



**Aalto University**  
School of Business

# Digital Markets and Competition Law

Prof. Petri Kuoppamäki, LL.D

Spring 2021

# Teacher

- Petri Kuoppamäki, LL.D
- Professor of Business Law at Aalto University School of Business since Autumn 2013
- Professor of Competition Law at the University of Helsinki 2009-2013
- Adjunct professor of Business Law at the University of Helsinki 2003
- Adjunct Professor of Law & Economics at the University of Eastern Finland
- Nokia Corporation, Vice President Legal & IP, 2003-2011
- Castrén & Snellman Attorneys-at-Law, Partner 2002-2003
- Finnish Competition Council, Secretary General 1993-2002
- European Commission, DG Competition, Brussels 2001-2002
- Associate in a law firm 1987-2000
- LL.M 1989, Doctoral Thesis in 2003 on the Concept of Market Power
- Has written 10 books and several articles on competition law/antitrust, EU law, law & economics, mergers, public procurement and regulation
- Approach: Combine academic and practical learning. Try out new things...😊

# Learning outcomes

- This is an advanced course in competition law. After the course the student has an in-depth knowledge of competition law and its application in practice as regards competition law issues relating to digital markets, including IPR. He or she understands the interplay between legal, business economics and economics related aspects that affect the contents and application of competition rules in the digital economy. The student knows how business can best be organized to comply with the requirements of competition rules. In addition to this, he or she knows how knowledge of competition rules can be made use of in developing market strategies for the business in question in the prevailing conditions.

# Content

- The core areas are cartels, dominant market positions and merger control. We will take a new economy angle to these issues. The course focuses also on the economic analysis of competition law, interaction of competition rules with IPR law, standardization digitalization as well as on the impact of competition law on market conditions within different branches of trade and industry.



# Evaluation

- 1. Lectures and possible exercises, 28 h, Prof. Petri Kuoppamäki.
- 2. Essay based on course literature and slides.
- 3. Exercises (max 6 extra points for the examination).
- **Study Material** Handouts and other material on the course homepage or mentioned on the following slide.
- **Grading Scale** 0-5

# Reading material (lukulista)

- Kuoppamäki, Petri: Määrävän aseman väärinkäyttö digitaalisilla markkinoilla – mikä muuttuu? Lakimies 7–8/2018 s. 996 (on course home page)
- Kuoppamäki, Petri: Algoritmiset kartellit ja kolluusio – kilpailuoikeuden haasteet ja mahdollisuudet. Defensor Legis 2020/4 s. 609 (on course home page)
- Competition policy for the digital era. Report for the European Commission, 2019 (“Special Advisors’ Report”) <https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf>
- Competition Policy for the Digital Era, Heike Schweitzer and Robert Welker t <http://robertwelker.bplaced.net/Schweitzer-Welker-CPI.pdf>
- KKV: Algoritmien aiheuttamat kolluusiotilanteet <https://www.kkv.fi/globalassets/kkv-suomi/julkaisut/selvitykset/2021/kkv-selvityksia-1-2021-algoritmien-aiheuttamat-kolluusiotilanteet.pdf>
- KKV: Alustat kilpailu- ja kuluttajaoikeudellisessa tarkastelussa <https://www.kkv.fi/globalassets/kkv-suomi/julkaisut/selvitykset/2017/kkv-selvityksia-4-2017-alustat.pdf>
- Digital platforms and the potential changes to competition law at the European level. The view of the Nordic competition authorities <https://www.kkv.fi/globalassets/kkv-suomi/julkaisut/pm-yhteisraportit/nordic-report-2020-digital-platforms-and-the-potential-changes-to-competition-law-at-the-european-level.pdf>
- OECD: Abuse of dominance in digital markets. <http://www.oecd.org/daf/competition/abuse-of-dominance-in-digital-markets-2020.pdf>
- Revising the Competition Law Rulebook for Digital Markets in Europe: A Delicate Balancing Act. By Kris Van Hove - October 11, 2020 <https://www.competitionpolicyinternational.com/revising-the-competition-law-rulebook-for-digital-markets-in-europe-a-delicate-balancing-act/>
- Competition regulation in digital markets: Five themes in five minutes (second edition). Linklaters. <https://www.linklaters.com/en/insights/publications/2020/november/competition-regulation-in-digital-markets-5-themes-in-5-minutes-2nd-edition>
- Is the goal of antitrust enforcement a competitive digital economy or a different digital ecosystem? <https://www.adalovelaceinstitute.org/blog/antitrust-enforcement-competitive-digital-economy-digital-ecosystem/>
- Another CJEU ruling on standard-essential patents and FRAND looks inevitable. Kluwer Patent Blog. <http://patentblog.kluweriplaw.com/2020/07/27/another-cjeu-ruling-on-standard-essential-patents-and-frand-looks-inevitable/>
- Platform Mergers and Antitrust. Bruegel. <https://www.bruegel.org/wp-content/uploads/2021/01/WP-2021-01.pdf>



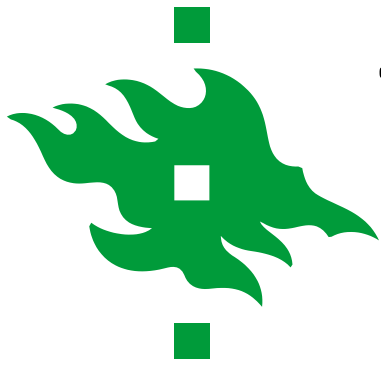
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# Short repetition – competition law

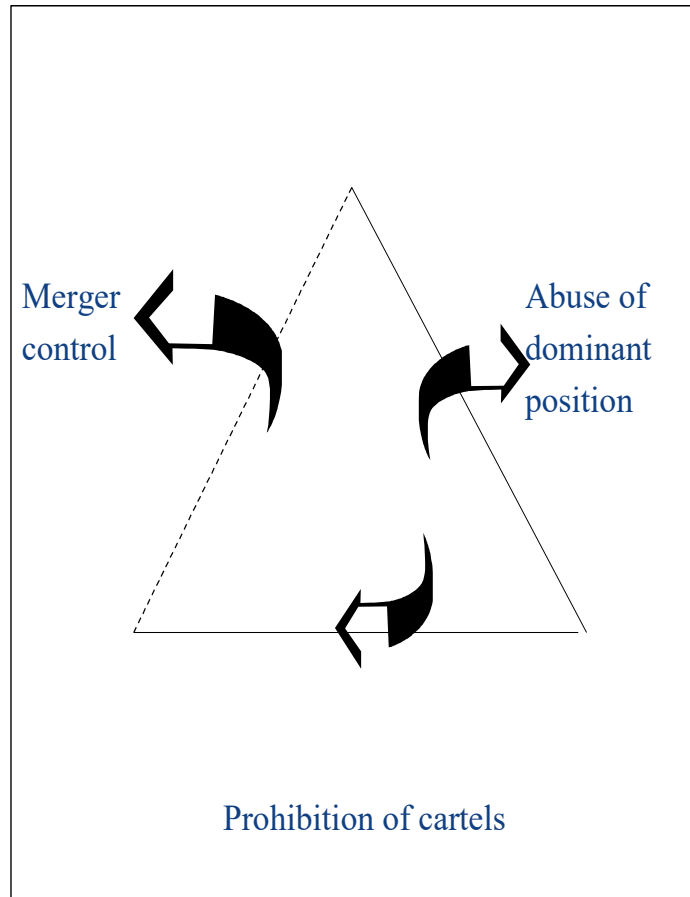
Restrictive agreements, abuse of dominant position, mergers...

# Why competition law?

- **Competition law** exists to protect the process of **competition** in a free market economy
  - A system where the allocation of resources is determined mainly by supply and demand in free markets
- **Competition** wanted because of the market result it produces
  - Efficiency
  - Low prices
  - Innovations
  - Freedom of action
- **Competition** rules limit the freedom of the market players in order to protect the process of **competition**; yet at the same time it preserves freedom of others (e.g. by enabling market entry or preserving choice for customers and ultimate consumers)



# Triangle of Competition Law



# EU competition rules – an overview

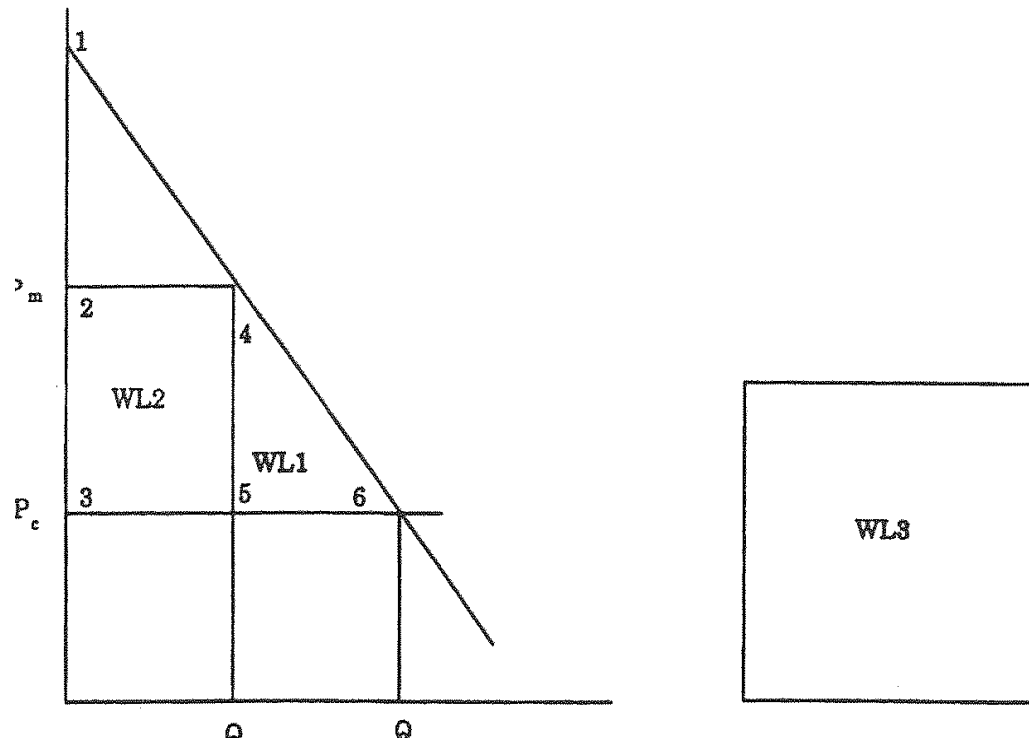
- Article 101
  - Article 101(1) prohibits agreements or concerted practices restrictive of **competition** is
  - According to Article 101(3) Article 101(1) “may ... be declared inapplicable”
- Article 102
  - Forbids dominant undertakings to abuse their market power
- Merger Regulation
  - Prohibits concentrations significantly impeding effective **competition**
- State aid rules
  - Prohibits aids from EU member states to companies that distort competition in the common market
- Public undertakings and exclusive rights

# Overview of Sanctions

- Prohibition of the illegal action (to put an infringement to an end)
- Fines of up to 10% of the offender's turnover; very high fines for serious infringements
- Restrictive agreements are automatically void under Art. 101(2) EU.
- Damages
- In some member states (e.g. UK and Ireland) criminal sanctions
- “Informal” sanctions (bad press)
- Fines are getting higher, biggest fine in EU over a 1 billion euro (Intel)
- Conditional decisions
- Commitment decisions (settlements)
- Leniency in cartel cases

## THE BASIC ECONOMICS OF ANTITRUST

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# Content of the Course

- What is a "Digital economy"
- New Article 101 issues in Digital industries
- Interface between IPR and Competition Law
- Licensing and competition law
- Article 102 issues
- Digital platforms and Competition law
- Standardization and Competition law
- "New economy" mergers
- Group work, interaction

# The New Economy, Digital Markets, and the Role of Competition Law

# Key Questions

- Is there a new economy?
- How does the new economy impact the way the economy works?
- How does the new economy affect competition law and policy?

# Is there a new economy?

- Short answer: Yes (Stiglitz 2004, 2014)
- Market changes in costs of communication and computers have interacted with other forces (lower transportation costs, reductions in artificial cross-boundary barriers, and a variety of technologies)
- Leading to
  - globalization
  - innovation revolution
  - marked changes in business practices and structure of the economy

# Is there a new economy? II

- Long answer: New economy became a buzzword in late 1990's
  - "New economy" became grossly overrated
  - Strange predictions were made, like the production cycle having changed in a way that there will be "no more recessions going forward"
    - .Com bubble, stock market crash in early 2000's
    - Global finance crisis in 2007
    - Economic crisis in many countries, for instance Finland
    - Structural issues: old jobs have gone and the new have not emerged
  - Yet, the world has changed, whatever we call it: New economy, Digital economy, Knowledge economy, Intellectual capitalism...
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# Globalization

- Closer integration of world's economies and societies through trade, capital flows, movement of people, diffusion of ideas

# Innovation revolution

- Industrial revolution changed what goods were produced and how goods were produced
- also led to a change in where goods were produced—move from rural to urban
- New revolution is leading to a change in how ideas are produced and the importance of the production of ideas (the weightless economy)
- together with globalization can have profound effects on where goods are produced—no longer place-based
- Industrial internet may be the next big thing

# Changing structure of the economy

## The new economy—and old economic laws

There have been major changes in the way the economy operates

- Manufacturing declining, services increasing (change as dramatic as the difference between agriculture and industry?)
- Much of what we consume today belongs to the digital (new “weightless”) economy
- Knowledge and information, which are at the heart of the new economy, are fundamentally different from conventional commodities; (access to consumer) information as the “gold, diamonds and platinum” of the new digital era?
- But basic economic laws—like scarcity (of eyeballs...) and fluctuations— still hold



# The new economy affects nature of competitive processes

- Competition is now global in many technology and finance markets, but by no means not all
  - Increased pace of innovation
    - “mechanized” innovation
    - Lower fixed cost of innovation
    - More rapid dissemination of new ideas due to new technologies
    - Sequential innovation model
  - Much of innovation is occurring in small firms
  - Enhanced potential for small firms to grow rapidly, yet building a global presence still requires a huge investment
  - But network economies associated with new economy can lead to global dominant positions and stifling innovation
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# New Digital Economy and Competition Law

Key concepts and challenges

# Digital economy

- The digital economy is comprised of markets based on digital technologies that facilitate the trade of goods and services through e-commerce.
  - The expansion of the digital sector has been a key driver of economic growth in recent years.
  - The shift towards a digital world has had effects on society that extend far beyond the digital technology context alone.
    - Paper industry and magazines vs. Ipad
    - Brick and mortar shops vs. Online
    - Traditional banking vs. E-banking
    - Video lease companies vs. on demand
    - Taxi companies vs. Über, travel agencies vs. Online reservations
-

# Winner takes it all?

- Competition in digital markets has certain distinctive characteristics, including tendencies toward “**winner takes all**” competition for the market, network effects, two-sided markets, fast paced innovation and high rates of investment.
- The **cyclical nature** of competition means that successful digital platforms have tended to acquire significant but transient market power.
- There is general agreement that **dynamic competition**, based on continual cycles of innovation, development, and disruption, is paramount in the digital economy.
- The **optimal market structure** for encouraging investment and innovation remains an **unsettled issue**, though.

# Network effects

- Network effects arise where the value of a product to its users increases with the number of other users of the product. A form of demand-side economies of scale, such effects may be direct or indirect. Network effects arise frequently in digital markets, where the increasing popularity of a platform attracts additional users as well as other groups, such as advertisers or applications developers, to the platform.

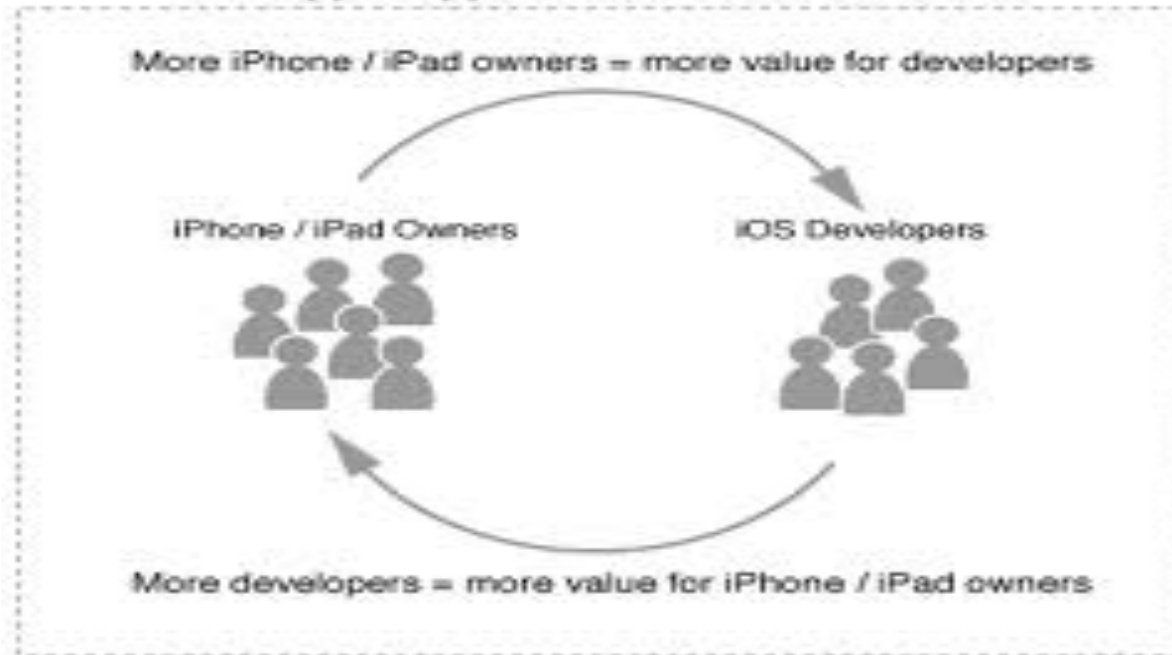
# Article 102: When are network effects pro or anti-competitive?

- Network effects are pro-competitive insofar as they improve the quality and value of a product for both its users and other groups.
- However, network effects can have a detrimental impact on competition where they raise barriers to entry or increase switching costs.
- This may result in lock-in to a particular platform and/or lead to a tipping point where a single platform emerges as dominant (e.g. Microsoft, Google).
- Firms that benefit from network effects should not attempt to abuse those effects to strengthen market dominance.

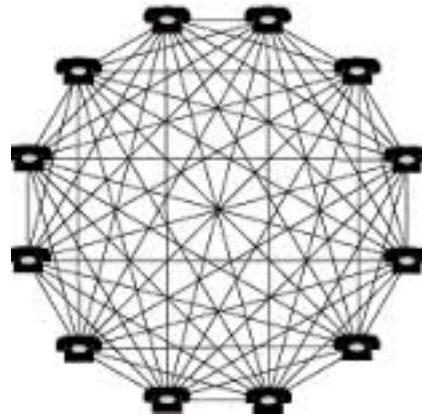
# Mobile platforms

- Competition in the mobile communications sector is increasingly taking place at the level of entire technology eco-systems. The conventional dichotomy between open and closed platforms has been largely superseded by the emergence of a broad spectrum of approaches, from mostly closed systems to more or less fully open platforms.
- In the mobile space, well-designed platforms serve as innovation catalysts, facilitating the development of applications that increase the functionality of the platform and therefore its value for users.
- Nokia's rise and fall, Apple, Android, Microsoft...
- Competition between platforms

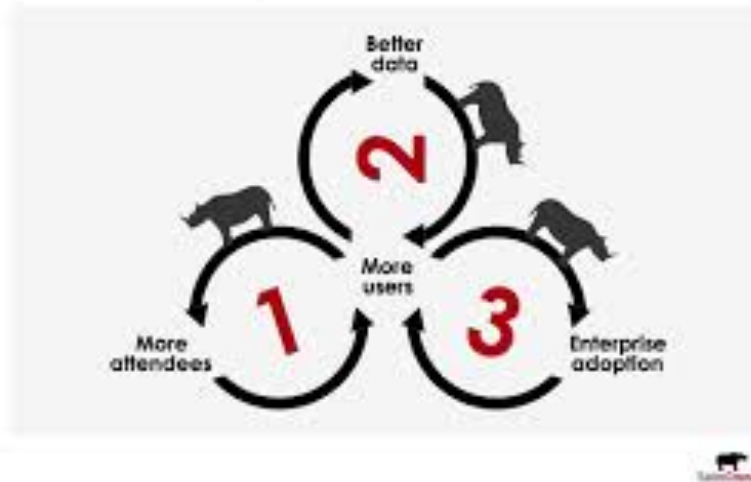
## The Apple App Store: a 2-Sided Market







## Network effects from 3 self-reinforcing and viral loops



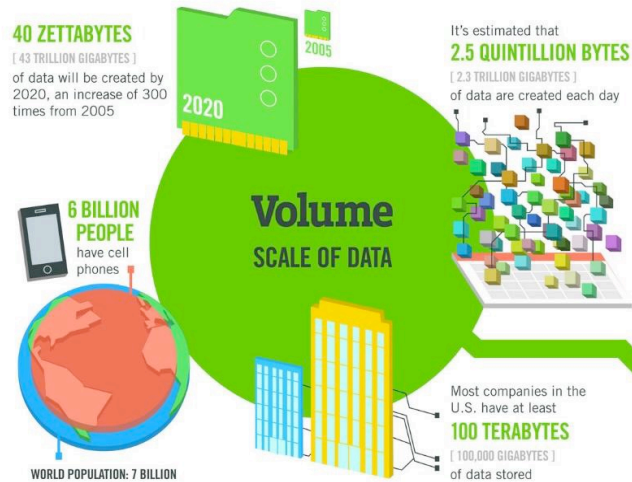
# Competition between platforms

- At the **intra-platform level**, two categories of competition issues may arise:
    - **exclusionary tactics** by a vertically-integrated platform owner relating to the applications market,
    - **misappropriation** by the platform owner of investments made by an applications developer through illegitimate copying or incorporation of the functionality within the platform.
  - The extent to which such problems can and should be addressed through competition law, however, is still under debate (Google case).
  - There is a need to balance **innovation incentives** emerging as a central concern and **access to markets**.
  - Access to **big data**?
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# Definition of "Big Data"

- Big data refers to datasets that are **so big** that they can no longer be collected, stored, processed and analysed by classical database software tools.
- To characterise the phenomenon of big data, as a rule reference is made to the "**3Vs**" **volume**, **variety** and **velocity** (+ 4. veracity).
- These describe the **algorithmic analysis** of particularly vast data volumes (volume) from the widest variety of sources and formats (variety) at maximum velocity (velocity) which has only been made possible by digitalisation.
- Big data is frequently used as a **catchword** for both the technologies used to collect, process and link massive, complex data volumes, as well as the business models.

# Big Data (4 Vs)



## The FOUR V's of Big Data

From traffic patterns and music downloads to web history and medical records, data is recorded, stored, and analyzed to enable the technology and services that the world relies on every day. But what exactly is big data, and how can these massive amounts of data be used?

As a leader in the sector, IBM data scientists break big data into four dimensions: **Volume, Velocity, Variety and Veracity**

Depending on the industry and organization, big data encompasses information from multiple internal and external sources such as transactions, social media, enterprise content, sensors and mobile devices. Companies can leverage data to adapt their products and services to better meet customer needs, optimize operations and infrastructure, and find new sources of revenue.

By 2015 **4.4 MILLION IT JOBS** will be created globally to support big data, with 1.9 million in the United States



As of 2011, the global size of data in healthcare was estimated to be

**150 EXABYTES** [161 BILLION GIGABYTES]



**30 BILLION PIECES OF CONTENT** are shared on Facebook every month



By 2014, it's anticipated there will be

**420 MILLION WEARABLE, WIRELESS HEALTH MONITORS**

**4 BILLION+ HOURS OF VIDEO** are watched on YouTube each month



**400 MILLION TWEETS** are sent per day by about 200 million monthly active users



## Variety

DIFFERENT FORMS OF DATA

The New York Stock Exchange captures **1 TB OF TRADE INFORMATION** during each trading session



Modern cars have close to **100 SENSORS** that monitor items such as fuel level and tire pressure

## Velocity

ANALYSIS OF STREAMING DATA

By 2016, it is projected there will be

**18.9 BILLION NETWORK CONNECTIONS**

—almost 2.5 connections per person on earth



**1 IN 3 BUSINESS LEADERS** don't trust the information they use to make decisions



Poor data quality costs the US economy around

**\$3.1 TRILLION A YEAR**



**27% OF RESPONDENTS**

## Veracity

UNCERTAINTY OF DATA

in one survey were unsure of how much of their data was inaccurate

# Interoperability Essential, and Interoperability requires Standards

- Incremental additions to IT network require interoperability within the network and backwards/forward compatibility
- Companies prefer not to be locked in to one IT supplier when adding to their network
- But even if they did: companies do not control what IT systems are bought by their customers, suppliers, partners and outsourcing firms
- Involving customer, supplier, business partner, outsourcing firms in end-to-end processing requires integration of their systems through interoperability
- Without interoperability, no competition, and little innovation – and without standards, no interoperability

# Voluntary and mandatory disclosure

- Voluntary disclosure of a products application programming interface is a common method by which firms enable interoperability. **Voluntary disclosure** can facilitate rapid innovation, but may bring certain risks for both the disclosing and receiving firms.
- A controversial question is the extent to which the refusal to supply principles of competition law can be used to force a reluctant dominant firm to disclose interoperability information (**mandatory disclosure**).
- IMS Health, Microsoft cases

# Problems with Technical Standards

- Standards make wide dispersion of new technology and competitive ecosystems possible.
- Standards may block inter-technology competition
  - This may reduce scope for innovation
  - risk can be limited by using functional specifications rather than design specifications
- Chosen standard may depend on proprietary technology
  - This could give patentee a *de facto* monopoly
    - Ability to block rivals
    - Ability to extract monopoly rent
    - Ability to use monopoly to leverage into other products
- So, SSOs want to know whether patent reads on standard
- But: How do SSOs know whether patents apply to a standard? (The “Submarine” problem)
- And: How to prevent patentees from setting “traps”?



# SEP's and FRAND

- When standard-essential patents are included in a standard, FRAND licensing commitments may reduce the risk of subsequent hold-up by the patent owner.
- However, the strategic accumulation of digital patents and potential hold-up through patent litigation has been a growing concern in the digital economy in recent years.
- Nokia vs. Qualcomm
- Apple vs. Samsung
- Motorola vs. Apple
- Huawei vs. ZTE
- Nokia vs. Daimler et al

# Article 101 problems in digital industries

- Too much standardization. Too much information sharing as horizontal and vertical roles get blurred...
- Brick and Mortar versus online shoppers...
- Online sales and absolute territorial protection
- New types of resale price maintenance cases (e.g. Pioneer)
- Digital online platforms (e.g. Booking.com, AirBnB) and MFN clauses
- Can machines (algorithms) form a cartel? (Über, ETURO cases)
- Is tacit collusion becoming a bigger problem?
- "Classical" market division agreements and price fixing of components (e.g. LIBOR cartel, LCD screens)

# Article 102 problems

- When are digital platforms dominant?
    - Network effect and installed base can lead to durable dominance
    - Competition can be dynamic and market positions may erode
    - Fast monopoly versus Schumpeter monopoly
    - Is the tide turning towards more intervention?
  - Abuse of dominant position
    - Vertical foreclosure vs. "self-preferencing"
    - Information based abuses (e.g. Google shopping case)
    - Tying and exclusivity (e.g. Google Android case)
    - Privacy concerns (e.g. Facebook case)
    - Amazon's hybrid role?
    - Fairness concerns (e.g. the Fairness regulation)
    - New remedies and approaches needed? (Special report to Commissioner Vestager in 2019)
-

# High-tech mergers – potential issues

- Technological barriers are raised
  - Too much horizontal concentration
  - Vertical foreclosure
  - Killer acquisitions: giants are buying their most potential rivals to remain the king until the end of the days...
  - But market dynamism can be hard to predict, and can it be predicted?
-

# What should be done?

- The appropriate scope of competition enforcement in digital markets is a controversial issue.
  - The dynamic and technical nature of the digital economy have led some commentators to call for regulatory restraint due to concern that excessive enforcement will inhibit the innovation that drives competition in the digital economy. However, the majority view that emerged in the hearings was that there is a clear need for competition enforcement in certain circumstances.
  - There is a particular need to protect the competitive structures that drive innovation and to deter exclusionary behaviour that prevents legitimate competition.
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# New activity of national competition authorities

- Many NCAs have conducted sector-specific investigations in digital markets in order to identify possible antitrust concerns.
  - In 2018, the German Federal Criminal Office (FCO) and the French Competition Authority (FCA) launched inquiries into the online advertising markets in Germany and France.
  - Report by the Finnish FCCA in 2017 on digital markets and Nordic report in 2020
  - EU report in 2019 proposing policy shifts
  - Legislative actions by the European Commission in 2020 regarding digital platforms
  - Many decisions of the EU Commission against Microsoft and Google in particular, new case against Amazon looming...
  - In fall 2020 US authorities filed an antitrust case against Google and proposed even a break up of Facebook

# Are competition rules flexible enough?

- In general, competition laws are sufficiently flexible to be applied in digital markets.
  - However, certain recurrent difficulties have arisen with competition enforcement in this sector.
    - digital market expertise,
    - territoriality and the multinational nature of digital economy firms
    - technical problems in adapting established competition concepts to the digital context
  - **Neo-chicago** alternative: don't intervene because you will only create a mess
  - **Post-chicago** alternative: you will need to fight "durable enough" monopolies but do it with caution
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# Report to the EU Commission

- In April 2019, the European Commission published a report prepared by three special advisers appointed by commissioner Margrethe Vestager in March 2018 to explore how EU competition policy should evolve in the digital age.
- The report identified extreme returns to scale, network effects and the role of data as the key characteristics of the digital economy, while concluding that there is no need to rethink the fundamental goals of competition law.
- However, established concepts, doctrines and methodologies must be adjusted and refined to conform to the demands of the digital economy.



# Optimal timing of antitrust enforcement?

- The optimal timing of competition law interventions is a complex matter.
- Given the vigorous competition existing between different platforms in many digital markets, it can be hard to determine the point at which a firm may be considered dominant for competition law enforcement purposes.
- The scope for intervention against powerful firms that do not yet hold a dominant market position is an unresolved issue, with laws regulating unfair trade practices providing a possible alternative where applicable.

# Topics for Groupwork

1. Über "surge pricing" and potential price fixing?
  2. Resale price maintenance: Asus, Denon & Maratz, Philips, Pioneer (2018)
  3. Hotel booking online platforms and MFN clauses – what's new?
  4. Territorial protection and online sales – where are we going?
  5. Apple fined 1,1 bn euro by the French competition authority (2020). Why?
  6. Amazon abuse of dominance investigation – is there a double role?
  7. Google comparison shopping decision in the EU (2017). Arguments in court.
  8. Google Android case (2018). Arguments in court.
  9. US DOJ antitrust law suit against Google (2020). Old wine in a new glass?
  10. US FTC and states' law suit against Facebook. Break it up! Really?
  11. Proposed Digital Services Act. Big fines and strict rules against BigTech?
  12. UK competition tribunal decision regarding Epic's claim against Apple (2021)
  13. The EU Qualcomm case (2018).
  14. What is FRAND? Nokia vs. Daimler case (2020)
  15. Broadcom case (2019) – temporary EU ban and latest developments
  16. Facebook decision of the German Supreme court (2020). Does privacy matter?
  17. Facebook and the Australian media skirmish. Competition law angle.
  18. AT&T/Time Warner merger case (2019)
  19. Google/DoubleClick merger case
  20. Google Fitbit merger case – remedies (2020)
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# Digital Industries and Article 101 issues

Restrictive agreements in digital industries –  
old concepts and novel applications.

New wine in an old glass?

# Emerging new 101 issues

- Cartel cases in digital industries
- Can machines form a cartel?
- Utilizing algorithms for horizontal and vertical price fixing
- Digital platforms and MFN clauses
- New kinds of RPM clauses
- Online sales, common market and absolute territorial protection
- Brick and mortar – how to modernise the EU vertical group exemption?
- Old: Patent licensing and Article 101

# Hardcore restrictions under Article 101

Most serious forms of restrictive agreements which cannot be exempted even if they contain pro-competitive effects:

- Price fixing
- Market sharing
- Quota cartels and other forms of capacity collusion
- Bid rigging
- Boycotts and concerted refusals to deal
- Information cartels
- Allocating markets or customers
- Resale price maintenance
- Blocking parallel trade



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# Can machines form a cartel?

Concurrence of the wills, coordination,  
liability and other problems...

# Outline

I. The Problem

II. The Classical Concept of Coordination

III. The *Eturas* Case of the ECJ

IV. Computer-based Cartels

V. Open Questions & Outlook

# I. The Problem

Common fears linked to machines, automation and artificial intelligence (AI) include:

- The machines will take our jobs!  
*David Ricardo* 1821: “the machinery question”
- The machines will wipe us out!  
e.g. HAL 9000 in *Stanley Kubrick’s* “2001: A Space Odyssey”
- and now: Will the machines form cartels?



## II. The Classical Concept of Coordination

Art. 101(1) TFEU: “agreements” or “concerted practices”

and “decisions by associations of undertakings”

- **agreement:** “concurrence of **wills**”, “meeting of the **minds**”, “consensus”
- **gentlemen’s agreement:** “joint **intention** of the parties to the agreement with regard to their conduct in the Common Market” (e.g. ECJ – *ACF Chemiefarma v Commission* [1970])

- **long-standing business relationships:** distinction between “genuinely unilateral measures” (-) and measures where the unilateral character is “merely apparent” (+). Test: “**acquiescence**” (explicit or implicit assent or submission) of the other party (see e.g. *Bayer Spain*)?
  - **concerted practices:** form of coordination between undertakings, which **knowingly** replaces the risks of competition by practical cooperation
- ➔ All these categories are based on **human behaviour! How do these concepts work for machines?**
-

- **“Old school”**: “proof of an agreement must be founded upon the existence of the **subjective element** that characterizes the very concept of the agreement, that is to say a **concurrence of wills** between economic operators on the implementation of a policy, the **pursuit of an objective**, or the adoption of a given line of conduct on the market”
- **But: information sharing cartels** (less proof needed in practice!)
  - **Intention** has to be proven? This could include **individual knowledge** of the coordination to take place. But in practice certain collusive behaviour is sufficient to prove intention...
  - **Negligence** (with respect to the ignorance) is not a sufficient defence.

- **See also Art. 23(2) Regulation 1/2003:**  
fines on undertakings „where, **either intentionally or negligently**“ they infringe Article 101 or 102 of the Treaty ...
- The term „**agreement**“ **requires intention**. Only with respect to Art. 101(1) TFEU in its entirety, negligence is sufficient.
- But **collusive behaviour is prohibited far beyond “agreements”**.

### III. The *Eturas* Case of the CJEU 21.1.2016

- 30 travel agencies in Lithuania use the **online booking system** E-TURAS (owned by the travel agency *Eturas*).
- *Eturas* imposed – through the booking system – a technical **restriction on the discount rates** they could offer to their clients.
- *Eturas* posts a **notice in the system** informing the travel agencies about the new discount policy.
  - “For travel agencies which offer discounts in excess of 3%, these will automatically be reduced to 3% as from 2.00 pm.”
  - The notice could only be consulted in the Notices’ section of the information system in question; access is password-protected.

- Lithuanian Competition Council: This is a **concerted practice** (of the travel agencies).
- **Travel Agencies:** No, this is an unilateral act by *Eturas*; no will or intention on their part.  
“We did not even read that system notice.”

# What has to be shown for a concerted practice?

**1. Concertation**

**2. Subsequent Conduct in the Market**

**3. Causal Link between 1 and 2**

# 1. Concertation

- by the **mere dispatch of the system notice** on the restriction of discounts and its technical implementation?
- See the case law on **passive modes of participation**: when in a **collusive meeting**, presumption of illegality which can be rebutted by public distancing
- **ECJ**: The presumption of innocence precludes an argument exclusively based on the system notice!
- Further **objective and consistent indicia** are necessary (and sufficient under the principle of effectiveness).



- **Here:** A technical restriction was implemented. Higher rebates were possible only after taking additional technical steps.
- **Presumption of participation** if the respective agency was **aware** of that message
- The presumption may be rebutted for example by sending a **clear and express objection** to the administrator of the computerized booking system.

## 2. Subsequent Conduct in the Market

- not dealt with by the Court
- raising prices or reducing output?
- Higher rebates were made **more difficult**.

## 3. Causal Link between 1 and 2

- ‘**Anic presumption**’: A causal connection is presumed once the concertation and a corresponding behaviour have been shown.
- The presumption can be **rebutted** for example by showing that discounts exceeding the cap were applied systematically.

- **Result**

- The Court tries to apply the requirements of Art. 101(1) TFEU to **computerized sales systems**.
- **Focal point of the ECJ: Awareness**

Were the addressees **aware** (or ought to have been aware) of the system notice capping rebates?

- How do the concepts of ‘**concurrence of wills**’, ‘**meeting of the minds**’ and ‘**intention**’ refer to computerized systems which require less and less human intervention?

## IV. Computer-based Cartels

- **Computer programs** can have an influence on prices and on other parameters of competition.
    - **Example:** Algorithms in high-frequency trading on financial markets
- Or “**Robo-Selling**”: automatized price-setting
- **An undertaking that is running such a program for its business purposes has the responsibility not to infringe competition law by doing so!**

# US v. David Topkins (District Court N.D. Cal., Plea Agreement 2015)

- Posters were sold through *Amazon Marketplace* which gets a fee from the seller but does not influence prices
- Competitors used algorithm-based pricing software.
  - The software collects pricing information and applies pricing rules set by the seller.
  - In particular: the software **coordinated price changes**.
  - In addition: conversations and communications on prices.

→ Violation of **Section 1 Sherman Act**

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- **Problems**

- A distinction has to be made:
  - Algorithm as a means to observe market prices and adapt to them (👍)
  - Algorithm as a means to coordinate prices with competitors (👎)
- But what if competitors use commercially available algorithm-based pricing software which they have acquired **independently from one another** and whose use leads to **coordinated prices**?

# Shared Economy (*Über*, *Airbnb* etc)

– **Price algorithms** are used systematically.

pricing is “dynamic”.

– **“Über Surge Pricing”**

- When taxi demand is higher than available drivers, fare rates increase by a multiplier.
- Dynamic pricing leads to the same result, but in a less obvious way.

– Problem: Because of the *Über* algorithm, drivers using the *Über* app do not compete on price. And they cannot negotiate fares.

– Über founder, CEO (and driver) **Travis Kalanick**:  
“We are not setting the price. The market is setting the price. We have algorithms to determine what that market is.”

## District Court S.D.N.Y. – *Meyer v. Kalanick*

- In **December 2015**, Uber passengers sue *Uber* and *Travis Kalanick* for price fixing (between *Uber* drivers).
- **31.3.2016**: Judge *Rakoff* denies the defendant's motion to dismiss (on a plausibility basis).
- **29.7.2016**: Judge *Rakoff* refuses to enforce an arbitration clause.
- Problems:
  - Are the agreements horizontal ('hub-and-spoke') or vertical?
  - Are *Uber* drivers ("driver-partners") employees (then social security rules) or independent businesses (then antitrust)?
- The **class action** is pending. Similar antitrust suits have been filed also in other US states.



## V. Open Questions & Outlook

- **ECJ - *Eturas***: ‘participation in a **concertation cannot be inferred from the mere existence of a technical restriction implemented in the system** [. . .], unless it is established on the basis of other objective and consistent indicia that it tacitly assented to an anticompetitive action’.
  - **Technology alone** cannot violate Art. 101 TFEU?
  - What if computer systems have become so **autonomous** that interference of natural persons is not necessary any longer?
-

- **Internet of Things, “Internet of Everything”, Artificial Intelligence, Deep Learning, Price Algorithms etc.**
- Does still **awareness** of natural persons has to be proven?
- If yes, with respect to what exactly? With respect to the **initial implementation** of the computer program, or with respect to each restrictive activity?
- What if the **lifespan** of the system is **very long** and does not require further human intervention?

- **Awareness** should lose its pivotal importance at least with respect to the implementation of competition-restricting steps.
- It should be sufficient to prove the **integration of a firm in a computer system** which fixes prices etc. with competitors.
- Here, **traditional communication is replaced by an algorithm.**
- At least: presumption of a concerted practice in these cases.
- A **‘Cartel of the Machines’** amounts to a cartel of the connected firms.
- But when and if we have **“independent” androids?**

# Conclusions

- Traditionally, the EU Commission and the European courts have considered that a ***concerted practice*** arises as soon as **information is exchanged** among competitors.
  - That approach creates difficulties on information based markets where computers and more generally machines **systematically organise such exchanges** and may thus give rise to allegations of cartel infringement for their operators, despite the absence of any fraudulent intention whatsoever on the part of the latter.
  - Such development may emphasize the need to revisit the doctrine and the jurisprudence on the formation of anticompetitive coordination.
  - **LIBOR and similar cases?**
-

# Future of Price Competition?

- Tool approach: algorithm is another tool that can be used to fix prices or share markets
- More price information, but is it accurate, and to whom?
  - More and better price information, advantages to everyone...
  - "Confusopoly", asymmetrical information and perfect price discrimination...
- Price algorithms in concentrated markets: Lufthansa case
  - Air Berlin went bankrupt, which led to market concentration
  - Lufthansa raised prices of airline tickets up to 30-40 % on German routes
  - BKA: abuse of dominance
  - Lufthansa: algorithm is just reacting to the changed market realities
- Algorithms, speed of information and big data
- Effects of the Internet of things going forward...



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# MFN clauses

Is market transparency always a good thing?

# MFN or parity clauses

- Most-favoured nation clauses (MFNs) or parity clauses are often used in vertical relationships between suppliers and platforms to reduce the risks of free riding on the platforms' investments in promoting the suppliers' products.
- MFNs ensure that a supplier does not offer more favourable terms and conditions (in particular in terms of price) to other customers. In essence, the promise is not to give better terms to others,
- Potential problem: same prices everywhere?

# MFN and competition law

- MFNs have drawn attention from NCAs and the EU Commission in recent years. With a few emblematic cases, competition watchdogs recently gave some indications as to their appraisal of MFNs under competition law. A rather significant level of uncertainty remains, however, not least because most cases have been closed without a formal infringement decision.



# Wide and narrow parity clauses

- Parity clauses can have different scopes according to the obligations imposed on suppliers:
  - ‘**narrow**’ parity clauses generally link the price and terms offered by the online platform to those available directly on the upstream supplier’s website in order to guarantee that the latter will not be less attractive than the offers available on the platform.
  - ‘**wide**’ parity clauses have the same effect as the previous one but in addition they seek to guarantee that the prices available on other platforms, including competitors, would not be lower than those advertised on the platform<sup>1</sup>.

# Amazon MFN case

- In 2015, the EU Commission initiated formal proceedings against Amazon aiming at investigating clauses in contracts between Amazon and e-book publishers.<sup>19</sup> The main focus of this ongoing investigation are clauses such as those granting Amazon ‘the right to be informed of more favourable or alternative terms offered to its competitors’ or ‘the right to terms and conditions at least as good as those offered to its competitors’. such behaviour may affect competition between e-book distributors and may be caught under article 101 or 102.
- Amazon has offered commitments.

# Earlier Apple case...

- In its *E-books* case, which involved Apple and its iBookstore the EU Commission only issued a preliminary assessment since the parties offered commitments that, in its view, addressed the anticompetitive concerns that it had identified.
- In particular, the final commitments included a ban on such MFN clauses.
- Vertical and horizontal aspect...
- The case was settled in the EU but led to substantial damage litigation on the US

# MFN clauses in the online booking

- MFN clauses in the online booking sector have been at the centre of different antitrust investigations conducted in a number of member states under the coordination of the Commission.
- The recent developments in the online booking sector have led to the dismantlement of a practice used until now throughout the industry in contractual relationships between, on the one hand, online travel agents (OTAs) such as Booking.com and, on the other hand, hotels.

# Booking.com case

Under the parity clauses in the contracts between Booking.com and hotels, the latter were obliged to:

- Offer Booking.com the same or better room prices, maximum room capacity and cancellation conditions as the hotel makes available
- On all other online and offline distribution channels

# NCAs decisions

- Through a series of decisions adopted by several NCAs under EU law (France, Italy and Sweden), Booking.com and other similar OTAs have renounced so-called parity clauses, by which the prices, availability and conditions had to be at least as favourable as those offered by hotels to competing online booking platforms.
- However, the commitments did not encompass narrow parity clauses, ie, clauses which prescribes that the prices hotels display on their own websites may not be lower than on online travel agents' portal.

# Resolution?

- On 25 June 2015, Booking.com announced that it would extend to hotels throughout Europe the commitments approved by the Italian, French and Swedish NCAs. Following Booking.com's steps, Expedia also announced that it would waive its rate, availability and conditions parity clauses in contracts with hotels in Europe for the next five years.
- Following these announcements, almost all of the NCAs that opened a probe against Booking.com and/or Expedia closed it (including Denmark, UK, Greece, Ireland, Switzerland, Austria, Poland and Italy).

## Stricter Germany...

- German competition authority (Bundeskartellamt) is the only NCA that prohibited narrow parity clauses. The German authority had indeed considered in a decision of 20 December 2013 that HRS' narrow best price clauses violated competition law.
- This stricter approach was confirmed by the Bundeskartellamt in the *Booking.com* decision of December 2015. In this case, the Bundeskartellamt ordered Booking.com to remove the best price clauses from its contracts. But Booking.com lodged an appeal before the Court of Appeal and applied for interim measures. These interim measures have been rejected and the substance of the case is still pending.



# Problem of coordination?

- The ‘patchwork nature’ of the *Booking.com* (and *Expedia*) case has been outlined by some officials and commentators
- In any event, European authorities agreed not to open further probes into price parity agreements between online booking platforms and hotel groups, and to monitor the effects of the remedies already secured



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# E-commerce and competition law

Brick and mortar vs. online shoppers, Geo-blocking and other issues...

# Novelties brought by e-commerce

- Significant commercial changes from traditional business models to online transactions with room for significant growth
- More transparency and intense competition online
- Manufacturers compete with their distributors by selling online themselves
- Online sales substitute traditional brick and mortar shops

# Digital Single Market (DSM)

- Serious problems with e-commerce identified by EU in the Digital Single Market Strategy:
- Relatively low cross border sales (compared to domestic sales); falling behind the US in digital services
- Recent initiatives by EU: e.g. (i) looking into VAT and copyright regimes, and (ii) legislative proposals e.g. recent proposals on consumer and contract law
- Purpose of EU competition law is to achieve the Single Market objective (see e.g. references in EU guidelines)
- Competition law is intended to complement the DSM
- strategy

# DG Competition inquiry into e-commerce:

- Area of economy of relevance for many players in the market (growth rate 10-20%)
- Gain a more comprehensive understanding of competition issues, market dynamics and business challenges in cross-border e-commerce
- Relevant for the development of the EU digital single market
- Better understanding of digital antitrust issues
- Review of online vertical restraints in light of new market realities
- Getting hands around the online platforms (e.g. Google investigations)

# One specific issue: Geo-blocking regulation

- **Geo-blocking** is a commercial practice whereby retailers and digital content providers prevent online shoppers from purchasing consumer goods or accessing digital content services because of the shopper's location or country of residence. This is one factor affecting cross-border e-commerce.
- **Good:** protects IPR, national tax system etc.
- **Bad:** partitions the EU digital single market

# Results of the sectoral enquiry in 2016

- Replies from more than 1400 retailers and digital content providers from all 28 EU Member States. It was found that 38% of the responding retailers selling **consumer goods**, such as clothes, shoes, sports articles and consumer electronics online use geo-blocking. For these products, geo-blocking mainly takes the form of a refusal to deliver abroad. Refusals to accept foreign payment methods, and, to a lesser extent, re-routing and website access blocks are also used. While a majority of such geo-blocking results from unilateral business decisions of retailers, **12% of retailers report contractual restrictions to sell cross-border** for at least one product category they offer.
  - As regards **online digital content**, the majority (68%) of providers replied that they geo-block users located in other EU Member States. This is mainly done on the basis of the user's internet protocol (IP) address that identifies and gives the location of a computer/smartphone. **59% of the responding content providers indicated that they are contractually required by suppliers to geo-block.**
-

# Online sale of consumer goods

- Manufacturers have responded to the growth of e-commerce by adopting a number of practices in order to better control the distribution of their products and the positioning of their brands.
  - Selective distribution systems are used more widely and manufacturers increasingly sell their products online directly to consumers.
  - Manufacturers also increasingly use contractual sales restrictions in their distribution agreements. The report finds that:
    - over two in five retailers face some form of price recommendation or price restriction from manufacturers;
    - almost one in five retailers are contractually restricted from selling on online marketplaces;
    - almost one in ten retailers are contractually restricted from submitting offers to price comparison web sites;
    - over one in ten retailers report that their suppliers impose contractual restrictions on cross-border sales.
  - All these types of contractual sales in general more difficult and ultimately harm consumers by preventing them from benefiting from greater choice and lower prices in e-commerce.
-



# Digital content

- The availability of licences from the holders of copyrights in content is essential for digital content providers and a key determinant of competition in the market.
- The report finds that copyright licensing agreements are complex and often exclusive. The agreements foresee what territories, technologies and release windows digital content providers can use.
- More than 60% of the licence agreements submitted by rights holders are limited to the territory of a single Member State. Almost 60% of responding digital content providers have contractually agreed with right holders to geo-block.

# Articles 101 and 102

- In some cases, geo-blocking appears to be linked to **agreements between suppliers and distributors**. Such agreements **may restrict competition in the Single Market in breach of EU antitrust rules**. This however needs to be assessed on a case-by-case basis.
- In contrast, if geo-blocking is based on **unilateral business decisions** by a company not to sell abroad, such behaviour by a non-dominant company falls clearly **outside the scope of EU competition law**.
- Specific rules for IP protection

# Article 101 and vertical restrictions

- Vertical Agreements Block Exemption Regulation (330/2010) and Guidelines on vertical restraints (2010)
  - Safe harbour subject to a 30% market share threshold
  - List of hard-core restrictions (Art 4):
    - obligations to set a fixed or minimum sales price
    - restrictions of passive sales into a certain territory or customer group
    - restrictions of active or passive sales to end-users by members of a selective distribution system
  - EU Commission has not recently focused on vertical restraints for a long time (e.g. Peugeot in 2002)
  - Referrals to ECJ in Luxembourg from national courts
  - Gap between intense e-commerce activity and limited ECJ case law?
-

# EU vertical guidelines

Guidelines on vertical restraints (2010):

(i) BER does not cover copyright licensing (para 33 (e)), and (ii) provide explanations regarding online sales restriction

In principle, every distributor must be allowed to use the internet to sell products

In general, internet is considered a form of passive selling, since it is a reasonable way to allow customers to reach the distributor

# Digital hardcore restrictions

EU Guidelines give examples of digital hardcore restrictions:

- Preventing customers from viewing its website or rerouting the customers
- Terminating a credit card transaction when the card reveals an address outside the exclusive territory; or
- An agreement that the distributor shall limit its sales made via the internet BUT the supplier may require that the distributor sales a certain amount in value or in volume offline

# Pierre Fabre Case, CJEU C439/09

- Fabre manufactures ranges of cosmetic and personal care products
- It's French distribution contracts for certain of its brands included a clause that required that all sales must be made in a physical space
- This clause effectively restricted all forms of selling via the Internet
- French Competition Authority found that these agreements were anti-competitive.
- The Paris Court of appeal made a reference to the CJEU.

# CJEU decision

- CJEU found that such ban amounts to a restriction by object
- Ban on internet sales could restrict competition as it considerably reduced the ability of a distributor to sell products to customers outside its territory
- The agreement had as its object the restriction of passive sales to online end users outside of the distribution area. Therefore, the block exemption cannot apply to the agreement
- French court to decide whether the ban could be justified as a means of achieving a legitimate aim under Art 101 (3)

# Murphy/Premier League, C-403, 438/08

- An exclusivity provision plus the obligation on the broadcaster not to supply decoders with a view to their use outside of the exclusive territory
- Amounts to absolute territorial protection because and limits competition by restricting the response to a passive cross-border sale
- ECJ 'limited exhaustion' means that subscription legitimately purchased in one Member State can be used in other Member State.
- In addition, ECJ found that the UK legislation was infringing EU law
- Practical effects of the case?



# Regulation of online platforms?

- The Commission suggested in its 2016 Communication on Online Platforms and the Digital Single Market that a new legislation may be needed to tackle the challenges raised by online platforms.
  - According to the Communication, businesses expressed concerns regarding ‘unfair trading practices from online platforms’. The most commonly experienced problematic practices include: platforms imposing allegedly unfair terms and conditions; platforms refusing or unilaterally modifying market access conditions; the dual role of platforms not only transacting in a capacity of supplier but competing with suppliers; parity/MFN clauses; and the lack of transparency notably on platform tariffs, on use of data and on search results.
-

# Regulation of online platforms?

- The Commission underlined that online platforms constitute for SMEs and micro-enterprises ‘important entry points to certain markets and data’. The Commission also emphasises that online platforms have ‘a key interest in a sustainable and positive relationship with their business users’.
  - EU Member states are far from reaching a consensus on the question, as most of them seem reluctant to adopt a uniform approach regulating online platforms.
  - The Commission will further study the sector more closely in order to decide in spring 2017 if a new European Union legislation is required.
  - Pro: equal opportunity
  - Con: too much regulation?
-



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# Intellectual Property Rights and Competition Law

Conflict or peaceful co-existence?

# IP and Competition law

- IP laws
  - Provide exclusive rights for IP holder – exclude others from certain acts
- Competition law
  - Preserve competition as driving force in efficient markets by prohibiting certain conducts
  - Limits i.e. the exercise of market power under certain circumstances where necessary to preserve competition
- Common purposes
  - To promote innovation
  - Consumer welfare

# Intellectual Property Rights

- Patents
- Copyright
- Trademarks
- Utility Models
- "Patent wars", e.g. Apple/Samsung

# Effects of IPR (1)

- **(1) IPR has produced significant gains for society:**
    - Innovation gains far exceed gains from price competition and capital accumulation (Schumpeter)
    - Social value of increases in life expectancy due to advances in medical research from 1970 to 1990 estimated at \$2.8 trillion per year (Murphy & Topel (2003)) (US)
  - **(2) In reality most innovation is incremental**
    - So focus on allowing follow-on innovation is as important as facilitating quantum leaps through strong IP
-

# Effects of IPR (2)

- **(3) IPR does not normally confer market power**
  - Most inventions fail to yield a return
  - But IP *may* lead to market power absent constraining substitute technology
- **(4) Core consensus on IP less stable than competition law**
  - Most issues in competition law fairly settled; discussion usually at margins
  - IP system and trade-offs much less clear and do not involve a “one size fits all.” Error costs are potentially significant

# Balancing IPR and Competition

- Allocative efficiency:
    - Low prices
    - Free market access
    - Scope and duration of patent and other IPR protection
    - Duty to license in exceptional circumstances
  - Dynamic efficiency
    - The core of IPR is to exclude others from the use of your intellectual property
    - This creates incentives to innovate and the results of your R&D will be protected
    - Incentives to innovate
    - Sequential innovation model
  - Balance allocative and dynamic efficiencies
    - Improve market access and allocative efficiency without hampering dynamic efficiency
-



# IP and Competition law

- Even though competition law and IP are aiming for the same goals, tension between these laws is inevitable.
- Occasional clashes, since certain exercise of IPRs may lead to conflicts with competition law
  - Unilateral acts by dominant companies, i.e. refusal to license/supply to any third party
  - Agreements among companies (e.g. on grant backs and no-challenge clauses)
- Competition law is evolving to become applicable on IP
  - More liberal, economic approach in principle
  - Case law on the Article 102 abuses
  - Two sided markets
  - Importance of effects based analysis
  - Patent wars and FRAND cases



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# Technology Transfer Agreements

Block Exemption system

# Technology Transfer Agreement Block Exemption Regulation

- Regulation 316/2014 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of technology transfer agreements (TTBER) entered into force on 1 May 2014.
- Guidelines supplement TTBER by clarifying the application of TTBER and also the application of Art 101 TFEU to agreements that fall outside the scope of the regulation.
- Also rules on patent pools and patent settlements are included in the Guidelines

# Scope: Technology transfer agreements

- For EU competition law, a technology transfer agreement is a licensing agreement where one party (the licensor) authorises another party or parties (the licensee(s)) to use its technology (patent, know-how, software license) for the production of goods and services.
  - Technology transfer agreements cover licensing agreements between two (bilateral) or several parties (e.g. patent pools). The TTBER covers only bilateral agreements while the Guidelines also cover multi-party agreements in the form of patent pools. Technology transfer agreements can be concluded between competitors (so-called horizontal agreements; concluded between companies that compete against each other for the sale of the same product or service) and non-competitors (so-called vertical agreements; concluded between companies active at different levels of the production or supply chain, such as for example a mining company and a steel manufacturer).
-

# Structure of Regulation 316/2014

- Is the agreement a technology transfer agreement as defined by the TTBER (Article 2)?
- What is the relevant product or technology market (Article 3)?
- Are the parties competitors on the relevant product or technology market(s) (Articles 3-5)?
- What are the market shares of the parties? Will the market shares increase during the lifetime of the license agreement (Article 3)?
- Does the license contain reciprocal or non-reciprocal licenses (Article 4)?
- Does the agreement contain any hardcore restrictions (Article 4)?
- Does the agreement contain any excluded restrictions? Are the clauses containing excluded restrictions severable from the rest of the agreement (Article 5)?
- Could the benefit of the TTBER be withdrawn by the Commission or by the national authorities (Article 6) or could it be disapplied (Article 7)?

# Scope

- Article 2 of the TTBER provides that Article 101(1) shall not apply to technology transfer agreements entered into between two undertakings permitting the production of contract products
- The TTBER only applies to agreements having their primary object the transfer of technology as opposed to the purchase of goods and services or the licensing of other types of intellectual property
- The agreement is not covered by Article 101, e.g. there are no restrictions or no effect on trade between member states
- In practice, the TTBER Guidelines cover much wider area than the Regulation

# EU Market Share Ceilings

- When the parties to the agreement are **competitors**, their combined market share may not exceed **20%** on both technology and product market.
- When the parties to the agreement are **not competitors**, the market share of each of the parties may not exceed **30%** on both technology and product market.
- Broad exemption would not be possible without market share restrictions?
- In addition, the guidelines will contain a **second safe harbor based on the number of competing technologies that are available to potential licensees at a comparable cost.**
  - Will provide extra guidance especially for dynamic sectors.
  - In practice it will still need still be necessary to identify suitable technologies and therefore does not make the market definition exercise easier.

# TTBER - Hardcore Restrictions

- Acknowledgement of vertical and horizontal agreements in certain restrictions
- Competition risks are greater for licensing between **competitors** and are greater for **reciprocal** licensing than for non-reciprocal licensing.
  - Hardcore restrictions between non-competitors:
    - Minimum resale price maintenance
    - Certain passive sale restrictions
    - Restrictions of active and passive sales to end users by a licensee which is a member of a selective distribution system and which operates at the retail level
  - Hardcore restrictions between competitors:
    - Maximum and minimum resale price maintenance
    - Reciprocal output limitations
    - Certain market or customer allocations
    - Restrictions on licensees' ability to exploit their own technology or on the parties' ability to carry out research and development
- If an agreement contains a hardcore restriction, the whole agreement is excluded from TTBE irrespective of market share



# Hardcore Restrictions

- An agreement which contains a hardcore restriction falls outside the scope of application of the exemption in its entirety
- Separate lists for agreements between competitors (Article 4(1)) and agreements between non-competitors (Article 4(2))
- If the relationship between the parties to an agreement changes from competitors to non-competitors, the hardcore list relevant for agreements between non-competitors will continue to apply to the agreement unless the agreement is subsequently amended in any material respect
- For certain hardcore restriction, a distinction is made between *reciprocal* and *non-reciprocal* agreements

# Price restrictions

- Price-fixing
  - Competitors (Article 4(1)(a))
  - Non-competitors (Article 4(2)(a))
  - An obligation on the licensee to pay a certain minimum royalty does not itself amount to price fixing
  
- Maximum and recommended prices
  - Competitors: forbidden (Article 4(1)(a))
  - Non-competitors: exempted (Article 4(2)(a))

# Output restrictions

- Competitors: Hardcore when imposed on the licensor in non-reciprocal agreements, or when imposed on both licensees in reciprocal agreements (Article 4(1)(b))
- Non-competitors: exempted

# Stricter approach 1 – no termination in case of validity attacks

- The Commission waives the automatic block exemption for certain types of clauses opting for a case-by-case assessment instead.
  - This important change of approach was particularly debated regarding termination clauses in the event of validity attacks.
  - The block exemption for this type of termination clauses in the former TTBER was waived and replaced by a more strict case-by-case approach for termination clauses in non-exclusive license agreements.
  - Only termination clauses in exclusive licenses will remain under the automatic block exemption; specific rules apply to know-how licenses.
-

# Stricter approach 2 – Grant backs

- Other topics which have been subject to changes are clauses forcing the licensee to grant the licensor an exclusive license for any improvements to the licensed technology.
- Whereas the former TT-BER exempted obligations for grant-back of rights on non-severable improvements to intellectual property developed by the licensee, under the new regulation even this exception shall be waived.
- Thus, the only option for the licensor will be to require grant-back of rights on any kind of improvements of the licensed technology on a non-exclusive basis.
- How does this affect parties' incentives?

# Good or Bad?

- Good, because
  - Division of clauses only to two categories (hardcore and excluded) instead of previous four
  - All clauses outside these scopes will be exempted
- Bad, because
  - Market share thresholds introduce complexity; determination of the relevant product and geographical market is complex.
  - Market share is also used to determine whether or not the parties are competitors – the scope of different clauses is not clear.
  - Prospect of possible litigation and/or third party complaints seeking to take advantage of some of the uncertainties in the effects-based self-assessment regime
  - Digital economy, two-sided markets and small players?

# A practical approach

1. Why is the licensing deal done?
2. Does it increase or decrease output?
3. Does it have an effect on prices?
4. What is the overall effect on IP markets and downstream product markets?
5. Does the agreement contain any hardcore or blacklisted provisions?
6. Shares in product markets and number of available technologies?
7. Specific concerns?
8. Read and apply the guidelines!

# IPR, Article 102 and compulsory licensing



# Case Magill, C-241 & 242/91

- Refusal by two UK broadcasters and one Irish broadcaster to license programming information for inclusion in a new comprehensive weekly guide
- Each broadcaster had factual monopoly over the information
- Each also had copyright in the listings under UK and Irish law
- ECJ stated:
  - Broadcasters had a dominant position in market for programme listings
  - Refusal to license was an abuse against “exceptional circumstances” – prevented creation of a new product
    - Consumer demand for the new product
    - The unjustified refusal to provide information prevented the appearance of the new product
    - IP holders able to reserve secondary market to themselves
  - Compulsory licensing as the remedy

# Case IMS Health, C-418/01

- IMS Health provides pharmaceutical laboratories with German regional sales data on pharmaceutical products, formatted according to a structure of 1860 or 2847 bricks which each correspond to a designated geographical area.
- In 1988, a director left IMS Health and set up Pharma Intra Information (PII) also in order to sell German regional sales data for pharmaceutical products presented on the basis of another brick structure of 2201 bricks. Having tried in vain to sell the data presented on the basis of that structure, PII decided to work with the 1860 or 3000 brick structures, which are very similar to IMS Health's structures.
- The national court considers that IMS Health cannot refuse to grant a license to NDC Health if that refusal constitutes an abuse of a dominant position according to Community law. It therefore referred questions to the Court of Justice on the circumstances under which such behavior constitutes an abuse of a dominant position.

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    - IP holders able to reserve secondary market to themselves
  - Compulsory licensing as the remedy

# Case IMS Health, C-418/01

- ECJ decision on April 29, 2004
  - **In order for the refusal** by an undertaking which owns a copyright to give access to a product or service indispensable to carry on business **to be regarded as an abuse, three conditions** must be fulfilled:
    - the undertaking which requested the license must intend to offer **new products or services** not offered by the owner of the copyright and for which there is a potential consumer demand;
    - the **refusal cannot be justified** by objective considerations, and
    - the **refusal** is such as to **reserve to the undertaking** which owns the copyright **the relevant market**, by eliminating all competition on that market.
  - It is now for the national court to determine whether those conditions are fulfilled in the case before it.

# Case IMS Health, C-418/01

- IMS Health provides pharmaceutical laboratories with German regional sales data on pharmaceutical products, formatted according to a structure of 1860 or 2847 bricks which each correspond to a designated geographical area.
- In 1988, a director left IMS Health and set up Pharma Intra Information (PII) also in order to sell German regional sales data for pharmaceutical products presented on the basis of another brick structure of 2201 bricks. Having tried in vain to sell the data presented on the basis of that structure, PII decided to work with the 1860 or 3000 brick structures, which are very similar to IMS Health's structures.
- The national court considers that IMS Health cannot refuse to grant a license to NDC Health if that refusal constitutes an abuse of a dominant position according to Community law. It therefore referred questions to the Court of Justice on the circumstances under which such behavior constitutes an abuse of a dominant position.

# Case IMS Health, C-418/01

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# Microsoft – interoperability abuse

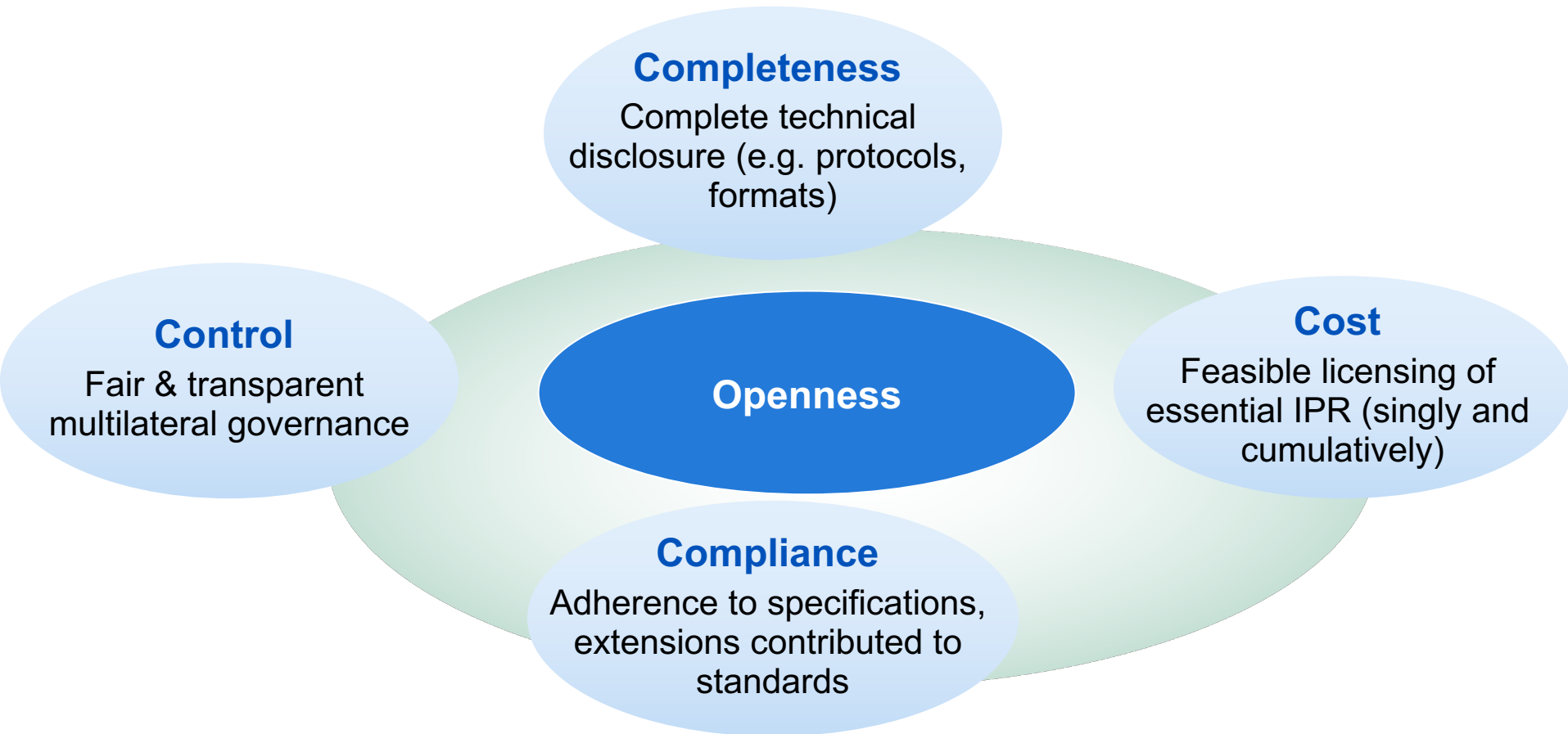
- A company in dominant position can in abuse its dominance by refusing to give the information or licenses needed for interoperability.
- In some situations it is possible to receive a compulsory license to the relevant IPR.
- Mandatory access to IPR of a dominant firm can be ordered only if an abuse has been committed - refusal to grant a license is unlawful only if it is combined with additional “abusive conduct”.
- This remedy can be ordered only if it is appropriate, proportionate and effective.
- Additional elements of “abusive conduct” must
  - Be something done by the dominant company.
  - Involve effects which are not merely the normal result of enforcing the intellectual property right in the market it primarily applies.
  - Effect, which is anticompetitive or exploitative and harms consumers.
  - Link between the additional conduct and refusal to license.
- Case law on the mandatory (compulsory) licensing
  - Magill
  - IMS Health
  - Microsoft

# Why interoperability?

- Unfragmented market key to mass market penetration, network effects
  - Threat from business model issues, not technology
  - Emerging markets need shepherding, not mature ones
  - Supporting interoperability is more important than ever
  - The threat is massive delay vs. expectations
- Only open standard technologies for universal interfaces
- Openness for interoperability relates to interfaces; *products* are proprietary (open source helps but not central to interoperability)
- Differentiation is possible on top of interoperable core



# What is an open standard?



Multivendor environment is a permanent characteristic of an open environment -  
**Independent Interoperable Implementations available**

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# Magill-IMS criteria

- Leading cases on **Article 102** obligation to license IP were *Magill* (1995) and *IMS Health* (April 2004)
- Cases with very peculiar facts
  - public domain, by-product **information**
- Four-part test
  - indispensability of the information that is refused for activity on an adjacent market
  - elimination of all competition on that market
  - refusal prevents appearance of a new product or service for which there is potential consumer demand
  - lack of objective justification

# Microsoft vs. Magill and IMS

- Extraordinary market power of Microsoft
  - Super-dominance (> 90 % market share)
  - Amount of market power affects the likelihood of foreclosure
- Particular nature of operating systems
  - Network products by their nature intended for interoperation
  - Refusal to share IO information created an applications barrier to entry
  - Normal industry practice in ICT is to share interoperability information
- Not really a "true" compulsory licensing case because of the relatively low innovative value of the communication protocols
- Both in Magill and IMS the scope of IPR had been extended to its boundaries which led to a) competition law intervention and b) subsequent scaling down of the IPR (law change in Magill and German appeals court decision in IMS)
- In fact, the "conflict between IPR and competition" law is much less severe than the sheer amount of literature would suggest...☺

# Microsoft's position in CFI

- Communication protocols contain very valuable IPR that is protected (patents, copyrights, trade secrets)
- Intervention reduces Microsoft's incentives to innovate
- Risk of cloning if competitors get free access to Microsoft's proprietary information
- The case is essentially a compulsory license case
- IMS-Magill criteria are not met in the case

# Commission's position in CFI

- Communication protocols at issue neither innovative nor IP
- But abuse even on the hypothesis most favorable to **Microsoft** that the **refusal** is regarded as a **refusal** to supply to third parties a licence relating to IP rights (**CFI**, 107)
- May take account of exceptional circumstances other than those in *Magill* and *IMS Health*; those 'exceptional circumstances' are anyway present
- Whereas **Microsoft** relied primarily on the *Magill* and *IMS Health* criteria, the Commission contended that their 'automatic' application would be 'problematic' (**CFI**, 315-7)

# CFI on Interoperability

- **Microsoft** failed to show that **interoperability information** is not indispensable (CFI 436)
- No manifest error in finding *risk* of elimination of effective competition on work group server OS market (CFI 618)
- Not manifestly incorrect to find that Microsoft's **refusal** limits technical development to the prejudice of consumers, so the new product test is met (CFI 665, which follows the statement that '**Microsoft** impaired the effective competitive structure on the work group server operating systems market by acquiring a significant market share on that market')
- **Microsoft** did not demonstrate any objective justification, in particular that the impact on its incentives to innovate outweighed the exceptional circumstances (CFI 709-11)

# Evaluation of the case

- An important precedent on disclosure of interoperability information
  - Market power from standardisation of core system architecture
  - Compare IBM case in the 1980's
- Magill/IMS
  - If covered by IPR, refusal to supply can only breach Art 82 in **exceptional** circumstances
  - Licence **indispensable** to competition in related market
  - Refusal **eliminates all competition** in this market
  - Prevents emergence of **new product** for which consumer demand
- Microsoft
  - Not all competition needs to be blocked but it is enough to prevent **effective competition**
  - **Risk of eliminating** effective competition is sufficient
  - CFI reformulated third limb to “**new innovative features**”, lowering the bar
  - “Exceptional circumstances” found in the case with apparent ease

# IP/competition: trends (1)

- Move away from historical existence/exercise distinction in relation to IP rights:
  - Respect for “*specific subject-matter*” of IP and “*essential function*”
  - See *Volvo/Renault*, *Magill*, and *IMS Health*
- Even move towards “*exceptional circumstances*” broadened to include conduct that “*limits production to the prejudice of consumers*” (Article 102(b) TFEU) (*Microsoft* (reduction in interoperability))



## IP/competition: trends (2)

- Assertion of IP/design rights treated as anti-competitive *in extremis* where bad faith/vexatious (*Decca Navigator, ITT Promedia*)
- Vexatious litigation/bad faith test replaced by more general “*competition on the merits*” or even broader “*transparency*” test (*AstraZeneca* (see also *Reckitts* (UK) *Pfizer* (Italy))

# IP/competition: trends (3)

- “*Strategic use*” of IP:
  - *Samsung, Motorola* FRAND cases pending (see also *Nokia/MS* response complaint by Google)
  - *Qualcomm* investigation closed; *IPCom* settled (see also recent *IPCom v Nokia*)
  - Huawei/ZTE – advocate general’s opinion
  - *Boehringer* case closed 2011 (Boehringer agreed to remove the alleged blocking positions) (see also *Servier* 2012))
  - *Rambus* (2010). *Ex ante* value of patents may be small; essentially a comparison with next best competitive alternative(s). But *ex post* value may be enormous where firms are committed to standard including essential (but late/non disclosed) patents.

# IP/competition: trends (4)

- “Pay for delay” cases (Servier, Lundbeck, Cephalon, Johnson & Johnson) fined by the EU Commission
  - Other SSO issues:
    - Can a failure to licence on FRAND terms itself infringe Article 101/102 TFEU? What is the remedy? Nullity?
    - Meaning of FRAND? *Ex ante* value?
    - Injunctive relief?
      - Knowing infringement (compulsory licence)
      - Willingness to pay FRAND terms
    - Discriminatory royalties. Defences?
    - Aggregate royalties
    - Transfer/sale of patents subject to FRAND
-

# IP and Competition law

- IP laws
  - Provide exclusive rights for IP holder – exclude others from certain acts
- Competition law
  - Preserve competition as driving force in efficient markets by prohibiting certain conducts
  - Limits i.e. the exercise of market power under certain circumstances where necessary to preserve competition
- Common purposes
  - To promote innovation
  - Consumer welfare



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# Digital Platforms and Competition Law

New issues and challenges.

# Digital platforms

- The last three decades have witnessed a significant growth in high-tech, often internet based media and communication "network industries", such as video games, computers, social networking or e-commerce shopping malls.
- These industries are often organized around physical or virtual platforms that enable distinct groups of agents to interact with one another. Digital platforms function as intermediaries economic actors and users. For example:
  - Online search platforms such as Google or Baidu provide an online search platform between web users and advertisers;
  - PC operating systems such as Microsoft provides a software platform that allows transactions between independent software vendors and users;
  - Video game platforms, such as Sony PlayStation or Nintendo, provide software tools that enable publishers develop games and a device on which consumers can play those games;
  - Smartphone platforms such as Android or iPhone provide an interface between users of the device and content providers such as application developers;
  - Online shoppers such as Amazon connect customers willing to buy books online and publishers as well as all suppliers and buyers or all kind of other commodities. eBay auction site allows us to buy and sell (used) products online.
  - Social media platforms such as Facebook provide an interface for social networking and LinkedIn for business related networking. The latter is also a job board and recruiting tool. Spotify allows us to listen to our favorite music "for free" or, actually, in exchange for agreeing to listen to some advertisements as well.
- Digital platforms are normally organized around physical or virtual platforms that enable distinct groups of agents to interact with one another. Often one side of the market is subsidized with the income from the other side of the market. Many of the digital platforms operate by attracting eyeballs with (in case of social networks self-generate) content and by selling access to those eyeballs and/or information gathered to advertisers.
- The concept of multi-sided markets is not new. Consider, for instance, a medieval market place connecting customers with producers, e.g. farmers and citizens. Note also credit card companies operating between banks, merchants and consumers.
- What constitutes an evolution here is the central place digital media platforms play in the so called "new economy" markets, in particular in the software, communication and media industries. An increasing number of modern businesses belonging to these sectors are two or multisided platforms as a result of technological changes that have drastically lowered the costs and increased the benefits of connecting diverse customer groups on a single platform.

# Two (Multi) Sided Markets

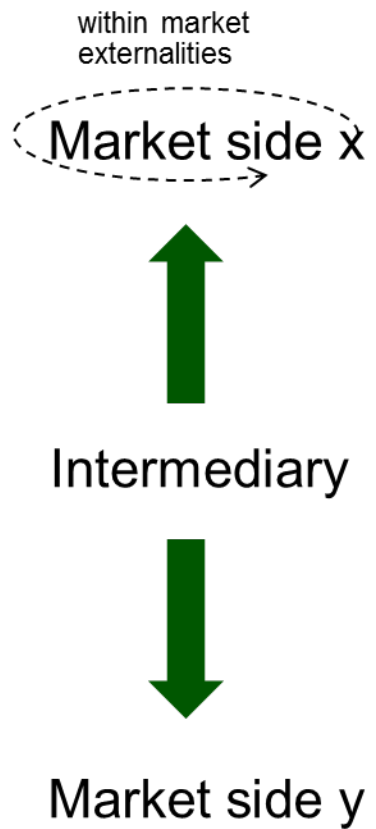
- Direct and indirect network effects
- Importance of scale or “critical mass” to make the operation profitable
- “Winner takes it all” competition vs. level playing field
- Importance of information as a the key raw material and “kingmaker”
- “Customer = merchandise as well”
- Importance of IPR (tangible vs. intangible assets)
- New challenges for competition policy, e.g.
  - Analysis methods, e.g. market definition, price-cost margins
  - Dynamism of these fast moving markets (fast monopoly vs. no monopoly)
  - Multiple effects on different sides of the market complicate the analysis



# Challenges to traditional market analysis

- Analysis of one market (e.g. Market x) of a 2-sided business model cannot reveal whether a business practice has adverse competition effects
- There is little sense in separate analysis of the two sides of the market
- Some failures of 1-sided antitrust logic in 2-sided markets
  - Market definition alone does not provide accurate answers; other tools needed as well
  - A high price-cost margin on one side of the market does not necessarily reflect significant market power
  - A price below cost price on one side of the market does not necessarily indicate predation; on the other hand offering the service for free does not in all situations indicate that it is pro-competitive (look at the industry practice; there is no free lunch)
  - Significant direct or indirect networks effects with a strong installed base may effectively restrict switching which may produce more harmful tying cases than the traditional theory suggests

Likewise interoperability abuses leading to higher entry barriers may prove quite harmful





# Some Market Characteristics

- Scale and access customer data are very important
- Asymmetric market that is developing rapidly and dynamically
- Indirect market externalities seem to play an important role with a clear risk of tipping
- Competition has to be analyzed on two levels: on the level “ecosystems” and the level “applications” that both affect each other
- Difference between open/free and closed/controlled platforms
  - Open/free: parties can freely incorporate their own applications on top of the platform
  - Closed/controlled: access of third party applications is restricted or closed (de jure or de facto commercially)
- Search advertising is moving to mobile which is the growth market, yet the market structure in mobile search is similar to “traditional” internet search

# Some Article 101 issues

- Online sales and potential for market partitioning (see Commission's vertical guidelines); digital vs. mortar shops
- Potential illegal activities in standardisation context
- Network markets and definition of actual and potential competition
- Several price fixing cases e.g. regarding components for high tech products found in past years
- Article 101 issues seem to pose less new topics sofar, except the difficult balancing act of protecting investments in sales infrastructure and preventing free riding on the one hand and allowing new new, more cost effective distribution modes to emerge
- Most pertinent questions seem to relate to Article 102

# Some Article 102 issues relating to digital platforms

- Digital markets are fast moving and dynamic; yet due to importance of scale and installed base they can lead to durable monopolies
  - Endogenous and exogenous growth
  - Interoperability abuses preventing market access of competing products; refinement of the essential facility concept to deal with high tech markets
  - Anticompetitive product design (bundling)
  - Protecting installed base with exclusivity provisions (preventing competitors from reaching a "critical mass")
  - Preventing or manipulating access to information
  - Imposed asymmetry in business operations (e.g. in data crawling)
  - Asymmetric IPR terms that prevent market access
  - FRAND and ex ante
-

# Some key challenges for analysis

- Complicated nature and crucial role of the digital platform markets
    - Importance for economic growth
    - Digital single market
    - Incentives to innovate versus artificial protection of the installed base?
    - "Schumpeterian" view: efficient duration of the dominance?
    - Historical, current and new data?
    - Analysing tipping and foreclosure: to soon versus too late?
    - Qualitative analysis instead of formal tools?
  - Potential for new type of abuses
    - New IPR issues
    - Interoperability issues
    - Product design issues (bundling)
    - Exclusivity, asymmetric business practices and information abuses
  - Evaluation of dynamic effects and market access
  - EU and US comparison
  - Institutional questions
-

# Article 102

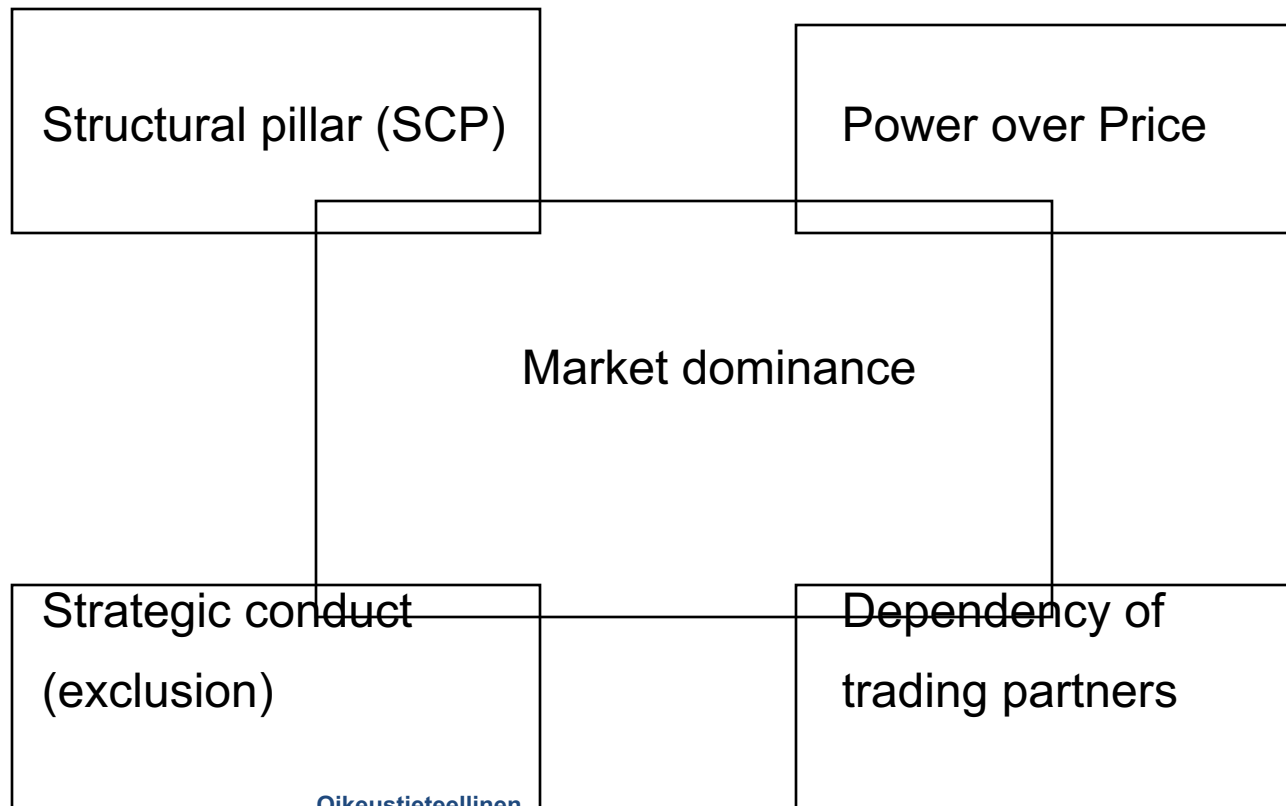
- "Any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it shall be prohibited as incompatible with the common market in so far as it may affect trade between Member States."
- Abuse - Art.102
  - (a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;
  - (b) limiting production, markets or technical development to the prejudice of consumers;
  - (c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
  - (d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

# Market Dominance

- A dominant position "relates to a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained in the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers."
- Market power: possibility to raise prices above competitive level
- Market dominance: substantial amount of market power
- Decisive factors:
  - market share of 40-50 %
  - competitive advantages of the market leader (cost advantages, IPR, brand, customer loyalty etc.)
  - vulnerability of competitors (exclusion and foreclosure)
  - dependency of trading partners
  - Pricing above costs and above competitive level
  - direct measurement of market power
  - indirect measurement of market power



# Eclectic Model of Market Dominance (Kuoppamäki 2003)



# Dominant position criteria

Hoffmann-La Roche case, 1979

- A dominant position relates to a position of economic strength enabling a company to prevent effective competition being maintained on the relevant market, by affording it the power to behave to an appreciable extent independently of its competitors, its customers and the consumers
- A dominant position may derive from several factors which, taken separately, are not necessarily determining :
  - - substantial market shares (> 50%)
  - - large gap with nearest competitor's market shares
  - - technological advantages and overall financial strength
- Most important criteria: 1. Market structure, 2. Power over price, 3. Customer dependency, 4. Ability to exclude competitors



# Classification of abuses

- **Exploitative abuse:**
  - A dominant company obtains an advantage at the expense of the consumer regardless of any effect on the competitive process or market structure.
  - E.g. excessive pricing to a final customer, refusal to deal, discrimination
- **Exclusionary abuse:**
  - Threatens to prevent, restrict or distort competition by changing the structure or dynamics of the market.
    - A dominant company has a special responsibility not to impair competition.
    - “competition on the merits” is allowed only?
    - Covers also potential impact on the markets - likelihood of actual foreclosure of the competitors?
    - E.g. price squeeze, predatory pricing, loyalty rebates
- Often abuse has **simultaneously** both exclusionary and exploitative elements



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# Article 102 and foreclosure. The Intel case.

Where do we stand today?

# Economic argumentation under Article 102

- Although sometimes otherwise stated, argumentation based on economics is not new
  - Rather one could argue that it has changed intermittingly
  - Economics is a tool to competition lawyer, it is not capable of producing solutions on its own and it cannot replace judicial considerations
    - Microeconomics as a tool, for instance, in defining the relevant markets, measuring market power and estimating its effects
    - Competition analysis is becoming more complicated; the challenges of dynamic network economy; old tools for analysis may not be adequate anymore
    - On the background are normative questions to which economics is incapable of answering
- Article 102 is still the most "traditional" field where many key precedents stem from the 1970's

# Is evidence on foreclosure needed under Article 102?

- The question arises, whether showing “foreclosure” is legally required under Article 102 TFEU.
  - Traditionally the EU courts have remained to say the least untouched towards a more “effects based” application of Article 102 TFEU.
  - Recently, the case law seems to be moving away from strict “per se” standards under Article 102 TFEU.
  - That being said there is still tension between a more lenient, effects based approach looking at whether the practice has the effect or capability to foreclose as efficient competitors from the market and a stricter, traditional rule based approach stressing form and predictability.
-

# Exclusionary abuses, potential effects

- Requirement of actual, concrete effects on the markets cannot be held as a requirement for the abuse, since
  - Authorities would be able to intervene only when some detrimental effects have accrued; and
  - The actual effects are hard to assess accurately in any case.
- But what is the sufficient degree of potential effect that will constitute an abuse?
- The potential effect test was applied by the European Commission and Court of First Instance in the Microsoft case:
  - ...”tying of WMP constitutes conduct which by its very nature is liable to foreclose competition ..... “In the following sections, it will be explained why tying in the specific case has the potential to foreclose competition so that the maintenance of an *effective competition structure is put at risk*”
- New formulation of effect on competition?

# Exclusionary abuses – evaluation methods

- Various ways to establish criteria for the exclusionary conduct:
  - **Consumer harm test**: conduct does raise prices or harms consumers in some other way.
  - **“Sacrifice” test**: conduct makes the dominant company sacrifice profits or incur losses.
  - **“But for” test**: conduct is not rational but is aimed for exclusion of the competitors.
  - **As efficient competitor test**: conduct would exclude efficient competitor.
  - **Balancing test**: conduct that can only be balanced against efficiencies is abusive.
  - **Structure test**: conduct harms market structure (potentially)
- The impact of possible efficiencies gained influences the evaluation
  - the so called “efficiency defense”
    - Consumer benefit should be taken into account, but are also required

# Intel, Case C-413/14 P, Intel v Com., judgement 6<sup>th</sup> of September 2017.

- The case itself concerned **exclusionary rebates**. On appeal, the main issue on was the application of the as efficient competitor test (**AEC test**) that aims at finding out whether the contested practice had the effect or capability of foreclosing the market from as efficient competitors of the dominant player.
- The Commission had indicated in its decision finding abuse that the rebates in question were “*by their very nature*” capable of restricting competition such that examining all the circumstances of the case and conducting an AEC test were not necessary. Nevertheless, it conducted an AEC test to show that Intel’s rebates had exclusionary effects.

# Decision of the General Court 2014

- On appeal Intel criticized heavily Commission's AEC test.
- However, the General Court did not consider it to be necessary to conduct a detailed foreclosure analysis in a case relating to exclusionary rebates.
- In its judgment the General Court largely relied on the formalistic case law of the CJEU citing *Hoffman La Roche*, finding that loyalty rebates were quasi-*per se* illegal and considering that it was not necessary to consider whether the Commission had performed the AEC in an accurate manner (Case T-286/09, Intel Corp. v Commission, [2014], Decision of the General Court, June 12<sup>th</sup>, 2014).



# Decision of the CJEU 2017

- Purpose of Article 102 TFEU is *not to protect inefficient competitors*, but to prevent a dominant firm from adopting pricing practices that will have an exclusionary effect on as efficient competitors by using methods other than those that are part of competition on the merits. This statement is nothing new and it is fairly widely accepted.
  - Hoffman La Roche case law, which has been often cited to suggest that loyalty rebates should be analysed under a quasi-*per se* rule of illegality should be “further clarified” in the case where the undertaking concerned submits, based on supporting evidence, that the conduct is not capable of restricting competition and producing anticompetitive effects.
  - See Intel judgment, para.133 to 136, 137 to 139
-

# Decision of the CJEU

- However, even if the AEC test fails to show foreclosure, the practice may still be illegal under the “all circumstances test”. In that case, the CJEU considers that “the Commission is not only required to analyse
  - 1. the extent of the undertaking’s dominant position on the relevant market
  - 2. the share of the market covered by the challenged practice,
  - 3. conditions and arrangements for granting the rebates in question, their duration and their amount;
  - 4. possible existence of a strategy aiming to exclude competitors that are at least as efficient as the dominant undertaking from the market
- See Intel, para. 139.

# Intel Decision - efficiencies

- Rebates may *be “objectively justified”* and that “it has to be determined whether the exclusionary effect arising from such a system, which is disadvantageous for competition, may be counterbalanced, or outweighed, by advantages in terms of efficiency which also benefit the consumer.”
- This balancing analysis should, however, be carried out “only after an analysis of the intrinsic capacity of that practice to foreclose competitors which are at least as efficient as the dominant undertaking.”
- See Intel, para. 140.

# Intel and previous case law

- The need for enforcement authorities to look at all the circumstances of the case is, as such, not new as it could already be found in earlier cases, such as Michelin I and II, British Airways, and Post Danmark I and II.
  - Case 322/81, *NV Nederlandsche Banden Industrie Michelin v Commission*, [1983] ECR 3461 (“Michelin I”) and Case T-203/01, *Manufacture française des pneumatiques Michelin v Commission*, [2003] ECR II-4071 (“Michelin II”). Case C-95/04 P, *British Airways v Commission*, [2007] ECR I-2331. Case C-209/10, *Post Danmark A/S v Konkurrencerådet*, and Case C-23/14, *Post Danmark A/S v Konkurrencerådet*.
- Looking at all the circumstances of the case adds value as it allows the enforcement authority to develop a complete picture of the rebates’ capacity to foreclose. Yet, it should be noted that the CJEU does not set a minimum market coverage threshold for a rebates regime to fall under Article 102 TFEU. Thus, while it is generally accepted that the larger the coverage of the rebates, the greater the likelihood the rebates will have a negative impact on competition, the CJEU does not address the question of whether a minimum coverage is needed to trigger the application of Article 102 TFEU, although it was invited to do so by Intel.

# Intel – Outlook

- It is not yet clear what will be the implications of the Intel judgment going forward. This will be clarified in the years to come.
- Taking into account the fairly general statements of the Court it is likely that the decision will have implications also outside of rebates.
- While there is a movement away from the per se standards, the Intel decision cannot be seen as a fully-fledged adoption of an effects based test either.



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# Tying, bundling and interoperability abuses

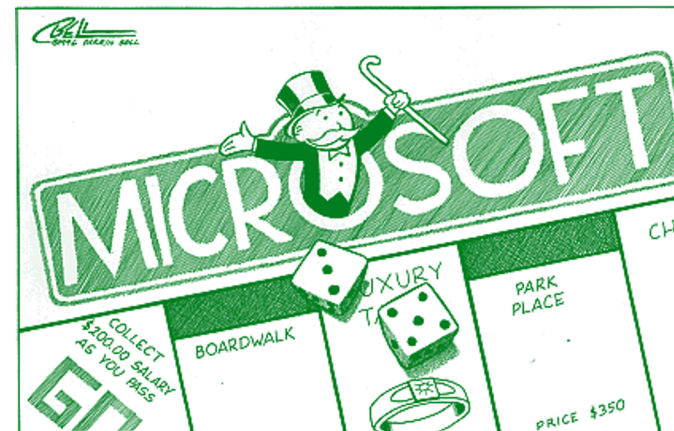
The Microsoft saga...

# Tying and foreclosure analysis (Art. 102 Guidelines)

- When considering anti-competitive foreclosure in the context of tying, the Commission will look in particular at the following factors:
    - 1, the degree of permanency of the effects of the tying: the risk of anti-competitive foreclosure is expected to be greater where the dominant undertaking makes its tying or bundling strategy a lasting one, for example through technical tying;
    - 2. the greater the number of products in a bundle within which the undertaking is dominant, the stronger the likely anti-competitive foreclosure;
    - 3. the degree of demand for the tied product: if there is insufficient demand for the tied product alone to sustain competitors who offer alternatives of the tied product, the tying can lead to those customers facing higher prices; and
    - 4. the degree to which the dominant undertaking can prevent a decrease in demand for the tied products by tying it to the tying products.
-

# Background: U.S. v Microsoft

- Collection of Civil Actions: pursuant to **Sherman Antitrust Act** – (Civil Action No. 98 – 1232)
- Violates Sherman Act (section 1 and 2)
- **May 18, 1998** – DOJ and 20 States take action against Microsoft (Software Monopoly)
  - October of 1998: DOJ sues Microsoft for forcing computer makers to include Internet Explorer as part of installation of Windows Software (separate case)
- Was Microsoft allowed to “bundle” its web browser, Internet Explorer, and Microsoft Windows, the operating system?
- **April 3, 2000**: Judge Thomas Jackson (U.S. District Court for District of Columbia) rules
- **September 26, 2000**: D.C. Circuit Court of Appeals overturns Judge Jackson’s ruling and remand the case for reconsideration under a different Judge (Judge Colleen Kollar-Kotelly)
- **September 6, 2001**: DOJ announces that it is no longer seeking to break up Microsoft (and seeks lesser –speedier - antitrust penalty)
- **November 2, 2001** – DOJ reaches agreement with Microsoft – share application programming (Preventing “Predatory Behavior”)
- **November 12, 2002**: Final Judgments – accepts DOJ settlements
- **April 22, 2011**: **Final Joint Status Report on Microsoft Compliance with the Final Judgments**





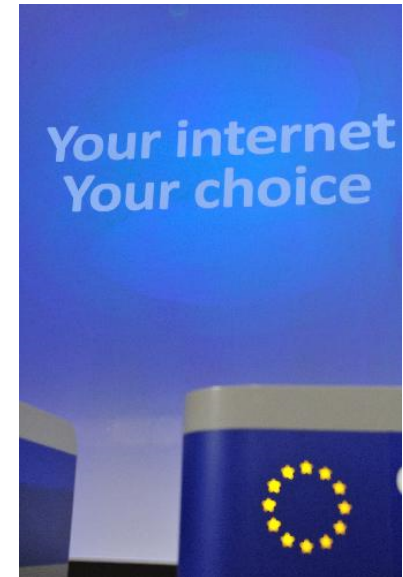
# US Antitrust Laws

- **Sherman Act (1890)**
  - **Section 1:** Makes illegal “contracts, combinations, and conspiracies” that restrain trade.
  - **Section 2:** Makes monopolies or conspiracies to create monopolies of a market illegal.
  - Sherman act has two standards for a violation “**per se**” and “**rule of reason**”
    - **Per Se violations:** tying arrangements and collusive bidding.
    - **Rule of Reason violations:** Exclusive dealing arrangements, vertical price fixing
- **Clayton Act (1914) created to expand the powers of the Sherman Act.**
  - **Section 7:** Makes illegal mergers and acquisitions which would lead to a monopoly or reduce competition.
- **Hart Scott Rodino Act (1976)**
  - Requires companies to report their planned mergers and acquisitions to the Department of Justice and the Federal Trade Commission if the transaction is valued above a statutory amount.
- **Federal Trade Commission Act**
  - **Section 5:** allows the FTC to administratively address new anti-competitive behavior that has not yet been covered by making illegal “unfair methods of competition in or affecting commerce, and unfair or deceptive acts or practices in or affecting commerce.”
    - Also allows the FTC to protect consumers administratively under the Sherman and Clayton Acts.



# Microsoft v. E.U.

- European Antitrust Law:
  - Treaty on the Functioning of the European Union
  - [Article 101](#)
  - [Article 102](#)
- “Dominant Position”: Novell complains that Microsoft’s licensing practices in 1993
- 1998 “Bundling” – Microsoft Media Player included with Windows is a problem for European Regulators (“Streaming Media Technologies”)
- 2004 Commission finds Against Microsoft: Sun Microsystems had charged that Microsoft refused to share information that would allow “interoperability” between its servers and the equipment produced by the software giant; Fine of €437million (\$794million) imposed
- Microsoft Argues that the ruling will infringed on Intellectual Property Rights and stifle innovation
  - The E.U. wanted Microsoft to disclose or license its server protocols
- September 17, 2007: Appeals Court dismisses Microsoft’s arguments
- December 16, 2009, E.U. drops antitrust case after Microsoft agreed to offer consumers choice of rival Web browsers; (Announced by E.U. Competition Commissioner Neelie Kroes)
- Beneficiaries: 100 million European users of Windows OS (“Competitive, free choice should be the norm.”)
- Punishment Method – Fines seem to hit home (totaling \$2.4billion)
  - This includes a February 28, 2008 fine of €899million for failing to comply with 2004 ruling
- December 2009: Microsoft agrees to offer users a choice between a dozen different browsers



# Commission's Microsoft decision in 2004

- The European Commission concluded in its Decision on March 24, 2004 that Microsoft broke EC competition rules by leveraging its near monopoly in the market for PC operating systems (OS) onto the markets for *work group server operating systems* and for *media players*. The Court of First Instance upheld the decision in 2007.
- Microsoft abused its market power by deliberately restricting interoperability between Windows PCs and non-Microsoft work group servers, and by tying its Windows Media Player (WMP), a product where it faced competition, with its ubiquitous Windows operating system.
- This illegal conduct has enabled Microsoft to acquire a dominant position in the market for work group server operating systems, which are at the heart of corporate IT networks, and risks eliminating competition altogether in that market. Microsoft's bundling has significantly weakened competition on the media player market.
- For these serious abuses, which have been ongoing for five and a half years, the EC Commission has imposed a record fine of € 497.2 million.

# Microsoft - Remedies

- As regards interoperability, Microsoft is required, within 120 days, to disclose complete and accurate interface documentation which would allow non-Microsoft work group servers to achieve *full interoperability* with Windows PCs and servers. This will enable rival vendors to develop products that can compete on a level playing field in the work group server operating system market. The disclosed information will have to be updated each time Microsoft brings to the market new versions of its relevant products.
- To the extent that any of this interface information might be protected by intellectual property in the European Economic Area, Microsoft would be entitled to reasonable remuneration. The disclosure order concerns the interface documentation only, and not the Windows source code, as this is not necessary to achieve the development of interoperable products.
- As regards bundling, Microsoft is required, within 90 days, to offer to PC manufacturers a version of its Windows client PC operating system without WMP. The *unbundling remedy* does not mean that consumers will obtain PCs and operating systems without media players. Most consumers purchase a PC from a PC manufacturer which has already put together on their behalf a bundle of an operating system and a media player. As a result of the Commission's remedy, the configuration of such bundles is meant to reflect what consumers want, and not what Microsoft imposes.

# Commission's decision on interoperability

- **Refusal** to disclose specifications and allow their use for the development of compatible products
- Analyse the entirety of the circumstances, including
  - disruption of a previous level of supply ...
  - of software **interoperability information**
  - Microsoft's rapid rise to dominance in server OS software
  - **Microsoft** can impose *de facto* standard for work group computing of which PCs are a key component, so **interoperability** essential to compete in server OS software

# Milestones in the bundling case

- In 2004 Commission decision (and €497m fine) that MS had abused dominance by
  - refusing to supply **interoperability information** to rivals on the market for work group server OS software
  - tying Media Player software with Windows OS
- Dec 2004: Court rejects MS request for remedy suspension
- Penalty payment decision of July 2006
  - Incomplete and inaccurate Interoperability information
  - Eur 280.5 million
- Continuing disputes about compliance with remedies
- Sept 2007: Court judgment upholds Commission decision
- October 2007: no appeal
- Penalty Payment decision of February 2008
  - Reasonable pricing of interoperability information
  - Eur 899 million
- Commission press release of October 9, 2009: settlement, in 2012 a new statement of objections because of infringement of the settlement
- Special circumstance: bundling by a super-dominant company holding about 95 % of the global market in PC OS markets

# US view

- The US Department of Justice sued MSFT for antitrust violations in 1998 over its tying of Explorer to the Windows operating system.
- Under a settlement, the terms of which expired in 2011, MSFT agreed to make Windows more open to third-party developers.
- The Microsoft settlement in the US was generally regarded as very mild which gave more impetus to the EU Microsoft cases
- The recent Google case seems to suggest that US antitrust enforcers continue to have little appetite for filing any major antitrust cases against leading US companies that compete on global markets

# Microsoft Bundling Case

- In its Microsoft decision in 2004, the EU Commission found that Microsoft had unlawfully bundled its operating system Windows with its Windows Media Player (“WMP”).
  - As such, Microsoft had not “coerced” in the economic or technical sense but a choice had been ex ante reduced by technical tying. Customers had not been required to pay anything extra for WMP. Bundling with the super-dominant platform led to exclusion of competitors.
  - Competition took place on the “OEM level”. “Users who find WMP pre-installed on their client PCs are indeed in general less likely to use alternative media players as they already have an application which delivers media streaming and playback functionality” (Commission’s decision of 24 March 2004, case COMP/C-3/37.792, paragraph 870)
  - Microsoft had applied similar tying and bundling practices earlier as regards word processing and internet servers, for instance, with the effect of extension of the Windows dominance to new areas.
  - The case was hard fought for many years. The core question was how to balance anticompetitive tying with the freedom of product design.
-



# Court decision in Microsoft I

- Commission's decision and significant fines were upheld by the EU General Court (see Case T-201/04, Microsoft Corporation v Commission of the European Communities, 17 September 2007)
- As confirmed by the EU General Court, a tying abuse requires the following elements:
  - 1) The tying and tied goods must be **two separate products**;
  - 2) The company concerned must be **dominant** in the tying product market;
  - 3) The company concerned must not **refuse** customers the **choice** to obtain the tying product without the tied product;
  - 4) The tying must **foreclose** competition; and
  - 5) The tying must **not** be **objectively justified**.

# Remedy in Microsoft I

- Commission ordered the dominant firm to eliminate the abuse by commercializing a naked version of Windows, devoid of WMP.
- Commission had concluded that the competition of media players took place mainly at the OEM level. In other words, the decisions taken by the PC manufacturers which player to install had a decisive impact on market shares of the competing media players.
- Although consumers could quite easily download the media player of their choice, in practice only very few consumers did so. So the consumer “inertia”, that according to behavioral economics can in fact be quite “rational”, protected the installed base. The aim was to open up competition on the OEM level.
- Commission’s decision contained no price clause that would mandate a price difference between the bundled version containing the WMP and the unbundled version without the WMP.
- As media players are widely available for free, the Commission did not impose on Microsoft to charge a lower price for the unbundled version of Windows.
- The plaintiffs had foreseen this serious loophole and urged the Commission to take more aggressive measures to ensure the useful effects of the decision but DG Comp. assumed it had no power to enforce a pricing rule.

# Failure of the remedy in Microsoft I

- So there was a choice given to the customer of a complete Windows OS or the same Windows OS without the WMP for the same price...
- Unsurprisingly, as a result, a few months later, only a few thousands version of this stripped software had been sold and most end-users continued to use WMP
- As could have been expected in such circumstances, the operation amounted to a commercial failure: no computer manufacturer in the world chose to install the unbundled version of Windows on any of their computers. Only a few thousand copies of the “light” version were sold as compared to millions of copies of the “full” version.
- While the unbundling remedy proved totally ineffective, the existence of “the case of the decade” affected Microsoft’s behavior significantly by foreclosing an “offensive bundling strategy in mobile” that may well have been under consideration in ~~Microsoft at the time.~~

# Microsoft Web Browser Case

- Microsoft II case concerned tying of the web browser Internet Explorer to Windows.
- The complainant was the Norwegian Opera, who develops web browsers for client PC and client PC operating systems, complained that Microsoft was excluding it from the browser market by tying Internet Explorer with the Windows operating system
- In January 2009, the Commission adopted a Statement of Objections with the provisional conclusion that Microsoft holds a dominant position on the PC operating system market. The Commission also concluded that the tying of Windows with Internet Explorer is illegal under Article 102 TFEU
- According to Article 9 of Regulation 1/2003, when the Commission intends to adopt a decision requiring that an infringement be brought to an end, the undertaking concerned can offer commitments in order to meet the Commission's concerns.
- On the 16th of December 2009, the Commission adopted its final Decision based on the preliminary assessment deciding that the Commitments were sufficient to reach its competition concerns

# Dominance in Microsoft II

- On the one hand, the Commission took into account the market for client PC operating systems and, on the other hand, the market of web browsers for client PC operating systems. The Commission concluded that the market of web browsers is a separate relevant market because of its specific characteristics and the lack of realistic substitutes.
  - Microsoft holds a dominant position in the first one: Windows is the most used PC operating system with a 90% market share. The geographical market was the entire world.
  - In addition, the Commission observed that there are two barriers to entry in the client PC operating system market. The first one and the biggest one is the indirect network effect. This means that the more a product is used, the more incentive there is for other undertakings to propose complementary products. So, software developers and content providers focused on creating applications essentially for Windows and this practice reinforces the value and the dominant position of Windows. The second barrier consists in the difficulty to enter into the market because of the sunk costs which are the high costs of development and product testing. Those costs influence the decision of an undertaking whether or not to enter the market. This has the effect to protect Microsoft's dominant position.
-

# Abuse in Microsoft II

- The four elements that are required to conclude that the tying of Windows with Internet Explorer is a prohibited abuse were all fulfilled.
  - 1) The tying and tied good must be two different products. In this case, the operating system Windows is a distinct product from the web browser Internet Explorer which is the tied good.
  - 2) Microsoft has to be dominant in the tying product market. The Commission has already concluded that Microsoft has 90% market share on the PC operating system market
  - 3) The targeted undertaking does not give the possibility to customers to buy the tying product without the tied one. This condition was fulfilled in the present case because if the consumer wants to purchase Windows, he had no choice to obtain it without Internet Explorer.
  - 4) The tying must foreclose competition. There were different potential foreclosure effects resulting from the tying of Windows and Internet Explorer. Tying gave Internet Explorer artificial distribution advantages because by tying the two products, Microsoft ensured that Internet Explorer will be worldwide distributed. Indeed, the competing web browser vendors cannot afford an access to that distribution channel. Microsoft then reinforced its already very strong power.

# Microsoft II – Ballot screen remedy

- The Commission concluded that tying of Internet Explorer to Windows makes Microsoft's web browser available on more than 90% of the PCs worldwide, which distorts competition on the merits between competing web browsers, by providing Internet Explorer with an artificial distribution advantage which other web browsers are unable to match. The Commission preliminary view was also that this tying of Internet Explorer to Windows was detrimental to the pace of product innovation and created artificial incentives for software developers and content providers to design their products or web sites primarily for Internet Explorer.
- The Commission obtained from Microsoft the commitment to make available a “ballot screen” forcing new Windows PC users to initially make a pre-selection between a range of competing web browsers ( See summary of Commission Decision of 16 December 2009 , case COMP/39.530 Microsoft, Tying, OJ, 13 Feb. 2010, C 36/7 ).
- Under the settlement deal, Microsoft committed to offering European users of new Windows PCs a choice screen, giving them a choice of which Web browser to use on their machines -- browsers such as Firefox, Opera, or Chrome were offered alongside Microsoft's own Internet Explorer.
- Microsoft also made proposals in relation to disclosures of interoperability information that would improve interoperability between third party products and several Microsoft products, including Windows, Windows Server, Office, Exchange, and SharePoint (see MEMO/09/352). Microsoft is publishes improved proposals on its website. Even though it remained informal vis-à-vis the Commission, Microsoft’s proposal, which is in the form of a public undertaking, includes warranties that Microsoft offers to third parties and that can be privately enforced.
- The remedy in Microsoft II seems has worked much better than the previous one. The share of Internet explorer has gone down from 80 in 2009 to 60 % in 2012. New browsers have gained foothold.

# Breach of the remedy in Microsoft II

- The EU began a new investigation into Microsoft in 2012 after it was claimed more than 28 million European users of Windows failed to receive a 'browser choice' option as part of an earlier 2009 settlement with Europe. The ballot screen remedy is in force until 2014.
- Microsoft admitted, almost immediately after the Commission's allegations were made public, that it had "fallen short in [its] responsibility" to include the browser options screen in the latest iteration of Windows 7 "due to a technical error."
- On October 24, 2012 the EU sent to MSFT a formal Statement of Objections which is a preparatory step of a negative decision. In its statement of objections, the Commission takes the preliminary view that Microsoft has failed to roll out the browser choice screen with its Windows 7 Service Pack 1, which was released in February 2011. From February 2011 until July 2012, millions of Windows users in the EU may not have seen the choice screen. Microsoft has acknowledged that the choice screen was not displayed during that period.
- Microsoft faces a fine up to 10 % of its global annual turnover should it be found flouting European antitrust laws; a figure that could total close to €5.7 billion (\$7.3bn). In practice the fine will be significantly lower.
- Microsoft's proxy statement for its fiscal 2012 earnings showed that the firm's top named executive officers, including CEO Steve Ballmer and Windows president Steven Sinofsky saw their incentive awards reduced as a result of the failure to provide the browser choice as per the firm's 2009 commitment with European authorities.
- The breach of remedy episode may make MSFT less willing to take antitrust risk.



# Bundling – requirements for Art 102 infringement

- **Dominance** (= significant market power)
  - In at least one of the affected markets
  - Market definition
- **Separate products being bundled/tied**
  - Art 82(d) vs Tetra Pak
  - Difficult issue in IT markets
    - Added functionality vs distinct product
    - Rapid evolution – markets merge
      - IBM – hardware bundling
  - Consumer demand
  - Indirect evidence
  - Windows OS vs WMP

# Bundling –requirements continued

- **“Coercion”**
  - Contractual stipulation
  - Technical bundling
    - Microsoft – free and no obligation to use, but deterred from uninstalling
- **“Foreclosure of competition”**
  - Evidence of likely anti-competitive effects
  - Microsoft
    - Balance of competition appreciably altered in Microsoft’s favour
    - Key distribution channel
    - Network effects
    - Routes to market outside OEM channel? (Apple)

# Bundling – requirements continued

## – No objective justification

- Burden of proof
- Microsoft
  - Standardisation - not precluded by unbundled version of OS
  - Consumer benefits of integration - not proven

## – Remedial action

- Microsoft
    - Media Player case 2004 : Standalone version of OS, no effect
    - Browser case 2009: Screen ballot remedy
    - US settlement on browser integration - less interventionist and quite ineffective
  - IBM
    - CPUs sold with and without main memory
    - No US remedy
-

# Mixed bundling/bundled rebates

- Widespread use in competitive markets
- Spectrum of approaches
- Strictest – per se illegal or illegal absent specific cost savings
  - Approach evident in past Commission decisions (Coca-Cola, Tetra Pak II)
- Rule of reason – overall effect on competition
  - GE/Amersham merger decision
- Predation test in relation to tied product - long run incremental costs
  - New Commission approach
  - UK approach BSkyB / OFT
- Predation test in relation to total price of bundle
  - USA – LePage (rule of reason) vs Cascade (full predation) – recoupment

# Criteria of Harmfulness

1. Customers are "forced" to buy the tied product in addition to the monopoly product
  - but note tying rebates
  - the bundled product is not offered separately
2. Other companies are foreclosed from the market
3. The freedom of customers is restricted
4. There is no objective justification



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# Google and Article 102

A new saga or a sage challenged?

# Google: Target of Antitrust Probes



# Google cases in a nutshell

EU Commission launched multiple probes into Google's business practices, first looking into the company's practices in 2010.

1. In June 2017, it fined Google €2.42 bn for abusing its dominance in the market for general search services by more favourably positioning and displaying Google Shopping compared to competing **comparison shopping services** in its general search result pages (the Google Shopping case).
2. In July 2018, the EC fined Google €4.34 bn after it found that the company had engaged in three types of illegal practices as part of a single strategy to cement its dominant position in general internet searches (the **Google Android case**). The illegal practices included tying, exclusivity payments and obstruction of the development of alternative versions of the Android operating system that were not approved by Google.
3. In March 2019, the EC fined the company €1.49 bn for abusing its market dominance by imposing a number of restrictive clauses in contracts with third-party websites that prevented Google's rivals from placing their search advertisements on these websites (the **Google AdSense case**).

Google has appealed the Commission's decisions before the General Court of the European Union, with a possibility to further appeal on points of law to the Court of Justice of the European Union (CJEU). Court proceedings can take several years, so it may be some time before matters at hand are resolved. In the meantime, Google has to comply with the EC's decisions and defend itself against private damage claims.



# Google: The Complaints

Four complaints lodged with European regulatory bodies:

- French legal search service eJustice
- British price comparison site Foundem
- German shopping site Ciao (owned by Microsoft)
- Microsoft (Bing)

1. “Google lowered the ranking of unpaid search results for businesses that offer competing online products (vertical search) - such as price comparisons for shoppers - while positioning its own services prominently on the page.”
2. “It took measures that forced rivals to pay higher prices to advertise such services on the search site.”
3. “The company attempted to prevent its advertisers from working with competing search and advertising companies by imposing exclusivity obligations and restricting the portability of advertising-campaign data.”

# Google complaints (1)

- Various EU and national cases (e.g., Microsoft, CIAO, Foundem, eJustice, 1PLUSV, VFT, VDZ/BDZV, Twenga)
- The case is crystallised around 4 allegations:
  - **Search manipulation** (preferential treatment of Google own “vertical” search sites)
  - **De facto exclusivity** in search advertising
  - **Restrictions on portability** of online search advertising
  - **Scraping**: copying content from competing vertical search engines for use in Google own offerings

# Search manipulation

- Allegation is that Google's own vertical (or sector-specific) searches are favoured in its Universal Results and OneBoxes search results; done by manipulation of the search results
- In online business consumers typically consider only the first (or second) search page
- If Google favours its own products competitors could die quickly
- Threshold question of whether in fact this is true: Google says no (measurement issues)
- Counter argument: even if some factual basis exists theory of harm is novel and controversial:
  - Search results, including Universal and OneBoxes are one and the same thing: what's being favoured?
  - Search is art and science: results are Google's judgment about what users want
  - It is normal for a firm to "favour" its "own products" (e.g., newspapers)?
  - But there should be clarity between white and yellow pages
  - Refusal to deal/tying and discrimination cases
- FTC in the US: even if true what is the remedy?

# De facto exclusivity in search advertising

- Allegation is that Google has tied up channel partners in search intermediation (AFS) and search distribution in *de facto* exclusive deals, foreclosing rival search engines
  - **Intermediation:**
    - Display of Google ads with Google search is part of benefit to publisher in which Google shares as provider/generator of the search results
    - Multiple search boxes on the same publisher site is unrealistic and Google permits those (rare) publishers who wish to offer this to do so
    - Intermediation a very small channel
  - **Distribution:**
    - Again, small – most queries come from direct searches
    - Effective competition to acquire partners
    - Agreements provide for default setting, not exclusivity

# Portability of online advertising

- Allegation is that Google licence terms for AdWords API prevent or limit multi-homing by advertisers
- Focus mainly is only provisions that: (a) regulate display of certain bulk input fields for campaign data to multiple ad services; and (b) limit direct copying of such data between Google and third party ad services
- Google says that clauses are proportionate attempt to retain enhanced functionality AdWords, an area where interests of advertisers and tool developers may differ – otherwise lowest common denominator might prevail
- Multi-homing rates are high (80% US; 67% UK); cross-platform tools exist.

# Scraping

- Allegation that Google is scraping content from other websites without paying compensation
- Italian case: in case compensation demanded, the newspaper will be removed from Google site
- Case where antitrust can be used to protect IPR of others

# Settlement discussions

- A proposed settlement published in February 2014 would inter alia force Google to display three ads for rival services whenever specialized search results (for things like hotels or restaurants) include ads for its own services.
- Google rivals criticized the proposal, saying it would merely end up generating more ad revenue for the company.
- Settlement discussions have not concluded

# Cronology of the case sofar

- **November 2010:** European Commission starts investigations based on complaints filed by competitors (e.g. Microsoft, TripAdvisor ja Expedia)
  - **May 2012:** Commission finds four problems in Google's behavior
  - **July 2012:** Settlement discussions start
  - **January 2013:** Google settles the US antitrust case with the FCT
  - **January 2013:** Google files its first proposal
  - **March 2013:** Google's competitors criticise the proposal being inefficient
  - **July 2013:** EU asks Google to improve its offer
  - **October 2013:** Google files new proposals
  - **December 2013:** Competitors criticise and Commissioner Almunia turns down the proposal
  - **February 2014:** EU publishes a preliminary settlement package
  - **September 2014:** No conclusion is reached in the settlement discussions
  - **November 2014:** EU parliamentarians call for European Commission to consider unbundling Google's search from other services as part of antitrust regulation...
  - **March 2015:** Commissioner Vestager "not afraid to start a fight"...
  - **June 2017:** Google is fined 2,42 billion euro in the comparison shopping case
  - **July 2018:** Google is fined 4,3 billion euro in the Android case
  - **March 2019:** Google is fined 1,9 billion euro in the AdSense case
-



# Ongelma 1 – Hakujen manipulointi

- 1 Ongelma: Googlen omien palvelujen suosiminen vertikaalisten hakukoneiden markkinoilla (hotellit, ravintolat, lentovaraukset, ”search manipulation”)
- Ratkaisu:
  - Kuluttajalle kerrotaan merkillä omien palvelujen promoamisesta
  - Graafinen erottelu
  - Kilpailijoiden sivujen näyttäminen visuaalisesti samanarvoisesti
  - Kilpailijoiden mahdollisuus vaikuttaa tietojensa esillepanoon

# Ongelma 2 - Raapiminen

- Ongelma: Google raapii kilpailijoiden sivuilta sisältöä, jota se käyttää omissa palveluissaan (scraping). Tällä tavalla Google höydyntää kilpailijoiden investointeja ilman suostumusta tai jopa niiden nimenomaista tahtoa vastaan.
- Ratkaisu: kilpailijat voivat irtautua menettelytavasta, jossa Google käyttää niiden tietoja ilman että tämä vaikuttaa ”kohtuuttomasti” kilpailijan näkyvyyteen Googlen hakutuloksissa.
- Lehtitapaukset

# Ongelma 3 - Yksinomaisuussopimukset

- Ongelma: Google on käyttänyt de facto yksinomaisuussopimuksia, jotka ovat käytännössä sitoneet kustantajat käyttämään eksklusiivisesti Googlen haku-mainonta-palveluja (search advertising)
- Ratkaisu: Google sitoutuu luopumaan kirjallisista ja kirjoittamattomista yksinomaisuusehdoista

# Ongelma 4 - Lukittautuminen

- Ongelma: Googlen noudattamat käytännöt ovat merkinneet sitä, että mainostajien on ollut hyvin vaikeaa siirtyä käyttämästä Googlen Adwords-platformin ohella kilpailevia palveluita
- Ratkaisu: Google luopuu sellaisista ehdoista ja menettelytavoista, jotka rajoittavat mainoskampanjojen siirtämistä kilpaileville palveluntarjoajille

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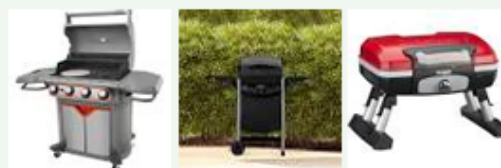
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2,7 ★★★★★ 16 avis de Google

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[www.cafedelapaix.fr](http://www.cafedelapaix.fr)

3,9 ★★★★★ 624 avis de Google

### Les Deux Magots

[www.lesdeuxmagots.fr](http://www.lesdeuxmagots.fr)

3,8 ★★★★★ 625 avis de Google

### Delaville Café

[www.delavillecafe.com](http://www.delavillecafe.com)

3,6 ★★★★★ 91 avis de Google

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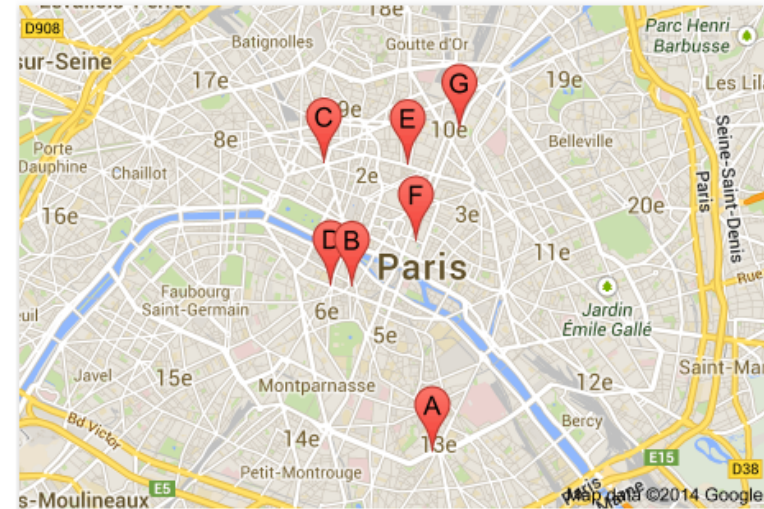
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+33 1 45 48 55 25

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Nouvelle  
Paris, France  
+33 1 48 24 48 09

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Find the best cafes in Paris with Yelp

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[www.cafedelapaix.fr](http://www.cafedelapaix.fr)  
3.9 ★★★★★ 621 Google reviews

[Les Deux Magots](#)  
[www.lesdeuxmagots.fr](http://www.lesdeuxmagots.fr)  
3.8 ★★★★★ 610 Google reviews

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[plus.google.com](http://plus.google.com)  
3.8 ★★★★★ 25 Google reviews

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3.6 ★★★★★ 163 Google reviews

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3.8 ★★★★★ 764 Google reviews

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- C 10 Rue de Buci  
Paris, France  
+33 1 46 34 84 11
- D 100 Rue Saint-Martin  
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# Amazon's hybrid role

- Amazon's business practices have also come under antitrust scrutiny. The European Commission is investigating Amazon's conduct in light of its dual role as a platform for retailers and as a retailer itself. The EC's investigation appears to focus on Amazon's collection and use of transaction data.
- In November 2018 and February 2019, the FCO and the Austrian Federal Competition Authority (BWB) also started looking at Amazon's dual role due to an alleged conflict of interest stemming from the company's two roles. The investigation focuses on the terms of business and practices toward sellers on its marketplace. The terms of business and practices under review include: liability provisions to the disadvantage of sellers, in combination with choice-of-law and jurisdiction clauses, unjustified loss of product rankings of sellers, the non-transparent termination and blocking of sellers' accounts, withholding or delaying of payments, clauses assigning rights to use the information provided by a seller regarding products offered and terms of business on pan-European dispatch, the obligation to disclose purchase prices and the adding of incorrect delivery details by Amazon to the sellers' accounts. The FCO and BWB investigations are supplementing, but not overlapping with, the EC's ongoing investigation.
- Amazon also faces an investigation by the Italian Competition Authority Italy for allegedly abusing its dominant position in the market for e-commerce platforms' intermediary services in order to significantly restrict competition in the e-commerce logistics market and potentially in the e-commerce platform market. According to the ICA, Amazon has allegedly discriminated in favour of third-party merchants who use Amazon's logistics services, Amazon Logistics or Fulfillment By Amazon, by granting improved visibility of the sellers' offerings, higher search rankings and better access to consumers on its website.

# Apple's App Store

- The EC is currently examining a complaint by Spotify, which claims Apple is undermining Spotify's competitive position, among others, via its pricing policy and by restricting the degree of integration and interoperability of its app.
  - In April 2019, the ACM launched an investigation into Apple's practices following complaints received by app providers during its market study into mobile app stores. According to the ACM, Apple's hybrid nature raises antitrust concerns, as it has the opportunity to set unfair conditions to app providers while also serving as an app provider itself. The complaints received by app providers during the ACM's study focused on Apple's and Google's payment systems for in-app purchases, the competition between app providers and Apple's own apps and Google's pre-installed apps.
-



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# Proposal on new European Data Governance regulation

<https://ec.europa.eu/digital-single-market/en/european-data-governance>



European Commission

# EUROPEAN DATA GOVERNANCE

A NEW APPROACH FOR THE DIGITAL DECADE

November 2020



**Setting up a new European way of data governance will facilitate data sharing across sectors and Member States. It will create wealth for society, and provide control to citizens and trust to companies.**

## The economic value of data sharing

- ◆ Data access and reuse can generate **social and economic benefits of 1% to 2.5%** of GDP<sup>1</sup>.
- ◆ The new measures could **increase the annual economic value** of data sharing by up to €7-11 billion by 2028<sup>2</sup>.
- ◆ In addition, the new rules will have a **wider impact on the EU economy and society** as a whole:



€ 1.3 trillion

in increased productivity in **manufacturing** through **Internet-of-Things data** by 2027<sup>3</sup>



€ 120 billion

of savings per year in the **EU health sector**<sup>4</sup>

## The EU will boost the development of trustworthy data-sharing systems:

- ◆ Empower **Europeans** to decide what happens to their data, and what data they would like to share with whom.
- ◆ Facilitate **data altruism** to make it easier and safer for companies and individuals to voluntarily make their data available for the benefit of society.
- ◆ Enhance the **reuse** of public sector data that cannot be made available as open data.
- ◆ Create **new EU rules on neutrality** to allow novel data intermediaries to function as trustworthy organisers of data sharing.
- ◆ Set up a **European Data Innovation Board** to steer data governance and prioritise standards.

<sup>1</sup> OECD (2019). *Enhancing Access to and Sharing of Data: Reconciling Risks and Benefits for Data Re-use across Societies*, OECD Publishing, Paris.

<sup>2,3</sup> European Commission (2020). Support Study to the Impact Assessment accompanying the proposal for a Regulation on European data governance, SMART 2019/0024, prepared by Deloitte.

<sup>4</sup> McKinsey (2020). *Shaping the digital transformation in Europe*.

# Proposed Digital Markets Act (DMA)

See

[https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/digital-markets-act-ensuring-fair-and-open-digital-markets\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/digital-markets-act-ensuring-fair-and-open-digital-markets_en)

# DMA applies to “Gatekeepers”

The DMA will apply to digital platforms that act as “Gatekeepers”. Firms will be “deemed” to be gatekeepers if the following criteria are met:

- Significant impact on the EU internal market - EU turnover equal or > €6.5bn in the last 3 years or where the average market capitalisation or equivalent fair market value amounted to equal or > €65bn in the last financial year and it provides services in at least 3 Member States;
- Important “Gateway” for business users to reach consumers >45m monthly users in the EU and more than 10 000 yearly active business users in the EU;
- Entrenched and durable position – satisfied if (i) and (ii) met for the last three years.
- Any digital platform that satisfies this “gatekeeper” test will be required to notify the European Commission within 3 months and/or seek to make arguments that it does not satisfy the “Gatekeeper” test. The EC will also have the power to designate other providers as “Gatekeepers” and this could include entities that are close to the so-called “tipping point” (i.e. they may enjoy an entrenched and durable position in the near future) pursuant to a new market investigation procedure. The EC will publish the list of gatekeepers and keep this up to date and it will be reviewed every 2 years given the fast-paced and dynamic nature of digital services.

# The regime will apply to core platform services

The EU regime will apply to a range of “core platform services” (CPS) which will be kept under review:

- Online intermediation services (marketplaces, app stores and other services like mobility, energy and transport);
- Online search engines;
- Social networking;
- Video sharing platforms;
- Number-independent interpersonal communications services ((NI-ICS) e.g., online messaging/communication services/apps);
- Operating systems;
- Cloud services; and
- Advertising services.

# Do's and Dont's

## Do's

- Allowing interoperability with the gatekeeper's own services;
- To provide companies advertising on their platform with the tools and information necessary for advertisers and publishers to carry out their own independent verification of advertisements hosted by the gatekeeper;
- Allow business users to promote their offer and conclude contracts with the customers outside the gatekeeper's platforms;
- Providing business users with access to the data generated by their activities on the gatekeeper's platform; and
- Provide data portability.

## Don'ts

- Prohibit gatekeepers from preventing users from un-installing any pre-installed software or apps;
- Not use data obtained from business users to compete with these business users (to address dual role risks);
- Measures to address self-preferencing, parity and ranking requirements to ensure no favourable treatment to the services offered by the gatekeeper itself against those of third parties.



# A tough enforcement procedure is proposed

Gatekeepers will need to comply with the obligation within six months. The European Commission will also have residual powers to set other obligations following a market investigation as well as investigate new services and practices.

The DMA will also introduce a requirement for Gatekeepers to inform the European Commission (rather than a formal merger control notification) of any proposed merger or acquisition involving another provider of CPS or other digital services (irrespective of whether it triggers the EU/National merger control thresholds).

Also a tough enforcement regime is proposed.

Combined with strengthened monitoring, investigatory powers and interim measures the EC will have the ability to impose fines of up to 10% of worldwide revenues and periodic penalty payments of up to 5% of the average daily turnover. In terms of break up powers, the EU will have residual powers to order divestments as a last resort in cases of systematic non-compliance.

The DMA is a draft proposal and a lengthy process can be expected before the act is finally adopted. The European Parliament, European Council and Commission will have differing views and there will be intense lobbying to influence the final outcome as it passes through the legislative process.

# Food for thought

- The proposed DMA would greatly enhance the enforcement powers, if adopted
- It can be categorised as “special sector competition law” (compare existing telecoms and energy regulations)
- One aim is to create an instrument that is more effective than Article 102 TFEU (time, cost and remedy problems)
- As regards digital platforms the enforcement climate is clearly shifting from “cautious enforcement” to “strong enforcement”
- Does DMA go too far or is it still not effective enough?



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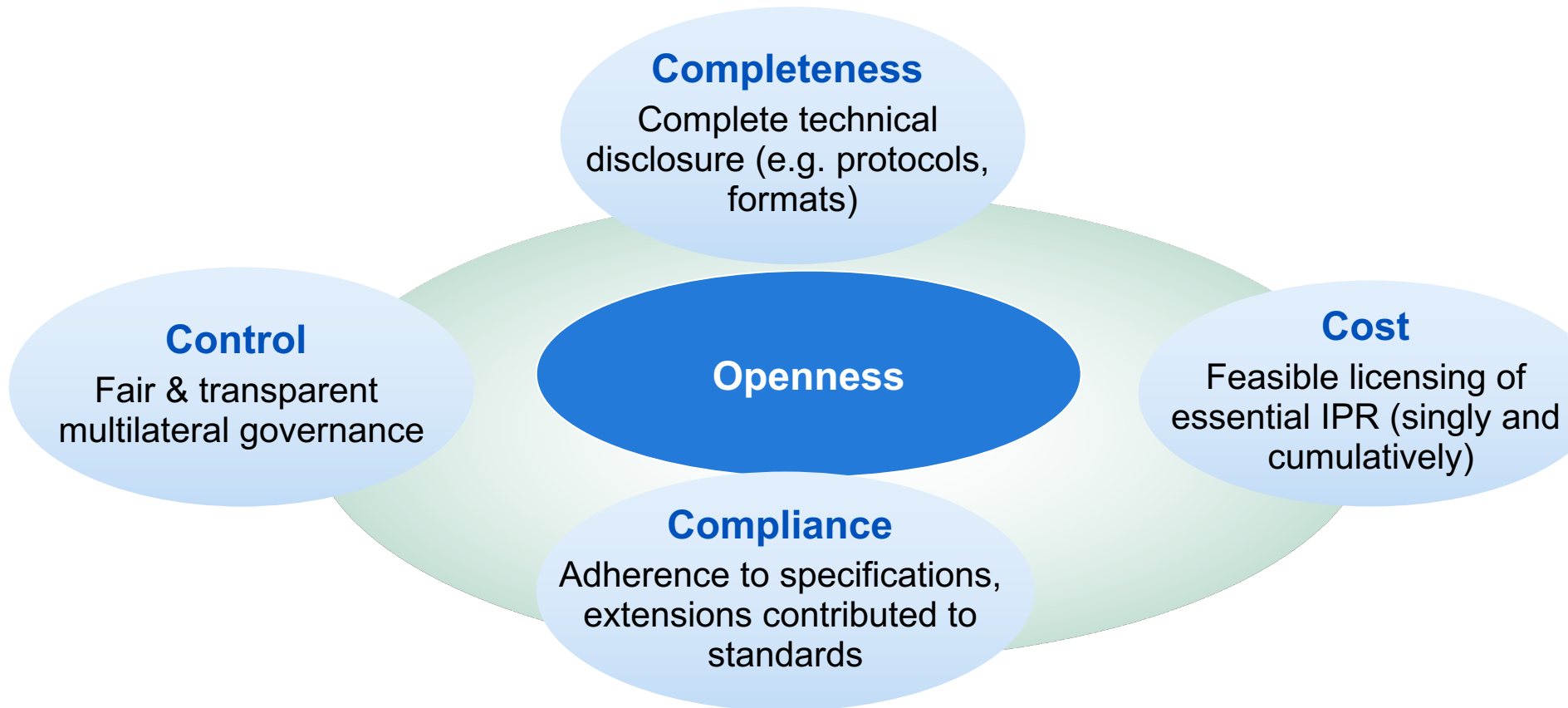
# Intellectual property, technical standards and FRAND

Virtues and potential problems of standards essential patents

# Interoperability Essential, and Interoperability requires Standards

- Incremental additions to IT networks require interoperability within the network and backwards/forward compatibility
- Companies prefer not to be locked in to one IT supplier when adding to their network
- But even if they did: companies do not control what IT systems are bought by their customers, suppliers, partners and outsourcing firms
- Involving customer, supplier, business partner, outsourcing firms in end-to-end processing requires integration of their systems through interoperability
- Without interoperability, no competition, and little innovation – and without standards, no interoperability

# What is an open standard?



Multivendor environment is a permanent characteristic of an open environment -  
**Independent Interoperable Implementations available**

# Interoperability

- Unfragmented market key to mass market penetration, network effects
  - Threat from business model issues, not technology
  - Emerging markets need shepherding, not mature ones
  - Supporting interoperability is more important than ever
  - The threat is massive delay vs. expectations
- Only open standard technologies for universal interfaces
- Openness for interoperability relates to interfaces; *products* are proprietary (open source helps but not central to interoperability)
- Differentiation is possible on top of interoperable core

# Open Source role for interoperability

- Open source phenomenon can boost interoperability
  - Adoption by community enthusiasm
  - Generation of robust implementations
  - Ability to verify implementation due to source code access
- Open source does not substitute open standards
  - Open source is an implementation: interoperability can result from almost same model as in Microsoft approach
  - Open source is a development model
  - Neither aspect produces standard interface specifications nor guarantees adherence to them
- What really matters is availability of interface specifications enabling interoperable multivendor implementations
- Open source does not provide these – it is a different kind of “openness”

# Problems with Standards

- Standards block inter-technology competition
  - This may reduce scope for innovation
  - risk can be limited by using functional specifications rather than design specifications
- Chosen standard may depend on proprietary technology
  - This could give patentee a *de facto* monopoly
    - Ability to block rivals
    - Ability to extract monopoly rent
    - Ability to use monopoly to leverage into other products
- So, SSOs want to know whether patent reads on standard
- But: How do SSOs know whether patents apply to a standard? (The “Submarine” problem)
- And: How to prevent patentees from setting “traps”?



# Potential competition law problems

- **"Problem 101"**: In standardization bodies competitors meet and discuss technical solutions and interfaces. This may lead to
  - Price fixing, market sharing and other classical cartel activity
  - Exclusion of as efficient competitors
  - Less competition on the technical merits
- **"Problem 102"**:
  - A monopoly position may be created
  - Lock in to key IPR rights

# Restrictions by “object”

- The EU horizontal guidelines guidelines make clear that standardization agreements cannot be a fig leaf for cartels:
  - “Agreements that use a standard or standard terms as part of a broader restrictive agreement aimed at excluding actual or potential competitors restrict competition by object within the meaning of Article 101(1)”
  - “Any efforts to reduce competition by using the disclosure of essential IPR or most restrictive licensing terms prior to the adoption of a standard as a cover to jointly fix prices of products” constitute restrictions of competition by *object*.
  - Restriction by “object” are in practice *per se* illegal under Article 101 TFEU.

# Restrictions by “effect”

- Restrictions by effect fall under Article 101(1), but can be exempted under Article 101(3) TFEU. They can fall outside the scope of Article 101(1) in certain conditions (safe harbor).
- Possible restrictions:
  - “[T]he establishment of standards ...can create or increase the market power of those IPR holders and in some circumstances lead to abuses of a dominant position.”
  - The guidelines are particularly concerned with patent ambush and hold up.

# Guidelines on horizontal cooperation agreements

- The guidelines cover various types of agreements, including information exchange agreements, R&D agreements, etc.
- The guidelines also include a chapter on standardization agreements
- Commission considers that since standards-related cases are very hard to deal with ex post, it is preferable to address issues on an ex ante basis.

# The safe harbor mechanism for standard setting

- Standard-setting agreements may fall outside the scope of Article 101(1) if the following conditions are met:
  - Participation in SSOs and procedure for adoption of standards is “unrestricted and transparent” and there is no obligation to comply with the standard in question
  - IPR policies should require “*good faith disclosure*” of IPRs that might be essential for the implementation of a standard before that standard is agreed. IPR policies should require that essential IPR holders “make *reasonable efforts* to identify existing and pending IPR reading on the potential standard.”
  - IPR policies should require that “all holders of essential IPR in technology which may be adopted as part of a standard provide an irrevocable commitment in writing to license their IPR to all third parties on fair, reasonable and non-discriminatory terms.”

# IPR problems with standards

- Technical standards help to disseminate new technology and make network products to interoperate
- Standards block inter-technology competition
  - This may reduce scope for innovation
  - risk can be limited by using functional specifications rather than design specifications
- Chosen standard may depend on proprietary technology
  - This could give patentee a *de facto* monopoly
    - Ability to block rivals
    - Ability to extract monopoly rent
    - Ability to use monopoly to leverage into other products
- So, Standard Setting Organizations (SSOs) want to know whether patent reads on standard
- But: How do SSOs know whether patents apply to a standard? (The “Submarine” problem)
- And: How to prevent patentees from setting “traps”?

# Essential patents, injunctions and abuse of dominance

- Patents and market dominance
  - Patents in general
  - Essential patents
  - Technical standards, lock in, "micro-dominance"
- Patent wars
  - Infringement suits and FRAND defences
- Commission vs. Samsung
- Commission vs. Motorola
- Huawei/ZTE
- Nokia vs. Daimler

# Current patent landscape

- The value of patents has increased dramatically, as seen by the very high sums paid in recent patent transactions
  - In digital network industries the problem of "patent thickets" may arise
  - While in traditional industries the number of truly important patents may be limited, products like handsets or computers may potentially infringe tens of thousands of patents
  - "Patent wars" (= global patent litigation) are conducted between important global players, IPR holders and implementators
  - Patents become more valuable as a result of standardization if they become essential to a standard (= must be licensed to produce a standard compliant products)
  - Query: how to resolve patent thickets and sanction abusive or manipulative conduct yet without fixing what ain't broken
  - Query: a) "FRAND is fairness and prevents abuse" and b) "FRAND means nothing". Which statement is true?
-



# Essential patents - cases

## “Important cases”

- Huawei/ZTE
- Commission/Samsung (Apple vs. Samsung)
- Commission/Motorola (Motorola vs. ROW)
- Rambus
- Qualcomm
- Broadcomm
- Nokia vs. Daimler

## ”Historical cases”

- Sun vs. ETSI
- Nokia vs. Qualcomm
- Traditional patent defences: invalidity and non-infringement
- Contract law and antitrust law cases as new ammunition in pending ”patent wars”
- Commission’s horizontal guidelines from 2010 give a safe heaven for FRANDly standard setting organizations

# SEPs and injunctions

- The core right of a patent owner is the right to exclude others from using the patent
  - Injunctions
  - Damages
- Damages and injunctions are utilized also by the IP companies
- "Patent trolls"
- FRAND promise to license to everyone on fair, reasonable and non-discriminatory terms
- What if there is an disagreement over the price?

# Commission's decisions on Motorola and Samsung 2014

- On 29 April 2014, the European Commission adopted its final decisions in two landmark proceedings regarding standard essential patents (SEPs), i.e. patents which will necessarily be infringed by the technical implementation of a specific industry standard.
- It accepted binding commitments by Samsung not to seek injunctions in relation to SEPs where certain conditions are met,
- It found that Motorola had infringed Article 102 TFEU by seeking and enforcing injunctions against Apple in relation to SEPs.

# Motorola and Samsung

- The Commission found that seeking injunctions before courts is - **generally** - a legitimate remedy for patent holders in the event of patent infringement, but stresses that seeking injunctions in the case of **FRAND-encumbered SEPs** can be anti-competitive. Since injunctions generally involve a prohibition on the sale of the infringing product, seeking SEP-based injunctions may exclude competing products from the market. It can therefore distort licensing negotiations and lead to excessively onerous licensing terms. Where a patent holder seeks an injunction against a company willing to enter into a licence agreement on FRAND terms, having previously given a commitment to license the SEP on those same FRAND terms, the Commission considers that the patent holder may be abusing its dominant position.
- On this basis, the Commission found that it was abusive for Motorola to seek and enforce an injunction against Apple and ordered Motorola to eliminate the negative effects resulting from it. However, recognising that there was no EU case-law in this area, and that national courts have previously taken different views on the issue, it exercised its discretion not to impose a fine.
- In the Samsung case, the Commission had similar concerns about Samsung's conduct in seeking injunctions against Apple on the basis of its SEPs. However, it decided the Samsung case on the basis of commitments given by Samsung), which address the Commission's concerns and have now been declared binding upon Samsung.

# Motorola and Samsung

- A key element of the Commission's application of Article 102 TFEU to the assertion of FRAND-encumbered SEPs is the fact that the patent holder has sought an injunction against a prospective licensee that has previously indicated its "willingness to enter into a license agreement on FRAND terms".
- The commitments given by Samsung shed some light on the circumstances in which the Commission considers that a prospective licensee is "willing". Essentially the commitments set out a framework for the determination of FRAND terms. A company that accepts that framework is to be considered as a "willing licensee".
- The framework provides for (i) a negotiation period of up to 12 months and (ii) if no agreement is reached, a binding third party determination of FRAND terms. The third party determination is to be carried out by a court if either party chooses, or by an arbitrator if both parties agree. Samsung has agreed not to seek injunctions in the EEA on the basis of any of its relevant SEPs against a company that agrees to this framework. The commitments have a duration of 5 years.
- Although Samsung's commitments are in principle limited to its own specific proceedings and the facts of this case, the "framework" established by the commitments can be considered as a "safe harbor" approved by the Commission for identifying standard users as willing licensees, against which the seeking of injunctions based on FRAND-encumbered SEPs will generally be abusive.

# Samsung and Motorola

- The Commission notes that seeking injunctions in respect of SEPs outside this safe harbor will be assessed on a case by case basis, taking into account the specific facts, and may also infringe Article 102 TFEU.
- Furthermore, the Commission stresses that potential – even willing – licensees of SEPs should remain free to challenge the validity, essentiality or infringement of SEPs.
- In this context, the Commission specifically refers to the German case law on injunctions and the preconditions for a defendant to run a successful competition law defense in patent infringement proceedings. Here the Commission comments that it would be anti-competitive if the courts required the defendant not to challenge the validity, infringement and essentiality of the SEPs in question.
- Motorola decided not to appeal against the Commission's decision

# Standard essential patents

- A patent that reads on a technology that must be used to comply with a technical standard i.e. for which there is no technical alternative.
- In some sectors the number of SEPs is already incredibly high and the trend is upward
- Standardisation is generally beneficial
- Allows for interoperability and follow-on innovation
- Crucial in telecommunications and IT markets
- But it also bears some risks...







# SEPs and Article 102

## Market definition:

- Each SEP is a relevant product market: no substitutable technologies for implementers of the standard

## Dominance:

- Market power be conferred by a single SEP: "It takes one bullet to kill"
- Yet most claimed SEPs die in the battle

## Factors strengthening dominance:

- wide adoption of the standard, industry 'lockin'
- Is there countervailing bargaining power stemming from other SEPs and non essential patents?

## Legal Issue relating to "abuse":

- Can the protection / enforcement of IP rights in the patent amount to an abuse of dominant position ?

# SEPs and injunctions

In its preliminary ruling in the **Huawei Technologies v. STE Corporation case**, the ECJ clarified the conditions pursuant to which a dominant SEP licensor can bring an injunction against a party infringing its SEP without infringing Art. 102 TFEU:

1. Notification from the SEP Holder to the alleged infringer of its willingness to conclude a licensing agreement on FRAND terms ;
2. Willingness of the alleged infringer to enter into FRAND discussion
3. SEP Holder must present a FRAND offer in line with commitments taken by the SEP holder before the standardization body

# SEPs and Injunctions

4. Alleged offer must respond to the offer in good faith

- a) if the alleged infringer accepts the offer, then the SEP holder can only claim damages for unlicensed past use of the SEP it cannot seek injunction
- b) If the alleged infringer rejects the FRAND offer, then the SEP holder can seek an injunctive relief
- c) submit a FRAND counter offer beware of delaying tactics

# SEPs and Injunctions

- Note that the Court ruled that if the SEP Holder only intends to sue alleged infringer for unlicensed use of the SEP, then the alleged infringer cannot use 102 TFEU as a defence
- The Huawei/ZTE decision is broadly consistent with earlier EU decisions in the Motorola and Samsung cases, but in certain aspects more limited than the Commission's formula

# Huawei v. ZTE

- Where the proprietor of a standard-essential patent (SEP) has made a commitment to a standards body to grant third parties a licence on fair, reasonable and non-discriminatory (FRAND) terms, it constitutes an **abuse of a dominant position** for that proprietor to request corrective measures or to seek an injunction against a company that has infringed the SEP ('the infringer') (an action which, if successful, may cause the products and services supplied by the offending company to be excluded from the markets covered by the standard), where it is shown that the SEP holder has not honoured its commitment even though the offending company has shown itself to be objectively ready, willing and able to enter into such a licensing agreement.

# Basic rule

- In order to honour that commitment and to **avoid abusing a dominant position**, the SEP holder must, **before making a request for corrective measures or seeking an injunction**, alert the infringer to the infringement at issue in writing, giving reasons, and specifying the SEP concerned and the way in which it has been infringed by that company, unless it has been established that the alleged infringer is fully aware of the infringement. **The SEP holder must, in any event, present the alleged infringer with a written offer of a licence on FRAND terms and that offer must contain all the terms normally included in a licence in the sector in question, including the precise amount of the royalty and the way in which that amount is calculated.**

# The infringer must...

- The infringer must respond to that offer in a diligent and serious manner. If it does not accept the SEP holder's offer, it must promptly present the latter with a reasonable counter-offer, in writing, in relation to the clauses with which it disagrees. An application for corrective measures or for an injunction does not constitute an abuse of a dominant position if the conduct of the infringer is purely tactical and/or dilatory and/or not serious.
- If negotiations are not commenced or are unsuccessful, the conduct of the alleged infringer cannot be regarded as dilatory or as not serious if it requests that FRAND terms be fixed either by a court or by an arbitration tribunal. In that event, it is legitimate for the SEP holder to ask the infringer either to provide a bank guarantee for the payment of royalties or to deposit a provisional sum at the court or arbitration tribunal in respect of its past and future use of the patent.

# Nor can...

- Nor can an infringer's conduct be regarded as dilatory or as not serious during negotiations for a licence on FRAND terms if it reserves the right, after entering into an agreement for such a licence, to challenge before a court or arbitration tribunal the validity, use and essential nature of that patent.
- In taking legal action to secure the rendering of accounts, the SEP holder does not abuse a dominant position. It is for the national court in question to ensure that the measure is reasonable and proportionate.
- In bringing a claim for damages in respect of past use of the patent, for the sole purpose of obtaining compensation for previous infringements of its patent, the SEP holder does not abuse a dominant position.





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# Patent Ambush

The Rambus case

# Rambus – Article 102 TFEU

- Rambus sued Infineon for patent infringement
- Infineon: Rambus committed fraud - set trap
  - Used JEDEC to promote a Synchronous DRAM standard
  - Business plan: Quietly adjust patent claims to cover standard
  - Did not inform JEDEC that it had patent/ applications
  - Breached JEDEC IPR policy which required declaration
  - Left JEDEC to avoid having to disclose patent
  - Used “secret squirrel” (informant) to get further information
  - Document destruction policy and change in testimony
- Rambus was found “guilty” of patent ambush and illegal monopolization by the U.S. district court but was later found “innocent” by the U.S. court of appeals inter alia because the obligations derived from the IP policy of the SSO had remained unclear

# Rambus case, cont'd

- Reversed on Appeal...:
  - (Much too) strict interpretation of IPR Policy, resulting in conclusion that Rambus did not breach duty to disclose :
    - Rambus patents (before adjustment) did not read on standard (even though Rambus believed they did), therefore no breach
    - IPR Policy was not clear enough – although members believed it required disclosure
  - An SSO needs to have a written patent policy with clear guidance on IPR. Problem: standard so high it discourages participation in SSO?
- Rambus still faces an antitrust Complaint filed by FTC alleging an “anticompetitive scheme”/patent misuse
- In EU, the Commission sent a statement of objections to Rambus. However, after the US Court of Appeals the case was settled. Rambus gave a FRAND promise.
- Was that a sanction?

# Rambus analyzed under 102 TFEU – dominance

- At the time of setting the trap, Rambus was not (yet) dominant
  - No collusion to conceal? Acted alone? Then no liability under 101 TFEU?
  - No dominance so long as standard not adopted, 102 not applicable?. BUT:
- Once standard is agreed, IPR owner would be dominant if
  - Patent is essential - All inter-technology competition is excluded
  - Rambus is an indispensable trading partner (no co-ownership);
  - Compliance with standard is essential to access market;
  - The standard is a barrier to new technology entry;
- Unless there are factors constraining dominance, e.g.:
  - Mutual dependence (in case of blocking patents)
  - Downstream activities constraining freedom to set royalty at will (GSM example)

# Rambus analyzed under Art 102 TFEU– abuse?

- But: Must abuse and dominance coincide in time?
- IP enforcement after setting trap could be abuse (*limiting production, markets or technical development to the prejudice of consumers*) (82(b)) – can be linked conduct
- Competitive impact:
  - Upstream: if standard would have been changed or withdrawn
  - Or if patent would not have “covered” the standard
  - Downstream: if excessive or discriminatory T&Cs and royalties
- remedy: Compulsory free license/reduced FRAND royalty
  - *Microsoft/MicroLeader* case suggests “patent misuse” remedy?
  - If SSO member set trap, then burden should be on member to prove that standard would not have been changed/withdrawn.

# Problem: Can IPR Policies Completely Avoid Submarines?

- IPR Policies develop to detect and avoid “submarine patents” – which surface only after standard has been set
- Several approaches have been tried:
  - Compulsory FRAND License on all SSO members (1993 ETSI case)
  - Avoidance of all patents to ensure royalty-free standards (W3C)
  - The middle road: Disclose IP and Declare Intentions (ETSI),
  - The FRAND license with opt-out principle (DVB)
- None of these deal with “outsiders”: Can compulsory license be imposed on “innocent outsiders” who want to collect for use of their patents in a standard they did not determine?

# How to Deal with Insiders' Submarine Patents?

## The 1993 ETSI “License by Default”

- ETSI wanted to solve the problem by imposing requirement to license all essential IPRs
    - Unless withheld within 180 days from start of standards work (“license by default”)
    - Requirement applied even if IPRs unknown or unpublished and even if standard not yet known
    - This became requirement for membership
  - Commission analysis under 101 TFEU:
    - License by default discourages competition through innovation
    - Exclusion from ETSI membership impacts competitive position
      - lost the right to influence standards (right to propose/block technologies)
      - no chance to gain experience and timely market entry
    - Defection of potentially key IT firms could affect quality of standards and therefore of standard-compliant products
-

# How to Deal with Insiders' Submarine Patents?

## W3C Solution: Collective Boycott of IPRs?

“...participants in a standards body will be unwilling and unable to work collaboratively if, at the end of the process, the jointly-developed standard can only be implemented by meeting licensing terms that are unduly burdensome...

–... Web community's longstanding preference for Recommendations that can be implemented on a royalty-free basis”

- As a condition of participating in a Working Group, each participant (W3C Members, W3C Team members, invited experts, and members of the public) shall agree to make available under WC3 Royalty-Free licensing requirements any Essential Claims related to the work of that particular Working Group.



# W3C: Royalty Free

- Escape clause: Patent can be withheld within 150 days from first public working draft
- IPR owner may also leave within 90 days from first public working draft
- If a patent has been disclosed that may be Essential, but is not available royalty-free, an ad-hoc group ... may recommend designing around it, cancelling the Working Group, or rescinding the Recommendation
- Collective boycott or normal cost optimization? If you join a golf club you need first accept the rules...

# W3C: Royalty free, exclusion and collective boycott?

- Same competitive concerns as 1993 ETSI IPR Policy?
  - Exclusion from membership impacts competitive position?
  - Mandatory RF license reduces incentive to innovate?
  - Defection of IT firms could affect quality of standards?
  - Open source should compete, not expropriate
  - But: escape clause
- Can W3C agree on “boycott” of IPR-based technology?
  - Rule of reason analysis
  - Technology selection should be done on the basis of objective, relevant, verifiable criteria
  - Royalty free is widely accepted principle in open source (Linux etc.)
  - Cost/quality evaluation: cost of IPRs includes not only FRAND royalties, but also impact on availability of open source development and early adoption

# The Middle Road: ETSI and DVB

- Solution: “Disclose and Declare”
  - Timely disclosure of “essential patents”
  - Declare intention to license or withhold them
  - If licensed, should be irrevocable and on “fair, reasonable, and non-discriminatory” (FRAND) terms and conditions
- ETSI IPR Policy, 3.1:
  - “... The ETSI IPR Policy seeks to reduce the risk to ETSI, Members, and others applying ETSI Standards and Technical Specifications, that investment in the preparation, adoption and application of Standards could be wasted as a result of an Essential IPR for a Standard or Technical Specification being unavailable”

# Example of IPR Policies: ETSI Art. 4

- **4.1** ... Each Member shall use its reasonable endeavours [in particular during the development of a Standard...in which it participates] to ...inform ETSI of Essential IPRs ....[in a timely fashion]. In particular, a Member submitting a technical proposal for a Standard ... shall, on a bona fide basis, draw the attention of ETSI to any of that member's IPR which might be Essential if that proposal is adopted.
- **4.2** The obligations ...do however not imply any obligation on Members to conduct IPR searches.

# Examples of IPR Policies: ETSI Art. 6

- **6.1** When an Essential IPR ... is brought to the attention of ETSI, the Director-General of ETSI shall immediately request the owner to give within three months an undertaking in writing that it is prepared to grant irrevocable licences on fair, reasonable and non-discriminatory terms and conditions ...
- The above undertaking may be made subject to the condition that those who seek licences agree to reciprocate.
- **Art. 8:** If IPR owner is unwilling to license, ETSI must drop the standard or refer to EC Commission for antitrust review under *IMS* criteria

# DVB : License by Default with opt-out

- **14.1:** Obligation to disclose
- **14.2:** Obligation to license, unless withheld
- **14.3** A Member shall have the right up until the time of final adoption as a standard by a recognised standards body of a specification approved by the Steering Board to declare to the DVB Steering Board that it will not make available licences under an IPR that was subject to the undertaking for licensing pursuant to article 14.2 above, only in the exceptional circumstances that the Member can demonstrate that a major business interest will be seriously jeopardised.

# “Disclose and Declare” Principles in IPR Policies Do Not Solve All or even most Problems...

- How to deal Outsiders refusing to license?:
    - Compulsory License? Or drop standard?
  - In most cases the problem is not patent ambush or a refusal to license but the willingness, even drive to license to an exorbitantly high royalty...
  - What are “essential patents”?
  - Violation of FRAND promises
    - What is “FRAND”...?
    - What remedy is appropriate?
  - First question: Do we apply Article 101 or 102?
-

# Insiders Setting Patent Traps?

## US Example: Dell Case

- FTC antitrust complaint (1996):
  - Dell was member of the VESA Video Electronics Standards Association with all U.S. hardware and software manufacturers
  - When approving a VL-bus standard, Dell certified that it knew of no IPR that the standard would violate
  - After adoption of the standard Dell asserted that firms using the standard infringed its patent
- Consent decree: Dell is precluded from asserting patents against any use in compliance with the standard



# Insiders Setting Patent Traps?

## The Sun/ETSI GSM 03.19 (SIM card) case

- 1999: Sun Declaration 03.19 “Sun may have patents...”
  - This was after standard adoption
  - There had been no “calls for patents”
  - Patents nrs. were disclosed only in 2001
  - Not “best endeavours”? Not “good faith”?
- This looks like a patent trap...
- MicroElectronica complaint argued:
  - Late disclosure was a patent trap
  - False disclosure: Patents not Essential
  - Collusion between ETSI Members to require patent (but no proof)
- Question: Can Article 101 be used?

# Does Article 101 Apply to Late/Incomplete Disclosure?

- DG Comp approached the case under 101 TFEU:
  - No proof of collusion (agreement to set a patent trap) found
  - But: IPR Policy / Standard is “agreement”
- DG Comp: Late/incomplete disclosure can affect inter-technology competition if it:
  - Prevents adjustment of standard to “work around” the patent
  - Prevents challenge of validity, ownership, or scope of patent
  - Influences technology choice
- Late disclosure can also affect downstream competition if
  - It influences technology choice (if higher royalties, less innovation)
  - No license is available (or if unfair, excessive, discriminatory)

# Does Article 101 TFEU Apply to False Declaration?

False disclosure can affect inter-technology competition if:

- Influences technology choice (e.g., drives towards technology that is in fact patented)
- False Disclosure can affect downstream competition if
  - It influences technology choice (if higher royalties, less innovation)
  - Threat of royalties discourages implementation

# Lessons from Sun/ETSI GSM 03.19

## Case: Art 101 Is Not A Perfect Remedy For Patent Ambush...

- Does 101 apply? “object or effect” was not to restrict competition
  - Object of standard and IPR Policy was pro-competitive
  - Sun was prepared to license on FRAND terms
- Real restriction (if any) was unilateral conduct, not collusion
- Also: Normal 81 Remedy is Nullity of Agreement (or standard):
  - This punishes the victim, and cure is worse than the disease
- DG Comp insisted on removal of IPR Declaration
  - But: This remedy has no “useful effect”:
    - Patent does not go away, and removal decreases transparency –
      - Lures implementers in the trap!
      - Uncertainty may discourage implementation
    - This remedy has no deterrent effect on patent trappers
- DG Comp also requested that ETSI improve IPR Policy
- Sun settled with MicroElectronica – should treat others equally

# How to Deal with Outsiders Refusing to License?

- IPR Policy does not necessarily help – No privity of contract
- Is a compulsory License possible under 2004 *IMS* Criteria?
- ECJ emphasis on users' participating in standard development and on switching costs (standard makes switching impossible) – relevant for SSOs
- “Two market” criterion: fulfilled if IP is separately licensed. If not, could the IP be a “potential or hypothetical market”?
- Exclusion of all downstream competition – if standard is pervasive
- “New product” -- if interoperability is a significant feature, and refusal frustrates significant demand for interoperable product
  - New product may still be in the same market
- Objective justification for refusal to license?
  - Does standard objective outweigh innovation disincentive?

# Conclusion – Submarines and Patent Traps

- Balanced IPR Policies are needed to detect “submarines” and avoid patent ambush, but too tight policies can discourage participation in standardization
  - Article 101 TFEU may not be an appropriate cause of action to address patent traps absent collusion to set the trap (*Sun/ETSI case*) but there can still be potential not utilized yet
  - Article 102 TFEU (concept of continuous conduct) can be appropriate to address patent traps
  - The proper remedy may be a royalty-free license (if proof that other technology would have been chosen or standard would have been dropped); FRAND does not add anything because that duty existed also in absence of a patent ambush
  - The 2004 *IMS* criteria may be useful to obtain compulsory license from an outsider refusing to license on FRAND terms
-



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# How to define a FRAND rate?

Market price, auction price or proportional price?

# FRAND aims at preventing Patent hold-up and Royalty stacking

- Patent hold-up = the potential problem that arises when a SEP holder has made a commitment to license on FRAND terms but then seeks to use standard-lock-in to obtain an unjustifiably higher royalty than would have been possible before the patent(s) were included in the standard.
- Royalty stacking = patent holders will set their royalty rates without regard to the other strictly complementary patent holders, potentially leading to a cumulative royalty payment for the good's producer that is so high that it cripples the product market, or at a minimum severely restricts output.



# No Excessive Pricing – Separating Value of Innovation from Value of Network Effects

- When a company contributes to a standard, it merits revenues attributable to its invention, but not “strategic value” (revenues deriving from the benefits of standardization, or the ability to exclude rivals from neighboring market)
  - Network effect can be valuable, but allowing patentee to capture that reduces economic efficiency
- How to separate value users attribute to innovative contribution from value they attribute to standardization?
  - Value of innovation: compare with revenues achieved in non-standardized market (or pre-standardized market) if competitive?
  - Value of standardization: compare with revenues in standardized market not using patent (or earlier generation of the standard)?
    - If interoperability could have been achieved in different ways with similar effect, then the value derives from standardization, not the innovation

# FRAND and ex ante

- A fair balance needs to be struck between IPR holders and technology users to ensure that market remain competitive and benefits of the standard are passed on to consumers
- In particular in case of important standards implementing companies have often in practice no alternative than to implement the standardized technology. This “hold up” situation creates significant market power (dominance) to holders of essential patents that need to be licensed
- Giving a FRAND promise to create standard including IP, and then imposing restrictive terms and conditions in breach of FRAND promise, to impose monopolistic IPR terms or to restrict competition in downstream product markets can constitute a breach of Art. 102 EU
- FRAND obligations seem substantially similar to the obligations under Article 102
  - prohibits unfair, exploitative, licensing terms, such as excessive royalties or the imposition of royalty-free grant-backs / non assertion provisions
  - prohibits restrictions or foreclosure of competition through exclusionary licensing practices (e.g. exclusivity provisions, raising rivals’ costs, margin squeeze).
  - the non-discrimination obligation applies in particular where discrimination would favor the dominant company’s own downstream operations or shield the licensor from competition in innovation and technology licensing.

# The Need to Control Price Abuse?

- Once standard is set, if the price is not set *ex ante*:
    - Standard may create monopoly power with barriers to entry: Technology market competition no longer constrains royalties
    - Downstream competition or desire to speed up adoption of new technology may not be a price constraint either (especially if IP owner is not present downstream)
    - There is no government price control
    - Are standards users “at mercy” of owner of essential IPRs?
      - royalty stacking concerns (multiple monopoly rents), yet most patents (50 to 80 %) “die” in litigation i.e. are either found invalid due to prior art for instance or are not infringed
  - FRAND commitment deals with these problems: it is a promise to avoid (multiple) monopoly rent and abusive pricing, in exchange for opportunity to reap network benefits from inclusion of technology in standard
  - But what is FRAND in practice?
-

# What is FRAND? -- Royalties

- Art 102 (a) case law is useful guidance even absent dominance:
- Fair – equitable, taking into account all interests involved (proportionality)
  - Taking into account also interest in development and roll-out of the standard (avoiding multiple monopoly rents), implementers, users, innovation, etc.
  - Same criterion as 82(a) EC, so also meaning “not excessive and not exclusionary or anti-competitive”
- Reasonable – moderate, bearing some rational relation to objective criteria other than monopolist’s desire to maximize profits
- Non-discriminatory – equal treatment of all customers, including the IPR-owner’s own downstream business

# No Excessive Pricing – Traditional Criteria Useful?

- Objective comparison of the price and the (historical or long-run incremental) cost of R&D (*GM*)
    - very difficult in information technology
  - Fall-back: a “consistent” comparison with prices of similar products (*United Brands, SACEM*) – may be useful
    - Charged by Licensor in non-standardized competitive markets
    - Charged by Licensor to its own downstream business
    - Charged by rivals for similar technology (*Bodson*)
  - Further fall-back: excessive profits analysis
    - OFT approach
    - Problem: How to adjust for risk factors?
    - *Ex post* analysis penalizes success, and makes advice difficult
-

# No Excessive Pricing – Separating Value of Innovation from Value of Network Effects

- When a company contributes to a standard, it merits revenues attributable to its invention, but not “strategic value” (revenues deriving from the benefits of standardization, or the ability to exclude rivals from neighboring market)
  - Network effect can be valuable, but allowing patentee to capture that reduces economic efficiency
- How to separate value users attribute to innovative contribution from value they attribute to standardization?
  - Value of innovation: compare with revenues achieved in non-standardized market (or pre-standardized market) if competitive?
  - Value of standardization: compare with revenues in standardized market not using patent (or earlier generation of the standard)?
    - If interoperability could have been achieved in different ways with similar effect, then the value derives from standardization, not the innovation

# Example: Use Competitive Pricing as Benchmark

- *“NTT DoCoMo, Ericsson, Nokia and Siemens ...reached a mutual understanding to introduce licensing arrangements whereby essential patents for W-CDMA are licensed at rates that are proportional to the number of essential patents owned by each company. ... The intention is to set a benchmark ... to achieve fair and reasonable royalty rates. ... This arrangement would enable the cumulative royalty rate for W-CDMA to be at a modest single digit level. ... As essential patent holders, Japanese manufacturers Fujitsu, Matsushita Communication Industrial (Panasonic), Mitsubishi Electric, NEC and Sony Corporation have also expressed their willingness to co-operate with such arrangements. ... targetted cumulative 5% level.” (<http://www.3g.co.uk/PR/November2002/4377.htm>)*
- This concerns example where IP owners' pricing is constrained by desire to foster acceptance of a new-generation standard (competition with installed GSM base)

# No Excessive Pricing – Other Relevant Considerations

- Price squeezing analysis can be a useful criterion if rival is active downstream – price should be non-discriminatory
- Royalty stacking – multiple monopoly rents -- should be avoided:
  - Cumulative royalty rate should be fair and reasonable, and not so high as to interfere with roll-out of the standard, and revenues should be shared pro rata to proportion of essential patents each patentee contributes
- EU Commission seems to be favoring a time comparison method (based on auction theory): the price of the IPR is compared to the situation before and after the lock in. The price before the lock in provides a competitive benchmark to consider whether the price asked for the standard essential patents is abusively high.



# No Excessive Pricing

## Other Relevant Considerations

- BUT:
- Price analysis should be *ex ante*, not *ex post* – success of standard should not necessarily lead to royalty reduction but the opposite may be true if it contains new valuable technology not covered before
- Price control should not eliminate incentives to innovate –
  - this is maintained by rewarding for value of innovative contribution, but not for value of standardization
  - In a competitive market, interoperability increases attractiveness of the product, and this is such a significant incentive that interoperability IP is often given away

# Non-discrimination

- Differential treatment should be allowed only if justified by proportional objective considerations
    - Legitimate objective
    - Effectiveness
    - Necessity (no less restrictive alternative)
    - Balance of interests
  - Example: cross-license may justify royalty adjustment if at arms' length
    - And should lead to royalty adjustment:
    - Royalty-free grant-back or non-assertion of patents (NAP) clause can be unfair (discourages innovation) and discriminatory (IP-rich licensee pays more than IP-poor licensee)
  - Royalty system / T&Cs should not discriminate between development models, such as proprietary vs. open source
  - No discrimination insiders/outside – level playing field
-

# What is FRAND? – Terms and Conditions

- FRAND criteria also apply to T&Cs: for example:
  - Tying, e.g., unnecessary patents, downstream products
  - ETSI rules prohibit termination - presumably unless:
    - material breach of provision “of the essence”
    - the breach cannot be cured
    - the breach cannot be remedied through financial compensation, and
    - Disproportionate negative impact on licensor
  - Defensive use of patents allowed (*MPEG, DVD, ETSI*): patentee may refuse to license Essential Patent
    - To prevent hold-up by outsider refusing to license Essential IPRs
    - To extract license commercially necessary related IPRs
    - To extract license to essential patents for other standard?
-

# Breach of FRAND promises

- Causes of Action to enforce FRAND promises: not just competition law
  - Contract (with SSO and with third-party beneficiary clause)? (But: is content sufficiently certain or determinable?)
  - Unconditional and irrevocable offer? (same issues as contract)
  - Promissory estoppel
  - Tort, Fraud
  - Article 102 TFEU and national law equivalents (per se analysis, since standard already “distorted” inter-technology competition by excluding all alternatives to the chosen alternative there should be no need to show that T&Cs have additional anti-competitive effect if they are apt to restrict competition further)

# Breach of FRAND promises

- Remedies for breach:
- Royalty reduction if excessive
- Royalty-free if evidence that third-party technology would have been chosen but for the FRAND promise (that was subsequently breached)
  - In that case value is attributable to standard, not to innovation
- Unenforceability of patent?
  - Broadcom/Qualcomm in the US
  - Rambus in EU: Deterrent to excessive pricing?

# Is joint licensing-in of IPRs *ex ante* a competition law problem?

- Joint buying (Horizontal Guidelines): two relevant markets:
  - buying market (IPR): concern with concentration of demand (if joint share is higher than 15% ceiling); and
  - downstream market where parties compete: concern with cost commonalities and possible collusion (if joint share is higher than 10% ceiling)
- Ceilings are exceeded; Does this mean SSO cannot organize bidding competition before agreeing on technology choice? Rule of Reason analysis?
- Better to set price when inter-technology competition is still available, than when IPR owner has achieved monopoly

# FRAND and ex ante

- A fair balance needs to be struck between IPR holders and technology users to ensure that market remain competitive and benefits of the standard are passed on to consumers
- In particular in case of important standards implementing companies have often in practice no alternative than to implement the standardized technology. This “hold up” situation creates significant market power (dominance) to holders of essential patents that need to be licensed
- Giving a FRAND promise to create standard including IP, and then imposing restrictive terms and conditions in breach of FRAND promise, to impose monopolistic IPR terms or to restrict competition in downstream product markets can constitute a breach of Art. 102 EU
- FRAND obligations seem substantially similar to the obligations under Article 102
  - prohibits unfair, exploitative, licensing terms, such as excessive royalties or the imposition of royalty-free grant-backs / non assertion provisions
  - prohibits restrictions or foreclosure of competition through exclusionary licensing practices (e.g. exclusivity provisions, raising rivals’ costs, margin squeeze).
  - the non-discrimination obligation applies in particular where discrimination would favor the dominant company’s own downstream operations or shield the licensor from competition in innovation and technology licensing.

# Meaning of the FRAND commitment

- “FRAND commitments are intended to prevent IPR holders from making the implementation of a standard difficult by refusing to license or requesting *unfair or unreasonable fees* (in other words excessive fees) after the industry has been locked in to the standard and/or charging *discriminatory royalty fees*.”
- “The assessment of whether fees imposed for patents in the standard-setting context are unfair or unreasonable, will be based on whether the fees bear a reasonable relationship to the *economic value of the patents*.”.



# Definition of FRAND in EU Guidelines

”In case of a dispute, the assessment of whether fees charged for access to IPR in the standard-setting context are unfair or unreasonable should be based on whether the fees bear a **reasonable relationship to the economic value** of the IPR.

In general, there are various methods available to make this assessment. In principle, cost-based methods are not well adapted to this context because of the difficulty in assessing the costs attributable to the development of a particular patent or groups of patents. Instead, it may be possible to **compare** the licensing fees charged by the company in question for the relevant patents in a competitive environment before the industry has been locked into the standard (ex ante) with those charged after the industry has been locked in (ex post). This assumes that the comparison can be made in a consistent and reliable manner

Another method could be to obtain an independent expert assessment of **the objective centrality and essentiality to the standard** at issue of the relevant IPR portfolio. In an appropriate case, it may also be possible to refer to **ex ante disclosures** of licensing terms in the context of a specific standard-setting process. This also assumes that the comparison can be made in a consistent and reliable manner. The royalty rates charged for the same IPR in other **comparable** standards may also provide an indication for FRAND royalty rates. These guidelines do not seek to provide an exhaustive list of appropriate methods to assess whether the royalty fees are excessive.

However, it should be emphasised that nothing in these Guidelines prejudices the possibility for parties to resolve their disputes about the level of FRAND royalty rates by having recourse to the competent civil or commercial courts.”

# Common principles under EU and US case law so far

- FRAND royalties must provide the patent holder with reasonable compensation;
- FRAND royalties should limit the patent holder to a reasonable royalty on the economic value of the patented technology itself, apart from the value associated with the patent's incorporation into an industry standard; and
- In determining a FRAND royalty rate, courts should consider comparable licenses.

# Disputed items sofar

- Whether concerns about patent hold-up and royalty stacking must be taken into consideration, or whether implementers must provide proof of actual hold-up or royalty stacking;
- Whether courts should apply the incremental value rule;
- What constitutes a “comparable license”; and
- Whether the appropriate royalty base is limited to the “smallest scalable patent practicing unit,” and what that actually means.

# Incremental value, comparable licenses and patent pool pricing as yardsticks?

- The FTC (like EU Comm) has recommended that: “Courts should recognize that, when it can be determined, the **incremental value** of the patented technology over the next-best alternative establishes the maximum amount that a willing licensee would pay in a hypothetical negotiation. Courts should not award reasonable royalty damages higher than this amount.”—2011 IP Report at 189.
- In determining a FRAND royalty rate or damages, courts have generally considered royalties received by the patentee for the licensing of the patent-insuit in other circumstances **comparable** to FRAND–licensing circumstances.
- In Microsoft, Judge Robart added **patent pool rates** to the list. Although the court agreed “as a general matter that patent pools tend to produce lower rates than those that could be achieved through bilateral negotiation,” it nevertheless found that rates offered by certain patent pools “served as good indicators of a FRAND royalty rate” for Motorola’s SEPs. In contrast, in Innovatio, Judge Holderman found that the pool was not an appropriate comparable license, distinguishing Judge Robart’s decision on the grounds that he determined that Motorola’s 802.11 patents were not important to the 802.11 standard, whereas Innovatio’s patent portfolio is of “moderate to moderate-high importance to the 802.11 standard.”

# Appropriate royalty base

- In LaserDynamic v. Quanta, the Federal Circuit held that:
- “Where small elements of multi-component products are accused of infringement, calculating a royalty on the entire product carries a considerable risk that the patentee will be improperly compensated for non-infringing components of that product. Thus, it is generally required that royalties be based not on the entire product, but instead on the ‘smallest salable patent-practicing unit’” (SSPPU).

# Conclusion – FRAND Licensing

- IPR owner should not terminate license nor request injunctive relief from willing licensees
  - Ex ante announcement of most restrictive licensing terms as alternative for FRAND
    - Difference between true ex ante value and ex ante ask
    - Practical difficulties (time lag, further development of standards, strategic actions of licensees and licensors, number of patents)
  - Royalty free is normal for standards implementing “merely” technical interfaces
  - No one fit for all solution is available as standards are different
  - Consider “patent misuse”-type of remedy?
  - In case of standardization FRAND does not mean “compulsory licensing” because the IPR holder has decided to participate in the standardization process and has given a FRAND commitment in exchange for its technology being included in the standard.
  - No circumvention of FRAND by transferring essential patents in order to escape binding FRAND commitments of the transferee. FRAND obligations stay in force irrespective of the transfer. IPCom case.
  - As regards the definition of FRAND prices, the jury is still out there
  - Cumulative application of competing yardsticks?
-

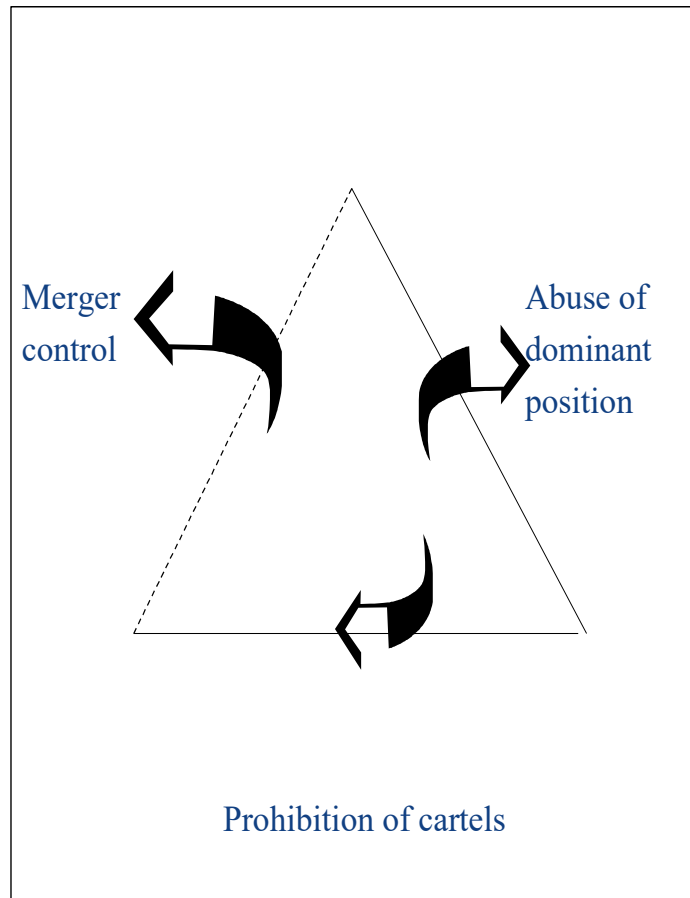


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# Merger control and Digital markets

How to evaluate dynamic effects?

# Triangle of Competition Law





# High-tech mergers – potential issues

- Technological barriers are raised
  - Too much horizontal concentration
  - Vertical foreclosure
  - Giants are buying their most potential rivals to remain the king until the end of the days...
  - But market dynamism can be hard to predict, and can it be predicted?
-

# Key principles of Merger Control

- **Mandatory notification:** Large concentrations meeting certain monetary thresholds need to be notified to the competition authorities
  - EU: combined worldwide turnover of the merging parties exceeds 5 billion euros and at the turnover of at least two parties exceeds 250 million euros in the EU and less than 2/3 of the turnover is in one single Member State; or all parties' worldwide turnover exceed 2,5 billion euros and the aggregate turnover of the parties exceeds 100 million euros in at least 3 EU Member States and each of the parties has at least a 25 million turnover in these 3 Member States
  - Under national rules turnover figures are significantly lower
- **Implementation ban:** the merger may not be put into effect before it has been cleared by the competition authorities having jurisdiction over the case: **Phase 1:** about five weeks from "effective notification date"; **Phase 2:** in case of "significant doubts" three additional months (additional time in case of transfers, remedies etc.)

# Key principles continued...

- **Protection of competition:** the merger is prohibited if it leads to a dominant position or otherwise significantly impedes effective competition in the relevant market; instead of a prohibition the transaction can be cleared conditionally (based on remedies proposed by the merging parties) to remove the competitive concerns
  - **One stop shop:** if the EU thresholds are met only EU Commission has jurisdiction over the case within the EU; in certain cases can be transferred to the EU or to national authorities
  - **Notifiable "Concentrations"**
    - Change of control on a lasting basis
    - Share acquisition( > 50 %, also a smaller share can lead to "effective control")
    - Mergers and takeovers
    - Setting up a joint venture (sole or joint control, note shifting alliances and non-full functional entities)
    - Asset transfers, sale of a business line
  - **Horizontal, vertical and conglomerate mergers**
  - **Idea: Block such mergers that would lead to a price increase on the relevant product and geographic market or otherwise significantly harm effective competition**
-

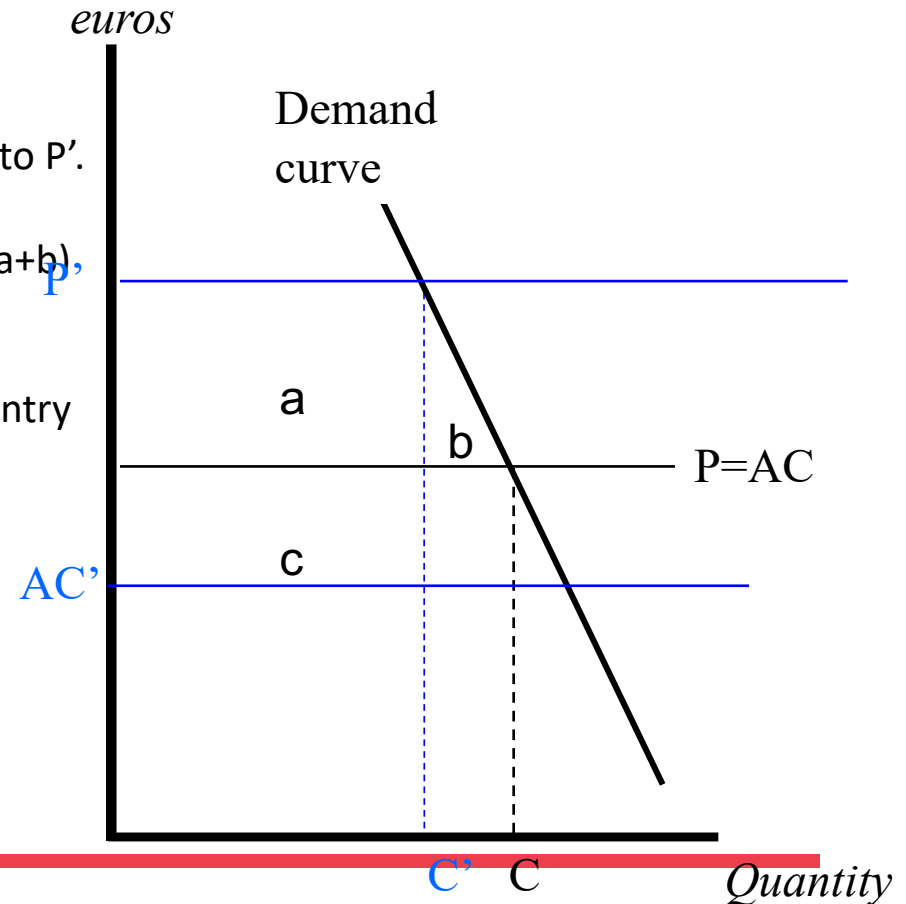
# The key tests

- In EU, mergers judged on whether they:
  - “... *significantly impede effective competition* ... in particular by *the creation or strengthening of a dominant position* ...”
- In other jurisdictions, it varies but often either dominance test or, e.g. in UK, US:  
“*substantial lessening of competition*”
- However phrased, it’s about market power:
  - unilateral or co-ordinated effects

# Merger control (economics)

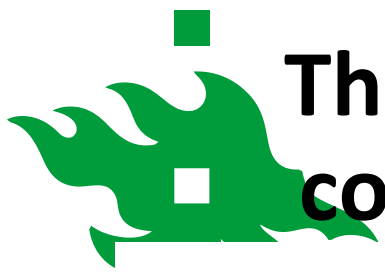
- Initially “ $P=AC$ ”.
- Merger implies lower  $AC$  to  $AC'$ , and increased price to  $P'$ .
  - Good for the cartel (profit from “zero” to  $a+b$ )
  - Bad for customers (loss of consumers surplus for  $a+b$ )
  - Net welfare to the society is  $c-b$  since  $a$  is simply transferred from consumers to firms
- Dynamic view (in US and increasingly in EU); if free entry then eventually  $P$  driven down to  $AC'$
- A lot depends on barriers to entry
- Predicting the future is not easy...

Williamson's diagram

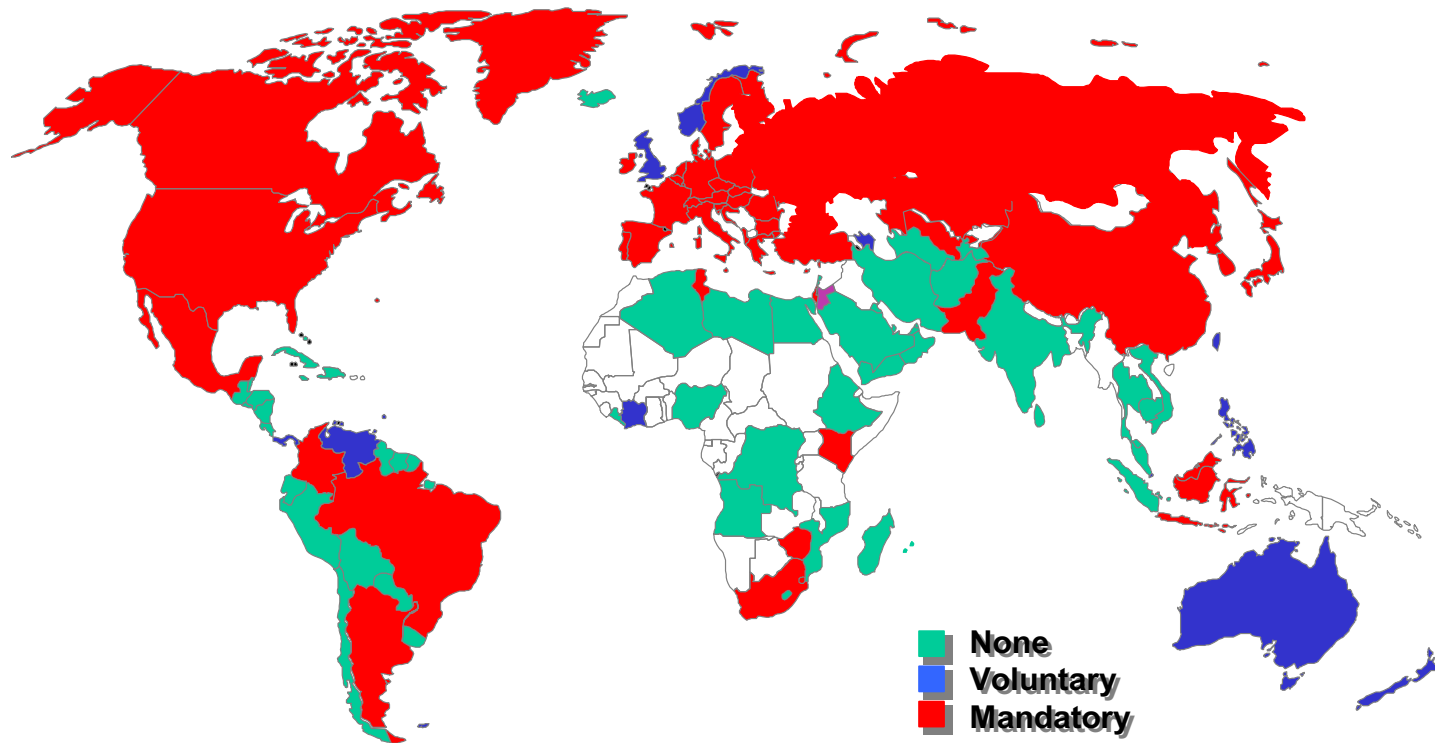


# Merger clearance procedure in practice

- Pre-notification meetings between the Commission's case team and the notifying parties before the formal notification. The clock starts to tick first when the Commission considers it has all relevant material in its file.
  - State of play meetings with all parties involved. Organised three weeks into Phase I, within two weeks of instigating Phase II, before SO is issued, following reply to the SO and before Advisory Committee.
  - Involvement of third parties with sufficient interest by Article 11 Requests and by meetings
  - Access to the Commissions file
    - Following statement of objections (SO) either on continuous basis or at predetermined intervals
  - If there are serious doubts and the case moves to Phase II a Statement of Objections (SO) will be sent to the notifying parties.
  - Parties can propose formal commitments to the Commission to alleviate the competitive concerns.
  - In practice most cases are closed in phase I. Of those cases that move to phase II ("serious doubts") most cases are cleared (with conditions). Only few cases are formally prohibited.
  - On the other hand parties may abandon a merger after bad initial feedback from the regulators (provided the merger agreement between the parties so allows).
-



# The evolving world of merger control...it is a moving target



# Practical considerations

- Merger rules are probably the most important "external factor" that can derail or destroy even a well prepared merger transaction
- At the same time merger analysis is a very complicated and detailed legal-economic exercise
- Various internal steps must be taken to put the case on the right track from the very start of the merger elaborations/negotiations
- The key antitrust risks relate to mistakes in analysis (for instance failure to notify in some country), gun-jumping (violations against the implementation ban), too long waiting periods that delay important business transactions, as well as bad substantive outcomes in terms of unexpectedly heavy commitments that sour the business deal up to outright prohibitions
- The aim of the merger rules is to block such mergers that would lead to higher prices or close markets from competitors
- The ultimate goal of merger control, like in other areas of competition law, is to protect competition as a process, not competitors



# The Horizontal Guidelines

- Covers the substantive assessment of horizontal mergers.
- Aim to
  - provide an economic framework for the assessment and
  - give guidance as to how the Commission assesses the concentrations where the parties are actual or potential competitors.
- Market share and concentration levels
  - Interpreted in the light of likely market conditions, i.e. is the market highly dynamic in character
  - Market share over 50% may, as such, evidence the existence of dominance
  - Other factors should be taken into consideration when evaluating the strengthening or creation of a dominant position with lower market share
  - HHI as an indication of competitive pressure in the market post merger

# The Horizontal Guidelines

- Possible anti-competitive effects of horizontal mergers:
  - Non-coordinated effects:
    - Merger eliminates competitive constraints, which consequently have increased market power
    - Creation of or strengthening of the dominant position of a single firm
    - Factors that may influence are i.e. large market shares of the merging parties, parties are close competitors, the customers have limited possibility to switch suppliers...
  - Coordinated effects:
    - Changes the nature of competition, firms are more likely to coordinate their behavior and thus harm effective competition
    - Coordinating may involve i.e. maintaining or raising prices above the competitive level, limiting production or capacity, dividing markets or sharing bids.
- Efficiencies in overall assessment of the merger
  - Efficiencies must be pro-competitive, benefit consumers and verifiable



# Herfindahl-Hirschmann Index: Initial indicator

## - EU

Post-merger	Post-merger	Increment( $\Delta$ )
<1,000	unconcentrated	-
1,000-2,000	moderate	+250
>2,000	concentrated	+150

## - US

Post-merger	Post-merger	Increment( $\Delta$ )
<1,000	unconcentrated	-
1,000-1,800	moderate	+100
>1,800	concentrated	>50/>100

HHI = sum of squares of market share

# Single dominance

- Single dominance Main criteria:–Market share (both volume and value sales)< 25% no single dominance> 50% dominance–Evolution of market share–Overall size of the undertaking–Control of infrastructure not easily duplicated (essential facility)–economies of scale and economies of scope–vertical integration
- Other criteria:–technological advantages or superiority–absence of or low countervailing buying power–easy or privileged access to capital markets/financial resources–product/services diversification–absence of potential competition (barriers to entry) –a highly developed distribution and sales network–barriers to expansion

# Collective dominance

Competition authorities analyse:

- (a) whether the characteristics of the market makes it conducive to tacit coordination; and
  - (b) whether such form of coordination is sustainable over time.
- 
- Main criteria:-mature market-stagnant or moderate growth on the demand side-low elasticity of demand-homogeneous product and similar cost structures-similar market shares-various kind of informal or other links between the undertakings concerned-retaliatory mechanisms-lack or reduced scope for price competition

# Non-coordinated effects

- Non-coordinated (unilateral) effects: the merged group is able profitably to reduce value for money, choice or innovation through its own acts without the need for a co-operative response from competitors
- The idea is that prices can raise even if no single dominance or joint dominance is created or strengthened as a result of the merger transaction
- US “Baby Foods” case
- Was added to EC merger rules in 2004 and in Finland in 2011
- The point here is that the Commission does not need to prove market dominance
- Ability to unilaterally raise prices in differentiated markets in a oligopoly situation
- How big is the gap between single dominance and joint dominance?
- Compare single/joint dominance and non-coordinated/coordinated effects
- So far “non-coordinated effects” has been a decisive factor only in a handful of EU cases

# Vertical and conglomerate mergers

- Vertical mergers have normally less potential for harmful effects than horizontal mergers between competitors, but gaining control of a key asset that other competitors need can sometimes block competitors a key asset
- Non-horizontal guidelines: a) ability and b) incentive to exclude downstream competitors by worsening access to a key asset
- Control of raw material or another asset that also competitors need in competing downstream with the merged entity
  - Importance of the controlled asset?
  - Refusal to deal?
  - Price squeeze?
  - Price advantage?
  - Alternative source of supply?
  - Efficiency defence?
- E.g. Tom Tom/Teleatlas and Nokia/Navteq
- Conglomerate mergers: does the merged group have the ability and incentive to leverage market power from one market into a second?
- Normally conglomerate mergers do not raise any competition concerns

# Important High-Tech merger cases

- Google DoubleClick (2007)
- Nokia/Navteq (2008)
- Tomtom/Teleatlas (2008)
- Intel/McAfee (2010)
- Google/Motorola (2011)
- Microsoft/Skype (2011, Court 2013)
- Microsoft/Nokia (2013)
- Facebook/WhatsApp (2014)
- AT&T/Time Warner (2019)
- Google/FITBIT (2020)



# Patent transactions and merger control

- Sale of an IPR is not notifiable but sale of a business line is notifiable...
  - Sale of part of a patent portfolio – a separate business?
  - Patent pools
    - Article 101
    - Patent consortia (e.g. Rockstar consortium)
  - Structural combination of patent portfolios is a merger...(?)
-

# Challenges in evaluating high-tech mergers

- High-technology merger analysis often focuses on two seemingly contradictory ideas about the nature of technology.
- On the one hand, the rapid pace of development can result in the sudden and complete overhaul of existing technologies and the displacement of an existing monopolist.
- On the other hand, due to network effects high-tech markets may be significantly more durable, enabling early innovators to become firmly entrenched as market leaders
- High-Tech incumbents can buy their future rivals before things get serious
- Is reduction of potential competition enough to block a merger that also produces economics of scale and scope?
- How good are we in analysing future effects of high-tech mergers?
- How to modernize the merger toolbox?