



challenge

- Reduce maximum port time from 7 days to 24 hours
- Replace paper documentation with online Preliminary Consultation
- Aggressive schedule for MNP and FNP launches
- Facilitate number portability at lowest-possible cost for service providers

solution

- iconectiv implemented its industry leading TruNumber Portability Clearinghouse* solution for both MNP and FNP in record time
- Solution supported new online Preliminary Consultation and Hosted Validated Database
- Enabled smaller service providers to cost effectively access NP system

result

- Improved competition and better consumer choice.
- More userfriendly porting process
- Porting times reduced to 24 hours
- Cost-effective service provider access to NP system and support functions

overview | replacing the existing MNP administrator and launching FNP in record time

Mobile Number Portability (MNP) was originally launched in Peru in January 2010 via a cost-free process for consumers and a maximum portability transaction time of seven days. The process included the submission of documentation by users who requested to change service providers, as well as the manual validation processes made by the MNP Administrator. The results were below expectations due to, among others, the time the above mentioned transaction might take, and the user's level of awareness of this competition mechanism.

Against that background, in order to make number portability more consumer-friendly and encourage the development of a vibrant, competitive telecom market, the Peruvian telecoms regulator, OSIPTEL, approved new regulation in December 2013.

The Peruvian telecom market has over 30 million mobile and fixed service subscriptions. Movistar and Claro are the dominant market leaders in both mobile and fixed services with Entel Peru (formerly Nextel) being the number three service provider.

Key focus areas of OSIPTEL, the Peruvian telecoms regulator, are to encourage competition and improve service quality. The introduction of more consumer friendly MNP services and the launch of FNP are part of the effort.

Peru's mobile market is recognized for its potential. The entry of Viettel under the Bitel brand as the fourth mobile operator, aided by number portability, marked the beginning of a new and exciting chapter in Peru's telecom market.

*formerly known as Number Portability Clearinghouse

shortening the porting time to one day for mobile ports, removing the submission of additional user documentation and making the validation of porting requirements online. The regulation also required Fixed Number Portability (FNP) be implemented by July 2014.

After issuing a new tender for both MNP and FNP, OSIPTEL selected iconectiv Peru S.A.C. ("iconectiv")¹ in March 2014 for the implementation and administration of MNP and FNP systems. Despite aggressive deadlines, the introduction of new features, and concerns among fixed service providers regarding the cost of implementation, iconectiv was able to work with all the industry stakeholders to implement a joint MNP and FNP system in only three months. In July 2014, iconectiv successfully assumed the administration of the existing MNP service from the IECISA-INDRA consortium and launched the new FNP service on time, fulfilling all the regulator's requirements.

"Working with iconectiv has been a pleasant experience throughout the implementation process of the Main Centralized Number Portability Database in the public mobile service and fixed telephony service, and even during the test period."

"We underscore the demonstrated experience and full-time availability to resolve any issues, with the necessary flexibility and expedience, not only in the database implementation process per se, but also, in particular, to manage to execute the portability migration process in the public mobile service complying within the initially scheduled timeline."

OSIPTEL's official opinion on their experience of working with iconectiv Peru S.A.C.

challenge

In March 2014 OSIPTEL named iconectiv Peru's new number portability administrator commencing in July 2014. At that time, iconectiv faced a number of challenges:

- A tight three-month schedule for system implementation, service provider integration, and testing to ensure a smooth commercial launch
- Migrating the existing MNP data from the previous provider and seamlessly transitioning the MNP service without interruption
- Significantly shortening the porting time from 7 days to 24 hours
- Incorporating a new online process called Preliminary Consultation, which removes the need for consumers to bring paper documentation to the point of sale when requesting a port. It also minimizes the risk of rejected port requests

iconectiv also had to work in parallel with all the Peruvian fixed service providers in implementing, testing and launching the new FNP service while ensuring a highly cost-effective solution.

solution

iconectiv has deployed its world leading Portability Clearinghouse solution in multiple countries. The Portability Clearinghouse has been continuously enhanced over the years by incorporating best practices and number portability requirements from countries all over the world.

The field proven and robust iconectiv Peru solution has the following key characteristics:

- Supports both MNP and FNP in one version of the software
- Is remotely hosted to lower costs by leveraging iconectiv's existing number portability clearinghouse facilities
- Includes a centralized database for storing number portability data, message timers, and a graphical user interface for small service providers, the regulator and system administration

The system also supports the online Preliminary Consultation function. When a customer walks into a store to switch service providers, the old service provider (the donor network) receives an online query to verify the subscriber's information. The donor network is required to respond within 120 seconds. The number portability system monitors and reports the responses to the regulator to ensure the service provider complies with the number portability rules. If the donor network does not respond within 120 seconds, the port can still proceed by default but the incident is recorded by the system and can eventually lead to a substantial fine for the donor network.

To address concerns from service providers that lacked a Simple Object Access Protocol (SOAP) web services interface for the online consultation feature, iconectiv developed the Hosted Validated Database function to save unnecessary implementation costs.

getting the job done

iconectiv's industry leading technical skills, project management methodologies and decades-long experience in deploying number portability solutions were no doubt crucial for meeting the demanding deadlines required by OSIPTEL.

ensuring a seamless MNP transition

iconectiv put together a technical team with very strong project management and communications skills. The team was able to work directly with the regulator and service providers to develop the right

requirements and solution for Peru based on the local market conditions. Since there was already an old MNP system in place, iconectiv worked closely with the service providers to minimize the impact on their existing number portability gateways and make the transition to the new MNP system as smooth as possible. The company scheduled regular project status meetings with the service providers and OSIPTEL to exchange information and ensure that all of the stakeholders understood and were prepared for the upcoming activities. A key task was the migration of the MNP data from the old provider to iconectiv's new MNP system. This required agreement on the delivery formats and several iterations to ensure the migration would work as scheduled.

enhancing MNP system performance and customer support

Implementing number portability is as much a cultural change as it is a technical change that impacts the entire industry. By listening carefully to the service providers, the iconectiv team was able to learn what was working and what was not working with the old MNP system and then propose improvements. For example, one big improvement was the overall graphical user interface and the performance when querying a telephone number. The old application could take a minute or more to query a number, while the iconectiv solution returns an answer in seconds. Another improvement was the establishment of a 24x7 help desk that service providers can access via email

Timeline

award announcement	March 17th, 2014
software requirements definition	March 18th - April 17th, 2014
required hardware and 3rd party installation	April 21st - May 12th, 2014
software implementation and documentation	May 27th - June 20th, 2014
acceptance	June 2nd - June 26th, 2014
training	June 23rd - June 30th, 2014
established help desk and data center	June 2nd, 2014
industry testing	July 1st - July 11th, 2014
go live mobile	July 16th, 2014
go live fixed	July 26th, 2014



or phone. After the production launch, it became the main source of support for service providers.

result

The transition to iconectiv's new MNP system was seamless. On the morning of July 15th, 2014, iconectiv received the MNP data from the previous provider, migrated the data to the new system and successfully started the new MNP service on July 16, 2014. iconectiv's successful launch of the FNP service followed on July 26th, 2014.

The improved MNP and new FNP services contribute to the development of a competitive and dynamic telecom market in Peru. A more user-friendly porting process with faster porting times means that consumers can efficiently port their numbers with only one visit to the store and without having to bring any paper documentation.

FOOTNOTES

1 iconectiv Peru S.A.C. is a wholly owned subsidiary of Telcordia Technologies, Inc., doing business as iconectiv.

"Working with iconectiv was a very good experience; we had very good documentation and all was well organized and set so it helped us implement the systems on our side smoothly. Even though we did not have a chance to attend the onsite trainings, the good documentation and technical support were vital to have the portability system in operation."

"Well trained personnel, much experience in this type of job, good IT infrastructure, good organization and planning."

"Thank you for your patience and time in helping us address each difficulty at the development and testing."

OSIPTEL's official opinion on their experience of working with iconectiv Peru S.A.C.

reduced porting time from 7 days to 24 hours	Making porting easier for consumers. Requires only one visit to service provider's retail store.
online preliminary consultation	Simplifies porting for consumers. Removes need for paper documentation.
hosted validated database	Saves implementation costs for service providers. Eliminates need to develop new web interfaces.
remotely hosted number portability system	Reduces costs for service providers and consumers. Leverages existing iconectiv NP system facilities.
improved graphical user interface	Is user-friendly, saves time and reduces the potential for user error.
faster number query	Facilitates number query and saves employee time and costs.
improved 24x7 help desk	Improves efficiency and overall service quality.

about iconectiv

At iconectiv, we envision a world without boundaries, where the ability to access and exchange information is simple, secure and seamless. As the authoritative partner of the communications industry for more than 30 years, our market-leading solutions enable the interconnection of networks, devices and applications for more than two billion people every day. We have intimate knowledge of the intricacies and complexities involved in creating, operating and securing the communications infrastructure for service providers, regulators, enterprises, aggregators and content providers. Our 5,000+ global clients rely on us for network and operations management, numbering, registry and fraud prevention solutions. We are proud to be enabling the world of tomorrow by making new connections today. A US-based company, Telcordia Technologies, does business as iconectiv. For more information, visit www.iconectiv.com

make the connection.

For more information about iconectiv, contact your local account executive, or you can reach us at:

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