The Radio Spectrum & Tomorrow's Communication (Part I)

written by Manoj Khanna | April 20, 2003

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Couple of weeks ago the country missed the opportunity of technological innovation in the internet and telecom spectrum. Innovation which could have freed you from having to plug into telephone lines and cable – and having a blazing data connection that you could have ever imagined. Wireless Local Loop (WLL). This along with the on-going efforts of wireless LANs, ultrawide band transmissions and mesh networks. WLL has the capacity to deliver internet access ten times faster then the speediest broadband connection.

We all have seen in the past year the enormous growth of 802.11b – "the Wi-Fi" – standard – and how it has created a revolution in the home and office networks. And this all comes in at the time when the telecom sector was supposedly going under recession.

The technology so far has improved enormously too – the regulations which governed the radio spectrum 70 years ago are no longer representing the technical limitations of that time today. Today, Digital Signal Processor (DSP) chips – a radio burned into a chip – reconfigures itself on the fly – hopping from channel to channel – thousands of times per second. This clears some of the myths about – the transport – the traffic and the bandwidth limitatioons. Making most of them irrelevant to the today's scenario.

Thus, the demand of the hour entails some very basic thoughts

about – understanding technology as it stands today. The historic notions about radio frequecies and the spectrum have to be changed and more education concerning them is required.

We probably lost the opportunity of the usage of this immense power, but the for the rest of the geography, Asia and Europe – the option is still open. We'd need to learn the the lessons from what it'll entail.

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