ENTERPRISE AND SKILLS SURVEY 2017

Observatório do Mercado de Trabalho Nacional
This report has been produced by the National Directorate of Labour Market Information, Secretariat of State for Youth and Labour, with technical support from the Australian Government-funded Workforce Development Program Timor-Leste

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ABBREVIATIONS AND ACRONYMS

BAS  Business Activity Survey
DNIMT Diresaun Nasionál ba Informasaun Merkadu Traballu (the National Directorate of Labour Market Information).
ESS  Enterprise and Skills Survey
IADE Instituto de Apoio ao Desenvolvimento Empresarial (Institute for Business Development Support)
ISIC International Standard Industrial Classification
NEC Not Elsewhere Classified
SEJT Sekretaria de Estadu ba Juventude no Traballu (Secretariat of State of Youth and Labour)
SERVE, IP Serviço de Registo e Verificação Empresarial, Instituto Públiku (Service for Registration and Verification of Entrepreneurs, Public Institute)
TVET Technical Vocational Education and Training
WDPTL Workforce Development Program Timor-Leste
PREFACE

The Secretariat of State for Youth and Labour (SEJT), through the National Directorate of Labour Market Information (DNIMT) is pleased to present the 2017 Enterprise and Skills Survey (ESS 2017). The main objective of the ESS is to identify skills demanded by the enterprises and industries in the labour market of Timor-Leste. The 2017 ESS field data collection was conducted by researchers from the National Directorate of Labour Market Information, over a period of three months from June to August 2017.

This report builds on the Enterprise and Skills Survey of 2016. The data and main indicators are generally comparable and aim to construct time-series data that can be analysed over an extended period. Indicators such as employers, employees, vacancies, future recruitments, hard-to-fill vacancies, monthly salary, workers training, and other information are reported in the same format as the ESS 2016.

The report shows that the three main economic sectors that employed more workers were construction; wholesale and retail trade, repair of motor vehicles and motorcycles; and accommodation and food services.

SEJT will continue to disseminate the results of the ESS to the public and other relevant stakeholders. Through DNIMT there will be local briefings and we will seek your input in developing effective employment and training policies to build our workforce. As always, SEJT would like to thank all the businesses and other stakeholders that participated in this survey. I would also like to thank the Ministry of Planning and Finance through the General Directorate for Revenue and General Directorate for Statistics and Institute for Business Development Support (IADE) and SERVE, IP for contributing to the survey. On-going cooperation in the future will be vital to improving the accuracy of the survey.

Finally, I would also like to thank the Australian Government-funded Workforce Development Project Timor-Leste (WDPTL) for the technical support provided for the implementation of this survey.

Nívio Leite Magalhães
Secretary of State for Youth and Labour
EXECUTIVE SUMMARY

This 2017 update to the 2016 Enterprise and Skills Survey helps us understand how the labour market in Timor-Leste is developing over time. It is based on a multi-stage stratified sample of enterprises, with extrapolation based on the total number of registered business in the country. The field research was carried out by SEJT staff between June and August 2017, using tablets to administer the survey.

The 2017 Enterprise and Skills Survey (ESS) is presented as an update of the 2016 ESS, and highlights the changes observed since the previous ESS. This shorter report, should be read in conjunction with the 2016 Enterprise and Skills Survey which is available by email from jeniferantoniopui@gmail.com

Enterprise and employee profiles

The survey results show a modest growth in enterprises and about 3.7% growth in employment from January 2016 to October 2017. There were 5,229 enterprises in operations in the business sector of the economy, engaging a total of 68,256 employees. Though 58% were micro enterprises with less than 10 workers, there is a trend towards larger enterprises, with average number of employees growing from 12.6% to 13.1%. The data suggests a slight decrease in foreign ownership, but as the results were not statistically significant, they are not presented here.

<table>
<thead>
<tr>
<th>Total number of enterprises</th>
<th>Total number of employees</th>
<th>Micro enterprises (&lt;10 employees)</th>
<th>Enterprises located in Dili</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,229</td>
<td>68,256</td>
<td>58%</td>
<td>60%</td>
</tr>
</tbody>
</table>

Two branches of economic activity continued to dominate the business sector in Timor-Leste. More than one-third of enterprises were either in construction or in wholesale and retail trade, repair of motor vehicles and motorcycles.

Construction continues to dominate the economy, with a slight rise in proportion of enterprises in the sector from 35% to 38%. Wholesale and retail trade, repair of motor vehicles and motorcycles dropped from 31% to 25%, while accommodation and food rose from 13% to 18%.

Note that as this is an enterprise focused survey, it does not capture subsistence farmers or ‘own account’ workers, a substantial proportion of the labour force in Timor-Leste.
Location of enterprises

<table>
<thead>
<tr>
<th></th>
<th>2016 Enterprises</th>
<th>2016 Employees</th>
<th>2017 Enterprises</th>
<th>2017 Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dili</td>
<td>74%</td>
<td>84%</td>
<td>60%</td>
<td>69%</td>
</tr>
<tr>
<td>Municipalities</td>
<td>24%</td>
<td>16%</td>
<td>40%</td>
<td>31%</td>
</tr>
</tbody>
</table>

The data suggest a sharp shift of business and employment from Dili to the municipalities (though expected hiring in 2018 is predominantly in Dili). This may reflect the dominance of the construction sector providing employment outside of Dili. The survey team also experienced relatively lower response rates in Dili, which may skew the data in favour of the municipalities.

<table>
<thead>
<tr>
<th>Total number of employees</th>
<th>Female employees</th>
<th>Foreign employees</th>
<th>Temporary employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>68,256</td>
<td>16,428</td>
<td>6,465</td>
<td>Not asked in 2017</td>
</tr>
<tr>
<td>100%</td>
<td>24%</td>
<td>9%</td>
<td></td>
</tr>
</tbody>
</table>

Female participation in the labour force remains low, with less than a quarter of jobs held by women. There was an increase in foreign employment of about 800 jobs, though there is only a very weak correlation between rising wages in occupational groups and foreign hires.

The size of enterprises is growing, and there is a positive outlook with many enterprises expecting to increase hiring in 2018. About two-thirds of employment growth comes from growth of existing firms, which suggests that support to enterprises to grow and expand should not be ignored in favour of creating new enterprises, though this is also important.

Employees enjoyed on average a 10% increase in wages in 2017, to USD 256, whereas average wages had remained static since 2014.

Conducting the survey

SEJT is developing a system to conduct an update of the ESS on an annual basis, using tablets for data collection to improve the accuracy and speed of data collection. Several challenges persist in conducting this survey, such as getting base data from other government agencies (in particular SERVE, IP and Taxa Impostu) to construct an accurate sampling framework, difficulty in locating enterprises, the stop-start nature of many enterprises during the year, and insufficient financial and human resources to conduct the field work and subsequent analysis.
1. INTRODUCTION

The 2017 Enterprise and Skills Survey builds on the ESS of 2009, 2014 (January and October), and 2016. The 2017 ESS serves as an update of the 2016 ESS. In general, this report will only highlight differences observed in the data, along with some interpretation of the changes.

The main purpose of the Enterprise and Skills Survey (ESS) is to measure the evolution of labour demand and skill needs across different sectors of the economy. The data provide crucial information for policy formulation and development of the education system and in particular the vocational training programmes of the country. In addition, the survey provides information on vacancies and recruitment and separation patterns in key occupations as well as the future demand for labour in different occupations and branches of economic activity.

As with any sample-based survey, the data presented here are extrapolated from the survey data, and as such are estimates of the real situation plus or minus margins of error. See (p 29) for further detail. In some cases, low response rates have led to small sample sizes, so care must be taken in extrapolating from them. Also, the poor quality of data obtained from other government departments on the number of registered enterprises, reduces the accuracy of the sample taken.

DNMIT plans to conduct updates to the ESS each year, with major review every five years. To reduce the time and cost in administering the survey, a maximum of 6 municipalities outside Dili will be surveyed each year on a rolling basis to provide sample data for Outside Dili. The use of tablets and the QuickTap survey software will also help streamline this process.
2. ENTERPRISE AND EMPLOYEE PROFILES

This section looks at the number, distribution, size and employee profiles of enterprises registered with SERVE, IP.

Years of registration of enterprise

The ESS 2017 survey estimates 3,870 new business registered (a significant increase on 2,463 in 2016), which correspond to about 6% of all business in operation currently.

The bars in the graph below shows the percentage of active business registered by year on the left-hand scale, and the line represents the cumulative registrations to date on the right-hand scale.

The big year-on-year fluctuations suggest a ‘boom and bust’ business cycle in Timor-Leste.

Timorese and foreign ownership

The survey does not demonstrate a significant change in patterns of ownership by Timorese or foreigners between 2016 and 2017. There is a rise in “Ownership not specified” in 2017 to 10%, so direct comparisons with 2016 are difficult to make.
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**Timorese and foreign ownership**

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**Location and size of enterprise**

3a. Enterprises by location

3b. Employees by location

It is encouraging to see more balanced growth across the country, with the number of enterprises outside of Dili rising by about 50% and the associated employment by about 100%.

Nonetheless, 69% of employment remains in Dili, which only accounts for 22% of the population\(^1\).

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\(^1\) Population and Housing Census 2015, Preliminary Results
Enterprises and employees by size of enterprise

Overall there appears to be a shift to more employment in larger enterprises, which may be a sign of the business environment in Timor-Leste maturing.

In 2017, 28% of enterprises had 15 or more employees, accounting for 71% of all employment.

By comparison, in 2016 13% of enterprises had 15 or more employees, accounting for 56% of all employment.
**Branch of economic activity**

The diagram below suggests growth in the manufacturing, accommodation and food service, and to a lesser extent in construction.

**Occupation, sex and foreign and local employees**

There are no significant changes in the spread across occupational categories compared to 2016.

The table below shows the percentage breakdown across occupational categories (eg 9% of all employees were managers, and 12% of female employees were managers). Each category (total, female and Timorese) totals to 100% across all occupations.
For each occupation category, the table below shows how many are estimated to be foreigners (eg 24% of all managers). Hence the total across all occupations does not equal to 100%.

The data suggest a small percentage increase in foreign employees, plus the overall growth in employment means the number of foreign employees has grown by about 800 to a total of 6,465 (representing 9% of the total workforce).
The large reported increase in Craft and related trade workers (from 12% to 32% in 2017) is hard to explain. If many employees have been incorrectly included in this classification, it will also skew the other data, resulting in an under-estimation of other categories. The classification of occupations by enumerators who carried out the survey may need to be re-examined to ensure accuracy.

**Average wages of employees**

The average wages of employees have risen by 10% from USD 233 to USD 256 per month in 2017, having remained static since 2014.

![Average monthly wage in USD by occupational category: ESS 2017 and ESS 2016](chart)

There is a large increase in reported wages for Professionals (65%), Sales and Service workers (44%) and Managers (19%). Part of this is related to a few outliers in the data of individuals with very high reported salaries.

Note also that the average wages reported for managers dipped in January 2016 to US$ 452 and in 2017 has returned to the same level of USD 540 reported in October 2014.

The increase in Craft and Related Trades Workers may reflect misclassification in that category as discussed above.

There is a weak correlation ($R^2 = 0.11$) between the increase in foreign workers and wages by occupational group. Removing ‘Craft and related trade workers’, an outlier which may be a result of poor data classification, would further weaken this correlation.
The image presents a scatter plot titled "Correlation between Foreign Employment and Wage Levels." The graph shows the percentage change in wages on the y-axis and the percentage change in foreign employment on the x-axis. Various occupational categories are plotted on the graph, each represented by a diamond marker. The categories include Managers, Professionals, Service and sale workers, Elementary occupations, Associate professionals, Skilled agriculture, forestry and fishing, Plant and machine operators and..., Clerical support workers, Craft and related trade workers. The coefficient of determination, $R^2 = 0.1136$, is indicated on the graph.
3. VACANCIES AND HIRING PRACTICES

Vacancies

Construction (60%) and retail (22%) continue to dominate the sectors with reported vacancies.

The top occupations in demand remain broadly the same, with the inclusion of Human Resource Manager and Administrative and Executive Secretaries being included in the top occupations, perhaps reflecting the increased size of enterprises as noted above.

<table>
<thead>
<tr>
<th>ISCO-08</th>
<th>ISCO description</th>
<th>Number of enterprises with vacancies</th>
<th>Number of vacancies</th>
<th>Number of employee jobs</th>
<th>Vacancy ratio per 100 employee jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>9313</td>
<td>Building construction labourers</td>
<td>168</td>
<td>1344</td>
<td>11433</td>
<td>12</td>
</tr>
<tr>
<td>8342</td>
<td>Earthmoving and related plant operation</td>
<td>106</td>
<td>924</td>
<td>238</td>
<td>388</td>
</tr>
<tr>
<td>5221</td>
<td>Shop keepers</td>
<td>21</td>
<td>450</td>
<td>817</td>
<td>55</td>
</tr>
<tr>
<td>5230</td>
<td>Cashiers and ticket clerks</td>
<td>90</td>
<td>315</td>
<td>510</td>
<td>62</td>
</tr>
<tr>
<td>8332</td>
<td>Truck and Lorry driver</td>
<td>45</td>
<td>315</td>
<td>204</td>
<td>154</td>
</tr>
<tr>
<td>9312</td>
<td>Civil Engineering labourers</td>
<td>252</td>
<td>252</td>
<td>1361</td>
<td>19</td>
</tr>
<tr>
<td>5223</td>
<td>Shop sales assistants</td>
<td>135</td>
<td>180</td>
<td>12351</td>
<td>1</td>
</tr>
<tr>
<td>5120</td>
<td>Cook</td>
<td>106</td>
<td>148</td>
<td>1055</td>
<td>14</td>
</tr>
<tr>
<td>4311</td>
<td>Accounting and bookkeeping clerks</td>
<td>80</td>
<td>80</td>
<td>8438</td>
<td>1</td>
</tr>
<tr>
<td>7231</td>
<td>Motor and bookkeeping mechanics</td>
<td>64</td>
<td>64</td>
<td>5444</td>
<td>1</td>
</tr>
<tr>
<td>5414</td>
<td>Security Guards</td>
<td>40</td>
<td>60</td>
<td>1021</td>
<td>6</td>
</tr>
<tr>
<td>7127</td>
<td>A/C and refrigeration mechanics</td>
<td>40</td>
<td>40</td>
<td>476</td>
<td>8</td>
</tr>
<tr>
<td>7115</td>
<td>Carpenter and Joiners</td>
<td>27</td>
<td>36</td>
<td>170</td>
<td>21</td>
</tr>
<tr>
<td>3343</td>
<td>Administrative and Executive Secretaries</td>
<td>20</td>
<td>20</td>
<td>170</td>
<td>12</td>
</tr>
<tr>
<td>1212</td>
<td>Human Resource Manager</td>
<td>20</td>
<td>20</td>
<td>34</td>
<td>59</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1232</strong></td>
<td><strong>4266</strong></td>
<td><strong>68256</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

Hard-to-fill vacancies

Three of the top five remain the same as 2016, with the addition of Earth Moving Operators and Air Conditioning Mechanics in 2017, replacing Cooks and Travel Guides from 2016.
The number of new hires in 2017 reflects the dominance of the construction and retail sectors noted above.

<table>
<thead>
<tr>
<th>Top Five Occupations with the Highest Number of Hiring in 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil engineering labourers</td>
</tr>
<tr>
<td>Shop sales assistants</td>
</tr>
<tr>
<td>Earthmoving and related plant operators</td>
</tr>
<tr>
<td>Building frame and related trades workers not elsewhere classified</td>
</tr>
<tr>
<td>Shop keepers</td>
</tr>
</tbody>
</table>

The demand for these skills is reflected in both the hard-to-fill vacancies and the hiring of foreign workers. Occupations with the highest number of hiring of foreign workers are:

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil engineers</td>
<td>168</td>
</tr>
<tr>
<td>Earthmoving and related plant operators</td>
<td>84</td>
</tr>
<tr>
<td>Motor vehicle mechanics and repairers</td>
<td>16</td>
</tr>
</tbody>
</table>
**Separations**

The survey results show that there were in total 6210 separations involving 2717 enterprises in 2017. The comparison of this result with the total number of newly recruited in 2017 (6447) indicates an excess of hiring over separation, however lower than the previous year.

<table>
<thead>
<tr>
<th>Total number of recruited in 2017</th>
<th>6447 employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of separations in 2017</td>
<td>6210 employees</td>
</tr>
<tr>
<td>Net increase</td>
<td>237 employees</td>
</tr>
</tbody>
</table>

The diagram below shows the top five occupations with the highest number of separations in 2017. The occupation with the highest number of separations in 2017 was house builder (1329 separations). This high rate of separation is likely due to the temporary and short-term nature of construction projects. Other occupations with high rates of separation include shop keepers (1125), shop sale assistant (945), civil engineers (588) and building construction labourers (252). It is important to note that almost half of these are construction related occupations.

![Top five occupations with the highest number of separation in 2017](image)
4. SKILL GAPS AND TRAINING NEEDS

Skills gaps

Employers were asked to specify the occupations (up to five) in which they found their employees not performing at the required level. Most skills gaps were reported to be in the dominant sectors of construction, retail, and automotive.

<table>
<thead>
<tr>
<th>Occupations with Reported Skill Gaps</th>
<th>Number of Enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building construction labourers</td>
<td></td>
</tr>
<tr>
<td>Shop sales assistants</td>
<td></td>
</tr>
<tr>
<td>Motor vehicle mechanics and repairers</td>
<td></td>
</tr>
<tr>
<td>Civil engineering labourers</td>
<td></td>
</tr>
<tr>
<td>Sales workers not elsewhere classified</td>
<td></td>
</tr>
<tr>
<td>Waiters, Waitresses and Bartenders</td>
<td></td>
</tr>
<tr>
<td>Heavy truck and lorry drivers</td>
<td></td>
</tr>
<tr>
<td>cooks</td>
<td></td>
</tr>
<tr>
<td>Finance and Sales Associate Professionals n.e.c</td>
<td></td>
</tr>
<tr>
<td>Shop keepers</td>
<td></td>
</tr>
<tr>
<td>Security guards</td>
<td></td>
</tr>
<tr>
<td>Car, Taxi, and Van Drivers</td>
<td></td>
</tr>
<tr>
<td>Business services and administration managers n.e.c</td>
<td></td>
</tr>
<tr>
<td>Construction supervisors</td>
<td></td>
</tr>
<tr>
<td>Earthmoving and related plant operators</td>
<td></td>
</tr>
<tr>
<td>Carpenters and Joiners</td>
<td></td>
</tr>
<tr>
<td>Bakers, Pastry-cooks and confectionery makers</td>
<td></td>
</tr>
<tr>
<td>Cleaners and Helpers in Offices, Hotels and Other...</td>
<td></td>
</tr>
<tr>
<td>Air conditioning and refrigeration mechanics</td>
<td></td>
</tr>
<tr>
<td>Cashier and Ticket Clerks</td>
<td></td>
</tr>
<tr>
<td>Hairdressers</td>
<td></td>
</tr>
<tr>
<td>Tailors, dressmakers, furriers and hatters</td>
<td></td>
</tr>
</tbody>
</table>

Note 1: n.e.c = not elsewhere classified

Training needs

The top occupation with reported training needs is accounting and bookkeeping involving 273 employees, followed by civil engineering labourers (252 employees), shop sales assistants (90), cook (85) and construction managers (84). It is important to note that accounting and bookkeeping have been reported in the top five occupations with training needs since 2016.
4. SKILL GAPS AND TRAINING NEEDS

Skills gaps

Employers were asked to specify the occupations (up to five) in which they found their employees not performing at the required level. Most skills gaps were reported to be in the dominant sectors of construction, retail, and automotive.

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**Direct recruitment from training providers**

The chart below shows those occupations where enterprises reported recruiting directly from TVET providers. It shows that enterprises are most likely to recruit directly for construction and masonry. This is followed by automotive, AC repairer, electrical, and welding. This is a significant change of demand in comparison to ESS 2016 where the most recruited area from TVET providers was electrical.
5. Hiring Intentions and Job Flows

Hiring intentions

The survey results show that around 83.6% or 4372 out of 5229 enterprises expect to maintain their current number of staff in the next 12 months. Only 837 enterprises (16%) expect to increase the number of workers, while a small number of enterprises (0.4%) expect that the number of workers in their enterprises will decrease. Similar analysis can be done for each breakdown by branch of economic activities and size of enterprises.

| Index of rate of change of labour demand of the business sector in the next 12 months by location, branch of economic activity and size of enterprises |
|---|---|---|---|---|---|
| Location | Total | X | P+ | P- | I |
| Dili | 3287 | 713 | 2556 | 18 | 21.7% | 0.5% | 21.1% |
| Other Municipalities | 1942 | 124 | 1816 | 2 | 6.4% | 0.1% | 6.3% |
| Branch of Economic Activity | 5229 | 837 | 4372 | 20 | 16% | 0% | 15.6% |
| Accommodation | 828 | 18 | 809 | 1 | 2% | 0% | 2% |
| Automotive | 274 | 12 | 261 | 1 | 4% | 0% | 4% |
| Construction | 1545 | 73 | 1466 | 6 | 5% | 0% | 4.3% |
| Manufacture and other industrial activities | 203 | 52 | 147 | 4 | 25% | 2% | 23.5% |
| Other services | 576 | 27 | 547 | 2 | 5% | 0% | 4.3% |
| Wholesale, resale services and automotive | 1230 | 82 | 1142 | 6 | 7% | 0% | 6.2% |
| Size of enterprise | 5229 | 837 | 4372 | 20 | 16% | 0% | 15.6% |
| 1 to 4 workers | 1220 | 86 | 1131 | 3 | 7% | 0% | 6.8% |
| 5 to 9 workers | 1220 | 234 | 981 | 5 | 19% | 0% | 18.8% |
| 10 to 14 workers | 598 | 99 | 497 | 2 | 16% | 0% | 16.2% |
| 15 to 24 workers | 598 | 186 | 410 | 1 | 31% | 0% | 31.0% |
| 25 to 49 workers | 374 | 37 | 336 | 1 | 10% | 0% | 9.6% |
| 50 + workers | 199 | 112 | 87 | 1 | 56% | 1% | 55.5% |
| Not Specified | 1021 | 84 | 930 | 7 | 8% | 1% | 7.5% |
The level of business confidence overall in Timor-Leste remains similar to 2016, with only a minor drop in expected change in number of employees (growth in employment dropping from 9.4% to 8.5%).

However, while 2017 data showed more growth outside Dili in 2017, it appears that growth in employment in 2018 will again be more concentrated in Dili (to grow by 11% in 2018), with little or no growth in employment expected outside the capital. The areas with the greatest level of expected growth are 23% for ‘other services’ and 11% for construction.

The employment growth coming from SMEs has dropped somewhat with enterprises of 10 to 24 workers providing 40% of new jobs (down from 58% in 2016). The major shift however is in the shift from job creation by micro enterprises (now less than 1% compared to 34% in 2016) to large enterprises now creating over 55% of new jobs compared to 1% in 2016.

While this is skewed by the small number of business with over 50 employees, and a few investment projects, the fall in new employment by micro-enterprises suggests that the economy is becoming more developed.
Medium for advertising job vacancies

The graph below shows the way in which enterprises are advertising their vacancies. It is important to note that the comparison among the bars is made within the location (i.e. Dili, blue colour) rather than between locations (i.e. Dili versus Other Municipalities, different colours). Moreover, it is important to clarify that, *never published* refers to enterprises that did not publish job vacancies but advertised and recruited through “word-of-mouth”, among friends and other relationship networks. The graph shows that, 73% of vacancies are never advertised compare to other channels of advertisements in Dili. Similar trend also occurs in other municipalities where 58% of vacancies are never published.

Job flows

<table>
<thead>
<tr>
<th>Job creations and job destruction</th>
<th>ESS 2016</th>
<th>ESS 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job creation</td>
<td>9279</td>
<td>10126</td>
</tr>
<tr>
<td>Opening Enterprises</td>
<td>193</td>
<td>296</td>
</tr>
<tr>
<td>Opening Enterprises with jobs</td>
<td>1564</td>
<td>3870</td>
</tr>
<tr>
<td>Recruiting enterprises in the preceding years</td>
<td>1188</td>
<td>700</td>
</tr>
<tr>
<td>(2015 &amp; 2016, respectively)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recruiting enterprises in the preceding years</td>
<td>7715</td>
<td>6256</td>
</tr>
<tr>
<td>with jobs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Destruction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contracting enterprises</td>
<td>701</td>
<td>1045</td>
</tr>
<tr>
<td>Contracting enterprises with job separation</td>
<td>4640</td>
<td>6204</td>
</tr>
<tr>
<td>(leavers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Employment Growth</td>
<td>4639</td>
<td>3922</td>
</tr>
<tr>
<td></td>
<td>(10126-6204)</td>
<td></td>
</tr>
<tr>
<td>Growth rate of Employment</td>
<td>7.0%</td>
<td>5.7%</td>
</tr>
<tr>
<td></td>
<td>(4639/65853)</td>
<td>(3922/68256)</td>
</tr>
</tbody>
</table>
The ESS contains two distinct measures of employment growth. The first (question B.1) is extrapolated from the responses about total number hired. This indicates that there has been growth of 2,403 jobs (68,256 in 2017 less 65,853 in 2016).

A second question (C.7) asks how many new staff have been employed by existing businesses (6,256) and how many staff have been employed by new businesses (3,870) giving a total of new jobs of 10,126.

In the same period, enterprises surveyed said they let 6,256 employees go, resulting in a net increase in employment of 3,922 (10,126 – 6,256).

Since there are contracting enterprises whose separation is higher than hiring, it can be assumed that the number of jobs lost by these businesses is approximately 1,519 (3,922 – 2,403).

| Employment growth from new enterprises | 3,870 | 38% |
| Employment growth from enterprise growth | 6,256 | 62% |
| Gross employment growth (new jobs) | 10,126 |

This shows that two-thirds of employment growth comes from enterprise growth. Assuming that, in general, expanding an existing business requires fewer supports than creating a new business, and that the employment growth of from existing business is twice that of new business, the policy response should be to invest more heavily in growing existing business.

This is not to suggest that new business should not be encouraged. While employment growth is typically small in the early years of a business, these are the business that will provide growth in future years.
6. CONCLUSIONS AND RECOMMENDATIONS

There are some signs the enterprise environment, and thus the labour market, are maturing: size of businesses is increasing, wages have increased, two-thirds of employment growth coming from existing enterprises growing, as well as indications of more economic growth outside the capital Dili.

However, a high level of volatility persists in the market, suggesting a boom-and-bust business cycle. Many enterprises operate more like contractors rather than as established business, hiring staff when they win a contract and letting them go on its completion. This is particularly evident in construction related occupation, demonstrating high rates of new hiring as well as separations. These factors increase overheads for employers and make it difficult for employees to develop their skills through on-the-job experience. While support to creating new businesses is important, measures to support and develop existing enterprises should be not be overlooked.

Data show growth in business outside Dili in 2017, but enterprises expect growth in 2018 to be mainly in the capital. Public works contracts outside Dili generate a significant amount of employment. The Government should consider how reliable and successful contractors outside Dili can be supported in the boom-and-bust business cycle to become more stable and durable businesses.

The ESS indicates no change in the number of female workers employed, which remains at 24%, and new initiatives may be needed to increase the number of women in the workforce.

There has been a small increase in foreign employment, particularly among managers and professionals, and Timorese workers should be supported to improve these skills. Accounting and book keeping is among the hardest to fill vacancy, and this should be addressed as a priority given the critical nature of this skill for the survival, growth and profitability of any enterprise.

Top skills in demand and hard to fill vacancies are:

- Civil engineering labourers
- Shop sales assistants
- Earthmoving and related plant operators
- Other building workers
- Shop keepers
- Accounting and bookkeeping clerks
- Motor vehicle mechanics and repairers
- Air conditioning and refrigeration mechanics
These are principally occupations with vocational training needs. DNIMT will analyse the demand for skills and working with Training Providers to help them adjust their course offering to ensure that the TVET is responding to the market demand. The education system in Timor-Leste, at all levels (Secondary, Vocational, Technical Schools and University) must be better focused on the demand for skills in the marketplace, and on providing skills development that meets these needs.

**Conducting the Enterprise and Skills Survey**

An annual ESS provides important time-series data on developments in the labour market. As DNIMT develops mechanisms to link the supply of skills to the demand for skills, the evidence gathered from the ESS become more important. Conducting a nationwide ESS is a significant undertaking, and the following recommendations can help streamline the process, reduce the costs, as well as improving the quality of the data.

**Recommendations**

1. Get better data to establish enterprise population (from Taxa Impostu and/or SERVE, IP). This data needs to be in an accessible format (such as Excel), be timely, complete and ideally with correct ISIC (International Standard Industrial Classification) coding.
2. Train staff in Sentru Empregu in Municipalities to conduct surveys using tables, to reduce costs and travel, and simplify logistics.
3. Sample outside Dili in 4 or 6 of the other municipalities each year, on a rotating basis, to reduce costs and simplify data collection outside Dili.
4. Consider creating a panel of enterprises to survey, due to the difficulty in locating and contacting some of the enterprises in the sample.
5. Use geo-location feature on tables to identify location of enterprises to facilitate follow on surveys.
6. Document and standardise process of conducting survey to improve comparability between years. By following this each year, the methodology and questionnaire section will not be needed in the updates.
7. Follow model of providing updates to ESS every year, with full ESS (with donor support) every 5 years.
ANNEX A: SURVEY METHODOLOGY AND DATA

This section describes the sample design and the questionnaire design and includes descriptions of the field operations and data processing. It also provides information on the data quality including non-response, and non-coverage rates and the sampling errors of the estimates.

Sample design

In comparison with the ESS 2016, the sampling frames for 2017 were combined by sectors rather than branch of economic activity. This is due to the limited information on categorisation of the data by branch of economic activities.

The sampling frame was the list of enterprises from three different sources (institutions). First, TAXA IMPOSTU contained the name and address of 5799 enterprises, including telephone number, type of enterprise, and sector. The second sampling frame was the list of enterprises in the target sectors registered with the Instituto de Apoio ao Desenvolvimento Empresarial (IADE). It contained the name and address of 1055 enterprises, including telephone number, sector and description of activity. The final sampling frame was the list of enterprises from SERVE, IP, which contained 166 enterprises.

The list of enterprises from the three different sampling frames were combined and sorted by sector and location are shown in the following tables.

The sampling frames by sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>Sampling Frame (TAXA IMPOSTU, IADE, &amp; SERVE, IP)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>Total</td>
<td>7020</td>
</tr>
<tr>
<td>1</td>
<td>Construction</td>
</tr>
<tr>
<td>2</td>
<td>Automotive</td>
</tr>
<tr>
<td>3</td>
<td>Accommodation and food services activities</td>
</tr>
<tr>
<td>4</td>
<td>Manufacturing, other industrial activities</td>
</tr>
<tr>
<td>5</td>
<td>Wholesale, resale services and automotive</td>
</tr>
<tr>
<td>6</td>
<td>Other services</td>
</tr>
</tbody>
</table>

The frame concentrates on four sectors making up more than 96% of the total: construction (45%); wholesale, retail trade and automotive (28%), other services (15 %), accommodation

Note: Refer to ESS 2016 for main concepts and definitions.
and food services (8%). The last two sectors covered only 4 per cent: manufacturing, other industrial activities (2%), and automotive (2%).

The two sampling frames by district

<table>
<thead>
<tr>
<th>Location</th>
<th>Sample Frame (TAXA IMPOSTU, IADE, &amp; SERVE, IP)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>Total</td>
<td>7020</td>
</tr>
<tr>
<td>1</td>
<td>Dili</td>
</tr>
<tr>
<td>2</td>
<td>Baucau</td>
</tr>
<tr>
<td>3</td>
<td>Oecusse</td>
</tr>
<tr>
<td>4</td>
<td>Bobonaro</td>
</tr>
<tr>
<td>5</td>
<td>Liquica</td>
</tr>
<tr>
<td>6</td>
<td>Lautem</td>
</tr>
<tr>
<td>7</td>
<td>Manatuto</td>
</tr>
<tr>
<td>8</td>
<td>Manufahi</td>
</tr>
<tr>
<td>9</td>
<td>Viqueque</td>
</tr>
<tr>
<td>10</td>
<td>Covalima</td>
</tr>
<tr>
<td>11</td>
<td>Ainaro</td>
</tr>
<tr>
<td>12</td>
<td>Ermera</td>
</tr>
<tr>
<td>13</td>
<td>Aileu</td>
</tr>
<tr>
<td>Not specified</td>
<td></td>
</tr>
</tbody>
</table>

The sampling frames were stratified into two geographical areas (Dili and Other municipalities) and six broad sectors of activity: Construction (ISIC Rev 4 two-digit codes 41-43), Automotive (ISIC Rev 4 two-digit code 45); Accommodation and food services (ISIC Rev 4 two-digit codes 55-56), Manufacturing and other industrial activities (ISIC Rev 4 two-digit codes 06-38); Wholesale and retail services excluding automotive (ISIC Rev 4 two-digit codes 46-47) and Other services (ISIC Rev 4 two-digit codes 49-53 and 58-99).

Sample allocation among strata

<table>
<thead>
<tr>
<th>Sector</th>
<th>Location</th>
<th>TAXA, IADE, &amp; SERVE, IP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>7020</td>
</tr>
<tr>
<td>1 Construction</td>
<td>Dili</td>
<td>1262</td>
</tr>
<tr>
<td>2 Construction</td>
<td>Other</td>
<td>1862</td>
</tr>
<tr>
<td>3 Automotive</td>
<td>Dili</td>
<td>54</td>
</tr>
<tr>
<td>4 Automotive</td>
<td>Other</td>
<td>59</td>
</tr>
<tr>
<td>5 Accommodation, food services</td>
<td>Dili</td>
<td>462</td>
</tr>
<tr>
<td>6 Accommodation, food services</td>
<td>Other</td>
<td>119</td>
</tr>
<tr>
<td>7 Manufacturing, other industrial activities</td>
<td>Dili</td>
<td>170</td>
</tr>
<tr>
<td>8 Manufacturing, other industrial activities</td>
<td>Other</td>
<td>24</td>
</tr>
<tr>
<td>9 Wholesale, retail services no automotive</td>
<td>Dili</td>
<td>1639</td>
</tr>
<tr>
<td>10 Wholesale, retail services no automotive</td>
<td>Other</td>
<td>327</td>
</tr>
</tbody>
</table>
The sampling frame was stratified into two geographical areas (Dili and Other municipalities) and six broad sectors of activity: Construction (ISIC Rev 4 two-digit codes 41-44), Automotive (ISIC Rev 4 two-digit code 45); Accommodation and food services (ISIC Rev 4 two-digit code 74); wholesale, resale services and automotive (ISIC Rev 4 two-digit code 4532); Manufacturing, other industrial activities (2%); and automotive (2%).

The two sampling frames by district are shown below by branch of economic activity and location.

### Sample enterprises by sectors

<table>
<thead>
<tr>
<th>Sector</th>
<th>Location</th>
<th>TAXA, IADE, &amp; SERVE, IP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td>7020</td>
</tr>
<tr>
<td>11   Other services</td>
<td>Dili</td>
<td>844</td>
</tr>
<tr>
<td>12   Other services</td>
<td>Other</td>
<td>192</td>
</tr>
<tr>
<td>Not classified</td>
<td>Dili</td>
<td>3</td>
</tr>
<tr>
<td>Not Classified</td>
<td>Other</td>
<td>3</td>
</tr>
</tbody>
</table>

The sample size was determined based on previous surveys and the present available resources. The sample size of 550 was drawn from the total of 7020 list of enterprise, a combination list of enterprises from tax office, IADE, and SERVE, I.P. The sample was allocated among the sector in each 13 municipalities by square-root allocation. The distributions of the sample enterprises are shown below by branch of economic activity and location.

#### Sample enterprises by sectors

<table>
<thead>
<tr>
<th>Sector</th>
<th>TAXA IMPOSTU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>1 Construction</td>
<td>178</td>
</tr>
<tr>
<td>2 Automotive</td>
<td>32</td>
</tr>
<tr>
<td>3 Accommodation and food services</td>
<td>74</td>
</tr>
<tr>
<td>4 Manufacturing, other industrial activities</td>
<td>34</td>
</tr>
<tr>
<td>5 Wholesale, resale services and automotive</td>
<td>125</td>
</tr>
<tr>
<td>6 Other services</td>
<td>88</td>
</tr>
<tr>
<td>7 Not specified</td>
<td>19</td>
</tr>
</tbody>
</table>

#### Sample enterprises by district

<table>
<thead>
<tr>
<th>District</th>
<th>Sample Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>550</td>
</tr>
<tr>
<td>1 Dili</td>
<td>328</td>
</tr>
<tr>
<td>2 Baucau</td>
<td>36</td>
</tr>
<tr>
<td>3 Oecusse</td>
<td>8</td>
</tr>
<tr>
<td>4 Bobonaro</td>
<td>25</td>
</tr>
<tr>
<td>5 Liquica</td>
<td>9</td>
</tr>
<tr>
<td>6 Lautem</td>
<td>11</td>
</tr>
<tr>
<td>7 Manatuto</td>
<td>7</td>
</tr>
<tr>
<td>8 Manufahi</td>
<td>22</td>
</tr>
<tr>
<td>9 Viqueque</td>
<td>16</td>
</tr>
</tbody>
</table>

3 Note: Refer to ESS 2016 for sample allocation (square-root allocation)
The comparison of frame and sample tables indicates that both samples preserve the proportion of enterprises in the frame in terms of geographical area. The sample contains 60% of enterprises in Dili, lower than the proportion in the frame 63%. In contrary, sample contains 11% of enterprises in Ainaro while sampling frame contains only 3% of enterprises for Ainaro.

In terms of sectors it can be observed however, that the sample composition over-samples accommodation and food services (13.5% in the sample against 8% in the frame) as well as those in automotive (5.8% in the sample against 2% in the frame), but under-samples the enterprises in construction (32.4% in the sample against 45% in the frame).

Questionnaire design

The questionnaire for ESS 2017 is similar to the ESS 2016, with some slight differences. The ESS 2017 now has 33 questions (36 previously) organised in 5 sections in addition to a final page. Some of the main changes from the previous questionnaires are:

- removal of the questions in relation to registration with SERVE, IP, IADE, and Impostu
- removal of questions regarding temporary workers
- additional questions regarding mechanisms for advertising job vacancies by the enterprises⁴.

Field operation

The field operations were conducted from June to August 2017. In total 9 interviewers were involved visiting the sample enterprises, often at multiple occasions, to obtain responses. The respondents were in most cases either the owner of the enterprise or the director or manager. In virtually all cases, the interviewer administered the questionnaire, recording the responses provided by the respondent. In a few cases, the interviews were done via mobile phone, when respondents were not able to meet with the interviewer.

The following table shows the interview results. In the case of 232 enterprises, the questionnaire was either fully or partially completed. One of the responding

<table>
<thead>
<tr>
<th>District</th>
<th>Sample Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>10 Covalima</td>
<td>10</td>
</tr>
<tr>
<td>11 Ainaro</td>
<td>58</td>
</tr>
<tr>
<td>12 Ermera</td>
<td>12</td>
</tr>
<tr>
<td>13 Aileu</td>
<td>8</td>
</tr>
</tbody>
</table>

⁴ Note: Refer to ESS 2016 for the questionnaire descriptions.
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The following table shows the interview results. In the case of 232 enterprises, the questionnaire was either fully or partially completed. One of the responding enterprises was a duplicate appearing in both the TAXA IMPOSTU and IADE samples. The table also shows that 67 enterprises could not be contacted and 30 refused to participate in the survey. Some 54 enterprises were no longer active, an additional 13 could not be located and the address of a further 94 could not be found. Some 39 other enterprises could not be interviewed for other reasons or unspecified reasons.

### Interview results of sample enterprises

<table>
<thead>
<tr>
<th>Interview result</th>
<th>TAXA IMPOSTU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>550</td>
</tr>
<tr>
<td>1 Questionnaire fully or partially completed</td>
<td>210</td>
</tr>
<tr>
<td>2 No contact</td>
<td>33</td>
</tr>
<tr>
<td>3 Refusal</td>
<td>15</td>
</tr>
<tr>
<td>4 Not active</td>
<td>57</td>
</tr>
<tr>
<td>5 Company not found</td>
<td>2</td>
</tr>
<tr>
<td>6 Address not found</td>
<td>139</td>
</tr>
<tr>
<td>7 Other, specify</td>
<td>76</td>
</tr>
<tr>
<td>8 Not specified</td>
<td>18</td>
</tr>
</tbody>
</table>

The enterprises in the first category (questionnaire fully or partially completed) are classified as responding enterprises. Thus, there are 210 (=164 + 46) responding enterprises. Enterprises considered non-responding are: no contact, refusal and others, specify. There are 124 (= 33 + 15 + 76) non-responding enterprises. The non-response rate of the survey may be thus calculated as

\[
\text{Non-response rate} = \frac{124}{550} = 22.5\%
\]

Enterprises in the remaining categories (not active, company not found, and address not found, etc.) are considered as non-coverage. The non-coverage rate may be calculated as

\[
\text{Non-coverage rate} = \frac{216}{550} = 39.3\%
\]

The non-response rate of the ESS 2017 is in line with the rates found in establishment surveys in other countries\(^5\).

---

\(^5\)http://laborsta.ilo.org/applv8/data/SSM2_NEW/E/main.html
Data processing

The 2017 data collection was done using tablets to collect responses, instead of paper-based questionnaires. Questions were loaded on eight tablets using a commercial application called “Quick Tab”. Responses were directly entered to the tablets in the field, which then synchronized into the Quick Tab account at SEJT, when internet access was available. Once stored in the Quick Tab account, the survey data were processed in Excel and Stata after all survey results became available in August 2017\(^6\).

Sampling and measurement errors

Sampling errors

Sampling errors arise because the survey does not cover all elements of the population, but only a selected portion. The sampling error of an estimate is based on the difference between the estimate and the value that would have been obtained on the basis of a complete count of the population under otherwise identical conditions. In principle, sampling errors may be decomposed into two components: (i) sampling bias; and (ii) sampling variance. Sampling bias reflects the systematic error that may occur due to the failures of the sample design, for example, certain elements of the population receiving zero probability of selection. The sampling variance, on the other hand, reflects the uncertainty associated to a sample estimate due to the sample used for its calculation, among all possible other samples that could have been selected from the frame with the same sampling design\(^7\).

Standard errors and confidence intervals of main estimates: ESS 2017

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Standard error</th>
<th>Relative standard error</th>
<th>Confidence interval (95%)</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees</td>
<td>68256</td>
<td>3145</td>
<td>4.6%</td>
<td>56926 - 79586</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of hiring in 2017</td>
<td>4404</td>
<td>348</td>
<td>7.9%</td>
<td>3370 - 5438</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of female hiring in 2017</td>
<td>1979</td>
<td>207</td>
<td>10.4%</td>
<td>1349 - 2609</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hard-to-fill vacancies</td>
<td>699</td>
<td>25</td>
<td>3.5%</td>
<td>587 - 811</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of separation in 2017</td>
<td>6210</td>
<td>509</td>
<td>8.2%</td>
<td>4689 - 7731</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected hiring in the next 12 months</td>
<td>3104</td>
<td>102</td>
<td>3.3%</td>
<td>2882 - 3327</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

One use of the standard error is to assess the level of precision of survey estimates. A low relative standard error indicates a high precision of the estimate. In general, the lower the relative standard error of an estimate, the higher is the precision of the

---

\(^6\) Note: Refer to ESS 2016 for more data processing and sampling weight

\(^7\) Enterprise and Skills Survey 2016 “Variance Calculation Method”
Another use of the standard error is for the calculation of confidence intervals. Under certain broad assumptions, it can be stated that the true value of the variable of interest lies in between the survey estimate and a multiple of the standard error, with certain degree of probability, set here at 95%. For example, from the first line of the table, it can be stated that the true value of the total number of employees is within the interval with 95% confidence, $56,926 \leq \text{estimated number of employees} \leq 79,586$.

**Measurement errors**

In addition to sampling errors, survey data are subject to different types of measurement errors (coverage errors, non-response errors, response errors, and other errors such as editing, coding and processing errors). In many situations, the measurement errors may have considerable impact on the quality of the survey results. Non-response and non-coverage errors were discussed earlier regarding the field operations. Here we will examine the coherence of the ESS 2017 results with data from different sources, such as Business Activity Survey (BAS) and ESS 2016.

The latest available results are for BAS 2014 referring to the situation on 15 December. The following table compares these results by location and branch of economic activity with the corresponding data obtained from the ESS 2017. The ESS 2017 data refer to the situation in 2017. BAS provides more precise estimates than ESS 2016 and 2017 as evidenced from their respective relative standard errors (2.1% for of the estimate of total employment in BAS against 4.1% and 4.6% in ESS 2016 and ESS 2017, respectively). The estimates of total employment from the three sources nevertheless closely agree: 62,200 in December 2014 from BAS, 65,853 in January 2016 from ESS and 68,256 from ESS 2017.

---


9 Note: Refer to ESS 2016 BAS descriptions.
Comparison of the level of employment by location and branch of economic activity - ESS 2016 versus BAS 2014

<table>
<thead>
<tr>
<th></th>
<th>ESS 2017(^{10})</th>
<th>ESS 2016(^{11})</th>
<th>BAS 2014(^{12})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total employment</td>
<td>68,256</td>
<td>65,853</td>
<td>62,200</td>
</tr>
<tr>
<td>- Dili</td>
<td>50,556</td>
<td>55,446</td>
<td>52,000</td>
</tr>
<tr>
<td>- Municipalities</td>
<td>17,700</td>
<td>10,407</td>
<td>10,200</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>5,829</td>
<td>2,834</td>
<td>2,800</td>
</tr>
<tr>
<td>Construction</td>
<td>21,728</td>
<td>18,580</td>
<td>21,500</td>
</tr>
<tr>
<td>Wholesale and retail trade, repair of motor vehicles and motor cycles</td>
<td>21,145</td>
<td>13,262</td>
<td>17,800</td>
</tr>
<tr>
<td>Automotive</td>
<td>3,604</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transportation and storage</td>
<td>-</td>
<td>2,192</td>
<td>-</td>
</tr>
<tr>
<td>Accommodation and food service activities</td>
<td>9,380</td>
<td>6,345</td>
<td>5,000</td>
</tr>
<tr>
<td>Financial and insurance activities</td>
<td>-</td>
<td>1,223</td>
<td>600</td>
</tr>
<tr>
<td>Administrative and support service activities</td>
<td>13,840</td>
<td>14,500</td>
<td>-</td>
</tr>
<tr>
<td>Other services</td>
<td>6,571</td>
<td>7,577</td>
<td>-</td>
</tr>
</tbody>
</table>

The breakdown for Dili and Other municipalities is also in relatively close agreement. The estimate of employment in Dili is 52,000 from BAS, 55,446 from ESS 2016. It is however, decrease to 50,256 from ESS 2017. The relative difference between Dili and Municipalities is attributable to the increasing concentration of employment in Dili. The estimates of employment in the other municipalities are almost identical (10,200 from BAS and 10,407 from ESS) but has increased in ESS 2017, suggesting that there has been growth of employment outside Dili. This may have been attributed to number of ongoing infrastructure projects and wholesale, and retail activities.

In terms of branch of economic activity, there is an increasing trend for the estimates of employment in manufacturing (2,800 from BAS, 2,834 from ESS) and significant increase from ESS 2017 (5,828). There are similarities between BAS and ESS 2017 (21,500 and 21,728) for construction. Wholesale and retail trade, repair of motor vehicles and motorcycles shows and increasing trend (17,800 from BAS, 13,262 from ESS 2016, and 21,145 from ESS 2017), and similarly, accommodation and food service activities exhibit increasing trends (5,000 from BAS, 6,345 from ESS 2016, and 9,380 from ES 2017). This increasing trend can be attributed to the increasing time period from 2014 – 2017.

\(^{10}\) Enterprise and Skills Survey 2017 (reference period June 2017)

\(^{11}\) Enterprise and Skills Survey 2016 (reference period January 2016)

\(^{12}\) Business Activity Survey 2014 (Reference period: December 2014)
ANNEX B: STATISTICAL TABLES

1. Number of enterprises and employed persons by location and sector

<table>
<thead>
<tr>
<th>Branch of economic activity</th>
<th>Timor-Leste</th>
<th>Dili</th>
<th>Municipalities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enterprise</td>
<td>Employed persons</td>
<td>Enterprise</td>
</tr>
<tr>
<td>Total</td>
<td>5229</td>
<td>68256</td>
<td>3150</td>
</tr>
<tr>
<td>Accommodation and food services</td>
<td>465</td>
<td>4570</td>
<td>369</td>
</tr>
<tr>
<td>Automotive</td>
<td>90</td>
<td>1029</td>
<td>26</td>
</tr>
<tr>
<td>Construction</td>
<td>2615</td>
<td>34195</td>
<td>949</td>
</tr>
<tr>
<td>Manufacture and other industrial activities</td>
<td>102</td>
<td>1870</td>
<td>102</td>
</tr>
<tr>
<td>Wholesale, resale services and automotive</td>
<td>1504</td>
<td>22109</td>
<td>1252</td>
</tr>
<tr>
<td>Other services</td>
<td>452</td>
<td>4484</td>
<td>452</td>
</tr>
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<table>
<thead>
<tr>
<th>Location and Sector</th>
<th>ESS 2017</th>
<th>ESS 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total enterprises</td>
<td>5229</td>
<td>100.0%</td>
</tr>
<tr>
<td>Dili</td>
<td>3150</td>
<td>60.2%</td>
</tr>
<tr>
<td>Municipalities</td>
<td>2079</td>
<td>39.8%</td>
</tr>
<tr>
<td>Accommodation and food services</td>
<td>465</td>
<td>8.9%</td>
</tr>
<tr>
<td>Automotive</td>
<td>90</td>
<td>1.7%</td>
</tr>
<tr>
<td>Construction</td>
<td>2615</td>
<td>50.0%</td>
</tr>
<tr>
<td>Manufacture and other industrial activities</td>
<td>102</td>
<td>2.0%</td>
</tr>
<tr>
<td>Wholesale, resale services and automotive</td>
<td>1504</td>
<td>28.8%</td>
</tr>
<tr>
<td>Other services</td>
<td>452</td>
<td>8.7%</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total enterprises newly established</td>
<td>296</td>
<td>193</td>
</tr>
<tr>
<td>Total employees</td>
<td>3870</td>
<td>1564</td>
</tr>
</tbody>
</table>
4. Number of enterprises and employed person by location and size of enterprise

<table>
<thead>
<tr>
<th>Size of enterprises</th>
<th>Timor-Leste</th>
<th></th>
<th>Dili</th>
<th></th>
<th>Municipalities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enterprise</td>
<td>Employed persons</td>
<td>Enterprise</td>
<td>Employed persons</td>
<td>Enterprise</td>
</tr>
<tr>
<td>Total</td>
<td>5229</td>
<td>68256</td>
<td>3150</td>
<td>47133</td>
<td>2079</td>
</tr>
<tr>
<td>1 to 4</td>
<td>2391</td>
<td>2870</td>
<td>1368</td>
<td>1901</td>
<td>1023</td>
</tr>
<tr>
<td>5 to 9</td>
<td>971</td>
<td>6570</td>
<td>455</td>
<td>3011</td>
<td>516</td>
</tr>
<tr>
<td>10 to 14</td>
<td>667</td>
<td>7941</td>
<td>342</td>
<td>4119</td>
<td>325</td>
</tr>
<tr>
<td>15 to 24</td>
<td>548</td>
<td>10343</td>
<td>426</td>
<td>8068</td>
<td>122</td>
</tr>
<tr>
<td>25 to 29</td>
<td>387</td>
<td>13380</td>
<td>336</td>
<td>11700</td>
<td>51</td>
</tr>
<tr>
<td>50 +</td>
<td>264</td>
<td>27151</td>
<td>223</td>
<td>18335</td>
<td>41</td>
</tr>
</tbody>
</table>

5. Number of enterprises and type of employed person by type of ownership

<table>
<thead>
<tr>
<th>Type of ownership</th>
<th>ESS 2017</th>
<th>ESS 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint ownership</td>
<td>3%</td>
<td>7%</td>
</tr>
<tr>
<td>Solely Foreign</td>
<td>23%</td>
<td>29%</td>
</tr>
<tr>
<td>Solely Timorese</td>
<td>64%</td>
<td>63%</td>
</tr>
<tr>
<td>Not specified</td>
<td>10%</td>
<td>1%</td>
</tr>
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</table>

6. Composition of enterprises by type of ownership ESS 2017 versus ESS 2016

<table>
<thead>
<tr>
<th>Type of ownership</th>
<th>Timor-Leste</th>
<th></th>
<th>Dili</th>
<th></th>
<th>Municipalities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enterprises</td>
<td>Employed persons</td>
<td>Enterprises</td>
<td>Employed persons</td>
<td>Enterprises</td>
</tr>
<tr>
<td>Joint ownership</td>
<td>173</td>
<td>2975</td>
<td>157</td>
<td>2773</td>
<td>17</td>
</tr>
<tr>
<td>Solely Foreign</td>
<td>1197</td>
<td>17883</td>
<td>1181</td>
<td>17833</td>
<td>17</td>
</tr>
<tr>
<td>Solely Timorese</td>
<td>3325</td>
<td>47398</td>
<td>1665</td>
<td>26528</td>
<td>1661</td>
</tr>
<tr>
<td>Not specified</td>
<td>532</td>
<td>0</td>
<td>148</td>
<td>0</td>
<td>384</td>
</tr>
</tbody>
</table>
7. Number of employed persons by major occupational group

<table>
<thead>
<tr>
<th>Occupation (Major group)</th>
<th>Total</th>
<th>Local Female</th>
<th>Local Male</th>
<th>Foreign Female</th>
<th>Foreign Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>68256</td>
<td>15474</td>
<td>46317</td>
<td>954</td>
<td>5511</td>
</tr>
<tr>
<td>Managers</td>
<td>6200</td>
<td>1775</td>
<td>2968</td>
<td>265</td>
<td>1192</td>
</tr>
<tr>
<td>Professionals</td>
<td>3683</td>
<td>662</td>
<td>2279</td>
<td>106</td>
<td>636</td>
</tr>
<tr>
<td>Associate professionals</td>
<td>3312</td>
<td>530</td>
<td>2226</td>
<td>106</td>
<td>450</td>
</tr>
<tr>
<td>Clerical support workers</td>
<td>6783</td>
<td>3948</td>
<td>1855</td>
<td>344</td>
<td>636</td>
</tr>
<tr>
<td>Service and sale workers</td>
<td>12719</td>
<td>5326</td>
<td>6651</td>
<td>79</td>
<td>662</td>
</tr>
<tr>
<td>Skilled agricultural, forestry, fishery workers</td>
<td>212</td>
<td>106</td>
<td>106</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Craft and related trade workers</td>
<td>3392</td>
<td>106</td>
<td>2199</td>
<td>26</td>
<td>1060</td>
</tr>
<tr>
<td>Plant and machine operators and assemblers</td>
<td>10360</td>
<td>291</td>
<td>9380</td>
<td>0</td>
<td>689</td>
</tr>
<tr>
<td>Elementary occupations</td>
<td>21595</td>
<td>2729</td>
<td>18654</td>
<td>26</td>
<td>185</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Managers</td>
<td>9.1%</td>
<td>11.5%</td>
<td>8.0%</td>
<td>11.2%</td>
<td>12.4%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Professionals</td>
<td>5.4%</td>
<td>8.2%</td>
<td>5.6%</td>
<td>9.0%</td>
<td>4.7%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Associate professionals</td>
<td>4.9%</td>
<td>7.5%</td>
<td>5.2%</td>
<td>7.8%</td>
<td>3.9%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Clerical support workers</td>
<td>9.9%</td>
<td>7.8%</td>
<td>4.8%</td>
<td>4.5%</td>
<td>26.1%</td>
<td>18.6%</td>
</tr>
<tr>
<td>Service and sale workers</td>
<td>18.6%</td>
<td>15.5%</td>
<td>14.1%</td>
<td>8.9%</td>
<td>32.9%</td>
<td>37.0%</td>
</tr>
<tr>
<td>Skilled agricultural, forestry, fishery workers</td>
<td>0.3%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.6%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Craft and related trade workers</td>
<td>5.0%</td>
<td>4.0%</td>
<td>6.3%</td>
<td>5.3%</td>
<td>0.8%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Plant and machine operators and assemblers</td>
<td>15.2%</td>
<td>8.6%</td>
<td>19.4%</td>
<td>11.2%</td>
<td>1.8%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Elementary occupations</td>
<td>31.6%</td>
<td>36.6%</td>
<td>36.3%</td>
<td>41.9%</td>
<td>16.8%</td>
<td>19.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Managers</td>
<td>9.1%</td>
<td>11.5%</td>
<td>7.7%</td>
<td>8.8%</td>
<td>23.5%</td>
<td>30.4%</td>
</tr>
<tr>
<td>Professionals</td>
<td>5.4%</td>
<td>8.2%</td>
<td>4.8%</td>
<td>6.9%</td>
<td>20.1%</td>
<td>23.3%</td>
</tr>
<tr>
<td>Associate professionals</td>
<td>4.9%</td>
<td>7.5%</td>
<td>4.5%</td>
<td>7.8%</td>
<td>16.8%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Clerical support workers</td>
<td>9.9%</td>
<td>7.8%</td>
<td>9.4%</td>
<td>7.9%</td>
<td>5.8%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Service and sale workers</td>
<td>18.6%</td>
<td>15.5%</td>
<td>19.4%</td>
<td>15.6%</td>
<td>14.5%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Skilled agricultural, forestry, fishery workers</td>
<td>0.3%</td>
<td>0.2%</td>
<td>0.3%</td>
<td>0.2%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Craft and related trade workers</td>
<td>5.0%</td>
<td>4.0%</td>
<td>3.7%</td>
<td>3.7%</td>
<td>32.0%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Plant and machine operators and assemblers</td>
<td>15.2%</td>
<td>8.6%</td>
<td>15.7%</td>
<td>9.0%</td>
<td>6.6%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Elementary occupations</td>
<td>31.6%</td>
<td>36.6%</td>
<td>34.6%</td>
<td>39.9%</td>
<td>1.0%</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

10. Average wages (USD per month) by major occupational group, ESS 2017

<table>
<thead>
<tr>
<th>Occupation (Major group)</th>
<th>ESS 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers</td>
<td>540</td>
</tr>
<tr>
<td>Professionals</td>
<td>535</td>
</tr>
<tr>
<td>Associate professionals</td>
<td>278</td>
</tr>
<tr>
<td>Service and sale workers</td>
<td>259</td>
</tr>
<tr>
<td>Clerical support workers</td>
<td>145</td>
</tr>
<tr>
<td>Skilled agriculture, forestry and fishery worker</td>
<td>-</td>
</tr>
<tr>
<td>Craft and related trades workers</td>
<td>299</td>
</tr>
<tr>
<td>Plant and machine operators and assemblers</td>
<td>160</td>
</tr>
<tr>
<td>Elementary occupations</td>
<td>129</td>
</tr>
</tbody>
</table>
11. **Average wages (USD per month) ESS 2017 versus ESS 2016**

<table>
<thead>
<tr>
<th>Occupation (Major group)</th>
<th>ESS 2017</th>
<th>ESS 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers</td>
<td>540</td>
<td>452</td>
</tr>
<tr>
<td>Professionals</td>
<td>535</td>
<td>337</td>
</tr>
<tr>
<td>Associate professionals</td>
<td>278</td>
<td>274</td>
</tr>
<tr>
<td>Service and sale workers</td>
<td>259</td>
<td>212</td>
</tr>
<tr>
<td>Clerical support workers</td>
<td>145</td>
<td>180</td>
</tr>
<tr>
<td>Skilled agriculture, forestry and fishery workers</td>
<td>-</td>
<td>298</td>
</tr>
<tr>
<td>Craft and related trades workers</td>
<td>299</td>
<td>162</td>
</tr>
<tr>
<td>Plant and machine operators and assemblers</td>
<td>160</td>
<td>222</td>
</tr>
<tr>
<td>Elementary occupations</td>
<td>129</td>
<td>135</td>
</tr>
</tbody>
</table>

12. **Recruiting enterprises and number of recruited person by location and sector**

Excludes number of workers hired during the establishment of the enterprises

<table>
<thead>
<tr>
<th>Location/Branch of economic activities</th>
<th>Total</th>
<th>Recruitment enterprises</th>
<th>Number of recruited person in 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>5229</td>
<td>996</td>
<td>4233</td>
</tr>
<tr>
<td>- Dili</td>
<td>3287</td>
<td>772</td>
<td>2515</td>
</tr>
<tr>
<td>- Municipalities</td>
<td>1942</td>
<td>224</td>
<td>1718</td>
</tr>
<tr>
<td>Accommodation and food services</td>
<td>971</td>
<td>274</td>
<td>697</td>
</tr>
<tr>
<td>Automotive</td>
<td>274</td>
<td>50</td>
<td>224</td>
</tr>
<tr>
<td>Construction</td>
<td>1569</td>
<td>224</td>
<td>1345</td>
</tr>
<tr>
<td>Manufacture and other industrial activities</td>
<td>299</td>
<td>100</td>
<td>199</td>
</tr>
<tr>
<td>Wholesale, resale services and automotive</td>
<td>1469</td>
<td>274</td>
<td>1195</td>
</tr>
<tr>
<td>Other services</td>
<td>647</td>
<td>75</td>
<td>573</td>
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</tbody>
</table>
13. Recruiting enterprise and number of recruited person in 2017 by size of enterprises (excluding number of workers hired during the establishment of the enterprises)

<table>
<thead>
<tr>
<th>Size of enterprise (number of employed person)</th>
<th>Total enterprises</th>
<th>Recruiting enterprises</th>
<th>Number of hired people in 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>5229</td>
<td>3991</td>
<td>1238</td>
</tr>
<tr>
<td>1-4 workers</td>
<td>1516</td>
<td>1330</td>
<td>186</td>
</tr>
<tr>
<td>5-9 workers</td>
<td>1516</td>
<td>1114</td>
<td>402</td>
</tr>
<tr>
<td>10-14 workers</td>
<td>743</td>
<td>650</td>
<td>93</td>
</tr>
<tr>
<td>15-24 workers</td>
<td>743</td>
<td>495</td>
<td>248</td>
</tr>
<tr>
<td>25-49 workers</td>
<td>464</td>
<td>309</td>
<td>155</td>
</tr>
<tr>
<td>50+ workers</td>
<td>248</td>
<td>93</td>
<td>155</td>
</tr>
</tbody>
</table>

14. Top twenty occupations (out of 31 occupations) with highest number of hiring in 2017 by and nationality

<table>
<thead>
<tr>
<th>ISCO</th>
<th>Occupation</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>Timorese</th>
<th>Foreigner</th>
</tr>
</thead>
<tbody>
<tr>
<td>9312</td>
<td>Civil engineering labourers</td>
<td>4158</td>
<td>2367</td>
<td>1791</td>
<td>3890</td>
<td>268</td>
</tr>
<tr>
<td>5223</td>
<td>Shop sales assistants</td>
<td>840</td>
<td>630</td>
<td>210</td>
<td>672</td>
<td>168</td>
</tr>
<tr>
<td>3419</td>
<td>Earthmoving and related plant operators</td>
<td>420</td>
<td>420</td>
<td>0</td>
<td>336</td>
<td>84</td>
</tr>
<tr>
<td>7119</td>
<td>Building frame and related trades workers NEC</td>
<td>405</td>
<td>405</td>
<td>0</td>
<td>405</td>
<td>0</td>
</tr>
<tr>
<td>5223</td>
<td>Shop keepers</td>
<td>180</td>
<td>90</td>
<td>90</td>
<td>180</td>
<td>0</td>
</tr>
<tr>
<td>1323</td>
<td>Construction managers</td>
<td>168</td>
<td>0</td>
<td>168</td>
<td>168</td>
<td>0</td>
</tr>
<tr>
<td>5122</td>
<td>Construction supervisors</td>
<td>168</td>
<td>84</td>
<td>84</td>
<td>168</td>
<td>0</td>
</tr>
<tr>
<td>5122</td>
<td>Carpenters and joiners</td>
<td>135</td>
<td>135</td>
<td>0</td>
<td>135</td>
<td>0</td>
</tr>
<tr>
<td>5249</td>
<td>Sales workers not elsewhere classified</td>
<td>135</td>
<td>0</td>
<td>135</td>
<td>135</td>
<td>0</td>
</tr>
<tr>
<td>8313</td>
<td>Car, van and motorcycle drivers</td>
<td>120</td>
<td>80</td>
<td>40</td>
<td>120</td>
<td>0</td>
</tr>
<tr>
<td>5122</td>
<td>Cooks</td>
<td>106</td>
<td>21</td>
<td>85</td>
<td>106</td>
<td>0</td>
</tr>
<tr>
<td>4311</td>
<td>Accounting and bookkeeping clerks</td>
<td>100</td>
<td>40</td>
<td>60</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>8332</td>
<td>Motor vehicle mechanics and repairers</td>
<td>96</td>
<td>58</td>
<td>38</td>
<td>80</td>
<td>16</td>
</tr>
<tr>
<td>5246</td>
<td>Food service counter attendants</td>
<td>85</td>
<td>0</td>
<td>85</td>
<td>85</td>
<td>0</td>
</tr>
<tr>
<td>9313</td>
<td>Building construction labourers</td>
<td>84</td>
<td>84</td>
<td>0</td>
<td>84</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sex and nationality</th>
<th>ESS 2017</th>
<th></th>
<th>ESS 2016</th>
<th></th>
<th>Change (percentage point)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
<td>Number</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4404</td>
<td>100.0%</td>
<td>5862</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2425</td>
<td>55.1%</td>
<td>4735</td>
<td>80.8%</td>
<td>-25.7%</td>
</tr>
<tr>
<td>Female</td>
<td>1979</td>
<td>44.9%</td>
<td>1127</td>
<td>19.2%</td>
<td>25.7%</td>
</tr>
<tr>
<td>Timorese</td>
<td>4136</td>
<td>93.9%</td>
<td>4558</td>
<td>77.8%</td>
<td>16.1%</td>
</tr>
<tr>
<td>Foreign</td>
<td>268</td>
<td>6.1%</td>
<td>1304</td>
<td>22.2%</td>
<td>-16.1%</td>
</tr>
</tbody>
</table>
### Top twenty occupation with highest number of separation in 2017

<table>
<thead>
<tr>
<th>ISCO</th>
<th>Occupation</th>
<th>Number of enterprises</th>
<th>Number of employees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>2717</td>
<td>6210</td>
</tr>
<tr>
<td>7111</td>
<td>House builders</td>
<td>252</td>
<td>1329</td>
</tr>
<tr>
<td>5223</td>
<td>Shop keepers</td>
<td>450</td>
<td>1125</td>
</tr>
<tr>
<td>5221</td>
<td>Shop sales assistants</td>
<td>180</td>
<td>945</td>
</tr>
<tr>
<td>9312</td>
<td>Civil engineering labourers</td>
<td>420</td>
<td>588</td>
</tr>
<tr>
<td>9313</td>
<td>Building construction labourers</td>
<td>168</td>
<td>252</td>
</tr>
<tr>
<td>7119</td>
<td>Building frame and related trades workers not elsewhere classified</td>
<td>84</td>
<td>252</td>
</tr>
<tr>
<td>3123</td>
<td>Construction supervisors</td>
<td>168</td>
<td>252</td>
</tr>
<tr>
<td>9129</td>
<td>Other cleaning workers</td>
<td>120</td>
<td>140</td>
</tr>
<tr>
<td>9412</td>
<td>Kitchen helpers</td>
<td>20</td>
<td>120</td>
</tr>
<tr>
<td>8313</td>
<td>Car, van and motorcycle drivers</td>
<td>80</td>
<td>100</td>
</tr>
<tr>
<td>5131</td>
<td>Waiters</td>
<td>45</td>
<td>90</td>
</tr>
<tr>
<td>7231</td>
<td>Motor vehicle mechanics and repairers</td>
<td>64</td>
<td>80</td>
</tr>
<tr>
<td>5230</td>
<td>Cashiers and ticket clerks</td>
<td>60</td>
<td>80</td>
</tr>
<tr>
<td>4110</td>
<td>General office clerks</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td>5120</td>
<td>Cooks</td>
<td>21</td>
<td>64</td>
</tr>
<tr>
<td>5131</td>
<td>Waiters</td>
<td>21</td>
<td>64</td>
</tr>
<tr>
<td>1221</td>
<td>Sales and marketing managers</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>5211</td>
<td>Stall and market salespersons</td>
<td>0</td>
<td>45</td>
</tr>
<tr>
<td>5151</td>
<td>Cleaning and housekeeping supervisors in offices, hotels and other</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>establishments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5245</td>
<td>Service station attendants</td>
<td>21</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>others</td>
<td>400</td>
<td>460</td>
</tr>
</tbody>
</table>
17. Expected increase or decrease of number of employees in the next 12 months by location and branch of economic activity of the enterprise

<table>
<thead>
<tr>
<th>Location and Sector</th>
<th>Total number of enterprises</th>
<th>Enterprises with expected increase or increase of employees in the next 12 months</th>
<th>Expected increase of number of employee</th>
<th>Expected decrease of number of employee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Increase</td>
<td>Remain Same</td>
<td>Decrease</td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>5229</td>
<td>837</td>
<td>4372</td>
<td>20</td>
</tr>
<tr>
<td>Dili</td>
<td>3287</td>
<td>713</td>
<td>2556</td>
<td>18</td>
</tr>
<tr>
<td>Other Municipalities</td>
<td>1942</td>
<td>124</td>
<td>1816</td>
<td>2</td>
</tr>
<tr>
<td>Branch of Economic Activity</td>
<td>5229</td>
<td>837</td>
<td>4372</td>
<td>20</td>
</tr>
<tr>
<td>Accommodation</td>
<td>828</td>
<td>18</td>
<td>809</td>
<td>1</td>
</tr>
<tr>
<td>Automotive</td>
<td>274</td>
<td>12</td>
<td>261</td>
<td>1</td>
</tr>
<tr>
<td>Construction</td>
<td>1545</td>
<td>73</td>
<td>1466</td>
<td>6</td>
</tr>
<tr>
<td>Manufacture and other industrial activities</td>
<td>203</td>
<td>52</td>
<td>147</td>
<td>4</td>
</tr>
<tr>
<td>Wholesale, resale services and automotive</td>
<td>1230</td>
<td>82</td>
<td>1142</td>
<td>6</td>
</tr>
<tr>
<td>Other services</td>
<td>576</td>
<td>27</td>
<td>547</td>
<td>2</td>
</tr>
</tbody>
</table>

18. Hiring intention of enterprises in the next 12 months: ESS 2017 versus ESS 2017

<table>
<thead>
<tr>
<th>Hiring intention during next 12 months</th>
<th>ESS 2017</th>
<th>ESS 2016</th>
<th>Change (percentage point)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
<td>Number</td>
</tr>
<tr>
<td>Total</td>
<td>5229</td>
<td>100.0%</td>
<td>5213</td>
</tr>
<tr>
<td>Increase</td>
<td>837</td>
<td>16.0%</td>
<td>635</td>
</tr>
<tr>
<td>Decrease</td>
<td>20</td>
<td>0.4%</td>
<td>95</td>
</tr>
<tr>
<td>Same</td>
<td>4372</td>
<td>83.6%</td>
<td>4401</td>
</tr>
<tr>
<td>Don’t know</td>
<td>-</td>
<td>-</td>
<td>83</td>
</tr>
</tbody>
</table>
19. Expected increase or decrease of number of employees in the next 12 months by location and branch of economic activity of the enterprises

<table>
<thead>
<tr>
<th>Size of enterprise (number of employed persons)</th>
<th>Total number of enterprises</th>
<th>Enterprise with expected increase or decrease of employees in the next 12 months</th>
<th>Expected increase of number of employees</th>
<th>Expected decrease of number of employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of enterprise</td>
<td>5229</td>
<td>837 4372 20 5856 79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 4 workers</td>
<td>1220</td>
<td>86 1131 3 24 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 to 9 workers</td>
<td>1220</td>
<td>234 981 5 184 20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 to 14 workers</td>
<td>598</td>
<td>99 497 2 1969 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 to 24 workers</td>
<td>598</td>
<td>186 410 1 371 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 to 49 workers</td>
<td>374</td>
<td>37 336 1 95 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 + workers</td>
<td>199</td>
<td>112 87 1 3213 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Specified</td>
<td>1021</td>
<td>84 930 7 0 42</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

20. Skills limitations of hired first-time job seekers by level of educational attainment ESS 2017

<table>
<thead>
<tr>
<th>Lack of:</th>
<th>Total</th>
<th>High School</th>
<th>Technical High School</th>
<th>TEVTs</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Job and Competencies</td>
<td>328</td>
<td>162</td>
<td>60</td>
<td>43</td>
<td>63</td>
</tr>
<tr>
<td>Literacy and numeracy education</td>
<td>176</td>
<td>83</td>
<td>0</td>
<td>22</td>
<td>72</td>
</tr>
<tr>
<td>Motivation or poor attitude</td>
<td>72</td>
<td>14</td>
<td>0</td>
<td>14</td>
<td>43</td>
</tr>
<tr>
<td>Work/life experience or maturity</td>
<td>120</td>
<td>41</td>
<td>14</td>
<td>0</td>
<td>65</td>
</tr>
<tr>
<td>Others</td>
<td>65</td>
<td>14</td>
<td>43</td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Lack of:</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High School</td>
<td>Tech High School</td>
</tr>
<tr>
<td>Specific Job and Competencies</td>
<td>88.60%</td>
<td>11.40%</td>
</tr>
<tr>
<td>Literacy and numeracy education</td>
<td>47.10%</td>
<td>52.90%</td>
</tr>
</tbody>
</table>
22. Skill limitations of employees: ESS 2017

<table>
<thead>
<tr>
<th>Lack of:</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High School</td>
<td>Tech High School</td>
</tr>
<tr>
<td>Motivation or poor attitude</td>
<td>85.50%</td>
<td>14.50%</td>
</tr>
<tr>
<td>Work/life experience or maturity</td>
<td>57.20%</td>
<td>0%</td>
</tr>
<tr>
<td>Others (not specified)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Skills</th>
<th>ESS 2017</th>
<th>100.0%</th>
<th>ESS 2016</th>
<th>100.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral communication</td>
<td>266</td>
<td>20.1%</td>
<td>138</td>
<td>8.2%</td>
</tr>
<tr>
<td>Team working</td>
<td>240</td>
<td>18.1%</td>
<td>143</td>
<td>8.6%</td>
</tr>
<tr>
<td>Management responsibilities/taking leadership</td>
<td>138</td>
<td>10.4%</td>
<td>122</td>
<td>7.3%</td>
</tr>
<tr>
<td>Taking initiatives</td>
<td>122</td>
<td>9.2%</td>
<td>109</td>
<td>6.5%</td>
</tr>
<tr>
<td>Customer handing</td>
<td>112</td>
<td>8.4%</td>
<td>114</td>
<td>6.8%</td>
</tr>
<tr>
<td>Literacy</td>
<td>93</td>
<td>7.0%</td>
<td>124</td>
<td>7.4%</td>
</tr>
<tr>
<td>Manual dexterity</td>
<td>75</td>
<td>5.6%</td>
<td>21</td>
<td>1.2%</td>
</tr>
<tr>
<td>Numeracy</td>
<td>68</td>
<td>5.1%</td>
<td>109</td>
<td>6.5%</td>
</tr>
<tr>
<td>Written communication</td>
<td>34</td>
<td>2.6%</td>
<td>109</td>
<td>6.5%</td>
</tr>
<tr>
<td>Public speaking/instructing/training</td>
<td>32</td>
<td>2.4%</td>
<td>79</td>
<td>4.7%</td>
</tr>
<tr>
<td>IT literacy/use of IT</td>
<td>16</td>
<td>1.2%</td>
<td>96</td>
<td>5.7%</td>
</tr>
<tr>
<td>Knowledge of foreign language</td>
<td>8</td>
<td>0.6%</td>
<td>147</td>
<td>8.8%</td>
</tr>
<tr>
<td>Clerical/administrative tasks</td>
<td>6</td>
<td>0.4%</td>
<td>79</td>
<td>4.7%</td>
</tr>
<tr>
<td>Planning and organizing</td>
<td>4</td>
<td>0.3%</td>
<td>135</td>
<td>8.1%</td>
</tr>
<tr>
<td>Advanced IT</td>
<td>-</td>
<td>-</td>
<td>125</td>
<td>7.5%</td>
</tr>
<tr>
<td>Job-specific tasks in automotive industry</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>0.3%</td>
</tr>
<tr>
<td>Job-specific tasks in construction industry</td>
<td>32</td>
<td>2.4%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Job-specific tasks in accommodation and food services</td>
<td>29</td>
<td>2.2%</td>
<td>20</td>
<td>1.2%</td>
</tr>
<tr>
<td>Other job-specific tasks</td>
<td>52</td>
<td>3.9%</td>
<td>0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
## 23. Top twenty occupations with hard-to-fill vacancies

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of enterprises</th>
<th>Number of employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>342</td>
<td>699</td>
</tr>
<tr>
<td>Accounting and bookkeeping clerks</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Civil engineers Labourers</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Earthmoving and related plant operators</td>
<td>18</td>
<td>36</td>
</tr>
<tr>
<td>Motor vehicle mechanics and repairers</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Air conditioning and refrigeration mechanics</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>Electrical line installers and repairers</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>Heavy truck and lorry drivers</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>Plumbers and pipe fitters</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>House builders</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Tailors, dressmakers, furriers and hatters</td>
<td>9</td>
<td>27</td>
</tr>
<tr>
<td>Cooks</td>
<td>20</td>
<td>24</td>
</tr>
<tr>
<td>Building architects</td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td>Carpenters and joiners</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>Cashiers and ticket clerks</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Cement, stone and other mineral products machine operators</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Fire-fighters</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Lifting truck operators</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Painters and related workers</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Pet groomers and animal care workers</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Process control technicians not elsewhere classified</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Others</td>
<td>92</td>
<td>151</td>
</tr>
</tbody>
</table>

## 24. Top twenty occupations with training needs

<table>
<thead>
<tr>
<th>ISCO</th>
<th>Occupation</th>
<th>Number of enterprises</th>
<th>Number employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>4311</td>
<td>Accounting and bookkeeping</td>
<td>168</td>
<td>273</td>
</tr>
<tr>
<td>2142</td>
<td>Civil engineers</td>
<td>252</td>
<td>252</td>
</tr>
<tr>
<td>5223</td>
<td>Shop sales assistants</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>5120</td>
<td>Cooks</td>
<td>64</td>
<td>85</td>
</tr>
<tr>
<td>1323</td>
<td>Construction managers</td>
<td>84</td>
<td>84</td>
</tr>
<tr>
<td>8342</td>
<td>Earthmoving and related plant operators</td>
<td>84</td>
<td>84</td>
</tr>
<tr>
<td>5245</td>
<td>Service station attendants</td>
<td>66</td>
<td>66</td>
</tr>
<tr>
<td>4321</td>
<td>Stock clerks</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>3511</td>
<td>Information and communications technology operations technicians</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>7231</td>
<td>Motor vehicle mechanics and repairers</td>
<td>32</td>
<td>32</td>
</tr>
</tbody>
</table>
### Top twenty occupations with hard-to-fill vacancies

<table>
<thead>
<tr>
<th>ISCO</th>
<th>Occupation</th>
<th>Number of enterprises</th>
<th>Number of employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>5246</td>
<td>Food service counter attendants</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>4224</td>
<td>Hotel receptionists</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>2411</td>
<td>Accountants</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>5230</td>
<td>Cashiers and ticket clerks</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>3513</td>
<td>Computer network and systems technicians</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>5411</td>
<td>Fire-fighter</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>5141</td>
<td>Hairdressers</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>3132</td>
<td>Incinerator and water treatment plant operators</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>5329</td>
<td>Personal care workers in health services not elsewhere classified</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>8132</td>
<td>Photographic products machine operators</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>25</td>
<td>25</td>
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</tbody>
</table>

25. **Top fifteen occupations with current vacancies**

<table>
<thead>
<tr>
<th>ISCO</th>
<th>Occupation</th>
<th>Number of enterprises</th>
<th>Number of vacancies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>1214</strong></td>
<td><strong>4248</strong></td>
</tr>
<tr>
<td>5221</td>
<td>Building construction labourers</td>
<td>168</td>
<td>1344</td>
</tr>
<tr>
<td>5230</td>
<td>Earthmoving and related plant operation</td>
<td>106</td>
<td>924</td>
</tr>
<tr>
<td>7115</td>
<td>Shop keepers</td>
<td>21</td>
<td>450</td>
</tr>
<tr>
<td>7231</td>
<td>Cashiers and ticket clerks</td>
<td>90</td>
<td>315</td>
</tr>
<tr>
<td>5223</td>
<td>Truck and Lorry driver</td>
<td>45</td>
<td>315</td>
</tr>
<tr>
<td>9312</td>
<td>Civil Engineering Labourers</td>
<td>252</td>
<td>252</td>
</tr>
<tr>
<td>5414</td>
<td>Shop sales assistants</td>
<td>135</td>
<td>180</td>
</tr>
<tr>
<td>9313</td>
<td>Cook</td>
<td>106</td>
<td>148</td>
</tr>
<tr>
<td>2142</td>
<td>Accounting and bookkeeping clerks</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>8342</td>
<td>Motor vehicle mechanics and repairers</td>
<td>64</td>
<td>64</td>
</tr>
<tr>
<td>7127</td>
<td>Security Guards</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>7531</td>
<td>Air conditioning and refrigeration mechanics</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>8332</td>
<td>Carpenter and Joiners</td>
<td>27</td>
<td>36</td>
</tr>
<tr>
<td>3343</td>
<td>Administrative and executive Secretaries</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>1212</td>
<td>Human Resource Manager</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>
### 26. Top thirteen occupations with expected new hiring in the next 12 months

<table>
<thead>
<tr>
<th>ISCO</th>
<th>Occupation</th>
<th>Expected number of new hiring</th>
</tr>
</thead>
<tbody>
<tr>
<td>9313</td>
<td>Building construction labourers</td>
<td>1260</td>
</tr>
<tr>
<td>1321</td>
<td>Earthmoving and related plant operators</td>
<td>672</td>
</tr>
<tr>
<td>5223</td>
<td>Shop sales assistants</td>
<td>450</td>
</tr>
<tr>
<td>5221</td>
<td>Shop keepers</td>
<td>315</td>
</tr>
<tr>
<td>5230</td>
<td>Cashiers and ticket clerks</td>
<td>120</td>
</tr>
<tr>
<td>5120</td>
<td>Cooks</td>
<td>106</td>
</tr>
<tr>
<td>5131</td>
<td>Waiters</td>
<td>42</td>
</tr>
<tr>
<td>2132</td>
<td>Farming, forestry and fisheries advisers</td>
<td>40</td>
</tr>
<tr>
<td>7231</td>
<td>Motor vehicle mechanics and repairers</td>
<td>32</td>
</tr>
<tr>
<td>4311</td>
<td>Accounting and bookkeeping clerks</td>
<td>20</td>
</tr>
<tr>
<td>7127</td>
<td>Air conditioning and refrigeration mechanics</td>
<td>20</td>
</tr>
<tr>
<td>7115</td>
<td>Carpenters and joiners</td>
<td>18</td>
</tr>
<tr>
<td>7531</td>
<td>Tailors, dressmakers, furriers and hatters</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ISCO</th>
<th>Occupation</th>
<th>Number of enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>9313</td>
<td>Building construction labourers</td>
<td>54</td>
</tr>
<tr>
<td>5223</td>
<td>Shop sales assistants</td>
<td>43</td>
</tr>
<tr>
<td>8323</td>
<td>Motor vehicle mechanics and repairers</td>
<td>39</td>
</tr>
<tr>
<td>9312</td>
<td>Civil engineering labourers</td>
<td>30</td>
</tr>
<tr>
<td>7231</td>
<td>Sales workers not elsewhere classified</td>
<td>28</td>
</tr>
<tr>
<td>5223</td>
<td>Waiters, Waitresses and Bartenders</td>
<td>24</td>
</tr>
<tr>
<td>3419</td>
<td>Heavy truck and lorry drivers</td>
<td>19</td>
</tr>
<tr>
<td>5122</td>
<td>Cooks</td>
<td>16</td>
</tr>
<tr>
<td>5122</td>
<td>Finance and Sales Associate Professionals not Elsewhere Classified</td>
<td>15</td>
</tr>
<tr>
<td>5223</td>
<td>Shop keepers</td>
<td>15</td>
</tr>
<tr>
<td>5223</td>
<td>Security guards</td>
<td>13</td>
</tr>
<tr>
<td>8322</td>
<td>Car, Taxi, and Van Drivers</td>
<td>11</td>
</tr>
<tr>
<td>1219</td>
<td>Business services and administration managers not elsewhere classified</td>
<td>10</td>
</tr>
<tr>
<td>5122</td>
<td>Construction supervisors</td>
<td>6</td>
</tr>
<tr>
<td>3419</td>
<td>Earthmoving and related plant operators</td>
<td>6</td>
</tr>
</tbody>
</table>
Top thirteen occupations with expected new hiring in the next 12 months

<table>
<thead>
<tr>
<th>ISCO-08</th>
<th>Occupation</th>
<th>Expected number of new hiring</th>
</tr>
</thead>
<tbody>
<tr>
<td>5122</td>
<td>Carpenters and Joiners</td>
<td>6</td>
</tr>
<tr>
<td>7412</td>
<td>Bakers, Pastry-cooks and confectionery makers</td>
<td>4</td>
</tr>
<tr>
<td>8342</td>
<td>Cleaners and Helpers in Offices, Hotels and Other establishments</td>
<td>4</td>
</tr>
<tr>
<td>7127</td>
<td>Air conditioning and refrigeration mechanics</td>
<td>4</td>
</tr>
<tr>
<td>5122</td>
<td>Cashier and Ticket Clerks</td>
<td>4</td>
</tr>
<tr>
<td>8332</td>
<td>Hairdressers</td>
<td>4</td>
</tr>
<tr>
<td>7531</td>
<td>Tailors, dressmakers, furriers and hatters</td>
<td>3</td>
</tr>
</tbody>
</table>

28. Enterprises financing training courses by area of training

<table>
<thead>
<tr>
<th>No</th>
<th>Areas of training</th>
<th>Number of enterprises</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>2713</td>
<td>100.0%</td>
</tr>
<tr>
<td>1</td>
<td>Civil Engineering Labourers</td>
<td>420</td>
<td>15.5%</td>
</tr>
<tr>
<td>2</td>
<td>Mechanics</td>
<td>196</td>
<td>7.2%</td>
</tr>
<tr>
<td>3</td>
<td>Architecture</td>
<td>168</td>
<td>6.2%</td>
</tr>
<tr>
<td>4</td>
<td>Computer Literacy</td>
<td>129</td>
<td>4.8%</td>
</tr>
<tr>
<td>5</td>
<td>Accounting</td>
<td>113</td>
<td>4.2%</td>
</tr>
<tr>
<td>6</td>
<td>Administration</td>
<td>104</td>
<td>3.8%</td>
</tr>
<tr>
<td>7</td>
<td>Hospitality</td>
<td>85</td>
<td>3.1%</td>
</tr>
<tr>
<td>8</td>
<td>Administration and Finance</td>
<td>84</td>
<td>3.1%</td>
</tr>
<tr>
<td>9</td>
<td>Business Management</td>
<td>84</td>
<td>3.1%</td>
</tr>
<tr>
<td>10</td>
<td>Clerk</td>
<td>84</td>
<td>3.1%</td>
</tr>
<tr>
<td>11</td>
<td>Engineering</td>
<td>84</td>
<td>3.1%</td>
</tr>
<tr>
<td>12</td>
<td>Finance</td>
<td>84</td>
<td>3.1%</td>
</tr>
<tr>
<td>13</td>
<td>Financial Management</td>
<td>84</td>
<td>3.1%</td>
</tr>
<tr>
<td>14</td>
<td>Induction training</td>
<td>84</td>
<td>3.1%</td>
</tr>
<tr>
<td>15</td>
<td>Wielding</td>
<td>84</td>
<td>3.1%</td>
</tr>
<tr>
<td>16</td>
<td>Cook</td>
<td>64</td>
<td>2.3%</td>
</tr>
<tr>
<td>17</td>
<td>Leadership</td>
<td>45</td>
<td>1.7%</td>
</tr>
<tr>
<td>18</td>
<td>Mechanics</td>
<td>45</td>
<td>1.7%</td>
</tr>
<tr>
<td>19</td>
<td>Numeracy</td>
<td>45</td>
<td>1.7%</td>
</tr>
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<td>20</td>
<td>Portuguese Language</td>
<td>45</td>
<td>1.7%</td>
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<tr>
<td>21</td>
<td>English</td>
<td>42</td>
<td>1.6%</td>
</tr>
<tr>
<td>22</td>
<td>Cleaning</td>
<td>21</td>
<td>0.8%</td>
</tr>
<tr>
<td>23</td>
<td>Customer Service</td>
<td>21</td>
<td>0.8%</td>
</tr>
<tr>
<td>24</td>
<td>Sales</td>
<td>21</td>
<td>0.8%</td>
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<tr>
<td>25</td>
<td>Waiters</td>
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<td>0.8%</td>
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</table>
### Areas of training and Number of enterprises

<table>
<thead>
<tr>
<th>No</th>
<th>Areas of training</th>
<th>Number of enterprises</th>
<th>%</th>
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<tbody>
<tr>
<td>26</td>
<td>Barber</td>
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<tr>
<td>27</td>
<td>IT</td>
<td>20</td>
<td>0.7%</td>
</tr>
<tr>
<td>28</td>
<td>Marketing Management</td>
<td>20</td>
<td>0.7%</td>
</tr>
<tr>
<td>29</td>
<td>Photographer</td>
<td>20</td>
<td>0.7%</td>
</tr>
<tr>
<td>30</td>
<td>Car Painting</td>
<td>16</td>
<td>0.6%</td>
</tr>
<tr>
<td>31</td>
<td>Critical Thinking</td>
<td>16</td>
<td>0.6%</td>
</tr>
<tr>
<td>32</td>
<td>Time Management</td>
<td>16</td>
<td>0.6%</td>
</tr>
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<td>33</td>
<td>Human Resource</td>
<td>9</td>
<td>0.3%</td>
</tr>
<tr>
<td>34</td>
<td>Plumbing</td>
<td>9</td>
<td>0.3%</td>
</tr>
<tr>
<td>45</td>
<td>Others</td>
<td>309</td>
<td>11.4%</td>
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### Enterprises recruiting from TVET by TVET training provider and area of training

<table>
<thead>
<tr>
<th>Training area</th>
<th>Total</th>
<th>Senai Bekora</th>
<th>Don Bosco</th>
<th>Salele</th>
<th>STVJ Comoro</th>
<th>Tibar</th>
<th>SOLS</th>
<th>Baucau</th>
<th>STVJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>606</td>
<td>40</td>
<td>280</td>
<td>100</td>
<td>20</td>
<td>104</td>
<td>21</td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>Construction</td>
<td>252</td>
<td>0</td>
<td>168</td>
<td>0</td>
<td>0</td>
<td>84</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Masonry</td>
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<td>0</td>
<td>0</td>
<td>84</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
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<td>Automotive</td>
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<td>32</td>
<td>16</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>AC Repairer</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Electrical</td>
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<td>0</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wielding</td>
<td>40</td>
<td>0</td>
<td>40</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
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<td>Hospitality</td>
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<td>0</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>Customer Service</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>20</td>
</tr>
</tbody>
</table>
### 30. Means of communication enterprises uses to advertise vacancies; by location and sectors

<table>
<thead>
<tr>
<th>Location (Total)</th>
<th>Total</th>
<th>Np</th>
<th>R</th>
<th>TV</th>
<th>FB</th>
<th>CW</th>
<th>SEJT</th>
<th>CNT</th>
<th>Comb</th>
<th>NP</th>
<th>NS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>522</td>
<td>28</td>
<td>0</td>
<td>0</td>
<td>115</td>
<td>20</td>
<td>235</td>
<td>19</td>
<td>164</td>
<td>3527</td>
<td>1120</td>
</tr>
<tr>
<td>Dili</td>
<td>319</td>
<td>28</td>
<td>0</td>
<td>0</td>
<td>81</td>
<td>20</td>
<td>178</td>
<td>19</td>
<td>157</td>
<td>2339</td>
<td>376</td>
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<tr>
<td>Municipalities</td>
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<td>0</td>
<td>0</td>
<td>34</td>
<td>0</td>
<td>57</td>
<td>0</td>
<td>7</td>
<td>1188</td>
<td>744</td>
</tr>
<tr>
<td>Sector (total)</td>
<td>522</td>
<td>28</td>
<td>0</td>
<td>0</td>
<td>116</td>
<td>20</td>
<td>235</td>
<td>21</td>
<td>163</td>
<td>3523</td>
<td>1123</td>
</tr>
<tr>
<td>Accommodation and Food services</td>
<td>455</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>14</td>
<td>7</td>
<td>357</td>
<td>63</td>
</tr>
<tr>
<td>Automotive</td>
<td>93</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>59</td>
<td>27</td>
</tr>
<tr>
<td>Construction</td>
<td>262</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>82</td>
<td>0</td>
<td>170</td>
<td>0</td>
<td>43</td>
<td>1547</td>
<td>785</td>
</tr>
<tr>
<td>Manufacture and other industrial activities</td>
<td>108</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>90</td>
<td>9</td>
</tr>
<tr>
<td>Wholesale, and retail trade, repair of motor vehicles and motorcycles</td>
<td>148</td>
<td>28</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>45</td>
<td>0</td>
<td>84</td>
<td>1110</td>
<td>219</td>
</tr>
<tr>
<td>other services</td>
<td>460</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>0</td>
<td>20</td>
<td>360</td>
<td>20</td>
</tr>
</tbody>
</table>

**Note:** Combination includes; Facebook, Konnecto, SEJT, Jornal, and Radio.

Np=Newspaper, R=Radio, FB=Facebook, CW=Company Website, SEJT=Secretária de Estad da Juventude e do Trabalho, NS=Not specified, CNT=Konnecto, Comb=Combination, NP=Never Published, NS=Not specified
ANNEX C: SKILLS ANTICIPATION SURVEY QUESTIONNAIRE

**Section A – Enterprise Profile**

1. Name of the enterprise: _______________________________________________________

2. Address of the enterprise:
   
   Suco|__________________________________|Municipal |_________________________

3. Is this your: A. Branch Office: |________| B. Main Office: |________|

3a. Does your enterprise have other establishments in different locations?

   1. Yes (go to 3b)   2. No (go to A.1)

   3b. How many? __________________________

A.1 When was your enterprise established? Month: |__|__| Year: |__|__|__|__|

A.2 The company/enterprise is a/an:

<table>
<thead>
<tr>
<th>Company Type</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sole Trader – ENIN</td>
<td>1</td>
</tr>
<tr>
<td>Partnership with Limited Liability – “Lda.”</td>
<td>3</td>
</tr>
<tr>
<td>Joint Stock Company – “S.A.”</td>
<td>4</td>
</tr>
<tr>
<td>Permanent Representation (Foreign Company’s Branch)</td>
<td>5</td>
</tr>
<tr>
<td>State Owned Enterprise – “E.P.”</td>
<td>6</td>
</tr>
<tr>
<td>National Enterprise</td>
<td>7</td>
</tr>
</tbody>
</table>

A.3 The enterprise is owned by:

   1. _______________________________________________________
   2. _______________________________________________________
   3. _______________________________________________________

A.4 What are the main goods or services provided by your enterprise in this location?

   ISIC Code

<table>
<thead>
<tr>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>
B.1 Could you please indicate the number of wage and salary employees by occupation.

<table>
<thead>
<tr>
<th>Occupation (by major group)</th>
<th>Locals</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>1 Managers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Professionals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Associate professionals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Service and sale workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Clerical support workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Skilled agricultural, forestry and fishery workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Craft and related trades workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Plant and machine operators and assemblers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Elementary occupations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B.2 Please list the occupational title of the main categories of workers in your enterprise and specify the current number of workers in each of the occupations (up to 5 occupations)

<table>
<thead>
<tr>
<th>No</th>
<th>Occupational title</th>
<th>ISC code</th>
<th>Current number of workers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skilled</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
B.3 Could you please indicate the average monthly wage/salary you pay for the following positions?

<table>
<thead>
<tr>
<th>Occupation categories</th>
<th>Average USD per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Managers (This category includes chief executives; general and corporate managers; managing director; administrative, finance, production, service and sale manager; and regional and branch manager who plan, direct and coordinate the policies and activities of business and other organization)</td>
<td></td>
</tr>
<tr>
<td>2. Professionals (Professionals increase the existing of knowledge, apply scientific or artistic concepts and theories, or teach in a systematic manner. Most occupations in this category- such as engineers, lawyers, economists, computing professionals, teachers and health professionals- require skills at graduate and postgraduate education)</td>
<td></td>
</tr>
<tr>
<td>3. Technicians and associate professionals (This category performs mostly technical and related tasks connect with research and application of scientific, artistic, or operational methods. These occupations, which typically require skills at upper secondary or tertiary education, include industrial robot controllers, photographers and medical assistants)</td>
<td></td>
</tr>
<tr>
<td>4. Clerical support workers (This category performs clerical duties with associated with money-handling operations, travel arrangements, requests for information and arrangement. Most of these jobs, such as secretaries, cashiers, or transport clerks, require skills at least lower secondary educations)</td>
<td></td>
</tr>
<tr>
<td>5. Service and sale workers (This category provides personal services related to travel, housekeeping, catering, personal care, or protection, or they demonstrate and sell goods. Most occupations require skills at least lower secondary education)</td>
<td></td>
</tr>
<tr>
<td>6. Skilled agricultural, forestry, and fishery workers (This group includes occupations that require skills at least secondary education or equivalent critical skills and knowledge such as crop growers, gardeners and dairy and livestock producers)</td>
<td></td>
</tr>
<tr>
<td>7. Craft and related trades workers (This group applies their skills in the fields of mining and construction, making or repairing machinery, printing, processed food, textiles, or articles including handicrafts goods which involve the performance of complex physical duties that normally involve initiative, manual dexterity and other practical skills. Most of these occupations, such as builders, bricklayers, plumbers, or electronic mechanics require a substantial period of training)</td>
<td></td>
</tr>
<tr>
<td>8. Plant and machine operators and assemblers (This group operates and monitors industrial and agricultural machinery and equipment, drives and operates motor vehicles and mobile machinery, or assembles products. Most occupations have not a particular standard of education but will usually have formal experience related training)</td>
<td></td>
</tr>
<tr>
<td>9. Elementary occupations (This group consists of simple and routine tasks that mainly require the use of hand tools plus physical effort. Most occupations in this group, such as cleaners, building caretakers, doorkeepers or laborers’ do not require formal education qualification).</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
</tr>
</tbody>
</table>
Section C – Recruitment / Recruitment Difficulties

C.1 In the last two years, has your company filled any permanent or temporary positions?

<table>
<thead>
<tr>
<th>Yes</th>
<th>1</th>
<th>Go to C.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>2</td>
<td>Go to C.6</td>
</tr>
</tbody>
</table>

C.2 Could you please, indicate the occupations (up to a maximum of five) in which your company has hired the most employees and the total number of employees in the following periods (in the case of people having been hired for more than one occupation, please choose the main one):

<table>
<thead>
<tr>
<th>Occupation (List up to five occupations) (ISCO-08 Code)</th>
<th>Locals</th>
<th>Foreigners</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C.3 In the last two years, including this year, have your enterprise recruited first-time job seekers? Please indicate.

<table>
<thead>
<tr>
<th>A First-time job seekers coming from general secondary school</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>B First-time job seekers coming from technical secondary education</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>C First-time job seekers coming from technical training centre (or TVET centre)</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>D First-time job seekers coming from university or other higher education</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

C.4 How well were they prepared for work for each category?

<table>
<thead>
<tr>
<th>A First-time job seekers coming from general secondary school</th>
<th>Very well prepared</th>
<th>Well prepared</th>
<th>Prepared</th>
<th>Poorly prepared</th>
<th>Very poorly prepared</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>B First-time job seekers coming from technical secondary education</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>C First-time job seekers coming from technical training centre (or TVET centre)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>D First-time job seekers coming from university or other higher education</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
C.5 In which of the following areas was the preparation of the newly hired employees lacking (you can select all relevant fields for each group):

<table>
<thead>
<tr>
<th>Area Description</th>
<th>A First-time job seeker coming from general secondary school</th>
<th>B First-time job seekers coming from technical secondary education</th>
<th>C First-time job seekers coming from technical training centre (or TVET centre)</th>
<th>D First-time job seekers coming from university or other higher education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of job specific required skills or competencies (e.g. technical or job specific skills, IT skills, problem solving skills, team working skills, communication skills)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited basic education (literacy and numeracy)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor motivation / personality or lack of motivation (e.g. poor work ethic, punctuality, appearance, manners)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of work experience or maturity (including general knowledge &amp; common sense)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E Other. Please specify</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C.6 In the last one year, have any employees left your company? (Both permanent and temporary positions)

<table>
<thead>
<tr>
<th>Yes</th>
<th>1</th>
<th>Go to C.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>2</td>
<td>Go to C.8</td>
</tr>
</tbody>
</table>

C.7 Could you please indicate the occupations (up to a maximum of five) that have registered the highest number of exits and the total number of exits in the last one year.

<table>
<thead>
<tr>
<th>Occupation List up to five occupations (ISCO-88 Code)</th>
<th>Number of exits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

C.8 Do you currently have vacancy/ies?

<table>
<thead>
<tr>
<th>Yes (Number of vacancies___________)</th>
<th>1</th>
<th>Go to C.10</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>2</td>
<td>Go to D.1</td>
</tr>
</tbody>
</table>
C.9 Could you please tell us how many vacancies will you open in the next 12 months, including this year’s? (Please list up to five occupations.)

<table>
<thead>
<tr>
<th>Number of vacancies this year</th>
<th>List of occupation (maximum 5) this year (ISCO-88)</th>
<th>Number of vacancies in the next 12 months</th>
<th>List of occupation (maximum 5) in the next 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C.10 Are any vacancies proving hard to fill?

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
<td>Go to C.12</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>Go to D.1</td>
</tr>
</tbody>
</table>

C.11 Could you please indicate how many vacancies are proving hard-to-fill? (Up to five occupations)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number</th>
<th>Main Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C.12 Could you please indicate the channels in which you advertise your vacancies to the public?

<table>
<thead>
<tr>
<th>Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newspaper</td>
</tr>
<tr>
<td>Radio</td>
</tr>
<tr>
<td>TV</td>
</tr>
<tr>
<td>Facebook</td>
</tr>
<tr>
<td>Websites</td>
</tr>
<tr>
<td>SEPOPE</td>
</tr>
<tr>
<td>Recruitment agency (eg Konekto)</td>
</tr>
<tr>
<td>Never advertised</td>
</tr>
<tr>
<td>Others</td>
</tr>
</tbody>
</table>
Section D – Future Hiring

D.1 Do you think the number of people working in your company will increase, decrease, or remain the same in the next 12 months?

| Increase (How many? ________________) | 1 | Go to D.2 |
| Decrease (How many? ________________) | 2 | Go to E.1 |
| Remain same | 3 | Go to E.1 |

Section E – Skills Gaps and Workforce Training

E.1 For each occupation, do you have problem related to your employees who do not perform jobs at the required level?

| Yes | 1 | Go to E.2 |
| No | 2 | Go to E.4 |

E.2 Could you please indicate those positions (occupations) where you find workers are not performing at the required level? (List up to 5 occupations)

<table>
<thead>
<tr>
<th>No.</th>
<th>Occupation category</th>
<th>ISCO Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

E.3 Among your employees who are not able to do their jobs at the required level, which, if any, of the following skills need to be improved?

<table>
<thead>
<tr>
<th>No.</th>
<th>Occupation category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Literacy</td>
</tr>
<tr>
<td></td>
<td>Reading and comprehending instructions, guidelines,</td>
</tr>
<tr>
<td></td>
<td>manuals or reports</td>
</tr>
<tr>
<td>2</td>
<td>Numeracy</td>
</tr>
<tr>
<td></td>
<td>Using and understanding numerical or statistical</td>
</tr>
<tr>
<td></td>
<td>information (for example, in graphs, charts and</td>
</tr>
<tr>
<td></td>
<td>tables)</td>
</tr>
<tr>
<td>3</td>
<td>IT literacy/using IT</td>
</tr>
<tr>
<td></td>
<td>Data entry, sending and receiving e-mails or printing.</td>
</tr>
<tr>
<td></td>
<td>Word processing or spreadsheets</td>
</tr>
<tr>
<td>4</td>
<td>Advanced IT application/development</td>
</tr>
<tr>
<td></td>
<td>Analysing information; statistical analysis, software</td>
</tr>
<tr>
<td></td>
<td>programming, managing computer networks</td>
</tr>
<tr>
<td>5</td>
<td>Oral communication</td>
</tr>
<tr>
<td></td>
<td>Giving instruction to others, describing problems and</td>
</tr>
<tr>
<td></td>
<td>reporting results</td>
</tr>
<tr>
<td></td>
<td>Written communication</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------</td>
</tr>
<tr>
<td>7</td>
<td>Public speaking/instructing/training</td>
</tr>
<tr>
<td>8</td>
<td>Customer handling</td>
</tr>
<tr>
<td>9</td>
<td>Team working</td>
</tr>
<tr>
<td>10</td>
<td>Taking initiative</td>
</tr>
<tr>
<td>11</td>
<td>Knowledge of foreign language</td>
</tr>
<tr>
<td>12</td>
<td>Planning and organizing</td>
</tr>
<tr>
<td>13</td>
<td>Management responsibilities/taking lead</td>
</tr>
<tr>
<td>14</td>
<td>Manual dexterity</td>
</tr>
<tr>
<td>15</td>
<td>Clerical/administrative tasks (please specify)</td>
</tr>
<tr>
<td>16</td>
<td>Job-specific tasks in construction industries (please specify)</td>
</tr>
<tr>
<td>17</td>
<td>Job-specific tasks in automotive industries (please specify)</td>
</tr>
<tr>
<td>18</td>
<td>Job-specific tasks in accommodation and food services (please specify)</td>
</tr>
<tr>
<td>19</td>
<td>Other job-specific tasks (please specify)</td>
</tr>
</tbody>
</table>

E.4 Last year, did your employees participate in any external or internal training courses, completely or partially financed by the company?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>1</th>
<th>Go to E.5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>2</td>
<td>Go to E.6</td>
</tr>
</tbody>
</table>

E.5 In which areas did your company finance the training?

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
E.6 What are the specific training needs for your employees in different occupations?

<table>
<thead>
<tr>
<th>No.</th>
<th>Occupation category</th>
<th>ISCO Code</th>
<th>Training needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

E.7 Are you aware of TVET providers for workers that you usually recruit (TVET = Technical Vocational and Education Training)?

Yes | 1
---|---
No  | 2

E.8 Do you recruit any of your workers from specific TVET providers?

Yes | 1
---|---
No  | 2

E.9 Could you please indicate TVET training providers, type of workers trained, and level certificate of the workers you have recruited.

<table>
<thead>
<tr>
<th>TVET training provider</th>
<th>Type of workers trained</th>
<th>Level of Certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>None   Basics 1 2 3 4</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

E.10 Please list the specific TVET training providers and the type of workers trained? For each TVET training provider, please specify your level of satisfaction of the workers who were recruited.

<table>
<thead>
<tr>
<th>E10a. TVET training provider</th>
<th>E10b. Type of workers trained</th>
<th>E10c. Level of satisfaction of workers who were recruited</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Very satisfied Satisfied Not satisfied</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>1 2 3</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>1 2 3</td>
</tr>
<tr>
<td>E10a. TVET training provider</td>
<td>E10b. Type of workers trained</td>
<td>E10c. Level of satisfaction of workers who were recruited</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Very satisfied Satisfied Not satisfied</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>1 2 3</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>1 2 3</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>1 2 3</td>
</tr>
</tbody>
</table>

Thank you very much for your time!

Personal details of the contact person

1. Name of the contact person ___________________________________________
2. Position of contact person ___________________________________________
3. Tel mobile __________________________ 4. Tel business __________________________
5. Email ___________________________________________

Interview control section

<table>
<thead>
<tr>
<th>6. Visit</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Date</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Start time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. End time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Interview result (Check appropriate code)

1. Questionnaire fully completed
2. Questionnaire partially completed
4. Refusal
5. Not active
6. Address not found
7. Company not found
8. Other, specify

11. Name of the interviewee (if different from contact person) ___________________________
12. Position of the interviewee (if different from contact person) ___________________________
13. Interviewee mobile ____________________ 14. Interviewee’s tel business ____________________
ANNEX D: LIST OF OFFICIALS INVOLVED

Survey Managers

1. Jenifer Antonio da Cruz Pui
2. Jose Bento
3. Mariano da Costa

Field operation

1. Jasinta do Rego
2. Miguel de Araujo Malik
3. Quintino Queros
4. Maria Peregrina Duarte Sarmento
5. Eliza Benevides Pinto
6. Natasha F. Simoes
7. Ervina Garcia

Consultants

1. Eoghan Walsh (International)
2. Leoneto Elizario (National)