IC news

In this issue:

Icom Debuts P25 Trunking and Next Generation Digital
International Wireless Communications Expo (IWCE)

Las Vegas – IWCE, booth 1407 – Icom announced (pre-released) two impressive and highly anticipated product lines in P25 trunking and 6.25 kHz digital narrowband technology. VHF trunked P25 (including conventional P25) will soon be available with the F9011 portable and F9511 mobile subscriber units (136-174 MHz).

Trunking uses a dedicated control channel in a radio repeater system for increased efficiency of all reserved channels and system resources, allowing a greater number of talkgroups in police, fire and EMS. Reliable system access, flexibility and performance are all achieved. The slim and powerful (6 watts RF output) P25 trunked portable arrives in three versions: full keypad with display, simple keypad with display and no display/no keypad version. All versions have a BTL amplifier enabling 1 watt of loud and clear audio output, even when using an optional speaker-mic.

The P25 trunked mobile, also available with full and simple keypad versions and backlit LCD display, comes with a 22 watt PA (Public Address) with BTL amplifier, audio compander and detachable front control panel (optional). In addition to the F9011 and F9511, Icom revealed a prototype of its P25 Trunking repeater. The repeater model is capable of upgrading a second RF channel module for a two-channel repeater.

 For those with an appetite for narrowbanding, Icom unveiled the Icom Digital Advanced System (IDAS). IDAS (pronounced eye-dus) is Icom's next generation professional digital two-way radio system – an ideal fit for business and industry (B&I) users thinking of migrating sooner than later to advanced digital 6.25 kHz technology.

The value proposition of 6.25 kHz is its increased communication coverage, doubled channel capacity, enhanced digital features, improved security and audio, integrated data and maximized overall performance, including improved sensitivity and longer battery life.

All IDAS products are compatible with legacy FM analog radio systems (dual mode operation analog/digital). Additionally, all IDAS products are multimode, operating in legacy 25 kHz and narrowband 12.5 kHz and ultra narrowband 6.25 kHz bandwidths.

IDAS empowers B&I users with the flexibility to make the transition to narrowbanding (25/12.5 kHz to 6.25 kHz) at their own pace – keeping their current analog and 12.5 kHz investments operational while benefiting immediately from digital 6.25 kHz.

For People Who Make Smart Choices

A new dealer sales incentive program
A race to the finish line...

Icom Canada dealers are jockeying to win a spot for the three-day all-inclusive trip to April Point Lodge located on B.C.'s west coast. The dealer incentive program started January 1 and will end on June 30, 2008. You can expect a race to the end! There are three ways to qualify to for the trip:

1. Be one of the top 5 dealers in sales during the promotional period.

2. Be one of the top 10 dealers based on percentage growth in purchases from Icom Canada. A minimum purchase amount of $30,000 during the promotional period is required to qualify for this category.

3.Purchase $5000 or more and receive one entry into a draw where 5 tickets will be drawn.

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Icom Debuts P25 Trunking and Next Generation Digital

In December 2004, land mobile radio (LMR) licensees received an FCC mandate to migrate from their existing 25 kHz-wide channels to 12.5 kHz-wide channels by 2013 in order to free up congestion in the LMR radio spectrum. In March 2007, the FCC, while not yet establishing the fixed migration date for phase 2 narrowbanding (6.25 kHz), urged "licensees to consider migrating directly to 6.25 kHz technology rather than first adopting 12.5 kHz technology and later migrating to 6.25 kHz technology".

Among its many benefits described earlier, IDAS' most noticeable benefit is its doubling of channel capacity, effectively fitting two 6.25 offset kHz channels inside the 12.5 kHz bandwidth space. This gained channel, for example, can be dedicated (next to the voice channel) for data. IDAS is powered by the NXDN ™ common air interface and protocol jointly developed by Icom Inc. and Kenwood Corp. NXDN uses a channel access technology called FDMA that produces true 6.25 kHz spacing. FDMA contrasts the TDMA access technology used by Motorola's 6.25 kHz equivalent, MOTOTRBO™. An information paper explaining these two access platforms is published and available from Icom. IDAS compatible radios include the F3161/F4161 portable (next generation F3061/F4061), enhanced F5061/F6061 mobile and the FR5000/FR6000 repeater. Visit the Icom IDAS website for exciting details on next generation digital: http://www.icom.co.jp/world/idas.

TECH CORNER ——— Explaining P25 Squelch Types
Knowledge Base Article Reference Number 63KC214268

Just like in a conventional radio, there are three levels of squelch that can be set in a P25 radio. These different levels allow you to fine tune the RX radio selectivity. Squelch levels are set in the programming software and are activated in the **Memory CH » Squelch Type** field.

When the squelch type is set to **OFF**, only the frequencies have to match for two radios to open squelch and communicate. NAC codes, Talk groups, and individual radio IDs are ignored.

Using NAC squelch is similar to setting CTCSS tones in a conventional radio. The frequency and the NAC code must match before squelch will open. Set the squelch type to **NAC** to enable this feature.

To make a selective call to a talk group or individual radio, set the squelch type to **SEL**. With this setting the frequency,

the NAC code, and talk group ID must match before squelch will open. You can also make a call to an individual radio from a talk group, by pressing a key that has been programmed with an individual ID function. However, remember that with **SEL** enabled, the radio will default to talk group ID squelch if you do not press the programmed individual ID key.

This works only when using a key one programmed with the individual ID function.

For People Who Make Smart Choices
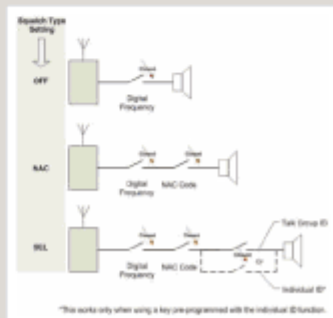
iDAS
ICOM DIGITAL ADVANCED SYSTEM

## IDAS bridges the gap between analog and digital systems

IDAS is Icom's digital land mobile radio system using the NXDN™ common air interface. It has useful calling features including selective calling, status message, radio stun/kill/revive and GPS position reporting, etc. The IDAS system is ideal for business and industry users who may want to migrate to a digital system or to the future FCC mandated narrow band spacing.
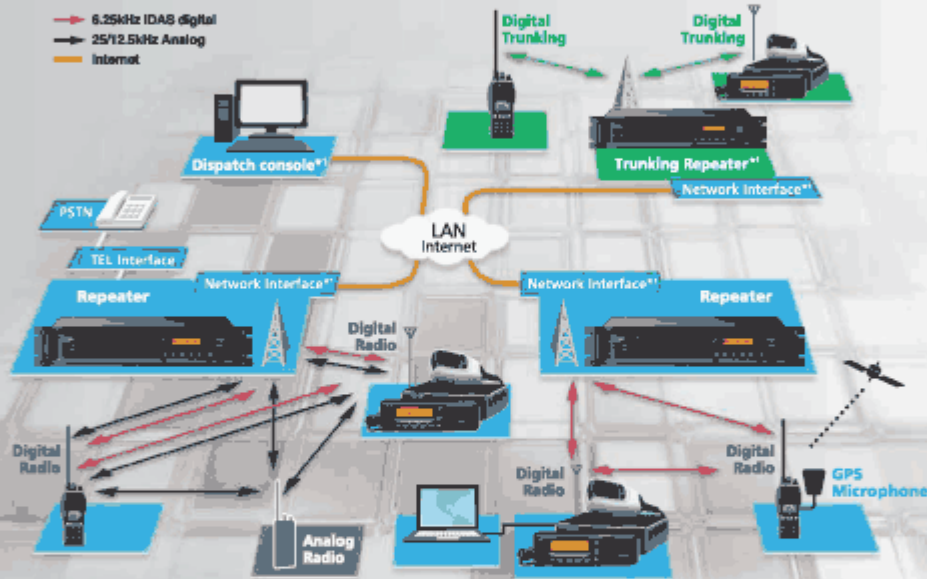
The above is system image only.

■ Double your channel capacity

IDAS doubles the capacity of the current 12.5kHz channel allocation. Icom allows you to meet any narrow banding requirements today, and provides a solution to any future spectrum deficiencies.

Double your channel capacity
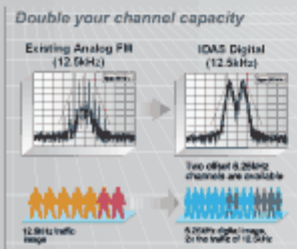
■ Digital/analog mixed mode operation

The IC-FR5000 series can receive both analog and digital signals on a single channel. You can partially introduce the IDAS system, while using the existing analog radios in a system. The IDAS system allows you to scale migration to narrow band digital at your own pace and need.

■ Improved audio quality

The IDAS system occupies only 6.25kHz spacing per channel. With the improved sensitivity of narrow band communications, increased communication greater than 12.5kHz analog mode can be achieved. The IDAS system uses the AMBE+2™ codec, which provides clear audio and simultaneous data communication.

■ Network interface*¹

The IDAS repeater has a network interface* and can be connected to a LAN or the Internet via Ethernet cable. Communication range is vastly extended by the Internet connection and eliminates the need for expensive leased lines. When connected to a PC via a LAN or the Internet, you can remotely maintain the repeater configuration remotely from your PC.
* Option (Available in the future)

■ Digital trunking capability*¹

The repeater will also have digital trunking capability in the near future. This will allow you further effective channel management by sharing a minimum of channels with a large number of users.

*¹ Some features are planned and released in the future.