

ITU New Initiatives Workshop

The regulatory environment for future mobile multimedia services

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# Regulatory conundrums (or is it conundra?)

Ewan Sutherland

<http://www.3wan.net/>



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*Ils n'ont rien appris,  
ni rien oublié*

Charles Maurice de Talleyrand-Périgord



# *Desiderata*

- A level playing field
- Technological neutrality
- Innovation
- Avoidance of legacy regulation
- Jobs and growth
- National competitiveness
- National champions
- Widespread adoption
- Affordable prices



# Complaints

- Australia – operators do not tell customers of their right to complain to the ombudsman
- China – telecoms has the most complaints of any service
- France – 7,418 complaints to DGCRF in 2005
- France – top ranked complaints 2004 (2003) in the overall telecoms market observatory:
  - 1 (1) cancellation of a mobile contract
  - 5 (3) mobile billing
- India – TRAI forced operators to share masts to cover blackspots, following consumer complaints
- Nigeria – Minister and Consumer Protection Council have called on MNOs to improve service
- Zambia – complaints to NRA resulted in direction to MNOs to improve quality and information to customers



# Mobile is not one market

## Wholesale

- Call origination
- Call termination
- Text messaging (SMS)
- Access:
  - national roaming
  - international roaming
  - virtual networks
  - content providers

## Retail

- Substitutability
- Cutting the cord
- Services “at home”
- Bundling into triple and quadruple play



# Dominance and abuses

- Obscure tariffs
- High switching costs
- High call charges
- Excessive data charges
- Walled gardens
- Poor quality of service
- Absence of service level agreements
- Lack of customer care
- Over-estimation of the numbers of customers



# Remedies

- Mobile Number Portability (MNP)
- Price caps and glide paths
- Long Run Incremental Costs (LRIC)
- Wholesale access:
  - national roaming
- Accounting separation
- Publication of data:
  - accounting
  - quality of service



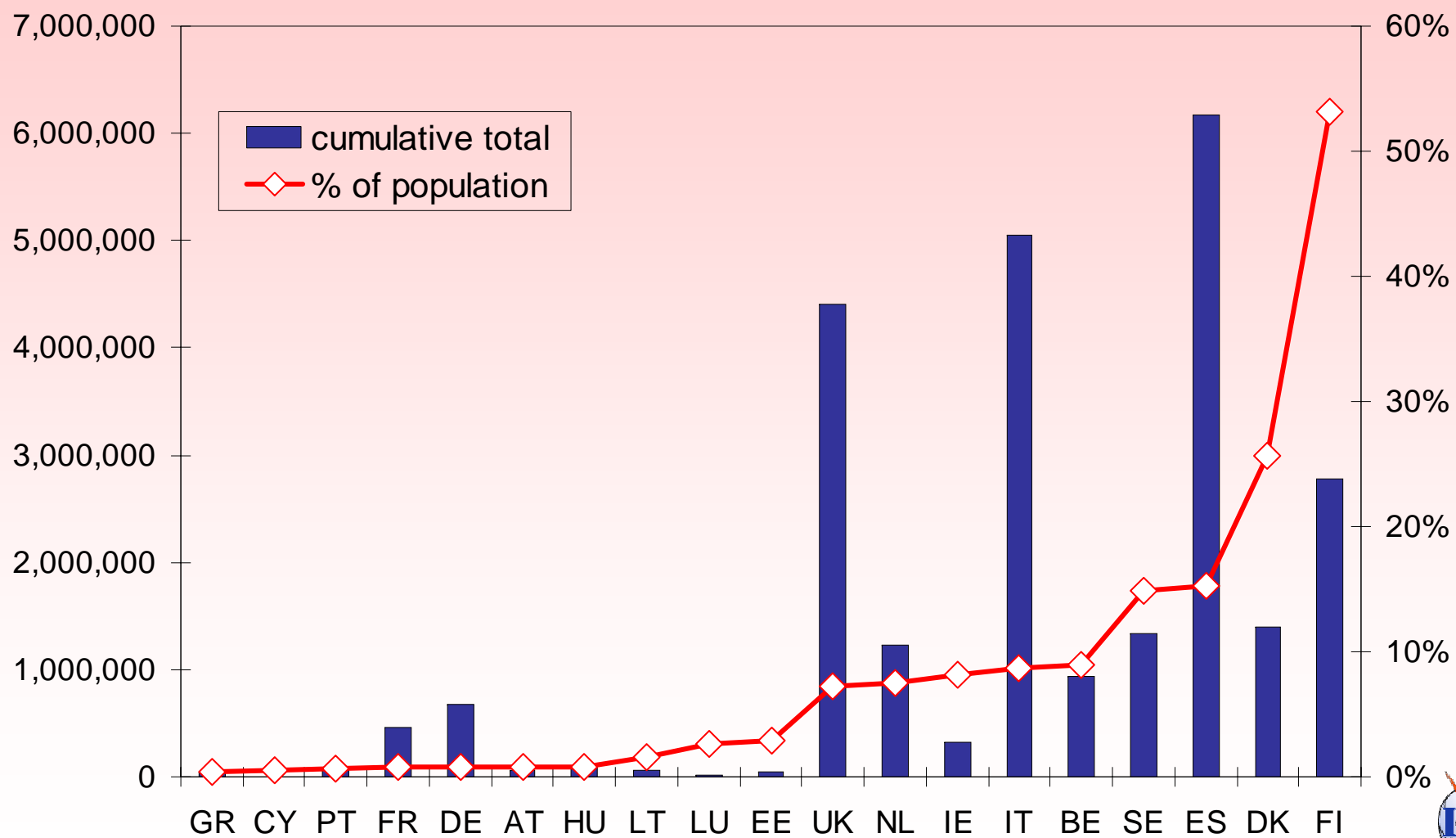


# Mobile number portability

- Arguments in favour of MNP have always won
- Successfully introduced in many countries
- Still being introduced by a few laggards
- Implementation is frequently:
  - slow
  - expensive
  - overly bureaucratic and highly technical
  - peculiarly nationalistic
- Operators have frequently frustrated the intention of legislators



# Mobile numbers ported in the EU



# Call origination

- Frequently, more expensive than fixed lines
- Often hideously complex tariffs  
(few people are confident they are on the best plan)
- Joint dominance in markets with few operators:
  - Ireland
  - Spain
  - South Africa
- Uncompetitive market structure for freephone:
  - MNOs want revenue “sharing”
  - they have destroyed single number marketing
  - NRAs never enforced 800 access



# France

- Ireland had shown the way on analysis of mobile call origination market
- Two dominant players, one weaker follower
- Operators realised regulation would work, so they made MVNO deals:
  - NRJ, a pop music FM radio station
  - Breizh Mobile in Bretagne
  - Coriolis Telecom for business users
- *Conseil de la concurrence* found the three operators guilty of collusion and fined them €500 millions

<http://www.arcep.fr/communiqués/communiqués/2005/index-c05-25.htm>



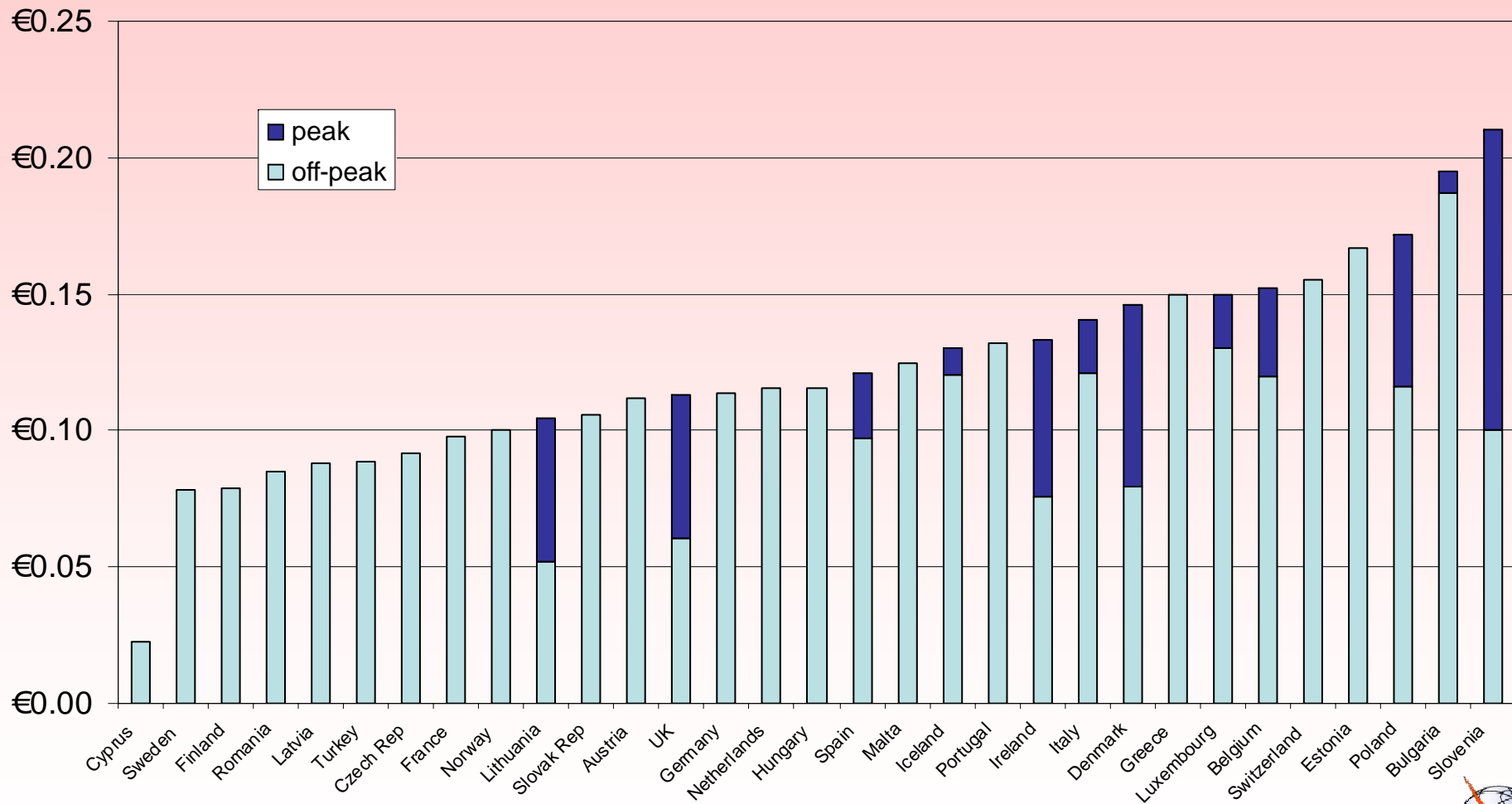
# Call termination

- Excessive pricing with Calling Party Pays (CPP)
- Dominance by one operator on termination of calls to its network
- Regulation is the only remedy
- Switching to Receiving Party Pays (RPP) is not considered practicable
- Weakly enforced by NRAs
- Resisted and delayed by operators
- A major barrier to fixed mobile convergence and flat rate fees

**Achieving cost orientation is taking a very long time!**



# European MTRs at 1.i.06



Source: IRG/ERG



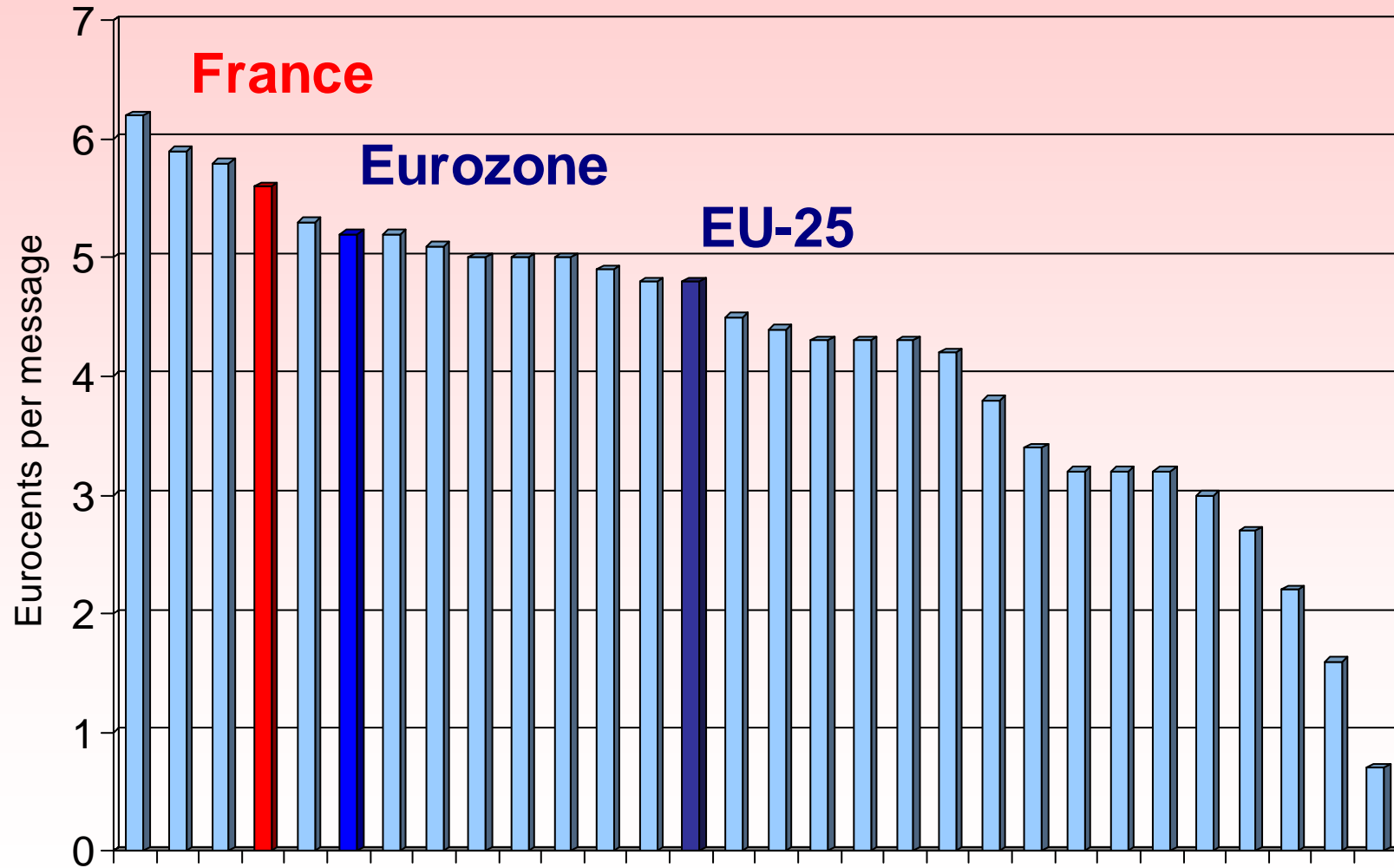
# SMS

- Carried at low priority in the signalling channel
- No significant costs to operators (apart from marketing and billing)
- Problems arise because operators:
  - refuse to interconnect
  - charge excessive prices (retail and wholesale)
- Enterprise customers need SLAs in terms of:
  - guaranteed delivery
  - maximum delay
- ARCEP (French NRA):
  - has acted to set prices for SMS termination rates

<http://www.arcep.fr/communiqués/communiqués/2005/index-c05-55.htm>



# SMS price comparisons





# Handset “subsidies”

- Very confusing for customers
- Often unnecessarily long lock-in periods:
  - contracts
  - SIM card locking
- Unclear how operators recover the costs (or how many times)
- There must be an option to have tariff plans without a handset purchase
- With more expensive 3G handsets, the problems get much worse



# Affordability

- A general concern to ensure services are “affordable”
- Very difficult to measure
- Are poor-to-poor calls feasible?
- Pre-paid voice with CPP allows people to receive calls, but not necessarily to make them
- The Grameen model offers outbound call-by-call
- Difficult to offer services to large groups of rural subsistence farmers



# International mobile roaming

- Excessive pricing, unresolved for very many years
- Extension of abuse to:
  - pre-paid customers
  - mobile data
- European Commission:
  - “letter of comfort” to absolve cartel violation
  - sector inquiry:
    - cases against operators in Germany and the UK
  - designation of the wholesale market:
    - analyses only by Ficora, NPT and Arcep
  - publication of prices on europa web site
  - proposal for direct regulation

**Informa estimates each fan at the FIFA World Cup will spend €36.50 on roaming charges.**



# Mobile Internet access

## Ireland to Germany

- Vodafone
  - € 8.00 on Vodafone
  - € 6.90 on T-Mobile
  - € 11.78 on E-Plus
- O<sub>2</sub> (Telefonica)
  - € 7.79 on O<sub>2</sub>
  - € 11.10 on Vodafone

## Belgium to Germany

- Proximus
  - € 8.86 on T-Mobile
  - € 15.13 on E-plus
  - € 29.54 on Vodafone
  - € 8.47 on O<sub>2</sub>
- Base (KPN)
  - € 12.50 on E Plus, O2, T-Mobile & Vodafone

Prices are per Megabyte. Warning these are not user data, but include all the TCP/IP overhead.



# Reding Roaming Regulation (3R)

- A proposal outside the regulatory framework:
  - political exasperation
  - support from heads of government
- To reduce wholesale prices within the EU
- To force operators to pass on the savings (only the utterly naïve expect this voluntarily)
- Operators:
  - demonstrated enormous resistance
  - have cut their prices (more cuts to come)
  - even collaborating to reduce prices (highly unlikely to comply with competition law)



# Yet more roaming abuses

- Considerable scope for extension of current abuses
- Roaming on planes:
  - even in home country
  - risks of phone/plane rage
- M-payments
- M-commerce
- M-content
- Digital broadcasting



# Wholesale access

- Mobile operators refuse to see the benefits for themselves
- They resist MVNO deals
- They want all the revenues
- They force service providers to find other routes to customers:
  - Internet
  - wi-fi hotspots
  - digital broadcasting



# Quadruple play

- A growing number of retail offers:
  1. fixed telephony
  2. Internet access
  3. television
  4. mobile telephony
- Even Vodafone seems convinced
- Regulated access to fixed networks:
  - telephone numbers
  - local loop unbundling
  - CS/CPS/VoIP
- Very little regulation on access to mobile networks
- A potentially dangerous asymmetry in access

<http://www.oecd.org/dataoecd/47/32/36546318.pdf>





# National roaming

- A remedy for poor network coverage in rural and remote areas
- A crucial measure to assist market entry
- Essential for access in countries like:
  - Australia
  - Colombia
  - Sweden
- Resisted by operators



# Voice over IP

- cheap flat rate pricing models challenges pre-paid model for consumers
- secondary numbers at distant locations
- nomadic access over:
  - fixed broadband
  - Wi-Fi and (soon) WiMAX

Vodafone maintains the technology is three years away from their networks.



# Least developed countries

- Only one business model:
  - high mobile termination rates
  - pre-paid outbound calls and SMS
- No business model for broadband or mobile value-added services
- No competition to drive such models
- Business models will have to include:
  - satellite and terrestrial digital broadcasting
  - WiMAX and Wi-Fi
  - Voice over IP



# Games, Gambling and Girls (3G)

- Consequently, the need for content regulation
- Parental control over children's access (very hard to enforce over Wi-Fi or WiMAX)
- Trans-border controls on roaming access to content
- Country of origin principle?
- Control over advertisements (cigarettes, alcohol, aimed at children, etc.)
- Technological advances, e.g., SlingPlayer and Orb



# M-Commerce

- Attempting to boost ARPU
- Payment systems
  - electronic purses
  - credit cards
- A means to address the “unbanked” in least developed countries
- Collision of banking and telecommunications regulations



# Mergers and acquisitions

- General competition law
- Some countries have specific legislation
- Recent interesting cases in:
  - Hong Kong: CSL and New World Mobility (significant lessening of competition?)
  - Thailand: Temasek acquiring AIS (ownership by a foreign government?)
  - Africa: MTN acquiring Investcom (possible “bubble” economy?)



# Systematic appeals

- MNOs will appeal any decision (sometimes even if they appear to have won)
- And then appeal again
- To intimidate the regulator
- To create FUD (Fear, Uncertainty and Doubt)
- To divert attention and resources
- To delay change
- To discourage potential market entrants
- It has become reflex and habit



# Conclusions

- 3GSM operators continuing to believe in their own ecosystem (they drink the Kool-Aid)
- One network will no longer suffice, the eco-system is very much bigger and includes fixed
- Abuses and market failures take *forever* to resolve
- Content providers will go to the most attractive networks and countries
- Instead of competition, we have created politico-regulatory gamesmanship
- The need is for much more competition, especially more market entry and new business models





# Thank you

Ewan Sutherland

<http://www.3wan.net/>

3wan [ @ ] 3wan.net

skype://sutherla

+44 141 416 0666

