## Appendix 1 List of sectors

| Sector | Description                                                                                 | NACE (2-digit) |
|--------|---------------------------------------------------------------------------------------------|----------------|
|        |                                                                                             |                |
| 1      | Agriculture, foresty and fishing                                                            | 01 - 03        |
| 2      | Mining and quarrying                                                                        | 05 - 09        |
| 3      | Manufacture of food, beverages, tobacco                                                     | 10 - 12        |
| 4      | Manufacture of textiles, wearing apparel, leather                                           | 13 - 15        |
| 5      | Manufacture of wood, paper, printing                                                        | 16 - 18        |
| 6      | Manufacture of non-metallic products                                                        | 19 - 23        |
| 7      | Manufacture of metals and metal products                                                    | 24 - 25        |
| 8      | Manufacture of computer, electronic, optical products; electrical equipment; motor vehicles | 26 - 30        |
| 9      | Manufacture of furniture; Repair of machinery and equipment                                 | 31 - 33        |
| 10     | Electricity, gas steam and air conditioning supply                                          | 35             |
| 11     | Water supply; sewerage, waste management                                                    | 36 - 39        |
| 12     | Construction                                                                                | 41 - 43        |
| 13     | Wholesale trade                                                                             | 45 - 47        |
| 14     | Land, water and air transport                                                               | 49 - 51        |
| 15     | Warehousing and support activities; Postal and courier activities                           | 52 - 53        |
| 16     | Accommodation and food service activities                                                   | 55 - 56        |
| 17     | Publishing activities                                                                       | 58 - 60        |
| 18     | Telecommunications                                                                          | 61 - 63        |
| 19     | Financial and insurance activities                                                          | 64 - 66        |
| 20     | Real estate activities                                                                      | 68             |
| 21     | Legal and accounting activities                                                             | 69 - 70        |
| 22     | Architectural and engineering activities; technical testing and analysis                    | 71 - 73        |
| 23     | Other professional, scientific and technical activities                                     | 74 - 75        |
| 24     | Rental and leasing; employment; travel agency; security activities                          | 77 - 82        |

Appendix 2 List of variables used in the (linear and logistic) regression analysis for innovation (whole sample)

| Variable Dependent variable | Question                                                                                                                                                                                        | Code                                                                                  |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| INPROD                      | Introduced into the market a new or significantly improved good or service                                                                                                                      | $0 = \text{No}; 1 = \text{Yes};  \bullet = \text{missing}$                            |
| INPROC                      | Introduced into the market a new or significantly improved methor<br>production, logistic, delivery or distribution system, or supporting activity                                              |                                                                                       |
| INORG                       | New business practices for organizing work or procedures, new metho workplace organization, or new methods of organizing external relations                                                     | 0 N 1 1 W                                                                             |
| INNMKT                      | Significant changes to the aesthetic design or packaging, new med techniques for product promotion, new methods for product placeme sales channels, or new methods of pricing goods or services |                                                                                       |
| Independent variables:      |                                                                                                                                                                                                 |                                                                                       |
| Demographic covariat        | es (general information about the firm)                                                                                                                                                         |                                                                                       |
| COUNTRY                     | Address                                                                                                                                                                                         | Country code                                                                          |
| NACE                        | Main activity                                                                                                                                                                                   | NACE revision 2 at 2 digits                                                           |
| GP                          | Enterprise part of a group                                                                                                                                                                      | $0 = No; 1 = Yes; \bullet = missing$                                                  |
| НО                          | Country of head office                                                                                                                                                                          | Code: $0 = No$ answer, $1 = Home$ country, $2 = EU$ ,                                 |
|                             |                                                                                                                                                                                                 | EFTA, CC, $3 = \text{rest of world}$                                                  |
| MARLOC                      | Local/regional market (within country)                                                                                                                                                          | $0 = N_0$ ; $1 = Y_{es}$ ; • = missing                                                |
| MARNAT                      | National market (other regions of country)                                                                                                                                                      | $0 = No; 1 = Yes; \bullet = missing$                                                  |
| MAREUR                      | Other EU/EFTA/CC market                                                                                                                                                                         | $0 = N_0$ ; $1 = Y_{es}$ ; • = missing                                                |
| MAROTH                      | All other countries                                                                                                                                                                             | $0 = N_0$ ; $1 = Y_{es}$ ; • = missing                                                |
| LARMAR                      | Largest market in terms of turnover between 2006 and 2008                                                                                                                                       | 1. Local/regional; 2. National; 3. Other European Union, EFTA; 4. All other countries |

Appendix 2 List of variables used in the study of product innovator firms

| Variable                              | Question                                                                                          | Code                                                                                                                               |
|---------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Dependent variable                    |                                                                                                   |                                                                                                                                    |
| TURNMAR                               | % of turnover in new or improved products introduced during 2006-2008 that were new to the market | $0 = N_0$ ; $1 = Y_{es}$ ; • = missing                                                                                             |
| Innovation-related covariates:        |                                                                                                   |                                                                                                                                    |
| Innovation activities                 |                                                                                                   |                                                                                                                                    |
| RRDIN                                 | Engagement in intramural R&D                                                                      | $0 = \text{No}$ ; $1 = \text{Yes}$ ; $\bullet = \text{missing}$                                                                    |
| RRDEX                                 | Engagement in extramural R&D                                                                      | $0 = \text{No}$ ; $1 = \text{Yes}$ ; $\bullet = \text{missing}$                                                                    |
| RMAC                                  | Engagement in acquisition of machinery                                                            | $0 = \text{No}$ ; $1 = \text{Yes}$ ; $\bullet = \text{missing}$                                                                    |
| ROEK                                  | Engagement in acquisition of external knowledge                                                   | $0 = \text{No}$ ; $1 = \text{Yes}$ ; $\bullet = \text{missing}$                                                                    |
| RTR                                   | Engagement in training for innovative activities                                                  | $0 = \text{No}$ ; $1 = \text{Yes}$ ; $\bullet = \text{missing}$ .                                                                  |
| RMAR                                  | Engagement in market introduction of innovation                                                   | $0 = \text{No}$ ; $1 = \text{Yes}$ ; $\bullet = \text{missing}$                                                                    |
| RPRE                                  | Engagement in other preparation                                                                   | $0 = \text{No}; 1 = \text{Yes}; \bullet = \text{missing}$                                                                          |
| Investments in innovation activities  | 0.06                                                                                              | ,                                                                                                                                  |
| RRDINXm                               | Expenditure in intramural R&D                                                                     | 0 to 99999999; • · = missing                                                                                                       |
| RRDEXXm                               | Purchase of extramural R&D                                                                        | 0 to 99999999: •· = missing                                                                                                        |
| RMACXm                                | Expenditure in acquisition of machinery                                                           | 0 to 99999999; •· = missing                                                                                                        |
| ROEKXm                                | Expenditure in acquisition of external knowledge                                                  | 0 to 99999999; •· = missing                                                                                                        |
|                                       | Total of these four innovation expenditure categories                                             | 0 to 99999999; •· = missing.                                                                                                       |
| Public funding of innovation          | Total of these four fills (these or permitted the governor)                                       | o to yyyyyyy, missing.                                                                                                             |
| FUNLOC                                | Public funding from local or regional authorities                                                 | $0 = N_0$ ; $1 = Y_0$ ; $\bullet = missing$                                                                                        |
| FUNGMT                                | Public funding from central government                                                            | $0 = \text{No}$ ; $1 = \text{Yes}$ ; $\bullet = \text{missing}$                                                                    |
| FUNEU                                 | Public funding from the EU                                                                        | $0 = \text{No}; 1 = \text{Yes}; \bullet = \text{missing}$                                                                          |
| FUNRTD                                | Funding from EU's 6th or 7th Framework Programme for RTD                                          | $0 = \text{No}; 1 = \text{Yes}; \bullet = \text{missing}$                                                                          |
| Sources of information for innovation | č                                                                                                 | v 1.0, 1 100, moonig                                                                                                               |
| SENTG                                 | Sources from within the enterprise or enterprise group                                            | 0: Not used; 1: Low; 2: Med; 3: High; •: : missing                                                                                 |
| SSUP                                  | Sources from suppliers of equipment, materials, etc.                                              | 0: Not used; 1: Low; 2: Med; 3: High; •: : missing                                                                                 |
| SCLI                                  | Sources from clients or customers                                                                 | 0: Not used; 1: Low; 2: Med; 3: High; •:: missing                                                                                  |
| SCOM                                  | Sources from competitors and other enterprises of same industry                                   | 0: Not used; 1: Low; 2: Med; 3: High; •:: missing                                                                                  |
| SINS                                  | Sources from consultants, commercial labs or private R&D institutes                               | 0: Not used; 1: Low; 2: Med; 3: High; •: : missing                                                                                 |
| SUNI                                  | Sources from universities or other higher education institutions                                  | 0: Not used; 1: Low; 2: Med; 3: High; •: : missing                                                                                 |
| SGMT                                  | Sources from government or public research institutes                                             | 0: Not used; 1: Low; 2: Med; 3: High; •:: missing                                                                                  |
| SCON                                  | Sources from professional conferences, trade fairs, meetings                                      | 0: Not used; 1: Low; 2: Med; 3: High; •: : missing                                                                                 |
| SJOU                                  | Sources from dcientific journals, trade/scientific publications                                   | 0: Not used; 1: Low; 2: Med; 3: High; •: : missing                                                                                 |
| SPRO                                  | Sources from professional and industry associations                                               | 0: Not used; 1: Low; 2: Med; 3: High; •: : missing                                                                                 |
| Innovation cooperation                | Sources from processional and measury associations                                                | o. Not used, 1. Dow, 2. Med, 3. High, 1. Hissing                                                                                   |
| CO                                    | Cooperation arrangements on innovation activities                                                 | $0 = No; 1 = Yes; \bullet = missing$                                                                                               |
| CO11                                  | Other enterprises within enterprise group                                                         | $0 = \text{No}$ ; $1 = \text{Yes}$ ; $\bullet = \text{missing}$<br>$0 = \text{No}$ ; $1 = \text{Yes}$ ; $\bullet = \text{missing}$ |
| CO21                                  | Suppliers of equipment, etc.                                                                      | $0 = \text{No}$ ; $1 = \text{Yes}$ ; $\bullet = \text{missing}$<br>$0 = \text{No}$ ; $1 = \text{Yes}$ ; $\bullet = \text{missing}$ |
| CO31                                  | Clients or customers                                                                              | $0 = \text{No}$ ; $1 = \text{Yes}$ ; $\bullet = \text{missing}$<br>$0 = \text{No}$ ; $1 = \text{Yes}$ ; $\bullet = \text{missing}$ |
| CO41                                  | Competitors or other firms: National                                                              | $0 = \text{No}$ ; $1 = \text{Yes}$ ; $\bullet = \text{missing}$<br>$0 = \text{No}$ ; $1 = \text{Yes}$ ; $\bullet = \text{missing}$ |
| CO41<br>CO51                          | Consultants, commercial labs, private R&D institutes                                              | 0 = No; 1 = Yes; • = missing<br>0 = No; 1 = Yes; • = missing                                                                       |
| CO51<br>CO61                          | Universities or other National                                                                    | $0 = No; 1 = Yes; \bullet = missing$<br>$0 = No; 1 = Yes; \bullet = missing$                                                       |
| CO62                                  | Universities or other: EU/EFTA/EU-CC                                                              | 0 = No; 1 = Yes; • = missing<br>0 = No; 1 = Yes; • = missing                                                                       |
| CO62<br>CO71                          |                                                                                                   | $0 = No; 1 = Yes; \bullet = missing$<br>$0 = No; 1 = Yes; \bullet = missing$                                                       |
|                                       | Government or public research institutes                                                          | U - INU, I - I es, • - IIIISSIIIg                                                                                                  |
| Innovation objectives ORANGE          | Increased range of goods or services                                                              | 0: Not relevant; 1:Low; 2:Med; 3:High; •: missing                                                                                  |
| UKANUE                                | increased range of goods of services                                                              | o. Not relevant, 1.Low, 2.lvied, 3.mign; •: missing                                                                                |

| OREPL | Replace outdated products or processes              | 0: Not relevant; 1:Low; 2:Med; 3:High; •: missing |
|-------|-----------------------------------------------------|---------------------------------------------------|
| OENMK | Enter new markets                                   | 0: Not relevant; 1:Low; 2:Med; 3:High; •: missing |
| OIMKS | Increase market share                               | 0: Not relevant; 1:Low; 2:Med; 3:High; •: missing |
| OQUA  | Improve quality of goods or services                | 0: Not relevant; 1:Low; 2:Med; 3:High; •: missing |
| OFLEX | Improve flexibility for producing goods or services | 0: Not relevant; 1:Low; 2:Med; 3:High; •: missing |
| OCAP  | Increase capacity for producing goods or services   | 0: Not relevant; 1:Low; 2:Med; 3:High; •: missing |
| OHES  | Improve health and safety                           | 0: Not relevant; 1:Low; 2:Med; 3:High; •: missing |
| OLBR  | Reduce labour costs per unit output                 | 0: Not relevant; 1:Low; 2:Med; 3:High; •: missing |