

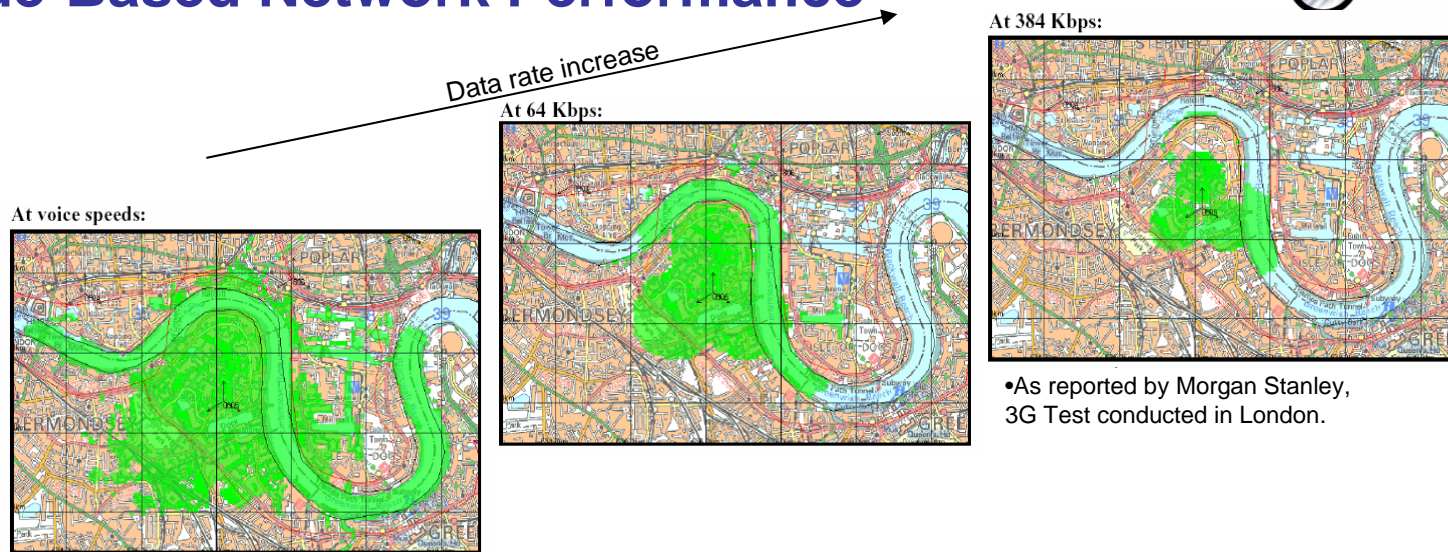
Mobile Broadband Americas

October 19, 2006

Introduction

- **Privately held wireless technology company**
- **Core competency in interference cancellation for wireless systems**
 - CDMA, WCDMA (Release 99), HSDPA, GPS, S-DMB, T-DMB
- **Products**
 - ICAT
 - ICT440 – HSDPA
 - ICT220 – Voice systems – CDMA1x, WCDMA (Rel99)
- **Industry leader in interference cancellation**
 - Over 85 patents issued/filed
- **Located in Denver Colorado**

Interference is the Key Limiter of Code-Based Network Performance

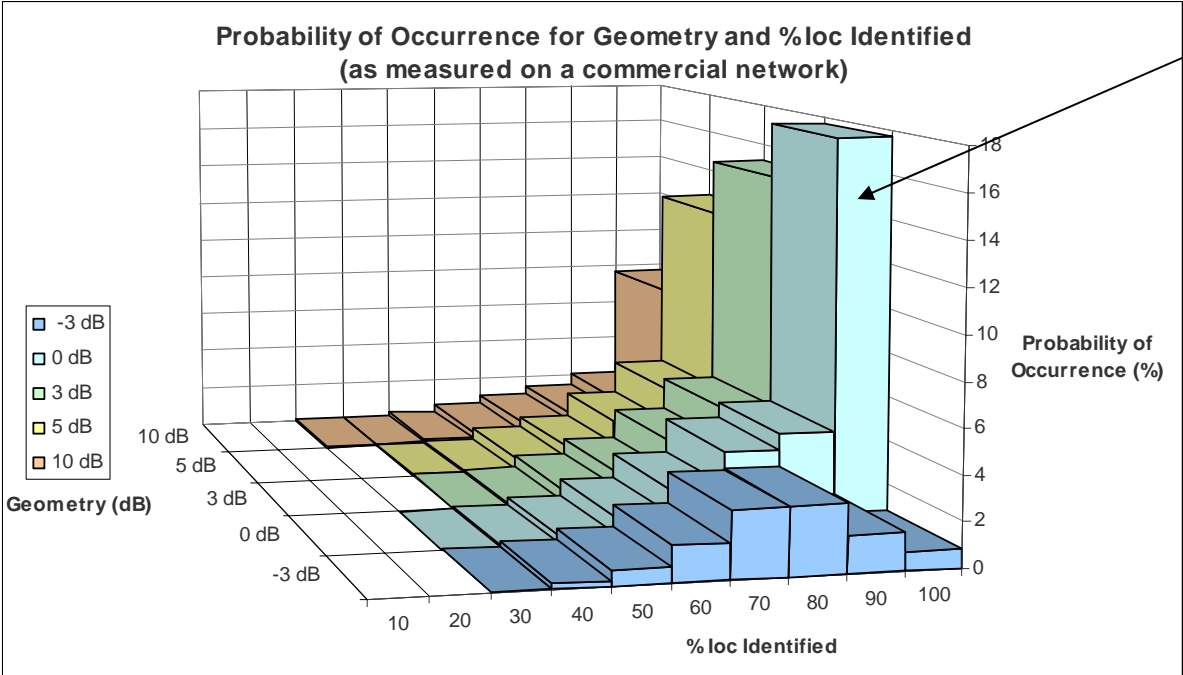


- **Data rate and capacity reduction; Quality of service degradation**
 - Degraded reception leads to lower data transfer rates
 - Interference causes base stations to broadcast more power to each terminal
 - The number of terminals that can be supported simultaneously is reduced
 - Increase in coverage holes leads to more frequent dropped calls
- **Dramatic demonstration of the Shannon game:**
 - For increased data rates, only users near cell center have sufficient power, thus reducing effective cell size.

Summary of Network Analysis



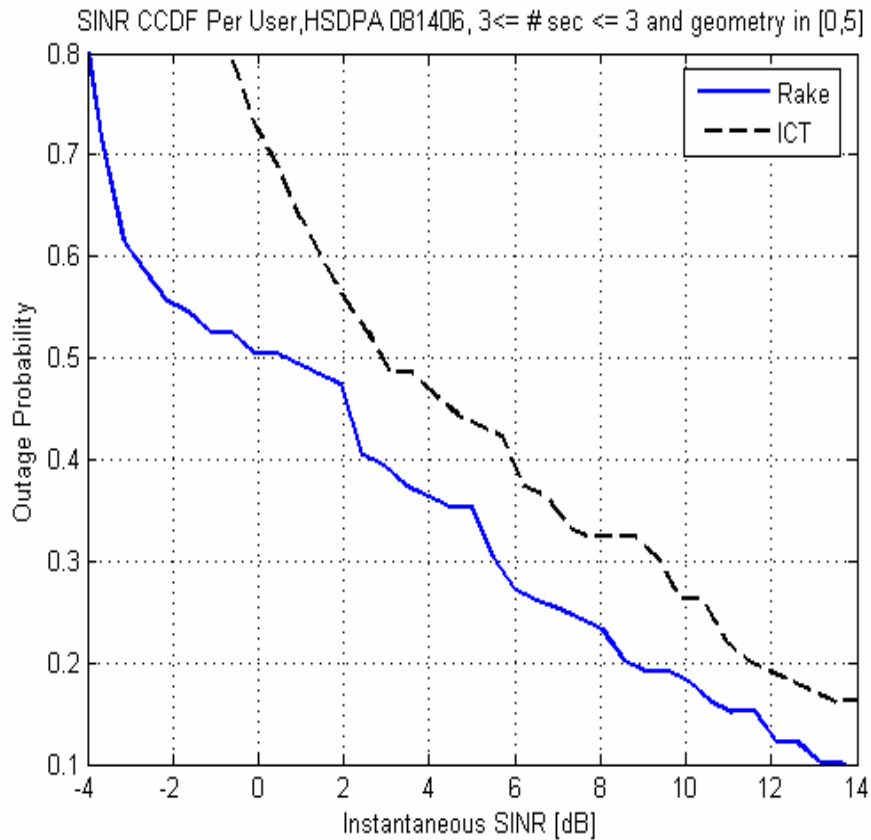
Network collects indicate that the most probable condition is at the "edge of cell" (0 dB geometry) with more than 90% of the interference identifiable and cancelable by ICT.



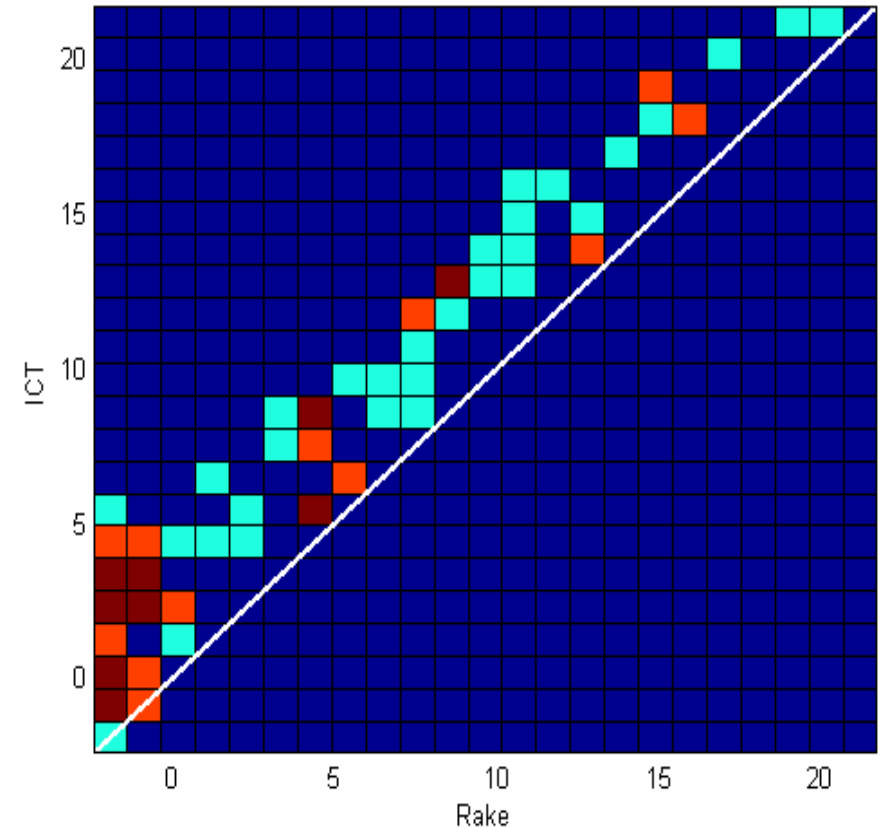
Across all geometries	
Percentage of Identified Interference is:	This percent of the time:
0 - 10	0.00%
11 - 20	0.00%
21 - 30	0.04%
31 - 40	0.55%
41 - 50	1.65%
51 - 60	4.78%
61 - 70	8.98%
71 - 80	13.47%
81 - 90	16.46%
91 - 100	54.07%

- Averaged over all geometries, interference is 90-100% identified, with probability 0.54
- The most probable network conditions are for geometries of 0dB to 5dB, where the interference is more than 90% identified, with even higher probability.

Leaving Performance on the Table



2d Histogram, SINR Per User, HSDPA 081406, $3 \leq \# \text{sec} \leq 3$, geometry in [0,5]

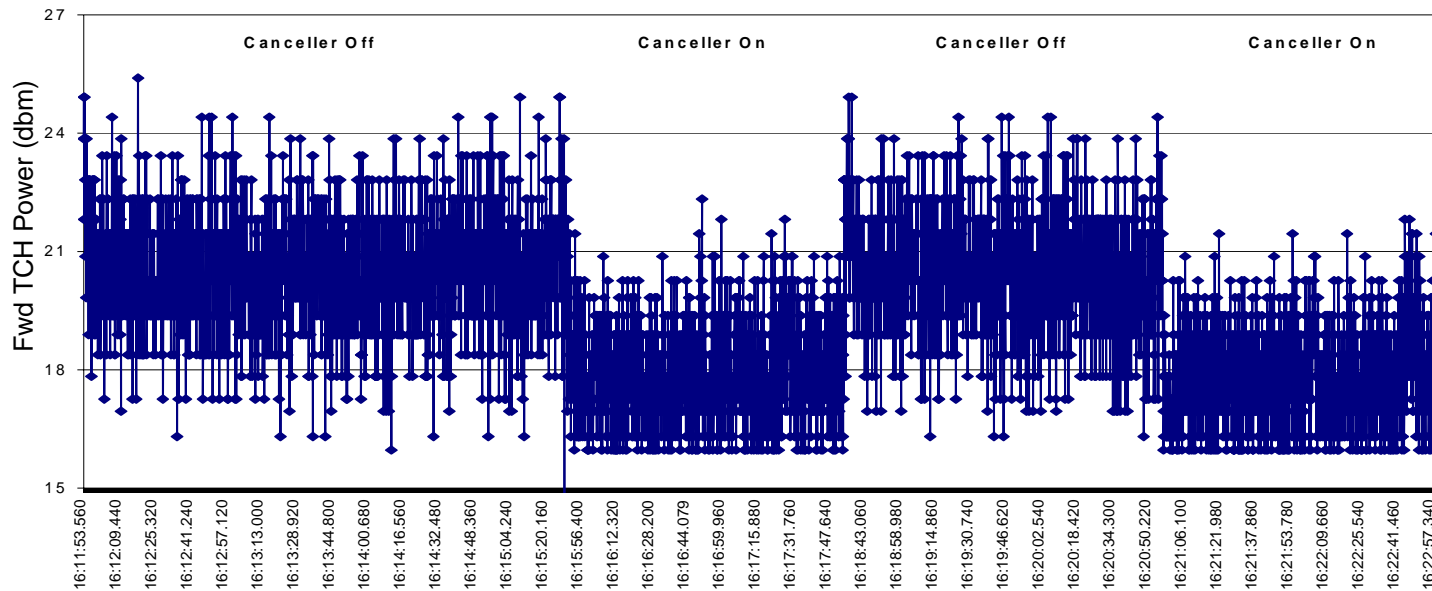


Throughput increase of over 60% is readily available

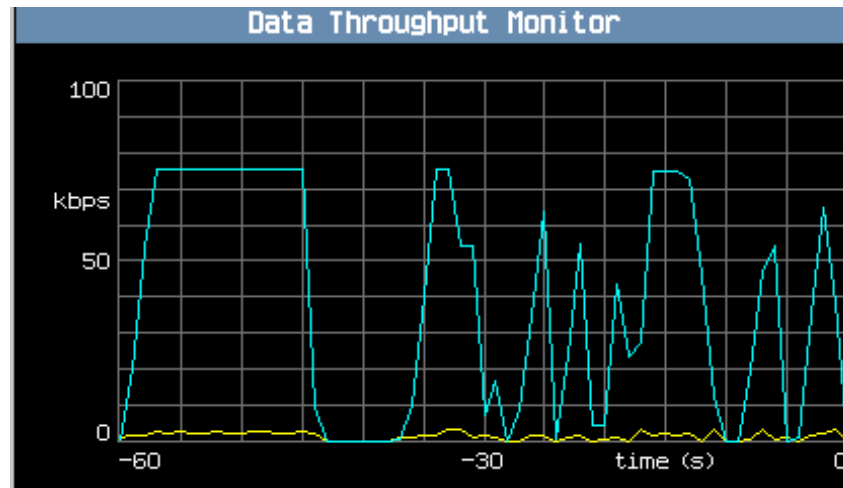
Interference Cancellation will allow Devices to Draw Less Power from the Base Station.



Forward Traffic Channel Power vs. Time
75% OCNS



ICT delivers a superior data experience



- In lab demonstrations, recorded an average 44% decrease in the time required to transfer a data file when ICT is enabled.
- From simulation cases based on commercial network profiles, ICT provides greater than 50% increase in the average data throughput per user.

The Benefits of Interference Cancellation to Wireless Operators



- Improves network capacity and data throughput, resulting in cost per bit savings.
- Extends the life of existing deployed capital
- **Can increase Operator cash flows by significant levels:**
 - CAPEX and OPEX model developed and validated by multiple operators
 - Additional spectrum expansion delayed or eliminated
 - Benefit per handset establishes operator economics
 - Each incremental ICT-enabled terminal provides a benefit to the consumer and operator.
- **Improves network performance significantly, leading to higher satisfaction and lower churn:**
 - Improves call quality and reduces dropped calls
 - Provides superior data streaming experience
 - Extends coverage at Network edge

Operators deploying Interference Cancellation can derive operational and economic benefits.