HD Radio Business Applications:
Emmis Communications and Broadcaster Traffic Consortium, LLC
Tuesday, October 21, 2008
Emmis Communications embraces digital radio as reinvention of the assets we own. HD Radio is a focus of innovation for our company.

Broadcaster Traffic Consortium consolidates digital radio assets to increase market presence. Digital content partnership aligns FM radio with real-world technology shifts.
Emmis Communications is a publicly traded media and entertainment company

23 U.S. Radio in New York NY, Los Angeles CA, Chicago IL, St. Louis MO, Austin TX, Indianapolis IN

International Radio operations in Belgium, Bulgaria, Hungary and Slovakia

7 U.S. Publications throughout the U.S.

Emmis Interactive web and online sales development for Emmis and non-Emmis radio, publishing and television market
Emmis HD Radio Innovation

Early adopter of HD Radio technology in U.S. – Watching international closely

Active member of HD Radio Alliance developments

Participant in iTunes tagging developments

KSHE HD-2 Multicast – Unique Programming

WorldBand Media HD-3 Multicast

Initiated and led BTC business development
HD Radio Song Tagging

Tagging leverages our strengths – Radio programs for listeners, iTunes programs for downloads

Makes radio more appealing to gadget audience
Emmis HD “Rebranding Rock”

Emmis St. Louis classic rock powerhouse KSHE on HD-2

Programming to appeal to those who have become disenchanted with commercial radio

Sponsorships instead of commercial breaks

Elegant station breaks placed thoughtfully between songs – like commas in a sentence

Unique content – full length albums, live concerts, huge song library of popular originals, deep-cuts, in-studio recordings
About WBM: Emmis seeks innovative content for HD multicasting plus ethnic media company targeting North America’s underserved ethnic communities (1st focus: South Asians).

**How it came About**

1. Ethnic populations live in major markets
2. HD Radio is cost effective way to reach smaller ethnic markets
3. Emmis commitment to serving community interests
4. ROI for both parties over long term
South Asian Markets
Chicago: > 300,000
Los Angeles: > 300,000
New York City: > 750,000

A few facts
• Between 1990 – 2000: fastest growing ethnic group
• Highest per capita income of all ethnic groups
• Annual buying power of approximately $20 billion
• Launch in late 2008
Initiated and led Broadcaster Traffic Consortium business development

January 2006 to November 2007 to form BTC and partnership with Navteq/Nokia
Group of radio organizations unified as a business entity focused on building a nationwide, terrestrial broadcasting, data distribution channel RDS-TMC and HD

- 8 Founding Members – 4 Contributing Organizations – Continuing to Expand
- Covering 52 U.S. Markets with RDS and HD Radio Data
- Planning expansion in U.S. and Canada in 2008/2009
- Competition: Clear Channel Traffic/TeleAtlas, MSN Directband, Sirius XM

Our purpose is to accelerate consumer HD receiver penetration (aside from programming efforts) and create new revenue

Alignment of traditional ad-supported, localized, OTA business model with newer, digital, high growth potential, consumer demand applications
NAVTEQ / Nokia is a leading provider of the digital map data and other content that power many of the world’s most innovative navigation applications.
HD Capability Enables Dynamic Content

With NAVTEQ’s core business being map centric information, the high capacity of HD Radio data services offer the opportunity to leverage a full content suite including:

- Real-time traffic
- World-wide Weather
- Fuel prices
- Events, including movie times, concerts, sports events, and festivals
- Core map POI updates
How Does This Work?

Traffic.com Systems in Philadelphia

- Real-Time Road Sensor Data
- New Developments in Traffic Gathering
- Weather-Gas Prices-Movie Times-Airport Conditions-Map Updates

Navteq Map Systems

Map Related Data

- Accident Reports
- Planned Event Information
- Advertising Inventory

BTC Radio Station Operations

Broadcast real time map data to devices, alongside RDS and HD Audio Channels

Portable Device

Auto with Navigation
NAVTEQ Real-Time Traffic
(Faster and Graphical)
NAVTEQ Map-Based Weather

Report - Temperature, ‘Comfort level’ (heat/cold factor), Wind, Direction, Barometric pressure, Dew Point, Humidity, Cloud cover, Visibility, UV Index, Precipitation type & amount, Description. Extreme weather warnings in force or forecast

Forecast – immediate day to six-hour granularity and for seven days at day granularity

Coverage: Eight ‘areas’ for each of 128 Metropolitan regions in each of ‘eight’ continents.

Possibility of Doppler/Radar images.

**48-Hour Detailed Forecast [Updated: Jul 05 2007 / 07:05 AM CDT]**

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<tr>
<th>Thursday</th>
<th>Morning</th>
<th>Afternoon</th>
<th>Evening</th>
<th>Night</th>
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<tr>
<td><strong>Temp</strong></td>
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<td>85°F</td>
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<tr>
<td><strong>Wind Speed/Dir</strong></td>
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<tr>
<td><strong>6hr. Precip. Total</strong></td>
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<td>0%</td>
<td>4%</td>
<td>8%</td>
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<td><strong>6hr. Precip. Probability</strong></td>
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Fuel prices are pushed to end user for a station most conveniently located to his or her route, including a click to route feature.
Example of fast food restaurant location specific call-to-action via RDS
Closing Remarks
&
Question and Answer