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**Article no. 12**

# **Mobile Number Portability – Impact Assessment**

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## 1. MNP – Mobile Number Portability

MNP is a service enabling customers to switch between mobile operators while keeping the same phone number. That is, a customer can change service providers without having to change his phone number.

## 2. Background

MNP has been implemented in over 20 markets since initially being presented in Singapore in 1997.

MNP is an effective tool for removing existing obstacles faced by customers who wish to switch mobile service providers, thus intensifying the already fierce competition in the communication market.

MNP provides instant advantages to the customer who is now able to choose a preferable service provider without having to consider additional costs (such as reprinting business cards).

Additionally, the customer can benefit from competitive price reductions.

The MNP service was declared a legal right and is therefore mandatory in most countries (USA, EU).

The table below features, by year, the countries which have already implemented MNP.

Year	Country
1997	Singapore
1999	UK, Hong Kong, The Netherlands
2000	Spain, Switzerland
2001	Denmark, Australia, Sweden, Norway
2002	Belgium, Italy, Portugal, Germany
2003	France, Finland, Ireland, Luxemburg, Austria, Greece, USA, South Korea
Debating MNP Implementation	Japan, Taiwan, Canada, New Zealand, Mexico

Table A - countries which have already implemented MNP, by year of integration (as of June 2004).

## 3. Customer Service Usage

It is evident that the number of customers who use MNP varies from one country to another. This number is not related to the length of time the service has existed in a specific country. The factors affecting the use of MNP will be explained later on in this article.

Below are examples of MNP usage numbers in a few countries:

- UK – within 63 months from service launch, 5% of customers used the MNP option.
- Hong Kong –within 60 months from service launch, 85% of customers used the MNP option.
- Finland –within 8 months from service launch, 16% of customers used the MNP option.
- Portugal –within 27 months from service launch, 0.28% of customers used the MNP option.

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## 4. Factors Affecting MNP Usage

Many researches conducted on this issue prove that in countries where the MNP service is quick and efficient, a large number of customers will use it.

Service efficiency varies considerably between countries. In some countries, such as France, it takes about 2 months to fully complete the transition from one operator to another, whereas in other countries, such as Hong Kong, the maximal time to complete such a transition is 48 hours.

Naturally, there is high correlation between service efficiency and customer usage levels.

However, other factors, having to do with market conditions, also affect service usage:

- The intensity of competition in the local communications market, i.e., the number of players in the market, and the emergence of virtual service providers.
- Marketing campaigns.
- Market maturity.
- Mobile phone subsidies.
- Contractual obligations.
- Customer base construct.

Out of all these factors, the intensity of competition in the market is the most influential one when it comes to MNP usage, as evident in countries such as Finland and Hong Kong, where the competition is fierce, as is MNP usage.

Other key factors are the construct of the customer base and market maturity.

In markets where penetration levels are particularly high, mobile service providers will try to win over customers using MNP, as they have no other option of recruiting new customers.

Marketing campaigns will be effective mainly in markets where the customers own their own service contracts.

Another interesting fact is that MNP usage will be higher among contract customers than among prepaid customers. The following are the reasons for that:

- On average, contract customers will hold on to their mobile phone for a longer time, and therefore will be more attached to it.
- Normally, business customers are contract customers. Those are more inclined to utilize MNP services, due to number switching costs.
- Contract customers are able to get phone subsidies. Customers choose to upgrade their phones with other service providers.

## 5. Short and Long Term Effects on Abandonment

In this section we will explore the MNP Effects on abandonment.

The level of influence MNP has on the market varies between different markets. The same goes for influence on abandonment. The table below illustrates the MNP influence on abandonment in different countries.

For each country, we present the monthly percentage of customers (out of the entire customer base), that have abandoned their service provider and used MNP.

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Italy	Denmark	Portugal	Sweden	Norway	UK	Hong Kong
0.2%	0.66%	0.02%	0.25%	1.03%	0.13%	1.27%

Table B – The monthly percentage of customers (out of all the customers) who abandoned and used MNP (as of June 2004).

Research shows that in the first period following MNP service launches, there is an increase in abandonment ratios. However, over time, abandonment ratios stabilize and become similar to those prior to the MNP launch.

## 6. Case Studies

### 7.1 Finland

In this section we will present the influence of MNP on the mobile communication market in Finland. MNP services were first introduced in Finland in July 2003.

In Finland, the use of MNP is available to contract customers only, which means that prepaid customers can not keep their phone numbers. It is important to note that in Finland only 4% of the customers are prepaid.

In the first 8 months following the launch, 16% of the customers used MNP, which is relatively a very high percentage.

The only other country that boasts such numbers is Hong Kong (in the first 9 months following the launch, 18% of the customers used MNP).

Transition from one provider to another in Finland lasts 5-14 workdays, which is quite a reasonable period. However, it can't possibly be the single reason for the high percentage of usage. We will now attempt to examine the different reasons for this high percentage:

- The Finnish market is one of the most mature markets in the world. The penetration proportion is over 90%.
- Finland is one of the only countries in the world with a high number (35%) of customers for whom the mobile phone is the only phone. Therefore, keeping their number must be particularly important to those customers.
- In Finland, the percentage of contract customers is one of the highest in the world (96%).
- Since there are no mobile phone subsidies, Finnish customers are not contractually bound to their mobile operators.
- Prior to the MNP service, the Finnish market enjoyed a relatively low competition – just 3 key players. After the service launch, several virtual service providers joined the competition, and that affected the market.

#### The Effect of MNP on Key Market Players

The launch of the MNP service had an enormous effect on the key players in the Finnish market. We will now examine the effect on each of these players:

Teliasonera – the MNP launch had a tremendous effect on Teliasonera's abandonment ratios. In the 2<sup>nd</sup> quarter of 2003, abandonment ratio was 10.2% (pre-launch). However, in the 1<sup>st</sup> quarter of 2004, this number grew to 37%.

The chart below describes Teliasonera abandonment ratios by yearly quarters:

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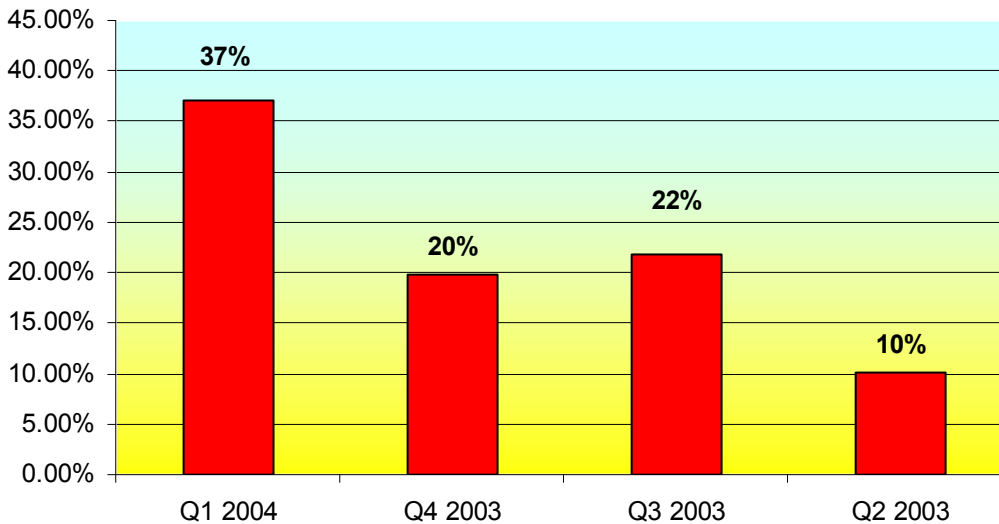


Chart A - Teliasonera abandonment ratios by yearly quarters

The data above presents the annual abandonment ratios (i.e., 37% abandonment in the 1<sup>st</sup> quarter of 2004 is 3% on a monthly average).

The other two mobile operators also suffered greatly from the MNP launch:

Radiolinja – in the 1<sup>st</sup> quarter of 2004, the company reported a 47.4% annual abandonment rate.

DNA – the numbers for this company were not fully divulged, but we do know that in the 1<sup>st</sup> quarter of 2004, DNA suffered an unusually high abandonment rate.

Therefore, the immense effect of the MNP launch is quite obvious when examining the percentage of customers who used this service when switching operators. In the 1<sup>st</sup> quarter of 2004, 85% of all abandoning customers kept their original phone numbers.

### Virtual Service Providers

In the first months following the service launch, the Finnish communication market changed drastically, as a result of the emergence of new players – the virtual service providers. The virtual service providers offer a variety of virtual services, such as mobile communication and Internet services.

Each virtual provider differs from the other, but they all use the same business model, make minimal capital investments, outsource services that are not core services, and focus on marketing and sales.

The virtual service providers stormed into the market offering discount communication packages, in order to attract the customers of the larger companies.

The virtual service providers launched advertising campaigns in order to market the MNP service and promised to provide swift and easy transfer, free of charge.

### *The Key Players' Attitude Change*

The large mobile operators had to react to the new competitors. Teliasonera started marketing discount programs, in order to keep up with the changing market conditions. This was the first time Teliasonera reacted to market changes by bringing down its prices.

However, this plan didn't last long, as the virtual service providers cut down their prices even more, which caused higher abandonment ratios for the larger companies.

Another solution Teliasonera came up with was establishing its one virtual service subsidiary. This subsidiary is currently operating according to the same business model as the other virtual service providers.

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It is still too early to evaluate the influence of this solution on abandonment rates, however it is already clear that the market share Teliasonera used to enjoy will never go back to the way it was prior to the MNP launch.

In conclusion, the current prediction is that the abandonment levels in the Finnish market will remain relatively high, thanks to the aggressive marketing tactics of the new service providers. In the long term, the level of abandonment will stabilize but will still be 50% lower than before.

## 7.2 Italy

In this section, we will present the influence of MNP on the mobile market in Italy.

The MNP service was first launched in Italy in June 2001.

About 2 years after the launch, only 3.68% of customers had used this service.

This is a high percentage, in comparison to other European countries such as Portugal, Spain and Germany. Yet it is lower than the usage percentage in Scandinavia.

Let's try to study the Italian mobile market:

- Italy is one of the countries where mobile phone usage is exceedingly high. Penetration rates are around 95%.
- Most customers (93%) are prepaid customers.
- Mobile phones are not subsidized, and therefore, customers keep their SIM cards. This contributes to relatively low abandonment rates.
- There are no monthly fees, so the customers tend to have several SIM cards from different providers.
- Completing a transfer between providers takes about 5 workdays.
- Virtual service providers are prohibited from operating in the Italian market.
- There are 3 key mobile operators.
- The Italian market is mature, and has exceedingly high penetration rates. This caused large providers to launch intense MNP marketing campaigns in order to attract new customers.

Given that virtual service providers are not allowed to participate, and that mobile phones are not subsidized, MNP usage was relatively low compared to that of the Scandinavian countries.

However, the rates are still high in comparison to those of other Western European countries. The main reason for that is that the large operators marketed the MNP service to potential customers. Another reason is that the MNP is not restricted to contract customers.

### *The Effect of MNP on Key Market Players*

Through the years, Italy had a relatively low abandonment rate of 1% - 1.5%.

Research shows that the MNP launch didn't have a dramatic impact on these numbers.

According to statistics, 17.6% of the customers who switched operators wanted to keep their original number (roughly 1/5).

### *Prevention Measures Taken by the Large Providers*

TIM – the main tactic used by TIM was improving their CRM systems.

The main objective was to develop a "one-on-one" relationship with the customers.

The idea was to follow the Pareto Law, and refer to 20% of the customers, who generate 80% of the revenues. The purpose of this was to enhance customer loyalty and cross-sell as much as possible.

TIM predicted that the MNP launch will promote abandonment, but abandonment rates actually declined, as a result of improving customer relations.

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Vodafone – did not invest much in promoting the MNP service. Much like TIM, Vodafone reported that abandonment rates dropped as a result of the MNP launch, attributing it to a new loyalty program Vodafone launched, in order to retain its most lucrative customers.

### **7.3 Singapore**

MNP effects were relatively small. The main reason for that is that customers using MNP had to pay a monthly fee to their previous service providers.

In August 2003, the law was modified, and now mobile companies in Singapore can collect a one-time commission from customers intending to use the service. Currently, there are no reports of an increase in abandonment ratios. But it might be too early to tell, seeing as most customers are contractually bound to their current providers, and it will be long before they can be released of those contracts.

### **7.4 UK**

The UK is the second country to ever launch the MNP service. Statistics show that one in every 5 customers to switch operators, asked to keep their old number.

Additionally, it is obvious that abandonment ratios in the UK have not grown post MNP launch.

The main reasons for the minor effects of MNP on market fluctuations are: no marketing campaigns, and a relatively long transfer period (up to 4 weeks).

### **7.5 Hong Kong**

Hong Kong is the third country to ever launch the MNP service, and the one with the strongest effects of MNP in the world. Statistics show that five years after launching the service, 85% of mobile customers used it when switching operators. The main reason for that is the fierce competition in the mobile market in Hong Kong. There are 6 key operators, and penetration rate is 107.9%.

### **7.6 Germany**

MNP was launched in November 2002, and according to the statistics, 15 months after the launch only 0.43% of mobile customers used the service. This is a very low rate, compared to other European countries.

What are the reasons for that? Well, the main operators hardly marketed the service, transfer completion is awfully long (31 work days), and there is a fairly high transfer commission.

## **7. Conclusion**

This article provides an overview of the influences of MNP in different countries.

Clearly, there are many factors affecting the levels of MNP usage, but a few conclusions can be drawn about the general phenomena:

- The more aggressive the marketing campaign is, the more aware customers become of the possibility of MNP, and the higher the usage of this service will be.
- The emergence of virtual service providers in the market can cause price reductions, and consequently increase the rates of abandonment dramatically.
- The longer the transfer process is, the lower the usage of MNP will be.
- Contract customers are usually more attached to their numbers, and therefore are more inclined to keep those numbers.

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**Synergy** aims to provide its customers with the ability of acquiring commercial advantages by informative analysis of their customers' shopping data.

**Synergy** has vast experience in working with leading commercial organizations, both locally and internationally, and its clientele includes foremost industry leaders in the communications, financial and retail fields.

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