Vertical separation

Training on Competition and Changing Market Conditions: Impact on ICT Regulation

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Modes of separation:
What is available in the form of remedies and regulation
Telecommunications and boundaries...the received wisdom

- Network industry with strong synergies between network management (supply) and retail operations (demand)

- Integration enables easier coordination of investment activities

- Boundaries
  - Upstream – equipment manufacturing (once AT&T owned Lucent)
  - Downstream – installation of customer premises equipment (some telcos still do this function)
Separation may be voluntary, negotiated or mandated

- Voluntary separation involves divestitures to realise (hidden) value (e.g. Eircom in Ireland)
- Negotiated separation is where a regulator and a telco agree a separation (e.g. BT in the UK)
- Mandated separation is where the regulator determines that separation of a telco is in the best interests of the public and imposes the remedy (may be Telstra Australia)
Modes of separation:
Voluntary separation
What does theory say about value and separation?

- Key question: Why would a company separate allowing rivals to access wholesale inputs? (The opposite of vertical foreclosure!)
Hypotheses

- Two hypotheses in the literature on financial restructuring (see Krishnaswami and Subramaniam, *Jnl Fin Econ* 1999)

- Core-operation hypothesis – remove unrelated businesses allowing managers to focus on core business. *Sometimes relevant in telecoms*

- Information hypothesis – help provide financial clarity about best performing units. *Can be a reason in telecoms.*
Strategic reasons for separation

- An alternative position is the Strategic hypothesis (see Lin, *Eur Econ Rev* 2006)

- Idea simple:
  - Spin off of wholesale operations allows upstream firm to expand production (even where this benefits the parent company’s downstream rivals)
  - Joint profits of spin off plus downstream operation may be higher vis-à-vis case where firm remains integrated

- This proposition is probably closest to separations currently being considered by some integrated operators - rests on idea of *commitment value*
What’s happening in practice?

- Eircom – strategic hypothesis, may be element of information hypothesis
- Orange in Switzerland – Core operation hypothesis
Modes of separation: Negotiated separation
Negotiated separation

- Where a firm and a regulator determine through a process of negotiation the boundaries between:
  - Monopoly ‘bottleneck’ elements, and
  - Competitive service elements

- See BT Openreach case study below
The negotiating/regulatory options

1. Accounting separation (common place)
2. Functional separation (BT Openreach)
3. Structural separation (Maybe Telstra)
4. Full legal divestiture (Mongolia)
Modes of separation: Mandated separation
Mandated separation

- This is the case where the monopoly elements are forcibly divested
- There have been instances of this e.g. Mongolia
Case study: Functional separation in the UK (BT)
Functional separation started in Ofcom’s Telecommunications Strategic Review around 2003/04

- Identified key attributes of a well-functioning market
- Identified where effective competition can occur and be sustained
- Looked to see whether market power of incumbent BT too entrenched
- Needed to consider effects of separation remedies on incentives for investment
The TSR concluded

- No equality of access to bottleneck facilities
  - Access
  - Backhaul networks
- Problem of discrimination (a vertical restraint) was acute and non-price discrimination difficult to deal with via regulatory means
- Ofcom considered structural separation
Ofcom’s consideration of structural separation

- Fixes basic problem of discrimination
- Too inflexible – the boundary cannot be revisited at a future date if significant changes occur
- Lengthy process (2+ years) and uncertain as it would be challenged by BT
- Some inefficiencies due to loss of vertical integration
- Concluded structural separation too onerous and risky
Functional separation chosen...why

- Problem of market power in access and backhaul
- Leverage of upstream market power – difficulties of regulating non-price discrimination
- Resistant BT culture
- Remedy that preserved the vertical synergies but enabled the problem of discrimination to be tackled
- Final undertakings agreed September 2005
BT Openreach

- The agreement between Ofcom and BT is legally binding and supported by the Enterprise Act 2003, can lead to
  - Directions from Ofcom and/or court enforcement
  - Reference to the Competition Commission
  - Third party action for damages
- Openreach created by BT is fully owned by BT and within the BT group of companies
Openreach - assets

PSTN & ADSL Service

Core Node

Local Telephone Exchange

Main Distribution Frame

Primary Connection Point (Cabinet)

Secondary Connection Point

Distribution Point (DP)

Customer premises

Backplate of NTE

openreach

openreach is also responsible for all duct, access fibre and copper & fibre backhaul

Demarcation Points

BT
Key elements of BT’s undertakings

- Functional separation – creation of Openreach
- Equivalence of inputs
- Transparency
- Independent audit and oversight
Equivalence of inputs

- The same
  - Products and services for BT and others
  - Time scales, terms and conditions, incl. price
  - Systems and processes
  - Reliability and performance
Independent monitoring and oversight

- **Equality of Access Board (EAB)**
  - Monitors, reports and advises on BT’s compliance with the Undertakings
  - Chaired by BT Group non executive director, three independent members and one senior BT manager
  - Reports directly to BT Group plc Board
  - Reports annually to Ofcom and publishes summary report as part of BT’s annual compliance report

- **Ofcom**
  - Quarterly implementation reports
  - Annual report on impact of TSR
BT Reporting structure and oversight

Main BT PLC Board

- BT CEO
- Operating Committee

EAB
- Openreach Board
- Wholesale Board
- Retail Board
- Global Board

Openreach
Wholesale
Retail
Global Services

Management reporting
Compliance oversight

BT Group Strategies & Operations
BT Design | BT Operate
Case study: The Mongolian model of separation
- Population 2.5 million
- Area greater than France & Spain combined
- <1 million outside the 21 main cities & towns
- 330 rural districts
Vertical separation in Mongolia

- Mandatory legal & ownership separation of a partially privatised incumbent (MT)
  - All local loops, fibre & microwave transmission now separately owned by “Netco”
  - Network now public sector owned & operated
  - Some serious efficiency challenges to be overcome

- Separation of all network & service businesses in the sector?
  - Initial intent to achieve single transmission & open access networks
  - Includes proposals to separate transmission of mobile networks
The problems addressed

- Competition & network investment? - already flourishes
  - 4 mobile operators, 40+% penetration, nation-wide networks
  - Among the lowest retail prices in the world
  - Thriving broadband internet services on existing backbones
  - Major UA program supported enthusiastically by mobile operators

- Duplication of networks? - The market functions
  - Two national networks, multiple spurs and urban networks
  - Choice, competitive pricing and shared infrastructure

- Abuse of dominance? - less likely in mobile market
  - Current environment of reducing dominance & rapid growth

- Regulation? - Other effective instruments exist
  - Mobile market competition tools well known
  - Open access to transmission – can be achieved without separation
Mobile network separation?

SERVCO Switch (MSC)

NETCO Long distance Transmission?

SERVCO Base Station (BTS)

NETCO Tower & building?

SERVCO Cell sites [BTS]

On many private buildings

NETCO Intra-urban E1 links?

SERVCO Base Station Controller
Mongolian policy

- Appears without precedent
- Separation of transmission backhauling networks of fixed and mobile into one unified netco
- Servcos compete at access layer and in retail space
- Very little capacity to apply complex arrangements
  - Compliance and monitoring will be a huge challenge
End