Abstract—For the first incumbent operator it is very important to understand how to react when the second operator comes to the market. In this paper which is prepared for preliminary study of GSM market in Iran, we have studied five MENA markets according to the similarity point of view. This paper aims at analyzing the impact of second entrants in selected markets on certain marketing key performance indicators (KPI) such as: Market shares (by operator), prepaid share, minutes of use (MoU), Price and average revenue per user (ARPU) (for total market each).

Keywords—GSM Market, Second entrant, MENA.

I. INTRODUCTION

This study evaluates the effects of the entry of a second GSM mobile telecommunications market and on the incumbent operator. We seek to draw inferences about the likely effects of a second GSM operator.

In doing this analysis, we take account of the experiences of a number of countries in MENA region according to the similarities in terms of language, demographics, economy etc. The following countries are taken into account as far as data is available: Bahrain, Tunisia, Algeria, Morocco and Egypt. The experience of each country with respect to the mobile market is unique, due to diversity of factors, including regulatory environment, level of unmet demand, tariff strategies, geography, coverage, promotional approaches, etc. Nevertheless, the experiences also have much in common, and we can therefore draw a number of general conclusions. These conclusions have important implications for assessing the impact of a second GSM operator [1].

We attempted, subject to data limitations, to look at some important factors related to the mobile market in each country. In particular, we examined factors relating to certain marketing key performance indicators (KPI) such as: Market shares (by operator), prepaid share, minutes of use (MoU), Price and average revenue per user (ARPU) (for total market each).

After this in section 2, the similarity of selected countries has been explained. Then in section 3, we give a summary of market study for the region and finally in section 4 the result has been analyzed.

II. SELECTION OF REGION AND COUNTRIES

The MENA region consists of very similar countries to Iran from many aspects like language, demographics, economy etc. MENA countries however are extremely diverse in terms of economy and population. Therefore it is difficult – and perhaps even pointless – to compare inherently different markets such as Oman and Qatar with a focus on operator performance. The more we manage to scale down prevailing differences on the demand side, the better is our ability to assess supply-side performance (i.e., that of the operator).

A. The Income of Country vs. Penetration Rate

It can be shown that there is a positive correlation between mobile penetration rate and the wealth of a country. With the exception of Tunisia, Morocco and Jordan, all MENA markets in the low-income segment (GDP/capita below $5,000) still trail well behind their full potential [3].

B. The Level of Competition

When moving from monopoly to a low competition market, in addition to increasing packages, the billing unit also decreases to less than 1 minute. Finally in the high competition level, we can see that prepaid and postpaid services are converging together [4].

C. Market Concentration

In countries with a high market concentration (e.g. monopoly, young duopoly) the low competitiveness leads to sub-optimal choice and variety of products from a subscriber point of view [4].

III. STUDYING GSM MARKET AFTER SECOND ENTRANT

Studying the customer development, we can conclude that in the year after the introduction of competition, subscriber figures are increasing heavily. This is mainly due to the reduction of entry barriers and the launch of prepaid services. According to the availability of data only five countries from low income MENA countries have been selected as follows [4].

A. Algeria

In the first year after the introduction of competition, incumbent Algerie Telecom lost 70% market share to Orascom. The success came with the offering of prepaid packages. While Algerie Telecom maintained high connection fees and fixed monthly subscriptions, Orascom lowered the entry barriers and introduced prepaid services. A price war in 2003 caused strong price erosion. Since 2003, price erosion is on an average level. MoU started to decline due to the introduction of prepaid packages and the increased share of low value customers. ARPU is expected to decline by an average rate of 13% between 2001 and 2009 (forecast).

B. Tunisia

The second entrant have gained more than 25% market share after the first year of operations. Since, Tunisiana is growing slower, but still at the expense of the incumbent Tunisie Telecom. With the launch of Tunisiana, the prepaid share increased from about 50% to 99%.

Tunisie Telecom decreased the prices between 2001 and 2002, before the market entry of Tunisiana. This is a
common strategy (tariff rebalancing) which is supposed to decrease the price difference between an incumbent and the competitors. Since, the average price is stable.

C. Bahrain

A strong competitor, MTC-Vodafone, launched its operations in December 2003. Having products and services readily available and having extensive marketing experience, MTC-Vodafone gained 20% market share in its first year. The market share continued to rise to close to 40% in 2006. The company has a strong brand and continuously launches new products. It is expected that by 2010 both operators will have about 50% market share provided no third entrant enters the market.

In terms of usage, price and average revenue per user, the market has been extraordinarily stable. This shows that both operators arranged with each other and avoided a price war.

D. Morocco

Meditel, the second network in Morocco, was launched in March 2000. After five years of operations, the company currently has a market share of about 35%. Meditel never really managed to catch up with Moroc Telecom. Compared to the incumbent, the company is more expensive and has a limited product range.

The arrival of Meditel in Morocco had no visual effect on Mou, price or ARPU. All KPI’s are relatively stable.

E. Egypt

Vodafone Egypt has launched its network in November 1998. After five years of operations, the company is on war with the incumbent Mobinil in terms of market share. As with the case of MTC-Vodafone in Bahrain, international backing, strong brand and continuous innovations were success factors.

Supposedly due to increasing prepaid share, the MoU dropped between 1998 and 2002. A price reduction in 2003 stopped the usage decline temporarily. ARPU has dropped by an average 12.5% between 1998 and 2006.

IV. RESULT

The experience of each country with respect to the mobile market is unique, due to diversity of factors, including regulatory environment, level of unmet demand, tariff strategies, geography, coverage, promotional approaches, etc. Nevertheless, the experiences also have much in common, and we can therefore draw a number of general conclusions. Our empirical analysis supports the following conclusions.

A. Market Share of the Second Operator

After the first year of operations, the second entrants had gained on average 22% market share and 42% after five years of operations (Fig. 1) [4].

B. Impact of Second Operator on MoU and ARPU

Minutes of Use (MoU) dropped by an average 16% after five years of the market entry of a second operator (figure 2) [4].

The average price per minute came down by 18% in the same time and ARPU by 32%. The effects are shown in below (Fig. 3).

D. Strategy

In many MENA countries, the introduction of competition caused a price war. Smarter companies however managed to accept competition and co-exist mutually (Table I).
TABLE 1
GSM TELECOMMUNICATION MARKET STRATEGIES AFTER SECOND ENTRANT

<table>
<thead>
<tr>
<th>Country</th>
<th>Incumbent</th>
<th>Competitor</th>
<th>Competitor Entry Date</th>
<th>PriceWar</th>
<th>Co-Opetition</th>
<th>Differentiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>Mobinil</td>
<td>Vodafone</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Bahrain</td>
<td>Batelco</td>
<td>MTC</td>
<td>May 2003</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Morocco</td>
<td>IAM</td>
<td>Meditel</td>
<td>Mar. 2000</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Algeria</td>
<td>Algérie Télécom</td>
<td>Orascom</td>
<td>Feb. 2002</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Tunisia</td>
<td>Tunisie Telecom</td>
<td>Tunisina</td>
<td>May 2002</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ACKNOWLEDGMENT
The authors would like to thank Iran Telecommunication Research Centre (ITRC) for its financial and scientific support.

REFERENCES