

Re: Comments by Dua Consulting on the Consultation Paper dated 26th May 2020 on "Regulation of International Mobile Roaming Services"

From: Dua Consulting

Date: 7th July 2020

1. Introduction

1.1 TRAI's consultation paper dated 26th May 2020 on "Regulation of International Mobile Roaming Services" ("**Consultation Paper**") provides an overview of the International Mobile Roaming Service ("**IMR service**") including standards and practices being followed by both, domestic and international telecom service providers and discusses an approach to assess how the IMR service may be restructured. Our comments to the various issues posed by TRAI have been detailed below.

2. Background

2.1 Bill Shocks (BS) is not new. Historically, bill shocks came into being the day connecting two individuals, in two geographical locations (at least 50kms apart) either nationally or internationally, shifted from an operator assisted driven service to Automatic Service i.e. the ability of a subscriber, located in city A, to be able to dial from his phone, his cousin located in city B. The minimum distance between cities varied from 50kms upwards. The farther apart the cities, higher the charges. Gradually, the provision was extended for international dialling as well. The services were called- for domestic calls **Subscriber Trunk Dialling** (STD-Introduced circa 1960) and International Long Distance Dialling (ILD), across the world from any subscriber in India to any subscriber in another country, commonly called **International Subscriber Dialling** ISD- Introduced to UK on 10th October 1976 and the rest of the world (circa 1986-87 onwards). The last country was Israel on 1st February 1992

2.2 The tariffs for these services were irrational, not on cost-based structure for providing the service, but how much revenue one could earn from these services to be able to subsidise the local service. These services were treated as, both revenue earners as well foreign exchange earners. More importantly, Telecom or phone service was the preserve of Government owned entities, wherein the question of transparency and accountability mattered the least. In any case getting a phone connection used to be a luxury of the rich or privilege of the high and mighty.

- 2.3 One could say that complaints of bill shocks did make some very comic reading to ask for rebates, which in today's scenario, with time and place tagging, would make a boring proposition.
- 2.4 In February 1998, the DOT approved a proposal that allowed operators to provide automatic national and international roaming. The DOT formalised technical and commercial conditions for automatic roaming. Under these conditions, the operators would provide roaming facilities using signalling transfer capabilities of the DOT and Videsh Sanchar Nigam Limited (VSNL). This allowed subscribers to roam seamlessly across the country and internationally. With the advent of automatic roaming, subscribers were able to make calls anywhere in India and around the world using subscriber identification module (SIM) cards.
- 2.5 The feature of roaming in mobile networks enables the customer to use one operator which uses the network of the other provider based on the inter-operation agreement between the Telecomm Service Providers (**TSPs**). Despite competition bringing down prices, for IMR services, this service has been resisting the downward market fall because of the monopoly it enjoys. These services also continue to be used by the customer due to the convenience of roaming using the same operator at the time of international roaming. This results in, lack of transparency in policies, bill shocks, and inflated pricing. India still lacks a clear mechanism addressing IMR and capping the market prices for IMR services, leaving only limited options to the customer.
- 2.6 ITU Secretary-General Hamadoun I. Touré has stated, *"ITU Member States agree on the need for international action on roaming charges, and this agreement is a clear indication of a willingness to address the issue for the good of both consumers and the global trade. I believe operators will see benefits in the long term as higher volumes of traffic are generated when it becomes more attractive for consumers to use their phones and mobile services while traveling."*¹
- 2.7 The International Mobile Roaming Strategic Guidelines published by ITU in 2017 ("ITU IMR Guidelines") lists (i) price regulation; and (ii) consumer protection amongst the key IMR regulatory issues.
- 2.8 An important question arises which could be the raison d'être of this Consultation Paper, who suffers the most from the Bill Shocks. The international roamers could be categorised as follows:
- **Business Traveller.** He is least concerned, because he is on expense paid, or his associates would have a local phone or he would use an ACP of sorts.

¹ Press release- ITU Acts to cut roaming charges, ITU September 12, 2012

- **NRI families.** They are seasoned travellers. Most of them would have arrangements to take care of this minor need of theirs (I can vouch for it), for visiting parents and family members.
- **Tourists.** This is the most gullible lot. It could include honeymooners, once in lifetime travellers or affluent tourists. These are the ones who suffer the most from Bill Shocks. A more detailed analysis of the pricing of international roaming is provided in Section 3.

3. Understanding the pricing of international roaming

- 3.1 It is widely understood that the international roaming charges are excessively high due to the cushioned profit margins for the operators. As a result, it may be seen that consumers often keep their data off while travelling internationally to avoid price shocks which impair their ability to enjoy regular connectivity.
- 3.2 Some of the major cost centres in international roaming are listed below:
- a. IOT- Wholesale roaming arrangements with each MNO and FNO for origination, carriage, and termination (negotiation and payments costs)
 - b. Operational business processes for roaming and their support system
 - Network Equipment Capex (Gateways, VLR, mediation, cabling, NOC etc., procurement and extensions)
 - Network Equipment Opex (salaries, NOC, maintenance, site cost, etc.)
 - Business support services Capex (billing and customer care software and hardware centres)
 - Business support services Opex (processes operation, software licenses, salaries, maintenance, data centre overheads, etc.)²
- 3.3 For understanding roaming wholesale prices (voice, data, SMS) key cost parameters are required
- Inter-operator tariffs (IOTs) charged by each MNO to foreign correspondent MNOs for terminating roaming calls
 - IOTs paid out to correspondent MNOs for domestic subscribers when roaming; Conditions which may result in differentials (volume discounts, time of day, etc.); Domestic call termination rates, with other domestic MNOs and with fixed-line operators, in order to compare tariffs with roaming; Roaming specific costs (billing, signalling, customer care); Transit

² Forge, S. and Srivastava, L. (2018), "ITU cost model and methodology to assist national regulatory authorities to engage with international mobile roaming", Digital Policy, Regulation and Governance, Vol. 20 No. 2, pp. 125-148

costs; Cost difference between prepaid and post-paid, domestic and roaming.³

- 3.4 The abolition of retail roaming charges in the European Economic Area (EEA) that marked the introduction of Roam Like at Home (RLAH) in June 2017 proved to be a clear success and a substantial contribution to the further completion of the single market. As results of the surveys show, the compliance with the Regulation was very high and consumers could benefit from RLAH with Fair Use Policy (FUP) without delay. FUP not only applies only for data but will relate to voice and SMS usage too.
- 3.5 The impact of RLAH were seen clearly in just a year of operation, which can be clearly observed between Q3 2016 and Q3 2017:
- Data traffic increased by 435% in Q3 2017 compared with Q3 2016.
 - The average EEA roaming subscriber used 14.2 voice minutes per month in calls made in Q3 2017 in comparison to 8.8 minutes in Q3 2016, an increase of 62%. While abroad, the received *voice call minutes averaged 11.1 minutes per month per EEA roaming subscriber in Q3 2017*, v 9.5 minutes in Q3 2016, an increase of 12%.⁴
- 3.6 All of the research made by BEREC and other bodies as the ITU, OECD and different regional groups dealing with roaming pricing, suggest that retail roaming tariffs are beyond the social level required and should be closer to the wholesale level.⁵ If exorbitant roaming charges are determined, the customers would move to Wi-Fi and switch to OTT services while the idea of ubiquitous and qualitative connectivity is impaired strongly challenging IMR.
- 3.7 To implement international roaming regulation and increase consumer's benefits. a suitable approach should be developed, taking into consideration all key international roaming regulatory issues and highlighting the need for consultation (inter alia with the respective telecom operators).

4. Transparency

- 4.1 A transparent mechanism helps the customer in making informed decisions. Regulators should have a transparent picture of international prices to assess the impact of roaming tariffs reduction on both operators and customers as well as the benefit, which is embodied in such action on the social welfare in each

³ Simon Forge, ITU-T Study Group 3 Mini-Workshop GENEVA, 26 MAY 2014, Towards an ITU cost model for international mobile roaming for NRAs <https://www.itu.int/en/ITU-T/studygroups/2013-2016/03/Documents/201405-miniworkshop/01-SimonForge.pdf>

⁴ Roaming: One Year After Implementation, IN-DEPTH ANALYSIS Requested by the ITRE committee, Policy Department for Economic, Scientific and Quality of Life Policies Directorate-General for Internal Policies Authors: Colin BLACKMAN and Simon FORGE PE 626.090 – November 2018
[https://www.europarl.europa.eu/RegData/etudes/IDAN/2018/626090/IPOL_IDA\(2018\)626090_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2018/626090/IPOL_IDA(2018)626090_EN.pdf)

⁵ Report on Harmonizing International Roaming Pricing and Reducing Roaming Tariffs among EMERG Members, EMERG International Roaming Report 2019

country. Lack of transparency and comparability led to the common customers' assumption that roaming services have to be more expensive.

- 4.2 TSPs enjoy economies of scale and may be seen to attract more customers to use their services when these services are cost-effective, hence the TSPs make more revenue through masses. Reducing retail prices based on wholesale prices and international agreements, and floor prices, together with the need to be studied to obtain the optimal price. Indian telecom regulatory already has enough provisions to determine the transparency of the margins that the TSPs get through IMS.
- 4.3 The theme of transparency is also reflected in the provisions of the Unified License. Clause 22.2 (d) of the Unified License⁶ provides that the license shall furnish to the Licensor full detail of inter-operator settlement of accounts e.g. pass through charges, usage of network and facilities, domestic and international roaming including details of the settlement regime through accounting rate or any other mechanism, etc. All bilateral settlements including those between the ILD service provider and other foreign partners (carriers) shall be through normal banking channel in a transparent manner.

5. Customer Awareness

- 5.1 As regards the protection of consumer interests while availing IMR Service, the Authority has mandated vide sub-clause (4) of clause 10A of Telecom Consumers Protection (Eighth Amendment) Regulations, 2015, that, "Every service provider shall, through SMS or USSD, provide to all consumers of the Cellular Mobile Telephone Service, having international roaming facility on their mobile connection, an alert, immediately after the consumer roams outside the territory of India, advising the consumer to deactivate the data services in his mobile phone if he does not intend to use data services while roaming outside the country."⁷
- 5.2 Governments and regulators are encouraged to explore ways to protect and empower consumers in determining their best choices amongst the options available to them in the rapidly evolving mobile marketplace, for example by making information on international mobile services clearer and more transparent, and by making it easier for consumers to choose a network that offers the best value for IMS services.

In addition, alerts should be sent to consumers as they approach a certain cost limit for roaming, for example, upon reaching 70 percent and 90 percent limit,

⁶ Licence Agreement for Unified license, Department of Telecommunication

⁷ Telecom Consumers Protection Regulations, 2012 along with subsequent amendments https://traf.gov.in/sites/default/files/Consumer_Protection_Regulations%202012.pdf

with a block placed on further usage unless authorized by the customer. Market-based solutions are advocated, including cultivating regional cooperation among operators and regulators, and encouraging them to reach agreements on lowering wholesale roaming tariffs. Possible regulatory measures such as placing caps on prices charged to consumers for mobile roaming may also be introduced.

6. *Suggestions*

- 6.1 Historically, roaming, and international calling were mainly used by elite customer and were priced at comfortable profits by TSPs for the niche monopolistic market catered to. One could say that complaints of bill shocks did make some very comic reading to ask for rebates, which in today's scenario, with time and place tagging, would make a boring proposition.
- 6.2 With that background, an explosive growth in numbers, globalisation, movement of people for professional and personal reasons, tourism artificially administered pricing must be passé. Some actions have been taken by European Union and South Asian countries. However, the services continue to be in the manner of maximising revenues, losing sight of a combination of high volumes and low cost, in addition to alternate means of calling. Which as the Consultation Paper describes as buying a local sim, using Wi-Fi etc.
- 6.3 In the present times, the customers have also becoming clever in deploying different methods to avoid BS. As a result, the TSPs have come out with myriads of Roaming Packs from one to 7 to 30 days and so on. This action must have been arrived at, after studying calling patterns, and thus assured of definitive revenues, once locked into a pack.
- 6.4 Today, with the absence of regulatory intervention, these characteristics prevent the emergence of competition and enable prices to remain high. The market of international roaming should take a turn from margin-based revenue to volume-based revenue.
- 6.5 The lack of regulatory intervention clearly establishes the arbitrariness of Roaming Tariffs. For example, a one day pack offers 100 minutes at less than Rupee 5/- per minute. Whereas, pack less is rupees 180/- minute, where is the rationale? Therefore, not only steps are needed to reduce BS, but also the need to bring about rationality in Roaming Charges from artificial to as much closer to as possible cost based. Eventually leading to elimination of all the packs and a visibility in ones Bills becoming shock proof, pay along as per usage, without constant fear of BS.
- 6.6 In the interim, it may be good idea to introduce packs of some intermediate denomination say for 3 days and 15 days in addition to the present 1, 7 and 30

days, which could be used for a variety of situations, both for number of days exceeded or limits of data pack. Say, if 30 day pack is over in 15 days, a customer would be asked to buy either additional data pack or pay as per usage at non-pack rates or get into daily packs.

- 6.7 In addition, initiate discussions with nations with community of interests in social calling and commercial calling to finalise data packs with those nations. Perhaps the EU model could be copied or used for? The abolition of retail roaming charges in the European Economic Area (EEA) that marked the introduction of Roam Like at Home (RLAH) in June 2017 proved to be a clear success and a substantial contribution to the further completion of the single market?
- 6.8 The fact that roaming packs for customers have a sizeable price difference when compared to regular international roaming makes it clear that the TSPs have enough cushion of margin and should offer packs even if the customer does not opt for such packs. The onus of informing customers about the international plans should lie with the TSP, to ensure that customers do not complain of Bill Shocks due to a lack of awareness of the plans.

7. Questions for consultation

7.1 *Question 1: Should not the IMR service remain inactive at the time of issue of the sim till the same is activated by the subscriber as a part of the IMR tariff-selection exercise? Please elaborate your submissions.*

Ans. Yes- IMR services should remain inactive at the time of issue of the SIM till the same is activated by the subscriber as a part of the IMR tariff-selection exercise. By activating IMR service no sooner than a SIM is issued, is like leading the subscriber into a dark alley, into unknown, uncharted territory. He, the subscriber has the fundamental right to know what he is bargaining for and getting into. This should be a standard practice, regardless.

Since limited subscribers travel internationally, rather than a standard feature this should be a special feature which may be activated upon the subscriber's request to the TSP. Activation and deactivation of IMR service should be a standard feature on the subscriber self-help portal. Upon activation, the subscriber must be made aware of the plans and should be called by TSP representatives to inform about the IR packs so that the subscriber may make an informed use-based plan.

7.2 *Question 2: Should it not be mandatory to communicate the details of activation and applicable tariff immediately by SMS or email on completion of the tariff-selection exercise by the subscriber? Please give your views.*

Ans. It should be mandatory to communicate the details of activation and applicable tariff immediately by SMS or email on completion of the tariff-selection exercise

by the subscriber. The sequencing has to be right. The subscriber first chooses, carries out tariff-selection exercise, post completion of this exercise, he should give his acquiescence to activate the chosen service, enabling the service provider to activate the service selected. An informed decision by subscriber should be the responsibility of TSP to educate him/her.

7.3 *Question 3: Should not the tariff details and related terms and conditions be communicated to subscribers of IMR service by SMS and /or email as soon as the phone is switched on in the visiting country by the subscriber. Please elaborate your views.*

Ans. Ideally, it is also the duty of the subscriber to have chosen the package before undertaking his travel. However, **the tariff details and related terms and conditions should be communicated to the subscribers of IMR service by SMS and /or email as soon as the phone is switched on in the visiting country by the subscriber; despite the fact that a plan has been chosen. This warning is indeed helpful in cases of exceeding limits and recalibrating a package. The subscriber should be cautioned against the use of his SIM.** Since the travelling subscriber might be carrying smart phone devices, therefore, apart from SMS , the option of selection / de-selection should be left for the subscriber to make choice through the web based and app based platforms of the TSP. By doing so, subscriber would be fully aware of the ILD / roaming charges for voice/ data, as is applicable specifically in the geography he is roaming. **Should the subscriber decide not to undertake a corrective action, let him face the consequences i.e. Bill Shocks.**

7.4 *Question 4: Please give your views on the significant differences in tariffs for IMR Service under Standard Rates and IR Packs. Furthermore, your views are solicited as to how these two rates can be rationalized.*

Ans. The significant differences in tariffs for IMR Service under Standard Rates and IR Packs. As has been discussed, these services are tariffed without any rationale to maximise revenues from gullible. This is an historical aberration when volumes were low, only affluent travelled, who could afford. These tariffs were never based on costs to implement but negotiated. This practice has continued unfortunately. How can anyone possibly justify a day pack at Rupees 575 for say 100 minutes talk time. Exercises have been carried out EU, south East Asia etc. Let the operators sit down and close the gap as much as possible, as has been done in the case of fixed line calling. If not, the subscribers will resort to alternate means of Calling Procedures. The customers are tech savvy, astute and knowledgeable. No doubt, someone is getting paid for the data service which is used for either ACP or Wi-Fi or even buying a local sim. A 30 day pack still costs equivalent of \$70 or Pound Sterling 50, whereas one could buy a local sim for half the price. Moreover, with app based calling, data only roaming charges should also be made aware to the subscribers.

The fact the roaming packs for customers have so much difference when compared to regular international roaming makes it clear that the TSPs have enough cushion of margin and should offer packs even if the Customer does not opt for them in order to have an optimal utilisation of the customer and standard billing procedure for the TSP if the subscriber does not voluntarily choose the plan, the TSP may allot such subscriber a premium plan, however, ensuring that the pack is priced such that it benefits the customer.

The onus of informing customers about the international plans should lie with the TSP, to ensure that customers do not complain of Bill Shocks due to lack of awareness of the plans.

Question arises are TSPs willing to give up or continue to greedy to keep tariffs high artificially. Therefore, these rates must be analysed by analysing the available traffic details. They are already aware of calling patterns to be in apposition to offer data packs. Let that study be extended further to rationalise tariffs to make life easy for all.

7.5 *Question 5: Should not the IR packs apply automatically the moment subscriber's expenses on IMR Services exceed the corresponding daily IR Pack rate unconditionally for all the countries for which the service provider is offering IR Packs?*

Ans. The IR packs should apply automatically the moment subscriber's expenses on IMR Services exceed the corresponding daily IR Pack rate unconditionally for all the countries for which the service provider is offering IR Packs, by suitable warning the subscriber of the consequences of BS. Within specific time of landing, the subscriber should be prompted the code or link for activation of IR packs, allowing the subscriber a minimal data usage for such network or tariff selection free of charge. The customer should be notified through the application and accordingly the threshold cross messages should be made up at the level of 70 percent and 90 per cent consumption.

7.6 *Question 6: Can IR Packs presently offered for one day duration be used to subscribe for multiple days to avail IMR Service? Whether the TSPs be mandated to permit combination of different IR plans as per requirement of the consumer? Please elaborate your submissions.*

Ans. Most TSPs already have multiple packages as per the subscriber, these are based on the number of days, minutes, and data limits.

The TSPs should be mandated to permit combination of different IR plans as per requirement of the consumer? The simple answer is yes. However, to make matters bit simpler, let the IR packages be introduced for say 3 days, 15 days, in addition to 1,7 and 30 days. If usage exceeds either days or **"USAGE", the subscriber can add a pack to suit his or her requirement.**

7.7 *Question 7: Why should not the IMR tariff be counted in 24 hour format on the first use of data, making or receiving a call or sending a text message and renewing the charges for only those 24-hour periods in which the services have been used rather than on calendar day basis ? Please elaborate your submissions.*

Ans. IMR tariff should be counted on 24 hour format on the first use of data, making or receiving a call or sending a text message and renewing the charges for only those 24-hour periods in which the services have been used. This is ideally true for business travellers and may customised on a 24 hour clock since it is all the usage is driven technologically and billing is automated, the calendar date is a redundant mechanism for use.

On calendar day basis charging is fleecing the consumer. The big question is which calendar basis, home or visited? At times one lands close to midnight but ends up paying for the entire day. **WE strongly suggest 24 hrs charging at visited country.**

7.8 *Question 8: In consumer interest why it should not be mandated for the service providers to send updates in respect of the data usage exceeding certain pre-established milestones such as 50%, 80%, 90% and 100% of the data entitlement? Please give your views.*

Ans. Informing usage of plans should be made mandatory at the above-mentioned pre-established milestones to make the customer more aware of his chosen plans and schemes. It is a necessity to make the consumer aware that he is approaching closer to his entitlement. He should either be careful or advised to upgrade his data pack to avoid BS. TSP use such automated tools and platforms that such enabling such a mechanism for intimation would not cause much difficulty to the TSP.

7.9 *Question 9: Will it not be advisable to mandate the TSPs to inform the subscriber by SMS every time the subscriber lands in a country/area not covered by the IR Pack subscribed, of the fact of roaming in an uncovered zone, and the tariffs applicable thereto? Would the aforesaid requirement suffice or whether alongside this, the TSPs be mandated to keep the mobile data in the inactive mode and activate only in accordance with the directions of the subscriber? Are there any other measures that can be taken to cover the situation as detailed?*

Ans. It would be most advisable to mandate the TSPs to inform the subscriber by SMS every time the subscriber lands in a country/area not covered by the IR Pack subscribed, of the fact of roaming in an uncovered zone, and the tariffs applicable thereto. In addition, **the TSPs be mandated to keep the mobile data in the inactive mode and activate only in accordance with the directions of the subscriber. The other measures should be to**

negotiate IR packs to promote trade and tourism and arrive at reciprocity of applicability tariffs.

7.10 *Question 10: What are your views on the measures suggested in para 3.20 to protect the consumer from bill shocks dues to usage of services beyond the pack entitlements? Please provide your views on each of the above measure and suggest additional measures, which in your opinion can be helpful in addressing the issue.*

Ans. In case of travelling at multiple locations, the subscriber shall be made aware of the IR Packs applicable at each of the locations as and when the network of such location is caught. The subscriber should be made aware of the applicable charges and should not be charged unless used in such territory. If the mobile device is used, the customer should automatically be charges as per the possible daily IR pack. if not, he should be made aware of applicable standard rates of the territory. The key is to inform and seek his acceptance to avoid a bill shock.

We agree with suggestions in para 3.21 of the Consultation Paper reproduced below with a proviso that Standard Rates after the usage exceeds the plan entitlements should not be applied, where IR packs exist:

- a. *Requiring the TSPs to bar the usage of any/all of the services once the plan entitlements are reached, and reactivating only on the explicit directions of the subscriber which can be availed through SMS, Mobile Application, Website, etc. or*
- b. *Capping the amount that can be charged to the consumer in any situation to the amount of the credit limit fixed by the TSP for the subscriber or any other limit pre-agreed by the consumer at the time of activation of the IMR Service,*
- c. *Requiring the TSPs to charge for another daily IR Pack or multiples thereof, where applicable, if the usage exceeds the entitlements given in an IR Pack instead of levying the Standard Rates after the usage exceeds the plan entitlements.*

Summing up, if subscriber has chosen an IR pack, he should not be subjected to Standard Tariffs, because of certain exigencies in usage etc. Customer loyalty, retention and not revenue maximising should be the aim.

7.11 *Question 11: Any other issue relevant to the subject discussed in the consultation paper may be highlighted.*

Ans. The artificiality, irrationality or fixing of IMR charges is clearly manifest from the vast differential between IR packs and Standard IMR charges. In the good old days, same was the case with international fixed line calling, when accounting rates were artificially fixed, until volumes exploded and the theory of **death of distance**. Long distance calling as alluded to earlier was a source of revenue and foreign exchange for many developing and less developed countries. The same legacy continues in mobile roaming, having lost out in

ISD. Therefore, urgent steps are needed to bring rationality by fixing nearer to the cost base of actual service provision. Consumers will find ACPs to bypass traditional calling methods depriving TSPs of revenues.

Some other persisting issues are:

- Questions of permanent roaming need to be addressed in the light of IMS.
- Due to an increased amount of interoperability the TSP's responsibility of data storage, development and processing should be clearly prescribed to avoid any security breach.
- The authorities may further assess if these IMS services may be used for M2M devices.
- The customer care services during IMS services should be pre-determined and made aware to the subscriber when calling.
- There authorities should prescribe new standards of quality of network in case of IMS services on networks inter-operable with the TSP.

European Union has taken action, Singapore has taken action, why can't India? Better late than never. Nonetheless the issues needs a larger/wider consultation amongst various regulators, operators and all stake holders to get as many countries into the fold as possible.