Optimal Resource Allocation for CDMA Networks Based on Source Coders Adaptation with Application to MPEG4 FGS

By Andres Kwasinski and Nariman Farvardin

System Model

Flow Control and Resource Allocation

Algorithm II: Adapt Transmit Bit Rate and Target SINR

Algorithm I: Adapt Transmit Bit Rate

Simulation Results

CDMA Multiuser Power and Rate Allocation

Optimal for D-R functions convex and decreasing.

Simulations

Sequences: 40 % “Foreman” and 60 % “Akiyo”, 30 fps.

Source Coder: MPEG4 FGS + error resiliency and concealment.