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

UNDERSTANDING THE QUESTIONNAIRE

May, 2012

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. Most importantly, BEEPS is designed to provide panel data sets. Because panel data is one of the best ways to pinpoint how and which of the changes in the business environment affect firm-level productivity over time and across countries, BEEPS has made panel data a top priority.

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 documents of more interest to researchers and final users of the data.

What is in a BEEPS questionnaire

The survey is implemented in two stages. In the first stage the *Screener questionnaire* is applied typically over the phone and the eligibility of the establishments randomly selected to participate in the survey 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. 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 *Manufacturing (Core plus Manufacturing Module)* and *Retail (Core plus Retail Module)* questions are asked to establishments in the manufacturing and retail sectors, respectively. The *Innovation Module* questionnaire is for those enterprises, who report that they have innovations or are manufacturing enterprises with at least 50 employees; the exact instructions related to this module are in the last sub-section of this Manual.

The three versions of the instrument, *Core, Manufacturing,* and *Retail* are comprised of seventeen 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 H *Innovation*
- Section G Land: land ownership, land access issues.
- 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 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:

		_
K.14	Referring only to this most recent loan or line of credit, what type of collateral was required?	1
	(INTERVIEWER: READ OUT)	

Collateral	Yes	No	DON'T KNOW	
			(SPONTANEOUS)	
Land, buildings under ownership of the establishment	1	2	-9	k14a
Machinery and equipment including movables	1	2	-9	k14b
Accounts receivable and inventories	1	2	-9	k14c
Personal assets of owner (house, etc.)	1	2	-9	k14d
Other forms of collateral not included in the categories above	1	2	-9	k14e

The first question to be asked should be "Land, buildings under ownership of the establishment", solicit a response, and then continue by asking "Machinery and equipment including movables". 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 percentage of this establishment's sales were:
	(INTERVIEWER: these must be asked in t	he order they appear on the table)
	SHOW CARD 5	

	Percent	DON'T KNOW (SPONTANEOUS)		_
National sales	%	-9	d3a	IF 100, GO TO QUESTION D.10
Indirect exports (sold domestically to third party that exports products)	%	-9	d3b	
Direct exports	%	-9	d3c	
	100%			_
		THAT TOTAL SUMS		<mark>%</mark>

This question must be carefully to implemented 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. Instructions for Interviewers

The questionnaires are visually coded to facilitate implementation. Instructions for interviewers appear in **BOLD AND UPPERCASE LETTERS.** The interviewer should not read these instructions out loud; they only operate as guidelines. At times, some questions require special instructions before being posed:

READ ONLY IF A7=1 (yes)
I want to proceed by asking you about this establishment only.

B.5	In what year did this establishment begin operations?	
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	Year]
Year establishment began operations		
DON'T KNOW (SPONTANEOUS)	-9	
		b5

INTERVIEWER: PROVIDE FOUR DIGITS FOR YEAR

Whatever text that appears in **BOLD AND UPPERCASE** in the questionnaire should not be read aloud; this includes responses to the question like "**DON'T KNOW**", "**DOES NOT APPLY**", or "**REFUSED**" when a respondent refuses to answer. Note the following example:

The text in **BOLD**, **UPPERCASE AND ITALICIZED LETTERS** indicates a skip pattern. When the interviewer sees these letters on the side of an answer given by the interviewee, he or she should proceed according to the instructions given by the skip pattern.

Text appearing in [bold and in brackets] indicates a portion of the questionnaire that is modified on a country-by-country or year-by-year basis. For instance, a number of the questions include the text "In fiscal year [insert last complete fiscal year]..." and should be read as, say, "In fiscal year **2011"**. These changes are made directly to the text prior to fieldwork.

Finally, text that appears between parentheses is intended as a guideline for the interviewer. For example, in the following question the text in the parentheses gives examples of a specific term in the text (here, "main point of exit"):

D.4	In fiscal year [insert last complete fiscal year], when this establishment exported goods directly, how
	many days did it take on average from the time this establishment's goods arrived at their main point of
	exit (e.g., port, airport) until the time these goods cleared customs?

	Days
Average number of days to clear customs	
LESS THAN ONE DAY	1
DOES NOT APPLY (SPONTANEOUS)	-7
DON'T KNOW (SPONTANEOUS)	-9

c. 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. 7	How many years of ex	sperience working in this	s sector does the Top Manager ha	ive?
	1	1 0	1 0	

	Years
Manager's experience in sector	
LESS THAN ONE YEAR	1
DON'T KNOW (SPONTANEOUS)	-9

b7

Or

(C.4	In reference to that application for an electrical connection, approximately how many days did it take to
		obtain it from the day of the application to the day the service was received?

Days
1
-6
-5
-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 and double bordering.

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 or double bordering.

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 **(R)** and **(M)** respectively. Color coding is used in the table below: *Manufacturing* only questions are colored in **blue**. *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
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	number/Vari	
0 1	able	
Control	Poslat	Latitude position: East, West, North or South
Information	D 1	T 2 I 22 II W AI I O I
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
Information		screener questionnaire (city-town-village)
Control	A.3b/a3b	Official capital city: self-explanatory
Information		
Control	A.3c/a3c	Main business city: self-explanatory
Information		
Control	A.3/a3	Location control variable should be recoded ex-post based on the
Information		answer given to a3x. Locality is defined country by country.
Control	A.4/a4a	Classification of the establishment's activity using the information
Information		from the sample frame. This variable should match the strata in the
		sample frame.
Control	A.4/a4b	Classification of the establishment's activity based on the answer to
Information		the 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 survey. This variable should correspond to the activity identified
		during screening.
Control	A.5/a5	Self-explanatory
Information		-
Control	A.6/a6a	Size of the establishment taken from the sample frame
Information		
Control	A.6/a6b	Size of the establishment as determined with the screener
Information		questionnaire
Control	A.7/a7	Identifies establishments that are part of a larger firm. Taken from
Information		screener questionnaire.

Control	A.7a/a7a	Self-explanatory. Identifies the number of establishments in the firm.
Information		For all questions beginning after B.4, the questions only refer to the
		largest establishment if the firm has multiple establishments.
Control	A.8/a8	Identifies type of establishment for those that are part of larger firms.
Information		Taken from screener questionnaire.
Control	A.9/a9	Information taken from the screener questionnaire
Information		1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Control	A.10/a10	Information taken from the screener questionnaire
Information	1207 0020	mommuon union mom une cereaniar queculonnume
Control	A.11/a11	Information taken from the screener questionnaire
Information	12022/ 0022	mommuon union mom une cereaniar queculonnume
Control	A.11a/a11a	Information taken from the screener questionnaire
Information	lilla, alla	information taken from the screener questionnaire
Control	A.12/a12	Information taken from the screener questionnaire
Information	11.12/ 412	information taken from the screener questionnaire
Control	A.13/a13	Information taken from the screener questionnaire
Information	11.15/ 415	information taken from the beteener questionnaire
Control	A.14/	Self-explanatory
Information	a14d	och explanatory
Intomation	a14m	
	a14111	
	a14h	
	a14min	
General	B.1/	A firm's legal status is information well known for the target
Information	b1	respondent: CEO, General Manager or owner of the firm.
Intomation	b1x	ENUMERATORS DO NOT NEED TO KNOW THE
	DIX	DEFINITION OF EACH TYPE OF LEGAL STATUS.
		DEFINITION OF EMORETITE OF ELONE STATES.
		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.
		That option is a combination of the previous ones.
		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 <i>shareholding company with shares traded privately</i> .
		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.
		diese categories minis nave minicu nability.
		A <i>sole proprietorship</i> 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
		1 1
		members or owner(R).
		A firm's legal status defines the extent of the liability which defines the
		11 mm s regar status defines the extent of the hability which defines the

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		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 <u>partnership</u> 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 Information	B.3/b3	Self-explanatory 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	<u>Foreign</u> 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> .
		Firms that operate under a franchise agreement should be classified

		according to the nationality of those awarded the franchise.
General General	B.4/b4	<u>Self-explanatory</u>
General General	B.4a/b4a	Percentage of ownership by all females. For example, if all females own 10 percent of the firm, write this percentage.
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	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. If the establishment changed its production significantly to change sector classification, then the year when that took place should be provided.
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. This refers to both paid and unpaid workers.
General Information	B.6a/b6a	Registering refers to registration with [to be defined on a country by country basis, choosing the most important for registration for tax purposes]. Please, select one procedure using the Doing Business list of procedures available on-line. Some examples are shown below. Albania: Request and obtain the Registration Certification and Unique Business Identification Number with National Registration Center, NRC (Qendra Kombëtare për Regjistrim,QRK)

Armenia: Register at the One-stop shop

Azerbaijan: File documents with the company registrar at the One Stop shop Taxes, register for VAT purposes

Belarus: Business registration with the State Registry

Bosnia and Herzegovina: Court registration with Municipal Courts **Bulgaria:** Register with the Commercial Register at the Registry Agency

Croatia: Notarize memorandum of association and register company with the Commercial Court electronically

Czech Republic: Register with the Trade Licensing Office and obtain extract of the trade license

Estonia: Submit online the registration application to the Commercial Register

FYR Macedonia: Registration with the Central Registry

Georgia: Register the company with the Entrepreneurial Register and obtain an identification number and certificate of state and tax registration

Hungary: Apply for registration at the Registration Court (simplified electronic registration)

Kazakhstan: State registration of legal entity and tax registration at the Public Registration Center

Kosovo: Request and obtain the Business Certificate and the 'Business Information' document at the Kosovo Business Registration Agency (KBRA)

Kyrgyz Republic: Register at the One stop shop Register with the Social Fund and the State Tax and the National statistics

Latvia: Register at the Commercial Registry and register with State Revenue Service (tax authority) for VAT

Lithuania: Register at the Company Register, including registration with State Tax Inspectorate (the Lithuanian Revenue Authority) for corporate tax, VAT, and State Social Insurance Fund Board (SODRA)

Moldova: Obtain the registration certificate and constitutive act; obtain an official stamp from the Ministry of Information Technologies and Communication; and obtain statistical codes

Mongolia: Register at the State Registration Office, under the General Department of State Taxation

Montenegro: Submit the request at the Central Registry together with the necessary documents and within 4 days (legal term) obtain the registration certificate, TIN (tax identification number), VAT tax number and customs authorization

Poland: File at National Court Register for company registration, REGON, NIP, Statistical Office and ZUS

Romania: Register with the Unique Office (Biroul Unic) of trade registry Registrul Comertului (BASC), Bucharest Tribunal; obtain court registration, publication of notice, and registration for statistical purposes and social security

Serbia: Apply and obtain the registration certificate, tax identification

		number, pension fund (PIO Fund)and Health Fund certificates, certify the signatures (three copies) for opening bank account and register the employment contracts with the Employment Organization at Business Registers Agency (SBRA)
		Slovakia: Apply at the One stop shop for trade licenses, income tax registration and health insurance company Slovenia: Register at the electronic One-stop shop: E-vem
		Tajikistan: Register with State Registry at the Ministry of Justice Turkey: File the incorporation notice form, commitment letter, and Chamber registration statement at the Trade Registry Office Turkmenistan: Company registration with tax authorities Ukraine: Approval of Ministry of Internal Affairs to prepare a
		company seal Uzbekistan: Register with the local authority (khokimiyat) and obtain the certificate of state registration
		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 [enter name of main Registration Office for each country]
General Information	B.6b/b6b	<u>Year of registration</u> refers to the year in which the establishment completed the registration as explained in B.6a.
General Information	B.7/b7	The <i>Top Manager</i> refers to the individual who highest executive rank. This person may be the owner if he or she works as a senior company official. The question refers to years of <i>Top Manager's</i> managerial experience in the type of sector that the establishment presently operates.
General Information	B.7a/b7a	<u>Top Manager</u> refers to the highest ranking manager or CEO of the 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 Information	B.8/b8	The question refers exclusively to internationally recognized 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 and Services	C.3/c3	Application for electrical connection. Electrical connection refers to a new connection or to an increase in voltage of an existing connection that requires an application.
Infrastructure and Services	C.4/c4	Wait for electrical connection. Self-explanatory

Infrastructure	C.5/c5	Opinion based or sensitive.
and Services		
Infrastructure	C.6/c6	A power outage 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 <u>number of outages on a typical month</u> , 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
		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
T. C.	0.01.6	since there will be 6 months with outages and 6 months without them.
Infrastructure	C.8/c8	This refers to the duration of the power outages in a typical month.
and Services		The respondent should calculate <u>average duration of power outages</u> in a
I C	C 0 / -0 -	typical month.
Infrastructure and Services	C.9/c9a,	Losses because of power outages The Manager should estimate the amount
Infrastructure	c9b C.10/c10	of production lost because of power outages.
and Services	C.10/C10	<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
and services		generator.
Infrastructure	C.11/c11	Percent electricity from own or shared generator. Self-explanatory
and Services	0.11/ 011	1 trent turning from own or shared generator. Self-explanatory
Infrastructure	C.12/c12	Application for water connection. Self-explanatory
and Services	3.12, 612	2 ippinimon joi wino, comecinon, con explanatory
Infrastructure	C.13/c13	Wait for water connection. Self-explanatory
and Services	3,10, 610	- Hanger water commencer
Infrastructure	C.14/c14	Opinion based or sensitive.
and Services Infrastructure	C.15(M)/c15	<u>Insufficient water supply:</u> whenever there is equipment failure or cessation
and Services	0.15(11)/ 015	of production operations due to the lack or reduction of water supply.
Infrastructure	C.16(M)/c16	Incidents of insufficient water supply per month can be estimated by
and Services	3.13(1.1)/ 010	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.
		Zero is the answer only if no insufficiencies occurred in a typical
		month.
Infrastructure	C.17(M)/c17	<u>Duration of water shortage</u> can be estimated by considering the average
and Services		duration of water insufficiencies that took place in a typical month.

Infrastructure	C.22a/c22a	E-mail. Self-explanatory
and Services	C.22b/c22b	Website use 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	C.23/c23	High-speed, Internet connection is defined as Internet connection that is
and Services		faster than using a telephone line with a standard modem.
Infrastructure	C.28	<u>Cell phone use</u> refers to use for operations of the establishment. It refers
and Services		to systematic use of cell phones, not to occasional use of personal cell
		phones
Infrastructure	C.30a/c30a	Opinion based or sensitive.
and Services	C.30b/c30b	
Infrastructure	C.31a1/	Self-explanatory.
and Services	ECAc31a1	
	C.31a2/	
	ECAc31a2	
	C.31a3/	
	ECAc31a3	
Sales and	D.1a1/d1a1x	Establishment's main activity and product or service. The purpose of this
Supplies		question is to determine what the establishment produces or sells. The
		description should be written down exactly as provided by the
		respondent and it should be as accurate as possible to facilitate classification. Consequently, the description must specify the activity
		of the establishment (manufacturing or service) and the product
		produced or offered.
		The main product and activity is defined in terms of sales in monetary value not
		volume.
Sales and	D.1a2/d1a2	Categorize the main activity and product according to standard
Supplies	D.142/ G142	industry classification codes. This is an extremely important question
очрысо		for classification purposes. The question is to be coded using the
		United Nations ISIC Rev.3.1.
		http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=17
		Coding will be made in the office on the basis of the description
		provided in d1a1x.
Sales and	D.1a3/d1a3	The <i>main product</i> is defined in terms of sales in monetary value not
Supplies		volume.
Sales and	D.2/d2	<u>Total sales</u> include the value of all annual sales counting manufactured
Supplies		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).
		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.
Sales and Supplies	D.2/d2x	<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"
Performance	N.3/n3	<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	Where sales are made. The purpose of this question is to determine where the establishment's customers are located. Please note that some establishments, such as hotels, may cater to foreigners at their domestic locations. Sales to these foreigners constitute exporting.
		<u>Domestic sales</u> are when goods or services are sold inside the borders of the country.
		An indirect export 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.
		<u>Direct export</u> is the sale of goods where the immediate recipient is outside the borders of the country.
Sales and Supplies	D.4(M)/d4	<u>Clearing customs for direct exports.</u> The purpose of this question is to determine the efficiency of customs in clearing goods for export.
		Average number of days to clear customs is the average time goods and services remain in customs from the moment they arrive at customs, including waiting time to enter, until they are ready to be shipped out of customs. Do not include waiting time for the shipment, after being cleared by customs officials. 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.

		Main point of exit 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). Goods cleared customs 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
Sales and Supplies	D.6(M)/d6	Theft for direct export. 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. Value of the products exported refers to the value paid when goods are
		delivered to the receiver. Theft refers to robbery that occurred outside the premises of the establishment.
Sales and Supplies	D.7(M)/d7	Breakage or spoilage for direct export. 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.
		Value of the products exported refers to the value paid when goods are delivered to the receiver.
		<u>Breakage</u> refers to the inoperability or usability of the good. A broken good is inoperable or unusable in its current state.
Sales and Supplies	D.8(M)/d8	Self-explanatory.
Sales and Supplies	D.10(M)/ d10	Theft when supplying domestic markets. See definitions in D.6. "No internal shipments to supply domestic market"s applies only when direct exports represent 100% of the establishment's sales.
Sales and Supplies	D.11(M)/d11	Breakage and spoilage when supplying domestic markets. See definitions in D.7. "No internal shipments to supply domestic market"s applies only when direct exports represent 100% of the establishment's sales.
Sales and Supplies	Q.15(M)/ ECAq15a	Self-explanatory.
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.
		Import from CIS or customs union still counts as import.
Sales and Supplies	D.13(M)/ d13	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.
		Goods cleared customs 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.
		Average number of days 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)/d16	Days of inventory of main input. 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.
		Days of inventory should be calculated as the number of days of normal

		production capacity before running out of stock.
Sales and Supplies	D.17(R)/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.
		<u>Days of inventory</u> 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 Supplies	D.30a, D.30b/d30a d30b	Opinion based or sensitive.
Sales and supplies	D.31b1/ ECAd31b1, D.31b2/ ECAd31b2, D.31b3/ ECAd31b3	Self-explanatory.
Degree of Competition	E.1/e1	The purpose of this question is to get the establishment to define what it considers to be its main market.
		The main product or service is defined by the output or service that generates the highest proportion of sales in monetary terms. The establishment's main market is defined by the market that generates the most sales of the main product as defined above.
		It could be the case that an establishment's main product is sold in smaller proportions in a greater number of markets and that the main product is never the greatest total annual share of revenue in any one market. For example, 51 percent of revenue comes from selling nails, but that is distributed equally in the local, national, and international 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.
		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.
Degree of Competition	E.2/e2b	Number of competitors in establishment's market. Self-explanatory
Degree of Competition	E.6/e6	Technology licensed from a foreign owned company: 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 Competition	E.11/e11	Opinion based or sensitive.
Degree of Competition	Q.53/ ECAq53	Self-explanatory
Degree of Competition	E.30/e30	Opinion based or sensitive.
Innovation	H.1/h1	New products or services introduced in the last three years. 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 new product or service also new for the establishment's main market? Self-explanatory.
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	New organizational structures or management practices. 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. 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.
Innovation	H.5/h5	New marketing methods. 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. 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.
Innovation	H.6/h6	Research and development activities, either in-house or contracted with other companies. Research and development (R&D) is defined as creative work undertaken on a systematic basis in order to increase the stock of knowledge. For example, laboratory research for a new chemical compound of paint would be research and development while market research surveys or internet surfing would not be research and development.
Innovation	H.7 (ECAh4)	New or significantly improved logistical or business support processes.
Innovation	H.8(ECAh8)	New approach or new idea about products or services, business process, firm management, or marketing.
Capacity	F.1(M)/f1	A capacity utilization estimate should be compared to a full production capacity capability. This question only references the production facility and not the administrative offices. Full production capacity 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
Capacity	F.2(M)/f2	Hours per week of operation 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!
		This question only references the production facility and not the administrative offices.
Land	G.1/g1a g1b g1c	Self-explanatory
Land & Permits	G.2/g2	Application for construction permit. Note: When interviewing construction businesses, these permits refer to both those permits related to the expansion or construction of the establishment's premises and to permits required in order to carry out construction work for clients.
Land & Permits	G.3/g3	Wait for construction permit. Self-explanatory
Land & Permits	G.4/g4	Opinion based or sensitive.
Land & Permits	G.5(R) /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	If establishment occupies several buildings the percentages should be computed for the summation of buildings.
Land & Permits	G.30/g30a	Opinion based or sensitive.
Crime Crime	I.1/i1 I.2/i2a i2b	Pay for security. Self-explanatory How much pay for security. Self-explanatory
Crime Crime	I.3/i3 I.4/i4a	<u>Experienced losses from theft, robbery, vandalism, arson.</u> Self-explanatory <u>Extent of losses from theft, robbery, vandalism, arson.</u> Self-explanatory
Crime	i4b I.30/i30	Opinion based or sensitive.
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 suppliers and customers .

Finance	K.3/k3ak3bck3ek3fk3hd	Working capital 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 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%.
		-
L.	TZ 4 /1 4	Both domestic and foreign banks are included in k3bc.
Finance Finance	K.4/k4 N.5/ n5a n5b	Purchase of fixed assets, investments, etc. Self-explanatory The category machinery, vehicles and equipment 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 othersIncluded 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	<u>Fixed assets</u> include and indivisible purchase made by the establishment as described in K.4. Examples include machinery/equipment, land, buildings, building improvements, etc. Leasing companies are non-financial institutions. Leasing is not bank credit.
	k5hdj	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%.
Finance	K.4a/k4a	Leasing of fixed assets. Leasing 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 or leasing company, while the business has the actual use of it.
Finance	K.6/k6	<u>Checking/ savings account.</u> In many countries, a checking account is known as a "current account".

Finance	K.7/k7	An overdraft facility is a flexible account that allows firms to draw upon
1 1111111111111111111111111111111111111	1301/131	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	A line of credit 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.
		A loan 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).
		In case of more than one loan outstanding, consider the most recent acquired loan.
Finance	K.9/k9	Institutions that granted loan. Self-explanatory
Finance	K.9a/	Name of the bank that provided the most recent line of credit or loan. Self-
	ECAk9a	explanatory
	ECAk9ax	
Finance	K.10/k10	Year loan approved. Self-explanatory
Finance	K.11/k11	<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
	2.1121	the term of the loan).
Finance	Q.46f/	Currency in which the most recent line of credit or loan is denominated. Self-
	ECAq46f	explanatory
	ECAq46fx	
Finance	Q.46d/	Annual interest rate of the most recent line of credit or loan. Self-explanatory
TO!	ECAq46d	
Finance	Q.46e/	Original duration of the most recent line of credit or loan. Self-explanatory
TO!	ECAq46e	
Finance	K.13/k13	<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
	K.14/	establishment defaults on its payment obligations. Collateral only
	k14a	refers to real property or financial assets, not to personal guarantees by
	k14b	third parties.
	k14c	
	k14d	
D:	k14e	IZalia da Batan I Tibia and di 1 di 1 di 1 di 1
Finance	K.15a/	<u>Value of collateral.</u> This question asks for the value of the property used
	k15a	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
D.	T/ 15 4 /	amount.
Finance	K.15a1/	Outstanding balance of the most recent line of credit or loan. Self-explanatory
	ECAk15a1	

Finance	K.15b/k15b	Total number of outstanding loans or lines of credit. An outstanding loan is the portion of the loan or line of credit that has not been paid. As payments are applied towards the loan balance, the amount outstanding decreases.
Finance	K.15c/k15c	<u>Total value of all outstanding loans or lines of credit.</u> This question addresses the level of indebtedness of the establishment. It refers to the unpaid portion of a loan or line of credit, not the total value of the loan or line of credit. If a loan or a line of credit has not been used, the outstanding value of that loan or line of credit is 0.
Finance	K.15d/k15d	<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 loans made to the establishment where the owner is a signatory.
Finance	K.16/k16	Apply for new loans in last year. Self-explanatory
Finance	K.17/ ECAk17	Reasons for not applying for loan last year. Self-explanatory
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	Opinion based or sensitive.
Business- Government Relations	Q.31e/ ECAq31e	Opinion based or sensitive.
Business- Government Relations	J.1/h7a ECAj1b ECAj1c	Opinion based or sensitive.
Business- Government Relations	J.2/j2	<u>Percent of total senior management's time.</u> The question asks senior managers to estimate what percentage of their time they spend dealing with 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- Government Relations	J.3/j3	Visits and inspections by tax inspectorate officials. On-site and off-site inspections, scheduled and un-scheduled, are to be included.
Business- Government Relations	J.4/j4	Self-explanatory
Business- Government Relations	J.5/j5	Opinion based or sensitive.
Business- Government Relations	J.6a/j6a	Self-explanatory
Business- Government Relations	J.6/j6	Opinion based or sensitive.

Business- Government	J.7/ j7a	Opinion based or sensitive.
Relations	j7b	
Business- Government Relations	J.10/j10	Application for import license. An import license is a document issued by a national government authorizing the importation of certain goods into its territory. Each license specifies the volume of imports allowed, and the total volume allowed should not exceed the quota. Licenses 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 of materials/intermediate goods.
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	Opinion based or sensitive.
Business- Government Relations	J.13/j13	<u>Application for operating license</u> Self-explanatory
Business- Government Relations	J.14/j14	<u>Wait for operating license</u> . <u>Licenses</u> 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. This includes renewals of operating licenses.
Business- Government Relations	J.15/j15	Opinion based or sensitive.
Business- Government Relations	J.30a/j30a J.30b/j30b J.30c/j30c J.30e/j30e J.30f/j30f H.30/h30	Opinion based or sensitive.
Business- Government Relations	J.31b1/ ECAj31b1, J.31b2/ ECAj31b2, J.31b3/ ECAj31b3, J.31c1/ ECAj31c1,	Self-explanatory.

	J.31c2/ ECAj31c2, J.31c3/ ECAj31c3, J.31f1/ ECAj31f1, J.31f2/ ECAj31f2, J.31f3/ ECAj31f3, H.31a1/ ECAh31a1, H.31a2/ ECAh31a2, H.31a3/ ECAh31a3,	
Business- Government Relations	Q.39/ ECAq39	Opinion based or sensitive.
Business- Government Relations	Q.41/ ECAq41a ECAq41b ECAq41c	Opinion based or sensitive.
Business- Government Relations	Q.44/ ECAq44a ECAq44b ECAq44c	Opinion based or sensitive.
Use of consulting services	R.16a/ ECAr16a	Hired an external consultant. The purpose of this question is to find out whether the establishment has ever hired an external consultant, either 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, engineers, architects, accountants, etc.
Use of consulting services	R.17/ ECAr17a ECAr17b ECAr17c	Self-explanatory. Technological production processes can be classified under feasibility study.
Use of consulting services	R.18/ ECAr18	Local consulting firms are domestically-owned consulting firms that do not offer their services in other countries.
Use of consulting services	R.20/ ECAr20 ECAr20x	Main reason why the establishment did not hire an external consultant. Self-explanatory.

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 a full shift. The definition of a full shift may vary by country and by industry. All employees and managers (including respondent) should be
Labor	L.2/12	counted. <u>Number of permanent, full-time employees three complete fiscal years ago.</u> See definition of <u>permanent, full-time employees</u> above.
Labor	L.3(M)/ 13a 13b	Number of permanent, full-time 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 working-supervisor level are excluded from this category.
		Number of permanent, full-time non-production workers 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.
Labor	L.4(M)/ 14a 14b	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 working-supervisor level are excluded from this item. Also, these workers are skilled 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. **Unskilled 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 working-supervisor level are excluded from this item. Also, these workers are unskilled in that it is not required that
Labor	L.5(C,R)/15	they have special training, education, or skill to perform their job. Number of permanent, full-time workers that are female. Self-explanatory
	L.5(M)/ 15a 15b	Number of permanent, full-time skilled production workers that are female. Self-explanatory
		Number of permanent, full-time unskilled production workers that are female. Self-explanatory
Labor	L.6/16 L.6a/16a	<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	Average length of employment of all full-time temporary or seasonal employees 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. Self-explanatory.
Labor	Q.69/ 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	Formal training 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. In-house training 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. Self-explanatory.

Labor	L.30a/130a	Opinion based or sensitive.
	L.30b/130b	
Labor	L.31a1/	Self-explanatory.
	ECAl31a1	
	L.31a2/	
	ECAl31a2	
	L.31a3/	
	ECAl31a3	
	L.31b1/	
	ECAl31b1	
	L.31b2/	
	ECAl31b2	
	L.31b3/	
	ECAl31b3	
Business	M.1/	Opinion based or sensitive.
Environment	m1a	
	m1d	

Performance	N.2/ n2a n2e (M, S) n2f (M) n2ra (M) n2rb (M) n2i (R) n2b n2j (M)	Total cost of labor, including wages, salaries and benefits is the total annual wages and all annual benefits, including food, transport, social security (i.e. pensions, medical insurance, and unemployment insurance). Raw materials and intermediate goods: (M) is the cost of all inputs in the production activity. This is usually an item directly taken from the financial statements. Finished goods and materials purchased to resell: (R) is the cost of all finished goods and materials purchased to be resold. This is usually an item directly taken from the financial statements. Electricity 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. Fuel (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. Total rental cost of machinery, vehicles and equipment
		Total rental cost of land and buildings The rental cost if the establishment rents or leases any of the items mentioned. Other cost of production not included above: this should be computed as total costs of production minus the items included above.
Performance	N.6 (M)/ n6a	<u>Net book value</u> equals the purchase value minus depreciation.
	n6b	The net book value represents the actual cost of assets at the time they 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/ ECAs1b S.1c/ ECAs1c	Expected sales one year from now. Self explanatory
Perceptions of obstacles	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	a15d a15m a15y a15h a15min	Time interview ends. Self-explanatory.
Control Information	a16 a17 a17x	Questions for interviewers. Self-explanatory.
Control Information	a18 a19h a19m	Questions for supervisors. 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 and to question L.1 in the main BEEPS. Eligible establishments should only be asked the questions that are relevant for them. Innovation module of the BEEPS questionnaire consists of eight 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

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) 2012 instrument.

Section	Question/Varia	Instructions
	bles	
Control	A.0/a0	Questionnaire module. Self-explanatory.
information		
Control	A.23/	Mode of implementation of the interview. Self-explanatory.
information	a23	
	a23x	
Control	A.14i/	<u>Time when Innovation Module begins.</u> Self-explanatory.
information	a14id	
	a14im	
	a14iy	
	a14ih	
	a14imin	
Goods and	O.1a/	New products or services as defined in H.1 above. Self-explanatory.
services	ECAo1a	
innovation		
Goods and	O.1b/	Main new or significantly improved product or service is defined
services	ECAo1bx	in terms of sales in monetary value not volume – it is the new

innovation		product or service that brings in the most sales among all new
Goods and services innovation	O.2/ ECAo2a ECAo2b ECAo2c	products or services (if there is more than 1). Self-explanatory. 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 (M) ECAo3c (M) ECAo3d (M) ECAo3e ECAo3f ECAo3fx ECAo3g (C, R)	Comparison of the main new of significantly improved product or service with the closest product already produced by the establishment. Self-explanatory.
Goods and services innovation Goods and services innovation	O.4/ ECAo4 O.5/ ECAo5 ECAo5x	Share of products or services introduced in the last three years in establishment's annual sales. Self-explanatory. Way in which the main new or significantly improved product or service was introduced. Self-explanatory.
Goods and services innovation	O.6/ ECAo6	An invention is a new composition, device, or process. An invention 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	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. Production methods involve techniques, equipment and software used to produce goods or services. 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. 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.
Process	0.8/	Self-explanatory.

innovation	ECAo8x	
Process	O.9/	A production or delivery method was new to the local
innovation	ECAo9a	market/country/international market in addition to being new
	ECAo9b	to the establishment if the establishment was the only one using
	ECAo9c	such production or delivery method in the local
		market/country/international market at the time the
		establishment introduced the production or delivery method.
Process	O.10/	Changes in technique, machinery and equipment, software used.
innovation	ECAo10a	Self-explanatory.
11110 (111011	ECAo10b	
	ECAo10c	
Process	O.11/	Self-explanatory.
innovation	ECAo11	
Process	O.12/	Invention, patent, know-how defined as in O.6.
innovation	ECAo12	71 7
Process	O.13(M)/	Self-explanatory.
innovation	ECAo13	
Organizational	O.14/	New or significantly improved organizational structures or management
innovation	ECAo14a	<u>practices</u> as defined in H.4 above. Self-explanatory. Organisational
	ECAo14b	innovations deal primarily with people and the organisation of
	ECAo14c	work implementation of an organisational method (in business
	ECAo14d	practices, workplace organisation or external relations) that has
	ECAo14e	not been used before in the firm and is the result of strategic
	ECAo14f	decisions taken by management.
Marketing	O.15/	New or significantly improved marketing methods as defined in H.5
innovation	ECAo15a	above. Self-explanatory.
	ECAo15b	
	ECAo15c	
	ECAo15d	
Innovation	O.16/	Research and development is defined as creative work undertaken on
activity	ECAo16	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	O.17/	Spending on research development in the last completed fiscal year.
activity	ECAo17	Research and development as defined in O.16. Includes all
		spending related to research and development (personnel costs,
		materials, etc.).
Innovation	O.18/	Research and development as defined in O.16.
activity	ECAo18	
Innovation	O.19/	Research and development as defined in O.16.
activity	ECAo19	
Acquisition of	O.20/	<u>Acquisition of external knowledge</u> and technology may be in the form

external knowledge and use of computers Acquisition of external knowledge and use of computers	O.21/ ECAo21	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. Self-explanatory.
Acquisition of external knowledge and use of computers	O.22a/ ECAo22a	Percentage of establishment's employees regularly using personal computers (PCs) in their jobs. Workforce includes all personnel, including administration and management. Only personal computers are included; automated machinery, Xerox machines, etc. should be excluded.
Acquisition of external knowledge and use of computers	O.22b/ ECAo22b	Percentage of establishment's employees that regularly used personal computers (PCs) in their jobs three years ago. As in O.22a.
Protection of innovation	O.23a/ ECAo23a	 A patent 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: be new, have an inventive step that is not obvious to someone with knowledge and experience in the subject be capable of being made or used in some kind of industry 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.
Protection of innovation	O.23b/ ECAo23b	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.
Protection of innovation	O.23c/ ECAo23c	Self-explanatory.

Protection of	O.23d/	Self-explanatory.
innovation	ECAo23d	Re-registration of a trademark counts as being granted a
		trademark again.
Management	R.1(M)/	<u>Dealing with a process problem</u> . The question refers to the timing
practices	ECAr1	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
3.6	D O O O	management practices in the establishment should be chosen.
Management	R.2(M)/ ECAr2	Number of production performance indicators monitored in the
practices	LCAIZ	<u>establishment.</u> 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	R.6(M)/	<u>Timescale of the establishment's production targets</u> . The purpose of the
practices	ECAr6	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	R.7(M)/	<u>Assessment of the establishment's production targets</u> . The purpose of the
practices	ECAr7	question is to assess how demanding are the establishment's
		production targets. Answer that best describes the management
Management	D Q/M) /	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
practices	LCINO	supervisors. Production targets as defined in ECAr6.
Management	R.11(M)/	Performance bonus is a form of payment to employees, which is
practices	ECAr11	related to the performance output of an employee.
1		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	R.13(M)/	<u>Performance bonus</u> is a form of payment to employees, which is
practices	ECAr13	related to the performance output of an employee.
		By <u>non-managers</u> we mean employees excluding managers as
Managamant	D 15/M) /	defined in ECAr11. Production targets as defined in ECAr6.
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.
practices	ECAIIS	Answer that best describes the management practices in the
		establishment should be chosen.
	1	Complement should be chosen.

Control	A.15i/	Time Innovation Module ends. Self-explanatory.
information	a15id	
	a15im	
	a15iy	
	a15ih	
	a15imin	
Control	A.24/	Self-explanatory.
information	a24	
Control	A.15a/	Self-explanatory.
information	a15a1dx	
	a15a2d	
	ECAa15a4d	
	A15a3d	

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: http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=17

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: http://unstats.un.org/unsd/cr/registry/regso.asp?Ci=26&Lg=1

A.4 Industry		Sampling	Screener
	•	sector	sector
		a4a	a4b
	Food	15	15
	Textiles	17	17
Ω	Garments	18	18
on]	Chemicals	24	24
ecti	Plastics & rubber	25	25
Manufacturing :Section D	Non metallic mineral products	26	26
fact	Basic metals	27	27
ann	Fabricated metal products	28	28
×	Machinery and equipment	29	29
	Electronics (31 & 32)	31	31
	Other manufacturing	2	2
Service	Retail	52	52
	Wholesale	51	51
Residual (core)	IT	72	72
	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 – 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.

- A Agriculture, hunting and forestry
 - 01 Agriculture, hunting and related service activities
 - 02 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
 - 10 Mining of coal and lignite; extraction of peat

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

- 62 Air transport
- 63 Supporting and auxiliary transport activities; activities of travel agencies
- 64 Post and telecommunications
- J 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
- <u>K</u> Real estate, renting and business activities
 - 70 Real estate activities
 - <u>71</u> Renting of machinery and equipment without operator and of personal and household goods
 - 72 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
- M Education
 - 80 Education
- N Health and social work
 - 85 Health and social work
- O Other community, social and personal service activities
 - 90 Sewage and refuse disposal, sanitation and similar activities
 - 91 Activities of membership organizations n.e.c.
 - 92 Recreational, cultural and sporting activities
 - 93 Other service activities
- P 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
- Q Extraterritorial organizations and bodies
 - <u>99</u> Extraterritorial organizations and bodies

ISIC REV. 3.1 Rev. - Detailed structure

15 Division: 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
- 1514 Manufacture of vegetable and animal oils and fats
- 1520 Manufacture of dairy products
- 1531 Manufacture of grain mill products
- 1532 Manufacture of starches and starch products
- 1533 Manufacture of prepared animal feeds
- 1541 Manufacture of bakery products

- 1542 Manufacture of sugar
- <u>1543</u> Manufacture of cocoa, chocolate and sugar confectionery
- 1544 Manufacture of macaroni, noodles, couscous and similar farinaceous products
- 1549 Manufacture of other food products n.e.c.
- 1551 Distilling, rectifying and blending of spirits; ethyl alcohol production from fermented materials
- <u>1552</u> Manufacture of wines
- 1553 Manufacture of malt liquors and malt
- 1554 Manufacture of soft drinks; production of mineral waters

16 Division: 16 - Manufacture of tobacco products

• 1600 - Manufacture of tobacco products

17 Division: 17 - Manufacture of textiles

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

18 Division: 18 - Manufacture of wearing apparel; dressing and dyeing of fur

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

19 Division: 19 - Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear

- 1911 Tanning and dressing of leather
- 1912 Manufacture of luggage, handbags and the like, saddlery and harness
- 1920 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

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

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

21 Division: 21 - Manufacture of paper and paper products

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

22 Division: 22 - Publishing, printing and reproduction of recorded media

- 2211 Publishing of books, brochures and other publications
- 2212 Publishing of newspapers, journals and periodicals
- 2213 Publishing of music
- 2219 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

- 2310 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

- 2411 Manufacture of basic chemicals, except fertilizers and nitrogen compounds
- 2412 Manufacture of fertilizers and nitrogen compounds
- 2413 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
- 2424 Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations
- 2429 Manufacture of other chemical products n.e.c.
- 2430 Manufacture of man-made fibres

25 Division: 25 - Manufacture of rubber and plastics products

- 2511 Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres
- 2519 Manufacture of other rubber products

• 2520 - Manufacture of plastics products

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

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

27 Division: 27 - Manufacture of basic metals

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

28 Division: 28 - Manufacture of fabricated metal products, except machinery and equipment

- 2811 Manufacture of structural metal products
- 2812 Manufacture of tanks, reservoirs and containers of metal
- 2813 Manufacture of steam generators, except central heating hot water boilers
- 2891 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
- 2893 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.

- 2911 Manufacture of engines and turbines, except aircraft, vehicle and cycle engines
- 2912 Manufacture of pumps, compressors, taps and valves
- 2913 Manufacture of bearings, gears, gearing and driving elements
- 2914 Manufacture of ovens, furnaces and furnace burners
- 2915 Manufacture of lifting and handling equipment
- 2919 Manufacture of other general-purpose machinery
- 2921 Manufacture of agricultural and forestry machinery
- 2922 Manufacture of machine tools
- 2923 Manufacture of machinery for metallurgy
- 2924 Manufacture of machinery for mining, guarrying and construction
- 2925 Manufacture of machinery for food, beverage and tobacco processing
- 2926 Manufacture of machinery for textile, apparel and leather production

- 2927 Manufacture of weapons and ammunition
- 2929 Manufacture of other special-purpose machinery
- 2930 Manufacture of domestic appliances n.e.c.

30 Division: 30 - Manufacture of office, accounting and computing machinery

• 3000 - Manufacture of office, accounting and computing machinery

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

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

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

- 3210 Manufacture of electronic valves and tubes and other electronic components
- 3220 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
- 3313 Manufacture of industrial process control equipment
- 3320 Manufacture of optical instruments and photographic equipment
- 3330 Manufacture of watches and clocks

34 Division: 34 - Manufacture of motor vehicles, trailers and semi-trailers

- 3410 Manufacture of motor vehicles
- 3420 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

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

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

- 3610 Manufacture of furniture
- 3691 Manufacture of jewellery and related articles
- 3692 Manufacture of musical instruments
- 3693 Manufacture of sports goods
- 3694 Manufacture of games and toys
- 3699 Other manufacturing n.e.c.

37 Division: 37 - Recycling.

- 3710 Recycling of metal waste and scrap
- 3720 Recycling of non-metal waste and scrap

45 Division: 45 - Construction

- 4510 Site preparation
- 4520 Building of complete constructions or parts thereof; civil engineering
- 4530 Building installation
- 4540 Building completion
- 4550 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

• 5110 - Wholesale on a fee or contract basis

- 5121 Wholesale of agricultural raw materials and live animals
- <u>5122</u> Wholesale of food, beverages and tobacco
- 5131 Wholesale of textiles, clothing and footwear
- 5139 Wholesale of other household goods
- 5141 Wholesale of solid, liquid and gaseous fuels and related products
- 5142 Wholesale of metals and metal ores
- <u>5143</u> Wholesale of construction materials, hardware, plumbing and heating equipment and supplies
- 5149 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
- 5190 Other wholesale

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
- 5219 Other retail sale in non-specialized stores
- 5220 Retail sale of food, beverages and tobacco in specialized stores
- 5231 Retail sale of pharmaceutical and medical goods, cosmetic and toilet articles
- 5232 Retail sale of textiles, clothing, footwear and leather goods
- 5233 Retail sale of household appliances, articles and equipment
- 5234 Retail sale of hardware, paints and glass
- <u>5239</u> Other retail sale in specialized stores
- 5240 Retail sale of second-hand goods in stores
- 5251 Retail sale via mail order houses
- 5252 Retail sale via stalls and markets
- 5259 Other non-store retail sale
- 5260 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
- 6023 Freight transport by road
- 6030 Transport via pipelines

61 Division: 61 - Water transport

- 6110 Sea and coastal water transport
- 6120 Inland water transport

62 Division: 62 - Air transport

- 6210 Scheduled air transport
- 6220 Non-scheduled air transport

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

- 6301 Cargo handling
- 6302 Storage and warehousing
- 6303 Other supporting transport activities
- 6304 Activities of travel agencies and tour operators; tourist assistance activities n.e.c.
- 6309 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
- 7221 Software publishing
- 7229 Other software consultancy and supply
- 7230 Data processing
- 7240 Database activities and online distribution of electronic content
- 7250 Maintenance and repair of office, accounting and computing machinery
- 7290 Other computer-related activities

Appendix B. NACE Rev. 2 – Sectors included and excluded from the sample

Please find below the whole NACE Rev. 2 structure.

For more information, please see:

http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST_NOM_DTL&StrNom=NACE_REV2&StrLanguageCode=EN&IntPcKey=&StrLayoutCode=HIERARCHIC

The correspondence between ISIC Rev. 4 and NACE Rev. 2 codes can be found in the following web site: http://unstats.un.org/unsd/cr/registry/regso.asp?Ci=70

NACE Rev. 2 – 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.

Code	Description	
Α	AGRICULTURE, FORESTRY AND FISHING	
1	Crop and animal production, hunting and related service activities	
2	Forestry and logging	
3	Fishing and aquaculture	
В	MINING AND QUARRYING	
5	Mining of coal and lignite	
6	Extraction of crude petroleum and natural gas	
7	Mining of metal ores	
8	Other mining and quarrying	
9	Mining support service activities	
С	MANUFACTURING	
10	Manufacture of food products	
11	Manufacture of beverages	
12	Manufacture of tobacco products	
13	Manufacture of textiles	
14	Manufacture of wearing apparel	
15	Manufacture of leather and related products	
	Manufacture of wood and of products of wood and cork, except furniture;	
16	manufacture of articles of straw and plaiting materials	
17	Manufacture of paper and paper products	
18	Printing and reproduction of recorded media	
19	Manufacture of coke and refined petroleum products	
20	Manufacture of chemicals and chemical products	
21	Manufacture of basic pharmaceutical products and pharmaceutical preparations	
22	Manufacture of rubber and plastic products	
23	Manufacture of other non-metallic mineral products	

24	Manufacture of basic metals
25	Manufacture of basic metals Manufacture of fabricated metal products, except machinery and equipment
26	Manufacture of computer, electronic and optical products
27	Manufacture of electrical equipment
28	Manufacture of machinery and equipment n.e.c.
29	Manufacture of maternal equipment file.c. Manufacture of motor vehicles, trailers and semi-trailers
30	Manufacture of other transport equipment
31	Manufacture of furniture
32	Other manufacturing
33	Repair and installation of machinery and equipment
D	ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY
35	Electricity, gas, steam and air conditioning supply
33	WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION
E	ACTIVITIES
36	Water collection, treatment and supply
37	Sewerage
38	Waste collection, treatment and disposal activities; materials recovery
39	Remediation activities and other waste management services
F	CONSTRUCTION
41	Construction of buildings
42	Civil engineering
43	Specialised construction activities
	WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND
G	MOTORCYCLES
45	Wholesale and retail trade and repair of motor vehicles and motorcycles
46	Wholesale trade, except of motor vehicles and motorcycles
47	Retail trade, except of motor vehicles and motorcycles
Н	TRANSPORTATION AND STORAGE
49	Land transport and transport via pipelines
50	Water transport
51	Air transport
52	Warehousing and support activities for transportation
53	Postal and courier activities
L	ACCOMMODATION AND FOOD SERVICE ACTIVITIES
55	Accommodation
56	Food and beverage service activities
J	INFORMATION AND COMMUNICATION
58	Publishing activities
	Motion picture, video and television programme production, sound recording
59	and music publishing activities
60	Programming and broadcasting activities

61	Telecommunications
62	Computer programming, consultancy and related activities
63	Information service activities
K	FINANCIAL AND INSURANCE ACTIVITIES
64	Financial service activities, except insurance and pension funding
65	Insurance, reinsurance and pension funding, except compulsory social security
66	Activities auxiliary to financial services and insurance activities
L	REAL ESTATE ACTIVITIES
68	Real estate activities
M	PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES
69	Legal and accounting activities
70	Activities of head offices; management consultancy activities
71	Architectural and engineering activities; technical testing and analysis
72	Scientific research and development
73	Advertising and market research
74	Other professional, scientific and technical activities
75	Veterinary activities
N	ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES
77	Rental and leasing activities
78	Employment activities
79	Travel agency, tour operator and other reservation service and related activities
80	Security and investigation activities
81	Services to buildings and landscape activities
82	Office administrative, office support and other business support activities
0	PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY
84	Public administration and defence; compulsory social security
P	EDUCATION
85	Education
Q	HUMAN HEALTH AND SOCIAL WORK ACTIVITIES
86	Human health activities
87	Residential care activities
88	Social work activities without accommodation
R	ARTS, ENTERTAINMENT AND RECREATION
90	Creative, arts and entertainment activities
91	Libraries, archives, museums and other cultural activities
92	Gambling and betting activities
93	Sports activities and amusement and recreation activities
S	OTHER SERVICE ACTIVITIES
94	Activities of membership organisations
95	Repair of computers and personal and household goods
96	Other personal service activities

	ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UONDIFFERENTIATED GOODS- AND
Т	SERVICES-PRODUCING ACTIVITIES OF HOUSEHOLDS FOR OWN USE
97	Activities of households as employers of domestic personnel
	Undifferentiated goods- and services-producing activities of private households
98	for own use
U	ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES
99	Activities of extraterritorial organisations and bodies

NACE Rev. 2 – Detailed structure

Code	Description
10	Manufacture of food products
1011	Processing and preserving of meat
1012	Processing and preserving of poultry meat
1013	Production of meat and poultry meat products
1020	Processing and preserving of fish, crustaceans and molluscs
1031	Processing and preserving of potatoes
1032	Manufacture of fruit and vegetable juice
1039	Other processing and preserving of fruit and vegetables
1041	Manufacture of oils and fats
1042	Manufacture of margarine and similar edible fats
1051	Operation of dairies and cheese making
1052	Manufacture of ice cream
1061	Manufacture of grain mill products
1062	Manufacture of starches and starch products
1071	Manufacture of bread; manufacture of fresh pastry goods and cakes
1072	Manufacture of rusks and biscuits; manufacture of preserved pastry goods and cakes
1073	Manufacture of macaroni, noodles, couscous and similar farinaceous products
1081	Manufacture of sugar
1082	Manufacture of cocoa, chocolate and sugar confectionery
1083	Processing of tea and coffee
1084	Manufacture of condiments and seasonings
1085	Manufacture of prepared meals and dishes
1086	Manufacture of homogenised food preparations and dietetic food
1089	Manufacture of other food products n.e.c.
1091	Manufacture of prepared feeds for farm animals
1092	Manufacture of prepared pet foods
11	Manufacture of beverages
1101	Distilling, rectifying and blending of spirits
1102	Manufacture of wine from grape

1103	Manufacture of cider and other fruit wines
1104	Manufacture of other non-distilled fermented beverages
1105	Manufacture of beer
1106	Manufacture of malt
1107	Manufacture of soft drinks; production of mineral waters and other bottled waters
12	Manufacture of tobacco products
1200	Manufacture of tobacco products
13	Manufacture of textiles
1310	Preparation and spinning of textile fibres
1320	Weaving of textiles
1330	Finishing of textiles
1391	Manufacture of knitted and crocheted fabrics
1392	Manufacture of made-up textile articles, except apparel
1393	Manufacture of carpets and rugs
1394	Manufacture of cordage, rope, twine and netting
1395	Manufacture of non-wovens and articles made from non-wovens, except apparel
1396	Manufacture of other technical and industrial textiles
1399	Manufacture of other textiles n.e.c.
14	Manufacture of wearing apparel
1411	Manufacture of leather clothes
1412	Manufacture of workwear
1413	Manufacture of other outerwear
1414	Manufacture of underwear
1419	Manufacture of other wearing apparel and accessories
1420	Manufacture of articles of fur
1431	Manufacture of knitted and crocheted hosiery
1439	Manufacture of other knitted and crocheted apparel
15	Manufacture of leather and related products
1511	Tanning and dressing of leather; dressing and dyeing of fur
1512	Manufacture of luggage, handbags and the like, saddlery and harness
1520	Manufacture of footwear
16	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
1610	Sawmilling and planing of wood
1621	Manufacture of veneer sheets and wood-based panels
1622	Manufacture of assembled parquet floors
1623	Manufacture of other builders' carpentry and joinery

- 1624 Manufacture of wooden containers
- 1629 Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials

17	Manufacture of paper and paper products
1711	Manufacture of pulp
1712	Manufacture of paper and paperboard
1721	Manufacture of corrugated paper and paperboard and of containers of paper and paperboard
1722	Manufacture of household and sanitary goods and of toilet requisites
1723	Manufacture of paper stationery
1724	Manufacture of wallpaper
1729	Manufacture of other articles of paper and paperboard
18	Printing and reproduction of recorded media
1811	Printing of newspapers
1812	Other printing
1813	Pre-press and pre-media services
1814	Binding and related services
1820	Reproduction of recorded media
19	Manufacture of coke and refined petroleum products
1910	Manufacture of coke oven products
1920	Manufacture of refined petroleum products
20	Manufacture of chemicals and chemical products
20 2011	Manufacture of industrial gases
2011 2012	Manufacture of industrial gases Manufacture of dyes and pigments
2011 2012 2013	Manufacture of industrial gases Manufacture of dyes and pigments Manufacture of other inorganic basic chemicals
2011 2012 2013 2014	Manufacture of industrial gases Manufacture of dyes and pigments Manufacture of other inorganic basic chemicals Manufacture of other organic basic chemicals
2011 2012 2013	Manufacture of industrial gases Manufacture of dyes and pigments Manufacture of other inorganic basic chemicals
2011 2012 2013 2014	Manufacture of industrial gases Manufacture of dyes and pigments Manufacture of other inorganic basic chemicals Manufacture of other organic basic chemicals
2011 2012 2013 2014 2015	Manufacture of industrial gases Manufacture of dyes and pigments Manufacture of other inorganic basic chemicals Manufacture of other organic basic chemicals Manufacture of fertilisers and nitrogen compounds
2011 2012 2013 2014 2015 2016	Manufacture of industrial gases Manufacture of dyes and pigments Manufacture of other inorganic basic chemicals Manufacture of other organic basic chemicals Manufacture of fertilisers and nitrogen compounds Manufacture of plastics in primary forms
2011 2012 2013 2014 2015 2016 2017	Manufacture of industrial gases Manufacture of dyes and pigments Manufacture of other inorganic basic chemicals Manufacture of other organic basic chemicals Manufacture of fertilisers and nitrogen compounds Manufacture of plastics in primary forms Manufacture of synthetic rubber in primary forms
2011 2012 2013 2014 2015 2016 2017 2020	Manufacture of industrial gases Manufacture of dyes and pigments Manufacture of other inorganic basic chemicals Manufacture of other organic basic chemicals Manufacture of fertilisers and nitrogen compounds Manufacture of plastics in primary forms Manufacture of synthetic rubber in primary forms Manufacture of pesticides and other agrochemical products
2011 2012 2013 2014 2015 2016 2017 2020 2030	Manufacture of industrial gases Manufacture of dyes and pigments Manufacture of other inorganic basic chemicals Manufacture of other organic basic chemicals Manufacture of fertilisers and nitrogen compounds Manufacture of plastics in primary forms Manufacture of synthetic rubber in primary forms Manufacture of pesticides and other agrochemical products Manufacture of paints, varnishes and similar coatings, printing ink and mastics
2011 2012 2013 2014 2015 2016 2017 2020 2030 2041	Manufacture of industrial gases Manufacture of dyes and pigments Manufacture of other inorganic basic chemicals Manufacture of other organic basic chemicals Manufacture of fertilisers and nitrogen compounds Manufacture of plastics in primary forms Manufacture of synthetic rubber in primary forms Manufacture of pesticides and other agrochemical products Manufacture of paints, varnishes and similar coatings, printing ink and mastics Manufacture of soap and detergents, cleaning and polishing preparations
2011 2012 2013 2014 2015 2016 2017 2020 2030 2041 2042	Manufacture of industrial gases Manufacture of dyes and pigments Manufacture of other inorganic basic chemicals Manufacture of other organic basic chemicals Manufacture of fertilisers and nitrogen compounds Manufacture of plastics in primary forms Manufacture of synthetic rubber in primary forms Manufacture of pesticides and other agrochemical products Manufacture of paints, varnishes and similar coatings, printing ink and mastics Manufacture of soap and detergents, cleaning and polishing preparations Manufacture of perfumes and toilet preparations
2011 2012 2013 2014 2015 2016 2017 2020 2030 2041 2042 2051	Manufacture of industrial gases Manufacture of dyes and pigments Manufacture of other inorganic basic chemicals Manufacture of other organic basic chemicals Manufacture of fertilisers and nitrogen compounds Manufacture of plastics in primary forms Manufacture of synthetic rubber in primary forms Manufacture of pesticides and other agrochemical products Manufacture of paints, varnishes and similar coatings, printing ink and mastics Manufacture of soap and detergents, cleaning and polishing preparations Manufacture of perfumes and toilet preparations Manufacture of explosives
2011 2012 2013 2014 2015 2016 2017 2020 2030 2041 2042 2051 2052	Manufacture of industrial gases Manufacture of dyes and pigments Manufacture of other inorganic basic chemicals Manufacture of other organic basic chemicals Manufacture of fertilisers and nitrogen compounds Manufacture of plastics in primary forms Manufacture of synthetic rubber in primary forms Manufacture of pesticides and other agrochemical products Manufacture of paints, varnishes and similar coatings, printing ink and mastics Manufacture of soap and detergents, cleaning and polishing preparations Manufacture of perfumes and toilet preparations Manufacture of explosives Manufacture of glues
2011 2012 2013 2014 2015 2016 2017 2020 2030 2041 2042 2051 2052 2053	Manufacture of industrial gases Manufacture of dyes and pigments Manufacture of other inorganic basic chemicals Manufacture of other organic basic chemicals Manufacture of fertilisers and nitrogen compounds Manufacture of plastics in primary forms Manufacture of synthetic rubber in primary forms Manufacture of pesticides and other agrochemical products Manufacture of paints, varnishes and similar coatings, printing ink and mastics Manufacture of soap and detergents, cleaning and polishing preparations Manufacture of perfumes and toilet preparations Manufacture of explosives Manufacture of glues Manufacture of essential oils
2011 2012 2013 2014 2015 2016 2017 2020 2030 2041 2042 2051 2052 2053 2059	Manufacture of industrial gases Manufacture of dyes and pigments Manufacture of other inorganic basic chemicals Manufacture of other organic basic chemicals Manufacture of fertilisers and nitrogen compounds Manufacture of plastics in primary forms Manufacture of synthetic rubber in primary forms Manufacture of pesticides and other agrochemical products Manufacture of paints, varnishes and similar coatings, printing ink and mastics Manufacture of soap and detergents, cleaning and polishing preparations Manufacture of perfumes and toilet preparations Manufacture of explosives Manufacture of glues Manufacture of other chemical products n.e.c.
2011 2012 2013 2014 2015 2016 2017 2020 2030 2041 2042 2051 2052 2053 2059 2060	Manufacture of industrial gases Manufacture of dyes and pigments Manufacture of other inorganic basic chemicals Manufacture of other organic basic chemicals Manufacture of fertilisers and nitrogen compounds Manufacture of plastics in primary forms Manufacture of synthetic rubber in primary forms Manufacture of pesticides and other agrochemical products Manufacture of paints, varnishes and similar coatings, printing ink and mastics Manufacture of soap and detergents, cleaning and polishing preparations Manufacture of perfumes and toilet preparations Manufacture of explosives Manufacture of glues Manufacture of other chemical products n.e.c. Manufacture of man-made fibres

22	Manufacture of rubber and plastic products
2211	Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres
2219	Manufacture of other rubber products
2221	Manufacture of plastic plates, sheets, tubes and profiles
2222	Manufacture of plastic packing goods
2223	Manufacture of builders' ware of plastic
2229	Manufacture of other plastic products
23	Manufacture of other non-metallic mineral products
2311	Manufacture of flat glass
2312	Shaping and processing of flat glass
2313	Manufacture of hollow glass
2314	Manufacture of glass fibres
2319	Manufacture and processing of other glass, including technical glassware
2320	Manufacture of refractory products
2331	Manufacture of ceramic tiles and flags
2332	Manufacture of bricks, tiles and construction products, in baked clay
2341	Manufacture of ceramic household and ornamental articles
2342	Manufacture of ceramic sanitary fixtures
2343	Manufacture of ceramic insulators and insulating fittings
2344	Manufacture of other technical ceramic products
2349	Manufacture of other ceramic products
2351	Manufacture of cement
2352	Manufacture of lime and plaster
2361	Manufacture of concrete products for construction purposes
2362	Manufacture of plaster products for construction purposes
2363	Manufacture of ready-mixed concrete
2364	Manufacture of mortars
2365	Manufacture of fibre cement
2369	Manufacture of other articles of concrete, plaster and cement
2370	Cutting, shaping and finishing of stone
2391	Production of abrasive products
2399	Manufacture of other non-metallic mineral products n.e.c.

24	Manufacture of basic metals
2410	Manufacture of basic iron and steel and of ferro-alloys
2420	Manufacture of tubes, pipes, hollow profiles and related fittings, of steel
2431	Cold drawing of bars
2432	Cold rolling of narrow strip
2433	Cold forming or folding
2434	Cold drawing of wire
2441	Precious metals production
2442	Aluminium production
2443	Lead, zinc and tin production
2444	Copper production
2445	Other non-ferrous metal production
2446	Processing of nuclear fuel
2451	Casting of iron
2452	Casting of steel
2453	Casting of light metals
2454	Casting of other non-ferrous metals
25	Manufacture of fabricated metal products, except machinery and equipment
2511	Manufacture of metal structures and parts of structures
2512	Manufacture of doors and windows of metal
2521	Manufacture of central heating radiators and boilers
2529	Manufacture of other tanks, reservoirs and containers of metal
2530	Manufacture of steam generators, except central heating hot water boilers
2540	Manufacture of weapons and ammunition
2550	Forging, pressing, stamping and roll-forming of metal; powder metallurgy
2561	Treatment and coating of metals
2562	Machining
2571	Manufacture of cutlery
2572	Manufacture of locks and hinges
2573	Manufacture of tools
2591	Manufacture of steel drums and similar containers
2592	
2502	Manufacture of light metal packaging
2593	Manufacture of light metal packaging Manufacture of wire products, chain and springs
2593 2594	

26	Manufacture of computer, electronic and optical products
2611	Manufacture of electronic components
2612	Manufacture of loaded electronic boards
2620	Manufacture of computers and peripheral equipment
2630	Manufacture of communication equipment
2640	Manufacture of consumer electronics
2651	Manufacture of instruments and appliances for measuring, testing and navigation
2652	Manufacture of watches and clocks
2660	Manufacture of irradiation, electromedical and electrotherapeutic equipment
2670	Manufacture of optical instruments and photographic equipment
2680	Manufacture of magnetic and optical media
27	Manufacture of electrical equipment
27 2711	Manufacture of electrical equipment Manufacture of electric motors, generators and transformers
	• •
2711	Manufacture of electric motors, generators and transformers
2711 2712	Manufacture of electric motors, generators and transformers Manufacture of electricity distribution and control apparatus
2711 2712 2720	Manufacture of electric motors, generators and transformers Manufacture of electricity distribution and control apparatus Manufacture of batteries and accumulators
2711 2712 2720 2731	Manufacture of electric motors, generators and transformers Manufacture of electricity distribution and control apparatus Manufacture of batteries and accumulators Manufacture of fibre optic cables
2711 2712 2720 2731 2732	Manufacture of electric motors, generators and transformers Manufacture of electricity distribution and control apparatus Manufacture of batteries and accumulators Manufacture of fibre optic cables Manufacture of other electronic and electric wires and cables
2711 2712 2720 2731 2732 2733	Manufacture of electric motors, generators and transformers Manufacture of electricity distribution and control apparatus Manufacture of batteries and accumulators Manufacture of fibre optic cables Manufacture of other electronic and electric wires and cables Manufacture of wiring devices
2711 2712 2720 2731 2732 2733 2740	Manufacture of electric motors, generators and transformers Manufacture of electricity distribution and control apparatus Manufacture of batteries and accumulators Manufacture of fibre optic cables Manufacture of other electronic and electric wires and cables Manufacture of wiring devices Manufacture of electric lighting equipment
2711 2712 2720 2731 2732 2733 2740 2751	Manufacture of electric motors, generators and transformers Manufacture of electricity distribution and control apparatus Manufacture of batteries and accumulators Manufacture of fibre optic cables Manufacture of other electronic and electric wires and cables Manufacture of wiring devices Manufacture of electric lighting equipment Manufacture of electric domestic appliances

28	Manufacture of machinery and equipment n.e.c.
2811	Manufacture of engines and turbines, except aircraft, vehicle and cycle engines
2812	Manufacture of fluid power equipment
2813	Manufacture of other pumps and compressors
2814	Manufacture of other taps and valves
2815	Manufacture of bearings, gears, gearing and driving elements
2821	Manufacture of ovens, furnaces and furnace burners
2822	Manufacture of lifting and handling equipment
2823	Manufacture of office machinery and equipment (except computers and peripheral equipment)
2824	Manufacture of power-driven hand tools
2825	Manufacture of non-domestic cooling and ventilation equipment
2829	Manufacture of other general-purpose machinery n.e.c.
2830	Manufacture of agricultural and forestry machinery
2841	Manufacture of metal forming machinery
2849	Manufacture of other machine tools
2891	Manufacture of machinery for metallurgy
2892	Manufacture of machinery for mining, quarrying and construction
2893	Manufacture of machinery for food, beverage and tobacco processing
2894	Manufacture of machinery for textile, apparel and leather production
2895	Manufacture of machinery for paper and paperboard production
2896	Manufacture of plastics and rubber machinery
2899	Manufacture of other special-purpose machinery n.e.c.
29	Manufacture of motor vehicles, trailers and semi-trailers
2910	Manufacture of motor vehicles
2920	Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers
2931	Manufacture of electrical and electronic equipment for motor vehicles
2932	Manufacture of other parts and accessories for motor vehicles
30	Manufacture of other transport equipment
3011	Building of ships and floating structures
3012	Building of pleasure and sporting boats
3020	Manufacture of railway locomotives and rolling stock
3030	Manufacture of air and spacecraft and related machinery
3040	Manufacture of military fighting vehicles
3091	Manufacture of motorcycles
3092	Manufacture of bicycles and invalid carriages
3099	Manufacture of other transport equipment n.e.c.

31	Manufacture of furniture
3101	Manufacture of office and shop furniture
3102	Manufacture of kitchen furniture
3103	Manufacture of mattresses
3109	Manufacture of other furniture
32	Other manufacturing
3211	Striking of coins
3212	Manufacture of jewellery and related articles
3213	Manufacture of imitation jewellery and related articles
3220	Manufacture of musical instruments
3230	Manufacture of sports goods
3240	Manufacture of games and toys
3250	Manufacture of medical and dental instruments and supplies
3291	Manufacture of brooms and brushes
3299	Other manufacturing n.e.c.
33	Repair and installation of machinery and equipment
3311	Repair of fabricated metal products
3312	Repair of machinery
3313	Repair of electronic and optical equipment
3314	Repair of electrical equipment
3315	Repair and maintenance of ships and boats
3316	Repair and maintenance of aircraft and spacecraft
3317	Repair and maintenance of other transport equipment
3319	Repair of other equipment
3320	Installation of industrial machinery and equipment
38	Waste collection, treatment and disposal activities; materials recovery
3811	Collection of non-hazardous waste
3812	Collection of hazardous waste
3821	Treatment and disposal of non-hazardous waste
3822	Treatment and disposal of hazardous waste
3831	Dismantling of wrecks
3832	Recovery of sorted materials
41	Construction of buildings
4110	Development of building projects
4120	Construction of residential and non-residential buildings

42	Civil engineering
4211	Construction of roads and motorways
4212	Construction of railways and underground railways
4213	Construction of bridges and tunnels
4221	Construction of utility projects for fluids
4222	Construction of utility projects for electricity and telecommunications
4291	Construction of water projects
4299	Construction of other civil engineering projects n.e.c.
43	Specialised construction activities
4311	Demolition
4312	Site preparation
4313	Test drilling and boring
4321	Electrical installation
4322	Plumbing, heat and air-conditioning installation
4329	Other construction installation
4331	Plastering
4332	Joinery installation
4333	Floor and wall covering
4334	Painting and glazing
4339	Other building completion and finishing
4391	Roofing activities
4399	Other specialised construction activities n.e.c.
45	Wholesale and retail trade and repair of motor vehicles and motorcycles
4511	Sale of cars and light motor vehicles
4519	Sale of other motor vehicles
4520	Maintenance and repair of motor vehicles
4531	Wholesale trade of motor vehicle parts and accessories
4532	Retail trade of motor vehicle parts and accessories
4540	Sale, maintenance and repair of motorcycles and related parts and accessories
46	Wholesale trade, except of motor vehicles and motorcycles
4611	Agents involved in the sale of agricultural raw materials, live animals, textile raw materials and semi-finished goods
4612	Agents involved in the sale of fuels, ores, metals and industrial chemicals
4613	Agents involved in the sale of timber and building materials
4614	Agents involved in the sale of machinery, industrial equipment, ships and aircraft
4615	Agents involved in the sale of furniture, household goods, hardware and ironmongery
4616	Agents involved in the sale of textiles, clothing, fur, footwear and leather goods
4617	Agents involved in the sale of food, beverages and tobacco
4618	Agents specialised in the sale of other particular products

4619	Agents involved in the sale of a variety of goods
4621	Wholesale of grain, unmanufactured tobacco, seeds and animal feeds
4622	Wholesale of flowers and plants
4623	Wholesale of live animals
4624	Wholesale of hides, skins and leather
4631	Wholesale of fruit and vegetables
4632	Wholesale of meat and meat products
4633	Wholesale of dairy products, eggs and edible oils and fats
4634	Wholesale of beverages
4635	Wholesale of tobacco products
4636	Wholesale of sugar and chocolate and sugar confectionery
4637	Wholesale of coffee, tea, cocoa and spices
4638	Wholesale of other food, including fish, crustaceans and molluscs
4639	Non-specialised wholesale of food, beverages and tobacco
4641	Wholesale of textiles
4642	Wholesale of clothing and footwear
4643	Wholesale of electrical household appliances
4644	Wholesale of china and glassware and cleaning materials
4645	Wholesale of perfume and cosmetics
4646	Wholesale of pharmaceutical goods
4647	Wholesale of furniture, carpets and lighting equipment
4648	Wholesale of watches and jewellery
4649	Wholesale of other household goods
4651	Wholesale of computers, computer peripheral equipment and software
4652	Wholesale of electronic and telecommunications equipment and parts
4661	Wholesale of agricultural machinery, equipment and supplies
4662	Wholesale of machine tools
4663	Wholesale of mining, construction and civil engineering machinery
4664	Wholesale of machinery for the textile industry and of sewing and knitting machines
4665	Wholesale of office furniture
4666	Wholesale of other office machinery and equipment
4669	Wholesale of other machinery and equipment
4671	Wholesale of solid, liquid and gaseous fuels and related products
4672	Wholesale of metals and metal ores
4673	Wholesale of wood, construction materials and sanitary equipment
4674	Wholesale of hardware, plumbing and heating equipment and supplies
4675	Wholesale of chemical products
4676	Wholesale of other intermediate products
4677	Wholesale of waste and scrap
4690	Non-specialised wholesale trade

47	Retail trade, except of motor vehicles and motorcycles
4711	Retail sale in non-specialised stores with food, beverages or tobacco predominating
4719	Other retail sale in non-specialised stores
4721	Retail sale of fruit and vegetables in specialised stores
4722	Retail sale of meat and meat products in specialised stores
4723	Retail sale of fish, crustaceans and molluscs in specialised stores
4724	Retail sale of bread, cakes, flour confectionery and sugar confectionery in specialised stores
4725	Retail sale of beverages in specialised stores
4726	Retail sale of tobacco products in specialised stores
4729	Other retail sale of food in specialised stores
4730	Retail sale of automotive fuel in specialised stores
4741	Retail sale of computers, peripheral units and software in specialised stores
4742	Retail sale of telecommunications equipment in specialised stores
4743	Retail sale of audio and video equipment in specialised stores
4751	Retail sale of textiles in specialised stores
4752	Retail sale of hardware, paints and glass in specialised stores
4753	Retail sale of carpets, rugs, wall and floor coverings in specialised stores
4754	Retail sale of electrical household appliances in specialised stores
4759	Retail sale of furniture, lighting equipment and other household articles in specialised stores
4761	Retail sale of books in specialised stores
4762	Retail sale of newspapers and stationery in specialised stores
4763	Retail sale of music and video recordings in specialised stores
4764	Retail sale of sporting equipment in specialised stores
4765	Retail sale of games and toys in specialised stores
4771	Retail sale of clothing in specialised stores
4772	Retail sale of footwear and leather goods in specialised stores
4773	Dispensing chemist in specialised stores
4774	Retail sale of medical and orthopaedic goods in specialised stores
4775	Retail sale of cosmetic and toilet articles in specialised stores
4776	Retail sale of flowers, plants, seeds, fertilisers, pet animals and pet food in specialised stores
4777	Retail sale of watches and jewellery in specialised stores
4778	Other retail sale of new goods in specialised stores
4779	Retail sale of second-hand goods in stores
4781	Retail sale via stalls and markets of food, beverages and tobacco products
4782	Retail sale via stalls and markets of textiles, clothing and footwear
4789	Retail sale via stalls and markets of other goods
4791	Retail sale via mail order houses or via Internet
4799	Other retail sale not in stores, stalls or markets

19	Land transport and transport via pipelines
1910	Passenger rail transport, interurban
1920	Freight rail transport
1931	Urban and suburban passenger land transport
1932	Taxi operation
1939	Other passenger land transport n.e.c.
1941	Freight transport by road
1942	Removal services
1950	Transport via pipeline
50	Water transport
5010	Sea and coastal passenger water transport
5020	Sea and coastal freight water transport
5030	Inland passenger water transport
5040	Inland freight water transport
51	Air transport
5110	Passenger air transport
5121	Freight air transport
5122	Space transport
52	Warehousing and support activities for transportation
5210	Warehousing and storage
5221	Service activities incidental to land transportation
5222	Service activities incidental to water transportation
5223	Service activities incidental to air transportation
5224	Cargo handling
5229	Other transportation support activities
53	Postal and courier activities
5310	Postal activities under universal service obligation
5320	Other postal and courier activities
55	Accommodation
5510	Hotels and similar accommodation
5520	Holiday and other short-stay accommodation
5530	Camping grounds, recreational vehicle parks and trailer parks
5590	Other accommodation

56	Food and beverage service activities
5610	Restaurants and mobile food service activities
5621	Event catering activities
5629	Other food service activities
5630	Beverage serving activities
58	Publishing activities
5811	Book publishing
5812	Publishing of directories and mailing lists
5813	Publishing of newspapers
5814	Publishing of journals and periodicals
5819	Other publishing activities
5821	Publishing of computer games
5829	Other software publishing
59	Motion picture, video and television programme production, sound recording and music publishing activities
5911	Motion picture, video and television programme production activities
5912	Motion picture, video and television programme post-production activities
5913	Motion picture, video and television programme distribution activities
5914	Motion picture projection activities
5920	Sound recording and music publishing activities
60	Programming and broadcasting activities
6010	Radio broadcasting
6020	Television programming and broadcasting activities
61	Telecommunications
6110	Wired telecommunications activities
6120	Wireless telecommunications activities
6130	Satellite telecommunications activities
6190	Other telecommunications activities
62	Computer programming, consultancy and related activities
6201	Computer programming activities
6202	Computer consultancy activities
6203	Computer facilities management activities
6209	Other information technology and computer service activities

63	Information service activities
6311	Data processing, hosting and related activities
6312	Web portals
6391	News agency activities
6399	Other information service activities n.e.c.
68	Real estate activities
6810	Buying and selling of own real estate
6820	Rental and operating of own or leased real estate
6831	Real estate agencies
6832	Management of real estate on a fee or contract basis
77	Rental and leasing activities
7711	Rental and leasing of cars and light motor vehicles
7712	Rental and leasing of trucks
7721	Rental and leasing of recreational and sports goods
7722	Rental of video tapes and disks
7729	Rental and leasing of other personal and household goods
7731	Rental and leasing of agricultural machinery and equipment
7732	Rental and leasing of construction and civil engineering machinery and equipment
7733	Rental and leasing of office machinery and equipment (including computers)
7734	Rental and leasing of water transport equipment
7735	Rental and leasing of air transport equipment
7739	Rental and leasing of other machinery, equipment and tangible goods n.e.c.
7740	Leasing of intellectual property and similar products, except copyrighted works
79	Travel agency, tour operator and other reservation service and related activities
7911	Travel agency activities
7912	Tour operator activities
7990	Other reservation service and related activities
95	Repair of computers and personal and household goods
9511	Repair of computers and peripheral equipment
9512	Repair of communication equipment
9521	Repair of consumer electronics
9522	Repair of household appliances and home and garden equipment
9523	Repair of footwear and leather goods
9524	Repair of furniture and home furnishings
9525	Repair of watches, clocks and jewellery
9529	Repair of other personal and household goods