

# IMS For Transportation

*January 2009*

If you run a box delivery company or taxi fleet, your priority will be to keep track of the goods or vehicles and make sure that they reach the customer at the right time and as cost efficiently as possible.

SinTech's innovative Internet Protocol Multimedia Subsystem IMS for Transportation uses the driver's GPS-enabled mobile phone to allow a centrally-based dispatcher to control the entire fleet from a PC - the perfect communication solution that will delight your customers and make your business more profitable.

## **TOTAL FLEET MANAGEMENT THE EASY WAY**

SinTech's innovative and extremely cost-effective solution means the end of conventional walkie-talkies whilst enabling even more flexible voice (and text!) communication to individual and groups of drivers. A map-based view allows your dispatcher to keep track of every driver - the ultimate objective for any fleet operator.

## **FROM THE DRIVER'S END...**

Simply equip each driver with a mobile phone containing the SinTech IMS Client application which transforms the phone into a 'walkie-talkie'.

The driver's position is read from the phone's GPS device and transmitted to the dispatcher's PC and/or other colleagues interested in the information.

The application will also join a special push-to-talk-over-cellular (PoC) Group, called the Dispatch PoC Group - used as the dispatch channel for all your drivers.

The driver is able to talk to the dispatcher by pressing a single 'push-to-talk' button, just like using a walkie-talkie. It is also possible to select one or more colleagues from the contact list in the

application, see if they are available and start a walkie-talkie style conversation.

#### AND FROM THE DISPATCHER'S END...

The dispatcher runs an ordinary PC with the SinTech Dispatch application. The main screen contains a large map, showing the positions of all the vehicles in the fleet. Next to the map is a window displaying every driver for easy access.

The Dispatch PoC Group channel is permanently setup, which allows the dispatcher to talk to all drivers (or any subset of them) by pressing a button. If an individual driver answers - which only the dispatcher can hear - the dispatcher can simply setup a one-to-one conversation with that driver.

If drivers are busy and do not reply, the dispatcher can send text messages instead. The Dispatcher can also set up "GeoFences". These define rules that trigger alerts when drivers leave or enter a pre-defined area - ideal for optimising the spread of your vehicles over a territory.

## Technical Description

SinTech IMS for Transportation is based on an application for mobile phones and an application for desktop computers.

Based on modular architecture, the solution is perfectly tailored to meet the needs of your transportation fleet.

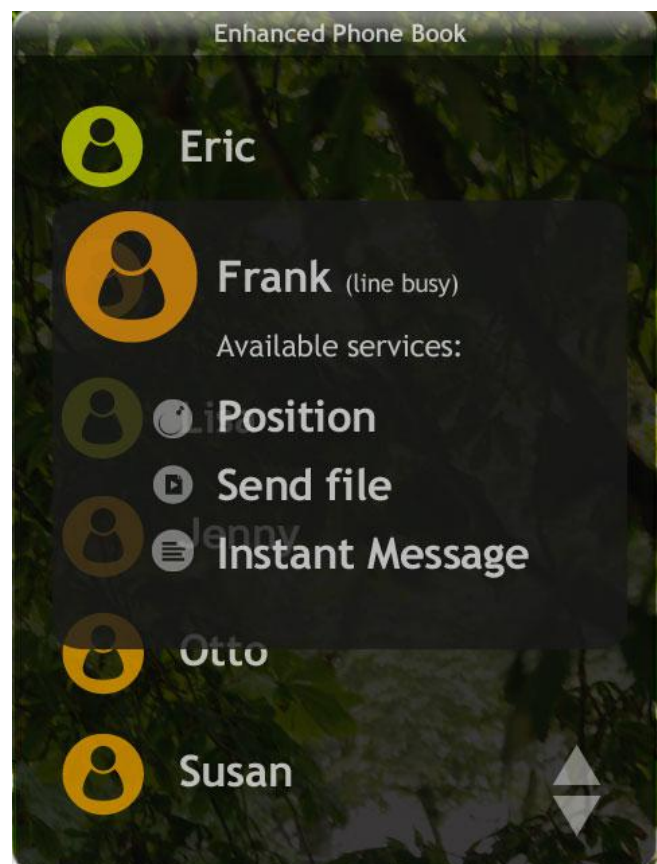
Since IP Multimedia Subsystem (IMS) is used as the underlying bearer, it merely requires access to an operator with IMS infrastructure (including PoC, XML Document Management (XDM) and presence services).

There are two main components to the IMS for Transportation solution: the SinTech IMS Client and

the SinTech Dispatch application:

#### SINTECH IMS CLIENT

The IMS Client is an efficient application for inexperienced mobile phone users that give simple access to the most vital features needed for your fleet driver's work.



*SinTech Client on Mobile Device*

#### FEATURES:

##### *Presence Enhanced Phonebook:*

- The main screen shows a contacts list.
- Manage the contacts list: add, delete or modify contacts and create groups to organize a large set of contacts.
- Presence information is displayed for each contact - showing availability.
- Launch the communication services to any person(s) on the contact list.

##### *Push To Talk:*

- Auto-joins the Dispatch PoC Group when the application is started.
- Press a button to talk to the Dispatcher.
- Start walkie-talkie style conversations with one or more persons from the contacts list.
- Create PoC Groups with persons from the contacts list to make GroupTalk (pre-defined group) sessions and ChatTalk (where users can enter and leave at will) sessions.

#### Voice over IP (VoIP):

- Start IP-based phone calls with other persons carrying the SinTech IMS Client or administrators running the SinTech Dispatch application.

#### IMS Messaging:

- Send text messages to contacts or the dispatcher.
- Setup IM sessions to chat with one or more contacts.
- Send and receive objects (such as images and audio/video clips) in the IM session.

#### Video Sharing:

- Send live video to a person in the contact list, to share information about your location.

#### Inbox:

- Storage of incoming text messages and PoC Group advertisements.
- Allows adding received PoC Groups to the Group List.
- Launch communication services directly from the *Inbox*.

#### Call Log:

- *Keep track of missed, received and established IMS sessions.*
- *Launch communication services directly from the Call Log.*

#### Common:

- Use the speakerphone in the handset.
- Use a dedicated talk button.
- Visual and tone indication of the status in walkie-talkie style conversations - tones that indicate permission (or not) to speak and visual indication of the current speaker in an ongoing conversation.

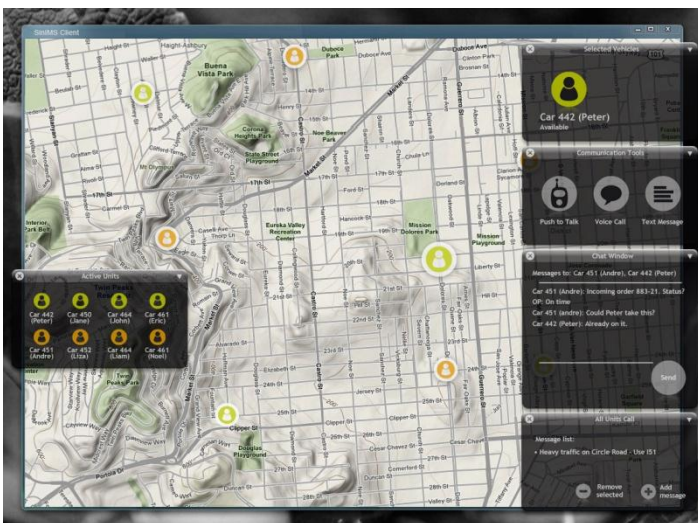
### SINTECH DISPATCH APPLICATION

The Dispatch Application is an excellent tool for centralized administrators (dispatchers) to control your fleet. Other office-based staff could also use it, if they need regular communication with your people in the field.

### FEATURES

#### Dispatcher:

- *Creates the dispatch group; adds drivers to a PoC Group and distributes this group information to all its members.*
- *Easy to setup a one-to-one call to a member of the dispatch group - the driver that answered the dispatch call.*
- *Dynamically populate the dispatch group based on certain criteria, e.g. within 10 kilometres from a specific location.*



SinTech Client on PC



*Desktop IMS Client:*

*Easy management of contact lists and groups.*

*Call Log:* called/received/missed, timestamp, duration. Easy to setup sessions or send text messages to persons in the Call Log.

*ChatWindow:* possible to open a dedicated window for text conversations with a contact.

*Multiple IMS Sessions:* Can have several ongoing sessions with different contacts.

*Desktop Application:* Delivered with InstallShield, that enables fast and easy installation. Drag and drop with contacts for creation of groups and movement of contacts between groups.

*Common:* Tone indications (as the Mobile IMS Client) Both visual and audio indications for floor control.

*History logs:* Possibility to save audio data (i.e. talk sessions).

## **Key benefits of IMS for Transportation**

Keep track of your goods or taxi pick-ups: SinTech IMS Client, distributed to every driver in your fleet, will send its location to the centralized dispatcher. The dispatcher can view the position of all fleet vehicles on a map.

*Increase efficiency by an integrated means of communication:* The dispatcher sees the position of the drivers in real-time. Text messages can be sent and walkie-talkie style conversations can be started with some simple clicks in the SinTech Dispatch Application. One or multiple drivers can be addressed.

*Monitor in which areas the drivers are operating:* Setup 'GeoFences' and be alerted when drivers enter or leave a certain area. Another use case could be to get a notification when a driver is approaching a customer's location and give an exact time of delivery.

*Reduce your communication costs:* SinTech IMS for Transportation works with standard mobile phones with GPS support. No expensive hardware is needed to get going. The mobile network (for example, 3G, GPRS or WCDMA) is used as communication bearer.

*A complete digital solution:* IMS is available where there is mobile phone coverage. Thus, no more limitations with analogue radio systems and walkie-talkie. The digital audio gives clear and secure conversations.

*Finally, the best news of all...* in addition to the efficiency boost that SinTech's IMS for Transportation will give to your business, it does not require a huge and expensive investment.

### **ALL YOU NEED IS:**

Access to a mobile phone operator that has an IMS-enabled infrastructure,

Standard mobile phones based on Symbian S60 or Windows Mobile with GPS support,

Any ordinary desktop PC to run the Dispatch application.



## Customized to your requirements

Because SinTech's IMS solutions are based on a modular building block architecture, we are able to easily customize features to exactly match your operational requirements - providing you with the solution you would have designed!

## Want to know more?

If you want to know more about how SinTech's IMS for Transportation solution can be rapidly and cost-effectively applied to your transportation fleet, including any further technical information, contact us on:

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Web: <[www.sintech.se](http://www.sintech.se)>

Email: <[sales@sintech.se](mailto:sales@sintech.se)>

SinTech - Sindarin Technologies AB is supporting governments and corporations by creating a more efficient, safer and more cost efficient communication solution by utilizing the latest communication technology standard: IMS, IP Multimedia Subsystem. SinTech's communication suite is based on open standards and includes means of communication such as Voice over IP (VoIP), Walkie Talkie, Messaging/Chat, Video Communication and File Sharing. The communication suite can be further enhanced with support for encryption as well as positioning.

SinTech's communication suite is available and downloadable for a large number of mobile devices as well as desktop computers.

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