

## Challenge

Tenaga Nasional Berhad, Malaysia's largest electricity utility company, wanted to improve its business efficiency and customer service levels. The Company identified the customer call center as a key area that needed to be addressed.

The old call center infrastructure was spread out across 13 locations, without an integrated central management system. The call centers were also based on a PBX telephone system, which was unreliable and unstable, resulting in a high percentage of dropped calls.

Furthermore, the lack of a unified management system to help the customer service team track key performance indicators (KPI) meant that reporting and benchmarking customer service levels could not be carried out.

## Solution

TNB consolidated all its call centers into four locations, and deployed and integrated the Avaya Call Center solution in each of these locations. When customers call, they will be taken through an Interactive Voice Response (IVR) system, which will route them to the right customer service team.

To address the Company's management and reporting issues, the Avaya Call Management System was also deployed. TNB can now keep track of KPI and other key call center targets as well as explore call center process and workflow improvements.

## Value Created

- **Sharp decrease in dropped calls** – call centers are now able to answer 92% of all calls, compared to 50% previously
- **Key performance indicators are tracked**, allowing for benchmarking and analyses
- **Live information on calls can now be captured** and information can be easily analyzed in customizable reports
- **84% increase in customer service levels** since deployment

# Tenaga Nasional Berhad Powers Up for a Unified Customer Experience through Avaya's Integrated Call Center Solution

## About Tenaga Nasional Berhad

Tenaga Nasional Berhad (TNB) is Malaysia's largest electricity utility company, and is listed on the main board of Bursa Malaysia. With more than RM67.0 billion (USD19.4 billion) in assets, and approximately 28,000 employees, TNB provides electricity to more than seven million people via its own power stations and independent power producers (IPP) in Peninsular Malaysia and Sabah. TNB has earned a reputation for outstanding performance regionally and globally, and was the only Asian energy company shortlisted as one of the five finalists for the 'Power Company of the Year' in the 2007 Platts Global Energy Awards. Recently, TNB's CEO was named "Malaysia's CEO of the Year 2008" by the New Straits Times and American Express.

Being in the business of generation, transmission and distribution of electricity, TNB contributes to 55 percent of Malaysia's electricity needs through six thermal stations, three major hydroelectric schemes. In addition, TNB manages and operates the National Grid that is also interconnected to Thailand and Singapore.

TNB has also diversified its business interests, including manufacturing transformers, high voltage switchgears and cables as well as providing related services such as civil and electrical engineering works and project management to industry players within Malaysia and around the region.

TNB's massive operations were supported by 13 customer service centers, all of which operated in isolation. TNB wanted to further enhance its customer services, as well as improve employee productivity and operational efficiency by upgrading its telephone service capabilities and integrating its customer call centers.

## Business Challenge

TNB previously had 13 distributed call centers sites which were working in isolation. Powered by a PBX system, there was neither call reporting nor performance monitoring capabilities in its previous system, making it difficult to ascertain if

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— Ir. Nirinder Singh Johl, Senior Manager (Customer Relations), Tenaga Nasional Berhad

the call center was serving customer needs adequately. The previous call center system also had several specific problems that TNB wanted to address.

Firstly, with the previous system, calls were congested around several specific nodes and telephone exchanges, making the service unreliable and frustrating for customers especially during peak hours.

Ir Nirinder Singh Johl, Senior Manager of Customer Relations at TNB said, *“With the old system, we were only getting 50% of the calls made to us. The old telephone system could not support our call volumes and we had many dropped calls as a result. This was unacceptable. Being a national provider of electricity services, we had to improve our call center services.”*

Secondly, TNB wanted to ensure service levels were being tracked and benchmarked. *“We had no way of checking the statistics with our previous PBX system. Furthermore, with call centers scattered in 13 locations, it was difficult to measure key performance indicators (KPI) across the organization,”* said Mr Singh.

TNB decided to consolidate all its call centers to four sites, with performance monitoring managed centrally through a unified call management system.

TNB thus began looking for an integrated solution that in the future would enable it to transform its existing 220-seat call center into a full-fledged IP multimedia contact center, capable of supporting various communications mediums including emails, fax, Web, text message services and instant messaging. The multimedia contact center should also be able to incorporate computer-telephony interface (CTI) that will enable advanced call routing capabilities for more personalized customer service.

According to Mr Singh, *“Previously, our call center operators took customer feedback and suggestions manually. This system is cumbersome with such high call volumes and also meant that we were not able to respond quickly to customer demands. Moving forward, we wanted a solution that can unify our customer touchpoints and, more importantly, be able to incorporate a CTI solution in the future.”*

*“While our focus now is on the task of consolidating all our call centers and streamline our operations via an integrated call management system, we certainly wanted a solution that is also future-proof and can easily scale up to deliver more advanced customer services in the near future.”* Mr Singh added.

## The Avaya Solution

TNB worked with its telecommunications consultant in Malaysia to identify a suitable vendor to provide this Intelligent Communications solution. Said Mr Singh, *“Together with Telekom Malaysia, we studied the solutions proposed by Avaya and other suppliers. Avaya came up tops, especially in the factors we considered most important such as comprehensive call center features, integrated reporting capabilities, flexible implementation and ability to scale. Avaya's competitive pricing and reliable, strong, local support also helped to reinforce our decision.”*

The Avaya Call Center solution deployed in TNB included the Avaya Contact Center Express, Avaya Call Management System (CMS), and Avaya Interactive Response.

The Avaya Contact Center Express platform serves as the foundation on which TNB built its customer service improvements. Avaya Call Center, built

upon the Automatic Call Distribution (ACD) technology, offers more advanced call routing capabilities designed to help TNB customer service agents handle incoming calls more effectively and improve overall call center productivity. TNB can now better manage its multi-site call centers in a more integrated manner through Avaya's Communication Manager and implement CTI solutions in phases, according to its business needs and readiness. The solution also introduces end-to-end Session Initiation Protocol (SIP) architecture, which helps cut down hardware and trunk costs.

CMS provides information and management tools for TNB to monitor and analyze the performance of its contact center operations thus simplifying contact center administration and results tracking. *"The Avaya Call Management System helps identify the areas where we need to improve, monitor agent's performance and help ensure that there is consistent experience for our customers across the four call centers,"* said Mr Singh. TNB's.

Mr Singh added, *"We are also pleased that the entire deployment of the Avaya solution was relatively fast – taking about three months from start to finish. This includes ensuring a smooth switchover to the new IP-based phone systems as well as the consolidation of all our 13 call centers into the four sites."*

## Business Benefits

Since implementing the new Avaya solution, TNB has seen a sharp increase in the number of calls received. *"Our system today is definitely more reliable. With proper call routing and more advanced call center capabilities, we are seeing a lot more customers' calls coming through,"* said Mr Singh.

*"If we study the number of calls we are getting today, we can estimate that we previously answered only 50% of all the calls being put through to us previously, due to dropped calls."*

The new call center has managed to pick up to a maximum of 8,000 calls daily, which is 92% of all calls made to TNB. Customer service operations were also greatly enhanced as a result of the new Avaya Contact Center Express solution implementation. With Call Routing and Interactive Voice Response (IVR), TNB can effectively respond to the large volume of calls it receives everyday.

TNB has also experienced huge productivity improvements in its call centers. *"Call Routing and IVR helps us manage our workforce in the most efficient way. The customers won't be kept waiting for long before getting to speak to someone who can help them. More importantly, with Avaya's intelligent routing, customers now get to speak to the right service staff the first time round, thus ensuring a more effective interaction as well as consistent and personalized services across call centers."*

And with CMS, TNB now has access to comprehensive call reporting capabilities, including service benchmarks such as customer wait time and dropped calls. TNB can also leverage historical data to improve its call center operations and workflow that can help deliver improved customer services.

Mr Singh added, *"What I especially like is the ability to generate live reports to get the information that I need, such as actual service level numbers and percentage of calls answered. This gives us the capability to make "on-the-fly" decisions where necessary, to redistribute our resources."* CMS helps the Company view live, real-time information and use historical reports

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to measure KPI, analyze call trends, and establish performance benchmarks

## Extending Customer Service into the Enterprise

One of the most important improvements is the reduction in customer response time for field services. TNB service teams in Wilayah and Selangor have integrated MFFA (Mobile Field Force Automation) into the Avaya call center system. This means that call center agents can now inform the mobile team in the field of any customer who require assistance with their electricity system.

The ability to extend customer service into the enterprise is a very important step for TNB towards a unified communications infrastructure that will allow it to respond swiftly to customer needs.

## Future Steps

Certainly, the Avaya Contact Center Express solution has delivered multiple benefits to TNB and brought the company

closer to achieving its dual objectives of raising customer service levels as well as improving its call center management capabilities. Mr Singh revealed, *“Overall, our customer calls within service levels have at times exceeded 84 %, which is something we are very pleased about. We believe that we now have the call center infrastructure that we need to help TNB achieve our vision of being a Customer Centric organization.”*

This successful deployment has encouraged TNB to take further steps to develop the call center into a full fledged contact center. *“We have plans to turn our call centers into full-fledged multimedia contact centers that have the capability to reach our customers via multiple touchpoints and deliver a more expanded portfolio of services.”*

One way to achieve this is implementing CTI fully throughout its contact centers. *“This will enable us to extend our services into billing and even sales, so that customers have a one-stop service center for all their electricity needs.”*

Another upgrade that TNB is currently exploring is to introduce outgoing calls to its contact center. *“We are even looking at using predictive dialing to help us reach customers more effectively and improve the productivity of our call center agents,”* said Mr Singh, ending the interview on a positive note.

## Learn More

For more information on how Avaya Intelligent Communications can take your enterprise from where it is to where it needs to be, contact your Avaya Client Executive or a member of the Avaya Authorized BusinessPartner program, or visit **“Do Your Research”** at [www.avaya.com](http://www.avaya.com).

All statements in this Case Study were made by Ir. Nirinder Singh Johl, Senior Manager (Customer Relations), Tenaga Nasional Berhad.

## APPLICATIONS

- Avaya Contact Center Express
- Avaya Application Enablement Services
- Avaya Interactive Response
- Avaya Call Center Elite
- Automatic Call Distribution
  - Skills-based routing

## SYSTEMS

- Avaya Call Management System
- Avaya Communication Manager
- S8710 Servers
- G650 Media Gateway at main site
- G700 Media Gateways at branches

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## ABOUT AVAYA

Avaya is a global leader in enterprise communications systems. The company provides unified communications, contact centers, and related services directly and through its channel partners to leading businesses and organizations around the world. Enterprises of all sizes depend on Avaya for state-of-the-art communications that improve efficiency, collaboration, customer service and competitiveness.

For more information please visit [www.avaya.com](http://www.avaya.com).