



هيئة تنظيم الاتصالات
Telecommunications Regulatory Authority
Kingdom of Bahrain - مملكة البحرين

Determination of Significant Market Power in the Retail Market for International Outgoing Calls from Bahrain

Final Determination

20 April 2016

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Public Version

(Confidential information has been replaced by [X])

Final Determination
DETERMINATION OF SIGNIFICANT MARKET POWER

DETERMINATION OF SIGNIFICANT MARKET POWER

HAVING REGARD TO THE LEGISLATIVE DECREE NO. 48 OF 2002 PROMULGATING THE TELECOMMUNICATIONS LAW, THE COMPETITION GUIDELINES ISSUED BY THE TELECOMMUNICATIONS REGULATORY AUTHORITY OF THE KINGDOM OF BAHRAIN ON 18 FEBRUARY 2010, ALL ADMISSIBLE EVIDENCE AND THE SUBMISSIONS MADE BY INTERESTED PARTIES, THE TELECOMMUNICATIONS REGULATORY AUTHORITY OF THE KINGDOM OF BAHRAIN HEREBY MAKES THE FOLLOWING DETERMINATION:

1. For the reasons set out in the Annex to this Determination, the Telecommunications Regulatory Authority of the Kingdom of Bahrain (the 'Authority') has identified the relevant market to be the **retail market for international outgoing calls from Bahrain**.
2. Furthermore, the Authority has identified and determined that no licensee has Significant Market Power in the relevant market.
3. This Determination is without prejudice to the Authority's powers under the Telecommunications Law, promulgated by the Legislative Decree No.48 of 2002, the Competition Guidelines, issued by the Authority on 18 February 2010 (ref. MCD/02/10/019), and the outcome of any on-going or future investigation, consultation or other regulatory process or measure carried out pursuant to such powers, all or any of which may result in the application of different terms and/or findings than those of this Determination, including the Determination and definition of new markets and the designation of Significant Market Power.
4. The Authority will continue to monitor developments in this market and may conduct a review of the market at some future time, with a view to determining if any Licensee holds a position of Significant Market Power, should the Authority determine that changes in market conditions warrant it. Such a review may conclude with a Determination that supersedes this present Determination.
5. This Determination supersedes the Determination of Significant Market Power in certain relevant retail markets issued by the Authority on 3 June 2008 only to the extent that that Determination relates to the **retail market for international outgoing calls from Bahrain**.
6. This Determination shall come into effect from the date of its issuance.

Signed on

20/4/2016



Mohamed Bubashait

General Director

Telecommunication Regulatory Authority

Manama, Kingdom of Bahrain

Annex 1 - Reasoning for the Determination

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List of acronyms and definitions

ARPM	Average Revenue Per Minute
ARPU	Average Revenue Per User
Batelco	Bahrain Telecommunications Company B.S.C
CPS	Carrier Pre-Selection
BD	Bahraini Dinar
EC	European Commission
GCC countries	Gulf Cooperation Council countries
IDD	International Direct Dialling
OLO	Other Licensed Operator
PPCC	Pre-paid Calling Cards
RTN	Retail Tariff Notification
SMP	Significant Market Power
SMR	Strategic Market Review
SSNIP	Small but Significant Non-transitory Increase in Price
TDM	Time Division Multiplexing
TRA	Telecommunications Regulatory Authority of the Kingdom of Bahrain
UK	United Kingdom
VoIP	Voice over Internet Protocol

1 Introduction and purpose of this Annex

1. The Strategic and Retail Market Review of 2008 ("2008 Review") considered the role of regulation in the telecommunications sector in Bahrain and established a package of regulatory measures designed to promote competition and the interest of Bahraini consumers.
2. Competition has developed significantly in Bahrain in the years following the 2008 Review, leading to lower prices and greater service innovation for Bahraini consumers. The Authority therefore carried out a holistic review of *ex-ante* regulation as part of the 2015 Strategic Market Review ("SMR").¹
3. The SMR concluded, amongst other things, that certain markets warrant further analysis to determine whether existing *ex ante* regulations that are currently imposed on these markets should be lifted. In particular, the Authority has commenced or is about to commence assessing individually the following markets:
 - a. Retail market for premium access to call services, including domestic calls from fixed location;
 - b. Retail market for mass-market access to call services, including domestic calls from fixed location; and
 - c. Retail market for international outgoing calls from Bahrain.
4. The relevant market for this present competition and market review is the retail market for international outgoing calls from the Kingdom of Bahrain, which is referred to hereafter as "market for international calls" or "market for international outgoing calls". Separate reviews, with separate documentation, will be carried out for the other two markets listed above.
5. This particular review including its Annex summarises the SMR's underlying reasoning and provides a competition and market assessment of the market for international outgoing calls to inform a final determination regarding whether or not any operator has Significant Market Power ("SMP").
6. A determination that an operator has SMP in the relevant market provides the legal basis introducing regulatory measures deemed necessary and/or mandated by the provisions of the Telecommunications Law promulgated by the Legislative Decree No. 48 of 2002 (the 'Telecommunications Law').
7. This Annex i.e. Annex 1, is structured as follows:
 - a. Section 2 provides an overview of the analytical framework used to identify Significant Market Power (SMP) in a relevant market.
 - b. Section 3 summarises the 2008 determination on the retail market for international outgoing calls from Bahrain and provides a summary of existing regulation.
 - c. Section 4 summarises the developments in this market since 2008.

¹ Available at <http://www.tra.org.bh/media/document/MCD%2008%2015%2062%20Final%20SMR%20Report%20-%20Public%20version.pdf>

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- d. Section 5 outlines the 2015 SMR's findings and the Authority's conclusion on the definition of the relevant market for international outgoing calls from Bahrain.
 - e. Section 6 assesses competition in the market and identifies whether any licensee has SMP.
 - f. Section 7 presents final conclusions and implications.
8. Annex 2 provides more detail on the findings of the 2015 Strategic and Retail Market Review 2008, by way of background.
9. Annex 3 provides a graph of the ARPM per zone from 2008 to 2014.

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Summary of and response to general comments made by respondents on the consultation

In this table, the Authority provides a summary of and a response to stakeholders' general comments that are not specifically covered by any of the consultation questions.	
Summary of stakeholders' submissions	The Authority's analysis and responses
<p>Almost all operators urged the Authority to consider the impact of OTT voice and video call services on the market as part of their response to the consultation.</p> <p>More broadly, VIVA linked a finding that these OTTs are in the same market as international outbound calling to a view that these OTTs require a licence.</p>	<p>The Authority rejects VIVA's assertion that there is a link between whether OTT services compete with PSTN services and whether providers of OTT services offered to consumers in Bahrain require a licence under the Telecommunications Law. This is because the question of whether OTT services should be licensed is unrelated to a discussion on whether OTT services and traditional voice calls are economic substitutes. Indeed, this point has been recognised in a recent review of OTT services by BEREK, the body of Electronic Communications regulators in the EU, which states that, "<i>it should be noted that whether an OTT service qualifies as ECS [Electronic Communications Service] does not depend on whether it potentially competes with ECSs. These are different things.</i>"² The Authority reminds VIVA and all stakeholders that this determination is examining the state of competition in the provision of international call services in Bahrain and whether existing designations of SMP remain appropriate. As such, whether providers of OTT services offered to consumers in Bahrain require a licence under the Telecommunications Law is not considered as part of this review.</p> <p>Furthermore, as set out in the Annex to the Draft Determination, the question of whether OTT services should be included as part of the same economic market as</p>

² BEREK, Report on OTT services, January 2016. (BoR (16) 35.) Telecommunications services in the EU (known as Electronic Communications Services) are not subject to a general licensing regime, but rather to an authorisation regime. If a service is not considered to be an ECS, then it falls outside of the authorisation regime. As such, the Authority considers that parallels can be drawn to the licensing regime applied in Bahrain.

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PSTN international calls is moot, because even without broadening the market to include OTT services, the Authority has found that the market is competitive. As such, existing ex ante regulatory obligations placed previously on SMP licensees in this market should be removed. That is, even if OTT services were to be included in the same economic market as international PSTN calls, the conclusions of the market review would remain the same.

Nevertheless, the Authority does accept that it is important to understand, as fully as possible, the impact that OTT services have on operators' traditional PSTN services, including both inbound and outbound international calling, and broadband services. To this end, the Authority requested operators to provide information on OTT services in November 2015, pursuant to Article 53 of the Telecommunications Law. The requested information include OTT voice and video call volumes, international PSTN call volumes, as well as PSTN and broadband access metrics, for the 24-month period from October 2013 to September 2015. The information provided was not sufficiently robust nor consistent between operators to determine whether or not OTT and traditional voices services are economic substitutes.

Given the indeterminate findings of the preceding analysis, and that the outcomes of this analysis do not affect the competitive assessment in the market for international calls (since the market is being deregulated), the Authority continues to believe it is appropriate to reserve judgment on whether OTT services form part of the same market as PSTN international services. In this respect, the Authority therefore maintains the market definition as set out in the Draft Determination.

2 Analytical framework

10. To determine whether a licensed operator or operators hold SMP and/or dominance in a relevant market, the Authority adopts a three-step process:
 - a. definition of the relevant market(s);
 - b. analysis of competition in the relevant market(s); and
 - c. identification of operator(s) who have SMP / dominant³ position, if any.
11. At each step, the Authority relies on well-established economic principles and tests to define markets and assess competition. For example, in defining relevant markets, the focus is to ensure that the market boundary includes those services that are considered by users to be close economic substitutes for one another (demand-side substitution) and between which suppliers could easily switch production (supply-side substitution). To assess demand- and supply-side substitution, the hypothetical monopoly test⁴ can be a useful tool. The Authority's market definitions focus on the markets in which international outgoing calls services are supplied.
12. The identification of relevant markets is not an end in itself, but is a critical step in assessing the extent to which any firm or firms in those markets have market power. Defining markets and assessing competition within those markets involves a degree of judgment, with the overarching purpose being to ensure that all relevant competitive constraints operating in a market (from both existing and potential competitors) are identified.
13. Throughout the three-step process, the Authority applies an analytical framework that is consistent with the Telecommunications Law and the Authority's Competition Guidelines.⁵ The tools and principles employed by the Authority are similar to those employed by other regulators and competition authorities, including the European Commission and national telecommunications regulatory authorities of the European Union.
14. Having identified the relevant markets, the Authority then looks at relevant factors to determine the level of competition in those defined markets, such as barriers to entry and expansion, and market shares. The purpose of this competition assessment is to identify any constraints, such as those from existing competition, potential competition, and any countervailing buyer power, that may limit the ability of an incumbent supplier of retail

³ Note that the Authority considers the terms "dominance" and "dominant position" equivalent and uses them interchangeably through the document.

⁴ As set out in the Authority's Competition Guidelines, the "hypothetical monopoly test" identifies a group of products which are sufficiently close substitutes to be regarded as being in the same market. The approach is to assume that the products are supplied by a hypothetical monopolist. If the monopolist is able to profitably maintain a "small but significant non-transitory increase in price" ("SSNIP") for those products, then the appropriate market boundary has been defined (i.e. to include only those products), as no other products are regarded as being close demand-side or supply-side substitutes.

⁵ See "Competition Guidelines: Guidelines issued by the Telecommunications Regulatory Authority", 18 February 2010 (Ref: MCD/02/10/019).

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international outgoing calls services to act independently of its competitors or customers and exercise market power.

15. The Telecommunications Law refers to two concepts of market power, namely a Dominant Position and SMP. The Competitions Guidelines interpret the distinction to be in terms of the markets in which the concepts apply.⁶ Dominant Position⁷ applies to an assessment of market power at the wholesale level while SMP applies to market power assessments at the retail level.
16. Findings of dominance and SMP impart different ex ante regulatory obligations on the affected operators:
 - a. Article 57 of the Telecommunications Law states that an operator with a dominant position in a market shall make available access and interconnection services by way of a Reference Offer, with tariffs, terms and conditions that are fair, reasonable, non-discriminatory and based on forward-looking incremental costs; and
 - b. Article 58 of the Telecommunications Law states that operators with SMP shall be subject to tariff controls as specified by the Authority by way of Regulation or Licence conditions.
17. Article 1 of the Telecommunications Law defines both SMP and a Dominant Position. An operator with SMP is defined as holding a share of 25% or more of the relevant market as determined by the Authority.⁸ However, in determining whether an operator has SMP, the Authority must also take into account a number of other factors, including the ability of the Licensed Operator to influence market conditions, its turnover relative to the size of the market, its control over access to end users, its financial resources, and its experience of providing products and services in the market. The Authority may determine that a Licensed Operator has SMP even if its market share is less than 25%, or that it does not hold SMP even though its market share exceeds 25%. The SMP assessment is thus carried out for all operators based on their market shares.
18. In practice, the Authority considers that the concepts of SMP and dominance are similar and seek to capture similar types of behaviour,⁹ namely the ability of a firm to act independently of its competitors, its customers and ultimately of consumers, for example by sustaining prices above the competitive level.¹⁰ However, the legal definition of SMP in the Telecommunications Law places special emphasis on market shares while recognising

⁶ See Paragraph 90, "Competition Guidelines: Guidelines issued by the Telecommunications Regulatory Authority", 18 February 2010 (Ref: MCD/02/10/019).

⁷ We use the terms Dominant Position and Dominance interchangeably throughout this document.

⁸ See Page 8, Telecommunications Law of the Kingdom of Bahrain. Available at <http://www.tra.org.bh/media/document/TelecommunicationsLaw-secondedition-English.pdf>

⁹ See Paragraph 92, "Competition Guidelines: Guidelines issued by the Telecommunications Regulatory Authority", 18 February 2010 (Ref: MCD/02/10/019).

¹⁰ For example, the regulatory framework governing the EU telecommunications sector considers the concept of SMP to be equivalent to that of dominance.

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the need to consider carefully the ability of an operator to influence market conditions, i.e. to act independently.

19. The Authority notes that the aim of undertaking an *ex ante* assessment of market power is to understand how competitive the market currently is and whether this is likely to change within a reasonable timeframe. As noted in the Competition Guidelines, the Authority typically takes the following factors into account when undertaking such a forward-looking competition assessment:¹¹
 - a. the market shares of individual entities;
 - b. competitive constraints arising from existing competitors, potential competitors, barriers to entry and expansion, and the degree of countervailing buyer power; and
 - c. evidence on behaviour and pricing.
20. In its competition analysis, the Authority would follow the so-called Modified Greenfield approach.¹² The first step of this approach is for the Authority to assume that there is no retail regulation in place. The next step is for the Authority to consider the impact of any existing wholesale regulation on the competitive outcomes at the retail level. In its analysis, the Authority specifically identifies which existing regulations impact its findings (and how).
21. In reaching its conclusion, the Authority has considered relevant facts and information, including information that the Authority has gathered through its periodic market data questionnaires, residential and business surveys as well as other sources of information.
22. In the following sections, the Authority defines the relevant retail market relating to the provision of international outgoing calls from Bahrain (Section 5.2) and then evaluates whether any Licensed Operator has SMP in the relevant retail market (Section 1).

¹¹ See Paragraph 93, "Competition Guidelines: Guidelines issued by the Telecommunications Regulatory Authority", 18 February 2010 (Ref: MCD/02/10/019).

¹² This approach is common in the European regulatory framework. See the explanatory note for the Commission's Recommendation on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC. . Available at <http://ec.europa.eu/digital-agenda/en/news/commission-recommendation-relevant-product-and-service-markets-within-electronic-communications>.

3 Findings in the Strategic and Retail Market Review 2008 and Summary of existing regulation

23. This section summarises the findings on market definition and competitive assessment in the Strategic and Retail Market Review of 2008 ("the **2008 Review**")¹³.
24. It also provides a summary of the current regulations imposed on the SMP operator.
25. Details on the reasoning behind the Authority's market definition and competitive assessment in the 2008 Review have been included in Annex 2.

3.1 Conclusions of the 2008 Review

26. The Authority has previously considered the retail market for international outgoing calls from Bahrain as part of the Strategic and Retail Market Review of 2008¹⁴. After presenting its findings for public consultation on 27 August 2007, the Authority took on board responses received from operators and presented its final analysis and conclusions on 3 June 2008¹⁵.
27. Routes were grouped by zones and separate markets were defined for these because the competitive dynamic differed between them. For each of these zones, the Authority defined separate markets for fixed and mobile originated international calls because of the differences in the pricing of these services. The Authority defined the markets to include calls made via PPCCs, Carrier Pre-Selection (CPS) and direct dial services. A single market was defined for residential and non-residential consumers.
28. Thus, the Authority defined the following markets for retail international outgoing calls from Bahrain:
 - a. the retail market for fixed originated international calls to Zone 1¹⁶. (Market 3a);
 - b. the retail market for fixed originated international calls to Zone 2¹⁷. (Market 3b);
 - c. the retail market for fixed originated international calls to Zone 3¹⁸. (Market 3c);
 - d. the retail market for fixed originated international calls to Zone 4¹⁹. (Market 3d);
 - e. the retail market for mobile originated international calls to Zone 1. (Market 3e);
 - f. the retail market for mobile originated international calls to Zone 2. (Market 3f);

¹³ Available at http://216.25.41.102/en/pdf/Strategic_and_Retail_Market_Review_Consultation_Final.pdf

¹⁴ Available at http://216.25.41.102/en/pdf/Strategic_and_Retail_Market_Review_Consultation_Final.pdf

¹⁵ Available at <http://www.tra.org.bh/media/document/FINALSMPDetermination20080603.pdf>

¹⁶ Zone 1 countries: GCC: Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE).

¹⁷ Zone 2 countries: South Asian countries; Bangladesh, India, Pakistan, the Philippines and Sri Lanka.

¹⁸ Zone 3 countries: Australia, Canada, France, Germany, Greece, Italy, Iran, New Zealand, Thailand, the United Kingdom (UK), the United States of America (USA), Yemen

¹⁹ Zone 4 countries: Rest of the world, i.e. all countries not in Zone 1-3

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- g. the retail market for mobile originated international calls to Zone 3. (Market 3g);
and
 - h. the retail market for mobile originated international calls to Zone 4. (Market 3h).
29. Based on an analysis of market shares, barriers to entry, market developments, etc. as per the competition guidelines, Batelco was found to have SMP in the retail markets for fixed originated international calls to Zone 1 and Zone 3 countries.

3.2 Summary of existing regulation

30. Article 58 of the Telecommunications Law provides that a licensed operator with SMP shall be subject to tariff controls specified by the Authority through regulations.
31. Following the 2008 SMP Determination and the issuance of the Retail Tariff Notification (RTN) Regulation in 2010²⁰, the services that Batelco supplies in the retail market for fixed originated international calls to Zone 1 (Market 3a) and to Zone 3. (Market 3c) are subject to the RTN Regulation. As a result, any changes to Batelco's tariffs for these services must be notified to the Authority before their introduction, with Batelco required to confirm that such tariff changes adhere to a set of tariff controls.
32. The tariff controls set out in the RTN Regulation are designed to ensure that the proposed tariffs do not give rise to anticompetitive practices, including but not limited to undue discrimination, excessive pricing, margin squeezes, predatory pricing, or abusive tying or bundling.

²⁰ See "Retail Tariff Notification Regulation", 21 February 2010. Available at <http://www.tra.org.bh/media/document/Retail%20Tariff%20Notification%20Regulation.pdf>

4 Developments since 2008

33. Since the 2008 review, a number of developments in the sector have affected the competitive environment in which international calls are provided. This includes the increased uptake of mobile services and OTT calling services.

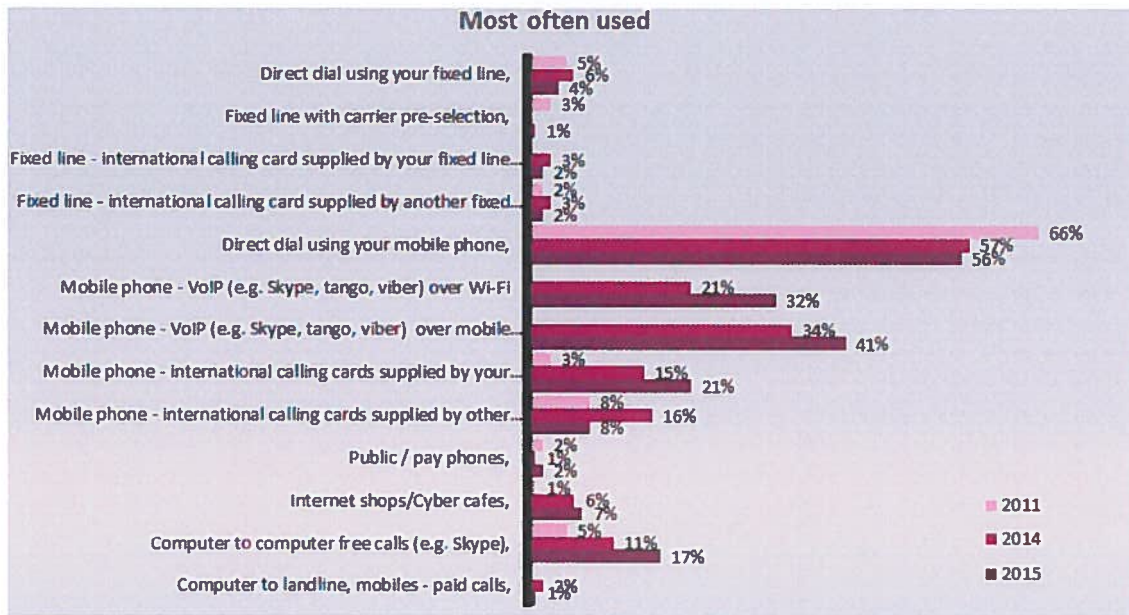
4.1 Developments in take-up of mobile

34. Historically, the major operators in the international call markets were Batelco, Kalaam, Mena, Viacloud, and Zain. However, since 2008, VIVA has entered the market and become a key player, whilst the volume of mobile originated traffic has more generally increased significantly. As a result, Mena's, Kalaam's and Viacloud's combined market share has fallen from 34% of traffic to less than 6%.
35. Indeed, Batelco, VIVA and Zain had, in 2014, a combined traffic market share of 94%.
36. The emergence of OTT (notably Skype, Viber and WhatsApp) has had an impact on the international calls market, especially on the calling behaviour of private users (but arguably, also in terms of the competitive behaviour by local licensed operators and on the prices offered to some destinations).
37. As an example of the changing call behaviour of end-users, one of the questions asked in the consumer survey from 2014 related to the most common ways in which (residential) consumers make international calls. While mobile direct dial remains the option used most often (57% of respondents in 2014, down from 66% in 2011), the use of mobile VOIP-based services to make international calls has increased significantly – in 2014, 34% of respondents used VOIP (e.g. Skype, Viber, Tango) over mobile broadband (up from 0% in 2011), and 21% used VOIP over WiFi (0% in 2011). These were the 2nd and 3rd most often used ways of making international calls in 2014. The results from the survey are shown in Figure 1.

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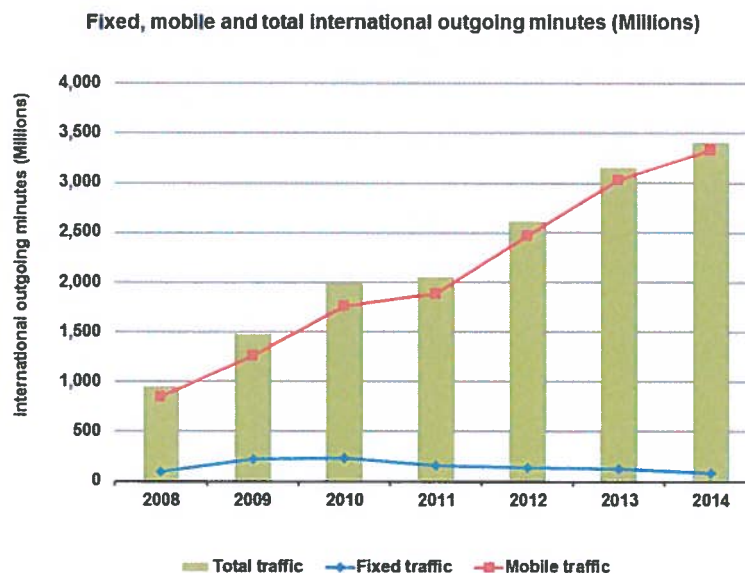
Figure 1: Survey results on means used to make international calls



Source: Telecommunications Services in Bahrain, Residential Services Survey, commissioned by the Authority in 2015.

38. Total international outbound traffic minutes have more than tripled since 2008, increasing from 953 million minutes in 2008 to 3.4 billion minutes in 2014, as seen in
39. Figure 2. Of these minutes, the number of minutes originated on mobile networks has increased from 853 million to 3.3 billion, with this shift to mobile being behind the increase in the combined market share of the three mobile operators.

Figure 2: Breakdown of total international outgoing minutes

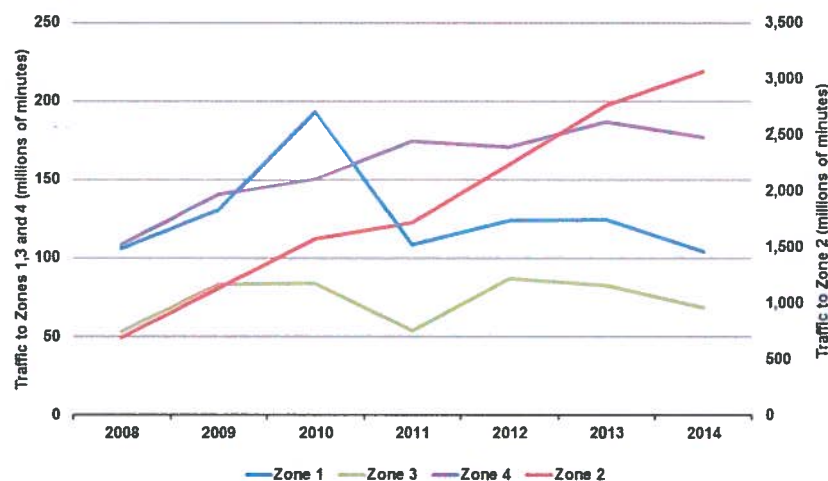


Source: The Authority's analysis based on operator data

4.2 Developments in traffic across zones

40. The increase in international traffic has largely been driven by increases in international outgoing minutes to Zone 2 countries, which has increased by 37% between 2012 and 2014. Traffic to Zone 1 (GCC) and Zone 3 countries has fallen since 2012, whereas the traffic to destinations in Zones 2 and 4 has increased consistently over time.

Figure 3: Total outgoing international traffic per Zone

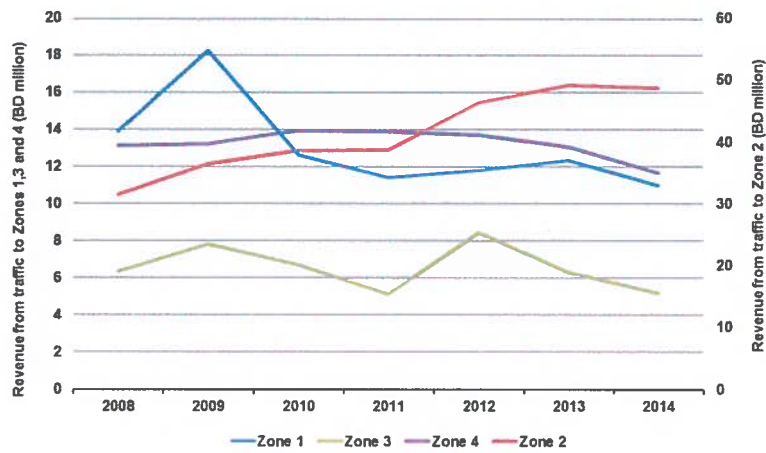


Source: The Authority's analysis based on operator data

41. International call revenues have increased since 2008 by 18%. Again, much of this increase came from calls to Zone 2 destinations, while revenue from calls to all other zones has remained more stable.

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Figure 4: Total outgoing international revenue per Zone, BD

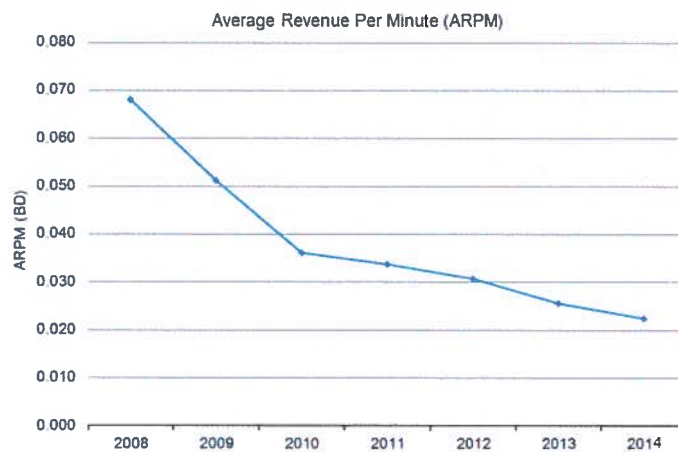


Source: The Authority's analysis based on operator data

4.3 Developments in measures of price

42. Average Revenue per Minute (ARPM) for international traffic has fallen by 68% since 2008.

Figure 5: Average revenue per minute, including both fixed and mobile

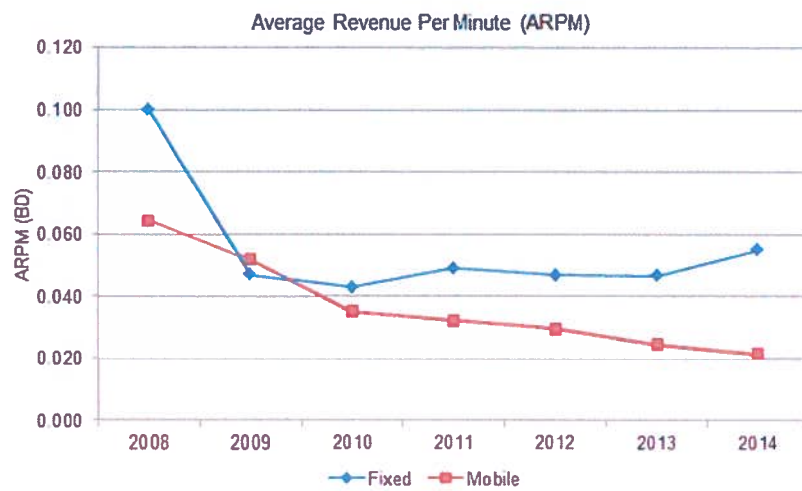


Source: The Authority's analysis based on operator data

43. This reduction has occurred across both fixed and mobile international call origination, with a large part of the reduction occurring in 2008 and 2009, as can be seen in Figure 6.

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Figure 6: Average revenue per minute, separately for fixed and mobile



Source: The Authority's analysis based on operator data

5 2015 Strategic Market Review (SMR) and identification of the relevant retail market

5.1 Conclusions in the 2015 SMR

44. As mentioned previously, the SMR analysed the developments since 2008 which have been highlighted in Section 4. Based on this analysis in the SMR, the Authority no longer considered the market definition as per the 2008 determination appropriate.
45. The Authority concluded in the SMR that:²¹
- a. the separation into Zones should be removed, and there should be only one relevant retail market for international outgoing calls; and
 - b. fixed outgoing and mobile outgoing calls should belong to the same relevant market.
46. The key reasons for these changes in market definition are:
- a. The Zone definitions do not reflect the features and characteristics of demand or supply in the international call market today.
 - b. Another reason for moving away from geographic ('Zone') markets is strong supply-side substitution, since suppliers of outbound international calls from Bahrain will often use international carriers who aggregate traffic and offer conveyance services to many destinations.
 - c. The rapid increase in mobile originated international calls has led to a situation where fixed outgoing volumes constitute a minor share of total outgoing international switched traffic overall.
 - d. There is evidence of substitution from fixed calls to mobile calls in both aggregate traffic data and the Authority's residential and business surveys. This supports a conclusion that fixed and mobile outgoing international calls are likely to be viewed by end users as close substitutes.
 - e. The strong consumer uptake and use of OTT services in the last few years (especially from smartphones) imply that these services may increasingly provide some competitive constraint to the licensed providers.
47. The Authority's conclusion was therefore that the market should be defined as 'the retail market for international outgoing calls from Bahrain' which would include both fixed and mobile outgoing calls to all Zones.

²¹ The abolition of zone-wise separation of markets is in line with EC precedent on market definition relating to calls markets.

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5.2 Identification of the relevant retail market

48. As explained in the introduction in Section 1, the analysis necessary for a market definition exercise was carried out in the SMR and a market definition was suggested.
49. Since the SMR, 2014 data has become available, which has been analysed to assess if the market definition suggested in the SMR is appropriate.
50. Based on this assessment, this section therefore defines the retail market for international outgoing calls from Bahrain.

5.2.1 Updated traffic and revenue data

51. The updated traffic data continues to show an upwards trend in total outgoing traffic with an increase of 8% between 2013 and 2014.
52. Fixed calls declined by 42 million minutes in 2014, a reduction of 34%. In contrast, mobile calls increased by 295 million minutes in 2014, an increase of 10%.

Figure 7: Total international outgoing traffic

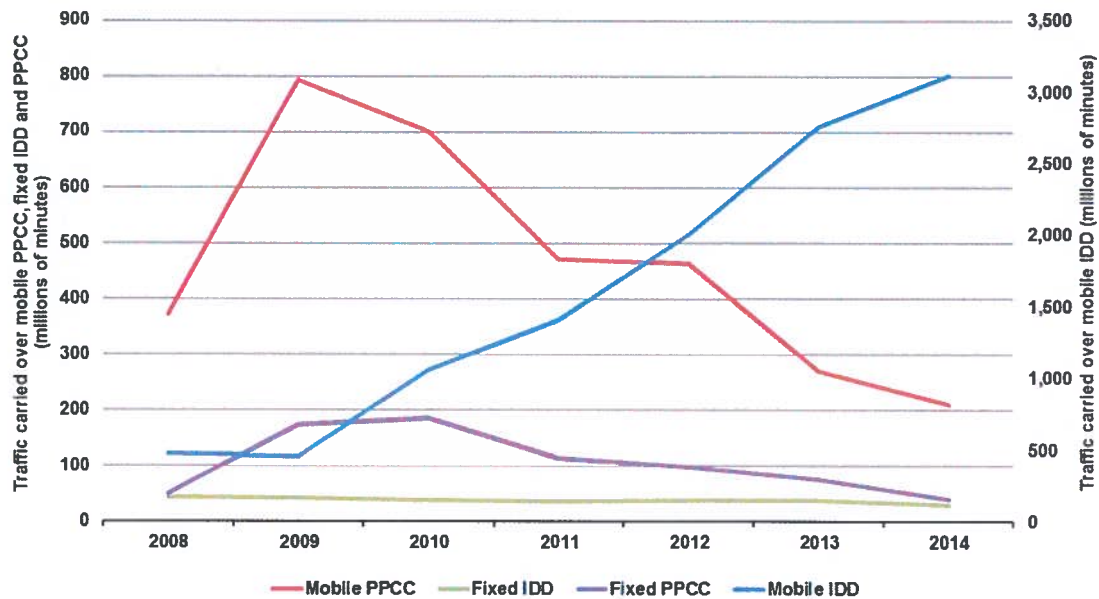
Minutes (In Millions)	2008	2009	2010	2011	2012	2013	2014	Growth (2013 - 2014)
Fixed	100	225	233	160	144	124	83	-34%
Mobile	853	1,258	1,764	1,890	2,474	3,032	3,328	10%
Total	954	1,483	1,998	2,050	2,618	3,157	3,410	8%

Source: The Authority's analysis based on operator data

53. The trends continue to suggest that substitution exists between fixed and mobile originated international calls.
54. As mentioned in Annex 2 on previous determinations, although the Authority defined a single market for residential and non-residential consumers in 2007, it had considered that there may have been some grounds for defining separate markets for the two consumer groups.
55. This was based on evidence such as the Consumer Survey conducted by the Authority in 2007 which found that residential customers saw PPCC as more of an alternative to IDD than business customers did. Furthermore, CPS services were primarily targeted at business users because of the economies of scale resulting from the larger spend on international calls that typically comes from businesses rather than residential customers.
56. This no longer appears to be the case. . The increasing use of mobile IDD services from around 2010 has led to a decline in the use of PPCC over both fixed and mobile networks. As Figure 8 below shows, traffic carried over mobile IDD has increased while that carried over mobile PPCC and fixed IDD and PPCC has either stayed stable or declined after an initial peak in 2009.

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Figure 8: Evolution of traffic carried over IDD and PPCC



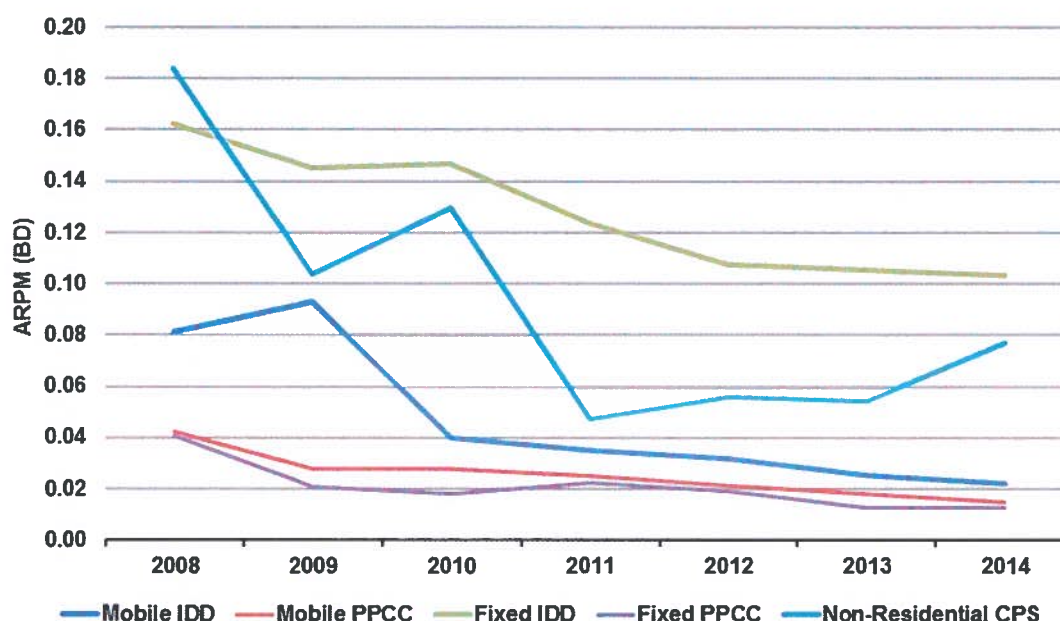
Source: The Authority's analysis based on operator data

57. PPCC thus no longer appears necessary as a substitute for fixed IDD because of the increasing use of mobile IDD. The difference between residential and non-residential consumers' perceptions of substitutability between PPCC and IDD is no longer a relevant consideration.
58. Furthermore, although CPS may continue to be attractive for non-residential consumers, the ARPMs for fixed CPS lie between the ARPMs for mobile and fixed IDD as seen in Figure 9. Thus, again, mobile IDD is more likely to be a substitute for non-residential consumers now than it was at the time of the previous review.

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Figure 9: Evolution of ARPM for fixed and mobile



Source: The Authority's analysis based on operator data

59. Given the trends in traffic and ARPMS, the factors that may have led to separate markets for residential and non-residential consumers no longer apply. Given that mobile would be a substitute for both customer groups, and that the outcome of the competitive assessment would be unaffected under either definition, a single market remains reasonable.

5.2.2 Customer surveys

60. The Authority has also carried out residential and business customer surveys in the period from May to July 2015 to assess satisfaction, perceptions on quality as well as propensity to switch.²²
61. According to the residential survey, 60% of respondents said that they would switch to making international calls through mobile if the price of international calls from a fixed line increased by 10%. 40% of respondents to the business survey stated that they would switch to a mobile service if faced with a 10% increase in the price of international calls from a fixed line.
62. This survey evidence gives additional support to the evidence from traffic, revenue and price trends which point to fixed-mobile substitutability for international calls for both

²² The results of the surveys will be published in the Authority's website by December 2015

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customer segments. A single market for residential and non-residential consumer therefore remains appropriate.

5.2.3 The impact of OTT services

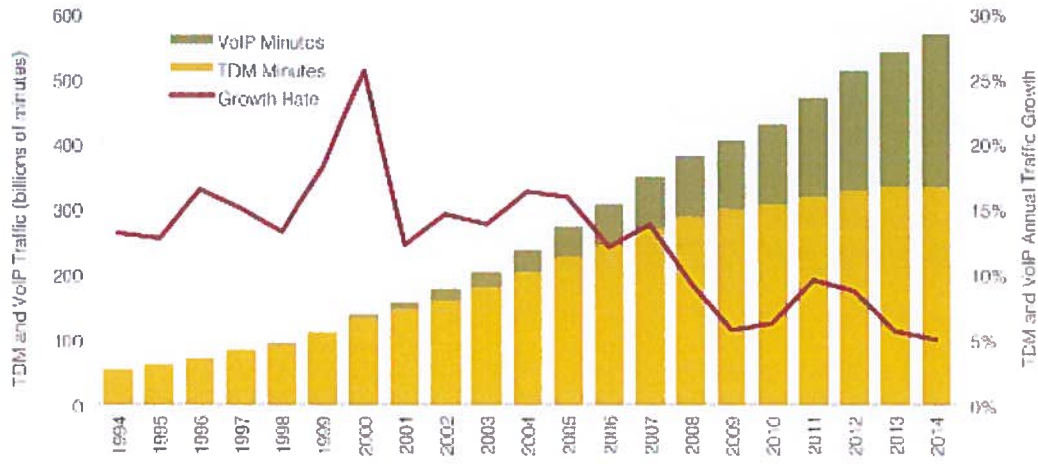
63. When a similar question was asked regarding OTT services, 61% of respondents to the residential survey stated that they would switch to an OTT application if faced with a 10% increase in the price of international calls from a fixed line. The business survey found that 31% of respondents said that they would switch to making international calls through mobile if the price of a fixed line call increased by 10%.
64. The evidence also points to potential substitutability between OTT services and fixed-line services in the international calls market. At the very least, it does suggest that there may be competitive constraints on fixed services being placed through these OTT services.
65. However, the fact remains that unlike for mobile services, there is no actual revenue and traffic evidence to demonstrate the trends in usage and switching from fixed and mobile services to OTT services over time. It also makes it difficult to distinguish between substitutability and complementarity of OTT and traditional voice services, especially in the absence of the finalised econometric analysis. This is because no reliable data on OTT usage exists, with the Authority having to have proxied this through the use of broadband services more generally.
66. International evidence paints a mixed picture. Figure 10 shows the international calls made over Time Division Multiplexing (traditional voice calls) and Voice over Internet Protocol (VoIP) for 69 countries in the world. The volume of calls over TDM has remained largely stable since 2008 while the volume of VoIP calls has increased. This could be indicative of complementarity between the two, rather than substitutability.²³

²³ TRA recognises that a more detailed analysis would be required to understand the extent to which there really is substitutability or complementarity between the two types of service in these particular countries. Furthermore, this data captures voice traffic transported over the international segment of a carrier's network as either TDM or VoIP. It does not include computer-to-computer traffic (e.g., Skype-to-Skype calls) and may therefore underestimate the volume of OTT traffic. Therefore, it remains difficult to judge the extent of substitutability between traditional call services and OTT services.

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Figure 10: International call volumes over Time Division Multiplexing (TDM) and VoIP

INTERNATIONAL CALL VOLUMES AND GROWTH RATES



Source: Telegeography²⁴

67. This reasoning is in line with the UK telecommunications market regulator's (Ofcom) findings in its 2015 Communications Market Report.²⁵ Its survey found that 61% of VoIP users used a smartphone to make VoIP calls and that most people using VoIP on a smartphone were using it to complement traditional calls.

²⁴ Note that VoIP minutes do not include computer-to-computer traffic (e.g., Skype-to-Skype calls) Available at <https://www.telegeography.com/research-services/telegeography-report-database/>

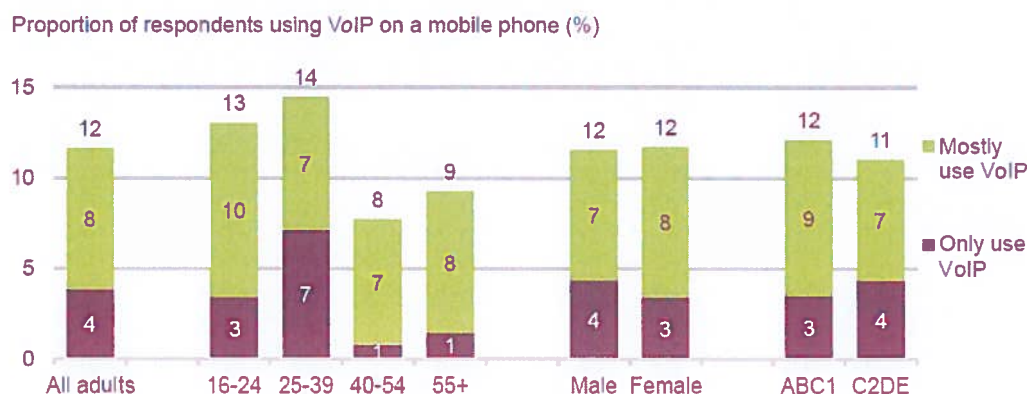
²⁵ The Communications Market Report, 6 August 2015, Ofcom. Available at http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr15/CMR_UK_2015.pdf

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Figure 11: Use of voice services on mobile phones, Ofcom survey evidence

Figure 4.11 Use of voice services on mobile phones: 2015



Source: YouGov VoIP 24-31 March 2015

Base: Online UK adults who use VoIP on their smartphone 16+ (617), 16-24 (118), 25-39 (181), 40-54 (175), 55+ (143), male (258), female (359), ABC1 (343) and C2DE (274)

Q7. You've stated that you use VoIP on your smartphone and/or feature phone. Thinking specifically about voice calls (i.e. not using video), which of the following best describes your use?

Source: Communications Market report, 2014, Ofcom

68. The EC, in its most recent recommendation on the relevant product and service markets within the electronic communications sector found that OTT services are not yet at a level in which they can be considered actual substitutes to the services provided by infrastructure operators.²⁶ However, the EC pointed out that certain technological developments, such as the growing importance of smartphones and the forthcoming expansion of LTE will likely result in a continuous expansion of OTTs.
69. For the purpose of the present review, the Authority does not find it necessary to determine whether or not to include OTT services are part of the relevant market for international outgoing calls from Bahrain. As the inclusion or exclusion of OTT services will not alter the outcomes of the competitive assessment in this market (see Section 6), the Authority chooses to remain agnostic on the matter at this point in time.

5.2.4 Market definition

70. Given the above evidence, the Authority believes that the relevant market is as suggested in the SMR.

²⁶ See Explanatory Note accompanying the Commission Recommendation on relevant product and service markets within the electronic communications sector. . Available at <https://ec.europa.eu/digital-agenda/en/news/explanatory-note-accompanying-commission-recommendation-relevant-product-and-service-markets>

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71. The market is therefore defined as the retail market for international outgoing calls from Bahrain, which includes fixed and mobile outgoing calls.
72. The Authority summarises the operators' views on this market definition and its own analysis and conclusions next.

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Summary of and response to comments made on the Authority's proposed definition of the market for international outgoing calls from Bahrain	
<p>Q1. Do you agree with the Authority's definition of the market for international outgoing calls from Bahrain? If not, please explain why.</p>	
Summary of stakeholders' submissions	The Authority's analysis and responses
<p><u>Batelco and Kalaam</u></p> <p>Batelco and Kalaam agreed with the Authority's proposed market definition but felt that a more detailed assessment of the impact of OTT services should be carried out.</p> <p><u>Mena</u></p> <p>Mena disagrees with the Authority's market definition as it finds that including fixed and mobile in the same market increases the "advantage" mobile license operators have over fixed license operators.</p> <p><u>VIVA</u></p> <p>VIVA disagreed with the Authority's proposed definition as it excludes OTT services. VIVA points to various pieces of evidence suggesting that OTT services are substitutes for traditional voice services.</p> <p><u>Zain</u></p> <p>Zain disagrees with the Authority's assessment that fixed and mobile originated international calls are in the same market. Zain finds that the increase in mobile originated calls has been the result of the entry of a third mobile operator and that there has been no commensurate drop in fixed outgoing international calls. Therefore, according to Zain, there is segment of customers which is unlikely to switch to mobile even though there are competitive rates on mobile IDD. Furthermore, Zain finds that the Authority should have considered separate</p>	<p><u>Batelco and Kalaam</u></p> <p>The Authority notes that Batelco and Kalaam agree with the proposed market definition.</p> <p><u>Mena</u></p> <p>The Authority disagrees with Mena that the proposed market definition bestows an "advantage" on mobile operators. The purpose of the market definition is to identify the products that consumers view as substitutes. The Authority has provided evidence to show that consumers view mobile services as a substitute for fixed services to make international outgoing calls from Bahrain. It is unclear to the Authority how including both technologies in the same market would give mobile operators an advantage and Mena does not provide any explanation or evidence for its statement.</p> <p><u>VIVA</u></p> <p>The Authority acknowledges VIVA's arguments and has stated in its draft Determination that OTT services may place some constraint on fixed services. As noted above, the data for Bahrain currently available to the Authority is not sufficiently robust to determine whether or not OTT and traditional voice services are substitutes. Given that the outcomes of this analysis do not affect the competitive assessment in the market for international calls (since the market is being deregulated), the Authority continues to believe it is appropriate to reserve judgment on whether OTT</p>

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<p>markets for residential and non-residential users as Zain believes that there is ineffective competition in the non-residential segment.</p> <p>Zain also considers that the consumer survey formed a "sort of SSNIP test" but did take into consideration the stable fixed IDD traffic, did not include a question on switching from mobile to fixed and suffered from the Cellophane Fallacy (where switching occurs because of the high price of the product in question whereas if the SSNIP test took place from the competitive price, such a degree of switching may not occur).</p>	<p>services form part of the same market as PSTN international services. In this respect, the Authority therefore maintains the market definition as set out in the Draft Determination.</p> <p><u>Zain</u></p> <p>The Authority disagrees with Zain's assertion that separate markets should be defined for residential and business customers. Zain provides no evidence of a lack of competition in the non-residential segment in terms of consumer outcomes. Stability in the volume of fixed outgoing calls is not sufficient evidence of competitive harm.</p> <p>With regard to the product market definition, the Authority's analysis did not rely solely on the survey evidence. The market was defined based on an analysis of pricing, product features and barriers to switching, in addition to the survey. This suggested that international calls from fixed and mobile are economic substitutes. Thus, even if Zain has concerns about the questions in the survey, the findings of the survey have been corroborated by other evidence, all of which have informed the Authority's decision on market definition.</p>
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The Authority's final conclusions on the market definition

73. Given a lack of evidence to the contrary, the market definition remains as per the draft Determination.
74. A single retail market for international outgoing calls from Bahrain is therefore defined to include fixed and mobile outgoing calls.

6 Assessment of whether there is SMP in the relevant retail market

75. On the 31st of August 2015 the Authority published its latest SMR²⁷ with the preliminary conclusion that the international calls market is effectively competitive and that no operator holds SMP in the relevant market. This was, in large part, due to the redefinition of the retail market for international calls and its evident implications for the assessment of market power.
76. Since the publication of 2015 SMR, 2014 data has become available. The following section uses this information to carry out the competitive assessment in the market for international outgoing calls from Bahrain.
77. Consistent with the Modified Greenfield approach²⁸, the existing RTN Regulation has been excluded from the Authority's assessment of competition in the retail market. Consequently, the Authority's assessment focuses on the competitive constraints that operate independently of any SMP finding in this market.
78. As outlined in the Authority's Competition Guidelines²⁹, several factors can be considered in assessing SMP and dominance. Given the characteristics of the markets under consideration and their evolution since 2008, the most important factors are described briefly below³⁰:
- a. Market shares and existing competition: A current snapshot of market shares indicates the market position held by each operator. Analysing market shares over time reveals how competition is evolving and allows a forward-looking assessment of how shares may continue to evolve. This is because the trend in market shares shows whether competition is intensifying or weakening, and therefore if the market power of current operators is likely to decrease or increase.
 - b. Barriers to potential entry and expansion: The extent to which the threat of potential entry or expansion by other operators will constrain existing operators will depend on whether barriers to entry or expansion are significant. Entry barriers occur when an existing operator in a market has an advantage over potential entrants. Barriers to expansion are similar but relate to the ability of an existing operator to expand. For example, where an existing competitor faces capacity constraints that limit its ability to increase its scale of production.

²⁷ Strategic Market Review, Future Ex-Ante Market Regulation and Other Regulatory Measures to Foster a Dynamic Sector Development, The Authority, 31 August 2015. Available at <http://www.tra.org.bh/media/document/MCD%2008%2015%2062%20Final%20SMR%20Report%20-%20Public%20version.pdf>

²⁸ See paragraph 20 above.

²⁹ See "Competition Guidelines: Guidelines issued by the Telecommunications Regulatory Authority", 18 February 2010 (Ref: MCD/02/10/019).

³⁰ The Authority also considered other factors such as evidence on prices and profits which have been discussed in other sections of this document, and the evidence found supports the conclusions of this section. .

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- c. Countervailing buying power: Countervailing buyer power refers to the ability of buyers to limit the ability of sellers to exercise market power. It refers to the relative bargaining power of buyers and sellers, and is most evident where buyers and sellers have to negotiate. Countervailing buyer power is enhanced where the following conditions apply:
 - i. the buyer is well-informed about alternative sources of supply;
 - ii. the buyer could switch to alternative sources of supply without incurring significant costs;
 - iii. the buyer could produce the input itself or “sponsor” new entry by another supplier; and
 - iv. the buyer is an important outlet for the seller and therefore the seller would be prepared to negotiate i.e. limited alternative buyers.
 - v. Two parties negotiate a reciprocal agreement such as in the case of two-way interconnection, internet peering, or wholesale international mobile roaming agreements between two operators.

79. These factors are discussed in more detail in the sections below.

6.1 Market shares and existing competition

- 80. Batelco's revenue market share has declined steadily since the 2008 SMP Determination from [40-50]% to [20-30]%. Meanwhile, Batelco's traffic market share has increased from a low of [5-15]% in 2012 to [10-20]% in 2014.
- 81. The difference in these trends suggests that Batelco has had to reduce its share of revenue to retain its share of traffic. This implies that Batelco has reduced prices to maintain its traffic market share, pointing to an increase in competition in the market.
- 82. Furthermore, it is possible that declining prices due to higher mobile competition since 2008 has led to a decline in PPCC use. As was seen in Figure 8, traffic for mobile IDD has increased while that of mobile PPCC has declined. Figure 9 showed that ARPM for mobile IDD and mobile PPCC also follow a similar trend.
- 83. The increased substitutability between fixed and mobile call origination has led to operators providing fixed services only to have a smaller market share. For example, Kalaam's share of traffic fell from [20-30]% in 2008 to less than [10]% in 2014. The three mobile operators, Batelco, VIVA, and Zain, now account for 94% of international call-origination traffic and 96% of revenue, see Figure 12 and Figure 13 below.

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Figure 12: Comparing traffic market shares between 2008 and 2014

[X]
[X]
[X]
[X]
[X]
[X]
[X]
[X]
[X]
[X]
[X]
[X]
[X]
[X]
[X]

Source: The Authority's analysis based of operator data

Figure 13. Comparing traffic market shares over time

[X]
[X]
[X]
[X]
[X]
[X]
[X]
[X]
[X]
[X]
[X]
[X]
[X]
[X]
[X]
[X]
[X]

Source: The Authority's analysis based of operator data

84. As can be seen in Figure 13 above, market shares of Kalaam and Mena have declined over the years, while VIVA and Zain's shares increased in the last four years. VIVA's share appears to have stabilised since 2012. Batelco's share has been increasing since 2012, but is still below the 2008 level of [20-30]%.

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Figure 14. Comparing revenues market shares over time



Source: The Authority's analysis based on operator data

85. Under the new market definition, VIVA is the largest operator in terms of both volume and revenue, with over [40-50]% market share in both cases.
86. This is above the threshold of 25% set by the Competition Guidelines for SMR. However, as is mentioned in the Guidelines, the finding of SMP is based on a market share threshold of 25%, providing this is supported by other evidence.
87. The Authority has considered the evolution of market shares, the competitive dynamic of prices and profits and the constraint from other fixed and mobile operators.
88. Although the Authority does not think it appropriate to include OTT players in the defined relevant market, the extent of the competitive constraint from these services is also considered.
89. On balance, the Authority finds it unlikely that VIVA, or any OLO, has sufficient market power to act independently to a significant extent from competitors or consumers, even if the market share is above the threshold of 25%.
90. Furthermore, while market share is in excess of the 25% required to consider SMP, this increase in market share has happened over time and does not stem from any inherent advantages that may come from being a former incumbent.

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91. Based on this assessment and in keeping with the Modified Greenfield Approach, the Authority is of the preliminary view that absent regulated access at the wholesale level, there would still be competition in the retail market for international outgoing calls from Bahrain.

6.2 Potential entry and expansion

92. The Authority finds that the barriers to entry and expansion in this market are likely to be low and surmountable.
93. Operators need access to international capacity to provide international calling services. Operators that already provide domestic calls services would therefore be able to provide international calling services without much difficulty.
94. Furthermore, operators providing calls to certain zones would easily be able to expand their operations and provide calls to other zones. Thus, the supply-side substitutability between zones implies that the barriers to expansion are also low.
95. The Authority therefore maintains, as it did in the 2008 SMR determination, that barriers to entry and expansion in this market are low.³¹

6.3 Countervailing buyer power

96. The Authority considers that demand for international outgoing call services at the retail level is highly fragmented, which leaves consumers with limited negotiating power.
97. The Authority's preliminary view is that customers of international outgoing call services in the Kingdom of Bahrain have little or no countervailing buyer power.

³¹ See "Significant market power designation in certain relevant retail markets", The Authority, 3 June 2008. Available at <http://www.tra.org.bh/media/document/FINALSMPDetermination20080603.pdf>

6.4 Preliminary conclusion on SMP

98. The Authority acknowledges that the three largest operators have a combined market share of nearly 96% of the billed revenue from international calls from Bahraini operators. However, the evaluation does not consider the substantial international call volumes generated by OTT communications providers, and the additional competitive constraint from OTTs.
99. Based on the above, the Authority's preliminary view is that the market is effectively competitive and that no operator holds SMP in the redefined retail market (i.e. the retail market for international outgoing calls from Bahrain).
100. The Authority summarises the operators' views on the SMP assessment and its own analysis and conclusions next.

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Summary of and response to comments made on the Authority's preliminary assessment of market power in the retail market for international outgoing calls from Bahrain

Q2. Do you agree with the Authority's view that that no operator holds SMP in the retail market for international outgoing calls from Bahrain? If not, please explain why.	
Summary of stakeholders' submissions	The Authority's analysis and responses
<p><u>Batelco</u></p> <p>Batelco does not make any comment on this question.</p> <p><u>Kalaam</u></p> <p>Kalaam disagrees with the Authority's assessment. It finds that no single operator has SMP in this market but that mobile operators hold the majority and that fixed operators have lost share and some have had to exit. Kalaam says that it has invested heavily in its PPCC services and that it is finding it difficult to sustain this business through cross-subsidisation with other services. Kalaam also says that the Authority has said that Batelco holds SMP in CPS in Zones 1 and 3.</p> <p><u>Mena</u></p> <p>Mena agrees that no single operator has SMP but finds that the market should still be regulated because mobile operators are using their market power as a loss-lead to grow their market share, which has driven other operators out of business. Mena also points out that some fixed operators have had to exit the market because of competition from mobile.</p> <p><u>VIVA</u></p>	<p><u>Batelco</u></p> <p>The Authority notes that Batelco makes no comment on this question.</p> <p><u>Kalaam and Mena</u></p> <p>Mena and Kalaam agree with the Authority that no single operator has SMP but assert that the mobile operators collectively have some form of market power and have driven fixed operators out of business.</p> <p>The Authority disagrees with this assessment. The operators have provided no evidence for the apparent market power of mobile operators. Mena, for instance claims that mobile operators are using market power to grow their market share but provides no evidence for this. Some fixed service providers exiting the market is not convincing evidence of a competition concern; free entry and exit takes place even in a perfectly competitive market. The Authority has analysed the outcomes in this market in Section 6 and does not repeat its analysis here. In the absence of evidence to the contrary, the conclusion of no SMP for any individual operator remains unchanged.</p> <p>Furthermore, it is not clear to the Authority which statement about SMP in Zones 1 and 3 for CPS Kalaam is referring to. The market definition and SMP assessment in this market review shows that no individual operator holds SMP. The Authority has</p>

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<p>Notwithstanding its response to Question 1, VIVA agrees that no operator holds SMP in this market. However, VIVA finds that OTT players should be subject to ex-ante regulation because they are not licensed operators. VIVA points to the examples of the Moroccan Regulatory Authority and regulators in the UAE, KSA and Oman which require OTT providers to hold the appropriate telecommunications license.</p> <p><u>Zain</u></p> <p>Zain disagrees with the Authority's conclusions. Zain believes that Batelco has SMP in the market for non-residential fixed IDD. Zain suggests that the markets for residential and non-residential international outgoing calls be analysed separately.</p>	<p>monitored the development of relevant metrics in individual zones and the market as a whole and does not find evidence of anti-competitive behaviour. Although it appears that the ARPM in Zone 1 has not declined as it has in the remaining zones and indeed, has increased slightly in the most recent years, the Authority does not find it a cause for concern at this point, given its overall assessment of the market.³² However, the Authority will continue to monitor the developments in individual zones, including Zones 1 and 3, to ensure that there is no anti-competitive behaviour.</p> <p><u>VIVA</u></p> <p>The Authority has already addressed VIVA's concerns on the impact of OTT services and does not repeat its response here.</p> <p><u>Zain</u></p> <p>With regard to Zain's point, the Authority notes that any market, if mistakenly defined too narrowly, might be found to have an operator with SMP. For this reason, the market definition exercise is an important step in the market review. As has been discussed in the previous section, the Authority has found that the appropriate market definition is a single customer market fixed and mobile international outgoing calls. For non-residential fixed users in particular, there are no barriers to switching to mobile. Thus, given that Zain has no evidence that there is an abuse of dominance or consumer harm to non-residential customers, the Authority maintains its conclusions from the draft Determination.</p>
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³² Annex 3 shows the trends in ARPM for the different zones.

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The Authority's final conclusions on the assessment of market power in the relevant retail market

101. The Authority's final conclusion is that the market is effectively competitive and that no operator holds SMP in the retail market for international outgoing calls from Bahrain.
102. Pursuant to its duties under the Telecommunications Law, the Authority will continue to monitor developments in the retail market for international outgoing calls from Bahrain.

7 Overall conclusions on SMP and implications

103. In this concluding section, the Authority summarises its preliminary conclusions on whether any operator has SMP in the relevant market. The Authority also sets out the implications of such conclusions in terms of the regulatory obligations that would be imposed on operators at both the retail and the wholesale level to remedy such positions of SMP / dominance.

7.1 Summary of findings and preliminary conclusions

104. The Authority last reviewed the retail market international outgoing calls from Bahrain in the 2008 SMP Determination.

105. In that Determination, the Authority defined eight markets, separated by geographical destination (Zone) and whether the call originated on a fixed or mobile device. Batelco was found to have SMP in the following markets:

- a. Fixed originated international calls to Zone 1 countries ; and
- b. Fixed originated international calls to Zone 3 countries.

106. Following the 2008 SMP Determination and the issuance of the Retail Tariff Notification (RTN) Regulation in 2010, the services that Batelco supplies in the retail market for fixed originated international calls to Zone 1 (Market 3a) and to Zone 3. (Market 3c) are subject to tariff controls.

107. Since 2008, there have been a number of developments in these markets. Most notably, the three key ones being:

- a. Increased competition in the market for international calls driven by the rise of mobile services as a substitute for fixed calls; and
- b. The emergence of OTT (notably Skype, Viber and WhatsApp) providers of international services.

108. The relevant retail market has consequently been redefined as a single market including both fixed and mobile (i.e. the retail market for international outgoing calls from Bahrain).

109. Given the competitive assessment carried out in Section 1, it is the Authority's preliminary view that no licensee has a position of SMP in the retail market for international outgoing calls from Bahrain.

7.2 Implications

110. In the event that the Authority makes a final determination that no licensee has SMP in the retail market for international outgoing calls from Bahrain, Batelco will no longer be subject to tariff controls under Article 58 of the Telecommunications Law and the RTN Regulation

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in respect of such services. As a result, Batelco will no longer be required to notify the Authority of any changes to Batelco's retail tariffs for these services.

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Summary of and response to comments made on the Authority's preliminary conclusions and resulting implications

Q3. Do you agree with the Authority's overall conclusions and the resulting implications? If not, please explain why.		
Summary of stakeholders' submissions		The Authority's analysis and responses
<p><u>Batelco</u></p> <p>Batelco does not make any comment on this question.</p> <p><u>Kalaam</u></p> <p>Kalaam does not agree that no operator has SMP as it finds that Batelco has a majority market share in the enterprise segment covering Zones 1 and 3. Kalaam also finds that the three mobile operators have a significant market share compared to OLOs in the consumer market and so, it should not be said that no operator has SMP. According to Kalaam, Batelco offers VoIP services to its enterprise customers, which makes it difficult to compete with them as they are the main ISDN providers. Kalaam reiterates that unlicensed OTT players are affecting the traffic and revenues of licensed operators in Bahrain.</p> <p><u>Mena</u></p> <p>Mena states that mobile operators should be found to have SMP and should be required to provide wholesale access to fixed-line operators to be able to provide international outgoing calls.</p> <p><u>VIVA</u></p> <p>VIVA generally agrees that no licensee has SMP in the market but reiterates that OTT players should be subject to ex-ante regulation and included in the market definition.</p> <p><u>Zain</u></p>	<p><u>Batelco</u></p> <p>The Authority notes that Batelco has not commented on this question. The remaining operators have not raised any new concerns in response to this question. The Authority has addressed the concerns on market definition and SMP findings as part of Questions 1 and 2 and does not repeat its responses here.</p>	

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Zain does not agree with the Authority's conclusions and remains of the view that Batelco has SMP in non-residential fixed originated international calls and so, should be subject to RTN on these services. However, Zain agrees with the Authority that there should not be zone-wise markets for the different destinations

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The Authority's final conclusions on SMP and resulting implications

111. The Authority's conclusions and their implications remain unchanged from the draft Determination.
112. The retail market for international outgoing calls from Bahrain is therefore defined to include both fixed and mobile calls. No operator has been found to have SMP in this market.
113. Consequently, Batelco will no longer be subject to tariff controls under Article 58 of the Telecommunications Law and the RTN Regulation in respect of such services. As a result, Batelco will no longer be required to notify the Authority of any changes to Batelco's retail tariffs for these services.

Annex 2 – Findings in the Strategic and Retail Market Review 2008

A2.1 Market definition

114. The Authority has previously considered the retail market for international outgoing calls from Bahrain as part of the Strategic and Retail Market Review of 2008.³³ After presenting its findings for public consultation on 27 August 2007, the Authority took on responses received from operators and presented its final analysis and conclusions on 3 June 2008.³⁴

A2.1.1 Route-level definition

115. The Authority found a definition of separate markets for each of the 237 international routes to be impractical and instead grouped the routes into four zones.

Table 1: Zonal grouping of routes

Zones	Countries
Zone 1	GCC countries: Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE)
Zone 2	South Asian countries; Bangladesh, India, Pakistan, the Philippines and Sri Lanka
Zone 3	Australia, Canada, France, Germany, Greece, Italy, Iran, New Zealand, Thailand, the United Kingdom (UK), the United States of America (USA), Yemen
Zone 4	Rest of the world, i.e. all countries not in Zone 1-3

Source: the Authority

116. For each of these zones, the Authority defined separate markets for fixed and mobile originated international calls because of the differences in the pricing of these services.

117. The Authority also defined the market for mobile originated international calls separately to the mobile services market because of demand and supply side substitutability.

118. On the demand-side, although access and calling services were typically bought together, the Consumer Survey and the activities of OLOs in the mobile originated international calls market showed that mobile users often purchase international calls from a different operator to the one they bought the mobile access product from. For instance, according

³³ Available at http://216.25.41.102/en/pdf/Strategic_and_Retail_Market_Review_Consultation_Final.pdf

³⁴ Available at <http://www.tra.org.bh/media/document/FINALSMPDetermination20080603.pdf>

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to the Authority's consumer survey in 2007, 38% of mobile residential customers use pre-paid calling cards ("PPCC") for international calls from their mobile.

119. On the supply-side, the Authority found that there was only one-way substitution because of barriers to entry in the mobile services market. That is, in response to a SSNIP in the mobile access and domestic calls market, a provider of international calls would be unable to enter the mobile services market within a reasonable timeframe due to barriers to entry.
120. Furthermore, given that the market for mobile originated calls appeared more competitive than the market for mobile services, the Authority thought to separate mobile originated international calls from the mobile services market.

A2.1.2 Product-market definition

121. The Authority defined the markets to include calls made via PPCCs, Carrier Pre-Selection (CPS) and direct dial services. This was based on considerable evidence of switching between calling cards and direct dial (including CPS) services for international calls. Although the user experience from PPCC and IDD were likely to be different, the Authority concluded that they should be included in the same market. The Authority found that PPCC being priced at a discount to IDD was reflective of the difference in user experience as well as the competition between the two mechanisms.³⁵

A2.1.3 Customer-level definition

122. The Authority recognised that there may have been some grounds for defining separate markets for residential and non-residential consumers. For instance, the Consumer Survey conducted by the Authority in 2007 found that residential customers saw PPCC as more of an alternative to IDD than business customers did. Furthermore, CPS services were primarily targeted at business users because of the economies of scale resulting from the larger spend on international calls that typically comes from businesses rather than residential customers.
123. However, the Authority found that potential competition and regulatory concerns for each category of users could be addressed without separate market definitions. Also, because the outcome of the competitive assessment would be unaffected by a combined market definition, the market was defined to include both residential and non-residential customers.

A2.1.3 Final market definition

124. The Authority therefore defined the following markets for retail international outgoing calls from Bahrain:

³⁵ See Page 140, "Strategic and Retail Market Review - A public consultation document", 27 August 2007, Available at http://216.25.41.102/en/pdf/Strategic_and_Retail_Market_Review_Consultation_Final.pdf

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- a. the retail market for fixed originated international calls to Zone 1³⁶. (Market 3a);
- b. the retail market for fixed originated international calls to Zone 2³⁷. (Market 3b);
- c. the retail market for fixed originated international calls to Zone 3³⁸. (Market 3c);
- d. the retail market for fixed originated international calls to Zone 4³⁹. (Market 3d);
- e. the retail market for mobile originated international calls to Zone 1. (Market 3e);
- f. the retail market for mobile originated international calls to Zone 2. (Market 3f);
- g. the retail market for mobile originated international calls to Zone 3. (Market 3g);
and
- h. the retail market for mobile originated international calls to Zone 4. (Market 3h)

125. These were defined to include both residential and non-residential customers.

A.2.2 Competitive assessment

126. The Authority came to the view that Batelco had SMP in the following international calls markets:

- a. The retail market for fixed originated international calls to Zone 1 (Market 3a)
- b. The retail market for fixed originated international calls to Zone 3. (Market 3c)

127. The Authority concluded that no operator had SMP in the other international calls markets. (Markets 3b, d, e, f, g, h).

128. This was based on a quantitative analysis of the international traffic. At a high level, the main insights from the analysis were:

- a. The volume of international traffic had increased dramatically while overall revenues had fallen significantly as a result of price competition; particularly for calls to Zone 2 but less so for calls to Zone 1.
- b. OLOs had gained significant market share in some markets, particularly the Zone 2 markets, indicating the development of competition.
- c. Batelco had retained substantial market shares in fixed originated international calls to Zones 1 and 3, and to a less extent Zone 4.
- d. Batelco had substantial market shares for mobile originated international calls to Zones 1 and 3. Zain had a substantial market share for mobile calls to Zone 4.
- e. Batelco's market shares based on revenues had been systematically higher than its market shares based on volume.

³⁶ Zone 1 countries: GCC: Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE).

³⁷ Zone 2 countries: South Asian countries; Bangladesh, India, Pakistan, the Philippines and Sri Lanka.

³⁸ Zone 3 countries: Australia, Canada, France, Germany, Greece, Italy, Iran, New Zealand, Thailand, the United Kingdom (UK), the United States of America (USA), Yemen

³⁹ Zone 4 countries: Rest of the world, i.e. all countries not in Zone 1-3

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129. The Authority considered that, through access to regulated wholesale services, OLOs have been able to enter the mobile international calls markets and to exert competitive pressures on Batelco and Zain.
130. On balance, the Authority found that with the exception of international calls originated from fixed lines to Zone 1 and Zone 3 countries, the remaining markets were competitive. For mobile originated calls, Zain was found to provide a sufficient competitive constraint to Batelco and vice versa. For Zone 4, Batelco's market share has been continually decreasing and so no competitive concern was raised.

A2.1.3 Conclusion

131. Thus, the Authority defined the following markets for retail international outgoing calls from Bahrain:
- a. the retail market for fixed originated international calls to Zone 1⁴⁰. (Market 3a);
 - b. the retail market for fixed originated international calls to Zone 2⁴¹. (Market 3b);
 - c. the retail market for fixed originated international calls to Zone 3⁴². (Market 3c);
 - d. the retail market for fixed originated international calls to Zone 4⁴³. (Market 3d);
 - e. the retail market for mobile originated international calls to Zone 1. (Market 3e);
 - f. the retail market for mobile originated international calls to Zone 2. (Market 3f);
 - g. the retail market for mobile originated international calls to Zone 3. (Market 3g);
 - and
 - h. the retail market for mobile originated international calls to Zone 4. (Market 3h)
132. Batelco was found to have SMP in the retail markets for fixed originated international calls to Zone 1 and Zone 3 countries.

⁴⁰ Zone 1 countries: GCC: Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE).

⁴¹ Zone 2 countries: South Asian countries; Bangladesh, India, Pakistan, the Philippines and Sri Lanka.

⁴² Zone 3 countries: Australia, Canada, France, Germany, Greece, Italy, Iran, New Zealand, Thailand, the United Kingdom (UK), the United States of America (USA), Yemen

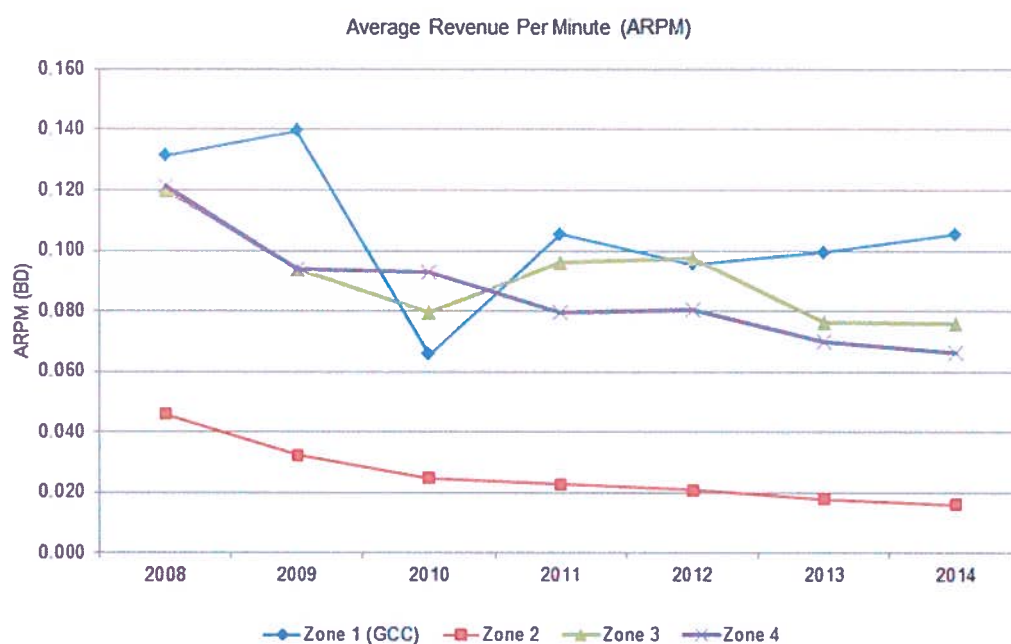
⁴³ Zone 4 countries: Rest of the world, i.e. all countries not in Zone 1-3

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Annex 3 – ARPM by Zone

Annex 3 – ARPM by Zone

This Annex provides a break-down of the ARPM for the four zones, as defined in the 2008 review of the international calls markets.

Figure 15: ARPM by Zone



Source: The Authority's analysis based on operator data.

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