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**Joint World Bank/EBRD/EIB  
MENA ENTERPRISE SURVEY**

**UNDERSTANDING  
THE QUESTIONNAIRE**

**September, 2012**

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Global version of this instrument available at [www.enterprisesurveys.org](http://www.enterprisesurveys.org)

## INTRODUCTION

The World Bank (WB) Enterprise Surveys (ES) collect data from key manufacturing and service sectors in every region of the world; the current rollout of the surveys, known as the Joint WB/EBRD/EIB MENA Enterprise Surveys, is a collective effort of the WB, the European Bank for Reconstruction and Development (EBRD), and the European Investment Bank (EIB) in the Middle East and North Africa (MENA). The Surveys use 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, the Enterprise Surveys are 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, the Enterprise Survey Initiative has made panel data a top priority.

The use of properly designed survey instruments and a uniform sampling methodology enhances the credibility of WB/EBRD/EIB analysis and the recommendations that stem from this analysis. The Enterprise Survey 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 [Sampling Note](#) and the [Weights Note](#) complete the documentation for these surveys. The [Sampling Note](#) and the [Weights Note](#) are technical documents of more interest to researchers and final users of the data.

### 1. What is in an Enterprise Survey questionnaire

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

The two versions of the instrument, *Manufacturing* and *Services* are comprised of fourteen sections organized by topic:

- Section A – *Control Information*: information collected in the first stage of implementation
- 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 H – *Innovation*
- Section F – *Capacity*.
- 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 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.

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:

<b>K.14</b>	Referring only to this most recent loan or line of credit, what type of collateral was required? <b>INTERVIEWER: READ OUT</b>
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Collateral	Yes	No	DON'T KNOW (SPONTANEOUS)
Land, buildings under ownership of the establishment <span style="float: right; color: red;">k14a</span>	1	2	-9
Machinery and equipment including movables <span style="float: right; color: red;">k14b</span>	1	2	-9
Accounts receivable and inventories <span style="float: right; color: red;">k14c</span>	1	2	-9
Personal assets of owner (house, etc.) <span style="float: right; color: red;">k14d</span>	1	2	-9
Other forms of collateral not included in the categories above <span style="float: right; color: red;">k14e</span>	1	2	-9

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:

<b>D.3</b>	In fiscal year <b>[insert last complete fiscal year]</b> , what percentage of this establishment's sales were: <b>(INTERVIEWER: SKIP PATTERNS MUST BE FOLLOWED IN THE ORDER THEY APPEAR IN THE TABLE)</b>  <b>SHOW CARD 7</b>
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	Percent	DON'T KNOW (SPONTANEOUS)	
National sales	<b>d3a</b> %	-9	<i>IF 100, GO TO QUESTION D.10</i>
Indirect exports (sold domestically to third party that exports products)	<b>d3b</b> %	-9	<i>IF 100, GO TO QUESTION D.8</i>
Direct exports	<b>d3c</b> %	-9	<i>IF 0, GO TO QUESTION D.8</i>
	<b>100%</b>		

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

This question must be carefully 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:

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

<b>B.5</b>	In what year did this establishment begin operations?
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	Year
Year establishment began operations	<b>b5</b>
<b>Don't know (spontaneous)</b>	-9

**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”):

<b>D.4</b>	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?
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	<b>Days</b>
Average number of days to clear customs	<b>d4</b>
<b>LESS THAN ONE DAY</b>	<b>1</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>DOES NOT APPLY</b>	<b>-7</b>

**c. What are acceptable responses**

Many questions ask for percentages or fractions.

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

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

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

- 1 day= calendar day;
- 1 week= 7 days;
- 1 month= 4 weeks;
- 1 month= 30 days.
- 1 year= 52 weeks; and
- 1 year= 365 days.

If the question asks for a response in days and the respondent responds in weeks, the enumerator must make the conversion and record the response in days, not in weeks. If in doubt about the conversion, record the answer in the margin for conversion after interview.

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

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

<b>B.7</b>	How many years of experience working in this sector does the Top Manager have?
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**Answer: “Two months”**

	Years
Manager’s experience in sector	b7
<b>1.1. LESS THAN ONE YEAR</b>	<b>1.2. 1</b>
<b>1.3. DON’T KNOW (SPONTANEOUS)</b>	<b>1.4. -9</b>

Or

<b>C.4</b>	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?
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**Answer: “Two hours”**

	Days
Wait for electrical connection	c4
<b>LESS THAN ONE DAY</b>	<b>1</b>
<b>STILL IN PROCESS</b>	<b>-6</b>
<b>APPLICATION DENIED</b>	<b>-5</b>
<b>DON’T KNOW (SPONTANEOUS)</b>	<b>-9</b>

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 neither 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 Enterprise Survey 2011 instruments.

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

Section	Number	Instructions
Control Information	<b>Poslat</b>	Latitude position: East, West, North or South
Control Information	<b>Poslon</b>	Longitude position: East, West, North or South
Control	<b>Lat</b>	Latitude. Format: XX.XXXXXX. Make sure that this information

Section	Number	Instructions
Information		can be read by Google Earth.
Control Information	<b>Lon</b>	Longitude. Format: XX.XXXXXX. Make sure that this information can be read by Google Earth.
Control Information	<b>a0</b>	Questionnaire used in the interview. It is defined according to the screener sector of activity of the interviewee
Control Information	<b>a1</b>	Country: self-explanatory
Control Information	<b>a1a</b>	Language used for the interview. Questionnaires should be translated into the language used for the interview. Under no circumstances interviews should take place with simultaneous translation.
Control Information	<b>a2</b>	Sampling region defines the region stratum of the establishment It is defined by the regional classification of the establishment in the sample frame
Control Information	<b>a3a</b>	Codification of a3x into regions of homogeneous regulation and or business environment conditions, for ex. into regional clusters
Control Information	<b>a3x</b>	Physical location of the establishment as determined with the screener questionnaire
Control Information	<b>a3b</b>	Official capital city: self-explanatory
Control Information	<b>a3c</b>	Main business city: self-explanatory
Control Information	<b>a4a</b>	Classification of the establishment's activity as defined in the sample frame. This variable should match the strata in the sample frame. Categories are according to ISIC Rev. 3.1
Control Information	<b>a4b</b>	Classification of the establishment's activity as defined by the screener questionnaire. This variable should correspond to the activity identified during screening. Categories are according to ISIC Rev. 3.1
Control Information	<b>a5</b>	<i>Self-explanatory</i>
Control Information	<b>a6a</b>	Size of the establishment taken from the sample frame
Control Information	<b>a6b</b>	Size of the establishment as determined with the screener questionnaire
Control Information	<b>a7</b>	Identifies establishments that are part of a larger firm. Taken from screener questionnaire.
Control Information	<b>a7a</b>	<i>Self-explanatory</i> . Identifies the number of establishments in the firm. For all questions beginning after B.4 the questions only refer to the largest establishment if the firm has multiple establishments.
Control Information	<b>a8</b>	Identifies type of establishment for those that are part of larger firms
Control Information	<b>a9</b>	Information taken from the screener questionnaire
Control	<b>a10</b>	Information taken from the screener questionnaire



Section	Number	Instructions
Information		
Control Information	a11	Information taken from the screener questionnaire
Control Information	a12	Information taken from the screener questionnaire
Control Information	a13	Information taken from the screener questionnaire
Control Information	a14	<i>Self-explanatory</i>
General Information	b1 b1x	<p>A firm's legal status is information well known for the target respondent: CEO, General Manager or owner of the firm. ENUMERATORS DO NOT NEED TO KNOW THE DEFINITION OF EACH TYPE OF LEGAL STATUS.</p> <p>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.</p> <p>If a firm's shares are publicly traded, it is a <i>shareholding company with shares traded in the stock market</i>. If the shares are not traded or they are traded only privately it is a <i>shareholding company with shares traded privately</i>. A <i>shareholding company with shares traded privately</i> 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.</p> <p>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 members or owner(s).</p> <p>A firm's legal status defines the extent of the liability which defines the level of responsibility of the owner over the firm's obligations. Under limited liability each owner is only responsible for the proportion of his/her shares.</p> <p>A <i>partnership</i> 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.</p> <p><i>Limited partnership</i> 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</p>

Section	Number	Instructions
		<p>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.</p> <p>When other is chosen, the actual form of legal status must be specified in writing by the enumerator on the survey instrument. This variable should be codified after field work is finished to make sure that “other” does not include establishments that can be included in forms 1-5.</p>
General Information	<b>b3</b>	<i>Self-explanatory</i>
General Information	<b>b2a b2b b2c b2d</b>	<p><i>Foreign</i> ownership refers to the nationality of the owners. If the primary owner is a foreign national resident in the country, it is still a foreign owned firm. If the owner is another company or institution owned by individuals who are foreign nationals, then it is foreign owned.</p> <p><i>Domestic</i> are nationals of the country in which the establishment is located. (Follow the same rule for companies)</p> <p>A firm that is a subsidiary of a government-owned firm should be considered <i>government-owned</i>.</p> <p>Firms that operate under a franchise agreement should be classified according to the nationality of those awarded the franchise.</p>
General Information	<b>MNA<b>b</b>4a</b>	<i>Self-explanatory</i>
General Information	<b>b4</b>	<i>Self-explanatory</i>
General Information	<b>b4a</b>	<p>Percentage of ownership by all females.</p> <p>For example, if all females own 10 percent of the firm, write this percentage.</p>
General Information	<b>MNAq5</b>	<p>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.</p>
General Information	<b>b5</b>	<p>The objective of this question is to obtain the year in which operations started regardless of who was the owner at the time.</p> <p>The year when the establishment began operation refers to the year in which the establishment actually started producing (or providing</p>

Section	Number	Instructions
		<p>services), not to the year in which it was registered for the first time.</p> <p>If the establishment was privatized, then the date provided should refer to when the original government-owned establishment began operations.</p> <p>If the establishment changed its production significantly to change <u>sector</u> classification, then the year when that took place should be provided.</p>
General Information	<b>b6</b>	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>b6a</b>	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 <b>[enter name of main Registration Office for each country]</b>
General Information	<b>b6b</b>	<i>Year of registration</i> refers to the year in which the establishment completed the registration as explained in B.6a.
General Information	<b>b7</b>	The question refers to years of <i>Top Manager’s</i> (defined as in B.7a) managerial experience in the type of sector that the establishment presently operates.
General Information	<b>b7a</b>	<i>Top Manager</i> refers to the highest management individual. This person may be the owner if he/she works as the Manager of the firm.
General Information	<b>MNA<b>b</b>7b</b>	<i>Education qualification of Top Manager</i>
General Information	<b>b8</b>	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.
Infrastructure and Services	<b>c3</b>	<i>Application for electrical connection.</i> Electrical connection refers to a new connection or to an increase in voltage of an existing connection that requires an application.
Infrastructure and Services	<b>c4</b>	<i>Wait for electrical connection.</i> Self-explanatory
Infrastructure and Services	<b>c5</b>	<b><u>Opinion based or sensitive</u></b>
Infrastructure and Services	<b>c6</b>	A <i>power outage</i> occurs when there is equipment malfunction from the failure of adequate supply of power. Brownouts that cause some, but not all, equipment to malfunction are also considered power outages.
Infrastructure	<b>c7</b>	If power outages are seasonal the interviewer should ask the

Section	Number	Instructions
and Services		<p>respondent to calculate the <i>number of outages on a typical month</i>, neither from months in which outages are most frequent nor from months where outages are most infrequent.</p> <p>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 since there will be 6 months with outages and 6 months without them.</p>
Infrastructure and Services	c8	This refers to the duration of each incident of power outage in a typical month. The respondent should calculate <i>average duration of power outages</i> in the typical month.
Infrastructure and Services	c9a c9b	<i>Losses because of power outages</i> The Manager should estimate the amount of production lost because of power outages.
Infrastructure and Services	c10	<i>Establishment owns or shares a generator.</i> Self-explanatory
Infrastructure and Services	c11	<i>Percent electricity from own or shared generator.</i> Self-explanatory
Infrastructure and Services	c12	<i>Application for water connection.</i> Self-explanatory
Infrastructure and Services	c13	<i>Wait for water connection.</i> Self-explanatory
Infrastructure and Services	c14	<b><u>Opinion based or sensitive</u></b>
Infrastructure and Services	c15 (M)	<i>Insufficient water supply:</i> whenever there is equipment failure or cessation of production operations due to the lack or reduction of water supply.
Infrastructure and Services	c16 (M)	<p><i>Incidents of insufficient water supply per month</i> can be estimated by considering the number of times water insufficiencies took place per month. The respondent should be asked not to make the calculation from months when water insufficiencies are rare or from months when water insufficiencies are extreme. The calculation should be made based on a typical month.</p> <p>Zero is the answer only if no insufficiencies occurred in a typical month.</p>
Infrastructure and Services	c17 (M)	<i>Duration of water shortage</i> can be estimated by considering the average duration of water insufficiencies that took place in a typical month.
Infrastructure and Services	MNAc18 (M)	<i>Percent of water from public sources.</i> Percent of water used in production that is obtained from government-owned utility services or from public wells and other public water sources.

Section	Number	Instructions
		<u>Self-explanatory</u>
Infrastructure and Services	c22a c22b	<u>E-mail.</u> Self-explanatory <u>Website use</u> includes cases when the establishment has its own website but does not actually do any direct communication with clients or suppliers via the website.
Infrastructure and Services	c28	<u>Cell phone use</u> refers to use for operations of the establishment. It refer to systematic use of cell phones not to occasional use of personal cell phones
Infrastructure and Services	c30a	<b><u>Opinion based or sensitive</u></b>
Infrastructure and Services	MNAc31a1 MNAc31a3	<u>Self-explanatory.</u>
Infrastructure and Services	c30b	<b><u>Opinion based or sensitive</u></b>
Sales and Supplies	d1a1x	<u>Establishment's main activity and product or service</u> The purpose of this 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. <i>The main product and activity is defined in terms of sales in monetary value not volume.</i>
Sales and Supplies	d1a2	Categorize the main activity and product according to standard industry classification codes. This is an extremely important question for classification purposes. The question is to be coded using the United Nations ISIC Rev.3.1. <a href="http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=17">http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=17</a> Coding will be made in the office on the basis of the description provided in d1a1x
Sales and Supplies	d1a3	The main product is defined in terms of sales in monetary value not volume.
Sales and Supplies	d2	<u>Total sales</u> include the value of all annual sales counting manufactured goods and goods the establishment has bought for trading. For ex. if an establishment makes blue jeans and also imports blue jeans to resell, total sales is the value of all blue jeans sold, both produced and imported. Revenue or receipts for all services rendered and any sales of merchandise for the year, even if the payment may have been received at a later date, are included in total sales. For services total sales refer to the total value of all the services provided during the year. In manufacturing and services the amount should include sales with and without invoices (reported and unreported sales).
Sales and Supplies	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"

Section	Number	Instructions
Sales and Supplies	n3	<i>Total sales</i> 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	d3a d3b d3c	<i>Where sales are made.</i> 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.  <i>Domestic sales</i> are when goods or services are sold inside the borders of the country.  <i>An indirect export</i> 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.  <i>Direct export</i> is the sale of goods where the immediate recipient is outside the borders of the country.
Sales and Supplies	d4	Is the average time goods and services remaining 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 shipment, after being cleared by customs officials.
Sales and Supplies	d6 d7	<i>Theft, breakage or spoilage for direct export.</i> The purpose of this question is to determine the extent of losses that stem from theft, 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.  <i>Theft</i> refers to robbery that occurred outside the premises of the establishment.  <i>Breakage</i> refers to the inoperability or usability of the good. A broken good is inoperable or unusable in its current state.

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Sales and Supplies	<b>d8</b>	Self explanatory
Sales and Supplies	<b>MNAd7</b>	Main country of an establishment's exports determined by value of exports
Sales and Supplies	<b>d10 + d11</b>	<i>Theft, breakage and spoilage when supplying domestic markets.</i> See definitions in D.6 "No internal shipments to supply domestic markets" applies only when direct exports represent 100% of the establishment's sales.
Sales and Supplies	<b>d12a (M)</b> <b>d12b (M)</b>	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.  <i>Inputs</i> 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.  <i>Supplies</i> are materials or products that are used, expended, consumed, but will not comprise the final good produced. Pencils and writing paper are good examples of a supply.
Sales and Supplies	<b>d13 (M)</b>	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	<b>d14 (M)</b>	The purpose of these questions is to measure the efficiency of customs clearance of imports.  <i>Goods cleared customs</i> 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.  <i>Average number of days</i> 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	<b>MNAd14b (M)</b>	<i>Self-explanatory.</i>

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Sales and Supplies	<b>d16 (M)</b>	<p><u>Days of inventory of main input.</u> The purpose of this question is to assess the efficiency in the supply chain. When firms have to maintain a high level of stock, because they cannot rely on a predictable supply of inputs, this is a source of economic inefficiency. Inversely, if supplies of the main input can be relied upon to be easily available, firms will keep low levels of stock on hand.</p> <p>The <u>main input</u> 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.</p> <p><u>Days of inventory</u> should be calculated as the number of days of normal production capacity before running out of stock.</p>
Sales and Supplies	<b>d17 (S)</b>	<p><u>Days of inventory of main sales item</u> 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.</p> <p><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.</p> <p><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.</p>
Sales and Supplies	<b>d30a d30b</b>	<b><u>Opinion based or sensitive</u></b>
Sales and supplies	<b>MNAd31b1 MNAd31b3</b>	Self-explanatory
Degree of Competition	<b>e1</b>	<p>The purpose of this question is to get the establishment to define what it considers to be its main market.</p> <p>The main product is defined by the output that generates the highest proportion of sales. The establishment's main market is defined by the market that generates the most sales for the main product as defined above.</p> <p>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</p>



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		<p>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.</p> <p>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.</p> <p>“Local” is generally defined as a territory that is less than the entire country. Use the following distinctions in each economy:</p> <ul style="list-style-type: none"> <li>• Egypt, Jordan, Tunisia, Yemen: governorate</li> <li>• Algeria: province (wilaya)</li> <li>• Djibouti, Lebanon, Morocco: region</li> <li>• Israel, Libya: district</li> <li>• Oman: governorate/region</li> <li>• West Bank and Gaza?</li> </ul>
Degree of Competition	e2	<i>Number of competitors in establishment's market.</i> Self-explanatory
Degree of Competition	e6	<i>Technology licensed from a foreign owned company:</i> 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.
Degree of Competition	MNAe3a MNAe3b (M)	Self-explanatory
Degree of Competition	MNAq53	The question refers to direct subsidies only. Exclude indirect subsidies such as subsidized loans or reduced tariffs.
Degree of Competition	MNAe20	<b>Opinion based or sensitive</b>
Degree of Competition	e11	<b>Self-explanatory</b>
Degree of Competition	e30	<b>Opinion based or sensitive</b>
Innovation	h1	<u>New or significantly improved products or services introduced in the last three years.</u> By new or significantly improved we mean completely new to the establishment, or having a large improvement in technical specifications, components and materials, incorporated software, user friendliness, capabilities or other

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		<p>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 product or service should be excluded.</p> <p><i>Product innovations in manufacturing include products that differ significantly in their characteristics or intended uses from products previously produced by the firm. A new or significantly improved product can use new technology or a new combination of existing technologies. The development of a new use for a product with only minor changes to its technical specifications is also a product innovation. Significant improvements to existing products can occur through changes in materials, components and other characteristics that enhance performance.</i></p> <p><i>Examples of product innovation for manufacturing include: 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 built-in software for reduced energy consumption, a coffee bean processor starting to make roasted coffee beans.</i></p> <p><u>Product innovations in services</u> can include significant improvements in how services are provided (for example, in terms of their efficiency or speed), the addition of new functions or characteristics to existing services, or the introduction of entirely new services.</p> <p><i>Examples of product innovation for services include introduction of home-delivery and/or online ordering, new forms of warranty, new forms of purchase on credit.</i></p>
Innovation	<b>h2</b>	Self-explanatory
Innovation	<b>h3</b>	<p>By new or significantly improved methods of manufacturing products or offering services we mean a change in the process of production or how the service is provided with the objective of reducing costs, increasing output, or improving quality.</p> <p><i>Examples for manufacturing: a) changes in production techniques; b) introduction of new technology for production; c) introduction of automation of processes previously performed manually; d) introduction of new process of finishing or packaging; e) introduction of new software for production.</i></p> <p><i>Examples for services: a) changes in the technique or equipment used to perform the service or to offer the product; b) introduction of new technology to perform the service or to offer the product; c) introduction of new software to perform the service or to offer the product; d) introduction of automation of processes previously performed manually</i></p>
Innovation	<b>h4a</b>	By new or significantly improved logistics, delivery or distribution methods we mean changes or improvements that encompass

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		<p>equipment, software and techniques to source inputs, allocate supplies within the firm, or delivery or distribute final products.</p> <p><i>Examples of new or significantly improved production process for both <u>manufacturing</u> and <u>services</u> include: a) changes in how inputs are delivered to the establishment, for ex. outsourcing transport that previously was done in-house; b) changes in how products or services are delivered/provided to clients and customers; c) introduction of scanning to register products using bar codes; d) changes in supply chain management.</i></p>
Innovation	<b>h4b</b>	<p>By new or significantly improved supporting activities we mean new or significantly improved techniques, equipment and software in ancillary support activities, such as purchasing, accounting, computing and maintenance. 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.</p> <p><i>Examples of new or significantly improved supporting activities for both <u>manufacturing</u> and <u>services</u> include: a) changes in the accounting method; b) changes in the purchasing method; c) changes in the maintenance method; d) changes in the quality control system; introduction of new or significantly improved software to manage inventories.</i></p>
Innovation	<b>h5</b>	<p>By new or significantly improved managerial or organizational practice or structure we mean changing the management structure, changes in the way workers work together, introducing new incentives for performance, changing hiring and firing practices, or changing the systems of information and monitoring that aim to enhance efficiency.</p> <p><i>Examples of new or significantly improved managerial or organizational practice or structure for both <u>manufacturing</u> and <u>services</u> include: a) giving non-managerial staff employees more responsibility; b) re-structuring departments; c) introducing new performance monitoring systems; d) introducing new problem reporting systems; e) introducing new systems for gathering employee opinions; f) changes in salary and promotion practices to better reward performance; g) a new pricing strategy [e.g. set different prices for the same product for different type of markets].</i></p>
Innovation	<b>h6</b>	<p>By new or significantly improved 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 products and services.</p> <p><i>Examples of new or significantly improved marketing methods for both <u>manufacturing</u> and <u>services</u> include: a) changes in product form and appearance</i></p>

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		<i>that do not alter the product's functional characteristics; b) new marketing methods in product placement such as introduction for the first time of a franchising system, of direct selling or exclusive retailing, and of product licensing; c) new marketing methods in product/service promotion such as the development and introduction of a fundamentally new brand symbol, the introduction of a personalized loyalty cards</i>
Innovation	<b>h7</b>	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	<b>h8</b>	Self-explanatory
Capacity	<b>f1 (M)</b>	<u>A capacity utilization estimate</u> should be compared to a full production capacity capability.  This question only references the production facility and not the 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	<b>f2 (M)</b>	<u>Hours per week of operation</u> are the hours per week in which machines and employees are engaged in some type of mechanical, physical, or chemical transformation of materials into new products or in which the assembly of components into new products takes place, including maintenance.  This question only references the production facility and not the administrative offices.
Capacity	<b>MNAf3</b>	An increase in production capacity and/or volume of sales consists of a considerable expansion of production facilities, office space, sales area, etc, or in the number of employees given the current size of the establishment.
Capacity	<b>MNAf4</b>	Satisfied implies that the owner/manager does not seek to considerably change the production capacity and/or volume of sales of the establishment based on sales, production facilities or the workforce.
Capacity	<b>MNAf5a</b> <b>MNAf5b</b> <b>MNAf5c</b> <b>MNAf5d</b>	<u>Self-explanatory</u>
Land	<b>g1</b>	<u>Self-explanatory</u>
Land	<b>g2</b>	Note: When interviewing construction businesses, these permits refer

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		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	g3	<u>Wait for construction permit.</u> Self-explanatory
Land	g4	Self-explanatory
Land	g5a (S) g5bx (S) g5b (S)	<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	g6a g6b g6c	If establishment occupies several buildings the percentages should be computed for the summation of buildings.
Land	g30a	<b><u>Opinion based or sensitive</u></b>
Crime	i1	<u>Pay for security.</u> Self-explanatory
Crime	i2a i2b	<u>How much pay for security.</u> Self-explanatory
Crime	i3	<u>Experienced losses from theft, robbery, vandalism, arson.</u> Self-explanatory
Crime	i4a i4b	<u>Extent of losses from theft, robbery, vandalism, arson.</u> Self-explanatory
Crime	i30	<b><u>Opinion based or sensitive</u></b>
Finance	k1c + k2c	The questions refer to an establishment's ability to provide and receive trade credit arrangements with suppliers and customers.
Finance	k3a k3b k3c k3e k3f k3hd	<u>Working capital</u> refers to financing of short term production activities. Working capital is necessary for businesses to cover short term liquidity issues, such as purchases of inputs, covering wage bills, etc. It does not refer to larger investments, such as in machinery or equipment. Since investment financing is covered under question K.5, working capital can be understood as financing of all operations, excluding investment in fixed assets  Working capital sources are likely to be diverse. It is important for the enumerator to make sure that the various sources do add up to 100%.  <u>Both domestic and foreign banks are included in k3bc</u>
Finance	k4	<u>Purchase of fixed assets, investments, etc.</u> Self-explanatory
Finance	n5a n5b	The category <u>machinery, vehicles and equipment</u> is the annual investment of anything used directly by this establishment to produce. Vehicles include transport and loading and unloading vehicles. It should include not only the purchase cost but also all other costs involved in the investment such as transport of the item and installation cost. Computer hardware should be considered under equipment

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		<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. Included are expenditures for new and used structures (including those under construction at the end of last complete fiscal year), fixtures and equipment, additions, major alterations and improvements to existing facilities, and capitalized repairs.
Finance	k5a k5i k5b k5c k5e k5f k5hdj	<u>Fixed assets</u> include any indivisible purchase made by the establishment as described in K.4. Examples include machinery/equipment, land, buildings, building improvements, etc.  <u>The source of funds for these purchases may be diverse, so it is important for the enumerator to make sure that the various sources do add up to 100%.</u>
Finance	MNAk4a	<u>Leasing of fixed assets.</u> <b>Leasing</b> is a process by which a firm can obtain the use of a certain fixed assets on a rental basis. This avoids the need to invest capital in fixed assets. Ownership rests in the hands of the financial institution or leasing company, while the business has the actual use of it.
Finance	k6	<u>Checking/savings account.</u> In many countries, a checking account is known as a “current account”
Finance	k7	<u>An overdraft facility</u> is a flexible account that allows firms to draw upon in the event their account balance becomes negative. The firm will incur fees or are subject to interest payments if they exercise this option.
Finance	k8	<u>A line of credit</u> is an available amount of credit that the establishment can draw upon or leave untapped. Lines of credit usually carry monthly interest rates, and are repaid quickly (as soon as the establishment’s cash flow allows for repayment). They may or may not have a defined date of expiration.  <u>A loan</u> is generally a much less flexible form of finance. It comes in fixed amounts (rather than ranges), carry annual interest rates (either fixed or floating), and they carry a determined term to maturity (finite period for repayment).  <u>In case of more than one loan outstanding, consider the most recent acquired loan.</u>
Finance	MNAk8c	<u>Self-explanatory</u>
Finance	MNAk8d	<u>Self-explanatory</u>
Finance	k9	<u>Institutions that granted loan.</u> Self-explanatory
Finance	MNAk9a	<u>Name of the bank that provided the most recent line of credit or loan.</u> Self-explanatory
Finance	k10	<u>Self-explanatory</u>
Finance	k11	<u>Value of the loan.</u> This question refers to the term to maturity of the

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		loan, as it was specified in the credit agreement. The respondent should answer according to what was specified in the loan contract, not what happened in practice (e.g. if they paid off the loan early or later than the term of the loan).
Finance	MNAq46f	<u>Currency in which the most recent line of credit or loan is denominated.</u> Self-explanatory
Finance	MNAq46d	<u>Annual interest rate of the most recent line of credit or loan.</u> Self-explanatory
Finance	MNAq46e	<u>Original duration of the most recent line of credit or loan.</u> Self-explanatory
Finance	k13 + k14a-e	<u>Collateral</u> refers to property of the business or personal property of the manager or owners that is used to secure the loan in the event that the establishment defaults on its payment obligations. Collateral only refers to real property or financial assets, not to personal guarantees by third parties.
Finance	k15a	<u>Value of collateral as percent of loan value.</u> This question gets to the relative value of the property used to secure the loan with respect to the actual value of the loan contract. If the value of the collateral pledged is greater than the value of the loan, the answer should be greater than 100%.
Finance	MNAk15a1	<u>Outstanding balance of the most recent line of credit or loan.</u> Self-explanatory
Finance	k15b	<u>Total Number of outstanding loans or lines of credit.</u> An <i>outstanding loan</i> 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	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 and line of credit not the total value of the line of credit. If a line of credit has not been used, the outstanding value of that line of credit is 0.
Finance	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	k16	<u>Apply for new loans in last year.</u> Self-explanatory
Finance	k17	<u>Reasons for not applying for loan last year.</u> Self-explanatory
Finance	k20	<u>Outcome of loan application:</u> Self-explanatory
Finance	MNAk20b	Outside equity refers to shareholders' contributions drawn from resources that were not part of the establishment.  Internal funding refers to current or past retained earnings.  Loans from relatives do not give shareholder rights.
Finance	MNAk20c	<u>Self-explanatory</u>
Finance	k21	<u>Certification of financial statements by external auditor.</u> Self-explanatory
Finance	k30	<b><u>Opinion based or sensitive</u></b>

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Business-Government Relations	MNAq31e	<i>Self-explanatory</i>
Business-Government Relations	h7a MNAj1b MNAj1c MNAj1a MNAj1b	<b><u>Opinion based or sensitive</u></b>
Business-Government Relations	j2	<i>Percent of total senior management's time.</i> Ask managers to estimate what percentage of their time senior managers spend dealing with government regulations, inspections, negotiations and other bureaucratic burden. This is time that would otherwise be spent on business matters. It should not include time spent negotiating procurement contracts with the government - only time dealing with red tape and bureaucracy.
Business-Government Relations	j3	<i>Visitations and inspections from tax inspectorate officials.</i> Self-explanatory
Business-Government Relations	j4	Self-explanatory
Business-Government Relations	j5	<b><u>Opinion based or sensitive</u></b>
Business-Government Relations	j6a	Self-explanatory
Business-Government Relations	j6	<b><u>Opinion based or sensitive</u></b>
Business-Government Relations	j7a j7b	<b><u>Opinion based or sensitive</u></b>
Business-Government Relations	j10	<i>Application for import license</i> Self-explanatory
Business-Government Relations	j11	<i>Wait for import license</i> Self-explanatory
Business-Government Relations	j12	<b><u>Opinion based or sensitive</u></b>
Business-	j13	<i>Application for operating license</i> Self-explanatory



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Government Relations		
Business-Government Relations	j14	<i>Wait for operating license</i> Self-explanatory—Includes renewals of operating licenses
Business-Government Relations	j15	<b><u>Opinion based or sensitive</u></b>
Business-Government Relations	j30a j30b	<b><u>Opinion based or sensitive</u></b>
Business-Government Relations	MNAj31b1 MNAj31b3	<i>Self-explanatory</i>
Business-Government Relations	j30c	<b><u>Opinion based or sensitive</u></b>
Business-Government Relations	MNAj31c1 MNAj31c3	<i>Self-explanatory</i>
Business-Government Relations	j30e j30f	<b><u>Opinion based or sensitive</u></b>
Business-Government Relations	MNAj31f1 MNAj31f3	<i>Self-explanatory</i>
Business-Government Relations	h30 MNAj30g	<b><u>Opinion based or sensitive</u></b>
Labor	11	<i>Number of permanent, full-time employees last complete fiscal year</i> 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 counted.
Labor	12	<i>Number of permanent, full-time employees three complete fiscal years ago.</i> See definition of <i>permanent, full-time employees</i> above.
Labor	13a (M) 13b (M)	<i>Number of permanent, full-time production workers</i> 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

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		<p>with these production operations. Employees above the working-supervisor level are excluded from this item.</p> <p><i>Number of permanent, full-time non-production workers</i> 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.</p> <p>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.</p>
Labor	<p><b>14a (M)</b> <b>14b (M)</b></p>	<p><i>Numbers of different types of permanent, full-time skilled production workers</i> 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 <i>skilled</i> 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, where they acquired knowledge directly applied in their work responsibilities. Or, a skilled worker may have learned his skills on the job.</p> <p><i>Unskilled production workers</i> 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 (excluding accountants), and other services closely associated with these production operations. Employees above the working-supervisor level are excluded from this item. Also, these workers are <i>unskilled</i> in that it is not required that they have special training, education, or skill to perform their job.</p>

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Labor	MNA14a MNA14b	<u>University degree or higher: self-explanatory</u>  <u>Secondary school degree:</u> is considered the level of education prior to university.
Labor	MNA14c MNA14d MNA14e MNA14f MNA14fx	<u>the total wage cost of an average permanent full-time employee increase:</u> including both skilled and unskilled employees
Labor	15 (S) 15a (M) 15b (M)	<u>Number of permanent, full-time workers that are female. Self-explanatory</u>  <u>Number of permanent, full-time skilled production workers that are female. Self-explanatory</u>  <u>Number of permanent, full-time unskilled production workers that are female. Self-explanatory</u>
Labor	MNA15c	<u>Self-explanatory</u>
Labor	16	<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	16a	Self-explanatory
Labor	18	<u>Average length of employment of all full-time temporary or seasonal employees</u> refers to the number of months that the worker was contracted for work that occupied employees for 40 hours or more per week. If average full-time temporary or seasonal employment was for less than one month, enumerator should write 1.
Labor	19a (M)	<u>Levels of education for average production worker. Self-explanatory</u>
Labor	19a2 (M)	<u>Levels of education for average female production worker. Self-explanatory</u>
Labor	19b (M)	“Secondary school” is considered the level of education prior to university.  <b>To be clarified on a country-by-country basis.</b>
Labor	MNA19a1 MNA19a2 MNA19a3 MNA19a4 MNA19a5	<u>Self-explanatory</u>
Labor	110	<u>Formal training</u> that has a structured and defined curriculum. Formal training may include classroom work, seminars, lectures, workshops, and audio-visual presentations and demonstrations. This does not include training to familiarize employees with equipment and machinery on the shop floor, training aimed at familiarizing

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		employees with the establishment's standard operation procedures, or employee orientation at the beginning of an employee's tenure. <i>In-house training</i> may be conducted by other non-supervisory employees of the establishment, the establishment's supervisors or managers, or the establishments training centers.
Labor	<b>I11a (M)</b> <b>I11b (M)</b>	<i>Percentage of production vs. non-production employees that were trained.</i> Self-explanatory
Labor	<b>I30a</b> <b>I30b</b>	<b><i>Opinion based or sensitive</i></b>
Business Environment	<b>m1a</b>	<b><i>Opinion based or sensitive</i></b>
Business Environment	<b>m1d</b>	<i>Coded by draw of rotation noted on p.1 of the questionnaire.</i>
Performance	<b>n2a</b> <b>n2e (M)</b> <b>n2f (M)</b> <b>n2i (S)</b> <b>n2b</b> <b>n2ra</b> <b>n2rb</b> <b>n2j (M)</b>	<p><i>Total cost of labor, including wages, salaries and benefits</i> is the total annual wages and all annual benefits, including food, transport, social security (i.e. pensions, medical insurance, and unemployment insurance).</p> <p><i>Raw materials and intermediate goods:</i> <b>(M)</b> is the cost of all inputs in the production activity. This is usually an item directly taken from the financial statements.</p> <p><i>Finished goods and materials purchased to resell:</i> <b>(S)</b> is the cost of all finished goods and materials purchased to be resold. This is usually an item directly taken from the Income Statement.</p> <p><i>Electricity</i> 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.</p> <p><i>Fuel</i> <b>(M)</b> 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.</p> <p><i>Rental cost of machinery, equipment and vehicles:</i> <i>Rental cost of land and buildings:</i> <b>(M)</b> is the rental cost if the establishment rents or lease any of the items mentioned.</p>

Section	Number	Instructions
		<i>Other costs of production not included above:</i> this should be computed as total costs of production minus the items included above.
Productivity	MNAn8a	<i>Value of the assets:</i> refers to the balance sheet total.
Productivity	n6a (M) n6b (M)	<i>Net book value</i> equals the purchase value minus depreciation.  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.
Productivity	n7a (M) n7b (M)	This question is designed to ascertain the market value of the establishment's capital, regardless of ownership You can ask the manager to estimate the market value if all of the equipment, land and buildings were purchased 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. Keep in mind that it is one of the most important questions on the questionnaire.
Control Information	a15a1ax a15a1bx a15a1cx  a15a2a a15a2b a15a2c  MNAa15a4a MNAa15a4b MNAa15a4c  a15a3a a15a3b a15c3c  a15d a15m a15y a15h a15min	<i>Self-explanatory</i>

Section	Number	Instructions
	a16  a17 a17x a18  a19h a19m	

## INNOVATION MODULE

Establishments eligible to participate in the Innovation Module are determined by their answers to Section H - Innovation and to question L.1 in the main MENA ES questionnaire. Eligible establishments should only be asked the questions that are relevant for them. Innovation module of the MENA ES 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 activities:** 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 manufacturing establishments that have at least 20 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 MENA Enterprise Survey 2012 instrument.

Section	Question/Variables	Instructions
Control information	A.0/a0	<i>Questionnaire module.</i> Self-explanatory.
Control information	A.23/a23 a23x	<i>Mode of implementation of the interview.</i> Self-explanatory.
Control information	A.14i/a14id a14im a14iy a14ih a14imin	<i>Time when Innovation Module begins.</i> Self-explanatory.
Goods and services innovation	O.1a/MNAo1a	<i>New products or services</i> as defined in H.1 above. Self-explanatory.
Goods and services	O.1b/MNAo1bx	Main new or significantly improved product or service is defined 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 products or services (if there is more than 1). Self-explanatory.
Goods and services innovation	<b>O.2/</b> <b>MNAo2a</b> <b>MNAo2b</b> <b>MNAo2c</b>	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	<b>O.3/</b> <b>MNAo3a</b> <b>MNAo3b (M)</b> <b>MNAo3c (M)</b> <b>MNAo3d (M)</b> <b>MNAo3e</b> <b>MNAo3f</b> <b>MNAo3fx</b> <b>MNAo3g (C, R)</b>	<u>Comparison of the main new of significantly improved product or service with the closest product already produced by the establishment.</u> Self-explanatory. Use Does not apply (-7) if the establishment is new and/or does not make any other product
Goods and services innovation	<b>O.4/</b> <b>MNAo4</b>	<u>Share of products or services introduced in the last three years in establishment's annual sales.</u> Self-explanatory.
Goods and services innovation	<b>O.5/</b> <b>MNAo5</b> <b>MNAo5x</b>	<u>Way in which the main new or significantly improved product or service was developed or introduced.</u> Self-explanatory.
Goods and services innovation	<b>HB.13</b>	<u>Reason for introducing the main new or significantly improved product.</u> Self-explanatory.
Goods and services innovation	<b>O.6/</b> <b>MNAo6</b>	An <b>invention</b> 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.  A <i>patent</i> protects new inventions and covers how things work, what they do, how they do it, what they are made of and how they are made. It gives the owner the right to prevent others from making, using, importing or selling the invention without permission. The invention must: <ul style="list-style-type: none"> <li>• be <b>new</b>,</li> <li>• have an <b>inventive step</b> that is not obvious to someone with knowledge and experience in the subject</li> <li>• be capable of being <b>made</b> or <b>used</b> in some kind of industry</li> <li>• <b>not</b> be: a scientific or mathematical discovery, theory or method, a literary, dramatic, musical or artistic work, a way of performing a mental act, playing a game or doing business, the presentation of information, or some computer programs, an animal or plant variety, a method of medical treatment or diagnosis or against public policy or morality.</li> </ul>



		<i>Know-how</i> is practical knowledge of how to get something done.
Goods and services innovation	<b>HB.23</b>	Self-explanatory.
Process innovation	<b>O.7/ MNAo7a MNAo7b MNAo7c</b>	<p>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.</p> <p>Production methods involve techniques, equipment and software used to produce goods or services.</p> <p>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.</p> <p>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.</p>
Process innovation	<b>O.8/ MNAo8x</b>	Self-explanatory.
Process innovation	<b>O.9/ MNAo9a MNAo9b MNAo9c</b>	A production or delivery method was new to the local market/country/international market in addition to being new to the establishment if the establishment was the only one using such production or delivery method in the local market/country/international market at the time the establishment introduced the production or delivery method.
Process innovation	<b>O.10/ MNAo10a MNAo10b MNAo10c</b>	Changes in technique, machinery and equipment, software used. Self-explanatory.
Process innovation	<b>MNAC.8</b>	Self-explanatory.
Process innovation	<b>HC.9</b>	Self-explanatory.

Process innovation	<b>O.11/ MNAo11</b>	Self-explanatory.
Process innovation	<b>HV.16</b>	Self-explanatory.
Process innovation	<b>O.12/ MNAo12</b>	Invention, patent, know-how defined as in O.6.
Process innovation	<b>O.13(M)/ MNAo13</b>	Self-explanatory.
Organizational innovation	<b>O.14/ MNAo14a MNAo14b MNAo14c MNAo14d MNAo14e MNAo14f</b>	<i>New or significantly improved organizational structures or management practices</i> as defined in H.5 above. Self-explanatory. Organizational innovations deal primarily with people and the organization of work implementation of an organizational method (in business practices, workplace organization or external relations) that has not been used before in the firm and is the result of strategic decisions taken by management.
Marketing innovation	<b>O.15/ MNAo15a MNAo15b MNAo15c MNAo15d</b>	<i>New or significantly improved marketing methods</i> as defined in H.6 above. Self-explanatory.
Innovation activity	<b>O.16/ MNAo16</b>	<i>Research and development</i> is defined as creative work undertaken on a systematic basis in order to increase the stock of knowledge. Research and development is distinguished from market research and product testing by the presence of an appreciable element of novelty. So, for example, laboratory research for a new chemical compound of paint would be R&D while market research surveys or internet surfing would not be research and development.
Innovation activity	<b>O.17/ MNAo17</b>	<i>Spending on research development in the last completed fiscal year.</i> Research and development as defined in O.16. Includes all spending related to research and development (personnel costs, materials, etc.).
Innovation activity	<b>O.18/ MNAo18</b>	Research and development as defined in O.16.
Innovation activity	<b>O.19/ MNAo19</b>	Research and development as defined in O.16.

Acquisition of external knowledge and use of computers	<b>O.20/ MNAo20</b>	<i>Acquisition of external knowledge</i> and technology may be in the form of patents, non-patented inventions, licenses, disclosures of know-how, trademarks, designs and patterns. It may also include computer services and other scientific and technical services for product and process innovation activities.
Acquisition of external knowledge and use of computers	<b>O.21/ MNAo21</b>	Self-explanatory.
Acquisition of external knowledge and use of computers	<b>O.22a/ MNAo22a</b>	<i>Percentage of establishment's employees regularly using personal computers (PCs) in their jobs.</i> 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	<b>O.22b/ MNAo22b</b>	<i>Percentage of establishment's employees that regularly used personal computers (PCs) in their jobs three years ago.</i> As in O.22a.
Protection of innovation	<b>O.23a/ MNAo23a</b>	Patent is defined in O.6
Protection of innovation	<b>O.23b/ MNAo23b</b>	Patent as defined in O.6 <i>Trademark</i> 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	<b>O.23c/ MNAo23c</b>	Self-explanatory.
Protection of innovation	<b>O.23d/ MNAo23d</b>	Self-explanatory. Re-registration of a trademark counts as being granted a trademark again.
Management practices	<b>R.1(M)/ MNAr1</b>	<i>Dealing with a process problem.</i> The question refers to the timing and frequency of process improvements in response to process problems, such as machinery break-down, human errors or failures in communication. Answer that best describes the management practices in the establishment should be chosen. Use Does not apply (-7) if there were no problems in the production process in the last complete fiscal year.
Management practices	<b>R.2(M)/ MNAr2</b>	<i>Number of production performance indicators monitored in the establishment.</i> 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, sulfur dioxide in thousand tons per year, nitrogen oxides in thousand tons per year, total energy use and energy intensity, total water used, hazardous/dangerous waste generated, non-hazardous/non-dangerous waste generated, number of production related incidents, etc.
Management practices	<b>R.6(M)/ MNAr6</b>	<u>Timescale of the establishment's production targets.</u> The purpose of the question is to find out whether short-term or long-term goals are the focus of the company and the relationship between the short-term and long-term production targets. Production targets can be defined in terms of units of products produced, percentage of products with errors etc. Answer that best describes the management practices in the establishment should be chosen. The main product is defined in terms of sales in monetary value not volume.
Management practices	<b>R.7(M)/ MNAr7</b>	<u>Assessment of the establishment's production targets.</u> The purpose of the question is to assess how demanding are the establishment's production targets. Answer that best describes the management practices in the establishment should be chosen.
Management practices	<b>R.8(M)/ MNAr8</b>	By <u>managers</u> we mean people who have responsibility for pay and promotion for at least one other employee. This excludes shift supervisors. Production targets as defined in MNAr6.
Management practices	<b>R.11(M)/ MNAr11</b>	<u>Performance bonus</u> is a form of payment to employees, which is related to the performance output of an employee. By <u>managers</u> we mean people who have responsibility for pay and promotion for at least one other employee. This excludes shift supervisors. Targets include any targets: production targets, sales targets, firm's stock price, etc.
Management practices	<b>R.13(M)/ MNAr13</b>	<u>Performance bonus</u> is a form of payment to employees, which is related to the performance output of an employee. By <u>non-managers</u> we mean employees excluding managers as defined in MNAr11. Use Does not apply (-7) if no promotions of non-managers in the last complete fiscal year.
Management practices	<b>R.15(M)/ MNAr15</b>	The purpose of this question is to find out what happens to employees who do not meet expectations in their position. Answer that best describes the management practices in the establishment should be chosen. Use Does not apply (-7) if no under-performing non-managers in the last complete fiscal year.
Control information	<b>A.15i/ a15id a15im a15iy a15ih a15imin</b>	Time Innovation Module ends. Self-explanatory.

Control information	<b>A.24/ a24</b>	Self-explanatory.
Control information	<b>A.15a/ a15a1dx a15a2d MNAa15a4d A15a3d</b>	Self-explanatory.