



TracPlus – Next Generation Tracking

Daestra New Zealand Ltd
Centre for Innovation, 87 Saint David Street, Dunedin 9054, New Zealand
contact@daestra.com

Flightcell International
98 Vickerman St , Nelson, New Zealand
Info@flightcell.com

what is TracPlus?

Flightcell recommends Tracplus as the mapping and tracking solution for use with the Flightcell DZM System

TracPlus is a securely hosted global tracking service proudly developed and provided by Daestra New Zealand.

TracPlus provides live tracking data of any compatible terminal allowing authorized subscribers to view live and historical movements of their assets, as well as current location, heading and speed. This critical information can be easily and securely viewed with a variety of mapping applications

TracPlus is a terminal and network independent service, allowing users to choose hardware and network providers that best meet their needs. TracPlus is also installation independent, allowing the seamless tracking of airborne, maritime and terrestrial assets within a single unified system.

how does it work?

A TracPlus compatible terminal is installed onto the aircraft, vessel or vehicle to be tracked. Frequent location, status and mission reports are transmitted across satellite or cellular networks to secure servers at the TracPlus data centre.

TracPlus users connect to the data centre across the Internet and view tracking information (both current and historical) using a dedicated Windows™ mapping application, a web browser or GoogleEarth™. New client applications will include SmartPhone™, Apple iPhone and Windows Mobile™ PDA's, providing "anywhere access" to tracking information.

what about flexibility?

TracPlus allows users to choose terminals that meet their specific needs. In the same way that cellular network providers offer a choice of cell phones from different manufacturers, TracPlus offers a choice of compatible terminals from different manufacturers. This allows users to upgrade or deploy different types of terminals to their fleet without having to change their tracking service provider.

why a hosted service?

Unlike point to point systems, a hosted tracking service allows operators to access their data from anywhere in the world, without having to purchase and manage dedicated computers and network equipment, leased connections, virtual private networks and so on for their operation.

A hosted service also means that users can easily and securely share information with other users. Regardless of what types of terminal are used, TracPlus users can share any tracking

information with family, friends, contractors, customers, monitoring, and emergency rescue/response coordination services or even the general public.

what maps are used?

The TracPlus client application uses NZTM Geographx™ maps for unmatched clarity and representation. These maps cover the whole of New Zealand, the subAntarctic islands, the Chatham and Antipodean Islands; and can be seamlessly scaled from 1:10,000,000 to 1:40,000. Corax Topographical maps for New Zealand and Blue Marble satellite imagery are scheduled for release in July 2007.

New maps are being developed for international markets, including Australia, United States of America and the United Arab Emirates.

TracPlus users can also use GoogleMaps™ and GoogleEarth™ to track assets anywhere in the world, as well as the automatic creation of website maps for publicity and marketing purposes.

can I install the software on multiple computers?

The TracPlus client can be installed on multiple computers within an organization without restriction. However, users are restricted in the number of simultaneous uses of their usercode. Additional concurrent licenses can be purchased if needed.

what terminals can be used?

The FlightCell DZM ICS is the flagship terminal for TracPlus.

Any terminal that supports industry standard telemetry protocols, such as SMS, FTP, SMTP, GPRS, CDMA, WiFi, Iridium SBD and Inmarsat D+ SBD can also work with TracPlus.

do you make terminals?

Daestra provides tracking services and innovative software solutions. We work closely with terminal manufacturers and network providers to ensure that as many terminals and networks are supported as possible.

which terminal should I choose?

Users should choose a terminal that meets their operational and budgetary requirements, taking into account the following:

Coverage

Coverage is related to the data telemetry network used by the terminal. Terminals may use a satellite network, such as Iridium or Inmarsat; a cellular network, such as CDMA or GPRS (; or they may use a combination of both.

Satellite networks offer global or near global coverage, but incur higher per-message costs, resulting in higher operational costs.

Cellular network coverage is primarily based on population density. While such coverage is reasonable in well populated and flat regions, it is sparse in mountainous areas. Terminals that rely on cellular networks must store reports while transiting between coverage areas. In the event of an accident outside of cellular coverage, critical position information may have never left the aircraft or vessel. **For this reason, we will not support the use of cellular-only tracking of aviation or maritime assets.**

Dual network terminals, such as the FlightCell DZM are able to use switch between satellite and cellular networks based on cellular coverage, resulting in improved operational costs.

Compliance

how does TracPlus support different terminals?

Aviation and maritime users have regulatory obligations specific to their type of operation. Users are responsible for ensuring the installation of any terminal is in accordance with those obligations.

Daestra works closely with Flightcell and other terminal manufacturers to ensure that TracPlus supports all of the capabilities of different terminal types.

TracPlus automatically takes into account the different capabilities of terminals when presenting and acting upon information received from terminals.

For example, a DZM provides mid-report track representation, or “breadcrumbs” (these provide greater insight into pre-accident behaviour, enabling a more informed SAR response). DZM’s also allow push-button registration of points of interest (e.g. the location of a found SAR target or the perimeter of a bush fire); distress messages; activation and deactivation of flight following services; and keypad entry of flight specific information (job number, POB etc).

TracPlus recognizes the additional features of advanced terminals such as the Flightcell DZM, and uses that information to better represent the status and flight of the target.

Where a terminal type supports certain “well-known” message types, TracPlus then builds on that support to deliver additional functionality over and above what the terminal can provide by itself. For example, any terminal capable of issuing a distress message can trigger the TracPlus service to issue SMS and pager alerts, urgent emails and desktop alerts.

When terminal manufacturers introduce new functionality and message types, TracPlus’s unique PassThru technology allows that information to be passed directly through to the client without the need for new client software releases.

what about flight following?

Like other tracking solutions, TracPlus complements and supports existing flight following procedures for aviation users. True and autonomous flight following functionality within TracPlus is scheduled for development in the third quarter of 2007 with a goal of full CAA certification. Please note that entry level terminals may not be capable of supporting autonomous flight following.

who is using TracPlus?

TracPlus users include commercial helicopter operators, ambulance coordination services, air rescue operators, police departments, rescue coordination services, and federal and state agencies.

what about security?

Daestra takes the security of user data very seriously. In accord with best industry practice, data security measures mirroring those found in online banking systems are used. User data is backed up continuously, and information will not be divulged to anyone else without express consent.

what about reliability?

In July 2007, Daestra’s data centre will move to a high availability facility specifically designed to host mission critical online applications. At that time, data servers will be mirrored in a backup facility in Dunedin, with a third mirror planned for Melbourne.

what do I need?

To run the full Windows PC client and high resolution New Zealand maps, or Google Earth, a personal computer meeting or exceeding the following specifications is recommended:

- Operating System: Windows XP

- CPU: Pentium 4 2.4GHz+ or AMD 2400xp+
- System Memory (RAM): 512MB
- Hard Disk: 2 Gb free space
- Broadband internet connection
- Graphics Card: 3D-capable with 128MB of VRAM (256 Mb or higher recommended).
- Screen: 1024x768, "32-bit True Color"

To use GoogleMaps, users require a PC or Mac with a broadband connection and an up-to-date web browser.

how do I find out more?

For more information, please contact

Daestra New Zealand Ltd

+64 3 477 8656

+64 21 535 294

skype: daestracom

www.daestra.com

contact@daestra.com

Flightcell International Ltd

Phone +64 3 5458651

Fax +64 3 5488091

info@flightcell.com

TracPlus screen shots



