



## **AUSPI'S RESPONSE TO TRAI CONSULTATION PAPER ON 'DETERMINATION OF PORT TRANSACTION CHARGE, DIPPING CHARGE AND PORTING CHARGE FOR MOBILE NUMBER PORTABILITY'**

### **General**

Introduction of mobile number portability will increase the flexibility for the consumer and bring about effective competition in the mobile telecom services. Success of MNP from the consumer point of view depend on many issues like convenience of porting, exit barriers and cost of portability.

It has been observed from the consultation paper itself that internationally high porting price discourages porting. India being very price sensitive market, high fee for MNP would be a major barrier for adoption of MNP.

In some of the countries, implementation of MNP has been a success story. That has been due to healthy competition in the market and with no exit barriers and minimum cost of implementation for the mobile number portability services.

It is earnestly felt that taking into account the Indian scenario, where prepaid subscriber can obtain mobile service with a cost as low as Rs. 40/- to 50/- a higher porting charge will be a big barrier.

AUSPI firmly believe that for large scale acceptance of mobile number portability and achieving effective competition, porting and dipping charges should be kept at the bare minimum. AUSPI is recommending a port charge of Rs. 20/- and dipping charge of 1-1.5 paise per dip.



**Q1) Whether the network elements, cost details and the cost structure considered for estimating the port transaction charges are appropriate? If not, give reasons.**

## **Response**

As per the details available in the consultation paper, the cost are to be incurred under the following heads:

**Hardware**

**Software License**

**Customization / Testing / Project Management**

**Office Set up**

**Hosting and communication fee**

The components considered in the consultation paper for costs appears to be representative. However, there is a wide disparity in the annual average cost shown by MNP Licensees in Table 7 of the consultation paper. This variation can be attributed to large variation in subscriber based assumption as well as different assumptions by two MNP licensees.

TRAI may please take into account the terminal value of the project. Since MNP operators have the license for 10 years, terminal value of the future cash flow occurring beyond 5 years is required to be built in the cost model as the methodology assume that the MNP licensees will have to make investment afresh due to existing investment being redundant after 5 years.

**The cost shown by MNP licensees need to be thoroughly investigated by the TRAI. It would have been logical to segregate and load capex and opex for each service line separately.**

Two of the MNP licensees have worldwide experience in implementing MNP services and this should provide them economies of scale to bring down cost and improve the efficiency which would correctly determine the transaction / dipping charges in India.

(Annex I provides all details regarding, Capex, Depreciation, Funding, P & L estimates etc as worked out by our consultant)

**Q2) Do you agree with the factors affecting the number of porting as discussed in chapter-4? Please indicate if any additional factors are required to be taken into account.**

## **Response**

Various factors listed out in the consultation paper which may have effect on the porting are as follows:



- **Mobile subscriber base:** Higher the subscriber base, greater the probability of porting.
- **Churn Rate:** In India, subscribers have high propensity to churn and even if a fraction of the churning subscribers opt for porting, it should translate into very high number of porting.
- **Number of Access service providers in a service area:** The timing of number portability coincides with the launch of operations by several new operators and also expansion in new circles by some of the existing operators; this should result in high porting rate.
- **Life Time Plans:** With life time plans available at very low rates, it no longer exists as a deterrent to porting.

#### **Additionally, following factors be considered for effective porting**

- **Porting Fees:** India being a price sensitive market, high porting charges for subscribers would be detrimental to porting
- **Porting Timelines:** Greater the time taken in porting, lower the probability of subscribers opting for it. The initial time line proposed by TRAI would encourage higher porting rates.
- **Authentication and Denial Rules:** It is important that authentication rules are such that it should be similar or less burdensome than acquiring a new subscriber.
- **The process for interfacing with donor network** or with MNP service provider should be as systems driven as possible.

#### **-Porting Regulation Regime**

- **Subscriber Awareness on Mobile Number Portability:** As has been observed in countries like UK and Greece, lack of subscriber awareness negatively impacts the number of ports India being a highly competitive market, subscriber awareness should not be an issue.
- **Market Dynamics, e.g. Metro Circle vs Others:** As has been observed for different product segments, subscribers staying in Metro circles are early adopters and it is expected that even for MNP the initial demand would come from these areas and later on it would be adopted by subscribers in other regions.

**For the Telecom service sector here all the above factors are positive for higher porting rates .Considering only 10% of the present churns we feel that 4% of porting rate initially is OK.**

**Q3) Whether the projection of the subscriber base and annual rate of porting as explained in the paper for the next 5 years is reasonable? If not, give your estimation of annual porting rate along with the reasons.**

## Response

3.1 Subscriber projection given by two licensees are at wide variance as shown in Table 5 & 6 of the consultation paper. TRAI projection in the consultation paper is available at table 10. We have brought out all these in the table below for ready reference.

| Year       | Estimated subscriber base in Million |                   |              |
|------------|--------------------------------------|-------------------|--------------|
|            | MNP LICENSEE NO.1                    | MNP LICENSEE NO.2 | TRAI (Total) |
| MARCH 2010 | 250                                  | 249.5             | 557          |
| MARCH 2011 | 255.92                               | 314               | 730          |
| MARCH 2012 | 261.63                               | 373.8             | 888          |
| MARCH 2013 | 267.45                               | 438.7             | 999          |
| MARCH 2014 | 273.35                               | 493.3             | 1093         |

3.2 Some other projection available from analyst are as follows:

| Year       | Estimated subscriber base in Million |               |     |
|------------|--------------------------------------|---------------|-----|
|            | HSBC                                 | Deutsche Bank | UBS |
| MARCH 2010 | 478                                  | 444           | 547 |
| MARCH 2011 | 553                                  | 500           | 675 |
| MARCH 2012 | 623                                  | 567           | 779 |
| MARCH 2013 | 681                                  | 611           | 868 |
| MARCH 2014 | 718                                  | 648           | 946 |

3.3 From the above, it is clear that projection of subscriber base by licensee No. 1 is conservative. Looking at the analyst's projection, we have taken a conservative view with regard to the projection given by TRAI in the table below:

| Year     | Estimated subscriber base in Million |        |        |
|----------|--------------------------------------|--------|--------|
|          | Subscriber base All India            | Zone 1 | Zone 2 |
| DEC 2009 | 438                                  | 219    | 219    |
| DEC 2010 | 554                                  | 274    | 280    |
| DEC 2011 | 659                                  | 326    | 333    |
| DEC 2012 | 751                                  | 370    | 381    |
| DEC 2013 | 852                                  | 418    | 434    |
| DEC 2014 | 954                                  | 461    | 493    |

Penetration levels of different service area have been taken into account in our projection over the year. Porting percentage typically increases with time especially during the initial few years of implementation as has been observed in Table 4 of the consultation paper.

**Some other observations:**

- ⇒ Brazil with high prepaid ratio like India has a porting rate of 6% in the first 9 months of the MNP implementation.
- ⇒ With the launch of services by 6/7 new operators, it is likely to drive the porting rate especially in the initial year.
- ⇒ Recent study by Nielson indicates that 20% subscribers are willing to change the network if allowed to retain the number.

All these indicate that there is pent-up demand for MNP.

3.4 In view of the above and as mentioned in our response to question No.2, we project annual porting rate as has been mentioned in the table below:

## NUMBER OF PORTS

| YEAR     | PERCENTAGE OF ANNUAL PORTING RATE |
|----------|-----------------------------------|
| DEC 2010 | 3.5%                              |
| DEC 2011 | 4.5%                              |
| DEC 2012 | 5.55%                             |
| DEC 2013 | 6%                                |
| DEC 2014 | 5.5%                              |

Higher porting rate in the initial years have been assumed. The rate increases gradually as observed in other countries before stabilizing. Initial assumption of 3.5% porting rate would translate to 2.62% for all categories of circles for both zones.

***Q4) Based on the cost details, what is your estimation of per port transaction charge? Justify your estimation and supplement it with the worksheets.***

## **Response**

Analysis has been undertaken with the help of a consultant to estimate viability from the perspective of MNP licensees and various scenarios have been considered as shown in the table below. The detailed assumptions and working are shown at **Annex-I**.

Separate analysis for Zone II is not done as both operators are expected to have similar cost and revenue structure.

| Scenario | Port Transaction Charge (INR) | Dipping Charge (INR) | Project IRR- 5 yr period | Project IRR- Including terminal value | Remarks   |
|----------|-------------------------------|----------------------|--------------------------|---------------------------------------|---|
| Base     | 75                            | 0.05                 | 121%                     | 160%                                  | *High IRR indicating a case for reduction of charges  |
| I        | 30                            | 0.05                 | 77%                      | 118%                                  | *High IRR indicating a case for reduction of charges  |
| II       | 30                            | 0.02                 | 25%                      | 70%                                   | *High IRR indicating a case for reduction of charges  |
| III      | 30                            | 0.01                 | 8%                       | 57%                                   | Low IRR, unattractive for MNP licensees   |
| IV       | 20                            | 0.02                 | 11%                      | 57%                                   | <b>Reasonable IRR</b>   |
| V        | 15                            | 0.02                 | 2%                       | 48%                                   | Low IRR, unattractive for MNP licensee  |
| VI       | 35                            | 0                    | 6%                       | 57%                                   | *Low IRR, unattractive for MNP licensee. Assuming zero dipping and a corresponding reduction of 15% in Capex and Opex (as dipping services would not be required) |
| VII      | 25                            | 0                    | -                        | 33%                                   | *unviable option  |
| VIII     | 25                            | 0.02                 | 18%                      | 62%                                   | *Optimal IRR  |



From the above table, we summarize that porting transaction charge of Rs.25/- and dipping charge around Rs. 0.02 (2 paise) would justify the investment made by MNP licensees. We have been conservative in projection of subscriber base vis a vis TRAI projection. **SMS volume due to VAS would further upside the revenue for the MNP service providers.**

**With assumption of porting fee of Rs 25 and Dipping Charges of 2 paise per dip, corresponding cash flows have also been analysed and it was noted that MNP operators would get IRR of 18% and project IRR of 62%. This healthy IRR is achievable even with a very conservative estimate of subscriber base & porting rate and a very liberal estimate of costs. Therefore, to promote efficiency it is recommended that porting fee may be decided at Rs 20. This charge will expand market and result in successful implementation of MNP. The expansion of MNP market may also result in excess revenues for the MNP operator than the projections.**

Reduction in port transaction charge would enable service providers to pass the benefit to subscriber which will further increase porting rate and hence would improve the business case for MNP licensees.

***Q5) What should be the time period for review of per port transaction charge?***

## **Response**

Timely review is needed for [estimation of number of ports, exact porting charges and hence calculating returns for the service providers](#). We understand this review is done internationally also. The Authority reviews regularly IUC charges and on the similar lines, porting transaction charge can be reviewed regularly. For initial few years the review be once a year. **First review may be considered after one year from the date of launch of MNP services.**

***Q6) What is your estimation about the number of voice/SMS/MMS dipping which may take place in the MNP service provider's Query Response System? &***

&

***Q7) What should be the factors which may be considered for the estimation of the Dipping charges.***

## **Response**

- (i) All the items mentioned in our response to question No.3 may also be considered for estimating dipping charge. In addition number of service providers, who may use Query Response System of the MNP licensees will also be an important item.
- (ii) Key driver for dipping are total number of calls, missed calls and SMS. Missed call is an important mode of communication in India and conservative estimate of 1:1

of missed call to outgoing calls may be considered. Conservative estimate of only 2.3% of subscriber can be taken mainly as subscriber base with new operators and standalone operators are likely to use dipping (decrease in dipping percentage has been assumed over the years).

- (iii) The consultation paper list out various factors for determining dipping charge like expenditure for installation and maintenance of QNPDB, number of service providers using Query data base, volume of porting queries from the service providers and some other factors. We submit that on the volume of queries, following sources of queries need to be considered.

Outgoing calls

Missed calls

SMS

In India, there are very high percentages of missed call that can be significant source of revenue for providing dipping service. It is also to be ensured that dipping and port transaction charges are not cross-subsidizing each other. There is a need for segregating and analyzing the incremental costs incurred in providing the dipping facility to estimate these charges separately.

- (vi) Some of the small / new operators are likely to gain scale and hence go for own local data base. Detailed estimate with key element are shown in the table below:

| Dipping Volume  | Dec 10 | Dec 11 | Dec 12 | Dec 13 | Dec 15 |
|---|--------|--------|--------|--------|--------|
| Dipping %(%age of total subscriber for whom central database would be queried | 2.3%   | 2.2%   | 2%     | 1.5%   | 1.5%   |
| MOU per subscriber per month (min)  | 219    | 219    | 219    | 219    | 219    |
| Avg. Call duration (min)  | 2      | 2      | 2      | 2      | 2      |
| Ratio of missed calls to O/G calls  | 1:1    | 1:1    | 1:1    | 1:1    | 1:1    |
| O/G SMS volume per sub per month  | 25     | 25     | 25     | 25     | 25     |
| A2P SMS as a %age of total SMS  | 40%    | 40%    | 40%    | 40%    | 40%    |
| O/G SMS volume (Bn)   | 1.8    | 2.1    | 2.2    | 1.9    | 2.1    |
| A2P SMS volume (Bn)   | 1.2    | 1.4    | 1.4    | 1.2    | 1.4    |
| O/G Call queries (Bn)   | 8.3    | 9.4    | 9.7    | 8.2    | 9.1    |
| Missed Call queries(Bn)   | 8.3    | 9.4    | 9.7    | 8.2    | 9.1    |

- v) **In order to avoid unjustified pricing with just one MNP service provider per zone (a monopoly situation), it is recommended that dipping charges are regulated with an upper cap on charge per dip. It is observed that MNP operators have healthy IRR even with the very conservative subscriber base and very liberal estimate of cost, conservative estimate of number of**





**dipping. It is therefore, recommended to promote efficiency the dipping charge ceiling should be 2 paise per dip.**

- vi) With assumption of porting fee of Rs 25 and Dipping Charges of 2 paise per dip, corresponding cash flows have also been analysed and it was noted that MNP operators would get IRR of 18% and project IRR of 62%. This healthy IRR is achievable even with a very conservative estimate of subscriber base & porting rate and a very liberal estimate of costs. Therefore, to promote efficiency it is recommended that dipping **charges be decided at 1-1.5 paise per minute**. This charge will expand market and result in successful implementation of MNP. The expansion of MNP market may also result in excess revenues for the MNP operator than the projections.

***Q8) (a) whether the recipient operator should be allowed to charge the porting charge from the porting subscriber? (b) If yes, should porting charge be equal to or less than or more than the per port transaction charge? Give reasons to justify your view? (c) If no, give reasons to justify your view.***

## **Response**

- (a) Yes, Recipient operator be allowed to charge as the subscriber is availing a facility and willing to pay for the same. In addition, Recipient Operator incurs several expenses for making the facility available to subscriber and hence should be allowed to charge porting charge from porting subscribers.
- (b) High porting charges could be a deterrent to Mobile Number Portability. In most market where port charge is significantly higher than the transaction charge, number portability has limited success. **We suggest that to accelerate adoption and success of MNP in India, regulator should put cap on the porting charge (equivalent to port transaction charge) and leave determination of the actual charge to the competitive market forces.**

***Q9 Whether the porting charge, if any, paid by the subscriber to the recipient operator, should be shared with the donor operator? Give reasons to justify your view.***

## **Response**

No Sir, the porting charges paid by the subscriber to the Recipient Operator should not be shared with the Donor Operator. We have proposed above that porting charge may not be more than the transaction charge and the transaction charge is cost based, therefore, there is no ground for sharing any porting charge with the Donor Operator. Additionally, service providers Donor Operators and Recipient Operator have to upgrade their network at their own cost, so that there is no reason for Recipient Operator to share the porting fee with Donor Operator.

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## Annex I – Key Cost Assumptions

|                                 | Assumption |       | Commentary  |
|---------------------------------|------------|-------|---|
| Head                            | Unit       | Value |   |
| <b>Capex</b>                    |            |       |   |
| Cumulative for 5 years          | INR Mn     | 979   | • Has been revised upwards from INR 729 mn estimate given by licensee 1 due to increased subscriber base  |
| Increase Factor                 | #          | 0.5   | • Applied to the increase in the subscriber base to estimate the capex requirement over and above the current number given by licensee 1  |
| Composition - Hardware          | %          | 60%   | • Industry discussions  |
| Composition – Software          | %          | 40%   | • Industry discussions  |
| Capex allocation over the years |            |       | • Significant front loading: 70% in first year; and balance 30% in 2 <sup>nd</sup> year   |
| <b>Opex</b>                     |            |       |   |
| Cumulative for 5 years          | INR Mn     | 2,087 | • Has been revised upwards from INR 1,638 mn estimate given by licensee 1 due to increased subscriber base  |
| Increase Factor                 | #          | 0.4   | • Applied to the increase in the subscriber base to estimate the opex requirement over and above the current number given by licensee 1   |
| Opex allocation over the years  |            |       | • Some level of front loading: 30% in first year; gradual increase from 2 <sup>nd</sup> year with increase in scale of operations: 15%, 17%, 18% & 20% respectively for Yr2, 3, 4 & 5 |

## Annex I – Financial Assumptions

|                                    | Assumption |       | Commentary  |
|------------------------------------|------------|-------|---|
| Head                               | Unit       | Value |   |
| <b>Financial Assumptions</b>       |            |       |   |
| D/E ratio                          | #          | 2     | • Standard benchmark  |
| Term of Debt                       | Yrs        | 5     | • Standard benchmark  |
| Interest on long-term loan         | %          | 12%   | • Industry discussions                                      |
| Interest on short-term loan        | %          | 15%   | • Industry discussions                                      |
| Cost of Equity                     | %          | 14%   | • Industry Estimates  |
| FCF growth rate for terminal value | %          | 3%    | • Standard benchmark  |
| Working Capital                    | %          | 10%   | • 10% of Opex requirement: based on TRAI Consultation Paper |

## Annex I – P&L Statement for the base case i.e. Transaction Charge = INR 75; Dipping Charge = INR 0.05 per dip

*Sample Analysis Done for Zone 1*

*All financials in INR Mn*

|                               | 2010  | 2011  | 2012  | 2013  | 2014  |
|-------------------------------|-------|-------|-------|-------|-------|
| <b>Revenue</b>                |       |       |       |       |       |
| Revenue from port transaction | 538   | 1,101 | 1,525 | 1,879 | 1,901 |
| Revenue from Dipping          | 986   | 1,122 | 1,156 | 979   | 1,081 |
| Total Revenue                 | 1,524 | 2,223 | 2,681 | 2,859 | 2,982 |
| <b>Opex</b>                   |       |       |       |       |       |
| Annual Maintenance Cost       | 49    | 40    | 30    | 21    | 11    |
| Hosting & Communication       | 289   | 137   | 162   | 178   | 203   |
| Customization                 | 260   | 123   | 146   | 160   | 183   |
| Admin & Other                 | 29    | 14    | 16    | 18    | 20    |
| Total Opex                    | 626   | 313   | 355   | 376   | 417   |
| <b>EBITDA</b>                 | 898   | 1,910 | 2,326 | 2,483 | 2,565 |
| Interest                      | 73    | 66    | 50    | 35    | 19    |
| Depreciation                  | 95    | 95    | 95    | 95    | 95    |
| Amortization                  | 78    | 78    | 78    | 78    | 78    |
| <b>EBT</b>                    | 652   | 1,671 | 2,102 | 2,275 | 2,372 |
| <b>PAT</b>                    | 518   | 1,118 | 1,374 | 1,477 | 1,537 |

**Annex I – P&L Statement for scenario VIII i.e. Transaction Charge = INR 25;  
Dipping Charge = INR 0.02 per dip**

*Sample Analysis Done for Zone 1*

*All financials in INR Mn*

|                               | 2010  | 2011 | 2012 | 2013  | 2014  |
|-------------------------------|-------|------|------|-------|-------|
| <b>Revenue</b>                |       |      |      |       |       |
| Revenue from port transaction | 179   | 367  | 508  | 626   | 634   |
| Revenue from Dipping          | 394   | 449  | 462  | 392   | 432   |
| Total Revenue                 | 574   | 816  | 971  | 1,018 | 1,066 |
| <b>Opex</b>                   |       |      |      |       |       |
| Annual Maintenance Cost       | 49    | 40   | 30   | 21    | 11    |
| Hosting & Communication       | 289   | 137  | 162  | 178   | 203   |
| Customization                 | 260   | 123  | 146  | 160   | 183   |
| Admin & Other                 | 29    | 14   | 16   | 18    | 20    |
| Total Opex                    | 626   | 313  | 355  | 376   | 417   |
| <b>EBITDA</b>                 | (53)  | 503  | 616  | 642   | 649   |
| Interest                      | 73    | 66   | 50   | 35    | 19    |
| Depreciation                  | 95    | 95   | 95   | 95    | 95    |
| Amortization                  | 78    | 78   | 78   | 78    | 78    |
| <b>EBT</b>                    | (299) | 263  | 392  | 434   | 456   |
| <b>PAT</b>                    | (299) | 219  | 325  | 342   | 272   |