Memorandum to:
TRA 4th October 2003.

MTC Vodafone Comments on Retail Price Controls

This note summarizes MTC Vodafone’s comments on the TRA’s Retail Price Controls consultation paper ERU/CN/013. Selected arguments from this note are to be presented to the TRA at the Public Hearing held on October 4th, 2003. We thank the TRA for this opportunity to present our positions in greater detail. As in our oral presentation, this note is focused on specific retail price control proposals that would affect MTC Vodafone’s ability to compete effectively in the short- and long-term. Our overall comments can be summarized as follows:

¶ The proposed sub cap on the fixed-to-mobile tariff is likely to be below costs. While MTC Vodafone recognizes that further cost information is needed to clarify the degree of the shortfall, MTC Vodafone is concerned that once the precedent is set for treating the fixed-to-mobile tariff under a CPI-0 price cap, that it will be difficult to adjust this. Consequently, the TRA should take steps to rectify this as it would be harmful to competition;

¶ The incumbent can bundle fixed and mobile services in a manner that leverages its dominance in both markets; specific language should be inserted to prohibit fixed and mobile bundling by the incumbent;

¶ The incumbent will suffer an access deficit that it may try and recoup through higher interconnect charges; it is not and never should be the responsibility of a new mobile entrant to shoulder the cost of incumbent rebalancing. All interconnection tariffs should be based on the cost of providing the service in question.

As an active player in the telecommunications industry throughout the Arab world, MTC Vodafone understands that the TRA faces a significant challenge in its efforts to liberalize the telecommunications sector. We recognize the difficulties faced in meeting the seemingly conflicting goals of lowering market prices while at the same time encouraging viable competition. In preparing this note, MTC Vodafone is drawing on two bedrock principles of telecommunications liberalizations. First that regulated tariffs should be cost based for wholesale prices or cost oriented for retail
prices. Second that asymmetric regulation is a necessary tool for the protection of new entrants into previously monopolistic markets. Both these principles have been touchstones of liberalization programs around the world and have proven indispensable to the achievement of the same goals espoused by the TRA.

**THE TRA SHOULD RAISE THE PROPOSED FIXED TO MOBILE SUB CAP TO PREVENT MTC VODAFONE FROM SUFFERING A PER UNIT DEFICIT**

MTC Vodafone notes that section 57 of the Telecommunications Law requires that tariffs for non-competitive services “be based on forward looking incremental costs.” MTC Vodafone is concerned that the TRA’s proposed sub cap of CPI-0 on the fixed-to-mobile tariff of 14 fils per minute is below cost, and therefore inconsistent with the Telecommunications Law. Furthermore a tariff at this level may be detrimental to the stimulation of competition in the Bahraini mobile telecommunications market. If the TRA feels that more information and discussions are needed to evaluate this tariff, then MTC Vodafone suggests that this tariff be addressed separately and not be included in the CPI-0 cap.

**Benchmarks suggest that termination costs will be higher than 14 fils per minute**

MTC Vodafone believes that the proposed retail rate of 14 fils for fixed-to-mobile termination is below cost, as would be any wholesale mobile termination charge that was below that retail price. This assertion is supported by three different benchmarks: international fixed-to-mobile termination tariffs, mobile termination charges as a multiple of origination charges, and mobile termination cost benchmarks.

*The current fixed-to-mobile tariff is well below international retail and wholesale benchmarks.* The proposed rate of 14 fils per minute capped at CPI-0 is substantially lower than the all of the markets surveyed: 87% lower than the European average of 104 (Exhibit 1), and 62% lower than the Middle Eastern average of 37 (Exhibit 2). Not only is the rate below these averages, it is well below the lowest in each of these markets. The rate is also 79% below the average and 72% below the lowest termination charges that European mobile operators receive for terminating the call. It is hard to imagine that each of these markets, after many years of competition, is less efficient than Bahrain, which is currently being liberalized with the expressed purpose of providing consumers with the benefits of greater efficiency. Competitors in these European markets have gained efficiency over a number of years and hence one would expect that MTC Vodafone
would have costs significantly above the most efficient levels in the early period of operations.

The current tariff is also below levels suggested by using a multiple of fixed retail charges. The average European fixed-to-mobile retail tariff is about 3 times greater than a fixed to fixed national call; presumably reflective of the widely held belief that mobile networks are more costly to operate on a per minute basis than fixed line networks (Exhibit 3). The TRA has stated that it believes that Batelco’s tariff of 7 fils per minute for national fixed to fixed calls is “not likely to be far out of line with the economic cost of provision.” Applying the European multiple to this tariff would suggest a retail fixed-to-mobile tariff of 21 fils per minute, 50% higher than current.

The current tariff is below leading cost estimates. It is difficult to find cost benchmarks for mobile termination rates, however the extensive cost analysis conducted by OFTEL\(^1\) does serve as a useful guide (Exhibit 4). Using a LRIC model, OFTEL determined that the cost of fixed-to-mobile termination would be about 37 fils per minute on a dual band GSM network, and 42 fils per minute for an 1800 Mhz GSM network. While we recognize that arguments could be made that the incumbent’s forward looking costs in Bahrain will be lower than the UK level (due to simpler topography, higher population density, easier construction requirements and higher traffic per subscriber), it is unlikely that would be low enough to justify retaining the 14 fils level.

No evidence that Bahrain’s unique characteristics significantly lower costs

The TRA has stated that Bahrain’s high population density and high MOU per subscriber render cost benchmarks inaccurate, because these two factors lower mobile operator costs. After researching these arguments, MTC Vodafone finds them to be inconclusive at best.

High population density does not conclusively lead to lower costs. Presumably Bahrain’s high population density leads to lower costs for two reasons: small geographic area means low initial coverage requirements, and high density leads to lower per minute costs as the network is filled more efficiently. Our findings in this are inconclusive: we have not found a compelling correlation between population density and fixed-to-mobile termination rates, but there is a slight correlation between fixed-to mobile termination and minutes of use per subscriber. Therefore, although we agree with the TRA that Bahrain may experience lower costs, we do

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\(^1\) UK Competition Commission Report
not think this difference to be substantial enough to justify existing tariff levels. In addition, MTC Vodafone’s forward looking costs are likely to be higher than Batelco’s due to the initial start up costs and expected lower usage levels per subscriber. Further, the coverage and technological requirements agreed in the license are likely to add to MTC Vodafone’s costs to serve.

Comparisons of retail tariffs to population density for EU and Asian countries do not demonstrate a clear relationship between the two (Exhibit 5). Singapore does provide an interesting case example as a high-density market with low retail fixed-to-mobile tariffs, however its population density is nine times greater than Bahrain’s and it still has retail tariffs 50% higher than Bahrain. In addition to the potential impact of density on prices, however, one must consider that Singapore is a country with a receiving-party-pays mobile regime, meaning that the mobile operators compete with each other, driving down prices for fixed-to-mobile tariffs, presumably to levels consistent with underlying costs.

Network capital expense can typically be explained by three factors: # of base transceiver stations, minutes of traffic, and number of clients. While the number of masts should be lower due to high population density, the number of radios will mostly be a function of minutes of traffic. Therefore, we believe that one part of capex, the masts could theoretically be lower, but radios will not. In fact, high density can actually cause radio requirements to increase.

MTC Vodafone will be using Batelco's masts; therefore this cost will not be a capex but rather an annual operating expense. We believe this annual expense will be sufficiently high as to negate the benefit of population density, because of the above market rates that Batelco is charging MTC Vodafone to lease space on their masts.

Increasing population density doesn’t necessarily result in more efficient networks and lower network costs (Exhibit 6). Not only do BTS requirements go up, but also the actual cost of capex per minute rises as well as density increases. MTC Vodafone would be happy to continue discussions with the TRA in this area.

Licensing requirements are high. By mandating stringent performance standards, coverage levels and the provision of high-speed services, the license imposes on MTC Vodafone costs that the incumbent and other players incurred gradually. As this investment will occur while subscriber numbers and call volumes are being built, however, MTC Vodafone
would not experience any of the purported benefits of density in the same manner.

*High call volumes do lead to lower costs but are unlikely to explain the full difference between Bahrain’s current prices and underlying costs.* In theory, Bahrain’s high per user call volumes could result in lower costs, due to resulting high overall call volumes (i.e., more minutes over a fixed cost base lead to lower per unit costs) and lower number of subscribers (e.g., lower subscribers numbers lead to lower service costs, such as billing, customer service). Again, our findings are inconclusive.

- Comparisons of retail tariffs to minutes of use per subscriber for EU and Asian countries do demonstrate a clear relationship between the two (Exhibit 7). As in the comparison against population density, Singapore provides an interesting case example as a high MOU market with low retail fixed-to-mobile tariffs. Again, despite being at roughly the same MOU as Bahrain, its retail tariffs are still 50% higher.

- While it is true that call volumes per user are high in Bahrain, MTC Vodafone’s projected call volumes are still low, because it is entering into a close-to-saturated market with a strong incumbent. Given that only 30-40% of costs are directly variable with traffic growth\(^2\), MTC Vodafone must fund a substantial fixed cost base during startup.

- Low subscriber numbers do result in lower commercial costs, but fixed-to-mobile is a wholesale rate, designed to allow a greenfield service provider the ability to recover the full cost of building an infrastructure from scratch, but not the commercial cost of acquiring customers.

**The sub cap is harmful to competition**

Interconnection revenues are an important contributor to the economics of a new entrant; they typically represent 25% of revenues and 19% of EBITDA (Exhibit 8). In this context, it is critical that the TRA address the imbalance between the tariff and likely costs. MTC Vodafone’s start up economics will be under severe pressure to support such a loss.

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\(^2\) [European Mobile: Case for Resilient Margins Oct 22, 2002; Dresdner Kleinwort Wasserstein](#)
The question is not if the tariff should be raised, but how

MTC Vodafone believes that at this stage of the process, the TRA should allow the mobile operators to set the termination rate in a cost-oriented manner, and focus on regulating fixed line retention, in line with the principle of asymmetric regulation. If a lack of control over the resulting retail tariff is not acceptable to the TRA, then the non-regulated participants, MTC Vodafone and the mobile division of Batelco, could be made to provide evidence that their tariffs are cost oriented.

Lacking sufficient cost data, MTC Vodafone believes that benchmarking is the most appropriate approach and in keeping with regulatory best practices. While a cost-based LRIC model could be the most accurate, most markets adopt this approach only after a number of years of using benchmarking, which has been the most extensively utilized technique on the part of regulators (Exhibit 9). MTC Vodafone would also point to the fact that only OFTEL has actually undertaken the effort to publish an independent LRIC model as speaking to the difficulty involved in such an effort and the need for an extremely detailed and extensive cost database in order to develop a robust estimate.

This recommendation is in line with the TRA’s own thinking, as communicated to MTC Vodafone in past interactions. In the event that the TRA is unwilling to let the mobile operators set the retail tariff, however, MTC Vodafone has examined a variety of approaches used by regulators to manage the setting and splitting of fixed-to-mobile tariffs (Exhibit 10). While MTC Vodafone is willing to work within any regime selected by the TRA, we believe that in all cases the tariff will have to be adjusted to account for the fact that it does not currently seem to be cost based. MTCV believes that there are two alternative mechanisms for addressing the issue:

- One-time adjustment to cost oriented rate and then apply sub-cap to promote efficiency
- Sub-cap but with a positive X to reach cost-oriented rate within set number of years. The TRA & mobile operators would agree on recourse for the resulting temporary deficit

Clearly, the first is the cleanest for all parties, but the significant adjustment may not be politically feasible at a time when other rebalancing is also being introduced. If this is the case, then the second approach of treating this as a rebalancing issue could be a viable work around, subject to a caveat: the temporary deficit that the MTC Vodafone and other mobile operators would suffer during the course of rebalancing must be addressed.
If the TRA feels that further discussion is needed to determine costs, then MTC Vodafone suggests that the fixed-to-mobile tariffs be taken out of the price control proposals and addressed separately.

**THE TRA SHOULD PROHIBIT INCUMBENT BUNDLING OF FIXED & MOBILE SERVICES**

MTC Vodafone strongly supports the TRA’s application of the principle of asymmetric regulation. This principle has been a key component of liberalization efforts. In several cases, such as the UK & Australia, regulators actually became more restrictive in the initial year after liberalization. The issue of bundling of fixed and mobile services is one where asymmetric regulation should be applied to restrict the incumbent from unfairly leveraging its market dominance.

**Incumbents can unfairly leverage market dominance through bundling**

One of the roles of the regulator is to restrain the incumbent, especially integrated incumbents, from exploiting their position to unfairly undermine new entrants using uncompetitive practices. Incumbents can leverage their market power in any number of ways as described in the World Bank Telecommunications Regulation Handbook, including: 1) control of the fixed network, 2) existing customer relationships, and 3) integration capability, in the case of integrated incumbents.

An incumbent can easily create an offer to customers that would result in lower costs to the customer, but only if the customer has both their fixed and mobile service with the incumbent. Incumbents often try to construct such bundles in the months leading up to the introduction of competition, as a way to ‘lock in’ customers and reduce churn. This practice is clearly something that a new mobile entrant cannot match, because they do not have access to a fixed line offering to build the same offer at the same cost.

This practice also violates the principle of accounting separation, because by spreading a discount across both fixed and mobile services, the incumbent can subsidize the discount given with monopoly profits gained from the fixed line business.

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Regulators are active in restricting bundling

Focusing specifically on bundling, MTC Vodafone has found that most European regulators impose some form of control over the bundling activities of former fixed line monopoly incumbents and even their affiliated mobile arms (Exhibit 11). This would suggest that the TRA might want to apply the principle of asymmetric regulation to monitor the activities of Batelco’s mobile arm in addition to directly regulating the fixed line organization.

Prohibition of bundling appears to be the most feasible choice today

Of the potential options for bundling regulation available to the TRA, MTC Vodafone believes that applying a stringent prohibition on bundling and severely restricting the cooperation between the fixed line operator and the incumbent mobile operator will best serve to achieve the goals at this stage of the market development (Exhibit 12). We present this recommendation with full understanding that the TRA is, in principle, hesitant to impose ex ante regulation. The rationale for our position is the following:

¶ The rules are clear and unambiguous, and easy to implement for all parties involved;

¶ As the market matures, it will be easy to relax restrictions and migrate to other regimes. Looking at the example of the UK, we find that they followed the same model and since 2001 have eliminated restrictions on bundling. If the TRA later chooses to relax regulations, it can do so quickly and with virtually no ‘stranded investment’ concerns for any parties, reducing the risks associated with ex ante regulation;

¶ Developed markets have seen little in the way of high impact bundled telephony offerings, thus little risk that significant innovation will be missed, again making ex ante regulation low risk in this instance;

¶ While large customers might not gain the benefit of possible discounts, they are benefiting from a general decline and prices;

¶ Other options do have benefits but, on the whole, would be harder to implement and manage in the short run
THE TRA SHOULD PREVENT THE INCUMBENT FROM USING ITS TEMPORARY ACCESS DEFICIT TO INFLATE INTERCONNECTION PRICES

The issue of tariff rebalancing is always contentious, and MTC Vodafone recognizes that rebalancing tariffs could result in significant public reaction. MTC Vodafone does not wish to contest the speed at which rebalancing will occur, as that is a result often of political and other compromises among key stakeholders. Rather our concern is on the incumbent’s reaction to a temporary access deficit. MTC Vodafone unambiguously opposes any attempt by Batelco to link progress against re-balancing to the prices charged for interconnection to Batelco’s network. This is consistent with some international experience, such as the EU and in Central and Eastern Europe. MTC Vodafone recognizes that there is a limited number of cases where explicit access deficit compensation schemes were set up such as Australia, the US and New Zealand. In all these cases, however, the topology of the network, particularly given the suburban and semi-urban preponderance of subscribers, and the historical context and political coalitions needed to support reform made these schemes an integral part of the liberalization process. For example, in the United States, an “access charge” regime had explicitly been in place for decades prior to reform and so there existed an inertia relative to changing it – furthermore, MTC Vodafone would be happy to provide existing interconnection prices for fixed termination as currently available to competitive local exchange carriers as these tariffs are currently among the lowest in the world.

The European Union, on the other hand, explicitly chose to delink re-balancing from the interconnection tariff setting process. The rationale behind this was that the access deficit would be resolved by re-balancing, which could take time and would reflect the specific country conditions in member states, the pressing need to open markets should not wait. Linking progress against re-balancing to market opening would be contradictory and so it was separated. Although member states were given the option to employ access deficit surcharges on interconnection to reflect the state of re-balancing, no country availed itself of this mechanism.

Likewise, MTC Vodafone supports the position of the TRA that Universal Service is an independent issue, and will withhold comments on this issue until the forthcoming Universal Service consultation.

The incumbent will experience a temporary access deficit

MTC Vodafone believes that Batelco will experience an access deficit during the rebalancing period. Its access rates are low compared to international and regional benchmarks (Exhibits 13). The extent of the deficit cannot accurately be determined
until cost data are made available, however the TRA estimated that current prices only cover 30-40% of costs\textsuperscript{4}. It is important to note that, particularly for local access networks, international benchmarks are of limited use as these costs are intricately related to the specific topology, density, age and specific construction rules that govern the network. As a result, MTC Vodafone believes the TRA should push Batelco to provide specific cost information before it agrees to any re-balancing proposal or to even begin considering the imposition of mechanisms to explicitly close the gap.

Despite this, MTC Vodafone supports the TRA’s existing re-balancing proposal, even though it appears no specific cost data have been forthcoming from Batelco. This is because MTC Vodafone does believe that a deficit exists and so starting the process now will make the adjustment more gradual and easier to manage.

**MTC Vodafone supports the TRA’s position on refusing access deficit surcharges**

MTC Vodafone supports the TRA’s position that the access deficit should be addressed through rebalancing and not through the implementation of any access deficit compensation scheme, because it is consistent with regulatory best practices and principles. In addition, because of the important impact of a surcharge on competition, MTC Vodafone believes that consideration of this is improper and premature, given that Batelco has not provided specific cost data that is compliant with the requirements laid out in the law. Furthermore, Batelco’s probable access deficit, while not insignificant, must be kept in context.

Examining the potential size and duration of the access deficit based on the proposed rebalancing sub caps of CPI + 17-24% every six months, the monthly impact of the access deficit under the worst-case scenario (highest cost estimate, slowest rebalancing program, no efficiency gains) represents approximately 6% of Batelco’s estimated monthly operating profit last year. The deficit could drop by as much as 60%, however, depending on the actual costs and how aggressively the TRA allows rebalancing to take place.

At present, no EU regulators administer an access deficit surcharge program (Exhibit 14). The UK, which established one in 1991, seven years after the initiation of the liberalization program, reversed its position four years later. During this period the charges only applied to operators with a minimum of ten percent market share (Exhibit 15).

\textsuperscript{4} TRA Consultation on Price Controls August 9 2003 Section 4.2.1
As the TRA rightly points out, Batelco’s historical monopoly status and current profitability must be taken into consideration. As stated in the TRA’s consultation paper on retail price controls:

“The profitability of these services [leased lines, outgoing international calls, and handling and termination of international calls] gives Batelco some degree of comfort that it will be able to continue funding an access deficit after full liberalization, even if it is facing competition in the provision of international calls. The TRA therefore considers that the tariff rebalancing and specifically the period over which the line rental prices will be rebalanced upward, can comfortably extend for 12 months following full liberalization in July 2004, without Batelco incurring windfall losses.”

This position is supported by the actual size of the potential access deficit. As previously stated, the high end of the range of potential annual cost is 6% of operating profit. This is roughly equal to the organic growth experienced by Batelco between 2001 and 2002, indicating that a combination of organic growth and efficiency measures should allow Batelco to recoup this deficit with, at best minimal impact on its profitability (Exhibit 16).

Lastly, it should be noted that throughout the region, most recently privatized incumbents are obligated to pay the government a special ‘monopoly’ tax until competition begins. As Batelco does not have this obligation, we would argue that the estimated temporary access deficit is substantially less than the taxes Batelco’s peers pay (e.g., upwards of 20% in many countries).

**The TRA should explicitly de-link rebalancing from interconnection**

Prior to the full liberalization of EU fixed line markets in 1998, the EU took a very clear position that the issue of rebalancing should be de-linked from market liberalization and the introduction of competition. Evidence of this includes the fact that most markets had not yet finished rebalancing when competition was introduced (Exhibit 17).

Deliberate separation of these two issues is critical for successful competition. If the incumbent does not receive access deficit compensation, and we agree with the TRA’s position that they should not, then the natural course of action for the incumbent is to attempt to recover the deficit through higher interconnection pricing. This would place the new mobile entrant in the unusual position of being

5 TRA Consultation on Price Controls August 9 2003 Section 6.4
forced to help the incumbent argue for some sort of access deficit compensation to reduce interconnect costs. This is contrary to the desired effect of introducing competition.

Those countries that did include access deficit surcharges, and there are not many, such as Australia, the US and New Zealand appear to have country-specific historical and political precedents that supported these decisions. In the case of New Zealand, the surcharge has its origins in the suits between Clear and New Zealand Telecom in which the courts supported the imposition of an efficient component pricing rule (ECPR) which included not just a deficit but also an allowance for foregone profits that NZT would face as Clear entered the market and took customers away. To MTC Vodafone’s knowledge, this rule has not been copied or applied anywhere else (although similar rules were considered and some adopted in the US railway industry at the time of liberalization of that industry).

The US and Australia have had a long tradition that predates liberalization that explicitly includes subsidized access as a tool to promote penetration (in the US a separate but similar mechanism delivered an additional $1-3 billion in universal service subsidies from long distance providers to local access providers). Because of lower population densities and longer loop lengths, the sums involved were proportionally much larger than in Europe (at its peak, the access charge cross-subsidy may have been as large as $10-20 bn per year from long distance operators to local operators). In the US, this regime had its roots in the 1934 telecommunications act (amended in 1996) and had as a primary aim to explicitly deliver cross subsidies from long distance services to local exchange operators and was historically supported by the separation between Federal and state regulators. This regime has been attempting to transition away from the cross-subsidies but political pressures have prevented its complete elimination. MTC Vodafone believes this regime has limited lessons for Bahrain, except to highlight the dangers of putting in place a regime that institutionalizes a cross-subsidy.

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We thank the TRA for the opportunity to provide these comments. We would be happy to have follow-on discussions and to provide more extensive supporting materials to assist the TRA in this important matter.

Sincerely,

Mohammad Shabib

MTC Vodafone Bahrain