

# WCDMA Frequency Refarming solution



## Improving service, reducing site count by 65%

More and more end-users are demanding high-speed access and services no matter where they are, and at competitive rates. Communications Service Providers (CSPs) have invested in 900MHz and 850MHz frequency bands, using them to offer GSM services. Now many regulators have opened these frequency bands for WCDMA use too. As terminals supporting both WCDMA 850MHz and 900MHz are already in place in many markets, this has opened up an unanticipated and welcome opportunity for operators to expand their 3G services in an efficient way. WCDMA 900 can dramatically reduce site count too – employing our Frequency Refarming solution the number of new sites a CSP requires can be reduced by 65%.

### More efficient networks, more satisfied users

#### Key Drivers

- Government deregulations
- Greater end-user demand for improved 3G services
- Increased network efficiency
- Getting the most out of existing investments

“At the time 3G was introduced it was, more than anything else, about hotspots and the like in urban centers – the perspective was quite different from what it is now. WCDMA 2100 suits this purpose very well but as it has turned out, the customer is not interested in whether they are better at a hotspot or not, she just wants it to work everywhere. When we first learned that WCDMA was going to use the 900MHz frequency, it was quite a big deal. WCDMA 900 provides good coverage and, from a financial standpoint, makes the most out of our existing sites and investments.”

**Timo Sippola**  
Technology Manager  
Elisa Corporation

Nokia Siemens  
Networks



## **Better 3G coverage, lower OPEX**

### **Key benefits**

Our WCDMA Frequency Refarming solution can help you create a cost-effective way to reach new users by extending 3G services to sparsely populated areas, and to improve service experience for indoor users of 3G services. Some of the many benefits of our WCDMA Frequency Refarming solution include:

- Wider coverage (for rural users)
- Better indoor broadband quality (for urban users)
- HSPA 900 allows the GSM 900 base station grid to provide broadband services (site reuse)

### **Upgrade to 3G with no site acquisition costs**

Says Eetu Prieur, Head of Access Networks Planning and Optimization at Elisa, "Based on our experience we can practically skip new site acquisition and building, and still get an excellent 3G coverage. From there on, it is primarily updating the rental contracts and refarming the 900 frequency band. Rental, electricity and transmission costs stay in check when you don't have to add new BTS sites."

## **Experience + collaborative approach = success**

### **The benefits of partnering with Nokia Siemens Networks**

A proven leader in Frequency Refarming, Nokia Siemens Networks offers CSPs a thorough consultation process before implementing any solution to ensure we fully understand your business situation, opportunities and challenges. Working collaboratively we can model your business and help you see the impact of different technical options. Together, we can quickly improve your performance and results. We were the first to offer a WCDMA Frequency Refarming solution and helped Elisa become the first CSP to utilize the 900MHz band to deliver WCDMA service to subscribers.

**To find out more visit [www.nokiasiemensnetworks.com](http://www.nokiasiemensnetworks.com)**