

Considering Number Portability in the Caribbean

OOCUR – “Regulation, Convergence, and the Competitive Environment”

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Ocho Rios, Jamaica - 4 November 2010



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Contents

- **Introduction**
- Different Approaches to Number Portability policy (including regulatory justification)
- Uncovering Favourable Conditions for NP (including market readiness)
- Costs and Benefits
- Lessons and trends

What is Number Portability?

- The ability to change your service provider without changing your number
- It may be applied to fixed-line, mobile, or both
- It may involve the requirement to import and export numbers, or only to export numbers
- Applies only where there is a competitor who can deliver incoming calls

Expected Results:

- Lowers switching costs for users
- Releases customers of incumbent/dominant provider for whom number changes are a barrier
- Facilitates market entry for new entrants
- Makes incumbents improve quality, services
- Leads to overall lower prices

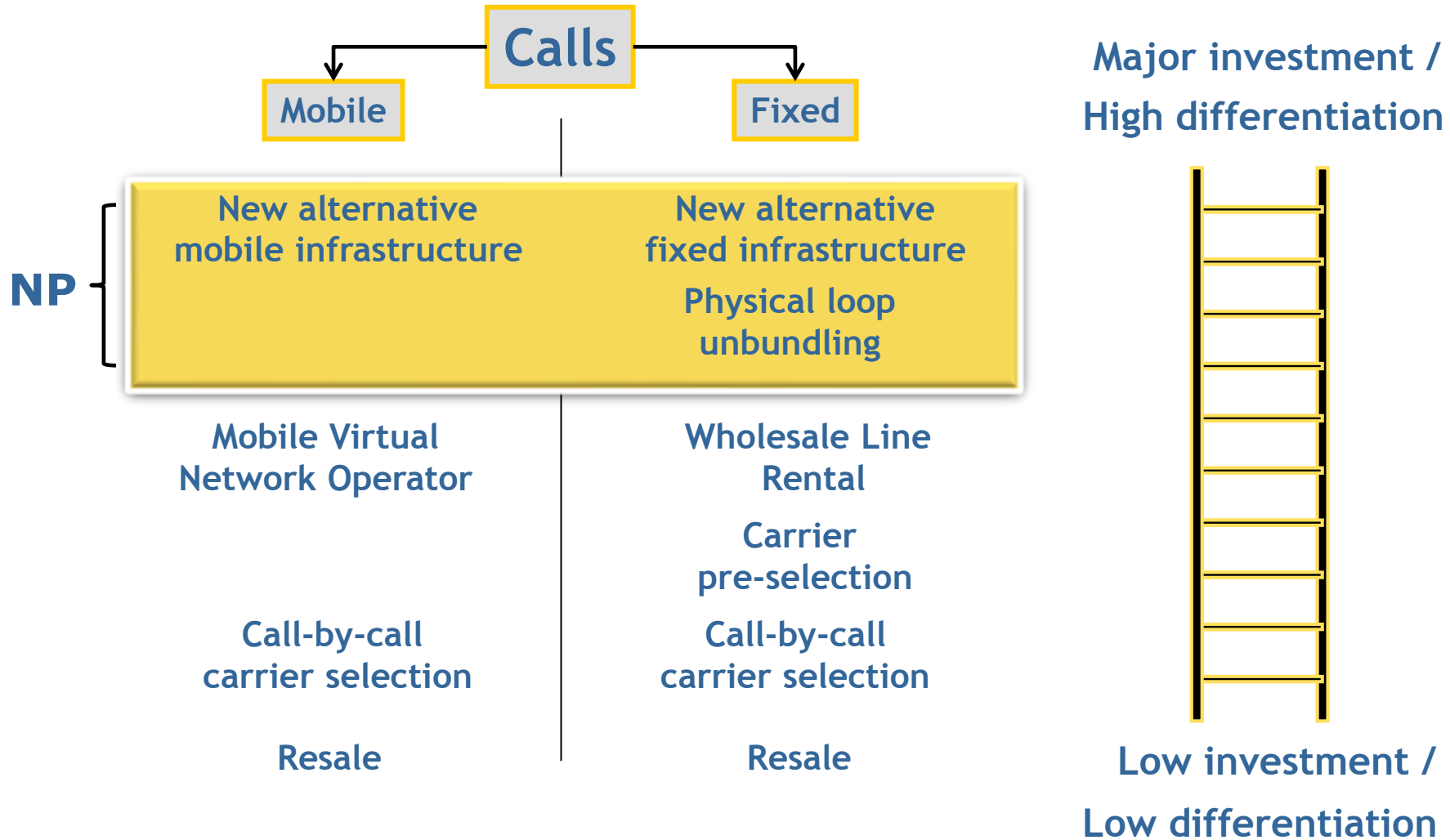
But Be Aware...

- The experience to date shows mixed results; NP has been disappointing in many countries
 - Often caused by poor implementation
- Costs and benefits are often not well understood, yet there are “political trends” as NP is often a “must do”
 - The European policy that it is a user right removed the need for cost benefit analyses
- Local market circumstances should be taken into account
 - Some regulators justify based on expected demand without regard to actual cost or local realities

And Also Be Aware...

- Need the legal/regulatory capacity and instruments to direct, implement, and monitor a NP program
 - requires enabling legislation and legal justification (look out for unfair burdens and regulatory impact tests)
- NP is a big project that needs careful management by the regulator to achieve the desired outcome
 - There may be higher regulatory priorities and limited resources
 - There has been little exploration of the constructive alternatives to NP
- The outcome may surprise anyway!

NP and the Ladder of Investment



Concept from Prof Martin Cave of Warwick University

Regional NP Implementation

Already Implemented or Have Decided to Implement:

- Cayman Islands (fixed and mobile)
- Dominican Republic (fixed and mobile)
- French Antilles (ARCEP) (fixed and mobile)
- Puerto Rico (FCC) (fixed and mobile)
- Trinidad & Tobago (fixed and mobile)

Under Consideration:

Bahamas, British Virgin Islands, OECS,
Haiti, Jamaica

Also Under Consideration:

Bermuda, Columbia, Costa Rica,
Guatemala, Panama, Venezuela

The Jamaican NP Study

- OUR commissioned a consultancy on the feasibility of NP or alternatives to it – completed this past summer
- Next step is for OUR to undertake a public consultation exercise using the results of the work undertaken
- CBA showed net benefits for both fixed and mobile, but other issues need to be considered further
- The legal/review process does not readily allow for alternatives to NP
- There are significant switching barriers and these problems could take precedence over NP or be pursued in tandem (e.g., on-net discounts / asymmetric termination rates)
- If NP were pursued, there is an opportunity to share lessons, specifications, and perhaps also central database costs across the region

Regulatory Options

- Do nothing
- Treat portability as a user right and require it (irrespective of cost benefit analysis/burden)
- Treat portability as a means to give benefits to users and increase competition, and require it where there is a net benefit from a CBA
- First take on other regulatory interventions that will have greater impact and/or make switching operator with a number change easier

Comparison of Approaches

| | User Right | Competition Measure |
|------------------------------|---------------------------|--|
| Focus | All operators equally | Requirements on incumbent/dominant |
| Start Time | Set by regulator | When requested by new entrant |
| Requirements | Export and import numbers | Export numbers only (import is optional) |
| Cost Benefit Analysis | Not needed | Needed |
| Cost | Greater | Lower |

Fixed Market Readiness

Ready Market

- High coverage by (new) operators
- Local loop unbundling working well
- No on-network discounts
- No price discrimination
- Many operators
- Churn driven by broadband
- Short contracts
- Win-back banned

Less Ready Market

- Low coverage by competing operators
- No local loop unbundling
- Deep on-net discounts
- Price discrimination
- Few operators
- Little or no broadband
- Long contracts
- Win-back allowed

Is it realistic to switch?

Mobile Market Readiness

Ready Market

- Low termination rates
- Symmetric termination rates
- No on-net discounts
- No price discrimination
- Many operators
- Churn driven by 3G broadband
- Unlocked handsets
- Short post-pay contracts
- Win-back banned

Less Ready Market

- High termination rates
- Asymmetric termination rates
- Deep on-net discounts
- Price discrimination
- Few operators
- No investment in 3G
- Locked handsets
- Long post-pay contracts
- Win-back allowed



How easy is it to switch?

Sample Statistics

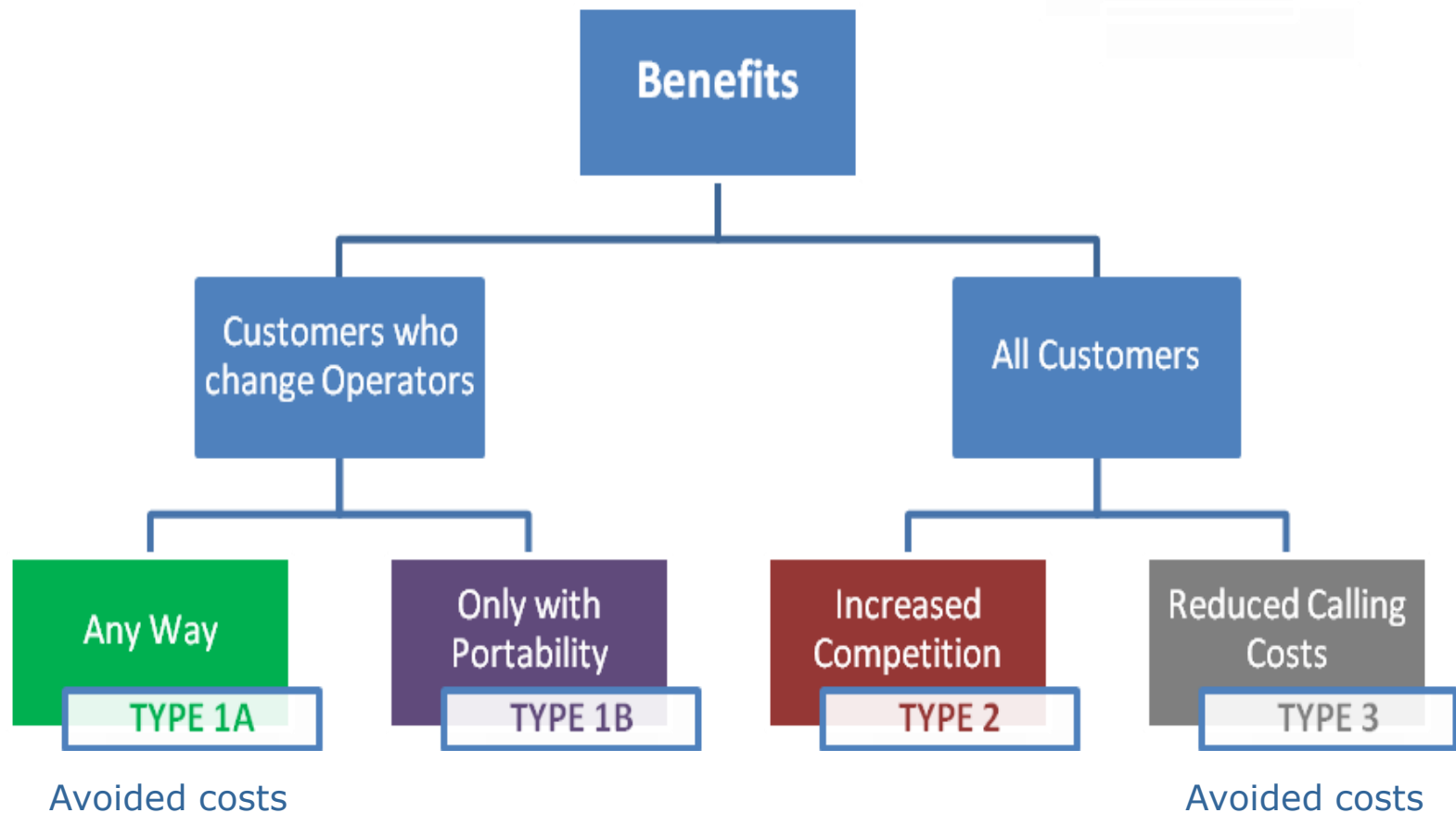
| Country | Operators | Penetration | Competition | Awareness | Porting Time (d) | % porting |
|-----------|-----------|-------------|-------------|-----------|------------------|-----------|
| Hong Kong | 5 | 125% | V High | High | 1.5 | 14.6% |
| Finland | 3 | 105% | High | High | 5 | 10.6% |
| Spain | 3 | 105% | High | High | 6 | 7.8% |
| Australia | 4 | 80% | High | High | 0.3 | 7.5% |
| Ireland | 3 | 102% | High | High | 0.2 | 6.5% |
| Sweden | 4 | 113% | High | High | 5 | 6.1% |
| Belgium | 3 | 86% | Medium | High | 2 | 4.6% |
| Malta | 2 | 80% | Low | Medium | 0.5 | 3.6% |
| UK | 5+ | 111% | High | Low | 7 | 2.5% |
| France | 3 | 78% | Low | Low | 30 | 0.6% |
| Germany | 4 | 91% | Medium | Low | 6, was longer | 0.4% |

These figures are older,
but the message does not change

Impact & Effectiveness

- Should increase competition
 - NP does not create competitiveness
 - Competitiveness is willingness of operators to reduce prices or improve service to increase market share
- Difficult to isolate the effects of number portability as the market is often dominated by the effects of new entrants
- Many implementations have been too poor to be effective (e.g., initial implementations in Germany, UK)
- Portability can work well but prices may not change
- May increase share of incumbent or dominant provider (e.g., Hong Kong, Korea, Spain)
- Greater impact likely with higher populations (i.e., costs are fixed, but benefits rise with number of switchers)

Benefit types



Changes in Benefits ↓

- Benefits are reducing as number changes are getting easier to manage by users, yet users are learning to demand portability = a paradox
- Why are benefits reducing, especially for mobile?
 - Email makes it cheap and easy to notify a change of number
 - Mobile operators can use SMS to tell contacts of number change
 - Mobile numbers are not learned but stored in terminals
 - Parallel accounts are cheap, even dual SIM terminals
 - The use of paper is reducing, and most letters or invoices are generated from word processor templates where numbers can be easily changed

Costs

- Set-up (network and systems, also service providers and retailers)
 - old systems can be 10x more expensive than new
 - costs will be less for exporting numbers only
 - typically 80% systems, 20% networks
- Additional conveyance (via block/transit operator)
- Porting process - specification, development, implementation
- Annual running costs for NP-specific equipment and servicing
- Reference database and service (if using All Call Query)
- Delays to other programs (e.g., while the focus is on NP)
- Loss of tariff transparency and the effect on on-network discounts
- Costs are generally not immediately passed along to users

The costs are fixed and may be large

Changes in Cost ↓

- Many new billing systems and ordering systems support portability
- NGN technology makes All Call Query routing easy
- Most equipment manufacturers are building in portability
- Costs reduce if implementation of portability can be phased in with other changes and upgrades
- Tariff transparency a large issue due to on-net discounts stimulated by high mobile termination charges – but large reductions in termination rates will reduce this problem (strategy of European Commission)
- Possible savings through cost sharing of database or by harmonising regional requirements and specifications

Alternate Consideration

If...

- A text is sent to all your address book about your change of number...
- You can send all your email contacts an email about your change of number in just a couple of minutes (free of charge)...
- You can tell all your Facebook contacts easily about your change of number...
- You can alter your number on letterheads and your web page easily with your computer...
- Callers to your old number hear a message about your change of number...

Does a number change still remain a problem?



Lessons

- There is a market size threshold below which portability is not likely to be a net benefit
- If NP is to be done it must be implemented well or it will waste money, goodwill, and could be negative
- Other regulatory measures are needed to increase the prospects of success:
 - Symmetric and low termination rates to reduce on-net discounts
 - Tariff transparency if on-net discounts remain
 - Prohibitions on price discrimination
- Without taking measures to break down switching barriers, there is a risk of helping the largest operator

Long Term Trends

- Improvements in other regulatory issues will make the market more ready for NP, but other trends will reduce its value:
 - Greater availability of the Internet makes telling others and finding numbers much easier
 - People are less dependent on telephony/text for communication - more on email, instant messaging, social networking (e.g., Facebook)
 - Competition is making networks more efficient and coverage better, so the remaining scope for continuing improvements is reducing
 - Number changes are not the only barrier to switching, other barriers such as unique on-net services may increase
- The value of portability may reduce, but
- New (NGN) products, improved database possibilities and better implementation processes will continue to reduce costs
- User's expectations for portability may continue to increase – it is already just *expected* in most countries

Thank You

“In this bright future you can't forget your past.” Bob Marley

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