

HD Radio Survey Results

Background

In December 2003, a link to an HD Radio Digital Conversion Survey was sent to 42 seed market stations. Of those stations, 35 responded to the survey – response rate of 83%. The purpose of this survey was to

- ascertain stations current schedule for HD installation and broadcast
- assess the status of the equipment selection process, and
- determine how NPR can best support stations during the following year through services, research and materials

Summary

The survey reveals three distinct groups of nearly equal size. The first group of stations, the “frontrunners”, is forging ahead quickly. Each station has a clear definition of goals, realistic timelines and is explicitly stating its needs for a successful conversion and implementation.

The second group is closely monitoring the frontrunners. So closely, in fact, that the two groups are almost indistinguishable. On first blush the second group seems in alignment with the first group and are equally on task for a successful implementation. However, they are a little unsure of timelines and have a few other station needs.

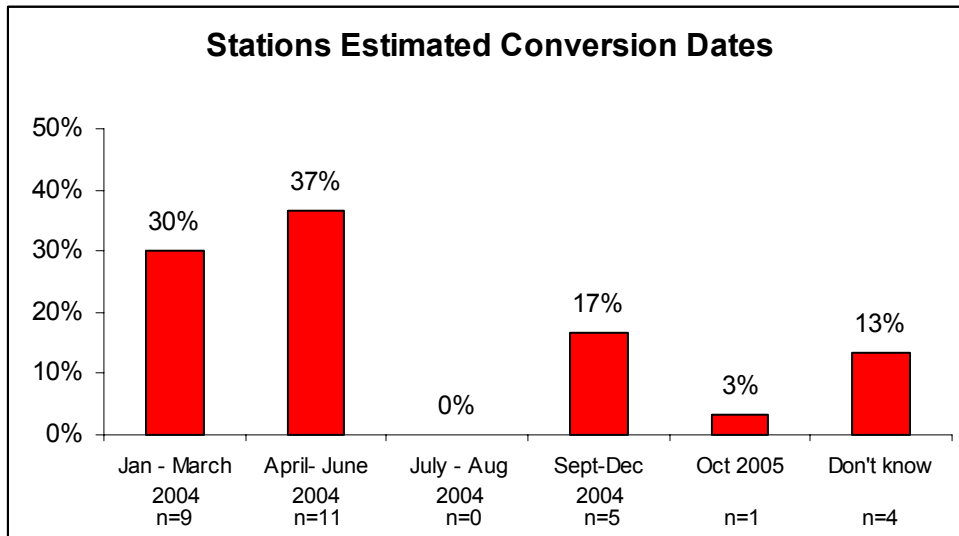
There is a larger gap between the first two groups and the third. The third group is still in the theoretical stage of conversion. The concept of HD Radio has not yet evolved into action. Responses indicate hesitancy and some confusion regarding the process. As a result, many are delaying their conversion process.

Despite the group differences, these overall points merit mention:

- 67% plan to convert in the first half of 2004
- 41% remain undecided regarding broadcast timeline, while 36% look to Fall 2004/Winter 2005
- Three-quarters plan to use a single antenna
- Other technical needs are T1 lines and audio links, studio space, new automation equipment
- While nearly all stations expressed support for SAC (supplementary audio channel), over half have not yet made specific plans for SAC programming
- Well over 80% are interested both in text based information for programming and fundraising/funders
- Looking at the next 6 months, the most important stakeholders are community boards, licensees, and major donors
- From 6-12 months, stations will be most concerned with listeners and members
- The respondents look to NPR for SAC capable receivers as premiums, research on consumer response to HD Radio and SAC, fact sheets and other support materials for underwriters and listeners, and on-air promotion introducing HD Radio
- Key challenges for stations are educating stakeholders regarding HD Radio, time to install and test, and money to fund the transition

Timeline for HD Radio Installation and Broadcast

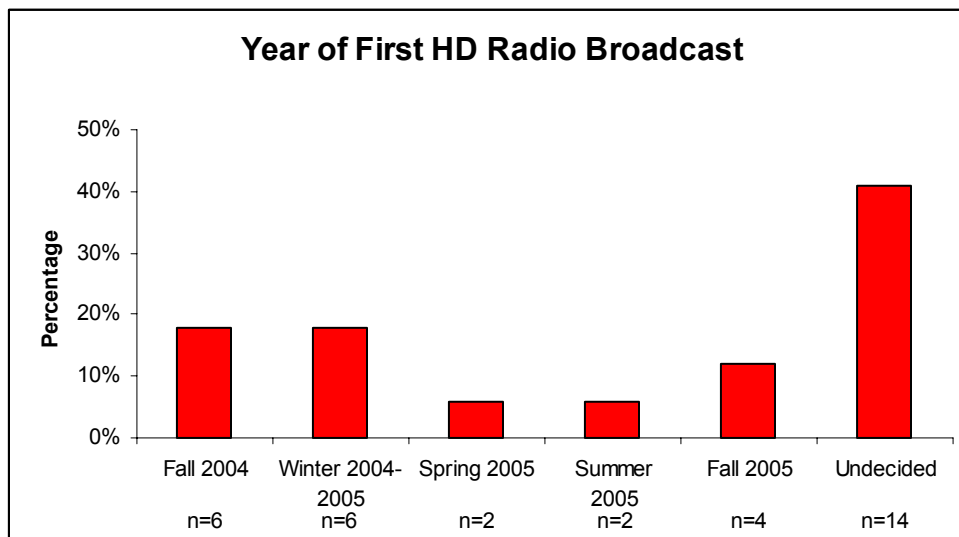
The majority of stations anticipate transitioning in the first half of 2004. Not surprisingly there is a dip during the summer months and then a bump back up in the fall of 2004. Still, a total of nine stations (a combination of don't know responses and 'other' responses) are unsure of their timeline.



Five stations indicated that their timeline for installation of HD radio equipment is dependent on other events such as FCC approval of proposed moves and completion of a new tower.

First Broadcast

Assuming the FCC approves supplemental audio, the plurality of stations (41%) is undecided as to when they plan broadcasting. However, we found 36% of stations optimistic about approval and thus hope to be ready for broadcast as soon as Fall 2004/Winter 2005.



Transmitter Product Selection

When stations were asked what brand of transmitter they plan to purchase, slightly more than half (53%) of all stations cite Harris. As 18% are still undecided, providing product information to these 6 stations may prove helpful.

Company	Count	Percentage
Harris	18	53%
BE	8	24%
Don't know yet	6	18%
Other (Nautel)	2	6%

Automation Equipment

Unlike the Transmitter selection where there has been a clear distinction in product preference, a significant 42% of stations are undecided as to the brand of automation equipment they plan to utilize. Of those 11 stations who have made a decision, Audiovault is the preferred brand.

Brand	Count	Percentage
Audiovault	11	36%
Enco's DAD	4	13%
Dalet	4	13%
Prophet	3	10%
Other (Please Identify)	13	42%

Single Antenna or a Secondary Antenna

About three-quarters of stations (76%) intend to use single antenna for digital transmission. Fifteen percent indicate uncertainty, and nine percent are seeking a secondary antenna.

Antenna	Count	Percentage
Single	25	76%
Secondary	3	9%
Don't Know	5	15%

Technical Resources for SAC

When stations were asked which technical resources they would need for Secondary Audio Channel (SAC), 42% of stations were undecided as to what their needs are. Almost half (48%) of stations were able to state their technical needs very clearly. Most of these were:

- T1 lines and audio links
- more studio space
- new automation: audio processing and equipment

Sixteen percent (16%) of stations expressed confidence that they were ready for SAC and that all of their needs had been met.

Station Needs in the Early Stages of Transition

The verbatim comments indicate several key needs during the early stages of transition.

- awareness of the HD Brand
- costs
- technical support
- FCC approval for SAC

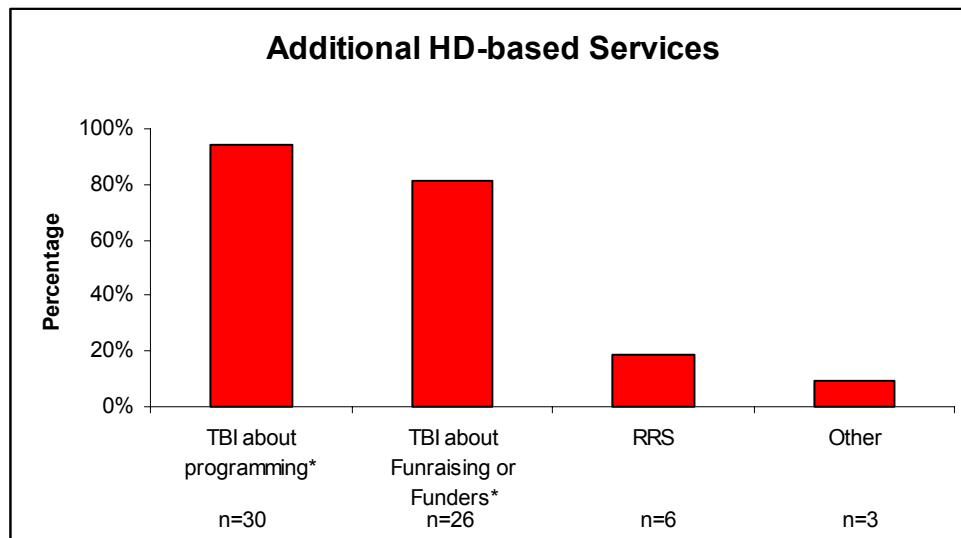
Formatting Plans for Secondary Audio Channel

Although nearly all stations are interested in SAC, slightly more than half (53%) of stations are undecided regarding specific programming plans. Verbatim comments listed in the Appendix state that stations are aware of the capability of SAC. About one-third of stations responded that they intend to use a single format that is currently serviced, but to a lesser degree, to reach existing audiences. And, 19% are looking into a new format that is not presently provided by stations in order to reach new audiences. However, some stations raised concern that HD Radio’s SAC would diminish the high quality audio standards, and they seek assurances that this will not be the case. Some stations are concerned that SAC may reduce bandwidth to the primary audio channel to the extent that listeners notice a difference.

Type of Use	Count	Percentage
Delivery of single format that is now serviced to some degree	11	34%
Delivery of new format that is not currently provided	6	19%
Don’t know	17	53%

New HD-Radio Priority Services

When stations were asked how they would incorporate the new HD-Based services, 94% of stations believe additional text based information would be the most import service offered. Close behind at 81% was the additional text based information about fundraising or funders. The third priority, which dramatically drops down to 19%, is radio-reading services. One station specifically mentioned traffic information as a supplemental service.



* TBI: Text Based Information

Station Priorities for the First Year

In the coming six months, stations are **most** interested in influencing their board/licensee and major donors. This is followed closely by interest in influencing listeners and the local press.

Stakeholders Interested in Influencing (next 6 months)	Count	Percentage
Community Board and/or Licensee	24	71%
Major Donors	23	68%
Listeners	22	65%
Local Press	22	65%
Station Management & Staff	20	59%
Station Members	20	59%
Underwriters	16	47%
Members of Congress	11	32%
State Officials	8	24%

In the following 6-12 months stations are **most** interested in influencing listeners and station members. Major donors and community boards and licensees follow the first tier. Most stations are not focusing on lobbying at the state or national level.

Stakeholders Interested in Influencing (next 6-12 months)	Count	Percentage
Listeners	25	74%
Station Members	24	71%
Major Donors	22	65%
Community Board and/or Licensee	20	59%
Underwriters	17	50%
Station Management & Staff	15	44%
Local Press	15	44%
State Officials	8	24%
Members of Congress	6	18%

Most Useful Services NPR Can Provide Stations

Many of the mean scores hover around the middle due in part to a split between those who feel completely prepared and those stations that are eager for assistance. The need for fact sheets for underwriters and listeners mirrors the priorities listed in the preceding questions. Beyond that, they would like NPR to use its influence to make receivers available as premiums. High on the list as well are primary research regarding the potential impact of new formats for SAC and on-air promotional assistance. Stations are also eager to understand the factors influencing adoption of receivers by consumers.

Importance of NPR Services	Mean
Premium offers for HD receivers (with SAC)	3.87
Primary research findings with listeners on Supplementary Audio Applications	3.81
Research on the radio consumer adopter market	3.73
Primary research findings on potential new formats for Supplemental Audio	3.69
Fact sheets for listeners on the value of digital conversion	3.61
Message points for press	3.55
On-air promotional spots (customized) introducing HD Radio	3.48
Premium offers for HD Receivers (without SAC)	3.47
Website feature articles	3.45
Underwriting one-sheet template for local audio stores	3.29
Letter to members focused on HD Radio	3.25
Case statements to solicit matching funds	3.24
Newsletter articles (print)	3.00
Messages for inclusion in direct mail	2.94
Fact sheets for licensees on the value of digital conversion	2.94

Top Priority Services

Importance of NPR Services	Count	Percentage
Premium offers for HD receivers (with SAC)	11	36%
Underwriting one-sheet template for local audio stores	8	26%
Fact sheets for listeners on the value of digital conversion	8	26%
Case statements to solicit matching funds	7	23%
On-air promotional spots (customized) introducing HD Radio	7	23%
Letter to members focused on HD Radio	7	23%
Fact sheets for licensees on the value of digital conversion	7	23%
Primary research findings on potential new formats for Supplemental Audio	7	23%
Premium offers for HD Receivers (without SAC)	6	19%
Research on the radio consumer adopter market	6	19%
Primary research findings with listeners on Supplementary Audio Applications	5	16%
Website feature articles	4	13%
Message points for press	4	13%
Newsletter articles (print)	1	3%
Messages for inclusion in direct mail	0	0%

Summary of Stations' Greatest Challenges and Concerns

Market Penetration: Stations are concerned about market penetration. How do they convince listeners, underwriters and even their own staff about the value and quality of HD Radio? Stations are looking for the “bridge” that will help transition listeners into not only thinking HD is a ‘good idea’ but actively incorporating it into their daily lives. Stations are aware of the complexities that HD Radio presents and unless people are able to directly experience and notably see the benefits of HD Radio, it has the potential of being just a ‘fad’.

Stations identified key resources that would help relieve many of these anxieties; among them are further research on this market and implementation strategy, hands-on exhibits that readily allow listeners to interact with the technology, and carefully planned and executable marketing and promotional strategies.

Time, Money and Testing: With CPB covering only partial costs and several stations converting large state networks, station management is feeling the pressure to provide funds to make the grant match. Stations are also struggling to find manpower and time to do appropriate testing. It is hoped that further testing would eliminate some of stations fears such as: Does the signal really expand the coverage area? Does HD really have CD-like quality? Will there be co-channel interference? Also, time is as precious a commodity as money. Stations are asking where they can find the time to create quality programming for a second channel without sacrificing other critical activities. Presently, the incentive to do so is marginal because most listeners don't have the technology to properly access HD.

Challenge	Count	Percentage
Education on the Value of HD	10	29%
Time for Installation & Testing	8	23%
Money	8	23%
Second Stream Programming	6	17%
Other	4	12%

Stations identified the following major case points for fundraising

- an opportunity to provide supplemental programming especially in areas of arts and culture
- improved service, quality and delivery through a strong, clear signal

Stations identified the following major case points for listeners on transitioning to digital

Stations expressed concern about convincing listeners that HD radio is a worthwhile investment. Many of the same case points identified for converting listeners parallel the case points for fundraising.

- increased programming
- improved services, information
- better quality as a result of reducing or eliminating interference from multi-path

Some stations specified ways in which NPR might assist with influencing listeners:

Brand Awareness

- ❑ HD symbol on NPR.ORG site with a section on the advantages to HD. Include testimonials and quick tips on equipment and technology of HD.
- ❑ Awareness cards on the counter tops of music & audio stores promoting the upcoming technology of HD.
- ❑ Message points to the press on the benefits of HD Radio

Costs

- ❑ Provide cost breaks on dues and programming to stations that have made the capitol investment towards HD conversion.
- ❑ Support cost effective planning by identifying and communicating areas where supplemental funding can be found.
- ❑ Adopt certain stations as test stations; NPR would administer their licensing application and provide unique programming on the second channel.

FCC Approval

- ❑ Stations did not have any suggestions for approaches to seeking FCC approval of SAC. However, it was stated several times in the verbatim that approval is paramount and that they trust in NPR's capabilities.

Technical Support

- ❑ Stations are seeking technical support during the initial installation.
- ❑ Team of engineers that are readily accessible for stations.
- ❑ Consider transcoding artifacts when designing Content Depot's audio file parameter