



## Addressing Underwater Options: Measured Responses to a Contentious Problem

By Brett Harsen

**WE GENERALLY CREDIT THE HIGH-TECHNOLOGY BOOM OF THE 1990S FOR THE GROWTH OF BROAD-BASED STOCK OPTION**

programs, and can correspondingly blame the 2000/2001 downturn for introducing us to large-scale underwater options. The risk for these awards to fall underwater has existed since stock options were initially introduced as a compensation vehicle. For the first time however, the high-technology sector was faced with company-wide morale, retention and motivation crises that struck at the core of the employee value proposition – the ownership culture.

Just after the downturn, we saw many companies act swiftly to “fix” the worthless options, sometimes piquing shareholders and the business press in the process. Years later, underwater options remain a common problem for high-technology and life sciences companies, but the business and shareholder environment has changed greatly in the interim:

- SFAS 123(R) became mandatory, changing the accounting treatment for underwater option exchange programs (in general, making accounting consequences *less* punitive)
- NYSE and NASDAQ exchanges implemented rules requiring shareholder approval for underwater option exchange programs
- Shareholders have become more sophisticated and vocal in making known what types of option exchange programs are acceptable – and which are *not*
- The SEC has required underwater option exchanges to be treated as tender offers, exposing programs to greater public disclosure and more restrictive offer rules

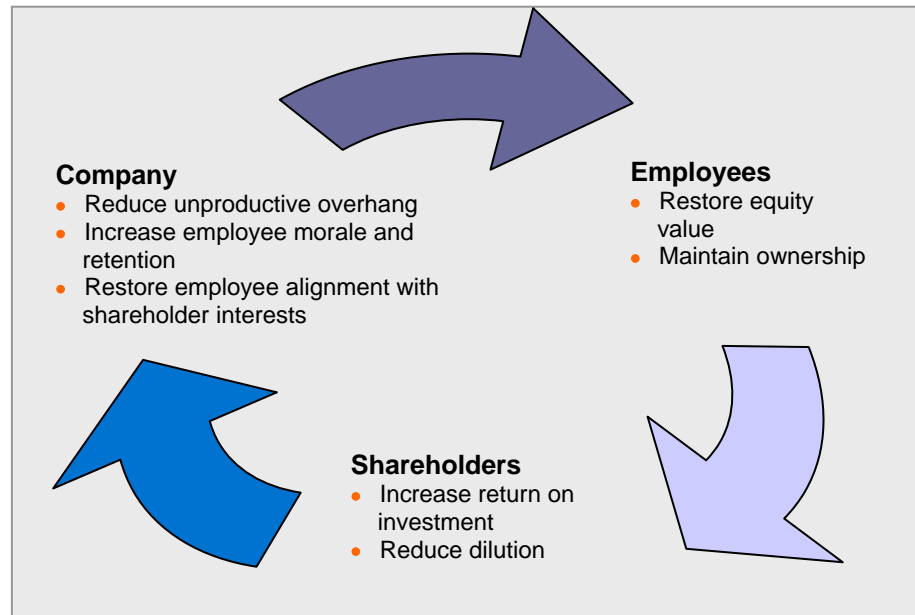
As it stands today, there is precedence for executing an underwater option solution that is beneficial and acceptable to each of the three primary stakeholders: employees, the company and shareholders, as outlined in Figure 1.

**Underwater Option** (uhn-der-waw-ter op-shuhn)  
*n.* An employee stock option with an exercise price greater than the fair market value of the underlying company stock.

This Radford Review will explore the three most common underwater exchange approaches and discuss the implications of each major design consideration. Throughout this white paper, we will cite from Radford Surveys + Consulting's ongoing research into public companies that have implemented such programs<sup>1</sup>, providing actual data on prevalent market practices. Finally, we will provide advice on program rollout, communication and administration.

There is precedence for executing an underwater option solution that is beneficial to employees, the company and shareholders

Figure 1: Stakeholder Objectives for an Underwater Option Exchange



### Underwater Exchange Program Approaches

Three basic approaches have emerged for addressing underwater options in today's business environment: Options-for-Options, Options-for-Stock, and Options-for-Cash<sup>2</sup>. The form of consideration offered by the company in return for the employee's participation is the primary difference between the alternatives. Figure 2 provides a general description and outlines the advantages and disadvantages of each approach.

Figure 2: Descriptions of Underwater Exchange Approaches

Approach	Description	Advantages	Disadvantages
Options-for-Options	Cancellation of underwater options followed by an immediate re-grant of ( <i>typically fewer</i> ) new options	<ul style="list-style-type: none"> <li>Ease of communication (employees generally understand options)</li> <li>Employees maintain control of taxable event (options taxed at exercise)</li> <li>Some reduction in issued stock overhang (assuming fewer new options are granted than were cancelled)</li> </ul>	<ul style="list-style-type: none"> <li>Potential remains for newly issued options to go underwater in the future</li> <li>May not be received positively by employees if stock options have not provided value historically</li> </ul>
Options-for-Stock (restricted stock or RSUs)	Cancellation of underwater options followed by an immediate re-grant of ( <i>significantly fewer</i> ) new shares of restricted stock/units	<ul style="list-style-type: none"> <li>Eliminates additional future underwater options (restricted stock cannot fall underwater)</li> <li>Greater reduction in issued equity overhang due to higher exchange ratios</li> </ul>	<ul style="list-style-type: none"> <li>Employees lose control of taxable event (shares taxed at vest/receipt)</li> <li>Number of shares returned to employee typically reduces future upside leverage compared to using stock options</li> </ul>
Options-for-Cash	Cancellation of underwater options for a ( <i>typically immediate</i> ) cash payment	<ul style="list-style-type: none"> <li>Greatest possible reduction in issued equity overhang (no new equity shares are issued)</li> <li>Eliminates additional future underwater options</li> <li>Typically provides immediate value to participants when no additional vesting required for payment</li> </ul>	<ul style="list-style-type: none"> <li>Requires a cash outlay by the company</li> <li>Employees lose control of taxable event (taxed upon payment)</li> <li>Employees lose opportunity to participate in future upside stock price growth</li> <li>Lacks retention features if no additional vesting added</li> </ul>

Three basic approaches have emerged for addressing underwater options; many factors determine which is appropriate for you

The primary factors driving program choice are:

**Governing equity incentive philosophy**

The use of restricted stock in lieu of options for ongoing equity awards has increased substantially in recent years. If an organization has already undergone such a philosophical shift to restricted stock, the options-for-options approach may deliver conflicting messages to employees.

**Current equity plan parameters**

Some companies still have option-only plans that do not provide for the granting of restricted stock/RSUs, therefore limiting the alternatives available to address underwater options.

**Resource limitations**

Cash is often a scarce resource, making the options-for-cash approach infeasible. Conversely, if shares available for grant under existing plans are not sufficient to cover the expected re-grant obligation, using cash may be the only course of action.

### ***Emphasis on overhang reduction objective***

In some cases, issued overhang reduction is of paramount importance (either to the company or shareholders), driving companies away from the options-for-options approach.

### ***Employee perception***

It is important to remember that employee participation in an exchange is voluntary. To maximize program success, employee demand for one form of consideration over another must be factored into the decision.

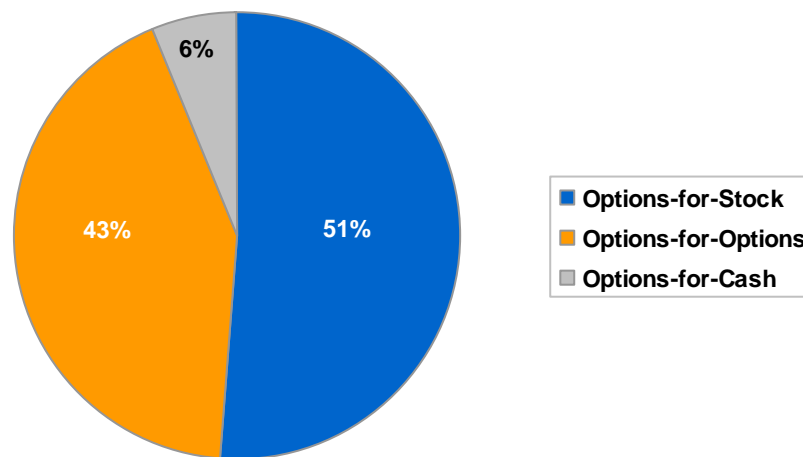
---

**The most popular approach has been options-for-stock; cash programs are relatively rare**

---

Our research findings indicate the most popular approach has been the options-for-stock exchange (51% of companies), followed closely by options-for-options (43%) with cash programs relatively rare (6%). [Figure 3]

**Figure 3: Prevalence of Underwater Exchange Approaches**



**n=50**

### **Program Design Considerations**

Regardless of the approach used, the majority of design considerations remain the same. The following section reviews each primary decision point; discusses implications; and provides market data on prevalent practices. Since shareholder approval is often required, we will touch on typical strategies for maximizing likelihood of investor approval at each step. In rare cases, an existing equity plan may explicitly allow the company to execute an underwater exchange with Board approval, not requiring shareholder approval. We recommend such cases carefully consider using “shareholder-friendly” terms to avoid the risk of investors taking retaliatory stances on future equity plan requests or Board member reelection efforts.

#### ***Option Holder Eligibility***

The first decision is whether certain option holders should be excluded from the program, namely members of the Board of Directors and executive officers of the company. Shareholder groups consistently want these senior level individuals excluded, arguing that accountability for performance

and direct linkage between stock price improvement and pay is essential. Shareholders reason that unlike broad-based employees for which morale and retention is the focus, directors and officers should not get a second bite at the apple if the stock price declined on their watch.

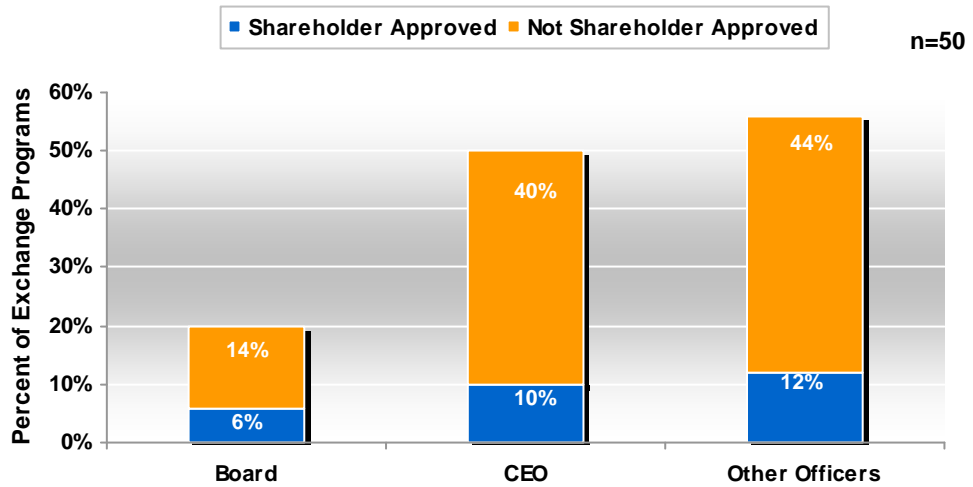
However, these individuals often hold substantial amounts of the troubled options in question, and excluding them can undermine other important program objectives such as overhang reduction. If it is determined that directors and/or officers must be included, consider:

**Those companies that put their exchange program to a shareholder vote were more likely to exclude officers and directors**

- Allowing their participation only under terms less favorable than those provided for broad-based employees (higher exchange rates, lower cash payments and/or longer vesting requirements for new awards)
- Separating the shareholder approval process into multiple proposals so that investors can decide on directors and/or officers without jeopardizing the program for broad-based employees.

Our research finds that only 20 percent of companies allowed the Board of Directors to participate in an underwater exchange program. Fifty percent of CEOs and 56 percent of other corporate officers were eligible to participate in the programs we studied. However, in four out of five cases where these senior executives were allowed to participate, the program was conducted without shareholder approval. Those companies that put their exchange program to a shareholder vote were more likely to exclude officers and directors to secure approval. [Figure 4]

**Figure 4: Senior Leadership Eligibility**



*Grant Eligibility*

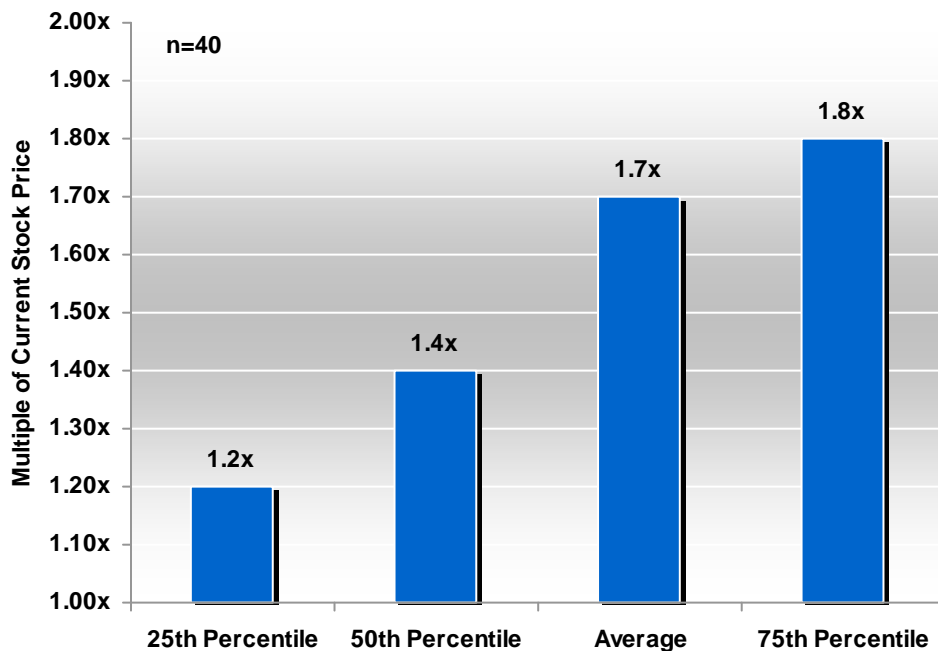
The next decision is which outstanding stock options to allow employees to exchange. Do we allow *any* underwater option to be turned in, or only those that are “*significantly*” underwater? There are three primary reasons for putting some space between stock options eligible for exchange and the current stock price:

- Allowing those options that are still priced relatively close to the current market value of the stock may send the message to investors and employees that the company’s leaders have little faith in stock price recovery

- Options only slightly underwater still provide an achievable incentive to increase stock price
- For those using the options-for-options approach, the new awards could be struck with a higher exercise price than those surrendered if the stock price spikes during the program enrollment period (tender offer rules, discussed later, require the offer remain open for at least 20 business days)

Determining where to set the price floor for grant eligibility is not an exact science. Company stock volatility and an array of employee and shareholder considerations will influence this decision – factors that can vary greatly from one company to the next. One institutional shareholder advisory group has a stated policy that the floor for eligible awards should not be less than the stock price’s 52- week high. We find that 80 percent of the companies in our database set a floor that is above the current stock price. Figure 5 demonstrates that floors typically range between 1.2x and 1.8x of the current stock price.

Figure 5: Price Floor for Grant Eligibility



**If an employee perceives a bad deal, participation will be below expectations and the program will fail to meet its stated objectives**

*Exchange Ratios or Cash Amounts Offered*

The most important element of an underwater exchange program is usually the amount of consideration being offered to the stock option holder. Remember, these are voluntary offers in which employees typically fixate on the number of shares they will be holding before and after the exchange. If an employee *perceives* a bad deal, participation will be below expectations and the program will fail to meet its stated objectives.

Many factors are at play when dealing with employee perceptions, but a common starting point is the “value-neutral” exchange rate. This is determined by using a fair value model, such as Black-Scholes, to calculate the value of the underwater options. If using cash, this represents your offering amount and you stop here. If using new options or restricted stock in the exchange, the number of

underwater options equal in value to one new award is your exchange rate. Because restricted stock has a higher per-share value than an option, options-for-restricted stock programs typically have higher exchange ratios than option-for-option offers.

Companies may round the calculated value-neutral rate to make it easier to administer and communicate to employees, or they may dismiss it altogether if the Black-Scholes valuation is dubious. It is important to note that if the new award has greater value than the surrendered underwater options, an incremental accounting charge will be generated under SFAS 123R. An offer that is value-neutral, or returns less value to the employee, avoids such charges. Determining the accounting impact is an important issue to review with the Compensation and Audit Committees when establishing the parameters of the plan. Figure 6 provides examples for three companies that arrive at their exchange ratio from different directions and their rationale for doing so.

**An offer that is value-neutral, or returns less value to employees, avoids additional SFAS123R charges**

**Figure 6: Sample Company Cases**

	(A) Value of Underwater Options (Black Scholes)	(B) Value of New Restricted Share (face value of stock)	(C) Value of New Option Share (Black-Scholes)	Approach Used	Calculated Value-Neutral Exchange Rate	Final Exchange Rate Offered to Employees	Accounting Impact	Rationale
Company 1	\$3.00	\$18.00	\$9.00	Options-for-Options	$(C) / (A) = 3:1$	3:1	No Cost	The calculated value-neutral rate is easy to communicate, fair and generates no additional accounting costs
Company 2	\$6.23	\$25.32	\$12.13	Options-for-Options	$(C) / (A) = 1.947:1$	2:1	No Cost	The calculated value-neutral rate is difficult to explain to employees. Rounding up makes communication easier, is still perceived as fair, and doesn't generate additional accounting costs
Company 3	\$1.50	\$15.00	\$5.00	Options-for-Restricted Stock	$(B) / (A) = 10:1$	5:1	Additional Costs Incurred	Employees are likely to reject an offer at 10:1 as unfair. In order to improve participation in the program, the company is willing to incur accounting charges to make the offer more attractive

Figure 6 is likely an oversimplification because it implies each company is using only one exchange rate. Many exchange programs attempt to address multiple underwater option grants with a range of strike prices. Offering only one exchange rate in these cases would make it very attractive to exchange certain awards and much less attractive for others. Conversely, establishing a unique exchange rate for every outstanding grant is complex and usually not necessary. The most common

approach is to group outstanding underwater options by strike price into a reasonable number of tiers. Figure 7 provides an example of a four-tier options-for-stock program.

**Figure 7: Sample Exchange Offer Using Multiple Price Tiers**

Tier	Strike Price Range	Options-for-Stock Ratio
1	\$10 to \$14.99	3.0:1
2	\$15 to \$19.99	3.5:1
3	\$20 to \$29.99	4.0:1
4	\$30 and over	5.0:1

**Establishing a unique exchange rate for every outstanding grant is complex and usually not necessary**

Figure 8 summarizes the number of tiers used and the average range of exchange rates offered by the companies included in Radford's research.

**Figure 8: Tier Usage and Exchange Rate Prevalence**

Exchange Approach	Percent of Companies									Exchange Rates		
	One Exchange Rate Offered	2 Tiers	3 Tiers	4 Tiers	7 Tiers	9 Tiers	12 Tiers	15 Tiers	No Tiers-Indiv. Exchange Rates per Grant	Low	Median	High
Options-for-Options (n=23)	74%	9%	9%	9%	0%	0%	0%	0%	0%	1.0:1	1.4:1	5.0:1
Options-for-Stock (n=24)	38%	4%	29%	4%	4%	4%	4%	4%	8%	1.0:1	4.0:1	20.0:1

### *Vesting of New Awards*

In options-for-options and options-for-stock programs, the second most critical factor affecting employees' willingness to participate is the vesting treatment for new awards. There are three basic ways to approach vesting of new equity awards in an underwater exchange program.

- **Map Vesting – Mapping** is the most employee-friendly approach that simply transfers the vested position of the underwater award to the new award. For example, if the underwater award tendered for exchange was 50 percent vested with one year to vest on the remainder, the new award will be 50 percent vested when it is granted, with the balance vesting over a one-year period.
- **Full Vesting Reset – A full reset** is the least employee-friendly approach. It disregards the vested position of the tendered underwater options and introduces a fresh vesting schedule to the new award based on typical practices (e.g., four years).
- **Partial Vesting Reset – The partial reset** is a middle ground between mapping and full reset. Typically, the new award is reset to zero vested at grant, but uses a shorter schedule than is typically used for equity awards (e.g., two years instead of the normal four year requirement). This approach adds additional retention to the new grant – a key objective of most option exchange programs – while still recognizing some of the vesting already earned by the employee.

In most cases, the underwater options being considered for exchange are substantially vested. Failing to recognize this past service by requiring the employees to vest from scratch in the new awards may hurt program participation. Because retention is often a key objective for the company, Radford typically recommends using a partial vesting reset. This approach recognizes some of the vesting earned on the old awards, while adding retention value to the plan. Figure 9 outlines the vesting approaches used by the companies studied in our research.

**Figure 9: New Award Vesting**

Exchange Approach	Percent of Companies Using Mapped Vesting	Percent of Companies Immediately Vesting All New Shares	Reset Vesting			
			Percent of Companies	Low Vest Period (yrs)	Median Vest Period (yrs)	High Vest Period (yrs)
Options-for-Options (n=23)	26%	9%	65%	1.0	3.0	4.0
Options-for-Stock (n=24)	17%	0%	83%	1.0	3.0	5.0

*Treatment of Net Recaptures*

Unless a 1:1 ratio is used, underwater exchanges will cancel a greater number of underwater shares than are re-granted as new awards. Most employee equity plans allow these recaptured shares to be returned to plan pools and made available for future issuance. However, in order to make the program more palatable to investors, some companies commit to permanently retiring net shares so they cannot create any further shareholder dilution. In studying recent underwater programs, of those companies that used exchange ratios of greater than 1:1, we found that 23 percent permanently retired some or all of the net shares and did not return them to plan pools.

**NYSE and NASDAQ requirements for investor approval have forced the evolution of more “shareholder friendly” programs**

**Sidebar: Maximizing Shareholder Approval**

In June 2003 the SEC approved new rules adopted by the NYSE and NASDAQ exchanges requiring shareholder approval for the vast majority of underwater stock option exchange programs. This more onerous requirement has forced the evolution of more “shareholder friendly” programs designed to ensure approval in the proxy voting process. The following summarizes the most shareholder-friendly approaches to each major design consideration.

Design Consideration	Shareholder-Friendly Approach
Option Holder Eligibility	<ul style="list-style-type: none"> <li>Exclude members of the Board of Directors</li> <li>Exclude executive officers</li> </ul>
Grant Eligibility	<ul style="list-style-type: none"> <li>Exclude any awards that are not significantly underwater (e.g. strike price less than or equal to the 52-week high)</li> <li>Exclude any awards that are less than two years old</li> </ul>
Exchange Rate	<ul style="list-style-type: none"> <li>Value neutral cash payments or share-for-share exchange rates (as determined by Black-Scholes or binomial models)</li> </ul>
New Award Vesting	<ul style="list-style-type: none"> <li>Reset vesting to original schedule, or possibly increase, for retention purposes</li> </ul>
Share Recaptures	<ul style="list-style-type: none"> <li>Retire net shares recaptures to permanently remove from plan pools</li> </ul>

## Program Implementation

Underwater option exchange offers are complex programs that require a well-defined communication and administration strategy. Some have compared the effort required to execute these programs to an open enrollment campaign for health and welfare benefits. In both cases, program details have to be explained and incumbent-by-incumbent elections must be tracked. It is important that the company not recommend to employees a course of action, or try to influence their decision to participate. To remain at arms length, some organizations choose to use a third party to communicate plan terms and administer elections.

Making the process even more burdensome is the requirement that it be treated as a tender offer under SEC rules. In a tender offer, any information that is material to the employee's decision to participate must be publicly filed. Due to the logistics and costs associated with making SEC filings, this means that *all* information that is intended to be shared with employees should be finalized before the program begins (legal offer description, employee presentations, e-mail announcements, enrollment forms, frequently asked questions). Employees must be given at least 20 business days to consider program participation and the company cannot recommend any course of action to option holders.

Any introduction of new material information after the program has started, or a change to the information originally provided, may require the company to file a tender offer amendment and restart the required 20 day election period.

Finally, eligibility for employees outside the United States must be examined on a country-by-country basis to avoid creating unnecessary tax and securities burdens for the company and program participants. Advice from local tax and securities experts should be obtained before deciding whether to include these locations in such programs. The costs and complexities of implementing a stock option exchange in a country without critical headcount and limited underwater option shares may mean such an approach is infeasible. In such circumstances, underwater options outside the United States can be addressed with supplemental equity awards that don't require the tender offer process.

## Conclusion

Stock options will continue to play an important role in high-technology and life sciences compensation delivery well into the future. For various reasons, and from time to time, options will fall underwater and companies will have to take action to address the associated employee morale issues. While regulatory and shareholder scrutiny has made underwater option solutions more onerous, companies can take advantage of responsible strategies for addressing the problem while meeting the objectives of all three stakeholders – the employees, the company and shareholders. If your company is considering action to address underwater options, please contact Brett Harsen at +1 (312) 381-3685 or [bharsen@radford.com](mailto:bharsen@radford.com) for additional assistance.

---

**For more information, please contact Brett Harsen, +1 (312) 381-3685 or [bharsen@radford.com](mailto:bharsen@radford.com)**

## Footnotes

<sup>1</sup> Radford's Underwater Exchange Database is continuously updated. As of this printing (April 2008), our database includes 50 publicly traded companies that have executed an underwater exchange since early 2005. Please see the appendix for a detailed profile of the companies studied.

<sup>2</sup> Under the former APB25 accounting rules, the cancellation of underwater options and the re-grant of new options had to be separated by a six-month-and-one-day waiting period to avoid punitive variable accounting treatment. Consequently, "6+1" option-for-option programs were the predominant choice prior to SFAS 123R. Under SFAS 123R, this six-month period is no longer necessary and therefore is not discussed in this paper.

Appendix – Radford’s Underwater Database

Company	Industry	Tender Offer Filing Date
Accelrys	Software	07/28/06
Actel	Semiconductor	12/01/05
Advanced Analogic Technologies	Semiconductor	12/15/06
Agile Software	Software	07/08/05
Applied Micro Circuits	Semiconductor	04/06/07
Ariba	Software	07/07/05
AXS One	Application Software	02/01/08
Bluefly	Internet Retail	01/25/07
Boston Scientific Corp.	Medical Instruments	05/22/07
Bronco Drilling Company	Oil/Gas Well Drilling	04/20/07
Builders Firstsource	Lumber & Building Materials	04/23/08
Catalyst Semiconductor	Semiconductor	02/14/07
Checkpoint	Software	09/18/06
Corgentech / Anesiva	Pharmaceutical	11/10/05
Critical Path	Software	05/31/06
Electronic Arts	Software	08/16/06
Endwave	Communicatons Equipment	01/04/08
Entercom	Media	06/05/06
Gartner	Business Services	08/22/05
ICAD	Med Dev	09/22/06
Internap	Networking	08/30/06
Intraware	Software	03/13/07
Kintera	Services	05/31/06
LIN TV	Media	11/21/05
LogicVision	Semiconductor	02/07/07
Magma Design Automation	Semiconductor	06/27/05
Marsh & McLennan	Insurance	05/20/05
Maxim Integrated Products	Semiconductor	02/01/06
MDC Holdings	Residential Construction	03/26/08
Mercury Computer Systems	Hardware	08/11/06
Meritage Homes Corporation	Residential Construction	10/01/07
Micro Linear	Semiconductor	02/27/06
Microvision	Hardware	04/18/06
Monolithic System Technology	Semiconductor	12/14/05
Natural Health Trends Corp.	Personal Prodcuts	05/25/07
Neurocrine	Pharmaceutical	08/25/06
Photon Dynamics	Electronics	03/19/07
Pixelworks	Semiconductor	10/27/06
Rackable Systems	Diversified Computer Systems	06/11/07
Riverbed	Communicatons Equipment	05/01/08
Rockville Financial	Regional-NE Banks	09/26/07
Smart Video Technologies	Networking	03/09/07
Strayer Education	Education	05/12/06
Synopsys	Software	05/25/05
Sypris Solutions	Scientific & Tech. Instruments	05/15/07
Tenet Healthcare	Healthcare	05/25/05
Threshold Pharma	Pharmaceutical	08/25/06
Ubid.Com Holdings	Catalog & Mail Order	02/19/08
Watchguard Technology	Software	04/19/05
Zoran	Semiconductor	01/06/06

### **Brett Harsen**

Vice President

Brett Harsen has more than 10 years of compensation consulting experience on a range of issues, including broad-based employee pay, short- and long-term incentive design, executive and Board of Directors compensation. He specializes in equity compensation design and delivery. Brett consults organizations in a variety of industries, with a focus on high technology and life sciences.

In his current role, Brett leads the newly-launched Radford Advisory Services (RAS) group, providing customized analytics and services that improve survey data analyses and compensation program design. In addition to managing the strategic direction for RAS, he directs the team's special research into equity and Board of Directors compensation practices and trends at publicly-traded companies.

Prior to joining Radford Surveys + Consulting, he held consulting positions at Mellon's HR & Investor Solutions, iQuantic and Deloitte & Touche's Human Capital Advisory Services.

Brett earned a bachelor of science from University of Illinois and holds designations from *WorldatWork* as a Certified Compensation Professional (CCP), and the Society for HR Management as a Professional in Human Resources (PHR). He is a frequent writer and speaker on equity and long-term incentive topics. Brett is based in Chicago.

## **About Radford**

For more than 30 years, Radford has provided compensation market intelligence to the technology and life sciences industries. Global survey databases, which include three million incumbents, offer current, reliable data to 2,000+ clients. Leveraging Radford survey data, our thought-leading global Radford Consulting team creates tailored solutions for the toughest global business and compensation challenges facing companies at all stages of development. In addition to our consulting team, we also offer equity valuation assistance via Radford Valuation Services, and leading-edge market analyses and survey services with Radford Advisory Services. For more information on Radford, please visit [www.radford.com](http://www.radford.com).

## **About Aon Consulting**

Aon Consulting Worldwide (<http://www.aon.com/hcc>) is among the top global human capital consulting firms, with 2007 revenues of \$1.352 billion and 6,335 professionals in 117 offices worldwide. Aon Consulting is shaping the workplace of the future through benefits, talent management and rewards strategies and solutions. Aon Consulting was named the best employee benefit consulting firm by the readers of Business Insurance magazine in 2006 and 2007.

**AON** CONSULTING

[www.aon.com](http://www.aon.com)

---

**RADFORD**  
SURVEYS + CONSULTING

[www.radford.com](http://www.radford.com)

---

San Jose San Francisco San Diego Chicago Atlanta Washington DC Philadelphia New York Boston London Hong Kong