BE Aliv LIMITED
("Aliv")

Response to URCA's Retail Cellular Mobile Market Review and Assessment

ECS 01/2022

Submitted to

The Utilities Regulation & Competition Authority

April 2022

General comments

1. Aliv supports and welcomes the overall conclusion reached by URCA, that the retail mobile market in The Bahamas is competitive. However we do not agree with some of the processes and information used by URCA to come to this conclusion. We hope that our comments will help URCA put its findings on an even more robust basis.

2. Aliv's daily experience in the marketplace is that the mobile market in The Bahamas is very competitive. Since Aliv's entry into the market in 2016, prices paid by the customer have fallen, the use of mobile services, especially mobile broadband has expanded, and customers can choose from a wide range of bundles, products and services. Competition between Aliv and BTC continues to be fierce and effective. URCA's conclusion will enable the two operators to compete and serve customers without the costs of unnecessary regulation.

3. URCA's clear decision has an important impact on other work being carried out by URCA, especially on whether the Government should license a third mobile operator. URCA's conclusion shows that there would be no additional benefits to consumers from a third operator, as they already have access to the benefits that arise from effective competition. Indeed, another operator would only dilute the revenues that the existing operators need to support further investment in networks (such as 5G), thereby making consumers worse off. As the experience of similar jurisdictions elsewhere in the Caribbean region shows, the mobile market in The Bahamas cannot support more than two mobile network operators, but does provide a competitive marketplace that benefits consumers. The table in Annex 1 shows the number of mobile operators in each country of the Caribbean. The majority (17 out of 22) have two operators, and the number of countries with more than two operators has fallen from 11 to 5, illustrating how small markets, such as The Bahamas, cannot support more than two operators.

4. In Section 4 (Definition of the relevant market) URCA gives a detailed explanation of how it decides whether specific services should (or should not) be included in the mobile market. This account demonstrates that market definition is not an exact science. In particular, the hypothetical monopolist or SSNIP test requires a difficult thought process which requires a forecast of a marketplace which does not exist. It also requires an understanding of how consumers will react to a hypothetical situation, sometimes with little or no real-world data in support. It is therefore of no surprise that URCA has to come to subjective judgements on the likely outcomes of these tests.

   The standard SSNIP test requires that both the demand side substitution and supply side substitution tests are satisfied before the service can be added to the market definition. However in several cases, URCA includes products in the mobile market even though they have not passed both the demand side and supply side substitution test as the table below illustrates:

Figure 1: Results of URCA's SSNIP tests

Service	Demand side substitute	Supply side substitute	Included in mobile market definition?
Domestic call and messaging services	no	yes	yes
Outbound international call and messaging services	limited	yes	yes
Outbound international mobile roaming services	no	unlikely	yes
Mobile data services	no conclusion	yes	yes
Prepaid and postpaid subscriptions	yes	yes	yes
Residential and business subscriptions	limited	yes	yes
Retail fixed access	no	no	no
Retail fixed broadband and mobile data services	no	no	no
OTT call and messaging	no	no	no

Indeed, URCA finds only one case in which both demand side and supply side SSNIP tests are passed (prepaid and postpaid subscriptions), and in one other case (outbound international roaming) that neither demand side or supply side substitution is likely to take place, but the product is still included as part of the mobile market. URCA justifies these decisions on the grounds that the services are complementary. Aliv supports these conclusions, with the exception of OTT services, which are complementary to mobile access services in the same way as the other services included in the market definition. Aliv asks URCA to make explicit the criteria it uses to assess whether a service is complementary or not, and to apply these to OTT services.

5. Aliv disagrees with URCA's finding that OTT services are not part of the mobile market. By continuing to define the markets in silos, URCA does not recognise one of the main trends in telecommunications: the gradual replacement of traditional services like TV, messaging and voice by OTT data services, with customers accessing such services across multiple platforms including mobiles. In the context of this consultation, URCA presents significant evidence that OTT messaging and voice services are substituting SMS services and OTT services therefore form part of the mobile market. We explain our position on OTT services in more detail below.

6. URCA should be congratulated on undertaking customer surveys as part of its market review process, and on using the results in the analysis. URCA should be encouraged to utilise such surveys in its review of the fixed market. However, URCA should publish the results of the surveys at the same time as its Preliminary Determination so that consultees can understand the evidence that URCA uses to come to its conclusions.

7. URCA should move ahead with the issue of spectrum for 5G and develop a plan that will enable all parts of The Bahamas to benefit from 5G. As Aliv has explained in its submissions to Government, the rollout of 5G to New Providence and Grand Bahama appears to be commercially viable. However, its rollout to the Family Islands is not, and so will need a different approach by Government, for example by permitting a single wholesale 5G network and deploying universal service funds. URCA's finding that the mobile market is competitive means that it can move ahead to 5G without being concerned about the implications for market regulation. The advent of 5G networks should result in new mobile services and products that will give a boost to growth and competition in the mobile market.

Specific comments

Section 3 Context for this Preliminary Determination

Page 19, mobile connections and penetration levels: Figure 1 shows a decline in mobile penetration from 2019 – 2020. According to the ITU's statistics[1], a similar decline also occurred in some other Caribbean countries (such as Barbados, Jamaica and Trinidad and Tobago), probably reflecting the economic impact of the pandemic, combined with the reduced requirement to carry multiple SIMs resulting from the introduction of number portability.

Page 19, usage trends: Figure 2 shows an increase in calling rates since 2017. As well as the price elasticity effect, this trend reflects the introduction by Aliv in 2016 of the calling party pays model for call charging, and the subsequent removal of the mobile receiving party pays model by BTC. This model encouraged mobile subscribers to keep their phones turned off, and so its removal improves call completion rates between mobile subscribers. Figure 2 shows a decline in messages per customer and this is a strong indication of substitution by OTT services like WhatsApp.

Page 20, Pricing trends: While Aliv recognises the methodological challenges of reducing the wide range of mobile service prices to a single figure, it considers that the use of ARPU (average revenue per user) is seriously misleading and underplays the reduction of tariff reductions in the market. Changes in ARPU reflect changes in a number of variables, in particular service volumes, product mix, price elasticity and income levels. For example, the small increase in 2020 may simply reflect the loss of marginal customers (who have lower than average ARPU) shown in Figure 1, rather than an increase in prices. The use of ARPU underplays the substantial increase in value that mobile customers have gained over the last few years because this measure does not reflect service volumes. In particular, the usage of mobile data has exploded, but this is not reflected in ARPU because of the use of bundles for charging. The evolution of data usage per customer is also missing from URCA's analysis and this is where the most significant increase in service volumes has taken place. Aliv considers that URCA cannot draw any useful conclusions about pricing trends from an analysis of ARPU, let alone whether prices are at the level expected in a competitive market (page 21, paragraph 1).

If URCA wishes to monitor prices in the mobile market, it should consider the use of price baskets. While this also has methodological challenges, the ITU collects and publishes data on price baskets around the world[2]. These show that mobile prices in The Bahamas have (with the exception of a small increase in the data only basket) fallen significantly over the last few years, especially when the effects of inflation are taken into account.

Figure 2: ITU's price baskets in The Bahamas (US cents)

ITU basket	2018	2021	Real price change*
Data-only mobile-broadband basket	14.55	15.70	2%
Mobile-cellular low-usage basket	19.94	19.94	-6%
Mobile data and voice low-consumption basket	39.96	29.12	-33%
Mobile data and voice high-consumption basket	39.96	31.92	-26%

**includes the effect of nominal price inflation of 5.5% between 2018 and 2021*

Source of inflation data: Government of The Bahamas Department of Statistics

[1] Mobile cellular subscriptions available at https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx

[2] See: https://www.itu.int/en/ITU-D/Statistics/Pages/ICTprices/default.aspx

Aliv considers that this provides a much better picture of the effects of competition on retail prices than URCA's analysis of ARPU in this Consultation Document. However, given that URCA has concluded that the retail mobile market is competitive, there may be little value in monitoring mobile prices in the future.

Page 22, OTT call and OTT messaging services: URCA's surveys provide evidence of Aliv's experience of OTT services – that they are clear substitutes for a mobile operator's own call and messaging services and that they eat into an operator's revenues.

Consultation Question 1 – Retail Product/Geographic Market Definitions
Do you agree with URCA's proposed definition of the market for retail mobile access, calls and messaging and mobile data services in The Bahamas? If not, why?

Aliv agrees with most of URCA's market definition, except for the exclusion of OTT services from this market. Our reasoning and other comments are below.

Page 29, Mobile access and domestic call and messaging services: Aliv agrees with URCA's conclusion that these services are part of the same market. Indeed, mobile access is integral to the calls and messaging services as they would not be possible without mobile access. The same applies to OTT services. Aliv is surprised at the implication (in paragraph 4, page 30) that 29% of respondents do not use mobile access for calls and messaging. It would be helpful if URCA can clarify whether this represents respondents who do not have any mobile services or respondents who only use data services. If the latter, it would be interesting to assess whether these respondents use OTT platforms for their messaging and voice services.

Page 33, outbound international call and messaging services, supply side substitution: Aliv questions URCA's assertion that a supplier of outbound international calls would be able to provide domestic mobile access and other mobile services in the event of a SSNIP. For many years such operators have provided outbound international call services through carrier selection, call-back or OTT applications, and these operators do not have in-country infrastructure to provide domestic services. However, Aliv agrees with URCA's conclusion that these services are part of the overall mobile retail market and considers that the supply side substitution test used here can be over-rigid in the mobile market, where a set of linked products are complementary to providing the customer with a full range of services. This point is relevant to the discussion about OTT services later.

Page 33, outbound international mobile roaming services: Aliv notes that URCA's analysis shows that neither demand side substitution nor supply side substitution exists for this service, but URCA concludes that these services should be included in the mobile market. Aliv agrees with this conclusion because the customer regards these services an integral part of a modern mobile package. This again illustrates the need to use the hypothetical monopolist test to inform, but not determine the conclusions about the extent of the market, and is relevant to the discussion about OTT services later.

Page 37, mobile data services, relative prices: Aliv fails to understand why URCA conducts a SSNIP test to see whether smartphone data usage is in the same market as the mobile data market. The question should be whether a SSNIP on the focal product (mobile access, calls, etc) would be profitable to a hypothetical monopolist as a result of substitution from mobile data. The conclusion, that mobile data is part of the mobile market, should be the same because customers would make greater use of OTT applications available on mobile data packages. However Aliv suggests that this conclusion would be more robust if based on a correct analysis.

Page 41, prepaid and postpaid subscriptions, relative prices: in its demand side SSNIP analysis of pre-pay and post-paid services, URCA has probably come to the wrong conclusion because it has focussed only on the average customer. The purpose of the SSNIP test is to conclude whether sufficient customers would switch away from the focal product so as to render the price increase unprofitable. Some pre-pay customers will have higher usage than the average, hence spend more on pre-pay services, and so are more likely to move to post-paid services in the event of a SSNIP. There may be sufficient numbers of these customers to render the SSNIP unprofitable. Hence URCA needs to consider the range of usage and expenditure in this analysis, rather than just the average customer. Aliv supports URCA's overall conclusion that pre-pay and post-paid should be in the same market.

Page 44, fixed retail access and calls: while Aliv agrees with URCA's overall conclusion that fixed network services are not substitutes for mobile services, it notes that URCA may find that mobile services do constrain market power in fixed markets during its forthcoming review of the fixed services market. Such findings would not be inconsistent with URCA's conclusions here.

Page 52, fixed and mobile broadband: switching evidence: URCA states that 14% of users would switch to fixed broadband in response to a SSNIP in mobile broadband services. A simple calculation shows that a hypothetical monopolist making a 10% increase in price would be worse off if 14% of his customers switched, contradicting URCA's conclusions in this section. However Aliv accepts that fixed broadband services are not part of the mobile broadband market because of the lack of supply side substitution.

Page 54, OTT call and messaging services: Aliv disagrees with URCA's conclusion that OTT services are not part of the mobile market. Here URCA argues that because OTT services do not include mobile access services, they are not substitutes. However the same argument applies to mobile call and messaging services, international call and messaging services etc, where URCA considers that they are complementary services, and hence part of the same market. OTT call and messaging services are comparable in functionality to the call and messaging services included in URCA's mobile market definition. It is important here to note that the *order* in which a SSNIP test is applied in the analysis as presented is important to the outcome. If URCA accepts that OTT services like WhatsApp are substitutes for call and messaging services because customers would move to such services in sufficient number to make a SSNIP unprofitable (as strongly suggested by the evidence presented by URCA), then they form part of the same market. However, if the focal product includes access, voice and messaging services and then a SSNIP is applied in relation to OTT services, OTT services would not form part of the same market because OTT providers do not offer mobile access. Given that access and voice and messaging are considered complementary, the latter approach would not be reasonable and would result in a significant part of the mobile market being excluded from the analysis.

Aliv has no doubt that the availability of OTT services places a constraint on its pricing power through demand side substitution – if it increases the price of its calls and messaging bundles, some customers will move to mobile data only plans and use OTT services, thereby reducing Aliv's revenues and rendering the SSNIP unprofitable.

The results from URCA's consumer surveys (page 54, paragraph 2, page 56, paragraph 4 and page 57 paragraphs 3 and 4) make it clear that the vast majority of mobile customers use OTT services and that substantial substitution does take place between mobile call and messaging services and OTT services. In addition, faced with a 5-10% price increase in mobile services (see Figure 9 on page 47) 30% of customers would make fewer mobile calls and use OTT call/messaging instead. This would result in lower revenues for the hypothetical monopolist, either from the reduction in call volumes or moves to data bundles without calls. Hence the hypothetical monopolist would be worse off as a result, and OTT services are substitutes for mobile call and messaging services on the demand side.

Page 55, OTT voice services and mobile voice services: URCA notes that OTT users can only make calls to others who have downloaded the same app as a constraint on substitution. Aliv wishes to point out that the cost of such downloads is zero, and so is not in itself a limitation. As most calls and messages (whether made on the mobile network or on OTT services) are to a circle of friends and relatives (or, in the case of small businesses, to repeat customers and suppliers), they are likely to share the same app and so the majority of calls and messages will be sent over the OTT service. URCA's primary research reveals that 93% of mobile users said they use WhatsApp to make calls or send messages (page 54). This is the main alternative platform for voice and messaging services and so URCA's argument about the download being a constraint does not hold.

URCA argues that because OTT services use the internet, a poorer quality of service may deter customers from switching to OTT services. Aliv considers that this is less true as the quality of 4G services across The Bahamas provides similar qualities of service, whether voice or data networks are being used. Taking a forward looking view, differences in quality of service will not be a significant deterrent to switching as 4G networks improve further and 5G networks are rolled out.

Page 57, OTT call and messaging services, supply side substitution: Aliv accepts that supply side substitution between mobile access services and OTT services is unlikely, but notes that in URCA's analysis of whether outbound mobile roaming services are part of the mobile market, it comes to the same view on supply side substitution, but concludes that these services are part of the mobile market (page 34). Aliv considers that URCA should come to the same balanced conclusion with respect to OTT services. In its view OTT services are complementary to mobile access services in the same way as mobile call and messaging services, and they are direct substitutes of such services. We have noted above our concerns about an over-rigid application of SSNIP tests on outbound international call and messaging services, and outbound international mobile roaming services, and think that they apply to URCA's analysis of OTT services as well.

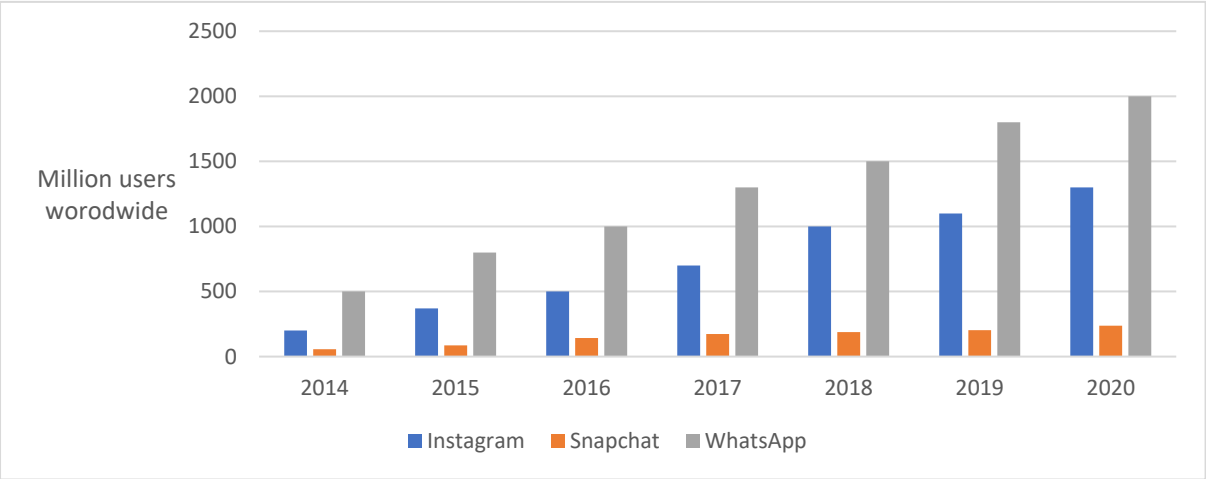
Aliv recognises that other national regulatory authorities have come to a similar conclusion as URCA that OTT services are not part of the mobile market. It notes that the Telecommunications Regulatory Commission in Jordan came to the conclusion that:

"… it recognises that OTT voice and messaging services do fulfil some functions that are similar to those available through some regulated services (such as mobile voice and SMS), and this is a factor that needs to be considered in the "three criteria test" and any competition assessment."[3]

Since this was written in 2019, the use and penetration of OTT services has increased significantly, as shown in the graph below, and Aliv urges URCA to take more account of OTT services in its assessments of mobile markets and related matters (such as the issue of additional mobile licences).

[3] Telecommunications Regulatory Commission, Jordan. Public consultation: Mobile markets in Jordan. July 2019. Page 35.

Figure 3: Growth in users of selected OTT services (millions worldwide)



Source: https://www.businessofapps.com

Consultation Question 2 - Single Dominance Assessment in Retail Market
Do you agree with URCA's preliminary conclusion from its single dominance assessment in the retail mobile market? If not, please set out your alternative views and provide evidence to substantiate your position.

Aliv agrees with URCA's overall conclusion that single dominance does not exist in the mobile market because the two mobile operators are of a similar size and are subject to the same economic factors. Our detailed comments are below.

Page 63, Pricing trends: Aliv has explained its reservations about the use of ARPU to track prices in its comments on page 20 above. Retail prices that are greater than those expected in a competitive market damage consumers by removing the consumer surplus, and this is a clear indicator of monopoly power. Whether the prices are higher than they should be can only be judged with reference to profitability (is it greater than expected in the market?) or costs (is the firm inefficient?) URCA's analysis in this section does not cover these aspects, and so Aliv considers that URCA cannot draw any conclusions about dominance as a result of its analysis of price trends. However, the pricing trends shown in our Figure 1 above provide good evidence of a strongly competitive market.

Page 67, Control over infrastructure that is not easily duplicated: Aliv wishes to point out that it does not completely self-supply its wholesale inputs. URCA has required operators to share infrastructure where possible[4], and indeed operators must demonstrate that mast sharing is not feasible before URCA permits the construction of new masts. Aliv uses a number of BTC mast sites and BTC's submarine cables to the Family Islands. While URCA's infrastructure sharing requirements do disadvantage Aliv, it has been able to compensate for this through its ability to compete successfully at the retail level.

Page 69, Absence of potential competition: Aliv considers that URCA underplays the competitive constraints that OTT services place on the mobile operators ability to increase their price their call and message services, even when included in bundles. Customers have access to free OTT call and message

[4] URCA. Infrastructure Sharing Regulations. ECS 04/2015. 3 September 2015.

services, and this reduces the value that customers place on the call and message elements in a bundle. Hence the mobile operators are constrained in the prices they can charge by OTT services.

Consultation Question 3 - Joint/Collusive Dominance Assessment in Retail Market
Does the industry agree with URCA's preliminary conclusion from its joint dominance assessment in the retail mobile market? If not, please set out your alternative views and provides evidence to substantiate your position.

Aliv agrees with URCA's overall conclusion that joint dominance does not exist in the mobile market, but considers that URCA's concerns about the potential for future joint dominance ignore the boost that 5G is likely to give to growth and competition in the mobile market. Its detailed comments are below.

Page 72, assessment of joint dominance: in this section URCA examines the factors in a market that are conducive to joint dominance, but this is not the same as demonstrating that joint dominance is being exercised. As URCA concludes that joint dominance is not present in the market, this difference is not material. However if in the future URCA comes to a different conclusion, it will also need to demonstrate that joint dominance is being used to damage consumers, for example through supernormal profits, unsatisfied demand or inefficient cost structures. Aliv notes that, as far as it is aware, no national regulatory authority has been able to demonstrate successfully the existence of joint dominance in the mobile retail market (although there are some examples in the mobile wholesale markets). It therefore believes that URCA's findings are consistent with international experience.

Aliv notes that BEREC, in its report on oligopolistic structures[5], sets out a different list of considerations for national regulatory authorities to consider when examining joint dominance, in particular:

- Existence of a clear focal point
- Symmetry in market shares, cost structures, vertical integration, capacity constraints, product homogeneity
- No destabilising events
- Long term focus

While URCA's analysis of joint dominance covers some of these factors, it may wish to update its list of criteria for future analyses, so that it is kept in line with current economic theory and regulatory practice.

Page 73, similarity in market share: URCA claims that the mobile market may be entering a more stable phase, but Aliv considers that the evidence does not support this conclusion. Figure 12 (page 62) shows that the rate of increase in Aliv's market share, as measured by customer numbers, has only decreased slightly for the last year, and Figure 13 on the same page shows no change in the rate of increase in Aliv's market share as measured by revenues. Stability of market share over a number of years is probably as important as similarity in market share because firms come to realise that if competition in the market is not going to improve their positions, collusion may. As the two graphs show mobile market share in the Bahamas has not been stable.

[5] BEREC Report on Oligopoly analysis and regulation. BOR (15) 195. December 2015, section 6.1

Page 74, Mature market and stagnant or moderate growth on the demand side: although growth in the number of mobile subscriptions in The Bahamas has slowed in recent years, the mobile market cannot be regarded as mature or stagnant. The growth in mobile data over recent years has opened up new demands for mobile services and stimulated new products, especially service bundles. Aliv expects that there will be considerable innovation in mobile services with the advent of 5G, with dynamic competition between operators. Hence it considers that URCA's concern that a mature and stagnant market may lead to tacit collusion between the operators takes only a short term view and ignores the current market dynamics and the future development of the mobile market. The allocation of 5G spectrum to operators will be an important step, and will open up the mobile market to many new and innovative uses (often described as the "Internet of things"). By opening up 5G spectrum, and URCA will help ensure that the mobile market is not mature or stagnant in the coming years.

Page 77, incentive for tacit collusion: Aliv refutes URCA's suggestion that it has less incentive to compete aggressively on reaching a similar market share to BTC. It is under continual pressure from its investors and owners to return a profit on their investments, and works to improve its market position in order to achieve this. The use of short term promotions is not relevant to this analysis as they are used to maintain consumer interest in a competitive marketplace.

Conclusion

Aliv congratulates URCA on a detailed and thorough analysis of the mobile market, and while we do not agree with all of the analysis, as set out above, we welcome the overall conclusions of the market review. We will, of course, be pleased to expand on any of our points, and look forward to reviewing the comments of other stakeholders in due course.

Respectfully submitted

On behalf of Aliv

Annex 1: Mobile network operators in the Caribbean region

	Population	Number of mobile operators	
	000	2008	2022
Montserrat	5	2	2
Anguilla	17	3	2
St Martin and St Barth	32	5	4
British Virgin Islands	36	3	3
St Maarten	43	3	2
St Kitts and Nevis	53	3	3
Turks & Caicos	54	2	2
Cayman islands	60	2	2
Bermuda	71	2	2
Dominica	74	3	2
Antigua and Barbuda	96	3	3
St Vincent & the Grenadines	102	2	2
Grenada	112	2	2
Aruba	117	2	2
Curaçao	150	3	2
St Lucia	166	2	2
Barbados	293	3	2
The Bahamas	333	1	2
Trinidad & Tobago	1,216	2	2
Jamaica	2,812	3	2
Haiti	10,788	2	2
Dominican Republic	10,864	4	3

Number of countries with 2 operators		10	17
Number of countries with 3 operators		9	4
Number of countries with 4 or more operators		2	1

Notes

1. In Barbados, Antigua and Barbuda, St Kitts and Nevis, British Virgin Islands and St Martin and St Barth the third or fourth operators have very small, in some cases have negligible market share, and their operations are generally unviable.
2. A third operator (Rock Mobile) was licensed to provide mobile services in Jamaica in 2021, but has yet to launch commercially. It is not included in the table.