## R\&D and Innovation Survey

## Notes

Survey introduction

## TBD

## Overall company information

1. Please provide the following information for a person we may contact regarding the answers to this survey.

## Name

$\square$
Title


## E-mail address


2. Which five-digit business code from the list on pages 2 and 3 best describes your company at end of 2008? (Enter number; if none, enter zero.)
$\square$
$\square$
$\square$
$\square$
$\square$

NOTE: Please answer the next three questions to find out whether you should fill out this questionnaire.
3. Did your company cease operations prior to April 1, 2008?
[ ] Yes $\rightarrow$ Stop here.
Please enter the date your company ceased operations and return the survey form.

Date: $\qquad$
[ ] No $\rightarrow$ Go to Question 4, page 4.

## Business segment codes for Question 2

## Aerospace \& Defense

33641 Aircraft manufacturing
33642 Aircraft engine and engine parts manufacturing
33643 Other aircraft parts and auxiliary equipment manufacturing
33644 Guided missiles, space vehicles and parts manufacturing
33692 Military armored vehicle, tank, and tank components manufacturing
33452 Search, detection, navigation, guidance, aeronautical, and nautical system and instruments manufacturing
33660 Ship and boat building

## Automobiles, Motorcycles \& Components

33610 Motor vehicles manufacturing
33620 Motor vehicle body and trailer manufacturing
33630 Motor vehicle parts manufacturing
33691 Motorcycle, bicycle, and parts manufacturing
33699 All other transportation equipment manufacturing

## Capital Goods

33430 Audio and video equipment manufacturing
33330 Commercial, service industry, temperature control, and airflow control machinery manufacturing
33312 Construction machinery manufacturing
23600 Construction of buildings
33360 Engine, turbine, and power transmission equipment manufacturing
33200 Fabricated metal products manufacturing
33311 Farm machinery and equipment manufacturing
23700 Heavy and civil engineering construction
33322 Industrial machinery manufacturing, except semiconductor machinery
33390 Metalworking and other general purpose machinery manufacturing
33313 Mining machinery and equipment manufacturing
33651 Railroad rolling stock manufacturing
33660 Ship and boat building
23800 Specialty trade contractors

## Commercial and Professional Services (including contract research)

54120 Accounting, tax preparation, bookkeeping and payroll services
54180 Advertising and related services
54130 Architectural, engineering, and related services
56140 Business support services
53240 Commercial and industrial machinery and equipment rental and leasing
54110 Legal services
54160 Management, scientific, and technical consulting services
56190 Office administrative, facilities, employment, and other support services
54190 Professional, scientific, and technical services (Not listed elsewhere in this category)
32300 Printing and related support activities
56290 Remediation and other waste management services
(continued)
Commercial and Professional Services (including contract
research) (continued)

56150 Travel arrangement and reservation services
56210 Waste collection, treatment, and disposal

## Consumer Goods \& Services

71300 Amusement, gambling, and recreation industries
31500 Apparel manufacturing
33430 Audio and video equipment manufacturing
81110 Automotive repair and maintenance
31210 Beverage manufacturing
51520 Cable and other subscription programming (except Internet)
62440 Child day care services
44800 Clothing and clothing accessories stores
23600 Construction of buildings
53220 Consumer goods and general rental centers
61100 Educational services
33500 Electrical equipment, appliances, and components manufacturing
45410 Electronic shopping and mail-order houses
44300 Electronics and appliance stores
44500 Food and beverage stores
31100 Food manufacturing
72200 Food services and drinking places
33700 Furniture and related products manufacturing
45200 General merchandise stores
51600 Internet publishing and broadcasting
56160 Investigation, security, and services to buildings and dwellings
31600 Leather and allied products manufacturing
33990 Miscellaneous manufacturing (Not elsewhere listed in this category)
51200 Motion picture and sound recording (except Internet)
44100 Motor vehicle and parts dealers
71200 Museums, historical sites, and similar institutions
51110 Newspaper, periodical, book, and directory
45490 Nonstore retailers, except electronic shopping and mail-order houses
71100 Performing arts, spectator sports, and related industries
81200 Personal care, death care, laundry, and other personal services
51510 Radio and television broadcasting (except Internet)
81190 Repair and maintenance, except automotive
45990 Retail trade stores, including gasoline stations (Not elsewhere listed in this category)
32591 Soap, cleaning compound, and toilet preparations manufacturing
62400 Social assistance (except child day care services)
31300 Textile mill products
31220 Tobacco manufacturing
56150 Travel arrangement and reservation services
72100 Traveler accommodation services

## Business segment codes for Question 2 (continued)

## Energy

21210 Coal mining
22110 Electric power generation, transmission, and distribution
21100 Oil and gas extraction
33313 Oil and gas field machinery and equipment manufacturing
32400 Petroleum and coal products manufacturing
48610 Pipeline transportation of crude oil, refined petroleum, and miscellaneous products, except natural gas
48620 Pipeline transportation of natural gas
21300 Support activities for oil and gas operations

## Financials

52230 Activities related to credit intermediation
52420 Agencies, brokerages, and other insurance related activities
52210 Depository credit intermediation
52500 Funds, trusts, and other financial vehicles
52410 Insurance carriers
52100 Monetary authorities-central bank
52220 Nondepository credit intermediation
53100 Real estate
52300 Securities, commodity contracts, and other financial investments and related activities

## Health Care

33451 Electromedical, electrotherapeutic and irradiation apparatus manufacturing
62210 General medical and surgical hospitals
62160 Home health care services
32543 In-vitro diagnostic substances manufacturing
62150 Medical and diagnostic laboratories
33910 Medical equipment and supplies manufacturing
62300 Nursing and residential care facilities
62120 Offices of dentists and other health practitioners
62110 Offices of physicians
62190 Outpatient care centers and other ambulatory health care services
32541 Pharmaceutical, medicinal, botanical, and biological products (except diagnostic) manufacturing
62220 Psychiatric, substance abuse, and specialty hospitals
54170 Scientific research \& development services

## Information Technology - Goods and services

33429 Communication equipment manufacturing, except broadcasting, wireless, and telephone apparatus
54150 Computer systems design and related services
33410 Computers and peripheral equipment manufacturing
51820 Data processing, hosting, and related services
33500 Electrical equipment, appliances, and components manufacturing
51900 Information services (Not elsewhere listed in this category)
51810 Internet service providers and web search portals
33460 Manufacturing and reproducing magnetic and optical media manufacturing
33459 Measuring and control instruments manufacturing (Not listed elsewhere in this category)
33422 Radio and television broadcasting and wireless communications equipment manufacturing
(continued)

Information Technology - Goods and services (continued)
33452 Search, detection, navigation, guidance, aeronautical, and nautical system and instruments manufacturing
33440 Semiconductor and other electronic components manufacturing
33321 Semiconductor machinery manufacturing
51120 Software
33421 Telephone apparatus manufacturing

## Materials

32511 Basic chemicals manufacturing
32790 Cement, concrete, lime, gypsum, and other nonmetallic mineral product manufacturing
32710 Clay and glass products manufacturing
33150 Ferrous and nonferrous foundries
33110 Iron and steel mills, ferroalloy, and steel product from purchased steel
21220 Metal ore mining
33130 Nonferrous metals production and processing
21230 Nonmetallic mineral mining and quarrying
32592 Paint, adhesive, and other chemical manufacturing
32200 Paper manufacturing
32530 Pesticide, fertilizer, and other agricultural chemical manufacturing
32600 Plastics and rubber products manufacturing
32512 Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing
32591 Soap, cleaning compound, and toilet preparations manufacturing
21310 Support activities for solid mineral operations
32100 Wood products manufacturing

## Telecommunication Services

51750 Cable and other program distribution
51740 Satellite telecommunications
51790 Telecommunications services (Not listed elsewhere in this category)
51710 Wired telecommunications carriers
51720 Wireless telecommunications carriers (except satellite)

## Transportation

48100 Air transportation
53210 Automotive equipment rental and leasing
49200 Couriers and messengers
48200 Rail transportation
48700 Scenic and sightseeing transportation
48800 Support activities for transportation
48500 Transit and ground passenger transportation
48400 Truck transportation
49300 Warehousing and storage
48300 Water transportation

## Utilities

22110 Electric power generation, transmission, and distribution
22120 Natural gas distribution
56290 Remediation and other waste management services
56210 Waste collection, treatment, and disposal
22130 Water, sewage, and other systems
4. Did another company own more than 50 percent of your company during 2008?
[ ] Yes
Please enter the date your company was purchased and return the survey questionnaire.

Date: $\qquad$ $\rightarrow$ Stop.
[ ] No $\rightarrow$ Continue with next question
5. How many male and female employees worked at your company on March 12, 2008? (Enter numbers)

- Please include employees working both within the United States and in other countries


STOP $\rightarrow$ If your company had 5 or more employees as of March 12, 2008, please stop now and return the questionnaire.
6. What year did you start your business? (Check one.)

| $[$ | $]$ | 2003 or earlier |
| :--- | :--- | :--- |
| $[$ | $]$ | 2004 |
| $[$ | $]$ | 2005 |
| $[$ | $]$ | 2006 |
| $[$ | $]$ | 2007 |
| $[$ | $]$ | 2008 |
| $[$ | $]$ | 2009 |
| $[$ | $]$ | Uncertain |
| $[$ | $]$ | Other (Please specify) |

7. Was your company located in a science park during any of the first five years you were in business? (Check one)
[ ] Yes
[ ] No
[ ] Uncertain
[ ] Other (Please specify)
8. How much did your company spend on upgrading or purchasing equipment during 2008? (Check one)

|  | None |
| :---: | :---: |
| [ ] | Less than \$10,000 |
| [ ] | \$10,000 to \$100,000 |
| [ ] | \$100,001 to \$1 million |
| [ ] | \$1.1 to \$5 million |
| [ ] | \$5.1 to \$10 million |
| ] | \$10.1 to \$25 million |
| [ ] | \$25.1 to \$50 million |
|  | \$50.1 to \$100 million |
|  | More than \$100 million |
|  | Uncertain |

[ ] Other (Please specify)
9. Did one or more academic institutions have an ownership stake in your company during 2008?
(Check one)
[ ] Yes
[ ] No
[ ] Uncertain
[ ] Other (Please specify)
10. During the last 5 years, did your company do any of the following? (Check one for each row)

| a. Received funding from the federal government's small business innovation research program | Yes $\square$ | No $\square$ | Uncertain $\square$ | Other <br> (Please specify) |
| :---: | :---: | :---: | :---: | :---: |
| b. Received venture capital funding | $\square$ | $\square$ | $\square$ | $\square$ |
| c. Hired academic consultants for shortterm projects in science and engineering | $\square$ | $\square$ | $\square$ | $\square$ |
| d. Hosted student interns pursuing undergraduate or graduate degrees in science or engineering for at least one month | $\square$ | $\square$ | $\square$ | $\square$ |
| e. Hosted postdoctoral fellows in science or engineering for at least one month | $\square$ | $\square$ | $\square$ | $\square$ |

f. Provided scientists or engineers from your company to serve as visiting scientists or engineers at a college or university for at least one month

## Sales and development of goods and services

11. Did your company sell any goods or services during 2008? (Check one)
[ ] Goods only
[ ] Services only
[ ] Both goods and services
[ ] Neither
[ ] Uncertain
[ ] Other (Please specify)
12. What were your company's 2008 net sales and operating revenues including both domestic and foreign sales? (Enter number; if none, enter zero.)

Net sales and operating revenues are the value of goods and services sold during the year, net of discounts, returns, and allowances.

If none, check here and skip to Question 15, page 7

## (Dollars in thousands)

## \$

13. What percentage of your sales were goods (rather than services)? (Check one)
[ ] 100 percent
[ ] 91 to 99 percent
[ ] 81 to 90 percent
[ ] 71 to 80 percent
[ ] 61 to 70 percent
[ ] 51 to 60 percent
[ ] 41 to 50 percent
[ ] 31 to 40 percent
[ ] 21 to 30 percent
[ ] 11 to 20 percent
[ ] 1 to 10 percent
[ ] None
[ ] Uncertain
[ ] Other (Please specify)
14. What percent of your net sales and operating revenues for 2008 were domestic (sold in the United States and its territories)? (Check one)
[ ] 100 percent
[ ] 91 to 99 percent
[ ] 81 to 90 percent
[ ] 71 to 80 percent
[ ] 61 to 70 percent
[ ] 51 to 60 percent
[ ] 41 to 50 percent
[ ] 31 to 40 percent
] 21 to 30 percent
[ ] 11 to 20 percent
[ ] 1 to 10 percent
[ ] None
[ ] Uncertain
[ ] Other (Please specify)

## Improvements of Goods and Services

15. During the three-year period from 2006 to 2008, did your company work to significantly improve your existing goods, services, methods, logistics, or processes in any of the ways listed below? (Check all that apply.)

16. Did your company introduce any of the following during the three-year period from 2006 to 2008 ? (Check one for each row)

|  | Yes | No | Does not <br> apply | Uncertain |
| :--- | :---: | :---: | :---: | :---: |
| a. New or significantly improved goods <br> (excluding the simple resale of new <br> goods purchased from others and <br> changes of a solely aesthetic nature) | $\square$ | $\square$ | $\square$ | $\square$ |
| b. New or significantly improved services | $\square$ | $\square$ | $\square$ | $\square$ |
| c. New or significantly improved <br> methods of manufacturing or <br> producing goods or services | $\square$ | $\square$ | $\square$ | $\square$ |
| d. New or significantly improved <br> logistics, delivery, or distribution <br> methods for your inputs, goods or <br> services | $\square$ | $\square$ | $\square$ | $\square$ |
| e. New or significantly improved |  |  |  |  |
| supporting activities for your <br> processes, such as maintenance <br> systems or operations for purchasing, <br> accounting, or computing |  | $\square$ | $\square$ | $\square$ |

17. What percent of your company's sales in 2008 were from new or significantly improved goods (rather than services) developed during 2006 to 2008 ? (Check one)
If no sales of "new or significantly improved goods or services" in 2008, check here and skip to Question 22.
[ ] None
[ ] 1 to 10 percent
[ ] 11 to 20 percent
[ ] 21 to 30 percent
[ ] 31 to 40 percent
[ ] 41 to 50 percent
[ ] 51 to 60 percent
[ ] 61 to 70 percent
[ ] 71 to 80 percent
[ ] 81 to 90 percent
[ ] 91 to 99 percent
[ ] 100 percent
[ ] Uncertain
[ ] Other (Please specify)
18. What percent of your company's 2008 sales of new or significantly improved goods (rather than services) were sold to domestic customers rather than to foreign customers? (Check one)
```
[ ] 100 percent
[ ] 91 to 99 percent
[ ] 81 to 90 percent
[ ] 71 to 80 percent
[ ] 61 to 70 percent
[ ] 51 to 60 percent
[ ] 41 to 50 percent
[ ] 31 to 40 percent
[ ] 21 to 30 percent
[ ] 11 to 20 percent
[ ] 1 to 10 percent
[ ] None
[ ] Uncertain
[ ] Other (Please specify)
```

19. What percent of your company's sales in 2008 were from new or significantly improved services developed during 2006 to 2008? (Check one)

| [ ] | None |
| :---: | :---: |
| ] | 1 to 10 percent |
| [ ] | 11 to 20 percent |
| [ ] | 21 to 30 percent |
| ] | 31 to 40 percent |
| ] | 41 to 50 percent |
| 1 | 51 to 60 percent |
| [ ] | 61 to 70 percent |
| [ ] | 71 to 80 percent |
| [ ] | 81 to 90 percent |
| [ ] | 91 to 99 percent |
| [ ] | 100 percent |
| [ ] | Uncertain |
| [ ] | Other (Please specify) |

20. What percent of your company's sales of new or significantly improved services during 2008 were sold to domestic customers rather than to foreign customers? (Check one)

| $[$ | $]$ | 100 percent |
| :--- | :--- | :--- |
| $[$ | $]$ | 91 to 99 percent |
| $[$ | $]$ | 81 to 90 percent |
| $[$ | $]$ | 71 to 80 percent |
| $[$ | $]$ | 61 to 70 percent |
| $[$ | $]$ | 51 to 60 percent |
| $[$ | $]$ | 41 to 50 percent |
| $[$ | $]$ | 31 to 40 percent |
| $[$ | $]$ | 21 to 30 percent |
| $[$ | $]$ | 11 to 20 percent |
| $[$ | $]$ | 1 to 10 percent |
| $[$ | $]$ | None |
| $[$ | $]$ | Uncertain |
| $[$ | $]$ | Other (Please specify) |

21. For any new goods or services sold during 2008, what made them new? (Check all that apply)
a. Improved performance
b. More user-friendly
c. Cost reduction
d. New features
e. Other (Please specify.)
f. Does not apply
22. How important was each of the following for increasing your company’s technical knowledge during 2006 2008? (Check one for each row)

|  | Very <br> important | Moderately <br> important | Somewhat <br> important | Not very <br> important | Did not <br> usel <br> Uncertain |
| :--- | :---: | :---: | :---: | :---: | :---: |
| a. Scientific publications <br> and journals | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| b. Conferences, trade shows, <br> or technical symposia | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| c. Other (Please specify.) | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |

## Patents and licensing

23. How many U.S. patents did your company apply for in 2008? (Enter number; if none, enter zero)
$\square$ patents

If you answered zero to Question 23, check here and skip to Question 25.
24. Of the U.S. patents reported in previous question, how many of these patents fit each of the following statements? (Enter numbers; if none, enter zero.)

## Number

a. We sought (or we will seek) patent protection for at least one $\square$ of the same inventions in foreign patent systems/countries
b. The invention originated outside our company’s R\&D activities $\square$
28. In 2008, how much revenue, if any, did your company earn licensing your company's patents to other organizations? (dollars in thousands) (Enter number; if none, enter zero.)

## Dollars in thousands

```
$
```

29. How many new agreements did your company enter into during 2008 to license patents to other organizations? (Enter number; if none, enter zero.)

30. How many U.S. patents were issued to your company in 2008? (Enter number; if none, enter zero)

31. How many U.S. patents did your company own as of December 31, 2008? (Enter number; if none, enter zero)

32. For how many inventions do you expect to file patent applications during 2009? (Enter number; if none, enter zero.)


## Intellectual property transfers

30. Did your company participate in the following activities relating to intellectual property in 2008? (Check one for each row)

Yes No Uncertain | Other |
| :---: |
| (Please |
| specify) |

a. Transferred intellectual property (patents, trade secrets, copyrights, etc.) to others using a technical assistance or "know-how" agreements
b. Received intellectual property from others using a technical assistance or "know-how" agreements
c. Participated in cross-licensing agreements to permit one party to use the invention that is the subject of one or more patents owned by the other party
d. Allowed free use of patents or other intellectual property owned by your company (for example, allowing free use of software patents by the open source community)
e. Made use of patents or other intellectual property that is available for free use, such as patents made available by the open source community
31. During 2008, how important were the following to protect your company's intellectual property? (Check one for each row)

|  | Very <br> important | Moderately <br> important | Somewhat <br> important | Not very <br> important | Uncertain |
| :--- | :---: | :---: | :---: | :---: | :---: |
| a. Utility patents | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| (patents for inventions) | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| b. Design patents <br> (patents for appearance) | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| c. Trademarks | $\square$ | $\square$ | $\square$ | $\square$ |  |
| d. Copyrights | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| e. Trade secrets | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |

## R\&D

32. What was your company's total R\&D expense for 2008 worldwide (both domestic and foreign)? (Enter number; if none, enter zero.)

R\&D is planned, creative work aimed at discovering new knowledge or developing new or significantly improved goods or services. It does not include expenditures for:

- Routine quality control testing
- Market research
- Efficiency surveys or management studies
- Literary, artistic, or historical projects such as films, music, or books and other publications
- Prospecting or exploration for natural resources


## (Dollars in thousands)

## \$

33. What is your company's projected R\&D expense for 2009? (Enter number; if none, enter zero.)
(Dollars in thousands)

## \$

35. How much of your company's purchases of new equipment (that is, your answer to Question 8) was used for R\&D operations? (Check one)

| $[$ | $]$ | None |
| :--- | :--- | :--- |
| [ | ] | 1 to 10 percent |
| $[$ | $]$ | 11 to 20 percent |
| [ | ] | 21 to 30 percent |
| [ | ] | 31 to 40 percent |
| [ | ] | 41 to 50 percent |
| [ | ] | 51 to 60 percent |
| [ | ] | 61 to 70 percent |
| [ | ] | 71 to 80 percent |
| [ | ] | 81 to 90 percent |
| [ | ] | 91 to 99 percent |
| [ | ] | 100 percent |
| [ | ] | Uncertain |
| [ | ] | Other (Please specify) |

36. How would you characterize the $\mathrm{R} \& \mathrm{D}$ you conducted in 2008? (Check one)
[ ] A one-time project
[ ] Part of company's on-going R\&D activity
[ ] Other (Please specify)
37. Of the R\&D expense reported in Question 32, what percentage was performed by your company? (Check one)
[ ] None
[ ] 1 to 10 percent
[ ] 11 to 20 percent
[ ] 21 to 30 percent
[ ] 31 to 40 percent
[ ] 41 to 50 percent
[ ] 51 to 60 percent
[ ] 61 to 70 percent
[ ] 71 to 80 percent
[ ] 81 to 90 percent
[ ] 91 to 99 percent
[ ] 100 percent
[ ] Uncertain
[ ] Other (Please specify)
38. How many of your company's male and female employees worked at least part of the time on R\&D-related activities? (Enter numbers)

Males


Females

Total

39. How many full-time equivalents (FTEs) did your company employ for 2008 R\&D-related activities? (Enter nearest whole number)

40. Were any of your employees during 2008 employed outside the United States? (Check one)

> Note: Forereign employees are not included on IRS $\left[\begin{array}{lll}{[ } & ] & \text { Yes } \\ {[ } & ] & \text { No } \\ {[ } & ] & \text { Uncertain } \\ {[ } & ] & \text { Other (Please specify) }\end{array}\right.$
41. Did any of your employees work on 2008 R\&D activities supported by funding from the U.S. federal government? (Check one)
[ ] Yes, all employee work was federally funded
[ ] Yes, at least some employee work was federally funded
[ ] No, no employee work was federally funded
[ ] Uncertain
[ ] Other (Please specify)
42. Of the costs for the 2008 R\&D performed, what percent was spent on wages, salaries, and fringe benefits? (Check one)
[ ] 100 percent
[ ] 91 to 99 percent
[ ] 81 to 90 percent
[ ] 71 to 80 percent
61 to 70 percent
51 to 60 percent
[ ] 41 to 50 percent
[ ] 31 to 40 percent
[ ] 21 to 30 percent
[ ] 11 to 20 percent
[ ] 1 to 10 percent
[ ] None
[ ] Uncertain
[ ] Other (Please specify)
43. Was any of your company's 2008 R\&D expense part of an R\&D agreement with any of the following types of organizations? (Check one for each row)

|  | Yes | No | Uncertain | Other <br> (Please specify) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| a. Companies located inside the United States | $\square$ | $\square$ | $\square$ | $\square$ |
| b. Companies located outside the United States | $\square$ | $\square$ | $\square$ | $\square$ |
| c. U.S. federal government labs or agencies | $\square$ | $\square$ | $\square$ | $\square$ |
| d. Universities, colleges, and academic <br> researchers, including individual principal <br> investigators | $\square$ | $\square$ | $\square$ | $\square$ |
| e. Other nonprofit organizations and foundations | $\square$ | $\square$ | $\square$ | $\square$ |
| f. Foreign government agencies or laboratories | $\square$ | $\square$ | $\square$ | $\square$ |
| g. State and local governments | $\square$ | $\square$ | $\square$ | $\square$ |
| h. Other (Please specify) | $\square$ | $\square$ | $\square$ | $\square$ |

## $\rightarrow$ If you did not mark "yes" for any of rows a to h, please skip to Question 45.

44. What percent of your company's 2008 R\&D
expense involved R\&D agreements? (Check one)
[ ] None
[ ] 1 to 10 percent
[ ] 11 to 20 percent
[ ] 21 to 30 percent
[ ] 31 to 40 percent
[ ] 41 to 50 percent
[ ] 51 to 60 percent
[ ] 61 to 70 percent
[ ] 71 to 80 percent
[ ] 81 to 90 percent
[ ] 91 to 99 percent
[ ] 100 percent
[ ] Uncertain
[ ] Other (Please specify)
45. What percentage of your company's 2008 R\&D was a) applied research, b) basic research, and c) development? (Enter numbers)

## Applied research

Applied research is research aimed at solving a specific
 problem or meeting a specific, recognized need.

Basic research
Basic research is research aimed at acquiring new
 knowledge or understanding without a specific application or use in view

Development
Development is the systematic use of knowledge gained from research that is used in the production of a useful goods, methods, or services.

Total
46. Did any of your 2008 R\&D expense involve the following types of applications? (Check one for each row)

|  | Yes | No | Uncertain | Other <br> (Please specify) |
| :--- | :---: | :---: | :---: | :---: |
| a. Agriculture | $\square$ | $\square$ | $\square$ | $\square$ |
| b. Biotechnology | $\square$ | $\square$ | $\square$ | $\square$ |
| c. Defense | $\square$ | $\square$ | $\square$ | $\square$ |
| d. Energy | $\square$ | $\square$ | $\square$ | $\square$ |
| e. Environmental | $\square$ | $\square$ | $\square$ | $\square$ |
| $\quad$protection |  |  |  |  |
| f. Health/Medical | $\square$ | $\square$ | $\square$ | $\square$ |
| g. Nanotechnology | $\square$ | $\square$ | $\square$ | $\square$ |

47. What percentage of your company’s 2008 R\&D expense was for projects with software products or software applications? (Check one)
[ ] None
[ ] 1 to 10 percent
[ ] 11 to 20 percent
[ ] 21 to 30 percent
[ ] 31 to 40 percent
[ ] 41 to 50 percent
[ ] 51 to 60 percent
[ ] 61 to 70 percent
[ ] 71 to 80 percent
[ ] 81 to 90 percent
[ ] 91 to 99 percent
[ ] 100 percent
[ ] Uncertain
[ ] Other (Please specify)

## Reporting

48. Is the time period covered by this report a calendar year?YesNo $\rightarrow$ What is the time period covered?

From | Month | Year |
| :--- | :--- |

49. Please provide any comments or remarks below.
