# World Bank's and EBRD's BUSINESS ENVIRONMENT AND ENTERPRISE PERFORMANCE SURVEY (BEEPS)

# UNDERSTANDING THE QUESTIONNAIRE

June, 2011

Global version of this instrument also available at www.enterprisesurveys.org

### **INTRODUCTION**

The Business Environment and Enterprise Performance Survey (BEEPS) collect data from key manufacturing and service sectors in every region of the world. The Surveys use a standardized survey instruments and a uniform sampling methodology to minimize measurement error and to yield data that are comparable across the world's economies.

The use of properly designed survey instruments and a uniform sampling methodology enhances the credibility of the World Bank and the European Bank of Reconstruction and Development (EBRD) analysis and the recommendations that stem from this analysis. The BEEPS team aims to achieve the following objectives:

- To provide statistically significant business environment indicators that are comparable across all of the world's economies;
- To assess the constraints to private sector growth and enterprise performance;
- To build a panel of establishment-level data that will make it possible to track changes in the business environment over time, thus allowing, for example, impact assessments of reforms and policy changes; and
- To stimulate policy dialogue on the business environment and to help shape the agenda for reform.

The purpose of this document is to provide information and guidance to the implementing contractor, researchers, field managers, field supervisors and enumerators on how to understand the questions in the surveys. Two complementary notes, the <u>Implementation Note</u> and the <u>Sampling Note</u> complete the documentation for these surveys. The <u>Implementation Note</u> is geared to a wider audience including field managers, field supervisors and enumerators. The <u>Sampling Note</u> is a technical document of more interest to researchers and final users of the data.

#### What is in an Enterprise Survey questionnaire

To generate internationally comparable data, the questions in the *Core* questionnaire are asked in all countries and for all industries where the survey is implemented. In addition to this *Core* instrument, the *Core plus Manufacturing Module* and *Core plus Retail Module* questions are asked to establishments in the manufacturing and retail sectors, respectively. Additionally, the *Screener Questionnaire* is used to screen all establishments randomly selected to participate in the survey to make sure they fit the sampling criteria and exclude those that are not part of the universe under study. The *Innovation Module* questionnaire is for those enterprises, who report that they have innovations; the exact instructions related to this module are in the last sub-section of this Manual.

The survey is implemented in two stages. In the first stage the Screener questionnaire is applied typically on via phone and the eligibility of each chosen unit is determined. Some additional control information is collected as well as the contact information. In the second stage one of the three versions of the questionnaire (*Core, Core plus Manufacturing* or *Core plus Retail*) is applied following the eligibility type determined in the first stage.

The three versions of the instrument, *Core, Core plus Manufacturing*, and *Core plus Retail* are comprised of fifteen sections organized by topic:

• Section A – *Control Information*: information collected in the first stage of implementation, in the screener questionnaire. Answers should be copied to the main questionnaire BEFORE the interview.

- Section B General information: characteristics of the establishment.
- Section C *Infrastructure and Services*: power, water, transport, and communication technologies.
- Section D Sales and Supplies: imports, exports, supply and demand conditions.
- Section E Degree of Competition: number of competitors and technology
- Section F *Capacity*.
- Section G Land: land ownership, land access issues.
- Section H Innovation
- Section I *Crime*: extent of crime and losses due to crime.
- Section K *Finance*: sources of finance, access to credit.
- Section J *Business-Government Relations*: quality of public services, consistency of policy, regulatory compliance costs (management time, bribes).
- Section R Use of consulting services.
- Section L *Labor* employment, training, skills.
- Section M Business Environment: ranking of general obstacles.
- Section N *Performance*: numbers and figures needed to estimate performance or productivity.
- Section S *Expectations*.
- Section VIN *Perceptions of obstacles*.

Section F, *Capacity*: use of production capacity, hours of operation, is a section only included in the *Core plus Manufacturing Module*.

The primary sampling unit of the study is the establishment. An establishment is a physical location where business is carried out and where industrial operations take place or services are provided. A firm may be composed of one or more establishments. For ex., a brewery may have several bottling plants and several establishments for distribution. For the purposes of this survey an establishment must *make its own financial decisions and have its own financial statements separate from those of the firm.* An establishment must also have its *one management and control over its payroll.* 

#### a. How to ask questions

Tables are to be read one category at a time. For example, when asking the following question:

C.24	Is this establishment's Internet connection used to:					
				(SPONT	ANEOUS)	1
INTERVIEWER: READ EACH OPTION ALOUD		Yes	No	DON'T KNOW	DOES NOT APPLY	
Make purchases for this establishment		1	2	-9	-7	c24b
Sell and market products		1	2	-9	-7	c24f
Do research and develop ideas on new products and services		1	2	-9	-7	c24d

The first question to be asked should be "Is this establishment's Internet connection used to make purchases for this establishment?", solicit a response, followed by asking "Is this establishment's Internet connection used to sell and market products?", solicit a response and finally continued by asking "Is this establishment's Internet connection used to do research and develop ideas on new

products and services?". The point is not to confuse the respondent by asking him or her two questions at once. There are particularly difficult questions to implement that we point out here. For example, when asking the following question:

### **D.3** In fiscal year **[insert last complete fiscal year]**, what percent of this establishment's sales were:

INTERVIEWER: THESE MUST BE ASKED IN THE ORDER THEY APPEAR ON THE TABLE

	Percent	
a. National sales	0⁄0	IF 100, GO TO QUESTION D.10
b. Indirect exports [sold domestically to third party that exports products]	0⁄0	IF 100, GO TO QUESTION D.8
c. Direct exports	0⁄0	IF 0, GO TO QUESTION D.8
	100%	

### INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%

This is a difficult question to implement because the responses must be given in the order of the table, from top to bottom, for the skip patterns to work. The best way to ask this question is by reading each category, from top to bottom, one by one and solicit a response from each before moving on to the next category.

#### b. What are acceptable responses

Many questions ask for percentages or fractions.

In general, all numbers should be recorded in such a way as to **not have decimals**. So, ten percent is recoded as 10 (not .1 nor .10 and certainly not 1/10). In cases where the respondent answers 10.5 percent, for example, the enumerator should **round up** to 11 percent. In cases where the respondent answers 10.25 percent, the enumerator should round down to 10 percent. The point is to **eliminate all decimals even if it sometimes means rounding down to zero**.

With regard to the rounding rule, in terms of measurement of time, where the answer given by the respondent is between 0 and 1, the rule is to record 1 (hour/minute/day, etc.). These cases are clearly indicated in the questionnaires, see examples B7 and C4 below.

For purposes of standardization, the conventions for time conversions are the following:

1 day= calendar day; 1 week= 7 days; 1 month= 4 weeks; 1 month= 30 days. 1 year= 52 weeks; and 1 year= 365 days. If the question asks for a response in days and the respondent responds in weeks, the enumerator must make the conversion and record the response in days, not in weeks. If in doubt about the conversion, record the answer in the margin for conversion after interview.

If the enumerator hears one and a half days, they should round up and record a two (2).

Some questions have pre-coded answers to facilitate implementation. As an ex., in the following question answers of less than one year should all be coded as one. The questionnaire provides this pre-coded answer.

<b>B.</b> 7	How many years of experience	e working in this sector do	es the Top Manager have?

#### Answer: "Two months"

	Years
Manager's experience in sector	
Less than one year	

Or

<b>C.4</b>	In reference to the application for an electrical connection, approximately what was the
	wait, in days, experienced to obtain that connection from the day this establishment
	applied for it to the day it received the service?

#### Answer: "Two hours"

	Days
Wait for electrical connection	
Less than one day	
Still in process	-6
Application denied	-5
Don't know	-9

The only case when the respondent is asked to do the conversion themselves is when they respond in dollars, Euros, or any other currency which is not the local currency. All questions should have a response in the local currency units (LCUs). The enumerator does not do the conversion himself. This discussion about currencies should also make it clear that the enumerator should always be aware of the currency units the respondent is referring to in his or her responses.

#### c. Time reference

The general principle is that if the fiscal year is not mentioned, the time reference is the last calendar year (365 days), the last 2 calendar years (730 days) or the last 3 calendar years (1095 days) counting backwards from the day of the interview.

#### d. How to minimize enumerator bias

The questionnaire is to be read as it is written. As with any survey enumerators should refrain from introducing any interpretation bias by trying to explain or direct the answer. However, in some cases answers are not provided in the format desired or they do not address the issue in question. To handle these situations, in general, questions can be classified in 2 categories: one, opinion-based or sensitive questions and, second, hard-data questions.

**Opinion-based or sensitive questions** are those where the actual opinion of the respondent is requested or where a sensitive issue is being addressed such as payment of informal gifts or the degree of obstacle questions. In these cases enumerators should just read the question. When asked for the meaning of any term or when faced with a respondent who is confused or does not understand the question enumerators should read again the full question as it is written. They should not attempt to change the wording or explain using synonyms or commonly used terms. If the respondent cannot understand the question, write -9 (don't know). If the respondent refuses to respond, write -8 (refuse to respond). If the respondent puts the enumerator under pressure to explain, as a last resort, the enumerator can indicate that he or she has been instructed NOT to explain this question because it elicits an opinion. In this manual and in the questionnaire, opinion-based and sensitive questions are identified with shaded background.

Hard-data questions are those directed to get objective facts including quantitative data. In some cases the questions are quite specific and they require identifying the appropriate answer from the sometimes "narrative stories" provided by the respondent. In these cases enumerators are allowed to probe the respondent using standard techniques: re-ask the question emphasizing the key concept, for ex. "In a TYPICAL month how many ....."; ask a question that completes an incomplete answer already provided, for ex. if the respondent provides an answer for one given month but the question refers to the whole year, enumerators can ask what happened in the other 11 months; when the respondent provides the answer in ranges such as, between a and b, enumerators can ask "Could you be more specific?" or "Is it more a or more b?". Notice that in the latter case enumerators that assume the answer is the average of a and b introduce a bias through their own interpretation. In this manual and in the questionnaire hard-data questions are differentiated by not having a shaded background.

#### e. Explanation of terms

The instructions below provide explanations of the terms used, definitions applied and the intent of the questions that comprise the Business Environment and Enterprise Performance Survey (BEEPS) 2011 instruments.

For purposes of distinguishing between *Core, Core plus Retail*, and *Core plus Manufacturing* questions, in the question number column *Core plus Retail* and *Core plus Manufacturing* specific questions will be identified with **(S)** and **(M)** respectively. Color coding is used in the table below: *Core plus Manufacturing* only questions are colored in blue. *Core plus Retail* only questions are in green. Opinion questions that should not be explained, but just re-read are shaded in gray. Questions without these references are *Core* questions which are common to all three questionnaires.

Section Question Instructions number/Var iable

Control Information	Poslat	Latitude position: East, West, North or South
Control	Poslon	Longitude position: East, West, North or South
Information		
Control	Lat	Latitude. Format: XX.XXXXXX. Make sure that this information can
Information		be read by Google Earth.
Control	Lon	Longitude. Format: XX.XXXXXX. Make sure that this information
Information		can be read by Google Earth.
Control	A.0/a0	Questionnaire used in the interview. It is defined according to the
Information		screener sector of activity of the interviewee
Control	A.1/a1	Country: self-explanatory
Information		
Control	A.1a/a1a	Language used for the interview. Questionnaires should be translated
Information		into the language used for the interview. Under no circumstances
		should interviews take place with simultaneous translation.
Control	A.2/a2	Sampling region defines the region stratum of the establishment
Information		It is defined by the regional classification of the establishment in the
		sample frame
Control	A.3a/a3a	Codification of a3x into regions of homogeneous regulation and or
Information		business environment conditions, for ex. into regional clusters
Control	A.3x/a3x	Physical location of the establishment as determined with the screener
Information		questionnaire (city-town-village)
Control	A.3b/a3b	Official capital city.
Information		
Control	A.3c/a3c	Self-explanatory
Information		
Control	A.3/a3	Location control variable should be recoded ex-post based on the
Information		answer given to a3x
Control	A.4a4a	Classification of the establishment's activity using the information
Information		from the sample frame.
Control	A.4/a4b	Classification of the establishment's activity based on the answer to the
Information		screener questionnaire. The options given cover all eligible industries.
		If an industry cannot be classified according to the options given,
		check that the establishment is actually eligible to participate in the
Control	A.5/a5	survey. Self-explanatory
Information	A.5/ a5	Sey-explanatory
Control	A.6/a6a	Size of the establishment taken from the sample frame
Information	11.0/ a0a	Size of the establishment taken from the sample frame
Control	A.6/a6b	Size of the establishment as determined with the screener
Information	11.07 000	questionnaire
Control	A.7/a7	Identifies establishments that are part of a larger firm. Taken from
Information		screener questionnaire.
Control	A.7a/a7a	Identifies the number of establishments in the firm
Information	,	
Control	A.8/a8	Identifies type of establishment for those that are part of larger firms
Information	-	
Control	A.9/a9	Information taken from the screener questionnaire
		1

Information Control	A.10/a10	Information taken from the screener questionnaire
Information Control Information	A.11/a11	Information taken from the screener questionnaire
Control Information	A.11a/a11a	Information taken from the screener questionnaire
Control Information	A.12/a12	Information taken from the screener questionnaire
Control Information	A.13/a13	Information taken from the screener questionnaire
Control Information	A.14/ a14d a14m a14y a14h a14h	<u>Self-explanatory</u>
General Information	B.1/ b1 b1x	A firm's legal status is information well known for the respondent: CEO, General Manager or owner of the firm. ENUMERATORS DO NOT NEED TO KNOW DEFINITION OF EACH TYPE OF LEGAL STATUS.

A firm's legal status is first determined by whether participation on ownership is by shares (first 2 options) or not (options 3 and 4). The fifth option is a combination of the previous ones.

the target

THE

If a firm's shares are publicly traded, it is a shareholding company with shares traded in the stock market. If the shares are not traded or they are traded only privately it is a shareholding company with shares traded privately. A shareholding company with shares traded privately is a firm that is owned by partners or shareholders for whom their claims over the firm are not publicly traded. They may or may not be traded privately. In both of these categories firms have limited liability.

A sole proprietorship is a business owned and operated by one individual, natural person. A natural person is a real human being, as opposed to an artificial legal entity such as a corporation or organization that the law treats for some purposes as if it were a person distinct from its members or owner(s).

A firm's legal status defines the extent of the liability which defines the level of responsibility of the owner over the firm's obligations. Under limited liability each owner is only responsible for the proportion of his/her shares.

A *partnership* allows two or more people to share profits and liabilities, with or without privately held shares. In a partnership, the parties could be individuals, corporations, trusts, other partnerships, or a

combination of all of the above. The essential characteristic of this partnership is the unlimited liability of every partner.

Limited partnership is a legal form that includes one or several general partners and one or more limited partners who invest capital into the partnership, but do not take part in the daily operation or management of the business. The limited partners limit their amount of liability to the amount of capital invested in the partnership. The general partners personally shoulder all debts and obligations of the partnership. Business operations are governed, unless otherwise specified in a written agreement, by majority vote of voting partners. Limited liability partnerships are separate legal entities that provide liability protection for all general partners as well as management rights in the business.

When <u>other</u> is chosen, the actual form of legal status must be specified in writing by the enumerator on the survey instrument. Please write down the full legal status or type i.e. PLC., Ltd., etc into **b1x**. This variable should be codified after field work is finished to make sure that "<u>other</u>" does not include establishments that can be included in forms 1-5

General	B.3/b3	forms 1-5.
Information	<b>D.</b> 37 03	<u>Self-explanatory</u> If the owners own equal parts of the establishment, write down their corresponding share as the share owned by the largest owner. Example: If there are two owners and each of them ownes exactly 50 per cent of the company, then write down 50 (per cent).
General Information	B.2/ b2a b2b b2c b2d	<i>Foreign</i> ownership refers to the nationality of the owners. If the primary owner is a foreign national resident in the country, it is still a foreign owned firm. If the owner is another company or institution owned by individuals who are foreign nationals, then it is foreign owned.
		<u>Domestic</u> are nationals of the country in which the establishment is located. (Follow the same rule for companies). Person with dual nationality is considered domestic.
		A firm that is a subsidiary of a government-owned firm should be considered <i>government-owned</i> .
General	<b>B.</b> 4/b4	Firms that operate under a franchise agreement should be classified according to the nationality of those awarded the franchise. <u>Self-explanatory</u>
Information	<b>D.</b> <del>1</del> /04	<u>Seg-explanatory</u>
General Information	Q.5/ECAq5 ECAq5x	The question refers to the creation of the firms in its current form. Whenever the firm is in the process of transition or privatization include in other.
General Information	B.5/b5	The objective of this question is to obtain the year in which operations started regardless of who was the owner at the time.

The year when the establishment began operation refers to the year in

		which the establishment actually started producing (or providing services), not to the year in which it was registered for the first time.
		If the establishment was privatized, then the date provided should refer to when the original government-owned establishment began operations.
General Information	B.6/b6	The number of permanent, full-time employees for the time that the enterprise began operations should be provided. All employees and managers (including respondent) should be included.
General Information	B.6a/b6a	<u>Registering</u> refers to registration with [to be defined on a country by country basis, choosing the most imp. for registration for tax purposes].
		The question is designed to be answered as is without explanation of "registration". If and only if the respondent asks what formal registration means explain that it's when the establishment registered with: XXXXXX as defined in the brackets above.
		The following procedures are considered as formal registration with XXXXXXX in each country:
		Albania: Armenia:
		Armenia. Azerbaijan:
		Belarus:
		Bosnia and Herzegovina:
		Bulgaria:
		Croatia:
		Czech Republic:
		Estonia:
		Former Yugoslav Republic of Macedonia:
		Georgia:
		Mongolia:
		Montenegro: Hungary:
		Kazakhstan:
		Kyrgyzstan:
		Latvia:
		Lithuania:
		Moldova:
		Mongolia:
		Poland:
		Region of Kosovo:
		Romania: Russia:
		Serbia:
		Slovak Republic:
		Slovenia:
		Tajikistan:

		Turkey:
		Turkmenistan:
		Ukraine:
		Uzbekistan:
General	B.6b/b6b	Year of registration refers to the year in which the establishment
Information	,	completed the registration as explained in B.6a.
General	<b>B.</b> 7/b7	The top manager refers to the individual who highest executive rank.
Information	<b>D</b> .17 51	This person may be the owner if he or she works as a senior company
momation		official. The question refers to years of <i>Top Manager</i> 's managerial
C 1	D 7 /1 7	experience in the sector that the establishment presently operates.
General	B.7a/b7a	<u>Top Manager</u> refers to the highest ranking manager or CEO of the
Information		establishment. This person may be the owner if he/she works as the
		Manager of the firm. If respondent is sole proprietorship and
		respondent is male, the interviewer can rephrase and ask if the owner
		is also the manager of the firm to avoid asking male respondent if he is
		female.
General	<b>B.8/b8</b>	The question refers exclusively to internationally recognized
Information		certifications. Examples are: ISO (International Organization for
		Standardization) for manufacturing and services, HACCP (Hazard
		Analysis and Critical Control Point) for food (especially, but not
		exclusively, for seafood and juices), and AATCC (American
		Association of Textiles Chemists and Colorists) for textiles.
		Certificates granted only nationally not recognized in international
		markets are not included.
		If the quality certificate belongs to the holding and included the
		establishment, then recorded answer should be yes.
Infrastructure	C.3/c3	<u>Application for electrical connection</u> .
and Services	0.07 00	Electrical connection refers to a new connection or to an increase in
and bervices		voltage of an existing connection that requires an application.
Infrastructure	C.4/c4	Wait for electrical connection. Self-explanatory
and Services	0.4/04	<u>w un jor electrical connection</u> . Self-explanatory
	C 5 / a5	Disco turnido no antica lust no no d the question if assessme
Infrastructure	C.5/c5	<u>Please, provide no explanation. Just re-read the question if necessary.</u>
and Services	0(1)	
Infrastructure	C.6/c6	A <u>power outage</u> occurs when there is equipment malfunction from the
and Services		failure of adequate supply of power. Brownouts that cause some, but
	/ -	not all, equipment to malfunction are also considered power outages.
Infrastructure	C.7/c7	If power outages are seasonal the interviewer should ask the
and Services		respondent to calculate the <i>number of outages on a typical month</i> , neither
		from months in which outages are most frequent nor from months
		where outages are most infrequent.
		The concept of TYPICAL MONTH must be well understood since it
		is used several times throughout the questionnaire: it is the most
		·
		is used several times throughout the questionnaire: it is the most common type of month in the year regarding the characteristic being asked. Thus, for answers such as "electrical outages once every 3 months" in a typical month there are 0 outages (since there will be
		outages only in 4 months of the year and in the rest 8 months there

will be no outages). For the answer "once every other month" write 1

Infrastructure and Services Infrastructure and Services Infrastructure and Services	C.8/c8 C.9/c9a c9b C.10/c10	since there will be 6 months with outages and 6 months without them. This refers to the duration of the power outages in a typical month. The respondent should calculate <u>average duration of power outages</u> in a typical month. <u>Losses because of power outages</u> The Manager should estimate the amount of production lost because of power outages. <u>Establishment have own generator</u> . It does not matter if the establishment is using the generator or not, question is only asking if they own a generator.
Infrastructure and Services	C.11/c11	Percent electricity from own or shared generator. Self-explanatory
Infrastructure and Services	C.12/c12	Application for water connection. Self-explanatory
Infrastructure and Services	C.13/c13	Wait for water connection. Self-explanatory
Infrastructure and Services	C.14/c14	Please, provide no explanation. Just re-read the question if necessary.
Infrastructure and Services Infrastructure and Services	C.15(M)/c15 C.16(M)/c16	<u>Insufficient water supply:</u> whenever there is equipment failure or cessation of production operations due to the lack or reduction of water supply. <u>Incidents of insufficient water supply per month</u> can be estimated by considering the number of times water insufficiencies took place per month. The respondent should be asked not to make the calculation from months when water insufficiencies are rare or from months when water insufficiencies are extreme. The calculation should be made based on a typical month.
Infrastructure and Services Infrastructure and Services	C.17(M)/c17 C.22a/c22a C.22b/c22b	Zero is the answer only if no insufficiencies occurred in a typical month. <u>Duration of water shortage</u> can be estimated by considering the average duration of water insufficiencies that took place in a typical month. <u>E-mail.</u> Self-explanatory <u>Website use</u> includes cases when the establishment has its own website but does not actually do any direct communication with clients or suppliers via the website.
Infrastructure and Services Infrastructure and Services	C.23/c23 C.30a/c30a C.30b/c30b	<u><i>High-speed, Internet connection</i></u> is defined as Internet connection that is faster than using a telephone line with a standard modem. The manager should be given a card with the different alternatives for 'degree of obstacle' (from 0 to 4).
Infrastructure and Services Sales and Supplies	C.31a1/ECA c31a1 C.31a2/ECA c31a2 C.31a3ECAc 31a3 D.1a1/d1a1x	Self-explanatory. <u>Establishment's main product.</u> The purpose of this question is to determine what is the main product of the establishment in terms of sales (or monetary value). The description should be written down exactly as provided by the respondent.

Sales and Supplies	D.1a2/d1a2	The main product is defined in terms of sales in monetary value not volume. Categorize the products according to standard industry classification codes. The code of the main product should be filled out in the office.
Sales and Supplies Sales and Supplies	D.1a3/d1a3 D.2/d2	For the codes use United Nations ISIC Rev.3.1. <u>http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=17</u> The <u>main product</u> is defined in terms of sales in monetary value not volume. <u>Total sales</u> include the value of all annual sales counting manufactured goods and goods the establishment has bought for trading. For ex. if an establishment makes blue jeans and also imports blue jeans to resell, total sales is the value of all blue jeans sold, both produced and imported. Revenue or receipts for all services rendered and any sales of merchandise for the year, even if the payment may have been received at a later date, are included in total sales. Write the number in WORDS in d2x For services total sales refer to the total value of all the services provided during the year.
		In manufacturing and services the amount should include sales with and without invoices (reported and unreported sales).
Sales and Supplies Performance	D.2/d2x N.3/n3	If the company is VAT (Value Added Tax) registered and is getting a VAT refund, the total sales figure should exclude VAT. If the company is not VAT registered (cannot get a refund), the total sales should be given as they are. <u>Total sales</u> Please write out the answer to d2 in words. For example, 132,000 should be written as "One hundred thirty two thousand" <u>Total sales</u> three complete fiscal years ago include the value of all annual sales counting manufactured goods and goods the establishment has bought for trading. If an establishment makes blue jeans and also imports blue jeans to sell, total sales is the value of all blue jeans sold, both produced and imported. Revenue or receipts for all services rendered and any sales of merchandise for the year even though
		payment may have been received at a later date are included in total sales. Firms operating on a commission basis should report commissions, fees, and other operating income, not gross billings or sales.
Sales and Supplies	D.3/ d3a d3b d3c	<ul> <li><u>Where sales are made.</u> The purpose of this question is to determine where the establishment's customers are located.</li> <li><u>Domestic sales</u> are when goods or services are sold inside the borders of the country.</li> </ul>
		<u>An indirect export</u> is when the manufacturer sells its goods to a trader or another agent who then exports the product without modifications. Products that the manager knows are smuggled abroad should be

		counted as indirect exports.
Sales and Supplies	D.4/d4	<u>Direct export</u> is the sale of goods where the immediate recipient is outside the borders of the country. <u>Clearing customs for direct exports.</u> The purpose of this question is to determine the efficiency of customs in clearing goods for export.
		<u>Main point of exit</u> is the last domestic location (e.g. port, border crossing, airport, or internal custom) from which the goods leave the country. Whenever different ports of exit are used this question refers to the port where "most goods" exit defined in terms of consignment value (not physical units).
		<u>Goods cleared customs</u> They refer to the time it takes to obtain all clearances required from the moment the goods arrived at their point of exit until the moment they satisfy the requirements of the clearance procedures at the custom office. This includes transit procedures.
		<u>Average number of days</u> to clear customs. Prompt the respondent to think of all shipments sent to the main point of exit and estimate an average time it took from the time the shipments arrived to the time they left that point of exit.
		Export to CIS or customs union counts as export.
Sales and Supplies	D.6(M)/d6	<u>Theft for direct export.</u> The purpose of this question is to determine the extent of losses that stem from theft as goods are transported for export, independently of whether the cost is borne by the establishment or a third party that is hired to transport the goods.
		<u>Value of the products</u> exported refers to the value paid when goods are delivered to the receiver.
		<u>Theft</u> refers to robbery that occurred outside the premises of the
Sales and Supplies	D.7(M)/d7	establishment. <u>Breakage or spoilage for direct export.</u> The purpose of this question is to determine the extent of losses that stem from breakage or spoilage as goods are transported for export, independently of whether the cost is borne by the establishment or a third party that is hired to transport the goods.
		<u>Value of the products</u> exported refers to the value paid when goods are delivered to the receiver.
Sales and Supplies	D.8(M)/d8	<u>Breakage</u> refers to the inoperability or usability of the good. A broken good is inoperable or unusable in its current state. <u>First exported directly or indirectly</u> . The purpose of this question is self-explanatory.

Sales and Supplies	D.10(M)/ d10	<u>Theft when supplying domestic markets.</u> See definitions in D.6. No internal shipments to supply domestic markets applies only when 100% direct exports.
Sales and Supplies	D.11(M)/d11	<u>Breakage and spoilage when supplying domestic markets.</u> See definitions in D.7. No internal shipments to supply domestic markets applies only when 100% direct exports.
Sales and Supplies	Q.15(M)/ ECAq15a	<u>Self-explanatory.</u>
Sales and Supplies	D.12(M)/ d12a, d12b	The purpose of this question is to determine from where the inputs for production are obtained and purchased.
		The calculation is done as a percent of all purchases of supplies and inputs purchased by the establishment for the fiscal year. Proportion is to be calculated in terms of monetary values, not physical quantities.
		<u>Inputs</u> are materials that go through a mechanical, physical, or chemical transformation that will ultimately make up some portion of the final good produced. Lumber in a furniture factory is a good example of an input.
		<u>Supplies</u> are materials or products that are used, expended, consumed, but will not comprise the final good produced. Pencils and writing paper are good examples of a supply.
Sales and Supplies	D.13(M)/ d13	Import from CIS or customs union still counts as import. The purpose of this question is to determine if the establishment has any interaction with customs when importing inputs and other materials.
Sales and Supplies	D.14(M)/ d14	The purpose of these questions is to measure the efficiency of customs clearance of imports.
		<u>Goods cleared customs</u> includes all clearances required from the moment the goods arrived at their point of entry (e.g., port, airport) until the moment they satisfy the requirement of the clearance procedures at the customs office and can be picked up. It does not include time spent on transportation to reach the point of entry.
		<u>Average number of days</u> to clear customs. Prompt respondent to think of various shipments destined to the establishment that originated from abroad, and to estimate an average of the time it took when the shipment arrived to the country's point of entry to the time the establishment was allowed to claim them and begin domestic transport.
Sales and Supplies	D.16(M)/d1 6	<u>Days of inventory of main input</u> . The purpose of this question is to assess the efficiency in the supply chain. When firms have to maintain a high level of stock, because they cannot rely on a predictable supply of inputs, this is a source of economic inefficiency. Inversely, if supplies of the main input can be relied upon to be easily available, firms will

keep low levels of stock on hand.

		The <i>main input</i> is the input that accounts for the highest value among all inputs. It is not the input for which stock is maintained the longest. For example, if a company makes shirts, the most important input is the cloth, not the buttons and thread, though the establishment may actually keep a 90 day supply of buttons on hand and only a 30 day stock of cloth. <i>Days of inventory</i> should be calculated as the number of days of normal production capacity before running out of stock.
Sales and Supplies	D.17(S)/d17	Days of inventory of main sales item The purpose of this question is to assess the efficiency in the supply chain. When firms have to maintain a high level of sales items in stock, because they cannot rely on a predictable supply, this is a source of economic inefficiency. Inversely, if supplies of the main sales can be relied upon to be easily available, firms will keep low levels of stock on hand.
		<u>The main sales item</u> is the item that accounts for the highest percent of sales among all items that the establishment sells. It is not the item for which stock is maintained the longest.
		<i>Days of inventory</i> should be calculated by how many days, under normal sales conditions, it would take to deplete the main sales item held in supply at the establishment's premises.
Sales and	D.30a,	The manager should be given a card with the different alternatives for
Supplies	D.30b/d30a d30b	'degree of obstacle' (from 0 to 4).
	D.30b/d30a d30b D.31b1/ ECAd31b1, D.31b2/ ECAd31b2, D.31b3/	
Supplies Sales and	D.30b/d30a d30b D.31b1/ ECAd31b1, D.31b2/ ECAd31b2,	'degree of obstacle' (from 0 to 4).
Supplies Sales and supplies Degree of	D.30b/d30a d30b D.31b1/ ECAd31b1, D.31b2/ ECAd31b2, D.31b3/ ECAd31b3	<ul><li>'degree of obstacle' (from 0 to 4).</li><li>Self-explanatory.</li><li>The purpose of this question is to get the establishment to define what</li></ul>

		markets, 33 percent in each. Bolts make up 49 percent of total annual revenues. However, half of the revenue for bolts comes from selling in the international market and half in the local market.
		It is clear that bolts sell more in its respective market with respect to nails, but does not generate as much revenue as nails do for the establishment. In such a case, nails should be used as the main product. Whenever local, national and international markets have equal shares choose the national market and do not follow the skip pattern.
Degree of	E.2/e2b	Local market in Russia is defined as federal subject, which is either oblast, republic, krai, autonomous oblast, autonomous okrug or federal city where the establishment is located. <u>Number of competitors in establishment's market</u> . Self-explanatory
Competition	<b>L.2</b> / <b>C</b> 20	<u>INAMOUT OF COMPETITORS IN ESTADUSIMENT S MARKET.</u> SCII-CAPIAIIATOTY
Degree of Competition	E.6/e6	<u>Technology licensed from a foreign owned company:</u> it measures access to foreign technology. The license may be held by the establishment's parent company. The answer is "no" if the establishment uses foreign technology without a license or a formal agreement. Office software such as Microsoft Office should not be included.
Degree of	E.11/e11	Competition from unregistered or informal firms
Competition	0.00	
Degree of	Q.53/ECA = 53	<u>Self-explanatory</u>
Competition Degree of	ECAq53 E.30/e30	The manager should be given a card with the different alternatives for
Competition	,	'degree of obstacle' (from 0 to 4).
Innovation	H.1/h1	<u>New products or services introduced in the last three years</u> . By new or significantly improved we mean completely new to the establishment, or having a large improvement in technical specifications, components and materials, incorporated software, user friendliness, capabilities or other functional characteristics. Minor changes or improvement, routine upgrades, regular seasonal changes, and design changes that do not affect the function, intended use or technical characteristics of the good or service should be excluded.
		Additional details (examples): Examples of product innovation: a shirt- maker introducing a shirt with non-iron material, a shoe-maker introducing a shoe with a new cushioning technology, an appliance manufacturer introducing an appliance with in-built software or reduced energy consumption, a coffee bean processor starting to make roasted coffee beans. For services firms, examples of product innovation are: introduction of home delivery service, new forms of warranty, new forms of purchase on credit, use of internet for ordering and delivery.
Innovation	H.2/h2	From the new products and services introduced in the last three years was the main

Innovation	H.3/h3	By <u>new methods of manufacturing products or offering services</u> we mean a change in the production process or how the service is provided with the objective of reducing costs, increasing output or quality. This includes technology, equipment and/or software, procurement procedures, and logistics, delivery or distribution methods. Additional details (examples): Examples of production process innovations include the introduction of: new or improved equipment, machinery or production-related software, automation, new machinery to produce new products, new formulae or recipes, computer assisted manufacturing or design, quality testing equipment, automated packaging.
Innovation	H.4/h4	<ul> <li><u>New organizational structures or management practices.</u></li> <li>By new managerial or organizational practice or structure we mean changing the management structure, the way workers work together, introducing new incentives for performance, or changing hiring and firing practices, or changing the systems of information and monitoring that aim to enhance efficiency.</li> <li>Additional details (examples): Examples: giving non-managerial staff employees more responsibility, reducing the levels between top management and production workers, re-structuring departments, new performance monitoring systems, new problem reporting systems, new systems for gathering employee opinions, a change in salary and promotion practices to better reward performance.</li> </ul>
Innovation	H.5/h5	<ul> <li><u>New marketing methods.</u></li> <li>By new marketing methods we mean design, branding or packaging that changes the look of the product or perception of the service, or a new channel or form of promoting, pricing or selling the goods and services.</li> <li>Additional details (examples): Examples: a change in package design to give the product a new look where packing is the main determinant of the product's appearance, use of a new media for advertising, change in brand logo or trademark, introduction of new sales methods such as franchising, direct selling, exclusive retailing and modifying the presentation of the product to different types of customers, introduction of new pricing methods such as discount schemes and customer loyalty rewards scheme, but excluding pricing methods used solely to differentiate prices by customer segments.</li> </ul>
Innovation	H.6/h6	<ul> <li><u>Research and development activities, either in-house or contracted with other</u></li> <li><u>companies.</u> Research and development (R&amp;D) is defined as creative</li> <li>work undertaken on a systematic basis in order to increase the stock of</li> <li>knowledge. For example, laboratory research for a new chemical</li> <li>compound of paint would be research and development while market</li> <li>research surveys or internet surfing would not be research and</li> <li>development.</li> </ul>
Capacity	F.1(M)/f1	<u>A capacity utilization estimate</u> should be compared to a full production capacity capability.

This question only references the production facility and not the

Capacity	F.2(M)/f2	administrative offices. <u>Full production capacity</u> is the maximum level of production that this establishment could reasonably expect to attain under normal and realistic operating conditions fully utilizing the machinery, equipment and employees in place <u>Hours per week of operation</u> are the hours per week in which machines and employees are engaged in some type of mechanical, physical, or chemical transformation of materials into new products or in which the assembly of components into new products takes place, including maintenance. Up to 168 hours!
Land	G.1/g1a g1b	This question only references the production facility and not the administrative offices. Self-explanatory
Land & Permits	g1c G.2/g2	Application for construction permit. Self-explanatory
Land & Permits	G.3/g3	Wait for construction permit. Self-explanatory
Land & Permits	G.4/g4	Please, provide no explanation. Just re-read the question if necessary.
Land & Permits	G.5(S) /g5a,g5bx, g5b	<u>Total selling area</u> refers to the space where sales take place. It does not include warehouses. Whenever the establishment is composed of several locations the selling areas of each location should be added.
Land & Permits	G.6/g6a g6b g6c	<u>If establishment occupies several buildings the percentages should be computed for the summation of buildings.</u>
Land & Permits	G.30/g30a	The manager should be given a card with the different alternatives for 'degree of obstacle' (from 0 to 4).
Crime	I.1/i1	Pay for security. Self-explanatory
Crime	I.2/i2a i2b	<u>How much pay for security.</u> Self-explanatory
Crime	I.3/i3	Experienced losses from theft, robbery, vandalism, arson. Self-explanatory
Crime	I.4/i4a i4b	Extent of losses from theft, robbery, vandalism, arson. Self-explanatory
Crime	I.30/i30	The manager should be given a card with the different alternatives for 'degree of obstacle' (from 0 to 4).
Crime	I.31a1/ ECAi31a1 I.31a2/ ECAi31a2 I.31a3/ ECAi31a3	Self-explanatory.
Finance	K.1/k1c + K.2/k2c	The questions refer to an establishment's ability to provide and be provided trade credit arrangements with <b>suppliers and customers</b> .

Finance	K.3/ k3a k3bc k3e k3f k3hd	<u>Working capital</u> refers to financing of short term production activities. Working capital is necessary for businesses to cover short term liquidity issues, such as purchases of inputs, covering wage bills, etc. It does not refer to larger investments, such as in machinery or equipment. Since investment financing is covered under question K.5, working capital can be understood as financing of all operations, excluding investment in fixed assets
Finance Finance	K.4/k4 N.5/ n5a n5b	Working capital sources are likely to be diverse. It is important for the enumerator to make sure that the various sources do add up to 100%. <u>Purchase of fixed assets, investments, etc.</u> Self-explanatory The category <u>machinery, vehicles and equipment</u> is the annual investment of anything used directly by this establishment to produce. Vehicles include transport and loading and unloading vehicles. It should include not only the purchase cost but also all other costs involved in the investment such as transport of the item and installation cost. Computer hardware should be considered under equipment
		<u>Land. buildings</u> is the annual investment in land, buildings and structures used directly or indirectly by this establishment to produce goods and services. Excluded are investments for property leased to others. Included are expenditures for new and used structures (including those under construction at the end of last complete fiscal year), fixtures and equipment, additions, major alterations and improvements to existing facilities, and capitalized repairs.
		Also included are expenditures made by the establishment for structures which, on completion, were, or are, to be sold or leased back to that establishment or firm.
Finance	K.5/ k5a k5i k5bc k5e k5f k5hdj	<i>Fixed assets</i> include long-term, tangible asset held for business use and not expected to be converted to cash in the current or upcoming fiscal year, such as machinery/equipment, land, buildings, building improvements, etc. Leasing companies are non-financial institutions. Leasing is not bank credit.
Finance	K.4a/k4a	The source of funds for these purchases may be diverse, so it is important for the enumerator to make sure that the various sources do add up to 100%. <u>Leasing of fixed assets</u> . <b>Leasing</b> is a process by which a firm can obtain the use of a certain fixed assets on a rental basis. This avoids the need to invest capital in fixed assets. Ownership rests in the hands of the financial institution on lossing approach while the business has the
Finance Finance	K.6/k6 K.7/k7	financial institution or leasing company, while the business has the actual use of it. <u>Checking/ savings account.</u> Self-explanatory <u>An overdraft facility</u> is a flexible account that allows firms to draw upon in the event their account balance becomes negative. The firm will incur fees or are subject to interest payments if they exercise this option.

Finance	K.8/k8	<u>A line of credit</u> is an available amount of credit that the establishment can draw upon or leave untapped. Lines of credit usually carry monthly interest rates, and are repaid quickly (as soon as the establishment's cash flow allows for repayment). They may or may not have a defined date of expiration.
		<u>A loan</u> is generally a much less flexible form of finance. It comes in fixed amounts (rather than ranges), carry annual interest rates (either fixed or floating), and they carry a determined term to maturity (finite period for repayment).
Finance Finance	K.9/k9 K.9a/ ECAk9a ECAk9ax	<u>In case of more than one loan outstanding, consider the most recent acquired loan.</u> <u>Institutions that granted loan.</u> Self-explanatory <u>Name of the bank that provided the most recent line of credit or loan.</u> Self- explanatory
Finance Finance	K.10/k10 K.11/k11	<u>Year loan approved</u> . Self-explanatory <u>Value of the loan</u> . This question refers to the original loan value, as it was specified in the credit agreement. Thus, the respondent should answer according to what was specified in the loan contract, not what happened in practice (e.g. if they paid off the loan early or later than the term of the loan).
Finance	Q.46f/ ECAq46f ECAq46fx	<u>Currency in which the most recent line of credit or loan is denominated</u> . Self-explanatory
Finance	Q.46d/ ECAq46d	Annual interest rate of the most recent line of credit or loan. Self-explanatory
Finance	Q.46e/ ECAq46e	Original duration of the most recent line of credit or loan. Self-explanatory
Finance	K.13/k13 + K.14/ k14a k14b k14c k14c k14d k14e	<u>Collateral</u> refers to property of the business or personal property of the manager or owners that is used to secure the loan in the event that the establishment defaults on its payment obligations. Collateral only refers to real property or financial assets, not to personal guarantees by third parties.
Finance	K.15a/ k15a	<u>Value of collateral</u> . This question asks for the value of the property used to secure the loan. If the value of the collateral pledged is greater than the value of the loan amount, the answer can be greater than the loan amount.
Finance	K.15a1/ ECAk15a1	<u>Outstanding balance of the most recent line of credit or loan</u> . Self-explanatory
Finance Finance Finance	ECARI5al K.15b/k15b K.15c/k15c K.15d/k15d	<u>Total number of outstanding loans or lines of credit.</u> Self-explanatory <u>Total value of all outstanding loans or lines of credit.</u> Self-explanatory <u>Personal loans used for business financing</u> This question asks whether an owner has taken out any personal loans in his/her name and is using those personal loans to finance the business. This does not include

		toans made to the establishment where the owner is a signatory.
Finance	K.16/k16	<u>Apply for new loans in last year.</u> Self-explanatory
Finance	K.17/	Reasons for not applying for loan last year. Self-explanatory
	ECAk17	<u> </u>
Finance	K.20/k20a	Outcome of loan application: Self-explanatory
Finance	K.21/k21	<u>Certification of financial statements by external auditor</u> . Self-explanatory
Finance	K.30/k30	The manager should be given a card with the different alternatives for
		'degree of obstacle' (from 0 to 4).
Business-	Q.31e/	<u>Self-explanatory</u>
Government	ECAq31e	
Relations	-	
Business-	J.1/h7a	<u>Self-explanatory</u>
Government	ECAj1b	
Relations	ECAj1c	
		Demonst of total anion menerous the time The exception relation menerous
Business-	J.2/j2	Percent of total senior management's time. The question asks senior managers
Government		to estimate what percentage of their time they spend dealing with
Relations		government regulations, inspections, negotiations and other
		bureaucratic burden in a TYPICAL week. It should not include time
		spent negotiating procurement contracts with the government - only
		time dealing with red tape and bureaucracy.
Business-	J.3/j3	Visits and inspections by tax inspectorate officials. On-site and off-site
Government	J*= / )=	inspections, scheduled and un-scheduled, are to be included.
Relations		inspections, scheduled and an scheduled, are to be melded.
	т и /:и	
Business-	J.4/j4	<u>Self-explanatory</u>
Government		
Relations		
Business-	J.5/j5	<u>Please, provide no explanation. Just re-read the question if necessary.</u>
Government		
Relations		
Business-	J.6a/j6a	<u>Self-explanatory</u>
Government	5 , ,	
Relations		
Business-	J.6/j6	Please, provide no explanation. Just re-read the question if necessary.
Government	<b>J</b> .0/ J0	<u>1 tease, provide no explanation. Just re-read the question if necessary.</u>
Relations	<b>T =</b> /	
Business-	J.7/	<u>Please, provide no explanation. Just re-read the question if necessary.</u>
Government	j7a	Notice the wording (phrasing) of the question: it asks for the
Relations	j7b	respondent to answer for establishments "like this one" rather
		than the establishment being interviewed.
Business-	J.10/j10	Application for import license An import license is a document issued
Government	0 1	by a national government authorizing the importation of certain goods
Relations		into its territory. Each license specifies the volume of imports allowed,
		and the total volume allowed should not exceed the quota. Licenses
		1
		can be sold to importing companies at a competitive price, or simply a
		fee. Government may put certain restrictions on what is imported as
		well as the amount of imported goods and services.
		Imports refer to both imports of final goods for sale as well as imports

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Business- Government Relations	J.11/j11	Wait for import license Self-explanatory. Import license defined as in J.10.
Business- Government Relations	J.12/j12	Please, provide no explanation. Just re-read the question if necessary.
Business- Government Relations	J.13/j13	<u>Application for operating license</u> Self-explanatory
Business- Government Relations	J.14/j14	<i>Wait for operating license Licenses</i> are defined as state-issued documents certifying the right of its holder to engage in a particular business activity. It is the authorization to carry out an activity on a continuous basis (eg. license to sell alcohol, license to import, license to operate) If the establishment applied more than once during the reference period, an average wait should be recorded.
Business- Government	J.15/j15	Please, provide no explanation. Just re-read the question if necessary.
Relations		
Business- Government Relations	J.30a/j30a J.30b/j30b J.30c/j30c J.30e/j30e J.30f/j30f H.30/h30	The manager should be given a card with the different alternatives for 'degree of obstacle' (from 0 to 4). <u>Please, provide no explanation. Just re-read</u> the question if necessary.
Business- Government Relations	J.31b1/ ECAj31b1, J.31b2/ ECAj31b2, J.31b3/ ECAj31b3, J.31c1/ ECAj31c1, J.31c2/ ECAj31c2, J.31c3/ ECAj31c2, J.31c3/ ECAj31c2, J.31f1/ ECAj31f1, J.31f2/ ECAj31f2, J.31f3/ ECAj31f3, H.31a1/ ECAh31a1, H.31a2/ ECAh31a2, H.31a3/	Self-explanatory.

	ECAh31a3,	
Business-	Q.39/	Self-explanatory
Government	ECAq39	
Relations		
Business-	Q.41/	Self-explanatory
Government	ECAq41a	
Relations	ECAq41b	
-	ECAq41c	
Business-	Q.44/	Self-explanatory
Government	ECAq44a	
Relations	ECAq44b ECAq44c	
Use of	R.16a/	Hired an external consultant. The purpose of this question is to find out
consulting	ECAr16a	whether the establishment has ever hired an external consultant, either
services	Lonitou	domestic or foreign, to provide consulting services. The areas covered
		can include business skills improvements (finance, marketing,
		communication, basic human resources, business plan, etc.), business
		process improvements (informational/accounting system, introduction
		of quality standard, etc.), or more sophisticated projects (restructuring,
		feasibility study, environmental management, energy efficiency, etc.).
		Any type of consultants are included: management consultants,
II	D 17 /	engineers, architects, accountants, etc.
Use of	R.17/ ECAr17a	Self-explanatory.
consulting services	ECAr17b	Technological production processes can be classified under feasibility study.
services	ECAr17c	study.
Use of	R.18/	Local consulting firms are domestically-owned consulting firms that do
consulting	ECAr18	not offer their services in other countries.
services		
Use of	<b>R.20</b> /	Main reason why the establishment did not hire an external consultant. Self-
consulting	ECAr20	explanatory.
services	ECAr20x	
Labor	L.1/11	Number of permanent, full-time employees last complete fiscal year are defined as
		all paid employees that are contracted for a term of one or more fiscal
		years and/or have a guaranteed renewal of their employment contract
		and that work up to 8 or more hours per day.
		All employees and managers (including respondent) should be
		counted.
Labor	L.2/12	Number of permanent, full-time employees three complete fiscal years ago. See
	-	definition of <u>permanent, full-time employees</u> above.
Labor	L.3(M)/	Number of permanent, full-time production workers are workers (up through
	13a	the line supervisor level) engaged in fabricating, processing,
	13b	assembling, inspecting, receiving, storing, handling, packing,
		warehousing, shipping (but not delivering), maintenance, repair,
		product development, auxiliary production for plant's own use (e.g.,
		power plant), recordkeeping, and other services closely associated with these production operations. Employees above the working supervisor
		these production operations. Employees above the working-supervisor

level are excluded from this category.

<u>Number of permanent, full-time non-production workers</u> are those workers not engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations. Managers and other supervisory personnel with responsibilities for the performance of shop floor supervisors and below are included. Do not include shop floor supervisors.

Employees in sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), janitorial and guard services, advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria, medical, etc.) are included. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force. Professional, and technical employees are included in this category.

Numbers of different types of permanent, full-time skilled production workers are workers (up through the line supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations. Employees above the workingsupervisor level are excluded from this item. Also, these workers are <u>skilled</u> in that they have some special knowledge or (usually acquired) ability in their work. A skilled worker may have attended a college, university or technical school. Or, a skilled worker may have learned his skills on the job.

<u>Unskilled production workers</u> are workers (up through the line supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations. Employees above the working-supervisor level are excluded from this item. Also, these workers are <u>unskilled</u> in that it is not required that they have special training, education, or skill to perform their job.

Number of permanent, full-time skilled production workers that are female. Self-

L.5(C,S)/15 <u>Number of permanent, full-time workers that are female. Self-explanatory</u>

L.5(M)/	
15a	
15b	

L.4(M)/

14a

14b

Labor

Labor

explanatory

		Number of permanent, full-time unskilled production workers that are female.
Labor	L.6/16 L.6a/16a	Self-explanatory <u>Full-time temporary or seasonal employees</u> are defined as all paid short-term (i.e. for less than a fiscal year) employees with no guarantee of renewal of employment contract) and work 40 hours or more per week for the term of their contract.
Labor	L.8/18	<u>Average length of employment of all full-time temporary or seasonal employees</u> refers to the number of months that the worker was contracted for work that occupied employees for 40 hours or more per week. If average full-time temporary or seasonal employment was for less than one month, enumerator should write 1.
Labor	L.9a(M)/ 19a1 19a2	Levels of education for average production worker.
Labor	Q.60/ ECAq69	Had a university degree means completed a university degree; only attending a university without obtaining a degree should be excluded.
Labor	L.10/110	<u>Formal training</u> that has a structured and defined curriculum. Formal training may include classroom work, seminars, lectures, workshops, and audio-visual presentations and demonstrations. This does not include training to familiarize employees with equipment and machinery on the shop floor, training aimed at familiarizing employees with the establishment's standard operation procedures, or employee orientation at the beginning of an employee's tenure. <u>In-house training</u> may be conducted by other non-supervisory employees of the establishment, the establishment's supervisors or managers, or the establishments training centers.
Labor	L.11(M)/ 111a 111b	Percent, by skill category that were trained.
Labor	L.30a/130a L.30b/130b	The manager should be given a card with the different alternatives for 'degree of obstacle' (from 0 to 4). <u>Please, provide no explanation. Just re-read</u> the question if necessary.
Labor	L.31a1/ ECA131a1 L.31a2/ ECA131a2 L.31a3/ ECA131a3 L.31b1/ ECA131b1 L.31b2/ ECA131b2 L.31b3/ ECA131b3	Self-explanatory.
Business Environment	M.1/ m1a m1d	Please, provide no explanation. Just re-read the question if necessary. <b>Do not</b> read card!
Performance	N.2/	Total cost of labor, including wages, salaries and benefits is the total annual

	n2a n2e (M, S) n2f (M)	wages and all annual benefits, including food, transport, social security (i.e. pensions, medical insurance, and unemployment insurance).
	n2i (S) n2b	<u>Raw materials and intermediate goods:</u> (M) is the cost of all inputs in the production activity. This is usually an item directly taken from the financial statements.
		<i>Finished goods and materials purchased to resell:</i> (S) is the cost of all finished goods and materials purchased to be resold. This is usually an item directly taken from the financial statements.
		<u>Electricity</u> is the total annual cost of electric energy purchased from public or private utility companies or received from other establishments that belong to the same firm. Exclude the value of electricity generated and used at this establishment.
Doutormana		<i>Evel</i> (M) is the total annual cost of all fuels consumed for heat, power, transportation, or the generation of electricity. Do not include the estimated costs of fuels, such as sawdust or blast furnace gas, produced as a byproduct of your manufacturing activities. Include anthracite and bituminous coal, coke, natural and manufactured gas, fuel oil, liquefied petroleum gas, gasoline, and all other fuels, including purchased steam. Be sure to include fuel used to power delivery trucks, forklifts, or other motor vehicles associated with the establishment.
Performance	N.6 (M)/ n6a n6b	<u>Net book value</u> equals the purchase value minus depreciation. The net book value represents the actual cost of assets at the time they
	100	were acquired, including all costs incurred in making the assets usable (such as transportation and installation) minus depreciation accumulated since the date of purchase. Included in the assets are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Accordingly, the value of assets at the end of the year includes the value of construction in progress.
Performance	N.7 (M)/ n7a n7b	This question is designed to ascertain the market value of the establishment's capital. Data on equipment is the most important. You can ask the manager to estimate the market value if all of the equipment, land and buildings were sold on the open market. If the respondent states that there is no market, ask how much the respondent would be willing to pay for the capital, knowing what it can produce in its <i>current condition</i> . Estimate how much it would cost to buy machinery in the current market which is similar in terms of age and characteristics. This estimate is to give an indication of the capital intensity of the firm. Keep in mind that it is one of the most important questions on the questionnaire.
Expectations	S.1a/ ECAs1a S.1b/	Expected sales one year from now. Self explanatory

Perceptions of obstacles	ECAs1b S.1c/ ECAs1c VIN.1/ vin1a vin1b vin1c vin1d vin1e	Perceptions of obstacles. Hypothetical situations. Self-explanatory.
Control Information	A.15a/ a15a1ax a15a2a ECAa15a4a a14a3a a15a1bx a15a2b ECAa15a4b a15a3b a15a1cx a15a2c ECAa15a4c a15a3c	<u>Self-explanatory</u> <u>Years working in the position vs. Years working with the firm:</u> For example, the respondent is a CEO who started working with the company as a Chief Technical Officer 5 years ago and was promoted to his current position of the CEO 1 year ago. His tenure in his current position as the CEO in this case is 1 year and his tenure with the company is 5 years.
Control Information	a15a5c a15d a15m a15y a15h a15h	<u>Time interview ends</u> . Self-explanatory.
Control Information Control Information	a16 a17 a17x a18 a19h a19m	<u>Questions for interviewers.</u> Self-explanatory. <u>Questions for supervisors.</u> Self-explanatory.

#### **INNOVATION MODULE**

Establishments eligible to participate in the Innovation Module are determined by their answers to Section H - Innovation in the main BEEPS questionnaire. Eligible establishments should only be asked the questions that are relevant for them. Innovation module of the BEEPS questionnaire consists of nine self-contained sections:

- Goods and services innovation: To be answered by eligible establishments that have introduced new products or services
- **Process innovation**: To be answered by eligible establishments that have introduced new methods for the production or supply of products or services

- **Organizational innovation**: To be answered by eligible establishments that have introduced new organizational or management practices or structures
- **Marketing innovation**: To be answered by eligible establishments that have introduced new marketing methods during the last three years
- **Research and development activites**: To be answered by eligible establishments that have spent on research and development activities during the last three years
- Acquisition of external knowledge and use of computers: To be answered by all eligible establishments
- **Protection of innovation**: To be answered by all eligible establishments
- Management practices (M): To be answered by eligible manufacturing establishments that have at least 50 employees
- Interaction with the state and public-private partnerships: To be answered by all eligible establishments

#### Explanation of terms

The instructions below provide explanations of the terms used, definitions applied and the intent of the questions that comprise the Innovation Module of the Business Environment and Enterprise Performance Survey (BEEPS) 2011 instrument.

Section	Question/ Variables	Instructions	
Control information	A.0/a0	<u>Questionnaire module</u> . Self-explanatory.	
Control information	A.23/ a23 a23x	Mode of implementation of the interview. Self-explanatory.	
Control information	a25x A.14i/ a14id a14im a14iy a14ih a14ih a14imin	<u>Time when Innovation Module begins.</u> Self-explanatory.	
Goods and services innovation	O.1a/ ECAo1a	New products or services as defined in H.1 above. Self-explanatory.	
Goods and services innovation	O.1b/ ECAo1bx	Main new or significantly improved product or service is defined in terms of sales in monetary value not volume – it is the new product or service that brings in the most sales among all new products or services (if there is more than 1). Self-explanatory.	
Goods and services innovation	O.2/ ECAo2a ECAo2b ECAo2c	Main new or significantly improved product or service is defined as in O.1b. A product or service was new to the local market/country/international market in addition to being new to the establishment if the establishment was the only one producing or offering such a product or service in the local market/country/international market at the time the establishment introduced the product or service.	

Goods and services innovation	O.3/ ECAo3a ECAo3b ECAo3c ECAo3d ECAo3e ECAo3f ECAo3fx ECAo3g	<u>Comparison of the main new of significantly improved product or service with the</u> closest product already produced by the establishment. Self-explanatory.
Goods and services innovation Goods and services innovation Goods and	O.4/ ECAo4 ECAo4x O.5/ ECAo5 ECAo5x O.6/ ECAo6	<ul> <li><u>Share of products or services introduced in the last three years in establishment's annual sales</u>. Self-explanatory.</li> <li><u>Way in which the main new or significantly improved product or service was introduced</u>. Self-explanatory.</li> <li>An invention is a new composition, device, or process. An invention may be derived from a programmed product or idea, or it could be</li> </ul>
services innovation	ECAo6	may be derived from a pre-existing model or idea, or it could be independently conceived in which case it may be a radical breakthrough. Patent as defined in O.23a. Know-how is practical knowledge of how to get something done.
Process innovation	O.7/ ECAo7a ECAo7b ECAo7c	<ul> <li>Process innovation is the implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software.</li> <li>Production methods involve techniques, equipment and software used to produce goods or services.</li> <li>Delivery methods concern the logistics of the firm and encompass equipment, software and techniques to find and acquire inputs, allocate supplies within the firm, or deliver final products.</li> <li>The implementation of new or significantly improved information and communication technology (ICT) is a process innovation if it is intended to improve the efficiency and/or quality of an ancillary support activity.</li> </ul>
Process innovation Process innovation	O.8/ ECAo8x O.9/ ECAo9a ECAo9b ECAo9c	Self-explanatory. A production or delivery method was new to the local market/country/international market in addition to being new to the establishment if the establishment was the only one using such production or delivery method in the local market/country/international market at the time the establishment introduced the production or delivery method.
Process innovation Process innovation	O.10/ ECAo10a ECAo10b ECAo10c O.11/ ECAo11	Changes in technique, machinery and equipment, software used. Self-explanatory.

Process	O.12/ ECAo12	Invention, patent, know-how defined as in O.6.
Process innovation	O.13(M)/ ECAo13	Self-explanatory.
Organizational innovation	O.14/ ECAo14a ECAo14b ECAo14c ECAo14d ECAo14d ECAo14e	<u>New or significantly improved organizational structures or management practices</u> as defined in H.4 above. Self-explanatory. Organisational innovations deal primarily with people and the organisation of work implementation of an organisational method (in business practices, workplace organisation or external relations) that has not been used before in the firm and is the result of strategic decisions taken by management.
Marketing innovation	O.15/ ECAo15a ECAo15b ECAo15c ECAo15d	<u>New or significantly improved marketing methods</u> as defined in H.5 above. Self-explanatory.
Innovation activity	O.16/ ECAo16	<u>Research and development</u> is defined as creative work undertaken on a systematic basis in order to increase the stock of knowledge. Research and development is distinguished from market research and product testing by the presence of an appreciable element of novelty. So, for example, laboratory research for a new chemical compound of paint would be R&D while market research surveys or internet surfing would not be research and development.
Innovation activity Innovation	O.17/ ECAo17 O.18/	<u>Spending on research development in the last completed fiscal year.</u> Research and development as defined in O.16. Includes all spending related to research and development (personnel costs, materials, etc.). Research and development as defined in O.16.
activity	ECAo18	
Innovation activity	O.19/ ECAo19	Research and development as defined in O.16.
Acquisition of external knowledge and use of computers	O.20/ ECAo20	<u>Acquisition of external knowledge</u> and technology may be in the form of patents, non-patented inventions, licences, disclosures of know-how, trademarks, designs and patterns. It may also include computer services and other scientific and technical services for product and process innovation activities.
Acquisition of external knowledge and use of computers	O.21/ ECAo21	Self-explanatory.
Acquisition of external knowledge and use of computers	O.22a/ ECAo22a	<u>Percentage of establishment's employees regularly using personal computers (PCs) in</u> <u>their jobs.</u> Workforce includes all personnel, including administration and management. Only personal computers are included; automated machinery, Xerox machines, etc. should be excluded.
Acquisition of external	O.22b/ ECAo22b	<u>Percentage of establishment's employees that regularly used personal computers</u> (PCs) in their jobs three years ago. As in 0.22a.

knowledge and use of computers Protection of innovation	O.23a/ ECAo23a	<ul> <li>A <i>patent</i> protects new inventions and covers how things work, what they do, how they do it, what they are made of and how they are made. It gives the owner the right to prevent others from making, using, importing or selling the invention without permission. The invention must:</li> <li>be new,</li> <li>have an inventive step that is not obvious to someone with knowledge and experience in the subject</li> <li>be capable of being made or used in some kind of industry</li> <li>not be: a scientific or mathematical discovery, theory or method, a literary, dramatic, musical or artistic work, a way of performing a mental act, playing a game or doing business, the presentation of information, or some computer programs, an animal or plant variety, a method of medical treatment or diagnosis or against public policy or morality.</li> </ul>
Protection of innovation Protection of	O.23b/ ECAo23b O.23c/	Patent as defined in O.23a. <u>Trademark</u> is a distinctive sign or indicator used by an individual, business organization, or other legal entity to identify that the products or services to consumers with which the trademark appears originate from a unique source, and to distinguish its products or services from those of other entities. A trademark is typically a name, word, phrase, logo, symbol, design, image, or a combination of these elements. The owner of a registered trademark may commence legal proceedings for trademark infringement to prevent unauthorized use of that trademark. Self-explanatory.
innovation	U.25C/ ECAo23c	Sen-explanatory.
Protection of	O.23d/	Self-explanatory.
innovation	ECAo23d	Re-registration of a trademark counts as being granted a trademark again.
Management practices	R.1(M)/ ECAr1	<u>Dealing with a process problem</u> . The question refers to the timing and frequency of process improvements in response to process problems, such as machinery break-down, human errors or failures in communication. Answer that best describes the management practices in the establishment should be chosen.
Management practices	R.2(M)/ ECAr2	Number of production performance indicators monitored in the establishment. Production performance indicators include, for example, volume of production (number of units produced), number of errors per 10000 units produced, greenhouse gas emissions in thousand tones of CO2/year, sulphor dioxide in thousand tones per year, nitrogen oxides in thousand tones per year, total energy use and energy intensity, total water used, hazardous/dangerous waste generated, non- hazardous/non-dangerous waste generated, number of production related incidents, etc.

Management practices	R.6(M)/ ECAr6	<u>Timescale of the establishment's production targets</u> . The purpose of the question is to find out whether short-term or long-term goals are the focus of the company and the relationship between the short-term and long-term production targets. Production targets can be defined in terms of units of products produced, percentage of products with errors etc. Answer that best describes the management practices in the establishment should be chosen. The main product is defined in terms of sales in monetary value not volume.
Management practices	R.7(M)/ ECAr7	<u>Assessment of the establishment's production targets</u> . The purpose of the question is to assess how demanding are the establishment's production targets. Answer that best describes the management practices in the establishment should be chosen.
Management practices	R.8(M)/ ECAr8	By <i>managers</i> we mean people who have responsibility for pay and promotion for at least one other employee. This excludes shift supervisors. Production targets as defined in ECAr6.
Management practices	R.11(M)/ ECAr11	<ul> <li><u>Performance bonus</u> is a form of payment to employees, which is related to the performance output of an employee.</li> <li>By <u>managers</u> we mean people who have responsibility for pay and promotion for at least one other employee. This excludes shift supervisors. Production targets as defined in ECAr6.</li> </ul>
Management practices	R.13(M)/ ECAr13	<ul> <li><u>Performance bonus</u> is a form of payment to employees, which is related to the performance output of an employee.</li> <li>By <u>non-managers</u> we mean employees excluding managers as defined in ECAr11. Production targets as defined in ECAr6.</li> </ul>
Management practices	R.15(M)/ ECAr15	The purpose of this question is to find out what happens to employees who do not meet expectations in their position. Answer that best describes the management practices in the establishment should be chosen.
Interaction with the state and public-private partnerships	VEB1/ veb1a veb1b veb1c veb1d veb1e veb1ex	Self-explanatory.
Interaction with the state and public-private partnerships	VEB2/ veb2	Self-explanatory.
Interaction with the state and public-private partnerships	VEB3/ veb3	Self-explanatory.
Interaction with the state and public-private partnerships	VEB4/ veb4	Self-explanatory.
Interaction with	VEB5/	Public-private partnership (PPP) describes a government service or private

the state and public-private partnerships	veb5a veb5b veb5c veb5d veb5e	business venture which is funded and operated through a partnership of government and private sector companies. PPP typically involves a contract between a public-sector authority and a private party, in which the private party provides a public service or implements a project and assumes substantial financial and operational risk in the project.
Interaction with the state and public-private partnerships	VEB6/ veb6	Self-explanatory.
Interaction with the state and public-private partnerships	VEB7/ veb7	Self-explanatory.
Control information	A.15i/ a15id a15im a15iy a15ih a15ih	Time Innovation Module ends. Self-explanatory.
Control information	A.24/ a24	Self-explanatory.
Control information	A.15a/ a15a1dx a15a2d ECAa15a4 d A15a3d	Self-explanatory.

## Appendix A. ISIC Rev.3.1 – Sectors included and excluded from the sample

Please find below the whole ISIC REV.3 structure.

For more information, please see: <u>http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=17</u>

The following codes correspond to each of the following sectors:

The correspondence between ISIC REV.3.1 and NACE REV.1.1 codes can be found in the following web site: <u>http://unstats.un.org/unsd/cr/registry/regso.asp?Ci=26&Lg=1</u>

A.4 Ind	lustry	Sampling sector	Screener
		a4a	a4b
	Food	15	15
	Textiles	17	17
$\circ$	Garments	18	18
Manufacturing :Section D	Chemicals	24	24
ecti	Plastics & rubber	25	25
ې: يو	Non metallic mineral	26	26
turi	products		
ıfacı	Basic metals	27	27
fanı	Fabricated metal products	28	28
4	Machinery and equipment	29	29
	Electronics (31 & 32)	31	31
	Other manufacturing	2	2
Service	Retail	52	52
	Wholesale	51	51
	IT	72	72
Residual (core)	Hotel and restaurants:	55	55
	section H		
	Services of motor vehicles	50	50
	Construction Section F:	45	45
	Transport Section I: (60- 64)	60	60

### ISIC REV. 3.1 Rev. - Sectors included and excluded from the sample

In RED you will find the sectors excluded from the sample In GREEN you will find all the included sectors.

- <u>A</u> Agriculture, hunting and forestry
  - 01 Agriculture, hunting and related service activities
  - <u>02</u> Forestry, logging and related service activities
- <u>B</u> Fishing
  - 05 Fishing, aquaculture and service activities incidental to fishing
- <u>C</u> Mining and quarrying

- <u>10</u> Mining of coal and lignite; extraction of peat
- <u>11</u> Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying
- <u>12</u> Mining of uranium and thorium ores
- <u>13</u> Mining of metal ores
- <u>14</u> Other mining and quarrying
- <u>D</u> Manufacturing
  - <u>15</u> Manufacture of food products and beverages
  - <u>16</u> Manufacture of tobacco products
  - <u>17</u> Manufacture of textiles
  - <u>18</u> Manufacture of wearing apparel; dressing and dyeing of fur
  - <u>19</u> Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear
  - <u>20</u> Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
  - <u>21</u> Manufacture of paper and paper products
  - <u>22</u> Publishing, printing and reproduction of recorded media
  - $\overline{23}$  Manufacture of coke, refined petroleum products and nuclear fuel
  - $\overline{24}$  Manufacture of chemicals and chemical products
  - <u>25</u> Manufacture of rubber and plastics products
  - <u>26</u> Manufacture of other non-metallic mineral products
  - <u>27</u> Manufacture of basic metals
  - $\overline{28}$  Manufacture of fabricated metal products, except machinery and equipment
  - <u>29</u> Manufacture of machinery and equipment n.e.c.
  - <u>30</u> Manufacture of office, accounting and computing machinery
  - <u>31</u> Manufacture of electrical machinery and apparatus n.e.c.
  - <u>32</u> Manufacture of radio, television and communication equipment and apparatus
  - <u>33</u> Manufacture of medical, precision and optical instruments, watches and clocks
  - <u>34</u> Manufacture of motor vehicles, trailers and semi-trailers
  - <u>35</u> Manufacture of other transport equipment
  - <u>36</u> Manufacture of furniture; manufacturing n.e.c.
  - <u>37</u> Recycling
- <u>E</u> Electricity, gas and water supply
  - <u>40</u> Electricity, gas, steam and hot water supply
  - <u>41</u> Collection, purification and distribution of water
- <u>F</u> Construction
  - <u>45</u> Construction
- <u>G</u> Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods
  - <u>50</u> Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel
  - <u>51</u> Wholesale trade and commission trade, except of motor vehicles and motorcycles
  - <u>52</u> Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods
- <u>H</u> Hotels and restaurants
  - <u>55</u> Hotels and restaurants
  - <u>I</u> Transport, storage and communications
    - 60 Land transport; transport via pipelines

- 61 Water transport
- 62 Air transport
- <u>63</u> Supporting and auxiliary transport activities; activities of travel agencies
- <u>64</u> Post and telecommunications
- <u>J</u> Financial intermediation
  - 65 Financial intermediation, except insurance and pension funding
  - 66 Insurance and pension funding, except compulsory social security
  - 67 Activities auxiliary to financial intermediation
  - $\underline{K}$  Real estate, renting and business activities
  - <u>70</u> Real estate activities
    - <u>71</u> Renting of machinery and equipment without operator and of personal and household goods
    - <u>72</u> Computer and related activities
    - 73 Research and development
    - 74 Other business activities
- <u>L</u> Public administration and defence; compulsory social security
  - <u>75</u> Public administration and defence; compulsory social security
- <u>M</u> Education
  - <u>80</u> Education
  - <u>N</u> Health and social work
    - 85 Health and social work
- <u>O</u> Other community, social and personal service activities
  - <u>90</u> Sewage and refuse disposal, sanitation and similar activities
  - <u>91</u> Activities of membership organizations n.e.c.
  - <u>92</u> Recreational, cultural and sporting activities
  - 93 Other service activities
- <u>P</u> Activities of private households as employers and undifferentiated production activities of private households
  - 95 Activities of private households as employers of domestic staff
  - <u>96</u> Undifferentiated goods-producing activities of private households for own use
  - <u>97</u> Undifferentiated service-producing activities of private households for own use
- <u>Q</u> Extraterritorial organizations and bodies
  - <u>99</u> Extraterritorial organizations and bodies

### ISIC REV. 3.1 Rev. – Detailed structure

## 1. 15 MANUFACTURE OF FOOD PRODUCTS AND BEVERAGES

- 1511 Production, processing and preserving of meat and meat products
- <u>1512</u> Processing and preserving of fish and fish products
- 1513 Processing and preserving of fruit and vegetables
- <u>1514</u> Manufacture of vegetable and animal oils and fats
- <u>1520</u> Manufacture of dairy products
- 1531 Manufacture of grain mill products
- 1532 Manufacture of starches and starch products
- <u>1533</u> Manufacture of prepared animal feeds
- <u>1541</u> Manufacture of bakery products
- <u>1542</u> Manufacture of sugar

- <u>1543</u> Manufacture of cocoa, chocolate and sugar confectionery
- <u>1544</u> Manufacture of macaroni, noodles, couscous and similar farinaceous products
- <u>1549</u> Manufacture of other food products n.e.c.
- <u>1551</u> Distilling, rectifying and blending of spirits; ethyl alcohol production from fermented materials
- <u>1552</u> Manufacture of wines
- <u>1553</u> Manufacture of malt liquors and malt
- <u>1554</u> Manufacture of soft drinks; production of mineral waters

### 2. 16 DIVISION: 16 - MANUFACTURE OF TOBACCO PRODUCTS

• <u>1600</u> - Manufacture of tobacco products

### 17 Division: 17 - Manufacture of textiles

- <u>1711</u> Preparation and spinning of textile fibres; weaving of textiles
- <u>1712</u> Finishing of textiles
- <u>1721</u> Manufacture of made-up textile articles, except apparel
- 1722 Manufacture of carpets and rugs
- 1723 Manufacture of cordage, rope, twine and netting
- <u>1729</u> Manufacture of other textiles n.e.c.
- <u>1730</u> Manufacture of knitted and crocheted fabrics and articles

## 3. 18 DIVISION: 18 - MANUFACTURE OF WEARING APPAREL; DRESSING AND DYEING OF FUR

- <u>1810</u> Manufacture of wearing apparel, except fur apparel
- <u>1820</u> Dressing and dyeing of fur; manufacture of articles of fur

## 4. 19 DIVISION: 19 - TANNING AND DRESSING OF LEATHER; MANUFACTURE OF LUGGAGE, HANDBAGS, SADDLERY, HARNESS AND FOOTWEAR

- <u>1911</u> Tanning and dressing of leather
- 1912 Manufacture of luggage, handbags and the like, saddlery and harness
- <u>1920</u> Manufacture of footwear

## 20 Division: 20 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials

- <u>2010</u> Sawmilling and planing of Wood
- <u>2021</u> Manufacture of veneer sheets; manufacture of plywood, laminboard, particle board and other panels and boards
- <u>2022</u> Manufacture of builders' carpentry and joinery

- <u>2023</u> Manufacture of wooden containers
- <u>2029</u> Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials

### 21 Division: 21 - Manufacture of paper and paper products

- <u>2101</u> Manufacture of pulp, paper and paperboard
- <u>2102</u> Manufacture of corrugated paper and paperboard and of containers of paper and paperboard
- <u>2109</u> Manufacture of other articles of paper and paperboard

# 5. 22 DIVISION: 22 - PUBLISHING, PRINTING AND REPRODUCTION OF RECORDED MEDIA

- <u>2211</u> Publishing of books, brochures and other publications
- <u>2212</u> Publishing of newspapers, journals and periodicals
- <u>2213</u> Publishing of music
- <u>2219</u> Other publishing
- <u>2221</u> Printing
- 2222 Service activities related to printing
- 2230 Reproduction of recorded media

- 23 Division: 23 Manufacture of coke, refined petroleum products and nuclear fuel
  - <u>2310</u> Manufacture of coke oven products
  - 2320 Manufacture of refined petroleum products
  - 2330 Processing of nuclear fuel

### 24 Division: 24 - Manufacture of chemicals and chemical products

- <u>2411</u> Manufacture of basic chemicals, except fertilizers and nitrogen compounds
- 2412 Manufacture of fertilizers and nitrogen compounds
- <u>2413</u> Manufacture of plastics in primary forms and of synthetic rubber
- 2421 Manufacture of pesticides and other agrochemical products
- 2422 Manufacture of paints, varnishes and similar coatings, printing ink and mastics
- 2423 Manufacture of pharmaceuticals, medicinal chemicals and botanical products
- <u>2424</u> Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations
- <u>2429</u> Manufacture of other chemical products n.e.c.
- 2430 Manufacture of man-made fibres

### 6. 25 DIVISION: 25 - MANUFACTURE OF RUBBER AND PLASTICS PRODUCTS

- <u>2511</u> Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres
- 2519 Manufacture of other rubber products
- <u>2520</u> Manufacture of plastics products

#### 26 Division: 26 - Manufacture of other non-metallic mineral products

- <u>2610</u> Manufacture of glass and glass products
- <u>2691</u> Manufacture of non-structural non-refractory ceramic ware
- 2692 Manufacture of refractory ceramic products
- 2693 Manufacture of structural non-refractory clay and ceramic products
- <u>2694</u> Manufacture of cement, lime and plaster
- 2695 Manufacture of articles of concrete, cement and plaster
- <u>2696</u> Cutting, shaping and finishing of stone
- <u>2699</u> Manufacture of other non-metallic mineral products n.e.c.

## 7. 27 DIVISION: 27 - MANUFACTURE OF BASIC METALS

- <u>2710</u> Manufacture of basic iron and steel
- <u>2720</u> Manufacture of basic precious and non-ferrous metals
- 2731 Casting of iron and steel
- <u>2732</u> Casting of non-ferrous metals

## 8. 28 DIVISION: 28 - MANUFACTURE OF FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND EQUIPMENT

- <u>2811</u> Manufacture of structural metal products
- <u>2812</u> Manufacture of tanks, reservoirs and containers of metal
- <u>2813</u> Manufacture of steam generators, except central heating hot water boilers
- <u>2891</u> Forging, pressing, stamping and roll-forming of metal; powder metallurgy
- <u>2892</u> Treatment and coating of metals; general mechanical engineering on a fee or contract basis
- <u>2893</u> Manufacture of cutlery, hand tools and general hardware
- <u>2899</u> Manufacture of other fabricated metal products n.e.c.

### 29 Division: 29 - Manufacture of machinery and equipment n.e.c.

- <u>2911</u> Manufacture of engines and turbines, except aircraft, vehicle and cycle engines
- <u>2912</u> Manufacture of pumps, compressors, taps and valves
- 2913 Manufacture of bearings, gears, gearing and driving elements
- <u>2914</u> Manufacture of ovens, furnaces and furnace burners
- 2915 Manufacture of lifting and handling equipment
- <u>2919</u> Manufacture of other general-purpose machinery
- <u>2921</u> Manufacture of agricultural and forestry machinery
- <u>2922</u> Manufacture of machine tools
- <u>2923</u> Manufacture of machinery for metallurgy
- 2924 Manufacture of machinery for mining, quarrying and construction
- 2925 Manufacture of machinery for food, beverage and tobacco processing
- 2926 Manufacture of machinery for textile, apparel and leather production
- <u>2927</u> Manufacture of weapons and ammunition
- <u>2929</u> Manufacture of other special-purpose machinery
- <u>2930</u> Manufacture of domestic appliances n.e.c.

# 9. 30 DIVISION: 30 - MANUFACTURE OF OFFICE, ACCOUNTING AND COMPUTING MACHINERY

• <u>3000</u> - Manufacture of office, accounting and computing machinery

#### 31 Division: **31** - Manufacture of electrical machinery and apparatus n.e.c.

- <u>3110</u> Manufacture of electric motors, generators and transformers
- <u>3120</u> Manufacture of electricity distribution and control apparatus
- <u>3130</u> Manufacture of insulated wire and cable
- <u>3140</u> Manufacture of accumulators, primary cells and primary batteries
- 3150 Manufacture of electric lamps and lighting equipment
- <u>3190</u> Manufacture of other electrical equipment n.e.c.

# 32 Division: 32 - Manufacture of radio, television and communication equipment and apparatus

- <u>3210</u> Manufacture of electronic valves and tubes and other electronic components
- <u>3220</u> Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy
- <u>3230</u> Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods

# 33 Division: 33 - Manufacture of medical, precision and optical instruments, watches and clocks

- 3311 Manufacture of medical and surgical equipment and orthopaedic appliances
- <u>3312</u> Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment
- <u>3313</u> Manufacture of industrial process control equipment
- <u>3320</u> Manufacture of optical instruments and photographic equipment
- <u>3330</u> Manufacture of watches and clocks

#### 10. 34 DIVISION: 34 - MANUFACTURE OF MOTOR VEHICLES, TRAILERS AND SEMI-TRAILERS

- <u>3410</u> Manufacture of motor vehicles
- <u>3420</u> Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers
- 3430 Manufacture of parts and accessories for motor vehicles and their engines

#### 35 Division: 35 - Manufacture of other transport equipment

- <u>3511</u> Building and repairing of ships
- <u>3512</u> Building and repairing of pleasure and sporting boats
- <u>3520</u> Manufacture of railway and tramway locomotives and rolling stock
- <u>3530</u> Manufacture of aircraft and spacecraft
- <u>3591</u> Manufacture of motorcycles
- 3592 Manufacture of bicycles and invalid carriages
- <u>3599</u> Manufacture of other transport equipment n.e.c.

### 36 Division: 36 - Manufacture of furniture; manufacturing n.e.c.

### • <u>3610</u> - Manufacture of furniture

- <u>3691</u> Manufacture of jewellery and related articles
- <u>3692</u> Manufacture of musical instruments
- <u>3693</u> Manufacture of sports goods
- <u>3694</u> Manufacture of games and toys
- <u>3699</u> Other manufacturing n.e.c.

### 37 Division: 37 - Recycling.

- <u>3710</u> Recycling of metal waste and scrap
- <u>3720</u> Recycling of non-metal waste and scrap

### 45 Division: 45 – Construction

- <u>4510</u> Site preparation
- 4520 Building of complete constructions or parts thereof; civil engineering
- <u>4530</u> Building installation
- <u>4540</u> Building completion
- <u>4550</u> Renting of construction or demolition equipment with operator

## 50 Division: 50 - Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel

- 5010 Sale of motor vehicles
- 5020 Maintenance and repair of motor vehicles
- 5030 Sale of motor vehicle parts and accessories
- 5040 Sale, maintenance and repair of motorcycles and related parts and accessories
- 5050 Retail sale of automotive fuel

## 51 Division: 51 - Wholesale trade and commission trade, except of motor vehicles and motorcycles

- <u>5110</u> Wholesale on a fee or contract basis
- <u>5121</u> Wholesale of agricultural raw materials and live animals
- <u>5122</u> Wholesale of food, beverages and tobacco
- <u>5131</u> Wholesale of textiles, clothing and footwear
- <u>5139</u> Wholesale of other household goods
- <u>5141</u> Wholesale of solid, liquid and gaseous fuels and related products
- <u>5142</u> Wholesale of metals and metal ores
- <u>5143</u> Wholesale of construction materials, hardware, plumbing and heating equipment and supplies
- <u>5149</u> Wholesale of other intermediate products, waste and scrap
- 5151 Wholesale of computers, computer peripheral equipment and software
- 5152 Wholesale of electronic and telecommunications parts and equipment
- <u>5159</u> Wholesale of other machinery, equipment and supplies
- <u>5190</u> Other wholesale

## 11. 52 DIVISION: 52 - RETAIL TRADE, EXCEPT OF MOTOR VEHICLES AND MOTORCYCLES; REPAIR OF PERSONAL AND HOUSEHOLD GOODS

- <u>5211</u> Retail sale in non-specialized stores with food, beverages or tobacco predominating
- <u>5219</u> Other retail sale in non-specialized stores
- <u>5220</u> Retail sale of food, beverages and tobacco in specialized stores
- <u>5231</u> Retail sale of pharmaceutical and medical goods, cosmetic and toilet articles
- <u>5232</u> Retail sale of textiles, clothing, footwear and leather goods
- <u>5233</u> Retail sale of household appliances, articles and equipment
- <u>5234</u> Retail sale of hardware, paints and glass
- <u>5239</u> Other retail sale in specialized stores
- <u>5240</u> Retail sale of second-hand goods in stores
- <u>5251</u> Retail sale via mail order houses
- 5252 Retail sale via stalls and markets
- <u>5259</u> Other non-store retail sale
- <u>5260</u> Repair of personal and household goods

#### 55 Division: 55 - Hotels and restaurants

- <u>5510</u> Hotels; camping sites and other provision of short-stay accommodation
- <u>5520</u> Restaurants, bars and canteens

### 60 Division: 60 - Land transport; transport via pipelines

- 6010 Transport via railways
- 6021 Other scheduled passenger land transport
- 6022 Other non-scheduled passenger land transport
- <u>6023</u> Freight transport by road
- <u>6030</u> Transport via pipelines

### 61 Division: 61 - Water transport

- <u>6110</u> Sea and coastal water transport
- <u>6120</u> Inland water transport

### 62 Division: 62 - Air transport

- <u>6210</u> Scheduled air transport
- <u>6220</u> Non-scheduled air transport

# 63 Division: 63 - Supporting and auxiliary transport activities; activities of travel agencies

- <u>6301</u> Cargo handling
- <u>6302</u> Storage and warehousing
- <u>6303</u> Other supporting transport activities
- <u>6304</u> Activities of travel agencies and tour operators; tourist assistance activities n.e.c.
- <u>6309</u> Activities of other transport agencies

### 64 Division: 64 - Post and telecommunications

- 6411 National post activities
- 6412 Courier activities other than national post activities
- 6420 Wired and wireless telecommunications

## 72 Division: 72 - Computer and related activities

- <u>7210</u> Hardware consultancy
- <u>7221</u> Software publishing
- 7229 Other software consultancy and supply
- <u>7230</u> Data processing
- <u>7240</u> Database activities and online distribution of electronic content
- <u>7250</u> Maintenance and repair of office, accounting and computing machinery
- <u>7290</u> Other computer-related activities