Next Generation Access (NGA) -Role of "Dynamic Spectrum Exchange" for IMT-Advanced

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Abstract

This presentation describes emerging trends in Next Generation ICT ecosystem leading to flux in telecommunication services. It focuses on various access technologies in the NGN domain enabling the growth of broadband in an technology agnostic manner. Various access technologies like those making use of existing infrastructure like XDSL, Cable TV networks, new infrastructure like FTTH and Carrier Ethernet and wireless based access including the IMT, DTH and VSAT based access has been discussed and compared.

Detailed discussion on emerging broadband wireless technologies especially IMT-Advanced and its various developments as well Beyond 3G technologies has been included.

Trends in innovative spectrum management for its more effective utilisation for IMT as well as allocation and pricing mechanisms through concept of "Dynamic Spectrum Exchange" by pooling the spectrum are discussed. In the end the role of IMT to enable FMC (Fixed Mobile Convergence) with a view to reduce demand on the licensed spectrum for voice and data has also been demonstrated.