

2007

**Flash** Collection

[ WEEK 03 - 2007 ]

ascom



## Ascom-Comarco: Together in Alliance at 3GSM World Congress 2007 ...

There is no better place than the 3GSM World Congress for the premiere presentation of the **Biggest Mobile Network Test Solutions Team in the World**. Created by the Alliance between Ascom, Switzerland and Comarco, USA, the all-encompassing cooperation embraces technology sharing, system engineering and worldwide customer support services.

The Alliance is packed with benefits and pleasant surprises for our existing and many new customers for years to come as the future of 4G networks materialize.

We are featuring the **"Symphony"** range with all its advanced mobile video and mobile TV services testing utilities, flexible product packages and powerful scanners. These tools are offered on both the Ascom QVoice and the Comarco measurement hardware platforms.

We are confident that you will find the **Ascom-Comarco exhibit a memorable experience** - a visit that could just prove to be your answer on how to improve network performance and ensure quality of subscriber services.

**Don't miss this opportunity** - our experts will be waiting for your visit on stand 1C05 in Hall 1-0 at the 3GSM World Congress in Barcelona, Spain from 12th to 15th February 2007.

Sincerely  
Your QVoice Team

---

Ascom (Switzerland) Ltd. | Mobile Test Solutions  
Glutz-Blotzheim-Strasse 3  
CH-4503 Solothurn | Switzerland  
Tel. +41 32 624 2121 | Fax +41 32 624 2143  
[qvoice@ascom.ch](mailto:qvoice@ascom.ch)

[Contact us now to learn more  
www.qvoice.com](http://www.qvoice.com)

[ WEEK 05 - 2007 ]

ascom



## QVoice testing DVB-H and UMA (GAN)

### DVB-H

Mobile TV is an exciting new service, and users have already been happily using QVoice to test its video streaming variant. Now mobile TV signals via DVB-H can also be evaluated.

As in other video applications, QVoice captures the TV video signal digitally / electronically without using additional codecs or D/A and A/D conversions. This guarantees that the true TV signal without corruption is being measured. The video quality algorithm then gives accurate KPIs including video/audio MOS, blur, jerkiness, blockiness etc.

### UMA (GAN) testing

QVoice has been successfully testing UMA (GAN) services in partnership with a major operator. Measurements include access to services and speech quality etc. Analysis of the measured data showed very interesting results on issues like loading and performance of WLAN and VoIP.

Come to the Ascom-Comarco stand no. 1C05 in Hall 1-0 at the 3GSM World Congress in Barcelona (12th-15th February 2007) to see the measurements on DVB-H video/audio signals, and discuss your requirements on DVB-H and UMA testing.

Sincerely  
Your QVoice Team

---

Ascom (Switzerland) Ltd. | Mobile Test Solutions  
Glutz-Blotzheim-Strasse 3  
CH-4503 Solothurn | Switzerland  
Tel. +41 32 624 2121 | Fax +41 32 624 2143  
[qvoice@ascom.ch](mailto:qvoice@ascom.ch)

[Contact us now to learn more  
www.qvoice.com](http://www.qvoice.com)

[ WEEK 12 - 2007 ]

ascom



## CTIA Wireless 2007

The American CTIA (Cellular Telecommunications Industry Association) spring trade show is promoted as the premier venue for all things wireless.

As 22% of last year's visitors came from Europe, Middle East and Africa, we decided to let all our customers and associates know that Ascom QVoice will be there too, along with our alliance partner, Comarco Wireless Test Solutions. Both companies have a long history in helping operators improve Quality of Service (QoS) and network performance on Speech, Data and Video Services. Collectively the team makes a formidable presence in the mobile network test solutions marketplace.

If you are planning to attend the show, please stop by our stand and see what's new. We are featuring:

- Symphony-Multi with Nokia 6680/Nokia N80 and HSDPA cards
- QVP - the most powerful analysis and reporting system
- QVoice Smart - the complete test system in the palm of your hand!

Symphony-Multi is part of the "Symphony" range, a completely configurable, modular drive-test system for GSM, GPRS and WCDMA/CDMA networks.

CTIA 2007 will take place in the Orange County Convention Center, Orlando, FL, USA running from 27 to 29 March 2007.

We would be delighted to have the opportunity to answer all your questions. You can find us at booth number 3663.

Have a safe trip and we look forward to greeting you in Florida.

Sincerely  
Your QVoice Team

---

Ascom (Switzerland) Ltd. | Mobile Test Solutions  
Glutz-Blotzheim-Strasse 3  
CH-4503 Solothurn | Switzerland  
Tel. +41 32 624 2121 | Fax +41 32 624 2143  
[qvoice@ascom.ch](mailto:qvoice@ascom.ch)

[Contact us now to learn more  
www.qvoice.com](http://www.qvoice.com)

[ WEEK 22 - 2007 ]

ascom



## Success Prompts QVoice Smart Action

**Interest and orders for QVoice Smart continue to grow.** Springing from this success, we decided to promote the many benefits of owning our pocket sized 'measurement platform' innovation.

QVoice Smart is an important complement to the QVoice Symphony product line - known for its unrivalled measurement capacity and freedom of configuration. In fact QVoice Smart offers much of the power of QVoice beautifully packaged in a Nokia N95 mobile computer-phone.

QVoice Smart enables you to conduct tests almost anywhere - for **speech testing with MOS, IP data tests such as WAP, FTP, PING, HTTP, video telephony tests and much more.** The claim to fame of QVoice Smart includes user efficiency **enhancing features like detailed and configurable graphical display of measured results, and automatically carrying out the measurement programs with multi-measurement tasks.**

Now engineers - and even non technical staff - can easily carry and make network measurements whenever and wherever the need arises. Measurements can be viewed on the screen in real time, or the compressed data files can be automatically transferred to your office for in-depth analysis and statistics reporting.

Many happy users of QVoice Smart are already seeing exactly where and when their network is performing better (or worse!) than the competitors - and they also have all the valuable engineering data to help improve quality and performance.

If you are interested in this unique sales promotion, please do not hesitate to contact us ( tel. +41 32 624 2489 or email [qvoice@ascom.com](mailto:qvoice@ascom.com) ).

Sincerely  
Your QVoice Team

---

Ascom (Switzerland) Ltd. | Mobile Test Solutions  
Glutz-Blotzheim-Strasse 3  
CH-4503 Solothurn | Switzerland  
Tel. +41 32 624 2121 | Fax +41 32 624 2143  
[qvoice@ascom.com](mailto:qvoice@ascom.com)

[Contact us now to learn more  
www.qvoice.com](http://www.qvoice.com)

[ WEEK 24 - 2007 ]

ascom



## QVoice Compact for the Globetrotter

If your network optimization or benchmarking work takes you out of the office a lot then **QVoice Compact is the Innovative tool you're looking for**. This latest addition to the family of QVoice Symphony systems provides all the detailed testing, reporting and analysis that you need to help ensure that your network has the highest quality and top performance.

Specifically designed for the professional network engineer who needs the flexibility to choose either his own specific test program, or apply one of the many automated tests delivered with the system. Analyse to the finest detail is easily done in the field or back in the office.

QVoice Compact is a multi-channel measurement system based on a notebook computer and comprising two main parts: The **QVoice Companion** for accurate testing and the **QVoice Presentation (QVP)** with powerful analysis programmes and reporting functionalities. The all-in-one test system is unrivalled in both drive and lab test applications. It offers all the good things in a single self-contained package.

**The network engineer can travel with ease, knowing that his preferred test and optimization system is always with him.**

Sincerely  
Your QVoice Team

Ascom (Switzerland) Ltd. | Mobile Test Solutions  
Glutz-Blotzheim-Strasse 3  
CH-4503 Solothurn | Switzerland  
Tel. +41 32 624 2121 | Fax +41 32 624 2143  
[qvoice@ascom.com](mailto:qvoice@ascom.com)

[Contact us now to learn more  
www.qvoice.com](http://www.qvoice.com)

[ WEEK 26 - 2007 ]

ascom



## QVoice Smart - On-line Interaction

**Since our announcement of the special offer and trial, we've been overwhelmed with requests about QVoice Smart** - our high-powered and easy to use measurement tool efficiently embedded in the very popular Nokia N95 mobile computer-phone.

**Now you can explore 'on-line'** a few of its many features. Go to <http://www.qvoice.com/smart> and interactively discover how simple it is to set-up and conduct speech testing with MOS or execute advanced IP data measurements. With QVoice Smart you can see - on the spot - exactly how your network and the others are performing.

**The graphical and text-based web presentation will give you a feel for QVoice Smart**, but we aren't showing everything. Hidden are sophisticated elements unique only to QVoice Smart and not found in any other hand-held test device. To get these secrets just talk to us!

Sincerely  
Your QVoice Team

Ascom (Switzerland) Ltd. | Mobile Test Solutions  
Glutz-Blotzheim-Strasse 3  
CH-4503 Solothurn | Switzerland  
Tel. +41 32 624 2121 | Fax +41 32 624 2143  
[qvoice@ascom.com](mailto:qvoice@ascom.com)

[Contact us now to learn more  
www.qvoice.com](http://www.qvoice.com)



## QVOICE FLASH

### WAP Testing Patent

WAP is an important feature in the mobile world, enabling subscribers to access a great variety of services and on-line information. The WAP access is done across several entities: the WAP stack in the subscriber device (e.g. a handy), a WAP gateway in the network, and the WAP server where the desired information or service resides.

Recently the **innovative Ascom Patent** for a WAP testing method was **granted** officially. The patented method logs at different points in the access chain, whereby possible problems can be detected and analysed. An example would be the delay or errors introduced by the WAP gateway, while it is re-formatting the information to suit a particular subscriber device.

The same approach is in use in the Ascom Symphony range of test systems, where log information from WAP stacks are recorded and analysed, thus enabling the user to pin-point problems and investigate solutions. In the Symphony range, the WAP tests can be carried out in the QVoice Symphony and QVoice Companion systems, which are in use worldwide for mobile network measurements and testing.

Sincerely  
Your QVoice Team

---

Ascom (Switzerland) Ltd. | Mobile Test Solutions  
Glutz-Blotzheim-Strasse 3  
CH-4503 Solothurn | Switzerland  
Tel. +41 32 624 2121 | Fax +41 32 624 2143  
[qvoice@ascom.com](mailto:qvoice@ascom.com)

Contact us now to learn more  
[www.qvoice.com](http://www.qvoice.com)



## QVOICE FLASH

### QVoice Release 5.2 Includes New Test Devices

**There is a lot to say about QVoice Release 5.2** with its wide range of system enhancements, software upgrades and even some new equipment. Information will be provided in future Flashes.

Right now, we want to introduce you to some **new test devices that have been integrated into the QVoice system.**

**Nokia N95** – is now the **standard test-mobile for the QVoice family of systems** – and for many reasons it's already well liked by QVoice users. Besides its stylish look, the Nokia N95 multimedia mobile phone is packed with the latest radio features. The **high speed data services with HSDPA category 6 provides a downlink bit rate of up to 3.6Mbps** and the GPRS/EDGE multi slot class 32 provides up to five downlink time slots.

It is the first 3G device from Nokia supporting the GSM HR speech codec as well asEFR, FR and AMR. The set of features is completed with the GERAN Feature Pack 1 for providing Extended Uplink TBF and Network Assisted Cell Change (NACC).

**The Nokia N95 together with the many QVoice features** – such as the special QVoice intelligent phone battery, external antenna and automatic power on/off – **is truly a test system for the RF connoisseur.**

**QVoice support for a new range of HSDPA data cards based on Qualcomm chipsets** is also introduced **in Release 5.2**. The latest additions cover HSDPA category 6 (3.6Mbps) cards which are ready for upgrading to category 8, offering downlink bit rates up to **7.2Mbps**:

- Huawei E630
- Huawei E220 (USB Modem)
- Sierra Wireless AC875
- Option GT MAX 7.2 Ready

**All these cards operate on GSM850/900/1800/1900 and WCDMA2100 bands.** The latter two are tri-band WCDMA (2100/1900/850) usable the world over. Especially for the US market the 1.8Mbps Sierra Wireless AC860 has been added to the portfolio as a legacy device.

Sincerely  
Your QVoice Team

---

Ascom (Switzerland) Ltd. | Mobile Test Solutions  
Glutz-Blotzheim-Strasse 3  
CH-4503 Solothurn | Switzerland  
Tel. +41 32 624 2121 | Fax +41 32 624 2143  
[qvoice@ascom.com](mailto:qvoice@ascom.com)

Contact us now to learn more  
[www.qvoice.com](http://www.qvoice.com)

[ WEEK 38 - 2007 ]

ascom



## Intelligent Adaptive Testing Patent

The Ascom QVoice records yet another patent grant – for 'real time intelligent adaptive testing'. The European patent process has now been successfully concluded, and filings have also been done in the following countries: Switzerland, Germany, Spain, France, UK, Italy.

This patent covers the important principle of taking some pre-defined action when a measurement gives some specific results. For example, if a measurement shows there is a potential problem, action can be taken automatically for some follow-on investigations.

The QVoice system plans to make use of this principle for some future measurements, including mobile IP data tests.

Sincerely  
Your QVoice Team

---

Ascom (Switzerland) Ltd. | Mobile Test Solutions  
Glutz-Blotzheim-Strasse 3  
CH-4503 Solothurn | Switzerland  
Tel. +41 32 624 2121 | Fax +41 32 624 2143  
[qvoice@ascom.com](mailto:qvoice@ascom.com)

[Contact us now to learn more  
www.qvoice.com](http://www.qvoice.com)

[ WEEK 40 - 2007 ]

ascom



## QVoice Companion Backpack – Wear It, Roll It or Stow It

**You'll get maximum usability with QVoice Companion Backpack along with its full 4 channel capacity for speech or IP-data measurements.**

Attractively packaged in an ergonomically designed backpack, QVoice Companion Backpack is the ideal solution for network testing in places not reachable by car – places many of your subscribers go and where they expect equal quality mobile phone services.

Typical locations cover congress centers, shopping malls, hotels, airports and rail stations – all those which have customers interested in E-mail and other mobile data access. But there are other areas, not indoors, that are growing in importance in terms of network quality requirements. These sites include city-centre pedestrian only streets, or recreational sites such as resorts, seafront promenades, entertainment venues and sports facilities

Getting around 'on-foot' comfortably is important, especially when large distances are involved. So if you prefer, there is a **lightweight and highly maneuverable trolley**, with large wheels for easy stair climbing and a kickstand keeping the unit upright when parked. With all weather protection, simply strap the backpack on the trolley and stroll away. The tablet PC with GUI sits on top for easy user control.

And once out and about, you can cover even larger areas since **QVoice Companion Backpack functions equally well in drive-testing**. Put it on the passenger seat, secured with the original backpack shoulder straps and belt and the one single patch-antenna is shared with all phones.

It's all about being efficient. For more information, why not take a look now on [www.qvoice.com/backpack](http://www.qvoice.com/backpack).

Sincerely  
Your QVoice Team

---

Ascom (Switzerland) Ltd. | Mobile Test Solutions  
Glutz-Blotzheim-Strasse 3  
CH-4503 Solothurn | Switzerland  
Tel. +41 32 624 2121 | Fax +41 32 624 2143  
[qvoice@ascom.com](mailto:qvoice@ascom.com)

[Contact us now to learn more  
www.qvoice.com](http://www.qvoice.com)



## QVOICE FLASH

### QVoice Symphony Scanners from Alliance Partner, Comarco

**Comarco RF-scanners have been fully integrated in QVoice Symphony and QVoice Companion.**

**These new scanners are multi-band/multi-technology.** Models are available for ITU 900, 1800 and 2100 MHz bands as well as ANSI 850 and 1900 MHz bands.

A single scanner can examine specified multiple bands in different licensed technologies. It is also possible to measure different radio technologies through several RF-bands such as:

- ITU-scanner for GSM and WCDMA spectrums
- ANSI-scanner for GSM, CDMA 1X, CDMA EvDO and WCDMA measurements

**This intelligent and unique approach eliminates cascading, adding or changing 'task-specific' devices as requirements vary.** QVoice users invest in only 1 RF-scanner and keep the freedom to add additional technologies should a need arise. For extra performance, multiple scanners can be connected and controlled by QVoice.

QVoice Scanners are delivered in a compact PrizmOne housing. They can either be used as a 'stand-alone' scanner or connected to QVoice Symphony via a dedicated MIA interface thus allowing full control and automatic on/off switching. **RF-scans can be monitored in real-time from either QVoice Symphony or QVoice Companion** and data processing done with QVoice Presentation or another QVoice format compatible software.

Combined with 'air-interface' QoS measurements, scanner data from a 'network independent' source is essential for both trouble shooting exercises and network optimization.

Sincerely  
Your QVoice Team



## QVOICE FLASH

### HSDPA Testing with QVoice Smart

**QVoice Smart** – our successful 'pocket' network measurement tool now has **HSDPA test intelligence.**

Just consider ... that 'good coverage' is a vital prerequisite for high HSDPA throughput; and typically subscribers access their high-speed data services indoors. Assessing HSDPA performance in buildings is therefore very important and **QVoice Smart is the practical solution.**

**QVoice Smart provides testing of IP services** such as **HTTP, WAP and FTP** on HSDPA connections – and in addition to application related measurements like **throughput and access times**, QVoice Smart gathers a wide range of **HSDPA parameters and displays the most important in real-time** during measurement. For example:

- **CQI (Channel Quality Information) statistics** – In the CQI the handsets notifies the network about the data rate it expects being able to receive based on current radio conditions. A high CQI indicates high potential throughput.
- **Layer 1 performance and quality metrics** – Modulation usage (QPSK vs. 16QAM), number of parallel codes in use, re-transmission rate and actual bit rate provide instantaneous information on HSDPA physical layer performance.
- **HSDPA activity value** – as HSDPA is a shared resource within one cell, it is important to know how much of the available resource a single subscriber can get at once. When doing large file downloads on FTP the HSDPA activity value provides this information.

Of course, HSDPA testing is not all that the QVoice Smart can do as it is also very well liked for its accuracy in testing **real speech quality** along with **SMS & MMS**. QVoice Smart uses the identical data file format as all QVoice data acquisition products, meaning **QVoice Smart measurements are accessible for post-processing with QVP and Field Analyser.**

Why not try it for yourself and see QVoice Smart in action by going to <http://www.qvoice.com/smart>.

Sincerely  
Your QVoice Team



## HSUPA Testing and Analysis from QVoice Systems

WCDMA mobile network data transmissions are significantly improved by two technologies – **HSUPA** (High-Speed Uplink Packet Access) and **HSDPA** (High-Speed Downlink Packet Access). They give business users wireless broadband speeds that allow true mobile office functionality to receive and send large file attachments; and, private customers power to download video, play interactive games and send high-resolution clips.

From email and on-line gaming to video conferencing and VoIP, 'faster quality' is what users want.

But different services exert varying demands on the air radio link. Maintaining acceptable user experience and overall QoS requires complete and accurate end-to-end measurement data with details of uplink interference.

You get these measurements and much more with QVoice. Engineers can test and view layer 1 quality information metrics, coverage values and other critical parameters vital for optimization and maintaining quality performance of IP services on HSUPA connections.

QVoice supports Huawei and Sierra Wireless devices offering up to 7.2 Mbps HSDPA and 1.9Mbps HSUPA.

QVoice post-processing system, QVP, has also been upgraded to support HSUPA data. In QVP Network Analyzer and QVP Map operators see Ec/Io, RSCP and scrambling codes of the HSUPA serving and non-serving radio links. A clear technology indicator in the line charts identifies which technology was active at a time of recording. Reports include an IP and FTP throughput summary with measurements grouped according to the radio technology.

**With QVoice, HSUPA Testing is a reality ready for delivery to you** – don't miss the opportunity to know what is really happening on your network – order now!

Sincerely  
Your QVoice Team



## Now You can Support Your Field Test Drivers & Engineers from the Comfort of Your Office

It does not matter which test system you use, everyone has experienced the situation where your driver or field engineer is having a problem that is preventing him from completing the network test. You try to help him over the phone, but eventually you have to ask him to return to base to fix the problem, often travelling hundreds of kilometres and a whole day of measurement wasted.

### **With QVoice Symphony's Remote Access Module this problem is solved!**

Using Symphony's remote user interface, systems that are in the field carrying out measurements can be remotely accessed (over air) from your office, to identify the cause and take corrective actions. Keeping the skill at your office for the many other tasks needed for your engineer is the right move and allows the driver or field engineer to get on with his task of measuring the network, whilst having the comfort of skilled support whenever he needs it. **This saves time and cost should trouble arise.** It is a practical fall back solution that allows your office based technical staff to give support to drivers with problems they can't resolve themselves.

Technically, a QVoice Symphony Remote Access GPRS/EDGE Module is dedicated to this task and not used for measurements. Using this module Symphony can then be accessed over the Internet from any office PC.

Of course, there are other advantages to having QVoice Remote Access, as you can also access the system in 'monitor mode' and view the measurements in real time as the system is performing the test, but all viewed from your office PC.

**QVoice Remote Access – a little technical insurance when something unexpected goes wrong.**

Sincerely  
Your QVoice Team