

## **RESPONSE TO COMMENTS REPORT**

**NICTA staff's response to the comments  
received in response to the Second  
Discussion Paper about the need for a  
retail service determination regarding  
certain mobile telephony services**

*Issued by NICTA, Port Moresby on 5<sup>th</sup> September 2012*

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# 1 INTRODUCTION

In May 2011, NICTA published a second discussion paper (2DP) as part of its public inquiry into the need for a retail service determination regarding certain mobile telephone services. Within the specified consultation period, written submissions were received from:

- bemobile;
- Digicel, which was accompanied by a submission prepared by:
  - Professor Martin Cave and Dr Chris Doyle (hereafter referred to as “the Cave/Doyle submission”).

Digicel also submitted a copy of a 2012 report published by the Asian Development Bank titled *Papua New Guinea: Critical Development Constraints*.

A late submission was also received from Telikom. As Telikom had not sought or been granted an extension of time, NICTA staff have not considered Telikom’s comments further.

NICTA staff also provided an opportunity for interested parties to review and submit comments on the submissions of other respondents. Such cross-submissions were received from:

- bemobile(hereafter identified as “bemobileX”), which was accompanied by a submission prepared by:
  - Professor Dr Justus Haucap and Ms Emma Lanigan (“the Haucap/Lanigan submission”);
- Digicel (“DigicelX”), which was accompanied by a confidential memorandum prepared by:
  - Messrs Peter Stiffe and Aaron Schiff, external advisors to Digicel, in relation to certain confidential information that was redacted by bemobile from the public version of its submission but made available to Digicel’s external advisors; and
- Telikom (“TelikomX”).

NICTA staff’s consideration of these submissions and cross-submissions and the evidence that they contained or referred to resulted in NICTA staff making changes to the proposed retail service determination that was set out for discussion in the 2DP. The key issues among those raised and considered are discussed in this Response to Comments Report. Additional information on the revisions made to the proposed retail service determination are set out in NICTA’s Recommendation Report, prepared for the purposes of section 159 of the *National Information and Communications Technology Act 2009* (the Act), and the Inquiry Report, prepared for the purposes of section 235 of the Act. Those reports should be read in conjunction with this report.

The revised Retail Service Determination recognises that price discrimination can have pro-competitive effects in mobile service markets characterised by low penetration rates but that price discrimination can also have adverse impacts on mobile service markets if used by a dominant licensee in an exercise of market power to seriously reduce competition in the market by weakening smaller competitors. NICTA staff recognise that there is a balance to be struck between these two outcomes. The revised Retail Service Determination therefore permits two exceptions to the proscription imposed on Digicel. These exceptions are (i) a limit on price discrimination between off-net and on-net calls of no more than 40%, calculated on the basis of the relevant on-net call rate; and (ii) the cost justification exception included in the original draft Determination in 2DP. (With respect to the latter exception, NICTA staff do not consider that the whole of the mobile termination rate (MTR) can be a cost-justified differential between the on-net and off-net prices given that some cost is incurred in terminating on-net calls.)

## **2 SUMMARY OF NICTA STAFF'S CONSIDERATION OF AND RESPONSE TO THE MAJOR COMMENTS RECEIVED**

There are a number of substantial issues that were raised by respondents that warrant detailed and considered responses. Those responses are set out below. An overview of other comments that were received, and NICTA staff's consideration and response to them, is provided in section 3.

### **2.1 THE SCOPE OF THE RETAIL SERVICE DETERMINATION**

bemobile agreed with 'the vast majority' of NICTA staff's findings as set out in the 2DP but submitted that:

- (a) SMS should be included in any proposed retail service determination as it 'has the potential to be an extremely strong source of tariff mediated network effects';
- (b) Post-paid mobile services should be included in any proposed retail service determination as its exclusion could lead to 'significant gaming of the regulation'; and
- (c) Any proposed retail service determination should impose an absolute obligation not to discriminate based on network called or text-messaged because the proposed exception for on-net/off-net discrimination that is based on objectively justifiable cost differences 'will distort the outcome in Digicel's favour [and] open the system up to regulatory gaming' and because the current mobile termination rates [MTRs] are an inappropriate justification for retail price differences.

NICTA staff considered the arguments submitted by bemobile in support of these positions but ultimately disagreed on all three matters.

In relation to (a), bemobile submitted that as SMS is a strong complement to voice services in the national market for retail mobile services, significant on-net/off-net price discrimination of SMS services could be a means of circumventing the intended effect of the proposed restriction on on-net/off-net price discrimination for voice services. bemobile also argued that SMS communications were more susceptible to the type of connectivity breakdown that may be engineered through excessive on-net/off-net pricing given the need for both parties to an SMS conversation to be willing to pay the tariffs charged by their respective service providers.

In relation to (b), bemobile submitted that –

- post-paid services represent an important part of the market;
- Digicel's market power is likely greater in the supply of post-paid service than in pre-paid services;
- the means of payment (i.e. whether a service is pre- or post-paid) should not result in different regulatory treatment of a service; and

- the problems caused by Digicel's on-net/off-net price discrimination affect post-paid consumers just as much as they do pre-paid customers.

bemobile was also concerned that by defining what constitutes a pre-paid service, there would be scope for regulatory gaming that created new products that intentionally do not fit the definition of the regulated service.

NICTA staff do not believe that there is sufficient evidence currently available to warrant the regulation of either SMS or post-paid services under the proposed retail service determination. As discussed further below, NICTA staff's consideration of all of the evidence submitted during the inquiry has led them to conclude that the tolerance of a degree of on-net/off-net price discrimination is prudent and appropriate in the circumstances. Accordingly a degree of on-net/off-net price discrimination in relation to SMS services and/or post-paid is not of itself sufficient grounds for regulation.

Although on-net/off-net price discrimination in the supply of SMS and/or post-paid service could have the same types of anti-competitive effects as NICTA staff identified in relation to pre-paid services in the 2DP, NICTA staff would prefer to limit the application of the proposed retail service determination to the minimum necessary to address the identified problems. As a proportion of the total market, pre-paid voice services dominate both SMS and post-paid voice services in terms of market shares of subscribers and revenues (see Figure 1). NICTA staff believe that the negative effects of on-net/off-net price discrimination can be sufficiently addressed by limiting the scope of the regulation to the particular service that represents the overwhelming majority of the market.

**Figure 1: Pre-paid voice services as a proportion of the total national market for retail mobile services**

Service	Subscribers		Revenue	
	2010	2011	2010	2011
Prepaid voice services as a proportion of the total market	99%	97%	90%	90%

In any case, NICTA will soon be introducing a comprehensive data collection framework that will enable it to monitor closely the development of the sector, including traffic trends and shares and retail prices. In addition, the proposed retail service determination incorporates a review mechanism under which NICTA staff would review the effects of the determination after it has been in operation for two years. If that review identifies that the prices of SMS or post-paid services are being manipulated in a way that undermines the effectiveness or intent of the retail service determination, then NICTA may recommend to the Minister that the scope and duration of the determination be extended to address those effects. NICTA staff believe that such a possibility would be a sufficient deterrent to a rational operator to refrain from engaging in the type of gaming behaviour that bemobile describes.

bemobile also argues that as Digicel has been found to have SMP in the national market for retail mobile services, and as both SMS and post-paid voice services are part of that market just as pre-paid voice services are, then all of the services supplied by the SMP operator in that market should be covered by the retail service determination. (A similar argument was used by Digicel to argue that the ability of its competitors to compete on price in the supply of pre-paid voice services is irrelevant as what matters is their ability to compete on price for the cluster of mobile services; see item 24 in section 3 below.) NICTA staff disagree and do not believe that such

an approach is appropriate (in either case). Under Part VII of the Act, a retail service determination applies to specific retail services and the only services that may be considered for regulation under a determination are those which are supplied by a licensee that 'has a substantial degree of power in the market within which the retail service is supplied'. bemobile suggests that the definition of the relevant market should determine the specific services that are regulated under a determination. The Act does not require this at all. In addition, such an approach would unnecessarily expand the scope of regulation beyond a level considered to be proportional. The purpose of the market definition and market analysis stages (described in chapters 3 and 5 of the 2DP) is to determine whether or not any licensee (and in particular the licensee supplying the specific service of concern) has 'a substantial degree of power in the market within which the retail service is supplied' pursuant to the retail regulation criteria. That is, it is a threshold test that must be satisfied for a specific service to be eligible for regulation under Part VII of the Act. The definition of the market is not intended to provide a menu of services for possible regulation.

In relation to (c), NICTA staff considered and ultimately decided against proposing (in the 2DP) an absolute prohibition on on-net/off-net price discrimination because such an approach would be unduly inflexible, and would eliminate the arguably pro-competitive effects and possible consumer welfare benefits that might arise from a moderate level of discrimination. As explained in the 2DP, NICTA staff are not concerned if there is retail price discrimination based on genuine differences in the costs of supplying on-net and off-net services. If there are genuine differences in the costs of supplying a service off-net vis-à-vis on-net, then Digicel should be able to recover those costs. Indeed a proposal for a retail service determination that did not allow for the recovery of such costs might not satisfy criterion (c) of the retail regulation criteria. In any case, as explained in the following section, NICTA staff's consideration of all of the evidence submitted to the inquiry led them to conclude that tolerance of a degree of on-net/off-net price discrimination apart from what is justified by cost is prudent, reasonable and appropriate in the circumstances.

## 2.2 PRICE DISCRIMINATION AND MARKET EXPANSION

Digicel submitted that on-net/off-net price discrimination has pro-competitive effects in markets (such as PNG) where mobile penetration is still in its expansionary stages. Digicel also submitted the Cave/Doyle submission, which it had commissioned from the authors and which summarised the conclusions and implications of Hoernig (2008)<sup>1</sup> and Sauer (2011),<sup>2</sup> which constitute the principal evidence in support of that position.

This line of argument had been previously raised by Digicel<sup>3</sup> and considered by NICTA staff. Although Cave/Doyle note that those particular papers by Hoernig and Sauer were not specifically cited in the 2DP, that does not mean that they were not read and considered in the preparation of that paper. The research undertaken by NICTA staff was expansive and not all of the material that was reviewed or considered was specifically cited in the

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<sup>1</sup>Hoernig, S. (2008) *Tariff-mediated network externalities: Is regulatory intervention any good?* CEPR Discussion Papers 6866

<sup>2</sup>Sauer, D. (2011) *Welfare implications of on-net/off-net price discrimination*, Toulouse School of Economics

<sup>3</sup>For example, in paragraphs 167–169 of its cross-submission to the first discussion paper.

2DP.<sup>4</sup> NICTA staff also noted in the 2DP (at paragraph (c) in section 6.4.3.7) that they had considered what is essentially the same key conclusion reached by Hoernig (2008) and Sauer (2011)—i.e. that on-net/off-net price discrimination can increase competitive intensity and thereby increase customer welfare—but had not found the evidence to be compelling. Nevertheless, in light of the submissions from Digicel NICTA staff revisited this line of argument and reconsidered it afresh.

### 2.2.1 The modelling by Hoernig and Sauer

Hoernig(2008) and Sauer (2011) use the same basic model and some results<sup>5</sup> to study the effects of on-net/off-net price discrimination in circumstances where markets are not saturated. They both concluded, among other things, that on-net/off-net price discrimination in such circumstances leads to increased consumer welfare, although total welfare may not necessarily improve. As expressed in Hoernig (2008): 'While price discrimination leads to inefficiency through too few off-net call minutes, it tends to increase competitive intensity and thus consumer welfare'.<sup>6</sup>

There are a number of assumptions underpinning the modelling by both Hoernig (2008) and Sauer (2011) that are inconsistent with the actual market conditions in PNG. As Sauer states: 'In my analysis I want to focus on the prevailing situation in the European mobile telecommunication markets.'<sup>7</sup> Such assumptions include:

- (a) That interconnection prices are set by a regulator at cost (Sauer);
- (b) That networks charge two-part (i.e. non-linear) tariffs, that is, network operators are assumed to charge customers a fixed monthly subscription fee<sup>8</sup> in addition to usage prices per minute, implying that the focus is on post-paid services supplied under a fixed-term contract (as are common in Western Europe) (Sauer);
- (c) That there are only two competing firms and that they are symmetric;
- (d) That calling patterns are balanced (which NICTA staff note is different from assuming balanced traffic patterns, but neither assumption reflects the reality in PNG) (Sauer);
- (e) That the two networks have the same cost structure (Sauer);
- (f) Subscription demand (as distinct from demand for particular types of calls) is inelastic (Sauer); and
- (g) That the market expansion potential is not too large (Sauer).

The Haucap/Lanigan submission also noted that many of these assumptions are contrary to the current conditions in PNG. In addition the Haucap/Lanigan submission noted that both Hoernig and Sauer:

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<sup>4</sup>As noted in the Haucap/Lanigan submission (at paragraph 12), NICTA staff's analysis on page 106 of the 2DP demonstrably takes account of some of the conclusions in Hoernig (2008).

<sup>5</sup>Sauer, D. (2011) op.cit. p.4–5

<sup>6</sup>Hoernig, S. (2008), op.cit. p.17

<sup>7</sup>Sauer, D. (2011) op.cit. p.2

<sup>8</sup>NICTA staff do not consider that charging a higher price for the first minute of a call compared to the second and subsequent minutes of a call, as both bemobile and Digicel presently do, is equivalent to the two-part tariff structure that is modelled in Hoernig(2008) or Sauer(2011). This view seems generally accepted in this context: see for example Laffont, J-J. and Tirole, J. (2001) *Competition in Telecommunications*, MIT Press, p.199; Armstrong, M. And Wright, J. (2009) "Mobile Call Termination" *Economic Journal*, 119, 270-307; Iimi, A (2007) *Price structure and network externalities in the telecommunications industry: evidence from sub-Saharan Africa*, World Bank Policy Research Working Paper 4200; and Lanigan, E. (2011), *Report for bemobile on retail price discrimination*, p.18.

‘...[assume] that there are two operators in the market and that both operators remain active in the market. The issues of potential market foreclosure, entry and exit are not analyzed at all in the paper. Hence, the value of the paper for the case at hand is limited, as the potential for market foreclosure by the dominant operator is the main issue.’

This is consistent with the comments in Cave, Stumpf and Valletti (2006) that were quoted on pages 10-11 of the 2DP (but which, as explained in the Cave/Doyle submission (p.13, footnote 12), were written by one of Professor Cave’s co-authors and not himself):

‘... if there is no exclusionary intent (that is, firms are more or less equally placed in the market and it is very unlikely that any firm will exit the market), on-net discounts may actually make mobile firms more rather than less aggressive overall.’<sup>9</sup>

NICTA staff appreciate that there is unlikely to be much, if any, academic literature or generic economic modelling that accurately reflects all of the prevailing conditions of PNG telecommunication markets or other similar country markets. However, it is important to recognise where there are such differences when interpreting the results or applying them to PNG. Otherwise the use of such evidence can be misleading. NICTA staff note that Digicel did not note any of the abovementioned ways in which the models in Hoernig (2008) and Sauer (2011) fundamentally differ from PNG, even though Digicel incorrectly criticised NICTA staff for doing something similar in the 2DP (see item 13 in section 3 below).

Of the abovementioned assumptions, assumption (b)—that the mobile operators charge two-part tariffs—is highly significant for current purposes. The modelling outcomes in Hoernig and Sauer to the effect that price discrimination increases consumer welfare depend on the fixed fee component in the two part tariff (i.e. the monthly subscription charge) decreasing in response to the increases in the average call prices under discriminatory on-net/off-net pricing. This is consistent with the previous observation in Laffont and Tirole (2001) that the use of two part tariffs enable network operators to separate the building of market share from the generation of call volume by, on the one hand, using the fixed fee component to build market share without inflating termination out-payments while, on the other hand, using decreases in per minute calling rates to increase call volumes.<sup>10</sup>

As Hoernig explains:

‘...[C]onsumer surplus is driven by the competitiveness of the market. In particular [consumer surplus decreases with lower pricing of on-net calls but increases with higher pricing of off-net calls.] The latter happens because competition between networks, exploiting tariff-mediated network externalities, drives fixed fees so low that consumers are over-compensated for the direct surplus loss due to higher off-net call prices.’<sup>11</sup>

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<sup>9</sup>Cave, M., Stumpf, U. And Valletti, T. (2006) *A review of certain markets included in the Commission’s Recommendation on Relevant Markets subject to ex ante regulation*, p.85

<sup>10</sup>Laffont and Tirole (2001), op.cit. p.199

<sup>11</sup>Hoernig (2008), op.cit. p.6



Sauer explains the outcome thus:

‘...the average [call] price under discriminatory pricing rises even further beyond the social optimum which is detrimental for total welfare. However, the pro-competitive effects of price discrimination lead to higher consumer surplus via lower fixed fees. Fixed fees do not affect total welfare because subscription demand is inelastic and hence only the negative effects on calling prices matter.’<sup>12</sup>

Sauer also finds that:

‘[F]ixed fees have a direct effect on total welfare due to market expansion...The first order distortion of calling prices is the same under both regimes [i.e. under discriminatory pricing and uniform pricing]...Only the second-order effects are different (under price discrimination prices are dispersed), but this is dominated by the first order effect on fixed fees which makes discriminatory pricing more favourable for total welfare.’<sup>13</sup>

This dependency on declining fixed fees is also reflected in Sauer’s concluding paragraph, which was quoted verbatim in both the Cave/Doyle submission and by Digicel:

‘High-off net prices resulting in an increased average calling price charged by networks in the presence of externalities seem to be bad for consumers at first glance. However, price discrimination does not harm consumers since it is accompanied by lower on-net prices and fixed fees which overcompensate the rising average calling price.’<sup>14</sup>

NICTA staff note that neither the Cave/Doyle submission or the (current or previous) Digicel submissions mention or discuss the significance of the role of fixed fees in the modelling of Hoernig and Sauer.

NICTA staff do not find the Hoernig and Sauer papers compelling evidence that, in a market such a PNG where the two-part tariffs associated with post-paid services constitute less than 2% of total subscriptions, on-net/off-net price discrimination is essential for mobile operators to continue to expand mobile penetration. NICTA staff are more inclined towards the view of Laffont and Tirole who note in Laffont and Tirole (2001) that ‘[o]verall, *the welfare implications of termination-based price discrimination are ambiguous*’.<sup>15</sup> NICTA staff also note Hoernig’s finding that ‘[i]t is...not obvious whether uniform pricing or price discrimination leads to higher welfare’.<sup>16</sup>

As the findings regarding the welfare effects of on-net/off-net price discrimination are ambiguous, so too are the conclusions that can be drawn from them for the purposes of the present inquiry. Accordingly, after further consideration NICTA staff concluded that even though they do not find compelling the evidence in support of the proposition that price discrimination is essential to the continued expansion of PNG’s mobile telecoms market, by the same token the possibility that some price discrimination can help foster continued market expansion cannot

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<sup>12</sup>Sauer (2011), op.cit. p.13

<sup>13</sup>Sauer (2011) op.cit. p.18

<sup>14</sup>Sauer (2011) op.cit. p.19

<sup>15</sup>Laffont and Tirole (2001), op.cit. p.202. Emphasis added by the authors.

<sup>16</sup>Hoernig (2008), op.cit. p.13

be completely discounted. That is, a degree of price discrimination might indeed be important to the achievement of greater mobile penetration in PNG.

Although NICTA staff now accept that a degree of price discrimination *might* help foster increased mobile penetration in PNG, NICTA staff do not agree with Digicel's implicit arguments that it automatically follows that:

- (i) the form of price discrimination that must be used to expand a market must be discrimination between on-net and off-net prices; and
- (ii) on-net/off-net price discrimination must remain completely unconstrained.

Although the focus in Hoernig (2008) and Sauer (2011) is on on-net/off-net price discrimination, other forms of price discrimination could possibly be used to expand telecoms markets without raising the anti-competitive concerns associated with on-net/off-net price discrimination. For example regional price discrimination, in which cheaper prices were offered in rural areas into which a network was newly expanded, could potentially accomplish the same market expanding objective as on-net/off-net price discrimination (as has been recognised by Laffont and Tirole<sup>17</sup> among others).

Further, even if on-net/off-net price discrimination can be welfare enhancing that does not completely allay its potential anti-competitive effects. "Can be welfare enhancing" is not the same as "always welfare enhancing". The scale of the discrimination must be taken into account. Given the scale of the discrimination practiced to date by Digicel, NICTA staff remain concerned about the potential future use of on-net/off-net price discrimination as a tool to maintain and extend SMP in the retail mobile telecommunications market. In short, NICTA staff believe that it is possible to have "too much of a good thing". This idea is reflected in the Cave/Doyle submission as follows:

'...the literature on on-net off-net price discrimination does not come out in favour of an automatic (per se) prohibition of it. It shows instead, in the conditions of a fully diffused mobile market..., some degree of discrimination benefits customers and the general welfare, but an 'excessive' amount of discrimination may bring detriments. Accepting for the purposes of argument that Digicel satisfies the conditions for the latter outcome, NICTA's task is then to craft a remedy which gives customers and the economy the benefit of 'legitimate' discrimination, but deprives them of the detriment of 'illegitimate' discrimination...'.<sup>18</sup>

Hoernig (2008) has a similar conclusion, finding that '...it may be optimal [for regulators] to allow for some price discrimination in order to not completely forgo the influence of call externalities on pricing.'<sup>19</sup>

Once NICTA staff had concluded that some form of retail service determination constraining Digicel's on-net/off-net price discrimination was still warranted, NICTA staff sought to identify an appropriate level to cap the scale of Digicel's price discrimination that would accommodate what Cave/Doyle described as the 'legitimate' discrimination while also addressing NICTA staff's concerns about the anti-competitive effects by preventing

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<sup>17</sup> Laffont and Tirole (2001), op.cit. p.201

<sup>18</sup> TheCave/Doyle submission at pp.16-17

<sup>19</sup> Hoernig (2008) op.cit.p.13

'illegitimate' discrimination. To that end NICTA staff undertook an international benchmarking exercise (an approach endorsed in the Cave/Doyle submission).

### **2.2.2 NICTA staff's international benchmarking of off-net price premiums**

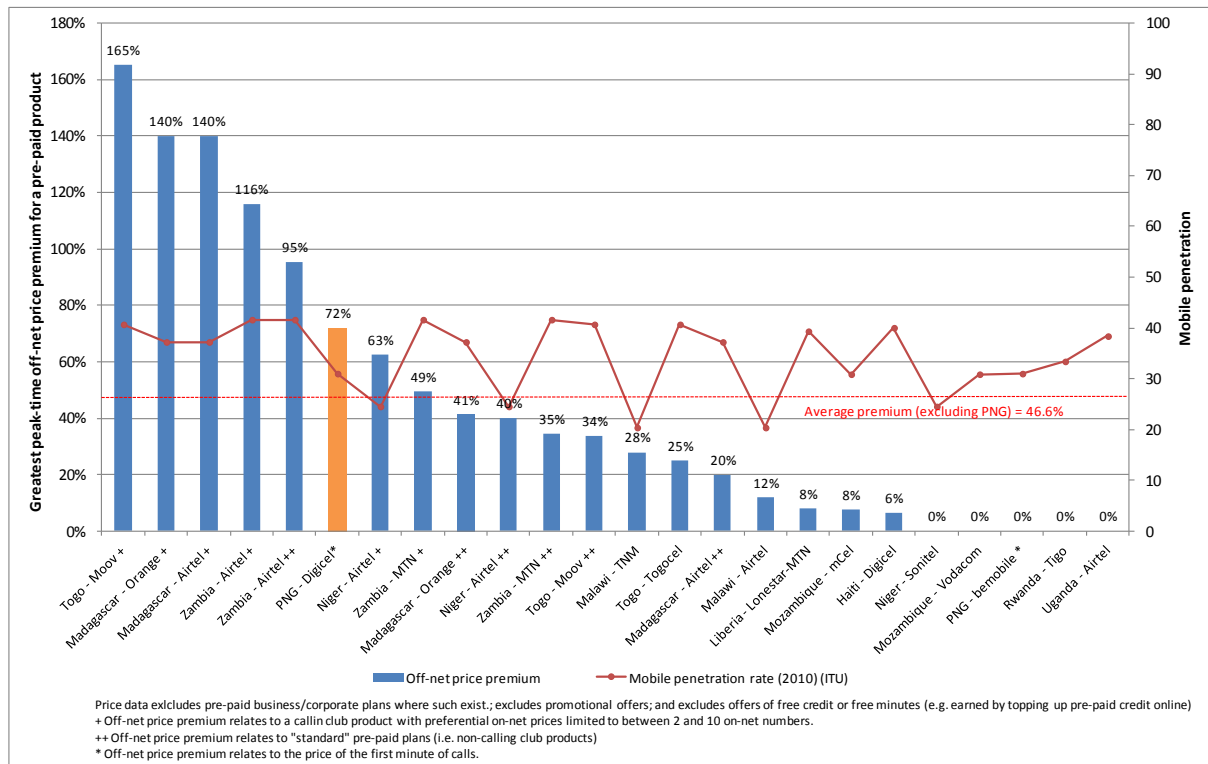
NICTA staff examined the on-net/off-net price discrimination practices of 95 mobile network operators in 52 countries throughout Africa, Asia, the Caribbean, Europe and the Pacific. The full list of countries and operators is provided at Annex B. For each of those network operators (typically representing the two largest networks in each of the sample countries) the *greatest* peak-time off-net price premium for a pre-paid product was identified. That is, NICTA staff focused only on the prepaid products and pricing plans that offered the highest possible off-net price premium. In cases where an operator offered a specific calling club product (i.e. one in which a customer's calls to a small number of nominated telephone numbers corresponding to family and friends attract discounted tariffs) that involved on-net/off-net price discrimination, NICTA staff collected data on both the greatest "standard" off-net price premium as well as the greatest off-net price premium within the calling club products. The entire benchmarking data set comprised 114 off-net price premiums.

As can be seen in the graph of the full data set in Annex C, there is no correlation between the level of mobile penetration and the maximum size of the off-net price premiums tolerated by the regulators in the countries concerned (i.e. tolerated in the sense that the regulator has not deemed it necessary to intervene in or otherwise remedy the on-net/off-net price discrimination practices). The results are also skewed by the practice in Bosnia and Herzegovina (BH) and Germany of offering free on-net calls while charging a per minute fee (of between 9 and 15 Euro cents) for off-net calls, creating an off-net price premium equivalent to infinity. A similar offer exists in Bulgaria with on-net calls charged at 0.005 Euro cents per minute and off-net calls charged at 22 Euro cents per minute. (The BH and Bulgarian prices both relate to calling club plans, which thus limit those particular rates of price discrimination to a maximum of three on-net telephone numbers.)

Excluding those four results (that is, Germany (2), BH and Bulgaria) and PNG, the average off-net price premium for the full data set is 50%. However, when the four outliers and the 14 calling club product prices are excluded, the average off-net premium falls to 37%.

Looking only at those countries where mobile penetration was (in 2010) <45% (which is similar to PNG's *current* penetration rate of 40%) produces an average off-net price premium of 47% (see Figure 2). However, excluding the six calling club products that are within the sample results in the average off-net premium decreasing to 24%.

Figure 2: International benchmark of off-net price premiums in markets with <45% mobile penetration



The above-mentioned averages are summarised in Figure 3. They suggest that a maximum off-net price premium of around 40% is both common and acceptable across mobile markets with different levels of competition and at different stages of development. They also indicate that the greatest off-net price premiums tend to be found in calling club products and thus are restricted to small calling circles (instead of applying to all calls to all subscribers of a network). Such restrictions would tend to mitigate the concerns about the anti-competitive effects of such large premiums. When calling club products are excluded, the greatest off-net price premiums tend to be within the range of 25–35%. The greatest off-net price premiums within calling club products tend to be in the order of 110–120% but there are cases (such as the outliers identified above) where that premium can go up to infinity (when on-net calls are free of charge).

In light of this NICTA staff concluded that, on balance, an off-net price premium of 40% (per call minute) would be a reasonable demarcation between acceptable and unacceptable or excessive” price discrimination between on-net and off-net calls. This was subsequently reflected in NICTA staff’s revised proposal for a retail service determination. In reaching this conclusion NICTA staff considered various higher and lower limits on the scale of Digicel’s on-net/off-net price discrimination but found through the benchmarking exercise that discrimination beyond 40% tends to relate to, or be reflective of, calling club products; whereas discrimination below 40% tends to completely exclude calling club products. NICTA staff considered that 40% thus represented a reasonable maximum that was consistent with the levels of on-net/price discrimination tolerated in a variety of other countries under various conditions. The 40% tolerance includes all differentials, including cost-based justifications. (If there are specific cost justifications that warrant a price differential above 40% they are not excluded by the adoption of

the 40% figure a NICTA may, if the circumstances warrant, authorise a greater differential that is based entirely of differences in costs.).

**Figure 3: Summary of average off-net price premiums within the benchmarking data**

Data subset	Sample size	Average greatest peak-time off-net price premium for a pre-paid product
Full data set (excluding the outliers Bosnia (1), Bulgaria (1) and Germany (2))	110	50%
The 14 calling club products included in the full data set (excluding the four above-mentioned outliers)	14	123%
Full data set excluding the above-mentioned outliers and the 14 calling club products	96	37%
Countries with mobile penetration >45%	88	51%
Countries with mobile penetration ≤45%	24	47%
Countries with mobile penetration ≤45% (excluding calling club products)	18	24%
The 6 calling club products in the countries with mobile penetration ≤45%	6	112%

NB The calculation of all averages excludes PNG.

## 2.3 NICTA STAFF'S CONSIDERATION AND ASSESSMENT OF REGULATORY OPTIONS

The Cave/Doyle submission objects to two aspects of the process that NICTA staff adopted to determine whether or not it would be appropriate for NICTA to consider the making of a retail service determination (discussed in chapter 7 of the 2DP), namely:

- (a) that NICTA staff considered only the proposed option (of a retail service determination prohibiting on-net/off-net price discrimination) against a single alternative option (that of doing nothing; i.e. the status quo); and
- (b) that NICTA staff did not consider alternative implementations of a non-discrimination pricing principle.

These comments (like Digicel's submission, as discussed below) incorrectly conflate two related but separate assessment exercises that NICTA staff undertook as part of its inquiry process (set out in Annex A) and discussed in separate chapters of the 2DP. They are discussed in turn below. In summary:

- in relation to (a), as the three alternative options to a non-discrimination rule were either impracticable (options (a) and (b)) or undesirable (option (c)), NICTA staff considered the proposed option against a single alternative option (that of doing nothing i.e. the status quo), which represents the only practical alternative in the circumstances;
- in relation to (b), although they were not canvassed in the 2DP NICTA staff actually considered 36 different implementation alternatives for a non-discrimination rule and, in light of that consultation, have considered more than 12 further alternatives. In determining whether or not a particular proposal for a retail service determination satisfies the retail regulation criteria, NICTA is not required by the Act also to consider all possible variations of that proposal.

### 2.3.1 Objection (a)

The objection in the Cave/Doyle submission mentioned in (a) above reflects an exercise that NICTA staff undertook to determine whether or not it would be appropriate for NICTA to consider the making of a retail service determination (in its generic sense) given the circumstances. It was not part of NICTA staff's consideration of the retail regulation criteria. As explained in the 2DP:

'...[staff] considered whether it would be appropriate for NICTA to develop a specific proposal for a retail service determination and consider it against the statutory retail regulation criteria. A retail service determination is one way in which the identified problems could be addressed. As such, it was necessary to determine whether, in the circumstances, the consideration of a retail service determination would be a superior or inferior option compared to other regulatory alternatives...'<sup>20</sup>

That exercise was not a statutory requirement on NICTA but reflects the principles of good regulatory practice that are commonly adopted internationally (some of which are quoted in the Cave/Doyle submission<sup>21</sup>). NICTA staff did this in order to determine whether or not it would be appropriate to contemplate the making of a retail service determination. If one of the identified alternatives to the making of a retail service determination were found to be superior to the idea of a retail service determination, or if none of the measures (listed in section 161 of the Act) that may be imposed under a retail service determination were found to be appropriate in the circumstances, then NICTA staff would not have proceeded to develop and consider a specific proposal for a retail service determination. As shown in Annex A, if this exercise had found that it would not be appropriate to consider the making of a retail service determination in the circumstances, then the inquiry would have been concluded (as it is an inquiry for the purposes of section 157 of the Act and thus focused on the whether or not a retail service determination should be recommended to the Minister). If that exercise had also found that one of the identified options was potentially superior to the making of a retail service determination, then the inquiry would have been concluded and the superior option would have been pursued through the appropriate avenue.

As explained in the 2DP, once NICTA staff had concluded—on the basis of consideration of the available alternatives—that it would be appropriate in the circumstances for NICTA to consider the making of a retail service determination that established a non-discrimination pricing principle, NICTA staff proceeded to develop terms for such a determination. That proposed determination was then assessed against the statutory retail regulation criteria (as discussed in chapter 8 of the 2DP). That assessment considered only a single alternative—that of the status quo—because the other options had already been found to be impracticable or not really options at all. In short, the other alternatives did not pass the first threshold test to warrant them being considered as practicable alternatives.

Option (b) in the 2DP was for NICTA to focus further upstream and introduce ex ante regulation at the wholesale level instead of the retail level (as some European and African regulators have done in similar

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<sup>20</sup> The 2DP at p.89

<sup>21</sup> The Cave/Doyle submission at pp.15-16

circumstances). However, as explained in the 2DP, NICTA's powers to intervene in the wholesale pricing of the domestic mobile terminating access service are more limited than those of many other national regulatory authorities, particularly those in the European Union. Accordingly, NICTA staff concluded that option (b) was not a practicable option at all.

Option (c) in the 2DP was for NICTA to directly regulate Digicel's retail prices. As explained in the 2DP NICTA is reluctant to intervene directly in the setting of retail prices given the potentially distorting effects and its inconsistency with the six principles that reflected NICTA's general posture in relation to intervention in pricing matters in retail markets. NICTA would not be able to replicate the commercial considerations and creativity that Digicel brings to such matters.

Option (a) in the 2DP was for NICTA to refrain from ex ante intervention and instead rely on ex post regulation. However, as explained in the 2DP, NICTA staff found this option represented 'a last resort'<sup>22</sup> given the nature of their concerns about the potential anti-competitive effects of Digicel's on-net/off-net price discrimination, the delays inherent in relying on any ex post remedy, and the risk that such delays could allow irreversible damage to competition to occur at a very early stage in the liberalisation of the market. As noted in the 2DP:<sup>23</sup>

'NICTA staff concluded that relying entirely on ex post regulation would not be sufficient or appropriate for the following reasons:

- With liberalisation of the ICT sector still very recent, NICTA wishes to ensure that the newly liberalised markets develop in a way that ensures they are effectively competitive in the long-term and ex ante regulatory measures are better able to prevent anti-competitive practices and to mitigate the harm from SMP in the market than ex post regulatory measures, which are geared towards identifying and penalising anti-competitive behaviour after the fact;
- NICTA staff are concerned about the possible use of (or the existence of incentives to use) tariff-mediated network externalities to increase barriers to entry and expansion and thereby limit the ability of competitors to compete in the market. If such conduct exists or occurs and was effective, it would be very difficult to reverse the anti-competitive consequences of that behaviour through ex post regulatory intervention;
- As some form of regulatory intervention in relation to the supply of retail services and/or setting of retail prices may be necessary, ex ante regulation would be more flexible and responsive than ex post regulation and would better accommodate the need for timely adjustment or removal of such regulations as circumstances change;
- NICTA staff noted the common view of the national regulatory authorities in the European Union that ex post regulation can prove to be insufficient in the assessment of excessive pricing scenarios because of the difficulties in the detection and proof of such conduct. Hence

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<sup>22</sup>The 2DP at p.93

<sup>23</sup>The 2DP at pp.26–27

preventative regulation in the form of ex ante intervention is preferable where such scenarios may exist.’

In addition, the Commissioner and CEO of the ICCC advised the CEO of NICTA in written correspondence dated 22<sup>nd</sup> February 2012 that:

‘The Commission has examined [bemobile’s complaint about Digicel’s on-net/off-net pricing practices] against the elements of s.50 and s.58 of the *Independent Consumer and Competition Commission Act 2002* (‘ICCC Act’) and concludes that the conduct of Digicel is *unlikely to be proved* to have anti-competitive purposes; hence they are not likely to amount to a contravention of the ICCC Act.’<sup>24</sup>

The Commission’s letter goes on to note that NICTA is free to examine and, if deemed appropriate, remedy those issues under the National ICT Act irrespective of the ICCC’s views in relation to the ICCC Act.

It was thus clear to NICTA staff that, not only was reliance on ex post regulation undesirable (for the reasons noted above), but the ICCC did not consider that it was in a position to pursue the matter through ex post regulation under the ICCC Act.<sup>25</sup>

### 2.3.2 Objection (b)

The objection in the Cave/Doyle submission mentioned in (b) above—that NICTA staff did not consider alternative implementations of a non-discrimination pricing principle—relates to NICTA staff’s assessment of the proposed retail determination against the statutory retail regulation criteria.

The observation is correct in that only one means of implementing a non-discrimination rule is discussed in Chapter 8 of the 2DP and considered against the retail regulation criteria in Chapter 9. However, it is incorrect to suggest that in developing the proposal retail service determination described in Chapter 8 that NICTA staff considered only one means of implementing a non-discrimination rule. Although not discussed in the 2DP, NICTA staff actually considered 36 different implementation alternatives for a non-discrimination rule. In light of the responses to the 2DP, NICTA staff have subsequently considered more than 12 additional alternatives for the implementation of a non-discrimination rule. An overview of these 48 implementation options is provided in Annex D.

Under Part VII of the Act, NICTA’s assessment of a proposed retail service determination against the retail regulation criteria does not need to take into consideration all possible variations of a particular proposed determination. NICTA may of course do so at its discretion and in practice an assessment against the retail regulation criteria is dynamic and may identify specific variations to the determination that, if made, would better enable it to satisfy the criteria or otherwise improve the recommendation in the view of NICTA. In any case,

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<sup>24</sup>Written correspondence; on file. Emphasis added.

<sup>25</sup>The Cave/Doyle submission (at page 13) appears critical of NICTA staff’s implicit assumption in their subsequent assessment of the proposed retail service determination against the retail regulation criteria that, under the status quo, the Independent Consumer and Competition Commission would not intervene (ex post) under the *Independent Consumer and Competition Commission Act 2002* to remedy the anti-competitive consequences of Digicel’s on-net/off-net practices. However, as the letter from the CEO of the ICCC demonstrates, that is an accurate assumption.



NICTA staff believe that the purpose of the Cave/Doyle submission raising this particular objection was not to have NICTA assess the proposed determination against the retail regulation criteria vis-à-vis 47+ other variations of it. NICTA staff accept the underlying point that is being made by Cave/Doyle here that there are other ways of prohibiting non-discrimination besides an absolute ban, such as by providing scope for a degree of 'legitimate' discrimination while prohibiting the 'illegitimate' levels of discrimination (as NICTA staff now propose and as suggested by the Cave/Doyle submission.)

### 3 OVERVIEW OF OTHER COMMENTS RECEIVED AND NICTA STAFF'S CONSIDERATION OF AND RESPONSE TO THOSE COMMENTS

Given the length and detail of the submissions received, NICTA staff have not (in the table below) responded directly to every point or comment that was made by the respondents in their submissions and cross-submissions. Many arguments and comments were repeated, and sometimes many times. However all comments considered to be important have been addressed either below or in the revised proposed determination. Even if not specifically addressed below, all comments received were considered in full and have been taken into account.

No.	Sub-mission	Reference or subject	Summary of comment	NICTA staff's response
1	bemobile	Urgency of a resolution p.16	Competition has suffered in the 18 months since bemobile first raised its concerns about Digicel's on-net/off-net pricing practices with NICTA staff. Resolution of the matter is now urgent.	NICTA staff note that the matters under inquiry have taken longer than expected to consider and resolve. However, some of this delay has been caused by such things as then need to obtain data from licensees (using formal information gathering powers) and the need for staff to undertake their own extensive research and investigation of matters that were not well framed or addressed in the initial submissions and correspondence to NICTA.
2	bemobile	Market definition p.19	The definition of the relevant market should include mobile internet as it is part of a cluster market for the bundle of mobile services. However whether or not mobile internet is included will not have any material impact on the matters under inquiry.	Many other regulators in developing markets do not agree with bemobile that the market should include mobile broadband and mobile internet access services – at least not at this stage. It is therefore not at all obvious at the present state of market development in PNG to consider mobile internet as part of the cluster market that bemobile wants to define. In any case, whether or not mobile internet is included in the market definition is unlikely to alter NICTA staff's key findings and conclusions with respect to that market.
3	bemobile	The relevance of the three criteria test	It is unclear to bemobile 'why NICTA feels compelled to apply the legislative criteria [i.e. the "three criteria test"] of other jurisdictions. It is an unnecessary distraction for NICTA to consider tests that have been legislated in other	The three criteria test is an important filter developed elsewhere for determining whether a market is susceptible to ex ante regulation of dominance. It is not a distraction but an important part of the regulatory process of analysing a market for dominance.

No.	Sub- mission	Reference or subject	Summary of comment	NICTA staff's response
		p.20	jurisdictions.'	
4	bemobile	Correction of an error of fact p.21	Trilogy International Partners has no equity in bemobile and exercises no control over bemobile	The correction is noted. However, after reconsideration NICTA staff do not believe that it materially alters either the point that NICTA staff were making in relation to corporate ownership or the conclusion that such analysis contributed to.
5	Digicel	Confidentiality – Covering letter of 1 June 2012	Digicel claims that “it has been constrained in its ability to provide full and complete arguments due to NICTA’s continuing refusal to establish an appropriate confidentiality regime...”	NICTA has an appropriate regime in place that is in accordance with section 44 of the Act and which balances claimed confidentiality from disclosure and the public interest in open and transparent regulation. NICTA staff note that Digicel has not indicated (at any stage during the inquiry) the sort of arguments or evidence that it might put forward if there was a different regime in place, which is something that Digicel could have done without identifying or disclosing any confidential information. NICTA cannot consider arguments or evidence that Digicel decides for whatever reason not to submit.
6	DigicelX	Confidentiality Paragraph 8, page 8	Digicel complains again that the absence of a confidentiality regime has prevented it from making its case in full.	Although this comment was made as part of its cross-submission, this comment is actually addressed to NICTA and not to the bemobile submission as such. In any case, as has been noted on numerous occasions, there is a regime in place that conforms to the requirements set out in the Act and Digicel has been made aware of it and the supplementary processes adopted by NICTA. NICTA staff accept that Digicel may prefer a different regime but that is another matter entirely.
7	Digicel	Comments on the management and efficiency of competitor firms – Covering letter of 1 June 2012 and elsewhere in the submission	Digicel asserts on many occasions that competitor firms are being managed inefficiently or inappropriately and throughout its submission that one of those firms will be subject to takeover in the next six months.	NICTA does not regard it as appropriate to use the public forum established by the inquiry’s consultation process to comment in this way on competitors in the market. No further response will be made by NICTA on such matters.

No.	Sub- mission	Reference or subject	Summary of comment	NICTA staff's response
8	DigicelX	Efficiency of licensees  Task 2, page 3 of covering letter	NICTA staff have made the unwarranted assumption that the mobile network operators in PNG are equally efficient.	Although this comment was made as part of its cross-submission, this comment is actually addressed to NICTA and not to the bemobile submission as such. In any case, no such assumption has been made at all. In fact NICTA does not have the information that might support an analysis of absolute or comparative efficiency. NICTA staff note that Digicel asserts conclusions on this matter throughout its submission and cross-submission.
9	Digicel	NICTA's role as regulator – Paragraph 5 of covering letter and elsewhere in submission	Digicel makes several suggestions that the current inquiry process is beyond NICTA's powers under the Act. In the covering letter it says: "It is not NICTA's primary role to manage competition in the mobile services market. That is the role of the Independent Competition and Consumer Commission." Digicel then goes on to state NICTA's role as being "to ensure that the ICT industry contributes to the greatest extent possible to the long-term economic and social development of Papua New Guinea".	NICTA is well aware of its roles and responsibilities under the Act and is acting in a manner that is consistent with them and which fulfils them. Further, it is not useful to talk in terms of primary and other roles as Digicel has done. The roles, powers and functions are given to NICTA by legislation and the legislation does not have a sliding scale of the kind that Digicel may have in mind.
10	DigicelX	NICTA's role as regulator Paragraphs 42 and 43, page 16	The view expressed by the ICCC in correspondence to NICTA in February 2012 [and which has been quoted by NICTA staff in section 2.3.1 above].	Although Digicel's comment was made as part of its cross-submission, this comment is actually addressed to NICTA and not to the bemobile submission as such. In any case NICTA staff believe Digicel is making far too much from a simple statement of conclusion by the ICCC. The ICCC is a competition regulatory authority and is concerned with the possibility of applying ex post competition remedies. The ICCC has provided no public details about its examination of the matter and has not indicated publicly how it might respond if a different or fuller set of facts was put before it. The ICCC's statement is perfectly reasonable and should not be stretched to cover meanings that may not have been intended.
11	Digicel	The effect of the proposed retail service determination— paragraph 7 and	Digicel says: "Forcing Digicel to reduce its off-net rates merely gives its rivals a 'free ride' on Digicel's past investments.... They have not invested to acquire their own mobile customers even though [in bemobile's or Telikom's case] they	NICTA is not offering free rides to anybody. Off-net and on-net prices and their relationship will determine customer behaviour. A customer calling from Digicel's network to bemobile's network will not enjoy a free ride if the price discrimination is limited to acceptable proportions that balance pro- and anti-competitive impacts of price discrimination. Nor does the customer calling behaviour under those

No.	Sub-mission	Reference or subject	Summary of comment	NICTA staff's response
		8 of the covering letter and elsewhere in the submission.	had at least a 5 year head start with no competition to do so. They now want NICTA to intervene, so they can enjoy the network effects that Digicel has built up through its past investments."	circumstances amount to a free ride of any kind for bemobile or other network operators.
12	DigicelX	Last paragraph, page 2 of covering letter	NICTA has ignored the fact that the market is not saturated.	Although this comment was made as part of its cross-submission, this comment is actually addressed to NICTA and not to the bemobile submission as such. In any case, the comment is incorrect. The state of the market and the geographic coverage is a matter that is referred to many times in NICTA staff's analysis. NICTA staff have also given specific consideration to the possible implications of PNG's current low rate of mobile penetration in section 2 above.
13	Digicel	Relevance of economic literature  Paragraphs 16, 26	'...NICTA simply cites a range of theoretical papers without checking whether the assumptions used in those papers are relevant to PNG.'	This is incorrect. For example, on page 61 of the 2DP NICTA staff noted: 'NICTA staff are conscious of not relying only on the conclusions drawn from economic modelling in academic literature. These insights need to be applied to the market circumstances in PNG. All of those models tend to have been developed to reflect mobile markets in developed countries, in particular, markets in the European Union where the issue of on-net/off-net price discrimination has been considered extensively in the context of mobile termination pricing. Consequently, some of the key assumptions that underpin those economic models do not reflect the circumstances that exist in PNG. For example, Jeon, Laffont and Tirole (2004) assumed equally sized mobile networks; Calzada and Valletti (2007) assumed a multi-firm industry, and Hoernig (2007) and Cabral (2011) among others assumed that mobile termination rates were set at cost by a regulator.'
14	Digicel	Relevance of cost differences  Paragraph 38(a)	NICTA staff's concerns that Digicel's on-net/off-net price discrimination is unrelated to costs is irrelevant because price discrimination by definition is not cost based.	This comment misunderstands the point NICTA staff were raising in the 2DP. In the view of NICTA staff, Digicel's structure of its on-net/off-net prices reflects a strategic intent to make off-net calls unduly expensive and unattractive and, in turn to make calling its competitors unduly expensive and unattractive. For example, whereas the price of on-net calls drops significantly after the first minute, Digicel's imposes the same high cost on all minutes of an off-net call. Further, Digicel charges a higher off-net price premium on calls that terminate on bemobile's network (the more established of its two competitors) compared to off-net calls that terminate on Telikom's network. NICTA staff looked for any evidence that such differences might not reflect the type of anti-competitive strategic intent that is

No.	Sub-mission	Reference or subject	Summary of comment	NICTA staff's response
				considered in the 2DP. Any differences in the associated costs may constitute evidence that the price structure was not wholly strategic in the sense described above. However, as NICTA staff concluded there was no cost-basis for the discriminatory structure (a point that Digicel does not dispute) NICTA staff remained concerned that Digicel's on-net/off-net price discrimination practices reflected a strategy that was anti-competitive. Accordingly, this is relevant to the matters under inquiry.
15	DigicelX	Price discrimination generally Task 1, page 3 of covering letter	Digicel says that most forms of price discrimination are "in fact normal competitive behaviour".	Although this comment was made as part of its cross-submission, this comment is actually addressed to NICTA and not to the Bemobile submission as such. NICTA staff recognise that some forms of price discrimination are pro-competitive and that was noted in the 2DP. However, it is a matter of degree and before cross-over points are encountered, a matter recognised in the Cave/Doyle submission. To assert blithely that most forms of price discrimination are pro-competitive is an unsubstantiated generalisation that is at odds with widespread regulatory controls in many countries around the world.
16	DigicelX	Price discrimination generally Section 5 heading, page 14	'Price discrimination between on-net and off-net calls is not anti-competitive'	This is too broad a statement. As explained in detail in the 2DP, section 2 above, and in the economic literature, on-net/off-net price discrimination is sometimes anti-competitive but it is not always anti-competitive.
17	DigicelX	Network effects Para 36, page 15	There is nothing inherently anti-competitive about network effects per se.	NICTA agrees and has never suggested otherwise. However that is not the issue before the price inquiry.
18	Digicel	Relevance of international comparisons Paragraph 39	'NICTA's argument...is effectively that (a) some other countries have regulated retail prices and (b) Digicel's price differential is excessive by comparison with those, so (c) PNG should also regulate retail prices.	This is incorrect. NICTA staff included references to international precedents throughout the 2DP to demonstrate that NICTA's concerns and proposed responses were not without precedent in other countries. NICTA staff made a number of national and international comparisons of Digicel's price discrimination practices, which demonstrated that the scale of Digicel's on-net/off-net price discrimination is high by various measures and comparisons. It also happened to

No.	Sub-mission	Reference or subject	Summary of comment	NICTA staff's response
				show that the scale of Digicel's on-net/off-net pricing is of an order that was of sufficient concern in other countries that the relevant regulators intervened to address the similar anti-competitive concerns that are held by NICTA. However, it is still the scale of Digicel's price discrimination (coupled with its substantial degree of market power (SMP)), that is the cause of NICTA's concern, not how Digicel's price discrimination compares to other countries.
19	Digicel	Paragraphs 51-55, 58	<p>'...[T]he data presented by NICTA for these countries [i.e. Kenya] appears to be inaccurate...[this] calls into question the other data cited [by NICTA]...'</p> <p>'...[E]ven though Kenya is cited by NICTA as a country that has "acted to address anti-competitive price discrimination between on-net and off-net calls", Safaricom's current pricing [as at 18 May 2012] shows "off-net price premiums of 25% and 150% for peak and off-peak calling respectively...'</p>	<p>Safaricom's pricing as of 2 July 2012, and as sourced from the same internet address as quoted by Digicel (<a href="http://www.safaricom.co.ke/index.php?id=148">www.safaricom.co.ke/index.php?id=148</a>) shows off-net price premiums of zero (0%) for peak time calls and 100% for off-peak times. (See screen shot of webpage at Annex E.) The data used by Digicel and its graph on page 20 of its submission are thus inaccurate. NICTA staff assume that this discrepancy is a result of price changes by Safaricom. Whatever the reason NICTA staff see no reason why this inaccuracy in Digicel's submission should call in question the accuracy or reliability of any of the other data cited by Digicel in its submissions.</p> <p>NICTA staff were not aware that Safaricom's pricing was inconsistent with the requirements of the regulator's determination at the time the 2DP was published. Subsequent research following Digicel's observations regarding Safaricom's pricing indicates that the regulator's determination (which also required further reductions in mobile termination rates (MTRs)) had been appealed on the grounds that the MTR cuts were excessive, leading to a review and intervention by the Kenyan Prime Minister's office. This is also noted in bemobileX. NICTA staff do not believe that these implementation issues detract from the key reason for mentioning the Kenyan example in the 2DP, which was to demonstrate that NICTA's concerns and proposed responses are not without international precedent (it remains a fact that the Kenyan regulator was sufficiently concerned about the anti-competitive effects on on-net/off-net discrimination by an SMP operator that it intervened to impose a non-discrimination rule).</p>
20	Digicel	Paragraph 56 Appropriate call duration for	As approximately 70% of outbound calls from Digicel's network are of a duration that is less than one minute, the off-net price premium on Digicel's first call minute is the only premium that is relevant for consideration or comparison. That is, the off-	NICTA staff note that the proportion of call durations supplied by Digicel was not disaggregated by, for example, pre-paid and post-paid or on-net and off-net. It is also unclear whether outbound international calls and mobile to fixed calls are included in these data supplied by Digicel. Nevertheless, if Digicel is correct, then 30% of calls must go beyond a minute, which is itself a significant proportion and

No.	Sub-mission	Reference or subject	Summary of comment	NICTA staff's response
		analysis of off-net price premiums	net price premiums of the second and subsequent minutes, and average prices, are irrelevant and should not be taken into account.	<p>cannot be ignored as irrelevant. NICTA staff's consideration of calls of different durations has captured that 30% and thus was comprehensive. NICTA staff note bemobile's comment that 'NICTA was correct to analyse different call lengths as calls do vary significantly in length'.</p> <p>NICTA staff's analysis is also forward-looking. 70% of Digicel's calls may be less than one minute's duration, but that may not be the case in coming years, particularly as customers can be given incentives to make calls of shorter or longer duration through retail pricing. NICTA staff note that Digicel did not identify how the 70% proportion compares with previous periods or its experience in other comparable markets, and Digicel also does not comment on how it expects call duration trends to develop in the future.</p> <p>In any event, a comparison of Digicel's off-net price premium for its first call minute with a much larger sample of countries, and with the highest available prepaid off-net price premiums available in those countries, shows Digicel's first minute off-net price premium to be in the highest third of the sample (refer Annex C) and 53% above the average off-net price premium in countries where mobile penetration is &lt;45% (refer Figure 3 above). Significantly, that comparison includes calling club products, which typically involve a higher off-net price premium but limit the discrimination to a small number of called parties.</p>
21	bemobileX	Appropriate call duration for analysis of off-net price premiums p.12-13	'If a single price point is required for comparison purposes then it should not be the price of a 1 minute call, it should be the average revenue per minute of an on-net call versus the average revenue per minute of an off-net call.'	A single price point is not required. The relevant price points are those that Digicel chooses to describe in its price structure. The proposed approach to managing price discrimination is to apply the regulatory constraint to all minutes of a call. NICTA staff understand bemobile to be making a similar point to Digicel, namely that because a high proportion (Digicel says 70%) of calls are less than one minute, this should be the focus of NICTA's attention during the review. As noted above, 30% is a significant proportion of calls and there is no reason why a retail price determination should ignore these calls.
22	Digicel	International comparison of off-net premiums	'NICTA also presents data on off-net premiums charged by Digicel and other operators in a range of Pacific and Caribbean markets...In doing so, NICTA appears to concede that PNG's off-net premiums are not excessive for calls up to one minute, which is over 70% of calls [originated on	This is incorrect. As NICTA staff noted on page 74 of the 2DP: 'That comparison indicates that Digicel's on-net/off-net price discrimination in PNG is excessive by comparison to those other mobile markets. Although the off-net price premium charged by Digicel (PNG) for the first minute of a call is towards the high end of this sample, it is not as high as that seen in Anguilla, the Cayman Islands or Fiji for example. However, the off-net price premium that Digicel charges for the second



No.	Sub-mission	Reference or subject	Summary of comment	NICTA staff's response
			Digicel's network in PNG].'	<p>and each subsequent minute of a call, and the per minute average off-net price premium, are extremely high.'</p> <p>The graph in question (Figure 19 in the 2DP) has been reproduced in Annex F with averaged price premiums removed (the inclusion of which Digicel opposes on the basis that 70% of its calls are less than one minute in duration). Consequently the graph at Annex F shows only the off-net price premiums for the first minute of peak time prepaid calls. Doing so still shows that Digicel's prices in PNG are excessively high: it is in the highest third of the sample, it is the 12<sup>th</sup> highest overall (of a sample of 43), and it is 75% above the average off-net price premium for the sample.</p> <p>Digicel's comments also ignore the information presented in an accompanying graph (Figure 20 in the 2DP) that compares off-net prices (during peak times) as a proportion of the applicable MTR in those sample countries for which MTR data was publicly available. As noted in the 2DP, NICTA staff concluded that that graph 'again shows that Digicel's off-net prices in PNG are very high in comparison'. That graph (which is unaffected by differences in call duration) is reproduced in Annex G.</p> <p>To be clear, NICTA staff believe that Digicel's off-net price premium for its first minute is excessively high. NICTA staff also believe that Digicel's off-net price premium for its second and subsequent minutes is excessively high.</p> <p>NICTA staff note that Digicel did not dispute the appropriateness of the comparator countries (as it did in relation to Kenya, Namibia, Qatar and Turkey) nor the appropriateness of comparing Digicel's pricing structure and practices in PNG with that of other Digicel companies in other countries.</p>
23	DigicelX	Scale of Digicel's price discrimination Para 15(d), page 9	Digicel claims its price discrimination is not excessive given the circumstances of PNG	As shown above in section 2, in Annexes D and E, and in the 2DP, NICTA staff's analysis of the approaches in many other countries shows that Digicel's claim is incorrect and that the scale of Digicel's on-net/off-net price discrimination is undoubtedly excessive relative to the levels tolerated or accepted in other countries.
24	Digicel	Competitors' ability to	As Digicel and its rivals compete in the supply of a bundle of services (as reflected in the definition of	NICTA staff disagree (and note that Digicel objected only to what was being compared, not to the manner in which the comparison was done or its results).

No.	Sub-mission	Reference or subject	Summary of comment	NICTA staff's response
		<p>profitable match Digicel's on-net prices</p> <p>Paragraphs 60-64, 110</p>	<p>the relevant market) and not in the supply of a single service (i.e. prepaid off-net voice calls). 'So the question NICTA needs to ask itself, is whether an efficient network operator could profitably replicate Digicel's bundle pricing.'</p>	<p>The relevant question (which is the one considered in the 2DP) is whether a smaller operator without existing market strength could reasonably respond to the substantial level of on-net/off-net price discrimination that is involved in Digicel's market strategy. After analysis, NICTA staff concluded (in section 6.4.3.5 of the 2DP) that the answer is 'no'. (For the purposes of considering this situation, the smaller operator was assumed to be efficient in terms of the practices it adopts; it may of course not have scale efficiencies by virtue of market share.)</p> <p>The bundles of services, as described by Digicel in its submission to the first discussion paper, includes 'the ability to receive calls (or access), to make domestic calls, SMS, international calls and international roaming calls, and the ability to access value added services [VAS], such as voicemail'. NICTA staff note and concur with the point made in bemobileX that: '[Digicel's proposition] would depend on available margins given MTRs and the relative importance of each of those services to the customer. However, such a strategy would seem to have a low likelihood of success given that customers place a value on receiving calls and by switching away from Digicel they will receive substantially fewer calls due to the high off-net pricing implemented by Digicel'.</p> <p>bemobile's comment about the relative importance of the different services in the bundle would seem to be particularly relevant in relation to the ability to make international calls and international roaming calls, which is a part of the bundle that is likely to be valued differently by many consumers compared to the national services. (This is supported by NICTA staff's analysis of ratios of national mobile-to-mobile call minutes to both national mobile-to-fixed and international mobile call minutes.) Assuming that the ability to receive calls is valued universally (otherwise why would anyone ever give out their telephone number), then this leaves competitors with only the margins on on-net calls, SMS and VAS like voicemail with which to subsidise the low or negative returns that would be incurred under the price matching strategy considered in section 6.4.3.5 of the 2DP. Given the scale of the negative returns (set out in the 2DP) that NICTA staff estimated would result if a competitor attempted a price matching strategy, it is unrealistic to expect to be able to subsidise those returns with the margins on SMS and VAS having regard to SMS and VAS volumes. Further, as noted in the 2DP, that analysis is based on Digicel's current prices. Given Digicel's SMP, it could lower its on-net pricing and render any such price matching strategy completely unprofitable.</p>

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25	Digicel	Competitors' ability to profitably match Digicel's on-net prices  Paragraph 62	That fact that Telikom is (or was) offering off-net calls at a price that is under Digicel's on-net price is evidence that disproves NICTA staff's conclusion that 'rivals could not compete with off-net pricing at the level of Digicel's on-net pricing'.	<p>This is incorrect. NICTA staff did not state that it was not possible for a competitor to set its off-net prices at a level that matches (or undercuts) Digicel's on-net prices. NICTA staff said that, based on their analysis, that a competitor could not do so <i>profitably</i>. As the 2DP states on page 70 '...NICTA staff concluded that bemobile and Telikom could not match Digicel's on-net prices without incurring significant losses that would need to be subsidised through higher on-net or other prices, particularly given that a significant proportion of the traffic originated by the non-SMP operators' terminates off-net.'</p> <p>Telikom is a very recent entrant in the mobile services market. As Digicel notes elsewhere in its submission '...adding subscribers is the primary goal of network operators. In growing markets, increasing customer numbers is more important than maximizing revenue per customer, so operators offer moderate tariffs designed to attract customers'. Telikom's introductory pricing should not be assumed to represent the level that it intends to apply on an on-going basis. Therefore neither Digicel nor NICTA staff can draw the conclusions that Digicel proposes from Telikom's entry level pricing.</p>
26	DigicelX	Competitors' ability to profitably match Digicel's on-net prices  Para 15(d), page 10	Citifon has no trouble undercutting Digicel and bemobile rates.	This comment misses the point that NICTA staff made in the 2DP, which is whether or not such pricing can be undertaken sustainably. Digicel offers no grounds for assuming the approach to pricing is viable, though it is possible that it has no information on the matter given that such information, if it exists, belongs to a competitor.
27	Digicel	International comparison of on-net mobile traffic relative to market shares  Paragraphs 65-66	The information shown in Figure 24 of the 2DP (showing a comparison of total on-net mobile traffic relative to market share across 10 countries plus PNG) 'is susceptible to an "availability bias" in that the data on the share of on-net traffic shares [sic] is generally confidential...[and] generally become available only in cases where the national regulators have chosen to regulate'.	NICTA staff are aware of the risks of availability biases, including in the information contained in submissions to inquiries generally. The availability of public information is sometimes further restricted by language differences. However, in this particular case NICTA staff note that of the ten countries for which data on the proportion of mobile traffic that is on-net was available, six of those countries (Bahrain, Spain, Malta, Sweden, France, UK) have not intervened in on-net/off-net price discrimination in particular. The data is simply made available publicly as part of the regulators' ongoing data collection and analysis processes. As Figure 24 in the 2DP shows, when the data from the ten countries is compared,

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				there are some similarities between the market shares of the largest operators and the proportion of traffic that remains on-net, and also between those countries that concluded that regulation was necessary and the current circumstances in PNG. NICTA would welcome receiving data relating to additional countries to expand the sample size but notes that none was submitted by any party.
28	Digicel	Time periods Paragraph 67, 109, 126	<p>'NICTA's theory of harm concerns effective competition in the long term. This is inconsistent with the two year horizon of NICTA's [market analysis] and with NICTA's stated view that competition is intensifying.'</p> <p>...</p> <p>Two years is too short a time horizon to analyse competition in a mobile market. A more appropriate time frame would be 15 years.</p>	Digicel has misunderstood the use of these terms. The concepts are different and are used consistently with each other. "Long term" does not relate to a specific timescale. It is really trying to understand the second and third order effects of any action or tendency now being observed. It goes to sustainability as well. The time horizon of the market analysis is concerned with detailed market developments. These may be complex, hence NICTA staff propose that a review is needed in two years' time to ensure that the market is developing as expected or to adjust for changes that could not have been foreseen.
29	Digicel	The three criteria test Paragraphs 68-86	NICTA has 'erred' in the way that it has considered each of the three criteria that have been used to determine whether or not a market is susceptible to ex ante regulation.	Digicel's criticism is based on the notion that some tendency in recent time towards competition – especially with the move from a single mobile operator to three – is to be equated with sustainable and viable competition longer term. However, "some competition" is not the same as "effective and viable competition", which is the focus of the analysis.
30	Cave/Doyle	The option of relying on ex post competition law p.12	'Reliance on competition law is immediately rejected on the curious ground that 'reliance on ex post competition is only realistic where there is effective competition in the relevant market...' (p. 92). Since SMP is by NICTA's own construction equivalent to a situation in which the firm in question has a high level of market power or dominance, taken literally this statement means that competition law is not a realistic option in addressing such situations – which would certainly come as a surprise to competition authorities	NICTA staff agree that the proposed alternative wording (i.e. that ex post competition law is insufficient to deal with the problem) in a more accurate and more appropriate description of the point being made.

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			throughout the world, such as the ACCC, the US Department of Justice and Federal Trade Commission and the European Commission. A more reasonable version of the proposition is that ex post competition law is insufficient to deal with the problem.'	
31	TelikomX	General Page 1 of 1	'Telikom does not agree to Retail Service Price Determination of the mobile call and SMS services because retail price regulation is not considered necessary in most cases if there is existence of competition as is the case in telecommunications sector in PNG. However, we are also aware that if fair competition cannot constrain price than [sic] regulation is justifiable.'	As noted above the existence of "some competition" is not the same as the existence of "effective and viable competition", which is something very different.
32	Digicel	Barriers to entry Pages 25 and 26	Digicel claims that NICTA has relied too heavily on whether new entrants can enter the market and has not given enough consideration of the fact that bemobile has entered the market and made large investments already.	Digicel has conflated the second and third criteria in the three criteria test. The first criterion is about whether barriers to entry are high today and whether that will continue. The second criterion is about whether there is competition behind such barriers, or whether the market is heading that way. There are high barriers to entry. No new entrant is likely to enter given the market situation of Digicel and the clear struggle that existing participants, bemobile and Telikom, are experiencing. Clearly the criterion is not about barriers in the past when current participants entered but today and in future. High and continuing barriers to entry is not the same as saying that barriers are insurmountable. However in the normal course, NICTA and customers in this market cannot reasonably rely on competition increasing through a new entrant.
33	Digicel	SMP analysis Paragraphs 93-112	NICTA has incorrectly concluded that Digicel has a substantial degree of market power as there is evidence of the erosion of any such power (although Digicel disputes that any such power existed in the first place).	Digicel's main argument is that it has achieved its current position in the market on the merits of its services and through its management and commercial skill. NICTA does not intend to argue for or against this. The point is that Digicel has built a position of pre-eminence with a substantial degree of power in the market. There is no assertion that it achieved this in ways that are inappropriate or unlawful. It is not unlawful to be dominant or to have a substantial degree of market power (SMP). NICTA staff remain of the view that the evidence of Digicel's SMP is compelling and believe that, apart from Digicel, few would doubt that

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				taking all of the factors mentioned in the 2DP into account, that Digicel has SMP in the mobile services market.
34	DigicelX	SMP analysis Paragraph 4, page 2 of covering letter	Framing the inquiry in terms of competition and market power is misconceived.	Although this comment was made as part of its cross-submission, this comment is actually addressed to NICTA and not to the bemobile submission as such. In any case, there is no misconception. If Digicel is found not to have market power then ex ante regulation such as that contemplated in the retail serviced determination would be inappropriate. The terms of the inquiry are effectively set by the requirements of Part VII of the Act, not by NICTA.
35	DigicelX	SMP analysis Paragraph. 5, page 2 of covering letter	Emphasis on competition and market power has caused NICTA to pay insufficient attention to the things that matter.	Although this comment was made as part of its cross-submission, this comment is actually addressed to NICTA and not to the bemobile submission as such. In any case, this comment is misguided and wrong. The "things that matter" are the requirements set out in Part VII of the Act. NICTA has had those requirements constantly before it throughout the inquiry.
36	DigicelX	SMP analysis Paragraph 11, page 7	Digicel considers that it should not be punished for its efforts or its market success.	Although this comment was made as part of its cross-submission, this comment is actually addressed to NICTA and not to the bemobile submission as such. In any case, Digicel's comment is an inappropriate characterisation of the inquiry process. It is not a criminal process that involves punishment for behaviour or for position. It is strictly concerned with the criteria set out in the Act.
37	DigicelX	SMP analysis Paragraph 15(f), page 10	A finding that Digicel has market power would be upset if its competitors are inefficient.	Although this comment was made as part of its cross-submission, this comment is actually addressed to NICTA and not to the bemobile submission as such. In any case, Digicel's comment is incorrect. Market power has been well defined internationally in terms of the ability of a competitor to pursue its policies on price and production without undue concern for the responses of its customers or competitors. How that power was attained, and whether part of that attainment was due to superior efficiency, is not relevant to the fact of market power as a position in a market. Further, having market power is not in itself objectionable, as Digicel appears to think.
38	Digicel	Paragraphs 94-98	Digicel submits that its high market share is being eroded and 'therefore disputes NICTA's view that its high market share is "prevailing"....'	NICTA staff explained in the 2DP some of the factors contributing to the recent change in market share in the last year, particularly market share of subscribers, and that as a result NICTA staff considered that the revenue and traffic

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				<p>shares provided a more accurate picture of market shares. Having a position of substantial market power is consistent with the ebb and flow of market share levels, especially where the changes are relatively small and relate to subscribers rather than revenue shares.</p> <p>Market concentration in PNG, as measured by the high Herfindahl Hirschman Index (HHI), is 7,859 based on revenues and 8,239 based on mobile-originated national voice traffic (and 5,888 based on subscribers). These results are extremely high by any standard.</p>
39	Digicel	Paragraphs 100-103	Digicel submitted the latest version of a Pacific mobile price benchmark prepared by Network Strategies that was referenced by NICTA staff in the 2DP in its discussion of excessive pricing. Digicel highlighted that based on the updated benchmark, there has been reductions in the estimated monthly spend on mobile services by "typical" Digicel and bemobile prepaid customers, and the gap between the monthly spend of Digicel and bemobile customers has narrowed.	<p>Digicel has not fully explained the relevance of the methodology adopted by Network Strategies (NICTA staff not that it has not criticised that methodology either). Network Strategies applied country price levels to a pre-determined basket of services, thereby enabling a "standardised" mobile purchase to be compared from country to country in the benchmark. In principle this is quite an acceptable way of examining relative dearthness. However the benchmark cannot be used to draw additional conclusions of the kind that Digicel is attempting to draw. Hence the note in the 2DP that 'NICTA staff have not given undue weight to the benchmark or relied upon it. NICTA staff have simply noted that this particular benchmark indicates that (pre-paid) retail prices in the retail mobile services market could be considered high relative to other Pacific island nations which are unlikely to have lower unit costs.'</p> <p>The ARPU of typical Digicel and bemobile prepaid customers can be determined more directly than via the benchmark. For example, Digicel could have submitted its actual ARPU figures for the last two years as an alternative or supplement to the Network Strategies benchmark. It is clear from the market shares for subscribers and revenue that Digicel has more valuable (higher spending) customers than bemobile on average. Narrowing of the gap may be temporary, and no evidence has been offered about the reasons for the recent narrowing or whether it might continue.</p> <p>NICTA staff noted the updated Network Strategies benchmark but, as before, have not given it undue weight or relied upon it.</p>
40	Digicel	Paragraph 107	Although Digicel's prices have not decreased, they have not risen either despite at times high	Mobile operators need to show a continuing reduction in real prices as a sign of goodwill and customer responsiveness. Leaving aside distressed economies with

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			inflation. 'Consequently, PNG customers have benefited from falling real prices for mobile services'.	hyper-inflation, there are few examples of increases in prices, even where competition is weak. The fact that prices have remained steady (or declined in real terms) is quite consistent with a situation of a position of SMP. An SMP competitor has a position of power. This does not mean that the power will always be exercised. The risk for regulators is that it might be exercised in various ways in future.
41	Digicel	Retail regulation criteria Paragraphs 116-119	The proposed determination would not satisfy the competitive objective under the retail regulation criteria because it would soften competition.	<p>NICTA staff disagree. As explained in the 2DP, NICTA staff concluded that the proposed determination would effectively reduce the anti-competitive effects of Digicel's on-net/off-net price discrimination and that, by removing such a barrier to effective competition, the proposed determination will promote effective competition in the mobile services market. Further, if the proposed determination was not made then the risk of further harm from the anti-competitive effects of Digicel's on-net/off-net price discrimination will not be addressed and will continue to the detriment of effective competition. NICTA staff remain of that view.</p> <p>However, following their consideration of all the submissions received and further analysis, as explained in section 2.2 above NICTA staff concluded to tolerate for a degree of on-net/off-net price discrimination to allow for the legitimate price discrimination that may stimulate competition and have positive welfare effects, while preventing the illegitimate price discrimination and its anti-competitive effects. After considering the revised proposed determination against the competition objective, NICTA staff concluded that the revised determination constituted "the best of both worlds" and satisfied the competition objective even better than the previous proposed determination.</p>
42	Digicel	Retail regulation criteria Paragraphs 120-124	Digicel is 'deeply concerned by NICTA's argument...which suggests that Digicel's previous investments were inefficient...NICTA's presumption that efficient investment can only take place in competitive markets is unjustified and incorrect.	In the 2DP (at page 103), NICTA staff said: 'If Digicel's past or future investments are based on the low level of competition that will inevitably result from a continuation of this price discrimination, to the extent that it is not warranted by differences in the costs of on-net and off-net call termination, then that investment will tend to be inefficient. It will lack the discipline and shaping that occurs when investment into effectively competitive markets is being considered. There is also the matter of efficient investment by competing mobile operators – bemoile and Telikom. In making their investments these operators are entitled to assume that the market will be reasonably and sustainably competitive, or, at the least, that discriminatory pricing behaviour with inevitable anti-competitive effects will not be



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				<p>permitted to persist. Such pricing undermines the incentive that competing operators have to invest and reduces their investment below the level that would otherwise be sustained in future investments in PNG. This is inefficient.'</p> <p>It is clear that Digicel has misunderstood what is being said. NICTA staff are concerned about the potential for inefficient and distorting investment under certain pricing circumstances. Digicel has misconstrued this as an assertion that Digicel's past and current investments have actually been inefficient. NICTA is not able to conclude either way on that point. NICTA has made no assumption that efficient investments can only take place in effectively competitive markets. The point being made is that the disciplines of an effectively competitive market increase the likelihood of that outcome.</p>
43	DigicelX	Retail regulation criteria Paragraph 14, page 9	Digicel claims that the proposed retail service determination would 'restrict Digicel's efficient use of its network infrastructure, particularly during off peak periods'.	Although this comment was made as part of its cross-submission, this comment is actually addressed to NICTA and not to the bemobile submission as such. In any case Digicel's comment is incorrect. The proposed retail service determination is about retail service price structures, not network usage. Furthermore it says nothing specifically about off-peak usage, only that the limits on price discrimination apply at all times.
44	DigicelX	Retail regulation criteria Paragraph 14, page 9	Digicel claims that the proposed retail service determination would retard investment in infrastructure.	Although this comment was made as part of its cross-submission, this comment is actually addressed to NICTA and not to the bemobile submission as such. In any case Digicel's comment is not substantiated. Digicel implies, but offers no information to show, that it requires the <i>current</i> level of returns on its investments. NICTA staff note that that may not necessarily be the case if those returns are well above risk adjusted levels. The relevant data on this matter is with Digicel who have not advanced it for discussion. A threat of an investment strike or slowdown cannot be accepted as serious if the returns would still remain adequate, as NICTA staff believe they would be.
45	Digicel	Retail regulation criteria Paragraphs 128-130	In the context of consideration of the retail regulation criteria (specifically section 158(b)(ii)(B) of the Act), the relevant retail service to be considered is the bundle of retail mobile services, not an off-net voice call service.	This is incorrect. A 'retail service' is defined in the Act as 'an ICT service that is supplied to a retail customer'. The specific retail service that NICTA must consider against the retail regulation criteria is the particular retail service that NICTA considers may warrant being made the subject of a retail service determination. As explained in the 2DP, the particular retail service that NICTA staff propose be made the subject of a retail service determination is mobile originated retail

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				national voice call services that are supplied on a pre-paid basis (by Digicel). NICTA staff also note that specific and differentiated prices exist for that service.
46	Digicel	Retail regulation criteria Paragraph 131-133	The proposed determination is 'aimed at' only 4% of all mobile calls in PNG (i.e. the proportion of all calls that are off-net calls originated by Digicel). 'The waterbed effect tells us, without doubt, that suppressing the price of 4% of all mobile calls in PNG will increase the price of 71% of all mobile calls in PNG'.	<p>Digicel has mistakenly assumed that the starting point should be the suppressed level of off-net calls that results from the impact of its price discrimination applied to a high market share in the first place. The waterbed effect referred to by Digicel would be reduced to an insignificant level if the impact of reducing the price in relation to 4% is applied to a further 71% of calls.</p> <p>More importantly, Digicel is quite wrong to say that the proposed determination is aimed at 4% of calls that Digicel are off-net calls. It is aimed at reducing the anti-competitive risks associated with price discrimination by a dominant competitor in the circumstances, taking account of the extremely high levels of price discrimination involved. Digicel has assumed that it must simply reduce the price of its off-net calls. It may choose to do that as a means of compliance. However it has other choices as well, and these will be extended when it considers the revised determination that is now proposed following the public consultation on 2DP.</p> <p>In addition, NICTA staff note the evidence submitted by bemoible showing that prices declined in Namibia and Turkey following the imposition of similar non-discrimination rules on the dominant operators in those markets. And NICTA staff noted in the 2DP that in Qatar the introduction of a non-discrimination rule led the SMP-operator to reduce its off-net prices to the level of its on-net prices while in Jamaica, Digicel eliminated discrimination between its on-net and off-net prices by lowering both its on-net and off-net prices (though this was the absence of regulation). Excluding Jamaica, these three examples demonstrate that there is no necessity or certainty that prices will rise following the absolute prohibition of on-net/off-net price discrimination (and NICTA staff are not proposing an absolute prohibition but instead allowing a legitimate degree of price discrimination to be maintained).</p> <p>Although a price rise is one potential response to the proposed determination, NICTA staff remain of the view that it is not definite that Digicel would raise, or needs to raise, its average on-net call price in order to comply with the proposed determination, particularly under the revised proposal which tolerates a degree of price discrimination.</p>

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				In any event, as noted in the 2DP (a page 106) if Digicel chooses to raise its on-net prices, such a price rise would be a short term detriment (to Digicel's customers) in the interests of a longer-term benefit in the form of an effectively competitive market, which is in the long-term interests of all mobile phone users (including Digicel's customers). As noted in the Haucap/Lanigan submission (at paragraph 12), this view is consistent with the conclusions of Hoernig (2008). NICTA staff are focused on the long term interests of all (current and future) mobile phone users.
47	DigicelX	Retail regulation criteria Paragraph 14(a), page 8	Digicel claims that the proposed retail service determination would raise prices for 80% of mobile phone users.	Although this comment was made as part of its cross-submission, this comment is actually addressed to NICTA and not to the bemoile submission as such. In any case, it is not necessarily the case. Compliance with any retail service determination made by the Minister can be achieved without price rises; the decision is Digicel's.
48	Digicel	Retail regulation criteria Paragraphs 135-138	Digicel notes that the criteria require that a licensee subject to a retail service determination "will not be prevented from achieving a return on assets during the period sufficient to sustain investment necessary to supply the retail service".  Digicel notes that return on assets is a function of both revenues and costs.	Digicel's second comment is correct. A return on assets is a function of both costs and revenues. Digicel mistakenly assumed that NICTA staff did not know this when they observed that there was no cost impact in the proposed determination.  The revenue impact of the proposed determination is largely in Digicel's hands. Digicel must determine which of a number of pricing strategies it will adopt to comply with the determination once made. These strategies will have different revenue consequences. There is nothing in Digicel's submission to indicate that it will not be able to achieve a return on assets in future. NICTA staff take the phrase "a return on assets" as meaning an adequate or sufficient return to sustain investment necessary to supply the retail service. It is important to note that the criterion does not require a current return to be maintained or a return considered by Digicel to be appropriate to be maintained. Yet these appear to be the meanings that Digicel is trying to attach to the words.  Digicel's approach to this issue is aligned to its interpretation that a criminal standard of proof applies and that NICTA must prove that the criteria apply beyond reasonable doubt. Apart from the obvious observation that we are interpreting an administrative statute and not a criminal one, it is also reasonable to assume that since Digicel is making assertions about the return that it will (apparently) be prevented from achieving in future, that it would put some evidence of the revenue consequences of its choice of response and some information about the minimum

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				returns for future investment, and show how the revenue outcomes affect the return level. But Digicel, the party making assertions and the party with access to its own financial data, has not done so. NICTA staff note Digicel's response to question 13 of the 2DP confirming that it has undertaken no modelling of the potential effects of the proposed determination.
49	Digicel	Retail regulation criteria  Paragraphs 139-146	Digicel has provided its interpretation that Section 158(b)(ii)(d) requires a cost benefit test.	Digicel argues that the words mean that a cost benefit analysis of the sort that Digicel has in mind must be intended by the words of the section. These are not the words of the Act, no matter how much Digicel would like them to be. The words relate to the aggregate of benefit out-weighting the detriments. NICTA staff have adopted an approach that makes comparisons between the outcomes that might eventuate if the status quo is maintained compared to the proposed determination. NICTA staff's approach is entirely consistent with the words and intention of the Act. NICTA staff also note the views expressed in the Cave/Doyle submission (at page 15) that NICTA staff's approach was '...detailed and systematic (if exclusively qualitative)...'. As noted in the 2DP, 'NICTA staff were unable to undertake a quantitative analysis and instead conducted a qualitative comparative analysis' because 'the detailed costs and benefits are known only to Digicel and/or the other MNOs'. Despite being given that opportunity, neither Digicel nor any other licensee submitted any data that would have enabled a quantitative analysis to be undertaken.)
50	Cave/Doyle	Retail regulation criteria  p.15	'NICTA has also set out its own self-imposed criteria, the fourth of which is the "that the aggregate likely benefits of making the retail service determination outweigh any aggregate likely detriments".'	This is incorrect. As explained in the 2DP, that criterion is an explicit requirement of the Act. The words are drawn directly from section 158(d) of the Act. It is not a self-imposed criterion at all; it is a statutory requirement.
51	DigicelX	The constitutionality of the proposed retail service determination  Paragraph 13, page 8	The proposed retail service determination is "harsh and oppressive" and therefore unconstitutional.	Although this comment was made as part of its cross-submission, this comment is actually addressed to NICTA and not to the bemobile submission as such. In any case Digicel's comment is completely baseless and without any substance. The proposed retail service determination is proportionate and light-handed, and the revised proposed determination is even more so. There is neither harshness nor oppression in any sense of these words.

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52	DigicelX	MTRs and cost-based price discrimination, page 28	The MTR is a cost justifying a difference between the on-net price and the off-net price.	This is manifestly incorrect. There is a cost in on-net termination even if it is not called the "mobile termination rate". That cost may approximate the MTR if the MTR has been set on a suitable cost basis. In that case the whole of the MTR cannot be a cost-justified differential between the on-net and off-net prices.
53	DigicelX	MTRs Paragraph 20, page 12	'Nothing in [NICTA staff's Response to Comments Report in response to the submissions to the first discussion paper] indicates a view that MTRs are above cost.	Although that is correct, no one should conclude that the reverse view is therefore justified. NICTA staff have signalled that they are not prepared to assume the reverse view.
54	DigicelX	MTRs Paragraph 29, page 13	Digicel considers that if bemobile does not like the agreement it made with Digicel on interconnection, bemobile should not try to address it through an unrelated regulatory proceeding.	NICTA staff agree.
55	TelikomX	MTRs Page 1 of 1	Telikom believes that the issue under inquiry could be resolved through a review of the existing interconnection rates.	This has already been discussed in the 2DP and in section 2.3.1 above. As explained in the 2DP, NICTA's powers to intervene in the wholesale pricing of the domestic mobile terminating access service are more limited than those of many other national regulatory authorities. Accordingly, NICTA staff concluded that an approach such as that proposed by Telikom was not a practicable option in the circumstances.
56	DigicelX	General Last paragraph, last page of covering letter	Digicel urges NICTA to guard against the tendency to think that the resources spent on the inquiry are a loss unless a retail service determination results.	Although this comment was made as part of its cross-submission, this comment is actually addressed to NICTA and not to the bemobile submission as such. In any case, Digicel has no basis for raising this tendency of its own construction. NICTA is aware of the sunk cost fallacy and there is no such tendency within NICTA and no hint of such thinking as part of this inquiry.
57	DigicelX	General Paragraph 7, page 7	Digicel comments that it would be reasonable for an impartial observer to conclude that the commercial interests of a single competitor are driving the inquiry.	Although this comment was made as part of its cross-submission, this comment is actually addressed to NICTA and not to the bemobile submission as such. In any case Digicel's comment is incorrect. NICTA is such an impartial observer and has concluded otherwise. In addition there are two parties who have commented both having good reason to see the matter through the prism of their commercial interests.

No.	Sub- mission	Reference or subject	Summary of comment	NICTA staff's response
58	DigicelX	General Paragraph 15(b), page 9	Retail regulation has a high risk of becoming self-justifying and irreversible.	Although this comment was made as part of its cross-submission, this comment is actually addressed to NICTA and not to the bemobile submission as such. There is no basis for Digicel to assume that in the present case the proposed retail service determination would become self-justifying and irreversible. Indeed, Digicel's comment ignores the provisions of the Act that limit the period of a retail service determination and also NICTA's stated intention to review the situation after it has been in operation for two years.
59	DigicelX	General	Digicel did not comment on the specific provisions of the proposed retail service determination	NICTA staff note that Digicel did not take the opportunity given to it to comment on, or suggest changes to, the specific terms and clauses of the proposed retail service determination. Notwithstanding Digicel's strong opposition to the contemplation and possible introduction of a retail service determination, Digicel could have identified and commented on any specific provisions of the proposed retail service determination that it was particularly concern about, or which it considered impracticable, in case its broader arguments against the making of retail service determination were not ultimately successful. This approach may be contrasted with the approach that Digicel has taken on other issues. For example, Digicel has submitted numerous arguments (over the course of the inquiry) to the effect that NICTA has acted contrary to the Act in its initiation and conduct of the inquiry and should immediately terminate the inquiry, and yet without prejudice to that point of view Digicel has nonetheless submitted detailed comments on matters emanating from the inquiry. Digicel could therefore have adopted a similar, contingent, approach to the provisions of the proposed draft determination. It did not do so. NICTA staff accept that the way Digicel wishes to approach matters is entirely a matter for Digicel.
60	DigicelX	General	NICTA staff note that Digicel repeats many of its previous arguments in its cross-submission in a manner which is not necessarily addressing comments from bemobile at all.	NICTA staff believe that Digicel has abused the reasonable purpose of the cross-submission process, which is an opportunity to specifically address matters raised in other submissions which have not been able to be addressed in any prior opportunity.

## ANNEX A: THE INQUIRY DECISION-MAKING PROCESS



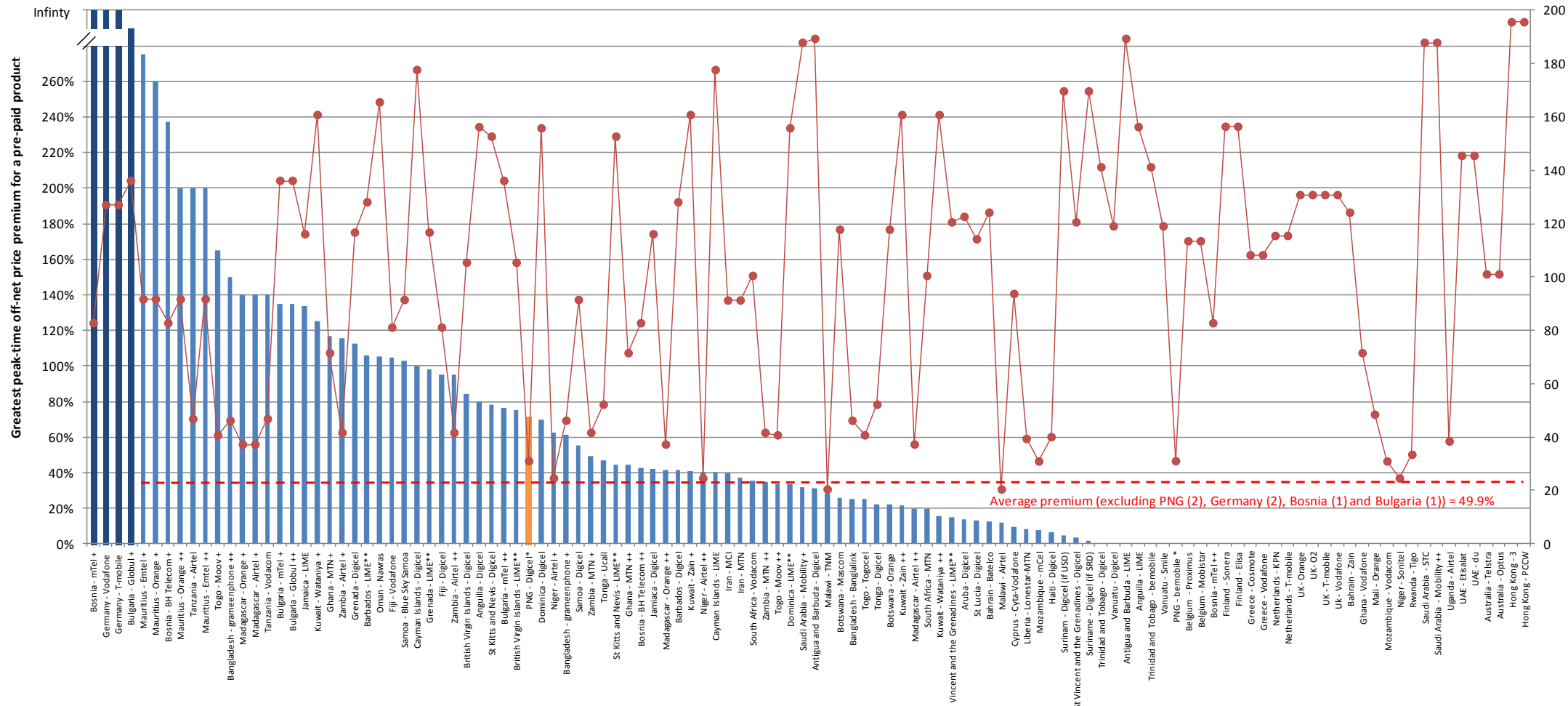
## ANNEX B: LIST OF COUNTRIES AND MOBILE OPERATORS INCLUDED IN NICTA STAFF'S BENCHMARKING OF OFF-NET PREMIUMS

Anguilla - Digicel	Germany - T-mobile	Rwanda - Tigo
Anguilla - LIME	Germany - Vodafone	Samoa - Blue Sky Samoa
Antigua and Barbuda - Digicel	Ghana - MTN	Samoa - Digicel
Antigua and Barbuda - LIME	Ghana - Vodafone	Saudi Arabia - Mobility
Aruba - Digicel	Greece - Cosmote	Saudi Arabia - STC
Australia - Optus	Greece - Vodafone	South Africa - MTN
Australia - Telstra	Grenada - Digicel	South Africa - Vodacom
Bahrain - Batelco	Grenada - LIME	St Kitts and Nevis - Digicel
Bahrain - Zain	Haiti - Digicel	St Kitts and Nevis - LIME
Bangladesh - Banglalink	Hong Kong - 3	St Lucia - Digicel
Bangladesh - grameenphone	Hong Kong - PCCW	St Vincent and the Grenadines - Digicel
Barbados - Digicel	Iran - MCI	St Vincent and the Grenadines - LIME
Barbados - LIME	Iran - MTN	Surinam - Digicel
Belgium - Proximus	Jamaica - LIME	Tanzania - Airtel
Belgium - Mobistar	Jamaica - Digicel	Tanzania - Vodacom
Bosnia - BH Telecom	Kuwait - Wataniya	Togo - Moov
Bosnia - mTel	Kuwait - Zain	Togo - Togocel
Botswana - Mascom	Liberia - Lonestar-MTN	Tonga - Digicel
Botswana - Orange	Madagascar - Airtel	Tonga - Ucall
British Virgin Islands - Digicel	Madagascar - Orange	Trinidad and Tobago - bemobile
British Virgin Islands - LIME	Malawi - Airtel	Trinidad and Tobago - Digicel
Bulgaria - Globul	Malawi - TNM	UAE - du
Bulgaria - mTel	Mali - Orange	UAE - Etisalat
Cayman Islands - Digicel	Mauritius - Emtel	Uganda - Airtel
Cayman Islands - LIME	Mauritius - Orange	UK - T-mobile
Cyprus - Cyta-Vodafone	Mozambique - mCel	UK- O2
Dominica - Digicel	Mozambique - Vodacom	UK- Orange
Dominica - LIME	Netherlands - KPN	Vanuatu - Digicel
Fiji - Digicel	Netherlands - T-mobile	Vanuatu - Smile
Fiji - Vodafone	Niger - Airtel	Zambia - Airtel
Finland - Elisa	Niger - Sonitel	Zambia - MTN
Finland - Sonera	Oman - Nawras	



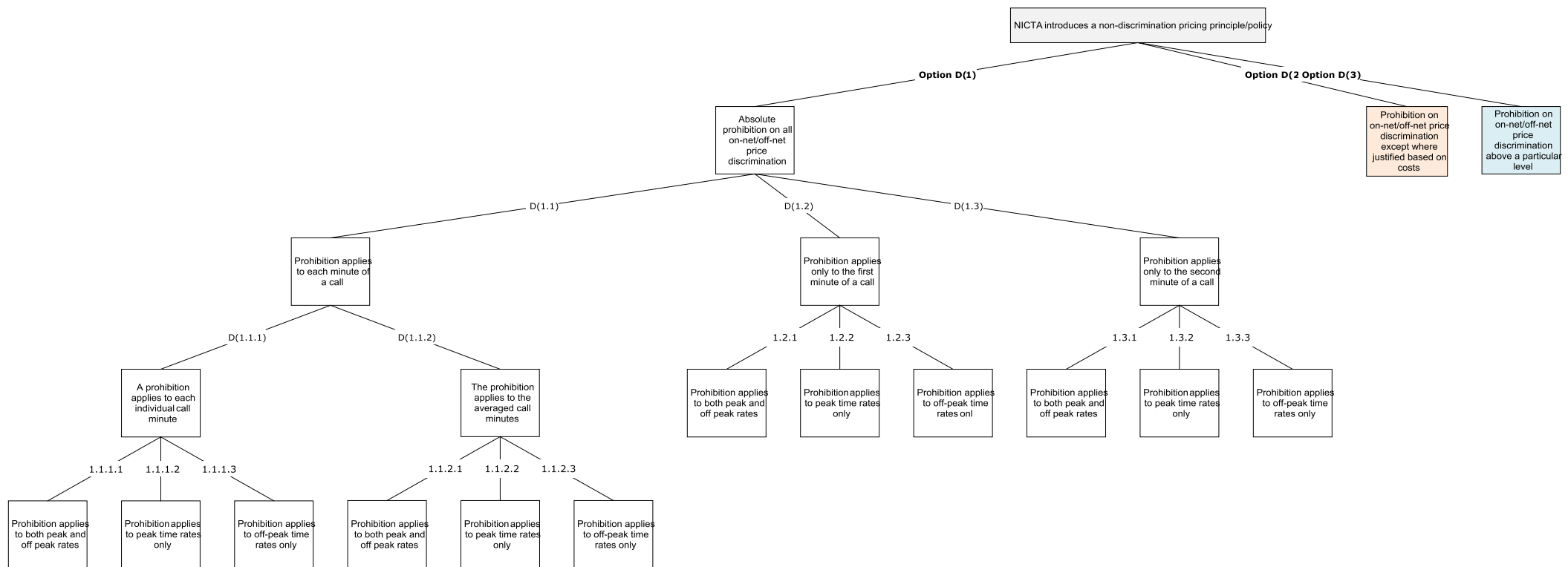
## **ANNEX C: GRAPH FOR FULL BENCHMARK DATA SET**

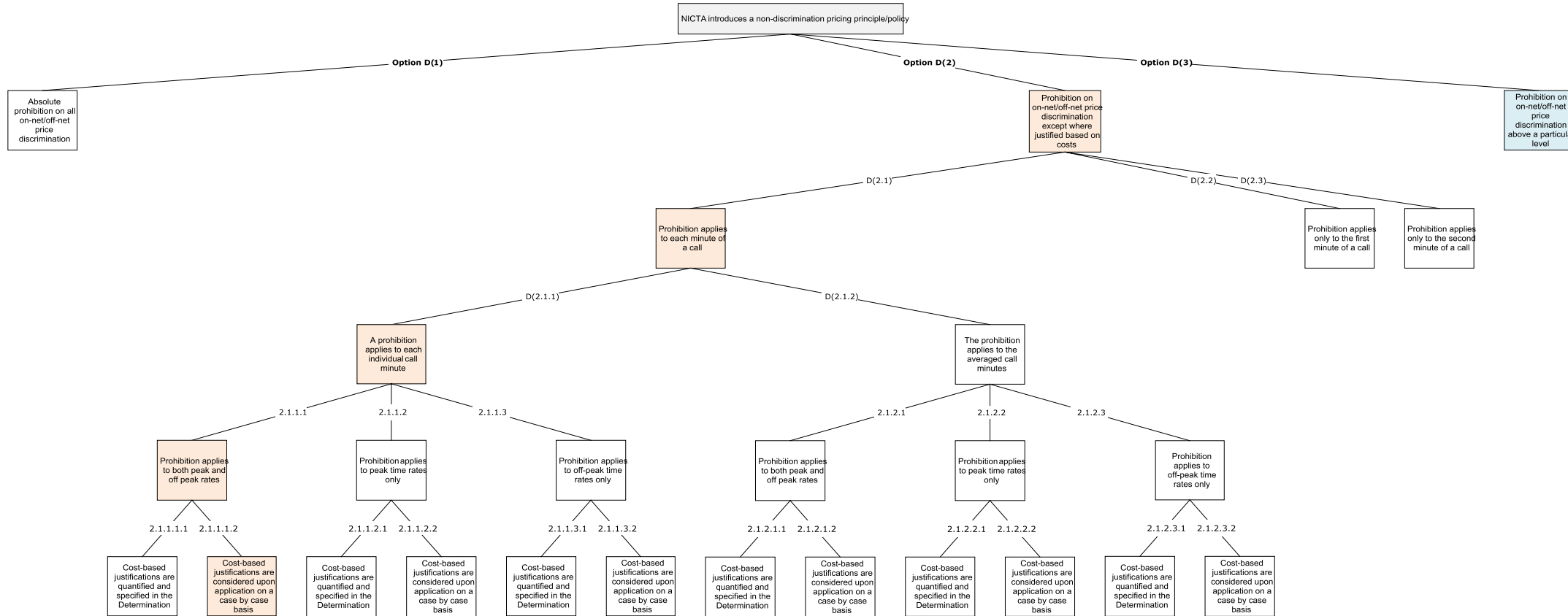
See graph on the following page.

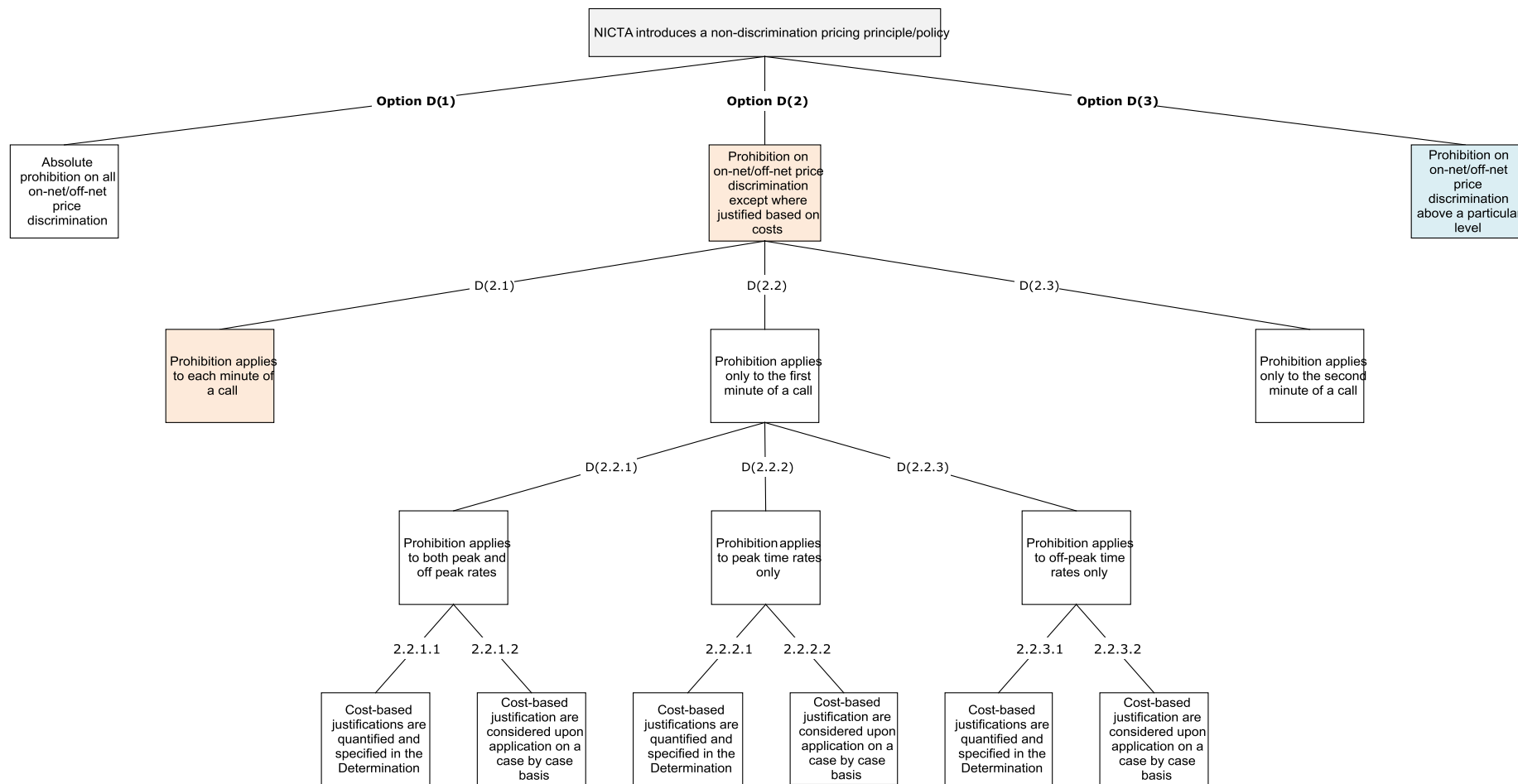


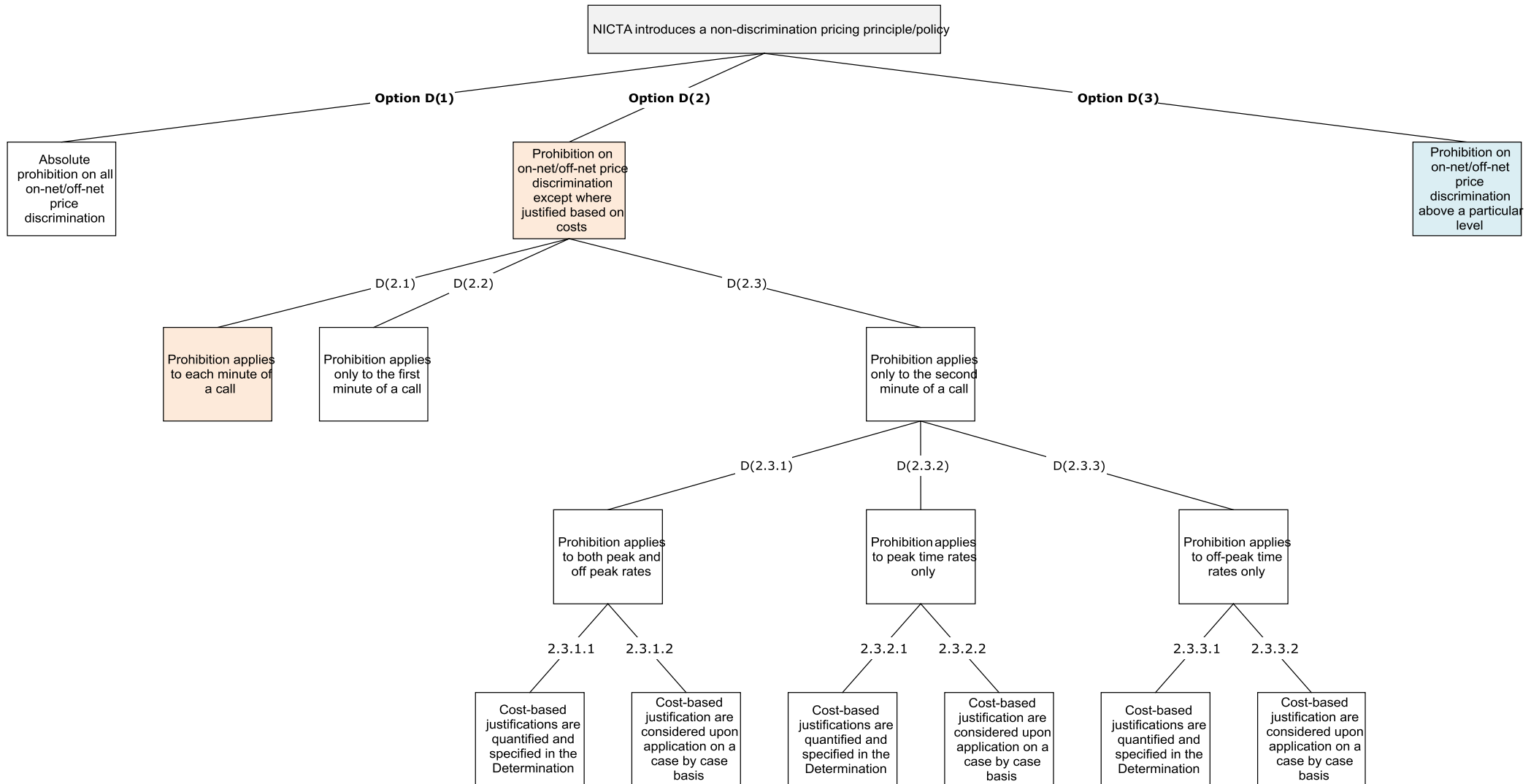
## **ANNEX D: OVERVIEW OF THE IMPLEMENTATION OPTIONS FOR A NON-DISCRIMINATION RULE CONSIDERED BY NICTA STAFF**

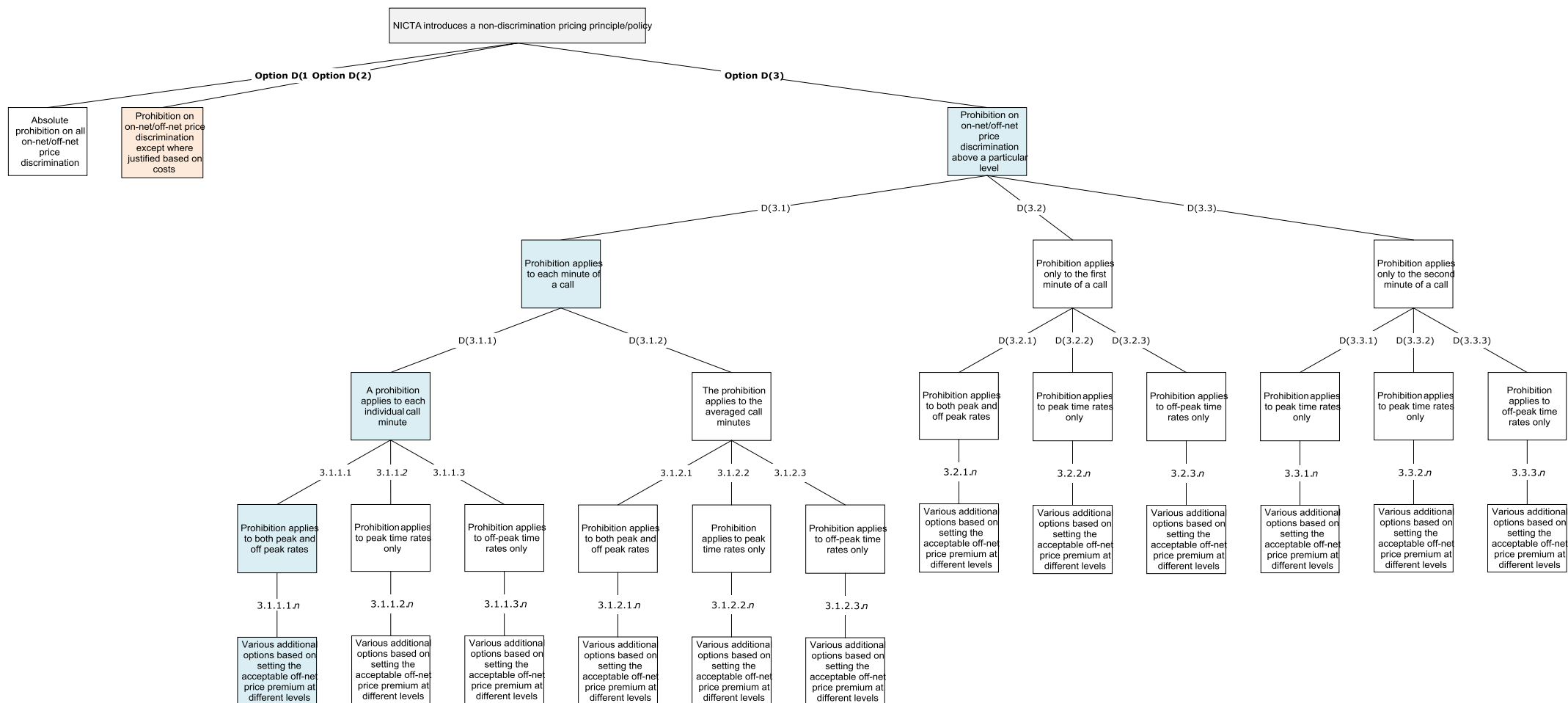
See diagram on the following page. The orange path represents the implementation option set out in the 2DP. The blue path represents the implementation option reflected in NICTA's staff's revised proposal.













## ANNEX E: SAFARICOM'S CURRENT PRICING IN KENYA

http://www.safaricom.co.ke/index.php?id=148 — Safaricom -Safaricom PrePay Service

Google

**Safaricom** Home | About Us | Investor Relations | Safaricom Foundation | Dealer Login | Careers | T&Cs | Ethics Hotline | Subscriber Registration | Contact Us |

Google™ Custom Search Search x

**Voice** Internet on Mobile Value Added Services M-PESA Bonga Loyalty Program Safaricom Shop Business Brand

PrePay PostPay International Calling & Roaming Internet on Mobile Simu ya Jamii Network Complaints Line

» Home » Voice » PrePay

**PrePay**

Platinum Tariff  
Unlimited SMS  
SMS  
My Safaricom Line

**BEI NI POA NA SAFARICOM!**

**CALLS TO ALL NETWORKS NOW REDUCED TO A FLAT 4**

**WAS 5/- NOW**

It's more affordable to call other networks to charge for every KSh 4 per network.

This promotion runs from 6th June 2012 to 5th July 2012

**PrePay**

The Safaricom PrePay service allows the freedom and flexibility to pay as you use by topping up your account with Safaricom recharge vouchers/scratch cards. Choose from our wide range of recharge methods and top-up denominations to suit your budget.

**Uwezo Tariff**

Time Band	On-net Rate	Off-Net Rate
08h00-22h00	4.00/-	4.00/-
22h00-08h00	2.00/-	4.00/-

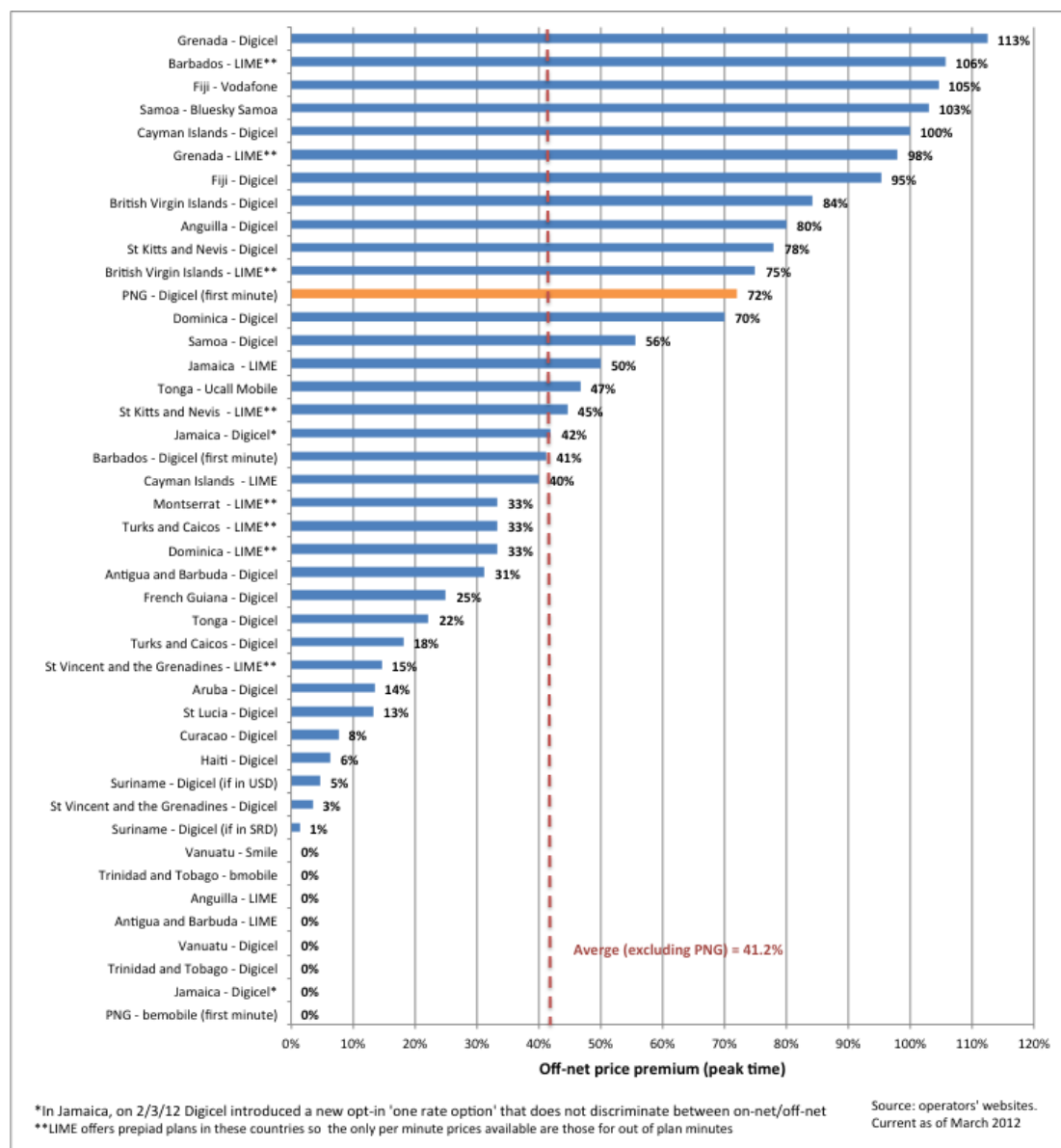
[Lost your SIM Card?](#)
[Voice Mail](#)
[How to recharge](#)

[Tariff Change](#)
[Tariff Plans](#)

1,999 /-

56,999/-

## ANNEX F: INTERNATIONAL COMPARISON OF DIGICEL'S OFF-NET PRICE PREMIUM



## ANNEX G: INTERNATIONAL COMPARISON OF OFF-NET PRICE PREMIUMS (REPRODUCED FROM 2DP)

