



## Welcome

Dear All,

> The 3GSM World Congress in Cannes is the most important event in the mobile telecommunications industry's calendar. Therefore, we are devoting this edition of CeDaR News to this key event.

The challenges and complexities of being a mobile operator are growing daily with the addition of new services, subscribers and technologies. It is the mission of ALLROUND to make business easier and more profitable for mobile operators by providing application solutions for testing and monitoring billing systems. We also specialize in

fraud detection – a major source of lost revenue – and provide a range of other products as outlined in this newsletter >> see ALLROUND Mobile Solutions on page 2.

Apart from our presentation at the Mobile Billing conference, the real stars of this event will undoubtedly be our products. We will present our new Interconnect Bypass Detector (IBD) application, which helps mobile operators to stop revenue loss through bypass detection. Also CeDaR and CeDaR Utilities will be demonstrated to show you how ALLROUND can give mobile

operators the confidence that their billing systems are performing as designed.

Please stop by and see us at our stand, our product experts will be on hand and delighted to answer any questions you may have. If you would like to schedule a meeting with us please contact **András Liebentritt** at +36 1 206 6280 or email [liebentritta@allround.net](mailto:liebentritta@allround.net).

We hope you find the first edition of CeDaR News for 2004 interesting and informative. We look forward to meeting you in Cannes! ♦

## Interconnect Bypass Detector

> A new feature has been added to one of our latest products, Interconnect Bypass Detector and it has been successfully implemented at one of our clients. >> For the latest news on IBD, see articles on page 2 & 3.



## Visit ALLROUND at the



## TAP2-TAP3 Converter to improve a legacy billing system

> ALLROUND has completed the first deployment of its CeDaR Utility-based TAP2-TAP3 Converter application for one of its clients. The implemented solution is aimed at providing immediate billing for GPRS roaming services, without having to upgrade legacy billing and mediation systems. >> Read the full story on page 3

### MAIN EVENT

> ALLROUND will be exhibiting at Stand J15 in Hall 3 at the Exhibition. Our applications will be displayed in action and our experts will be ready to discuss whatever needs and questions you have in the fields of CDR handling, Roaming, Revenue Assurance and Fraud Detection. Make sure you pay us a visit! >> See the floorplan on page 4

### MOBILE BILLING

> Now in its 6th year, the Mobile Billing Conference at the 3GSM World Congress is



recognized as the world's most prestigious billing event. This year, continuing our participation in this key event, ALLROUND will be the delegate badge sponsor of the Mobile Billing Conference. Our Technical Sales and Support Manager, Gábor Lakatos, will speak during the second day of the conference on Tuesday, 24th February, at 15.20. His presentation will focus on Revenue Assurance. In this speech Gabor will highlight ALLROUND's experience in the area of CDR processing as a result of our close cooperation with several mobile operators. ♦

# ALLROUND Mobile Solutions

➤ ALLROUND's products span three main business areas: **Operations and Development, Billing and Revenue Management**. As you can see on the diagram several products are offered to help customers solve their problems at every stage of this workflow.

Our product portfolio could also be divided into two main branches: **applications related to CDR processing** and **Business Support Systems**.

Our 10-year expertise in **CDR processing** is reflected in our applications. **CeDaR** – our recognized brand name for CDR handling – incorporates our current flagship product **CeDaR Interactive**, a comprehensive solution for CDR/TAP browsing, test data generation and mediation. There are also **CeDaR Utilities**, which are standalone, customer-specific, ready-to-run solutions that solve TAP and CDR handling problems.

**AllRoamer** is a complete solution to manage all international roaming related tasks such as conversion between different TAP versions, validation of files, re-rating of CDRs, contract management and interconnect billing.

**Interconnect Bypass Detector (IBD)** is an application that recognizes "bypass suspicious" cases by using complex user configurable detection rules.

Last, but not least, our **Business Support Systems** include our ultra-flexible **Rating (RTG)**, intelligent rule-based **Fraud Detection (FDS)**, and predictive **Churn Prevention (CPS)** systems.

Should you wish additional information on any of these products, please contact us at [solutions@allround.net](mailto:solutions@allround.net) ! ♦



## Interconnect Bypass Detector First User Test

➤ As interconnect bypass is turning out to be one of the hottest issues for mobile network operators worldwide, we have conducted a survey to assess how bypass fraud affects mobile operators. Our conclusion is that this problem is causing more and more headaches for license operators. The good news is that in December, ALLROUND was delighted to install IBD at one of its clients.

Below is a brief summary of what we have learned from this first implementation of IBD:

- The installation and configuration were fast; using the install kit this only took a couple of hours.
- CDR processing speed is impressive; a laptop can process between 800-1800 CDRs per second.
- The detector works offline and reads the CDR directly, therefore there is no interference with normal CDR processing or billing.

You can download our demo version of IBD from our website [www.allround.net](http://www.allround.net) Try IBD and you will be convinced! ♦



## Interconnect Bypass Detector

### New feature added

➤ Interconnect Bypass Detector (IBD) is an application designed to recognize "bypass suspicious cases" on the subscriber level by processing CDRs of a mobile operator. IBD is one of ALLROUND's new products.

Having conducted a bypass detection survey recently, we have come to realize that there is another type of interconnect fraud, called **network bypass** that causes significant revenue loss to mobile operators. Based on these findings a **new feature has been added** to our existing IBD product so that it is also **capable of detecting illegal routing from partner networks**. For more information on Interconnect Bypass Detector, please contact us at [bypass@allround.net](mailto:bypass@allround.net). ♦



## Bypass

is a word with several meanings. For mobile network operators bypass means a severe loss of revenue. It is causing more and more trouble for operators. To date, lots of them are not fully aware of the magnitude and the severity of the problem, and are unable to quantify the overall impact on their business. Operators have to take matters into their own hands to fight against this illegal activity.

## How?

By letting no one pass them by with ALLROUND's Interconnect Bypass Detector. ♦

# Profitably charge

for the latest mobile services while using your legacy billing systems

➤ Continued from page 1

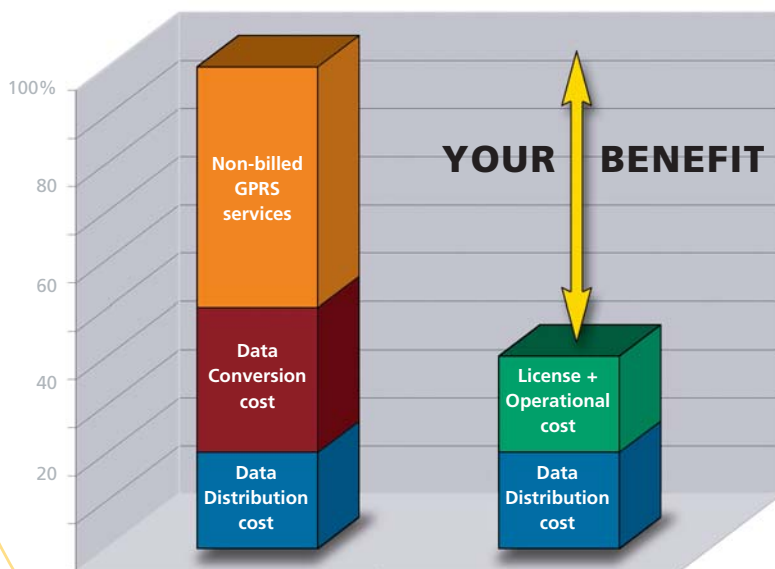
➤ According to the latest market research more and more GSM operators are planning to upgrade their roaming sub-systems to handle

TAP3 format. Why has this developed into a hot issue? Why is this upgrade so urgent in today's mobile market? The reason is simple: customer

demand for value added and content rich services (e.g. MMS and W-LAN internet access) are growing rapidly. This trend can result in increased revenue – if operators are able to charge properly. Unfortunately, many roaming systems are not able to manage these new services. The result is lost revenue and market share for the mobile operator. Realizing the complexities of handling TAP3 format, an ALLROUND client recently decided to upgrade their system to support this format. Using ALLROUND's TAP2-TAP3 Format Converter they were able to take advantage of TAP3 formats without modification to their existing billing and mediation systems. Implementation of this system took less than 5 weeks. Here's a summary of some of the key benefits realized by our client:

- Immediate capability to charge on a usage base GPRS roaming service
- Cost savings on Data Clearinghouse charges
- Modularity and flexibility ensuring fast introduction of new services
- Huge time and cost savings resulting from not having to upgrade legacy billing system.

ALLROUND's TAP2-TAP3 Format Converter has been developed for mobile operators, using TAP2 roaming data exchange format, who wish to enhance their revenue streams and increase subscriber loyalty by providing advanced services to their customers. ♦



# About us

- » ALLROUND is an ISO 9001:2000 certified company specialized in software development and consulting.
- » The company was established in 1991, it is a Microsoft Certified Solution Provider since 1995, Oracle Alliance Partner since 1997 and Oracle Certified Solution Partner since 1999.
- » Member of the Sun Developer Connection(SM) Partner Program since 2001.
- » ALLROUND is an Associate Member of the GSM Association since April, 2002, listed under the categories Security Systems Supplier and GSMA Standards Supporter. ALLROUND is represented in the following working groups of the GSMA: the File Specification Subgroup, the Security Group, TTS and TADIG. ♦



## CDR formats

### Supported formats by CeDaR Interactive and CeDaR Utilities at present

» As the CeDaR product line is an extremely format flexible range of interactive software products, handling both ASN.1, XML and sequential formats, it's of no surprise it supports various MSC, Billing System, GPRS and other vendor specific formats. Please note that since the last edition of CeDaR News, several new formats have been applied to the CeDaR product line.

#### MSC formats:

Ericsson CME20 R7, R8 (Rev.G),  
R8 XML (Rev.F), R8 PCS (Rev.E),  
R9.1 PCS (Rev.B),  
R9.1 (Rev.C)  
R10 > **NEW**  
R10 PCS > **NEW**

Nokia DX200 M10 BCD/HEX  
Siemens CS1.0 MSE

#### GPRS formats:

Ericsson GSN 2.0, 2.1, 3.0  
GPRS UTX, UTX 2  
Nokia GPRS CG 1.1, 2.0

#### Billing System formats:

Jupiter CCCF, CCCL, CTRL Ver 2.2 Rev 0.3  
Rating DUMP2

#### Multimedia Messaging formats:

Multimedia Messaging Service 4.0.0  
Multimedia Messaging Service 5.0.0

#### TDMA formats:

Ericsson AS147, AS160

#### Standard formats:

GSM 12.05 (v7.0.1)  
GSM 12.15 (v7.6.0)

#### Roaming data exchange formats:

TAP1 (TD.01 3.12.1)  
TAP2+ (TD.17 3.13.0)  
TAP3  
3.2 (TD.57 3.6.0), (TD.57 3.6.2),  
3.3 (TD.57 3.7.1),  
3.4 (TD.57 3.8.1), (TD.57 3.8.2),

3.9 (TD.57 3.9.0),  
3.10 (TD.57 3.10.1)  
RAP 1.1 (TD.32 3.5.1)  
for TAP3.2 (TD.57 3.6.2),  
for TAP3.3 (TD.57 3.7.1),  
for TAP3.4 (TD.57 3.8.2),  
for TAP3.9 (TD.57 3.9.0)  
RAP 1.2 (TD.32 3.6.2)  
for TAP3.9 (TD.57 3.9.0),  
for TAP3.10 (TD.57 3.10.1)

#### CIBER 2

Near Real Time Record Data Exchange  
(NRRTRDE) 3.0.0, 3.1.0

#### Other formats:

CMG SMSC 3.5, 4.0, 4.6 > **NEW**  
MPC 3.0  
MNET (Cisco)  
Pacific Ocean (Location Based Services) 2.0 PA8  
Nokia Operator Wireless LAN 2

*We continuously extend the number of supported formats; so all inquiries are welcome even related to formats that are not supported yet. ♦*

## Contact us

» For more information on commercial issues regarding ALLROUND Mobile Solutions, please contact us at [sales@allround.net](mailto:sales@allround.net).

» For information on our new products AllRoamer and Bypass Detector please contact us at [solutions@allround.net](mailto:solutions@allround.net)

## Interconnect Bypass Detector

### Special introductory offer

If you acquire ALLROUND's plug-and-play IBD tool during its launching phase, not only will you find a solution for a growing concern that your competitors are still ignoring, but you will also benefit from its **Special Introductory Offer**. Purchase IBD for €35,000 before 31 March 2004 and save €20,000!

*Identify bypass activity now and put an end to losing parts of your revenue!*



## Visit us

at The 3GSM World Congress



As you can see on the map, **ALLROUND** is exhibiting in Hall 3, at the stand J15. We look forward to meeting you there!

## CeDaR Utilities

### Special Price List for the 3GSM World Congress

On the occasion of the premier global wireless event, ALLROUND introduces a special price list for CeDaR Utilities. **By purchasing a CeDaR Utility before 31 March 2004, you could benefit from a 50% discount.** Buy a TAP3 to XML Converter, a TAP3 Statistical Report Generator, a TAP3 Record Filter, or a TAP3 Validation Report Generator for only €3,000! On the higher end of the spectrum, a solution for TAP version conversion is also available at a discounted price.

*Make use of this special offer and solve your TAP-related problems right away! ♦*



**ALLROUND**  
PUTS YOU IN CONTROL

E-mail: [info@allround.net](mailto:info@allround.net)  
[www.allround.net](http://www.allround.net)