# Intelligent Networks:

## Power up your GSM business.

NORTEL NETWORKS

*How the world shares ideas.*

**POWER UP** your business by adding innovative features that subscribers really want. Nortel Networks has the answers.

With our

# INTELLIGENT NETWORKS

technologies,

you have complete control over what services

you choose and when they are launched.

Not only can IN be deployed in any network,

but it is the best and fastest way to bring

services to market.

IN

# Dominate your market.
# Differentiate your service.

The competitive scenario for GSM operators tends to follow the same path : it begins with a coverage war and moves quickly to a price war. Once the dust settles, and coverage and price-cutting have been stretched as far as they will go, the picture changes again. That's when operators should start focusing on enriching their network by offering a unique package of subscriber services.

Service differentiation is especially important for new entrants whose coverage often cannot compete with the service provided by established operators. And it is a key strategy for operators in mature markets where competition is at its height.

What services can you offer and how are they deployed? Nortel Networks has the answers. With our **INTELLIGENT NETWORKS (IN)** technologies, you have complete control over what services you choose and when they are launched. Not only can IN be deployed in any network, but it's the best and fastest way to bring services to market.

## *Supercharge your network with solutions from a world leader.*

**#1 EXPERIENCE**

Nortel Networks has been developing and selling IN solutions for over ten years. We are a recognized IN leader, with an established global customer base and the world's first location- and advertising-based IN service in commercial use.

**#2 READY-TO-LAUNCH SERVICES**

We have developed off-the-shelf services which can be launched immediately including Prepaid Calling, Geo Zone, Location Inquiry, Sponsored Cell & Call, Virtual Private Network, Personal Number, GSM Call Management, and Calling Party Pays.

**#3 STANDARD CAMEL INTERFACE**

We are the leading contributor to Customized Applications for Mobile network Enhanced Logic (CAMEL) standards, providing added protection to your investments, and offering ubiquitous services for subscribers as they roam in other parts of the world.

**#4 STANDARD COMPUTING PLATFORM**

Our IN solution was based on a standard computing platform, standard protocols and Applications Programming Interfaces (APIs) more than two years ahead of the competition. As a result, our ServiceBuilder™ platform is now a mature, third generation open platform.

**#5 END-TO-END SUPPORT**

In order to meet your needs, we provide a total, end-to-end IN portfolio ranging from service definition to provisioning and commercial launch.

# Increase airtime and revenue with ready-made IN services.

*Our growing portfolio of off-the-shelf IN services will help you create a unique market positioning, capture more subscribers, and increase your revenue. Choose from these ready-to-run services to make your own specialized offering :*

**PREPAID CALLING**
allows you to offer multiple Prepaid packages to your subscribers, with different tariff plans, recharging and account balance notification options. This service also enables seamless international roaming for Prepaid subscribers.

**PERSONAL NUMBER**
improves how and when a subscriber can be reached and the manner in which the subscriber wishes to answer a call.

**GEO ZONE**
allows you to offer different tariff structures and services depending on where the subscriber is. Geo Zone enables operators to increase airtime and penetrate the fixed line market more effectively.

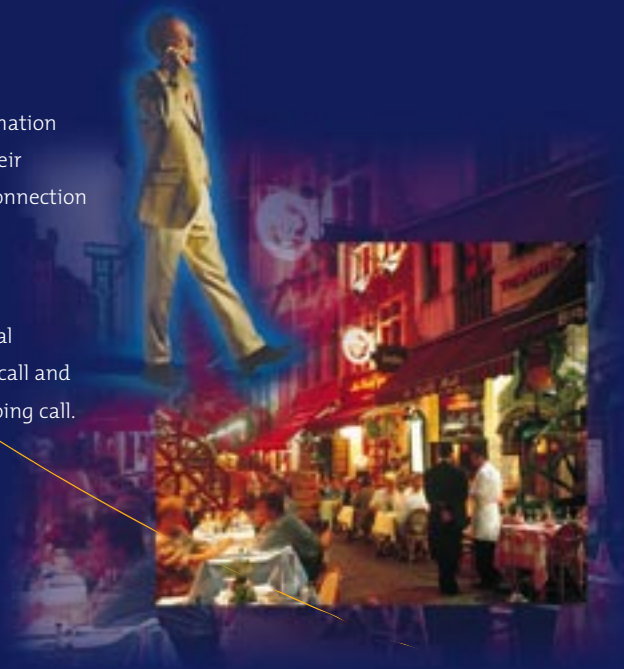
**VIRTUAL PRIVATE NETWORK**
is a set of corporate services that enable private network-like features to work for a group of GSM subscribers. You can customize services as well as different tariff plans to fit individual corporate customer profiles.

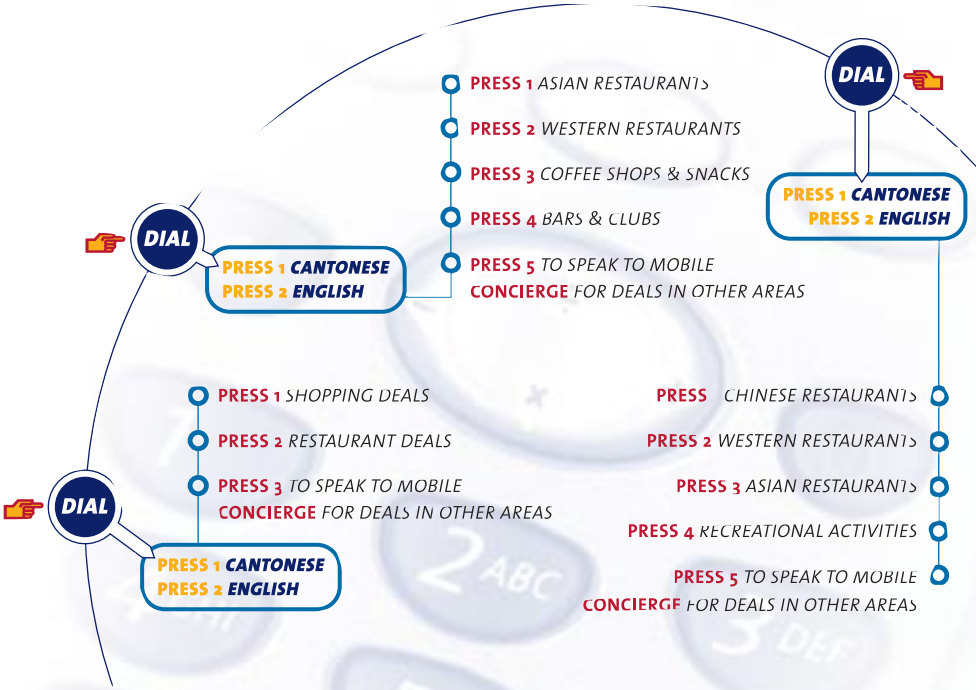
**LOCATION INQUIRY**
provides GSM subscribers with information on where to find useful services in their current vicinity. It also enables easy connection to any service they are interested in.

**SPONSORED CELL & CALL**
allows a sponsor to play a promotional announcement at the beginning of a call and subsequently pay for part of the ongoing call.

**GSM CALL MANAGEMENT**
is a set of services for incoming and outgoing call management, combining features such as short-code dialing and customized call screening lists to maximize efficiency and control costs, particularly when roaming.

**CALLING PARTY PAYS**
provides alternative charging principles in markets where the subscribers are charged for airtime on both incoming and outgoing calls.






# How IN services brought a "good deal" of success to this operator.

*"We selected Nortel Networks' ServiceBuilder™ IN platform as the vehicle to best deliver advanced INTELLIGENT NETWORK services to demanding Hong Kong subscribers."*

**CRAIG EHRLICH,**
**MANAGING DIRECTOR**

SUNDAY is a GSM operator in Hong Kong, one of the world's most intensely competitive markets for wireless service. They are also a customer of Nortel Networks. SUNDAY became a trendsetter for IN services when they deployed our ServiceBuilder™ platform in order to get an edge in their market.

SUNDAY uses the ***Location Inquiry*** service to offer Jetso ("good deal" in Cantonese) and Mobil Assist location-sensitive services to SUNDAY subscribers. The services have proven to be extremely popular with Hong Kong wireless users, and so far have not been duplicated by any other operator.

These two services were launched in January 1997 and have been met with tremendous success, both from the point of view of subscribers using the services, and from the advertisers wanting to have their names listed.

# Nortel Networks puts you IN control.

Nortel Networks' integrated portfolio of IN applications, tools, and platforms was developed to give our customers complete control over the design, delivery and management of services. Nortel Networks provides end-to-end Intelligent Network solutions which consist of four main parts :

**#1 SERVICEBUILDER™**

the network elements Service Creation Environment (SCE), Service Management System (SMS), Service Control Point (SCP), Intelligent Peripheral (IP) and software architecture involved in the creation, deployment and management of services.

**#2 GSM NETWORK COMPONENTS**

the network elements Mobile Switching Center / Service Switching Point (MSC/SSP), Home Location Register (HLR), Service Transfert Point (STP) which support network signaling and switching functions.

**#3 SERVICE CONSULTANCY & APPLICATION DEVELOPMENT**

encompass the design and testing of new services from market demand analysis through to market deployment and subsequent management.

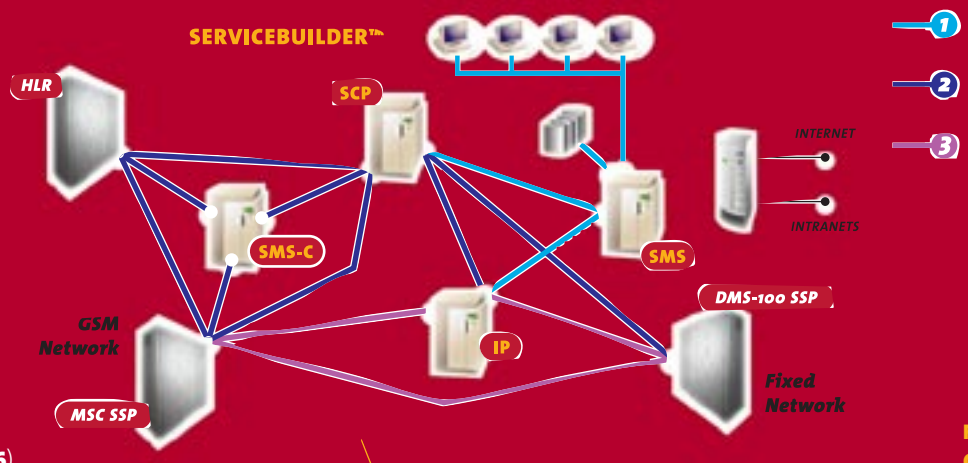
**#4 OFF-THE-SHELF SERVICES**

a growing portfolio of services to reach the market quickly.

We are committed to providing standards-compliant products to enable you to deploy networks using open interfaces. Our IN portfolio, including ServiceBuilder™ and the DMS-MSC/SSP and DMS-HLR are compliant with Core INAP and CAMEL Phase 1.

We are the first vendor to provide CAMEL phase 1, thus enabling subscribers to fully benefit from their GSM IN services in a roaming environment.

We are committed to offering a CAMEL Phase 2 compliant IN solution by the year 2000. Operators around the world will soon be able to choose their preferred GSM IN solution independently from the rest of the GSM network components.




**FIXED-MOBILE CONVERGENCE READY**

# Develop your potential for delivering advanced services.

In addition to providing the IN platform, we also offer a complete end-to-end service, including engineering, integration and support service, to provide you with the best time to market, best-in-class reliability and seamless evolution.

Our ***solution*** covers the following :

**#1 MARKET ANALYSIS**

We assist operators in identifying market demands and trends.

**#2 SERVICE PACKAGE DESIGN**

Let us help you design the most suitable service package for your needs, using ready-to-launch services.

**#3 NETWORK INTEGRATION**

We help protect your investment by providing an end-to-end solution, from initial deployment to the upgrade stages, including complete network integration and system interoperability services.

**#4 TRAINING**

We offer technical and sales training to help operators develop and sell their own unique IN services.

(IN)

Our Intelligent Networks solutions allow you to stay ahead of the competition in terms of subscriber loyalty, technological superiority and increased revenue. Our innovative services also enable you effectively to sell into the vast market of advanced users, information services and advertising.

## *Tap into the potential of the services market*

Find out how you can become a leader in your market by leveraging IN services. Contact your Nortel Networks representative today.

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