

# Next Generation Messaging

## [ITP]



### Key Features

- Coordinates and simplifies communications, Presence and Interaction options on the phone
- Flexible UI in terms of features, navigation and branding
- Able to configure what services a user is given access to and in what order
- Enables third party service access
- Enables development of new features and services by third parties
- Able to support new and compelling presence attributes
- Extensive and flexible reporting
- Billing gateway for pre pay and post pay
- Customer care administration tools
- Interoperability with other operator and ISP services using NeuStar Hub

### NeuStar ITP [Interaction Platform]

#### Mobile Communications and Interaction

Communication needs are evolving from basic communications to having a choice of communications options that enable people to connect, share and interact with people within their social and corporate networks.

The NeuStar Interaction Platform (ITP) is a core part of our Interaction Framework vision which enables network operators to evolve from IM to offer a broad range of operator and third party web services that use address book, presence, identity, media sharing and communications capabilities.

The technology within ITP comes from our IMSC, MMG and PSP products which have been proven across numerous commercial IM service deployments since 2000.

The ITP is designed as an open and extensible platform that enables NeuStar, Network Operators, Internet communities and other third parties to develop features and services.

Development is supported by a developer program which provides an SDK, test servers, documentation and support.

Network operators are able to decide on the super-set of features that are offered to their customers who are then able to add and remove services to reflect their interests and device capabilities

New features are accessible using NeuStar Clients or third party Clients that connect to the ITP.

The NeuStar Interaction Client (IT1.x) enables the user to interact in a simple and engaging way by coordinating the many separate communication options available on a phone around the address book. Additional services are either associated with contacts or use an additional 'tab'. The UI offers flexibility in terms of features, navigation and look to promote an operators brand and reflect a user's personality.

#### Operator Benefits

- **Drives retention and acquisition** as mobile communication and interaction are highly valued
- **Higher Service use** by delivering an engaging and convenient communications experience
- **More interaction** prompted by awareness of status changes
- **Increased Value to Internet service partners** who want their services to be part of this environment
- **Common infrastructure** which enables existing and new services to be integrated into one environment

#### User Benefits

- **An easier, more effective and more engaging** way to interact
- **Coordinated communications** that work around people
- **More opportunity for self expression** using avatars and status messages
- **Able to share & be more aware** of others mood
- **A feeling of being connected and 'in touch'** through presence updates
- **Control** over what you share
- **Easier to manage intrusions** by different people and groups
- **New services** available quickly
- **Able to add and remove services** to reflect interests and device capability

# NeuStar ITP

## [Interaction Platform]

### Specifications

- **IMPS CSP (Client-Server Protocol)**  
Client access by IMPS Clients
- **IMPS SSP (Server-Server Protocol)**  
Presence interoperability between remote presence servers and distributing standardised presence information to external services
- **OMA User Agent Profile (v1.1)**
- **vCard (v2.1)**  
Exporting/importing contact information in standardised form
- **Software infrastructure**
  - Operating System: Solaris 10
  - Database: Oracle 10G
- **Protocols**
  - OMA IMPS (WV): Version 1.1, 1.2, 1.3 for CSP and version 1.2 for SSP
  - Protocol Binding: SMS (plain text), XML and WBXML
  - CIR methods: SMS, WAP Push, UDP, TCP
  - IMS: OMA SIMPLE IM, PRS and XDM, IEFT XCAP
- **Common Integration interfaces**
  - SMSC via UCP, SMPP, or CIMD2
  - PPG via PAP
  - Generic integration via Web
  - Services (SOAP) interface

### Customer Example

The technology within ITP comes from our IMSC and MMG products which have been proven across numerous commercial IM service deployments since 2000.

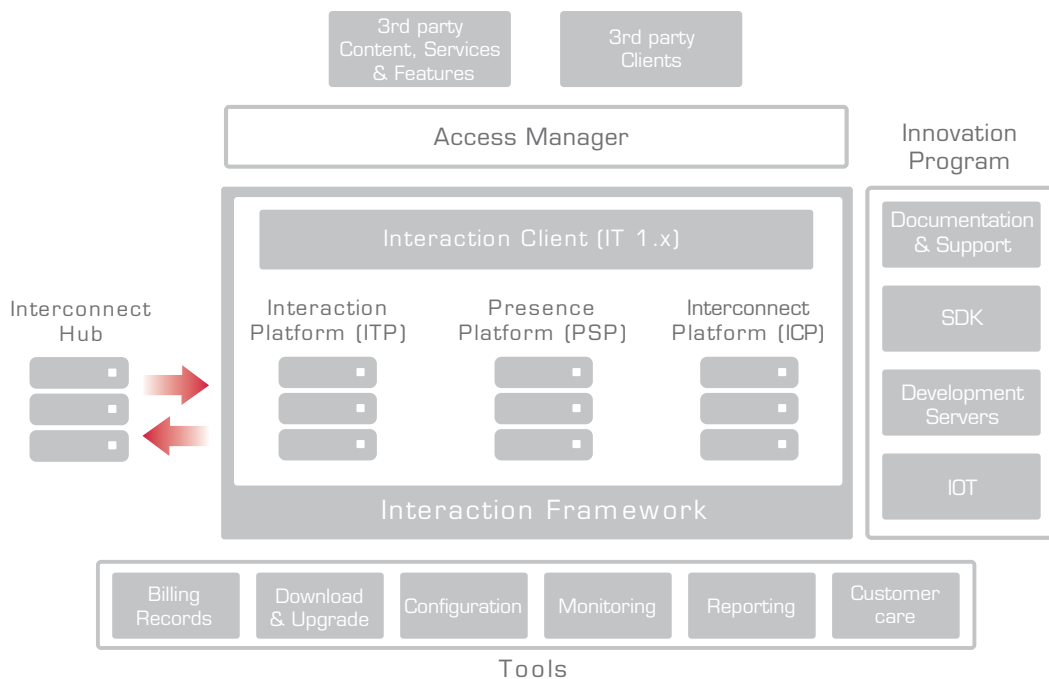
First launched in 2000, the IMSC solution is a white labeled IM solution used by operators worldwide, including Turkcell, Beeline, Mobinil and Telecom Italia.

Using open API's, Turkcell was also able to create unique and innovative services on top of Turkcell Messenger such as "Info-buddies" which provide the latest news, sports and stock quotes through the address book and chat rooms, which now represents around 40% of their instant messaging traffic.

The Mobile Messaging Gateway (MMG) solution enables mobile operators to quickly Mobilise popular Internet communities IM and email services.

MMG is the platform behind the IM service offered by the 3 Group companies. UK launched its award winning Windows Live Messenger in August 2006 and in the month of June 2007 alone sent 133 million messages. Yahoo! Messenger was launched in August 2007.

In 2007, NeuStar announced that it had delivered 3 billion instant messages across its MMG and IMSC platforms.



### About NeuStar NGM Mobile Applications

NeuStar Clients are field-proven and have been developed in collaboration with operators, handset manufacturers and ISP's. Key elements of the NeuStar Clients are: great user experience, ease of use, flexible branding, OTA configuration, innovative features such as battery saving mode and standards compliance.

NeuStar Clients make communications simpler and more engaging as a result of feedback from live customer deployments.

Applications have been deployed as downloads, preloads and integrated mobile applications.

Supported platforms include Java, Symbian and Windows Mobile. Browser based access is also an option for emerging markets with very limited handset capabilities.

Client protocol support includes IMPS, SIP and XMPP.

