their money and are out of the picture
- Federal agencies (FCC, FTC, NTIA, NITSA etc.) have been active on Internet security as have many state governments
  - o Important to partner with industry
- Can't eliminate data breaches
  - o Focus on critical infrastructure
  - o Allow consumers improve their personal risk profiles
- Regulation moves far too quickly for most technical issues
  - o Need to regulate lightly and focus on prevention
- Patches are critical to the solution, but companies eventually stop providing them and limit secure life of products

Austin Carson
- Security imperative is much harder for consumers – how much burden should they bear (i.e. distributed service attacks)?
- Legislatures and consumers are developing expertise and technology is evolving to make things more consumer friendly
  - o If it seems really easy, it is probably not the answer to a complex problem

- Lots of existing hardware/infrastructure needs to be replaced
- First massive consumer event will be a big turning-event

Lisa Hayes
- IoT is helpful for many, esp. old and disabled
- Need to be sure that is power goes out, does their pacemaker work?
    - Can't expect people to download software patches all of the time to maintain security processes – some people aren't able to do this
    - (Armand's comment: Not sure how detailed regulation can be avoided with respect to major heath applications. Consider how the FDA regulates medical equipment. That process might be a route to understanding how technology advances can happen in an environment of heavy regulation)
- Maybe you have all home devices that connect to one device where you can adjust the privacy settings
- Sime Suggestions for public standards for security processes

D. IoT in Our Daily Lives Demos - Part 1 Presentations

Paul Paget, CEO, Pwnie Express;
- Drones can be access points
- 85% of enterprises expect to have employee devices
    - Companies are wide-open today
    - Not a good way to trace source of attack
- Telsa can update cars remotely, but Chrysler does not have that ability and had to recall cars when it was hacked
- Liability for credit cards are transferring to merchants, especially the gas stations
    - Does gas station have the ability to stop the credit card skimmer? Can they stop the skimmer's connection?
- ATM Bluetooth skimming is a $8B/yr activity
- Banks are last to roll-out Wi-Fi
    - Wi-Fi is everywhere (sports stadiums etc.)
- IoT is an "asset problem" – need to know what the exact assets are to protect them on the network
- Privacy perspective- companies want
    - Right to detect devices within their facilities
    - Right to communicat what is being detected (maybe give notice)
    - Refrain from capturing personal data or intercepting traffic
    - If there is an incident, right to identify the devices and the relationship to an individual (may need a subpoena)
- New ways to have "zones of trust"

Srdjan Marinovic, CTO, Wireless Registry
- Collection of IoT devices are everywhere
- Each bit starts making decisions – AI is coming/machine learning

- Need to be sure where device is when it makes decision and that the surrounding infrastructure is not spoofed
    - o Mutual authentication does not scale
- Crowdsourced data goes down
- Huge privacy issues for people
    - o Making sure data that comes in is autonomous
        - ▪ Monitor for stolen phones
        - ▪ Authenticate presence when crossing the boarders`

E. Lunch and an Armchair Discussion with Stacey Higginbotham

Panel Description: Journalist and host of the "Stacey Knows Things" Internet of Things Podcast, <u>Stacey Higginbotham</u>, will hold an armchair discussion. She has written for GigaOm and Fortune, covering the impact of IoT on enterprises, developers and consumers. The conversation will focus on what the IoT looks like (and will look like) in the real world.

<u>Stacey Higginbotham</u>
- ALURA network – low latency alternative network in Europe
- Rural healthcare
    - o Some benefits from IoT are hard to measure
        - ▪ Reduced hospital visits etc
    - o Patient generated data

<u>Dean Brenner,</u> Senior Vice President, Government Affairs at Qualcomm
- 5G is more focused on large scale device deployment
- IoT is not waiting for this
- Need to drive cost down and increase coverage
    - o Two version of LTE to focus on this
        - ▪ CAT-M – 1.4 MHz channel
            - • Cheaper devices ($5-$10) and longer battery life
        - ▪ Narrowband IoT
            - • Connectivity in the 10s of kilobits
            - • 200 KHz of spectrum
            - • Need some software changes, so CAT-M will be first
    - o 5G is under development now
        - ▪ 2nd version will be based on narrowband (2021-2022)
- Other variants of LTE are designed to drive down costs
    - o Other technologies operate in unlicensed spectrum
    - o Whole range of short-area technologies are designed to leverage the cost curve
- 5G being defined by 3GPP, Verizon is leading the way in the US to produce specification that will hopefully drive 5G for fixed residential wireless
- US has done a good job showing global leadership (Spectrum Frontiers)

- o Was not able to get the 28 GHz band identified globally
- o Want as much global consistency as possible
- o Likely modular approach to millimeter wavelength
- Data safeguarding – A giant breach early on would be very harmful to IoT development

Jonathan Adelstein, President, Wireless Industry Association (Former FCC Comm)
- Need connect for many new services
- Need more antennas closer to the end user
- Explosion of small cells and distributed antenna systems
- Still working on rural solutions
  - o (Armand's comment: Its curious that there are few, if any, IoT-type systems using low-band spectrum on the drawing board to have rural coverage. PTC for trains, is perhaps an exception)
- Low latency is important for connected cars
- Wireless companies will be going head to head with cable
- Thousands more antennas closer to the end-users
  - o Antennas everywhere
- US is leading the Global Connect initiative
- Attempts for local governments to stop deployment when an antenna is involved
  - o Irrational concerns about the RF
  - o Co-location is important to be efficient
  - o Pole attachment is also important
  - o FCC has done a good job on deployment

F. Spectrum: Powering the IoT

Panel Description: As we connect anything and everything to the Internet, we place greater and greater demands on wireless spectrum. The success of the IoT hinges on access to spectrum, specifically, access to the right spectrum under the right terms and conditions. This panel will discuss how we make spectrum allocation decisions in a way that optimizes for IoT innovation while ensuring there are clear rules of the road.

Co-Moderators:
Trey Hanbury, Hogan Lovells; and
Mark Parsons, Hogan Lovells (Hong Kong).
Speakers:
Renee Gregory, Senior Policy Advisor, White House Office of Science and Technology Policy;
David Grossman, Senior Legal Advisor, Commissioner Clyburn's Office;
Derek Khlopin, Senior Advisor for Spectrum, National Telecommunications and Information Administration, U.S. Department of Commerce;
Virginia Lam Abrams, Sr. Vice President, Communications & Government Relations, Starry, Inc.; and

<u>Steve Sharkey</u>, Vice President of Government Affairs, Engineering and Technology Policy, T-Mobile.

<u>Trey Hanbury</u>
- Most IoT devices still run on 2G that will be shut off soon
  - Should carriers be allowed to create stranded assets?
  - (Armand's Comment: This will fee-up a nice chunk of spectrum for more spectrally efficient use)
- Interoperability – opportunities and risks?

<u>Mark Parsons</u>
- **Asia allocates spectrum without auctions**
- Three facilities based telcos in China
  - Spectrum awarded by government
  - Got late start on 4G and then caught-up quickly
- Korea does not have the scale of China
  - Freeing-up unallocated bands for experimentation
  - "Sandbox" for innovative companies to try

<u>Virginia Abrams</u>
- Starry, Inc. – gigabit to the home via millimeter technology 37-45 GHz
- Agrees that we need a hybrid system of different licensing schemes
- US does not have a good record of predicting technology
  - Best to allow flexible use
  - Stranded technology is the cost of progress
- Spectrum Frontiers requires interoperability in some bands
  - Important for industry to know regulators' expectation on interoperability

<u>David Grossman</u>
- Global traffic expected to increase 8x by 2020
- Laser focus on new spectrum
  - Do not see tension between licensed and unlicensed
  - Flexibility is the key going forward
- (Armand's comment: When was the last time the Cisco projections were accurate? Or the FCC accurately predict spectrum demand?)
- Consumers want interoperability

<u>Renee Gregory</u>
- Using spectrum more efficiently – can use spectrum that was previously unusable.
- Do we have enough?
  - Need to make better use of the spectrum that is available today
- Need a mix of licensed, unlicensed and shared spectrum
- Government will also be big users of IoT
  - Big win if govt. agencies can get private sector economies of scale

- Government does not have deep tech expertise and should not tell companies how to make their products
    - Allows for more innovation – part of why the US is successful at innovation
- Need to watch spectrum demand to figure out how much to allocate

<u>Steve Sharkey</u>
- Need certainty to drive investment – licensing helps with getting that certainty
    - FCC erred in not giving enough licensed spectrum in upper bands in the Spectrum Frontiers Report & Order
        - Would like to see a balance closer to that over the lower bands
- New business in unlicensed spectrum have been for innovation purposes
    - LTE-U turns this on its head
    - Either use unlicensed for what it's for or have some kind of unlicensed commons system
- 5G is very flexible
- Improved discussions about spectrum sharing
- Industry benefited from 700 MHz band operability, but generally industry does a good job and facilitating interoperability

<u>Derek Khlopin</u>
- Unlicensed and licensed serve different purposes in the market
    - Unlicensed model has been a success story
- Most comments are that we don't need a dedicated IoT band in the US
    - Have more flexibility so you don't need permission to re-farm spectrum
- No real upside for government to force lots of interoperability

G. IoT in Our Daily Lives Demos - Part 2 Presentations
<u>Virginia Lam Abrams</u>, Senior Vice President, Communications & Government Relations, Starry, Inc.;
<u>Alex Moulle-Berteaux</u>, CMO, Starry, Inc.; and

- Starry – formerly part of Aereo
- (Armand's Comment: Aereo was the local TV via Internet project that the Supreme Court, in 2014, ruled violated copyright law)
- Offer gigabit speed connection in urban areas
    - Uses beam to a building and then wi-fi within
- In Beta in the Boston area
- Have their own consumer premise equipment with parental controls
- Have technology for smaller phased array antenna that reduces costs
- (Armand's Comment: Broadband to home via millimeter wave (or similar) spectrum has been tried and failed many times over the past 10-15 years. Not clear how their IP (modems, antenna etc.) changes the cost structure sufficiently to make this work where others failed. Telco's disinvestment in DSL may create an opening for

Starry in some markets. On the other hand, this was probably not the forum for them to go into those business issues in detail.)

Michael Valivullah, CTO, National Agriculture Statistics Service, U.S. Department of Agriculture.
- 40% of country is farmland, but only 2.1 million people farming
- Can further increase productivity by using modern technology
    - Can use sensors and satellites to improve land utilization and reduce fertilizer
    - Drones are even better than satellites – better resolution
- Issues related to data ownership is unresolved
- Adoption rate of sensors is higher with larger agribusiness farmers – 50%+ small farmers use is under 20%
    - Small farmers save 15-20% bigger farmers save close to 50% due to economies of scale, but some may be due to adoption rate difference
- (Armand's comment: Missionary sales of new technology, such as IoT, to mature industries, such as farming, has historically been a slow and painful process. Not clear if the stars have suddenly lined-up for farmers to embrace IoT in a heightened manner)
- (Armand's comment: This seems to be another example of recent increased commercial interest in higher band spectrum)

H. Afternoon Remarks

Julie Brill, Hogan Lovells, former Commissioner, U.S. Federal Trade Commission (FTC)
- Security issues are very important
- Distributed service attacks are problematic
    - Need to do better
- FTC settled charges against Aces computers relative to router security flaws
    - Lacked security design reviews
    - Code reviews
    - Testing
    - No process for 3rd party vulnerability
    - No "future testing"
- The above shows what companies are expected to do
- Many connected devices don't have a consumer interface
    - How do people get notices?
    - What about consent for guests etc
- Maybe easy to understand icons
- Maybe central "command centers"
- Hard to know in advance what data will be important down the line
- Concerns about discrimination, unfair treatment when personal information is shared
    - Liability and consumer trust issues

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I. Protecting your Privacy in the IoT:

Panel Description: It's safe to say that the IoT isn't going away. In fact, experts estimate that by 2020 there will be 50 billion connected devices. And while the IoT presents enormous opportunities, there are also implications for our privacy. Our panel of experts will debate the challenges and opportunities of this growing marketplace in addition to the decisions policymakers should make to protect the privacy of American citizens and businesses while encouraging innovation.

Moderator:

Tim Tobin, Hogan Lovells

Panelists

Genie Barton, President, BBB Institute for Marketplace Trust, Inc., Better Business Bureau;

Maneesha Mithal**,** Associate Director, Division of Privacy and Identity Protection, Bureau of Consumer Protection, FTC;

Adam Thierer, Sr. Research Fellow, Mercatus Center;

John Verdi, Vice President of Policy, Future of Privacy Forum; and

Federico Hernandez Arroyo, Hogan Lovells (Mexico City).

Maneesha Mithal
- Need to use existing tools
  - FTC can go after unfair use of data
- Health is a big priority at FTC along with security and end-of-life issues
- FTC has brought cases against foreign companies targeting US consumers
  - Privacy is increasingly a global issue
- Self-regulation needs to have teeth and there is benchmarking and enforcement
- Retailer liability is not a strict liability – case by case based on who is most culpable and who has least cost to fix
- Information is personal if it can be linked to a specific person – but flexibility on a case by case basis

John Verdi
- Over notification means people need to read lots of notices just to be informed
  - No one has time to do it (about a week a year)
  - US "notice and consent" form of notification has a long history in the US (legal system) and is deeply embedded
- Need to think more broadly than "notice and consent" give the number of data collection devices
- Self-regulatory bodies are important as a baseline
  - Can set deadline and convene meetings even if there is no legislation pending
  - Can raise priority of privacy on companies' list
- Context of privacy expectations may be important
  - Don't want privacy implications to impede new products

Genie Barton
- Norms/Standards are needed, but can't take the place of ethics, consumer education and regulatory backstop
  - DoS attacks show there was a gap in standards that everyone was aware of for at least 5 years
    - All of these breaches are possible privacy issues
- Incremental improvement is the only think that will help
  - Problem grows a devices and data grows
- Need to get a better state of agreement
  - Need to most to an ethical use model and how to enforce them
  - This is the roll of self-regulatory bodies
- Major differences in approach in the US and the EU
  - Need to have a view of reasonable compromise that balances innovation and privacy
- "Personal Information" is not well defined, but is being defined increasingly broadly

Federico Hernandez
- In Mexico, they need to first deal with privacy issues for people individuals
  - Big gap in standards between countries
  - Notice and consent is obsolete
- Mexico is 2nd biggest country with Spotify
  - Need to go to NY to enforce privacy rights
    - Does not make sense
- Need international standards for the world as technology is seeking global standards
- Mexico has a more European model for privacy regulation
  - More privacy notices in Mexico
- Need more enforcement from regulators, self-regulation is not enough

Adan Thierer
- Truisms about the modern world
  - There won't be a time in the future with less data, sensors and other devices
  - Technology evolves exponentially while policy evolves incrementally so the gap between them continues to increase
- May need to change norms (legal and social) – notice and consent does not make sense
- May be at end of administrative law and at the start of a new era of multi-stakeholder cooperation (soft law/soft governance)
  - Less new law and more agreements and codes of conduct, guidance
    - Leaves an issue about accountability and lack of clarity about what the exact rules are
- Social norms evolve for new technology, not clear how they evolve into hard rules

  o But need more than law to enforce norms, need social expectations
- Expectations will adjust with 24-hour data collection

J. IoT International Considerations

Panel Description: The IoT promises to connect markets and supply chains around the world. But these opportunities also present new challenges for interoperability, network neutrality, cross-border data flow and ownership, and international standards and norms of behavior for an increasingly global society. Our panel of experts from around the world will discuss how collaboration among industry, governments and civic stakeholders might promote the growth and development of the IoT.

Moderator:
Brian Fung, Washington Post
Speakers
Mindel DeLaTorre, Chief, International Bureau, FCC;
Jonathan King, Vice President, Cloud Portfolio Management & Strategy, Ericsson;
Robert MacDougall, Head of Enterprise Public Policy, Vodafone;
Falk Schöning, Hogan Lovells (Brussels); and
Peter Watts, Hogan Lovells (London).
Contributors:
Federico Hernandez Arroyo, Hogan Lovells (Mexico City); and
Mark Parsons, Hogan Lovells (Hong Kong).

Brian Fung
- IoT security is a huge collective action problem

Mindel DeLa Torre
- Nordic countries may step into UK's role
  - FCC will miss UK's role in EU
- Last week's privacy framework
  - Mostly for ISP – can't comment on Commissioner O'Reiley's comments
- Can regulate narrowly or broadly
- Will need to coordinate with Mexico
  - Did a good job with 600 MHz
  - Will have less interference at higher frequencies
    - Will still want to coordinate frequencies as there is so much movement of trucks etc. with devices on them
- Even simple devices that haven't had good security will need to be looked at
  - Focus on sensitive areas – children, health etc.

Jonathan King
- Digital single market now
  - Supportive of the EU positions
- EU has a different consciousness than the US

- o Things are done different
- o Seeing this payout on each side of the Atlantic
  - ▪ But arriving are similar conclusions
- o IoT is not just able broadband, but about the whole ecosystem that needs to be considered

Robert MacDugall
- EC has "alliance for Internet Innovation" – different working groups that make horizontal recommendations to different industry group
  - o Soft law
  - o Makes contacts with other standards organizations

Falk Schöning
- Need to harmonize European position and then others around the world
- Lots of work to achieve harmonization in Europe with the Four Freedoms
  - o Not as well done in the digital economy
- BrExit was a political disruption
  - o IoT is a crucial part of the digital single market solution
- Expect regulation on the European side
  - o Not sure how liability and common law would fix it
    - ▪ Regulators want to take action

Peter Watts
- Is BrExit good for the EU and bad for the UK, or the opposite?
  - o Has to do with how BrExit impacts IoT
    - ▪ UK might be able to do better deals internationally with the US and others when going alone
- Perspectives on privacy on both sides of the Atlantic is getting better
- Not sure regulation can deal with security due to fast moving
  - o Maybe just focus on liability and get companies to focus on the details
- There is something distinct about IoT that poses an issue for regulators
  - o It is a device that can be moved anywhere and collect data from people from any jurisdiction – turns normal regulatory approach upside down
    - ▪ But fortunately it impacts all industry segments so there is no choice but to focus on it

K. Cocktail Reception

- (Armand's Comments: Hogan Lovells lived-up to its reputation of serving quality wine and hors d'oeuvres
  - o The crab cakes were especially good)
- The cocktail hour was followed by a presentation analyzing implications of Brexit
  - o Unfortunately, I had to catch a train back to NYC and was not able to attend