

Islamic University of Gaza  
Deanery of Graduate Studies  
Faculty of Commerce  
Department of Business Administration



**Developing National Occupational Licensing System for Subcontractors and Technicians in  
Construction Sector**

By

**Rashid Al Ruzzi**

Supervised by

**Prof. Dr. Yousif Hussain Ashour**

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of  
Master in Business Administration

**2015**

## إقرار

أنا الموقع أدناه مقدم الرسالة التي تحمل العنوان:

# **Developing National Occupational Licensing System for Subcontractors and Technicians in Construction Sectorates**

أقر بأن ما اشتملت عليه هذه الرسالة إنما هو نتاج جهدي الخاص، باستثناء ما تمت الإشارة إليه حيثما ورد، وإن هذه الرسالة ككل أو أي جزء منها لم يقدم من قبل لنيل درجة أو لقب علمي أو بحثي لدى أي مؤسسة تعليمية أو بحثية أخرى.

## **DECLARATION**

The work provided in this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted elsewhere for any other degree or qualification

Student's name

اسم الطالب/ة: رشيد يوسف الرزي

Signature

التوقيع: رشيد

Date:

التاريخ: 2016 / 05 / 16



هاتف داخلي 1150

مكتب نائب الرئيس للبحث العلمي والدراسات العليا

الرقم. ج. ب. غ. /35/..... Ref

التاريخ ..... 2016/02/10 Date

## نتيجة الحكم على أطروحة ماجستير

بناءً على موافقة شئون البحث العلمي والدراسات العليا بالجامعة الإسلامية بغزة على تشكيل لجنة الحكم على أطروحة الباحث/ رشيد يوسف رشيد الرزي لنيل درجة الماجستير في كلية التجارة/ قسم إدارة الأعمال وموضوعها:

تطوير نظام الإجازة المهنية الوطنية لمقاولي الباطن والفنيين في قطاع البناء

Developing National Occupational Licensing System for Subcontractors and Technicians in Construction Sector

وبعد المناقشة التي تمت اليوم الأربعاء 01 جمادى الأولى 1437 هـ، الموافق 2016/02/10م الساعة

الواحدة ظهراً، اجتمعت لجنة الحكم على الأطروحة والمكونة من:

.....	أ.د. يوسف حسين عاشور	مشرفاً و رئيساً
.....	د. وائل حمدي الدايدة	مناقشاً داخلياً
.....	د. أسامة إبراهيم بدوي	مناقشاً خارجياً

وبعد المداولة أوصت اللجنة بمنح الباحث درجة الماجستير في كلية التجارة/ قسم إدارة الأعمال.

واللجنة إذ تمنحه هذه الدرجة فإنها توصيه بتقوى الله ولزوم طاعته فإن يمنح علمه في خدمة دينه ووطنه.



والله ولي التوفيق

نائب الرئيس لشئون البحث العلمي والدراسات العليا

أ.د. عبدالرؤوف علي المناعمة

## **Declaration**

I declare that:

This dissertation, “**Developing National Occupational licensing system for subcontractors and Technicians in construction sector**” is my own work that all sources used or quoted have been indicated and acknowledged by means of complete references, and that this thesis was not previously submitted by me for a degree at another University.

**Rashid Yousif Al Ruzzi**

Signature \_\_\_\_\_, Date: \_\_/\_\_/\_\_\_\_

## **Dedication**

I lovingly dedicate this thesis to  
My Mother, Wife & Family,  
Who has supported me every step of the way

## **Acknowledgement**

This research would not have been possible without the guidance and the help of several individuals who in one way or another contributed and extended their valuable assistance in the preparation and completion of this research.

First and foremost, my sincere thanks and respect to my supervisor ***Prof. Dr. Yousif Hussain Ashour*** for his valuable advices, encouragement, professional support and guidance.

Deepest Gratitude to every person who gave me some time for interview and provided guidance through my research.

## **Abstract**

This research proposes a new independent body for national occupational licensing (OL) system for construction sector and it develops the strategic planning for the national occupational system with the appropriate vision, mission, strategic goals, action plan and logical framework.

This research aims to answer the following questions: 1) Is an occupational licensing system application in Palestine? 2) What are the barriers if any to design, implement and enforce an occupational licensing framework for workers in Palestine? 3) What is the most suitable occupational licensing framework for Palestine? 4) What is the most suitable licensing implementation and enforcement system and approach for the Palestinian OL framework? 5) What are the strategic goals, objectives and the Logical framework for the Palestinian OL system?

This methodology of research uses quantitative and qualitative methods which consists of the following steps: 1) stockholder analysis 2) focus group discussion with the stockholders to formulate the main survey items. 3) Structured Interview and survey and 4) the development of the strategic goals, objectives and the Logical framework for the Palestinian OL system with the relevant stockholders and participants.

The research findings and conclusions can be summarised as follows. *First*, the Palestinian Labour market is unregulated, deformed, suffers from skills availability and low quality of services in addition to the gap between training outcome and labour market requirement. *Second*, Occupational Licensing System is a suitable solution and it is applicable for the Palestinian Labour Market. It will help greatly in improving the skills of the workers, the quality of their work, the youth attraction to TVET training and education. In addition, it will improve mobility of workers between local, regional and international market. *Third*, the main barriers to the Occupational system are: (a) The lack of financial capacity to implement and finance the framework. (b) The insufficient capacity of governmental bodies to implement the system. (c) The inadequate TVET system. And (d) The absence of any legalization involvement/laws in the issue. *Forth*, the Occupational Licensing system framework main objective is to improve skills and improve quality of services. It uses licensing as an enforcement approach.

## Contents

Declaration.....	II
Dedication.....	III
Acknowledgement .....	IV
Abstract .....	V
Table of Figures .....	11
Glossary.....	13
Chapter 1: Introduction .....	16
1.1 Introduction .....	16
1.1.1 Construction sector in Gaza.....	17
1.1.2 Subcontracting in construction sector in Gaza.....	17
1.1.3 Recruitment practices .....	17
Skills are not valued.....	18
Economic challenges and lack of education pathways lock workers in low productivity ó low pay jobs.....	18
Informality is high.....	18
Occupational Safety and Health is a major concern .....	18
1.2 Research Problem .....	18
1.3 Research Importance.....	19
1.4 Research Objectives.....	20
1.5 Research Contribution .....	20
1.6 Thesis Structure .....	20
Chapter 2: Theoretical Framework .....	22
2.1 Occupational Licensing.....	22
2.1.1 Definition of occupational licensing .....	22
Registration.....	24
Certification.....	25
Licensing .....	25
2.1.2 Importance of Occupational Licensing .....	25

2.2 Advantages & Disadvantages of Occupational Licensing .....	26
2.3 Barrier of Occupational Licensing.....	32
2.6 Occupational licensing & Quality .....	33
2.7 Occupational Licensing & Improvement Skills .....	35
2.3 Conclusion .....	35
Chapter 3: Previous studies .....	37
3.1 Does Occupational Licensing Deserve Our Approval? A Review of Work by Morris Kleiner .....	37
3.1.1 Methodology.....	37
3.1.2 Recommendations: .....	37
3.2 Occupational Licensing and the Quality of service Sidney L. Carroll* and Robert J. Gastont.....	37
3.2.1 Methodology.....	38
3.2.2 Recommendations and Results .....	38
3.3 Occupational Licensing Verses Company- led training, Joachim Haast.....	38
3.3.1 Methodology.....	38
3.3.2 Recommendation and Results:.....	38
3.4 Occupational Licensing and the Transition from Welfare to Work THOMAS W. HAZLETT & JENNIFER L. FEARING .....	39
3.4.1 Methodology.....	39
3.4.2 Recommendation research:.....	39
3.5 Some Evidence on Occupational Licensing and Occupational Income, Jeffery Pfeffer .....	40
3.5.1 Methodology.....	40
3.5.2 Recommendations and Results .....	40
3.6 The Economies of Occupational Licensing, NEIL KATSUYAMA .....	40
3.6.1 Methodology.....	40
3.6.2 Recommendations and Results .....	40
3.7 The Prevalence and Effects of Occupational Licensing, Morris M. Kleiner and Alan B. Krueger .....	41
3.7.1 Methodology.....	41

3.7.2 Recommendations and Results .....	41
3.8 Analyzing the Extent and Influence of Occupational Licensing on the Labor Market, Morris M. Kleiner, Alan B. Krueger .....	41
3.8.1 Methodology .....	42
3.8.2 Recommendations and Results .....	42
3.9 Occupational Licensing of Building Trades: Case of Western Australia, Peter E. D. Love; Peter R. Davis; and Denis Worrall .....	42
3.9.1 Methodology .....	42
3.9.2 Recommendations and Results .....	42
3.10 A Just Measure of Forgiveness: Reforming Occupational Licensing Regulations for Ex- Offenders Using BFOQ Analysis KAROL LUCKEN and LUCILLE M. PONTE.....	43
3.10.1 Methodology .....	43
3.10.2 Recommendations and Results .....	43
3.11 Occupational Licensing and Minorities: A Reply to Klein, Powell, and Vorotnikov Marc T. Law and Mindy S. Marks .....	44
3.11.1 Methodology .....	44
3.11.2 Recommendations and Results .....	44
3.12 The impact of licensing requirements on industrial organization and labour: Evidence from the U.S. private security market , Brian Meehan.....	44
3.12.1 Methodology .....	44
3.12.2 Recommendations and Results .....	45
3.13 Occupational Licensing in a "Competitive" Labor Market: The Case of Cosmetology , A. FRANK ADAMS , JOHN D. JACKSON and ROBERT B. EKELUND, JR . .....	45
3.13.1 Methodology .....	45
3.13.2 Recommendations and Results .....	45
3.14 The Effects of Occupational Licensing on Skills Needs in the Building Industry: Evidence from New Zealand.....	45
3.14.1 Methodology .....	46
3.14.2 Recommendations and Results .....	46
3.15 Doctors with borders: occupational licensing as an implicit barrier to high skill migration, Brenton D. Peterson ÉSonal S. Pandya ÉDavid Leblang .....	46

3.15.1 Methodology .....	46
3.15.2 Recommendations and Results .....	46
3.16 Licensing Requirements and Occupational Mobility Among Highly Skilled New Immigrants in Canada, Rupa Banerjee and Mai Phan.....	47
3.16.1 Methodology .....	47
3.16.2 Recommendations and Results .....	47
3.17 The de-licensing of occupations in the United States.....	47
3.17.1 Methodology .....	47
3.17.2 Recommendations and Results .....	48
3.18 The Effects of Occupational Licensing on Complainants Against Real Estate Agents ,James D. Shilling , C.F. Sirmans.....	48
3.18.1 Methodology .....	48
3.18.2 Recommendations and Results .....	48
3.19 Occupational Licensing: Scant Treatment in Labor Texts, E. Frank Stephenson and Erin E. Wend .....	48
3.19.1 Methodology .....	48
3.19.2 Recommendations and Results .....	49
3.20 Projects in The Gaza Strip Adnan Enshassi, Sherif Mohamed, Saleh Abushaban (2009).....	49
3.20.1 Methodology .....	49
3.20.2 Recommendations and Results .....	49
Chapter 4 The Construction Sector In Context.....	50
4.1 Multilayer subcontracting of specialist works.....	50
4.2 Advantageous features of the multilayer subcontracting .....	50
4.3 Occupational Health and Safety (OHS) .....	51
4.3.1 The relationship between subcontracting and OHS .....	51
Chapter 5: Research Methodology.....	53
5.1 Focus Group definition and analysis .....	53
5.2 Methods of collecting qualitative data.....	53
5.2.1 Group interviews: .....	54
Chapter 6: Data analysis, Results and Findings.....	65

6.1 Structured Interview design .....	66
6.2 Data Collection and Structured Interview Application.....	67
6.3 Results of the structured interviews concerning the applicability of the Occupational Licensing System .....	69
6.3.1 Results of the close ended questions of the structured interview .....	69
6.3.2 Results of the open ended questions of the structured interview:.....	94
6.4 Summary of findings .....	98
6.5 Conclusion and summary of results.....	99
Chapter 7: Proposed Occupational Licensing Model for Palestine .....	100
7.1 National Construction-sector Occupational Licensing System.....	101
7.1.1 Characteristics of the National Construction-sector Occupational Licensing System	102
7.1.2 Possible Participants/Stakeholders of the FC and National Occupational Licensing System .....	103
7.1.3 Stakeholders and responsibility matrix .....	105
7.1.4 Occupational Licensing Strategy .....	107
7.2 Summary .....	116
Chapter 8: Conclusions and recommendations.....	117
References .....	120
Appendix I: Structured Interview (English Version).....	122

## Table of Figures

Figure 1 Sample breakdown based on organization. ....	67
Figure 2The informant response regarding of their knowledge of Occupational licensing. ....	70
Figure 3 Informants Confidance in their knowledge of Occupational Licensing System ....	71
Figure 4 the knowledge of the presence of occupational licensing model in the local community .....	71
Figure 5 Is there any presence of provisions in the Palestinian labor law connected to OL? .....	72
Figure 6 The relation between the Occupational Licensing and access to formal jobs. ....	73
Figure 7 Relation between Occupational Licensing and quality of services and public safety. ...	73
Figure 8 The perceived impact of occupational licensing and work conditions and occupational health and safety. ....	74
Figure 9 Relation between compulsory enforcement procedures and impact on employability...	75
Figure 10 The perceived importance of occupational license. ....	75
Figure 11 Most important problems that the Occupational Licensing will address. ....	76
Figure 12 Main barriers to implementing the Occupational Licensing in Construction Sector...	76
Figure 13 Goals of The Occupational Licensing. ....	77
Figure 14 Feasibility of the Occupational Licensing in the Palestinian economic situation. ....	78
Figure 15 The most convenient approach to Occupational Licensing in Palestine. ....	79
Figure 16 The most appropriate regulation approach to Occupational Licensing.....	80
Figure 17 The relation between the Occupational licensing and customers' confidence.....	81
Figure 18 The focus of the Occupational Licensing System.....	81
Figure 19 Skills Standard to be enforced. ....	82
Figure 20 The level that the Occupational Licensing should address.....	83
Figure 21 The occupations that has the highest complaints in the construction sector. ....	84
Figure 22 The occupations that has the highest skills gap in the construction sector.....	84
Figure 23 The occupation that has the highest risk in the construction sector.....	85
Figure 24 The occupation that has the highest employer/customer risk in the construction sector .....	86
Figure 25 The scope of obligation for the licensing process.....	86
Figure 26 The nature of the occupational licensing authority .....	87
Figure 27 The enforcement process.....	87
Figure 28 The requirements for obtaining an Occupational License.....	88
Figure 29 The most appropriate form of examination .....	88
Figure 30 Emphasis on Practical skills in the examination process .....	89
Figure 31 The legal responsibility of unlicensed worker.....	90
Figure 32 The optimal duration for the Occupational License.....	91
Figure 33 Conditions for license's renewal .....	91

Figure 34 Optimal financing model for the Occupational Licensing sustainability.....92  
Figure 35 The appropriate timeframe to implement the Occupational Licensing System.....93

## **Glossary**

<b>Occupation</b>	An overall term which includes all forms of regulated paid employment or self-employment by people who have been educated and trained to practice in these occupations.
<b>Occupational standards (profile)</b>	Definition of what is required of the person in terms of competences in order to perform his tasks correctly regarding quality, efficiency, and productivity standards.
<b>Qualifications</b>	Attribute that an individuals has achieved competences to specified standards recognized by relevant organization.
<b>Occupational competences</b>	The comprehensive term for being capable and willing to take action in a planned, responsible, goal-oriented way in order to solve complex tasks or problems in the occupation.
<b>Occupational level</b>	A job evaluation or grading system which is used by the national organizations to classify jobs according to their content and to establish comparative value between jobs.
<b>Palestinian Occupational classification</b>	<p>Palestinian cabinet approved the development of POC</p> <p>A system for describing jobs, defining their titles, grouping them according to the functions and duties, tasks and skills undertaken.</p> <p>POC skill level categories are 5 .</p>
<b>The national Qualifications framework</b>	Worldwide acknowledged and utilized instrument to standardize classify qualifications .NQF matches the needs of the labour market as classified and described in the POC with the required education and training to perform well in these occupations.
<b>Job description</b>	Represents the minimum functions and tasks performed in a given job title and consists of a brief and detailed description.
<b>Lifelong learning Performance</b>	The process of crying out or accomplishing an action task or function in compliance with specific criteria /standards/guidelines or achieving results in accordance with stated goals and plans .
<b>Employability</b>	The capacity of E óTVET to secure a job ,to keep it ,to cope with

	changing technology and labour market conditions and to build a career
<b>Sustainability</b>	The degree to which E-TVET services ,processes ,benefits and effects are able to be maintained over time
<b>Informal economy</b>	All economic activities by workers and economic units are either in law, or in practice, not covered or insufficiently covered by formal working arrangements.
<b>Training Programmes</b>	E TVET programmes developed to respond to identified labour market needs.
<b>Unemployment</b>	<p>Situation of persons who during the reference period were:</p> <ul style="list-style-type: none"> <li>a) Without work óNot in paid employment or self-employment.</li> <li>b) Currently available for work.</li> <li>c) Seeking work ó seeking paid employment or self-employment and had taken specific steps to do so in the recent specified period.</li> </ul>
<b>Technical and vocational Education and Training TVET</b>	The education or training process that involves ,in addition to general education subjects ,the research of technologies and related sciences ,and acquisition of practical skills related to occupations in various sector in the economy .It includes formal TVET programme (organized as a part of education system ),and non-formal courses (organized outside the education system)
<b>Stakeholders</b>	Entities (Government, agencies, companies, organizations, communities, individuals ...etc.) that have a direct or indirect interest in or benefit from an E TVET interventions, policy or any related
<b>Policy</b>	Principles ,roles ,and guidelines formulated or adopted by E-TVET organizations to reach long term goals
<b>Social partners</b>	Trade union or employer organization engaged in cooperative relationship in mutual benefit within an E óTVET framework whether at central, sectorial, or company level.

<b>Labour supply</b>	The available human resources that are expected to the quantitative and qualitative needs of labour market.
<b>Labour force</b>	Employed and unemployed people.
<b>Labour market information system</b>	The systematic collection and analysis of data and dissemination the information regarding the demand for and the supply of labour ,includes information on working age population ,national labour force ,migrant workers, unfilled vacancies, skill gap ,wages and other related data.

## Chapter 1: Introduction

### 1.1 Introduction

Palestine has a very high unemployment rate. According to the Palestinian Central Bureau of Statistics (PCBS)<sup>1</sup>, In Gaza, yearly average unemployment increased by as much as 11 percentage points to reach 43 percent in the fourth quarter of 2014<sup>2</sup> probably the highest in the world--and that in the West Bank dropped by 1 percentage point. In Gaza, the poverty rate reached 39 percent and with poverty in the West Bank at 16 percent, the aggregate poverty rate amounted to 25 percent. Young persons were also more likely to be unemployed with a 41.1% unemployment rate among youth aged between 20 and 24 years. However, Palestinian employers find it difficult to recruit skilled workers. According to the Skills Gaps and Development in Palestinian Territory report of January of 2015<sup>3</sup>, the vast majority of employers and business owners state that they find it difficult to fill job vacancies. They also indicate that they place greater faith in the skills of old staff. In addition, it found that there is a lack of practical skills among applicants and there is a very limited capacity of the private sector to provide on-the-job-training.

This indicates that the labour market in Palestine is unregulated. Furthermore, this situation arises because the following reasons:

- (a) The lack of a national skills testing and certification system credible for the employers.
- (b) The lack of predictability of wages that discourage many youth Palestinian to be trained in semi-skilled / skilled level occupations.
- (c) Systemic failures of the skills development system. (i.e. TVET and other systems.)
- (d) The access of workers to many occupations that are potentially hazardous for both themselves and consumers is not regulated in Palestine.

Those problems are not exclusive to the Palestinian labour market although they may differ in the severity of the problem.

---

<sup>1</sup> Palestinian Central Bureau of Statistics (PCBS), Labour Force Participation, Employment, Unemployment and Average Daily Wage in NIS for Wage Employees in the Palestinian Territory by Governorate (ILO Standards), January - March, 2012, [http://www.pcbs.gov.ps/Portals/\\_Rainbow/Documents/Labor%20Force%20Annual.htm](http://www.pcbs.gov.ps/Portals/_Rainbow/Documents/Labor%20Force%20Annual.htm).

<sup>2</sup> World Bank estimates. Economic Monitoring Report to the Ad Hoc Liaison Committee, World Bank, May 27, 2015

<sup>3</sup> Skills Gaps and Development in the Occupied Palestinian Territory, Care International Team, January 2015.

### **1.1.1 Construction sector in Gaza**

Apart from the overall employment situation in the construction sector in Gaza, the substandard working conditions also present a clear problem. Internationally recognized occupational safety and health standards and practices are generally neither applied nor monitored. Basic workers' rights are not sufficiently respected and in some instances child labour is also exploited in the construction sector. There is a need to improve working conditions in all construction related activities in Gaza, including those instigated by international organizations, the public sector as well as private entrepreneurs.

### **1.1.2 Subcontracting in construction sector in Gaza**

Construction industry encounters very complex practices, which includes: owners, general contractors, specialist contractors, suppliers and designers. Work conditions and Safety performance is a very sensitive matter; it deals with human life, the active resource in all aspects of life and its continuity. For the most part, the construction industry thrives on the work of subcontractors. On building construction projects, it is common that 80-90% of the work is to be performed by subcontractors.

Construction relies heavily on subcontractors and their workers who are employed by prime contractors. Subcontractors are the wheels which carry the project to completion and therefore, are the dynamic of the construction industry. The quality of subcontractors is significant as it has a direct bearing on how well tasks are performed for the general contractors. The construction industry relies heavily on specialised subcontractors to bring the expertise needed for specific jobs. As a result, the quality of specialist subcontractors is even more important because it has a direct bearing on the performance of the prime contractor on key elements of the work. The focus of many studies in the construction industry was on general contractors, construction management firms, and design/build firms. There are perhaps many reasons for this, but the reality is that specialty contractors actually execute most construction on-site while working as subcontractors.

### **1.13 Recruitment practices**

*Recruitment practices are mostly informal for lower skills workers* – they often rely on private networks or personal connections to employers. Some sectors are also characterized by a high level of sub-contracting with a large share of the work being done by individual self-employed

workers. Larger companies get involved in a costly process of testing and retraining of the workers to ensure they comply with company standards.

**Skills are not valued** - The average daily wage for waged employees in the West Bank in the Gaza Strip was respectively 88.8NIS and 65.2NIS, slightly above the agreed minimum wage of 65NIS (18,6USD). This small differential shows the little value most employers attribute to the skills currently provided by the skills development system, while at the same time being vocal about the overall lack of skills.

**Economic challenges and lack of education pathways lock workers in low productivity – low pay jobs** – The national qualification framework (NQF) for Palestine was adopted but the 8 levels are not yet operational; consequently, semi-skilled and skilled workers do not have much prospect of education progression that could bring them beyond the survival level jobs in which they are involved.

**Informality is high** – only 26.7% of waged employees were hired with a written contract. 21.3% of waged employees contributed to a pension fund. 22.2% had annual paid vacations. 39.4% of women wage employees had paid maternity leave. 32.8% of workers were affiliated to workers' union (but only 27.9 % of working women)<sup>4</sup>. This informality has also a direct impact on the capacity of the private companies to produce services / products that comply with quality standards and can be exported.

**Occupational Safety and Health is a major concern** – Recent studies showed that 55% of the workers' respondents from the construction sector reported having only partial knowledge of OSH, while 86% had no safety professional or safety department where they worked. Worker attitude and lack of skilled workers were cited as major barriers as improvements for quality and safety.

## **1.2 Research Problem**

The occupational licensing system has been implemented in the EU, USA and Regional Labour Market as a solution for those issues Shapiro (1986). Occupational licensing is a method of economic regulation where by the government controls the entry and supply of participants in a

---

<sup>4</sup> Labour Force Survey, Palestinian Central Bureau of Statistics, 2014-5, Available at [http://www.pcbs.gov.ps/portals/\\_pcbs/PressRelease/Press\\_En\\_LFSQ12013E.pdf](http://www.pcbs.gov.ps/portals/_pcbs/PressRelease/Press_En_LFSQ12013E.pdf)

given profession<sup>5</sup>. The intent is to protect the public health, morals, safety, and general welfare by preventing fraudulent and unethical professionals from entering a vocation<sup>6</sup>. Safety justifications are accomplished by imposing strict entrance requirements on new market participants such as licensing exams, education requirements, and residency requirements<sup>7</sup>.

In this context, the research will support the design and piloting of a national occupational licensing system that will link certified level of skills in targeted occupations to specific wage scales.

To achieve that, this research aims to answer the following questions:

- 1) Is an occupational licensing system applicable in Palestine?
- 2) What are the barriers if any to design, implement and enforce an occupational licensing framework for construction workers in Palestine?
- 3) What is the most suitable occupational licensing framework for Palestine?
- 4) What is the most suitable licensing implementation and enforcement system and approach for the Palestinian OL framework?
- 5) What are the strategic goals, objectives and the Logical framework for the Palestinian OL system?

### **1.3 Research Importance**

While these problems require a long term comprehensive approach, one area where progress can be made is the establishment of a national system for skills recognition which at least would eliminate one of the obstacles Palestinians face. Currently, there is no occupational licensing system in place in the Occupied Palestinian Territories, i.e. (a) there is no specific competencies requirements to be hired even for jobs that can potentially be dangerous for workers and for the consumers like construction, (b) the current certification system for lower level qualifications cannot be relied upon by employers for recruitment purposes, (c) there are no regulations linking a recognized qualification to a wage level, (d) the valuing of skills of the Palestinian semi-skilled

---

<sup>5</sup> See James A. Cathcart & Gil Graff, *Occupational Licensing: Factoring It Out*, 9 PAC. L.J. 147, 148(1978).

<sup>6</sup> See Daniel B. Hogan, *The Effectiveness of Licensing: History, Evidence, and Recommendations*, 7 L. & HUM. BEHAV. 117, 117 (1983) ("Licensing attempts to . . . eliminate[e] quakes, charlatans, incompetents, and unethical practitioners fi-om the field."); Evenly S. Vorotnikov, *License to Profit: An Analysis of Entry Regulations in the Legal and Real Estate Professions*, U. ST. THOMAS J.L. & PUB. POLY, Spring 2011, at 52, 52.

<sup>7</sup> See Morris M. Kleiner, *Occupational Licensing*, J. EcON. PERSP., Fall 2000, at 189, 192

and skilled workers on Palestinian and outside labour markets is currently very low, (e) the pathways to higher level education / training do not function.

The research aims to provide the rule book and framework for such a licensing system.

#### **1.4 Research Objectives**

The research will contribute to identify, evaluate, and rank factors that influence the safety and quality of performance of subcontractors, and increase the opportunities for decent work in construction sector through developing the Licensing and accreditation system and establish accurate data base of subcontractors and technical workers.

#### **1.5 Research Contribution**

This research is the first research to discuss the issue of occupational licensing in Palestine. The research contribution can be stated as follows:

- 1- This research confirms the previously observed issue of unregulated job market in Palestine. It also shows that the Palestinian labour Market suffers from skills availability and low quality of services in addition to the gap between the education and training sector and the labour market needs and requirements.
- 2- This research provides a theoretical framework for the research by discussing the concepts of occupational licensing, the literature review and the related studies.
- 3- This research describes the desired occupational licensing framework characteristics from the conception of the idea to the implementation.
- 4- This research provides a strategic planning for the National Occupational Licensing System for the Palestinian construction sector.

It has to be mentioned that this research is an exploratory research and its findings can be the base of many future research and projects that can be done on the Palestinian labour market in general and in the construction sector specifically.

#### **1.6 Thesis Structure**

This research is structured as follows. The Theoretical Framework is discussed in Chapter 2: Theoretical Framework. The previous studies are summarized in the Chapter 3: Previous studies while Chapter 4 The Construction Sector In Context explores the construction sector in the context of Occupational Licensing. The research methodology is explained in the Chapter 5:

Research Methodology. Data analysis, results and findings are detailed in Chapter 6: Data analysis, Results and Findings. The Proposed National Occupational Licensing Model for Palestine is detailed in Chapter 7: Proposed Occupational Licensing Model for Palestine provide the conclusions, recommendations and future work.

## **Chapter 2: Theoretical Framework**

This research examines and provides the literature review of the occupational licensing. It first discusses the definitions of occupational licensing and its importance in section 2.1 Occupational Licensing the second topic of the research will show the previous studies that will depict the advantages and disadvantages of occupational licensing and its impact on the labor market, consumer and employer. The third one will introduce the licensing effects on raising wages of professional licensed. Also will show how reduction the price of product or service will protect the consumer from this effects ,How professional licensing controls in workers' wages rising and falling, studies have shown 10 ó 15 % of worker for higher wages have occupational licensing , government workers are more likely to have a license than nongovernment workers , but have is no difference in the rate of licensing by gender ,Fourth define the barrier of licensing and how entry to have license, so the worker must have the specific skills to carry out the works efficiently and have multi skills across trades are quite rare , fifth the research exposition most important result of the occupational licensing it is increase quality of service and productivity . Sixth the studies will explain the availability of high education, skills, and mathematical task and training to helps workers to pass the professional licensing exam and access to degrees enables them to take a professional license from the government and accomplish their work efficiently and effectively and provide services with high quality and favorable price to the consumer. Seventh will show multilayer subcontracting of specialist work, finally will explain occupational health and safety (OHS).

### **2.1 Occupational Licensing**

#### **2.1.1 Definition of occupational licensing**

Occupational licensing is a method of economic regulation where by the government controls the entry and supply of participants in a given profession<sup>8</sup>.The intent is to protect the public health, morals, safety, and general welfare by preventing fraudulent and unethical professionals from entering a vocation<sup>9</sup>. Safety justifications are accomplished by imposing strict entrance

---

<sup>8</sup> See James A. Cathcart & Gil Graff, *Occupational Licensing: Factoring It Out*, 9 PAC. L.J. 147, 148(1978).s

<sup>9</sup> See Daniel B. Hogan, *The Effectiveness of Licensing: History, Evidence, and Recommendations*,

requirements on new market participants such as licensing exams, education requirements, and residency requirements<sup>10</sup>.

Occupational licensing is defined also as a process where entry into an occupation requires the permission of the government, and the state requires some demonstration of a minimum degree of competency. The state usually creates a nongovernmental licensing board with political appointees, public members and members of the occupation to oversee the regulated occupations<sup>11</sup>. Arkani et al. define occupational licensing as a set of rules embedded in a structured institutional framework, whether at local or state level that determine, orchestrate or bind relationships between capital and labour prevailing in a territory.

Occupational licensing has been defined by the Commonwealth Office of Regulation Review (1995) as: "a form of regulation that restricts entry to an occupation or a profession to those who meet requirements stipulated by a licensing authority"

Australian National Training Authority defines the occupational license as any form of regulation that restricts entry to an occupation or a profession to those who meet competency related requirements stipulated by a regulatory authority.

Australian National Training Authority considers that the definition of licensing should include two main elements:

- Licensing Standards – the standards identifying the requirements to obtain an occupational license.
- Licensing Authority – the regulatory authority which determines the licensing standards or issues the occupational license<sup>12</sup>.

Initially, occupational license is any form of regulation that restricts entry to an occupation or profession to people who meet requirements stipulated by a regulatory authority. Therefore, occupational licensing is one of the most effective and easily recognizable legislative and regulatory controls that governments have at their disposal to control public risk. Occupational licensing is enforced to mitigate a wide range of public risk factors such as the following:

• Public health and safety;

---

<sup>10</sup> See Morris M. Kleiner, *Occupational Licensing*, J. EcON. PERSP., Fall 2000, at 189, 192

<sup>11</sup> See Morris . M. kleiner , *Occupational licensing* , vol.14,no.14,( Autumn, 2000),pp.189-202.

<sup>12</sup> A guide to assist training package developers in integrating licensing standards within training packages, Joint copyright between Australian National Training Authority, version 3 , 2004

ÉOccupational health and safety (OHS);  
ÉConsumer protection; and  
ÉEnvironmental protection.

Final definition Occupational licensing provides an example of one of the essential tasks of democratic societies, which is to establish a proper balance between freedom and autocratic or dictatorship forms.

The issue of the government regulation of occupations involves the role of government in reconciling the special interests of the practitioners with those of society. From this general principle of democratic governments, this policy brief examines the regulation of occupations by government and suggests that an implementation of policies that have begun by state governments might lead to more economic growth and jobs<sup>13</sup>.

Kleiner (2015) consider that the occupational licensing is the process by which governments establish qualifications required to practice a trade or profession, so that only licensed practitioners are allowed by law to receive pay for doing work in the occupation.

The main rationales for occupational licensing are to protect the health and safety of consumers and to ensure a sufficiently high level of product or service quality. By making would be practitioners undergo specific training, pass exams, and complete other requirements, according to this rationale, the public is better protected from fraudulent, disreputable, and unqualified service providers

Parker et al. (1997) claim that occupational licensing may take the form of registration, certification in addition to the licensing as follows.

**Registration** requires practitioners to register to be able to provide a particular service. Requirements for registration can include appropriate educational qualifications and/or membership of professional bodies. In addition, candidates for registration may need to pass probity tests or satisfy the criteria to be a òfit and properö person. Registration schemes can be run by government agencies or by self-regulating industry bodies.

---

<sup>13</sup>See Occupational licensing , Morris M. Kleiner , *University of Minnesota W.E. Upjohn Institute for Employment Research* July 2011,p.2.

**Certification** or accreditation is usually administered by a certification body responsible for keeping a list of those practitioners who have reached a certain level of competency or meet other standards. These schemes are usually non-legislative and fostered by industry bodies.

**Licensing** is similar to registration in the sense that the grant of a license to practice an occupation is often dependent on formal qualifications, approved training periods, or general probity tests. However, licensing can restrict entry into an occupation and place restrictions on the range of activities that an individual can carry out. Licenses can be issued by government agencies or by industry licensing boards. For most occupations the license to practice has been valid only within the jurisdiction in which the license was granted. An additional license has been required to practice in another state or territory.

### **2.1.2 Importance of Occupational Licensing**

Occupational licensing as an input regulation that requires minimum levels of human capital investment by professionals. By raising professionals' training levels, licensing helps alleviate moral hazard problems associated with the provision of high quality services. I also consider certification, whereby consumers are provided information about professionals' training levels. Licensing and certification tend to benefit consumers who value quality highly at the expense of those who do not. Licensing may raise total surplus if sellers' investments are not observable, but is Pareto-worsening if training levels are observable<sup>14</sup>.

Licensing may result in higher-quality outcomes for those who obtain services, for example, because it requires a certain amount of education and training. It may also encourage greater investment in human capital because individuals will be able to recoup a higher return for their investment if they are not competing against lower-quality substitutes<sup>15</sup>.

---

<sup>14</sup> See **The Society for Economic Analysis Limited, Carl Shapiro, 1986, p. 843-86.**

<sup>15</sup> See Occupational Restrictions and the Quality of Service Received, Carroll, S.L., and R.J. Gaston. 1981, Some Evidence. *Southern Economic Journal* 47(4): 959-976.

Licenses are used to ensure a minimum standard of quality in a wide variety of professions that are complex and potentially harmful to consumers<sup>16</sup>.

## **2.2 Advantages & Disadvantages of Occupational Licensing**

### ***2.2.1 Advantages and Benefits***

The introduction of OL has received a considerable attention from a plethora of economic and industry sectors throughout the immense work of Dorsey (1980); Shilling and Sirmam (1988); Kleiner (2000); Adams et al. (2002). Within the construction sector, however, a dearth of studies undertaken among others, the studies of Arkani et al. (2003); Lobo and Wilkinson (2012); Skarbek (2008).

Common benefits identified include improvement in quality, promotion continual development, improvement in safety, and increased productivity.

#### ***2.2.1.1 Improvement in Quality***

Quality can be defined as the degree to which a set of inherent characteristics fulfills requirement<sup>17</sup>. Applied to the work of construction, quality can be determined to be the ability of the trade person to satisfy consumer requirements, though often there can be a perceived difference of opinion between parties as to what constitutes fulfilling requirements and as a result this can lead to disputes occurring. Skarbek, (2008) argues that the quality protects the consumer from their assumed lack of knowledge, hence occupations should be regulated. This is because the supplier of goods and services is in a superior position to assess their fitness for purpose.

The main benefits that are suggested for occupational licensing involve improving quality for those persons receiving the service. Occupational licensure creates a greater incentive for individuals to invest in more occupation-specific human capital because they will be more able to recoup the full returns to their investment if they need not face low-quality substitutes for their services<sup>18</sup>. Under these conditions, some sectors of the market divided by income or quality for the services may benefit more than others, which is what Shapiro calls a "separating

---

<sup>16</sup> Walter Gellhorn, *The Abuse of Occupational Licensing*, 44 U. CHI. L. REV. 6 (1976).

<sup>17</sup> Quality management systems – Fundamentals and vocabulary. *Standards Australia AS/NZS 9000:2006*, Australia.

<sup>18</sup> "The Market for Lemons, Akerlof, George, Qualitative Uncertainty and the Market Mechanism." *Quarterly journal of Economics*. 84, August, pp. 488-500.

equilibrium." The licensed service and increase the overall demand for the service <sup>19</sup> Moreover, it is argued that in some cases, a poor quality service is not just a matter existence of licenses may minimize consumer uncertainty over the quality of the between employer and employee. A doctor who makes a bad diagnosis may cause a widespread epidemic. In this sense, requiring a practitioner to be trained at a minimum level recognizes a form of regulation which may produce positive social payoffs.

### ***2.2.1.2 Promotion of Continuing Professional Development***

Continuing professional development (CPD, hereafter) has been identified as being able to maintain standards, elicit improvements within an industry, and assist in employee recruitment and retention <sup>20</sup>. Several professional bodies such as the Law Institute of Victoria, Chartered Professional Accountants Australia, and the Australian Institute of Quantity Surveyors all have initiatives within their charter that require their members to *continually* undertake CPD with the aim of maintaining standards and improving quality. By introducing minimum quality standards, CPD can become an integral component of the building trades. Registration bodies have the ability to educate its members through issuing learning materials and holding information sessions relevant to their occupation. Therefore licensed individuals are able to remain aware of changes, innovations, and industry best practice. Further, by requiring members to conform to these changes to maintain their licensed status, this information can become an integral part of individual trade participant's day to day operations. An area where trades people must be constantly educated about is that of OHS<sup>21</sup>.

### ***2.2.1.3 Improvement of Safety***

Construction field may exposed person to a very high risk of injury or even death because of the inherent complexity and level of technical difficulty encountered in projects, the extensive use of plant and equipment, and the nature of the material that are used <sup>22</sup>. So every practice, design, or

---

<sup>19</sup>. Essays in the Theory of Risk Arrow, Kenneth, 1971, -Bearing Chicago, Illinois, Markham Publishing co.

<sup>20</sup> Cost effectiveness of continuing professional development in health care , Brown, C., Belfield, C., and Field, J. ,2002, A critical review of the evidence. *British Medical Journal*, 324, 6526655.

<sup>21</sup> Occupational Licensing of Building Trades, Case of Western Australia Peter E. D. Love<sup>1</sup>; Peter R. Davis<sup>2</sup>; and Denis Worrall,2010,p.3.

<sup>22</sup> *Risk and insurance in construction*, Taylor & Francis, Bunn, N. \_2003 London.

innovation that reduces the risk of injury not only reduces the physical and psychological impacts of those involved but also the direct costs to the industry \_e.g., insurance premiums, ambulance fees, medical fees, and lost time. Furthermore, changes to health and safety regulation can be costly to participants if they do not adhere to them as they may be subjected to fines or litigation. For example, at the beginning of 2008, changes to OHS regulations came into force National Standard for Construction. Among the changes was the lowering of the safe working height to 2 m. Therefore, any work that is carried out where a person can fall in excess of 2 m requires a pre work safety identification form to be completedô also known as a *job safety analysis* \_JSA\_<sup>23</sup>.

#### ***2.2.1.4 Increased Productivity***

Productivity can be defined as the ratio of output produced to inputs used. It is essentially a measure of the efficiency of a process, business, industry, or economy. The more efficient a task is carried out, the better the productivity that is measured. By requiring prospective occupation entrants to increase their knowledge and skill base, they are able to more effectively and efficiently undertake their work and add value to their output. The increase in effectiveness increases in productivity and innovation. Screw guns, plaster board stilts, and plasterboard hoists are all examples of innovations in the ceiling and partitionsø occupation that have dramatically increased the productivity of plasterboard installers. From a job that previously required at least two people and considerable trade skill, fixing plasterboard is now a one person task that can be learned in a shorter time period. Learning about new innovations, and how best to use them, can be taught to those entering and currently involved with the trade<sup>24</sup>.

### ***2.2.2 Disadvantages of Occupational Licensing***

#### ***2.2.2.1 Reduction in Competition***

By restricting access to an occupation, licensing bodies are able to raise the difficulty of the assessment process to reduce the number of licensed individuals in the marketplace. This

---

<sup>23</sup> Occupational Licensing of Building Trades, Case of Western Australia Peter E. D. Love1; Peter R. Davis2; and Denis Worrall,2010,p.3.

<sup>24</sup> Occupational Licensing of Building Trades, Case of Western Australia Peter E. D. Love1; Peter R. Davis2; and Denis Worrall,2010,p.3.

subsequently decreases the supply of providers to the particular occupation and enables the bodies to maintain high rates charged to consumers.

Proponents of occupational licensing are often the individuals within the occupation that are the subject of the licensing<sup>25</sup>. They invariably lobby the government to implement licensing and, when the regulating body is commissioned, make up a significant portion of the board. This effectively allows the occupation to regulate itself and determine how much competition it should allow to maintain good profits for its licensees<sup>26</sup>.

### *2.2.2.2 Increased Prices to the Consumer*

Several writers have proffered that occupational licensing leads to increases in prices for the consumer<sup>27</sup>. Likewise,<sup>28</sup> stated that the reduction in supply can lead to increased demand, which drives prices higher in the competitive market. Furthermore, the implementation and maintenance of the licensing system are recovered by charging a fee to its members, which is typically recovered by trades people by increasing rates charged to the consumer.

Given the current high demand for building in WA and the lack of skilled labor, building costs are increasing across the entire industry. Forecast labor to be the main contributor to price increases over the next 2 years. While real wage increases will occur, productivity losses from employing under skilled labor to fill vacancies will also cause price increases, as wage expenses to complete a given amount of work increase<sup>29</sup>.

### *2.2.3 Relationship between Occupational Licensing & Wages*

Unlike unionization, where lower wage employees appear to gain as a consequence of organizing, licensing effects appear to be larger for higher wage workers, at least within this limited set of occupations. Consequently, licensing may increase wage inequality by first keeping out persons from entering higher wage occupations, and then by raising wages for

---

<sup>25</sup> *Licensing occupations*, Kleiner, M. , 2006, *Ensuring quality or restricting competition?* W. E. Upjohn Institute for Employment Research, Kalamazoo, MI, [\\_http://www.upjohninst.org](http://www.upjohninst.org).

<sup>26</sup> "The case for and against licensing." Bousel, A. J. , 1974 , *Monthly Labor Rev.*, 97\_10\_, 82.

<sup>27</sup> "Occupational licensing in a competitive labor market: The case of cosmetology." Adams, A. F., Jackson, J. D., and Ekelund, R. B. ,2002 , *J. Labor Res.*, 23\_2\_, 261-278

<sup>28</sup> "Does regulation affect economic outcomes? The case of dentistry." Kleiner, M. M., and Kudrle, R. T. , 2000 , *J. Law Economic.*, 43\_2\_,547-582.

<sup>29</sup> "Construction costs to surge again." Hatcher, N. , 2008, *Construction contractor magazine*, Aspermont, Australia.

persons in these already high income occupations. Moreover, more highly educated and influential occupations may be more powerful in state or local jurisdictions and be able to control supply more effectively. Since occupational licensing appears to increase earnings, on average, for persons in high income occupations relative to persons in lower income ones<sup>30</sup>.

How can licensing raise wages? Unlike unions, which can engage in concerted activities such as strikes or work slowdowns, licensed workers do not sign collective agreements with their employers. Nor do they engage in strikes against employers to raise wages. Occupational licensing can affect pay and employment through three main channels. First, licensing may increase quality by imposing initial education, testing, continuing training requirements, internship requirements, or fees. These requirements are likely to diminish the number of less qualified or unmotivated individuals who could enter the occupation, and thereby serve to drive up the average quality of workers in an occupation. A consequence is higher quality outcomes for those who are able to obtain the service, but fewer practitioners and less access to the service. Second, by using the state to monitor and prevent the potential work effort of unlicensed workers, competition by unlicensed individuals is virtually eliminated through the use of the state's enforcement powers. For example, the work of "hair braiders," which is unlicensed, could be brought under the control of the cosmetology board and limited to only licensed cosmetologists or barbers<sup>31</sup>. Further, when demand fluctuates for traditional tasks, the board has the ability to expand the regulated work through establishing administrative rules and limiting the work of unregulated workers. Third, the regulatory board through its administrative procedures of establishing large entry barriers and moral suasion can reduce the number of openings in schools that prepare individuals for licensed positions. In addition, by adjusting the pass rate on the licensing exam they can change the number of new entrants from in-state or migrants from other states or nations<sup>32</sup>.

---

<sup>30</sup> See Morris . M. Kleiner , Occupational licensing , vol.14,no.14,( Autumn, 2000),pp.189-202.

<sup>31</sup> *Anderson v. Minnesota Board of Barber and Cosmetology Examiners*. 2005. Case 05-5467 June .

<sup>32</sup> "Three Essays on the Relationship between Migration and Occupational Licensing," Tenn, Steven. 2001 , Unpublished dissertation, Department of Economics, University of Chicago  
"Licensing Exam Difficulty and Entry Salaries in the US, Pagliero, Mario, 2009

The general estimates of cross sectional studies using Census data of state licensing's influence on wages with standard labor market controls show a range from 10 to 15 percent for higher wages associated with occupational licensing. Estimates were developed from the National Longitudinal Survey of Youth (NLSY) from 1984 to 2000 and show the difference in wages between changers from unlicensed to licensed occupations and between those who move from a licensed occupation to an unregulated one. The estimates show an impact of about 17 percent of moving to a licensed occupation relative to moving from a licensed occupation to an unlicensed one. However, within-occupation wage variations both for service occupations and for individuals in jobs that repair things suggest a wide range of wages changes from zero to 40 percent of regulation within an occupation, government workers are more likely to have a license than nongovernment workers, but there is no difference in the rate of licensing by gender. Although these results suggest that licensing the toughest form of regulation matters for wage determination, these estimates do not use national estimates, do not examine the levels of government that matter, and do not consider the influence of the requirements to become licensed, such as education, testing, or internships that may further enhance wages<sup>33</sup>.

#### *2.2.4 Influence of Occupational Licensing On Geographic Mobility*

Kleiner (2015) Shows that the impact of OL is varied among occupations. For instance, OL may effectively boost wages for some occupations, licensed workers are not always better off. Empirical and theoretical findings suggest that licensing can deteriorate mobility, making it harder for workers to take advantage of job opportunities in other countries or cities. OL can act as a deterrent to geographical movements in several ways. Since the OL is related to the regulation of a particular country or state, many of the requirements and investments necessary to gain licensure in another country. These requirements sometimes involve meeting qualification criteria such as having good moral character, passing exams, working with or for local practitioners, and in many cases engaging in continuing professional development activities. In such case, the mobility between countries or state is not preferable for qualified and licensed people. In the absence of reciprocity agreements in which one state accepts an occupational license granted by a partner state re-licensure requirements can be prohibitive, in

---

<sup>33</sup> analyzing the extent and influence of occupational licensing on the labor market, Morris M. Kleiner and Alan B. Kueger, 2009, Working Paper 14979, p.8.

terms of both time and money, and so discourage workers from moving to a different state or countries. In particular, the studies show that re-licensing policies impose costs on workers in the case of looking for new jobs in another state, reducing their ability to earn a living.

Many issues were raised on front of federal state for more equality between states and for unifying licensing regulation. A plethora of studies show negative link between occupational licensing and worker mobility. Some of these studies (Holen 1965; Kleiner, Gay, and Greene 1982; Pashigian 1979) is from the 1960s, 1970s, and 1980s and focuses on the occupations then heavily licensed, such as dentists, physicians, and attorneys. However, evidence that is more recent confirms and extends the earlier findings to lower-earning occupations.

The negative impact of re-licensing is extended to the other aspects of workers and consumer. Customers bear more cost to bring licensed worker form other states. In addition, and especially in rapidly growing areas, customers face challenges to find licensed worker as the heavy demand on them. To the extent that licensing slows both the inflow of new workers and greater competition, consumers are not able to take advantage of services at the lowest cost (Moretti 2012). Taken together, these studies support the view that regulation may limit the number of practitioners and that a policy of reducing barriers to migration could provide benefits to workers and consumers.

### **2.3 Barrier of Occupational Licensing**

Effective licensing requirement restricts the number of workers admitted to the occupation. One set of requirements raises entry costs and causes potential entrants to drop out of the occupation voluntarily. Included in this category are minimum, education and training age, citizenship, and license fees. These standards may be more burdensome to certain groups than others, but it is difficult to identify those affected because they do not attempt to obtain a license. Licensing examinations reject applicants who have already spent time and resources meeting the first set of requirements. They are easily identified, thus permitting a test for biases in this requirement. Generally, licensing examinations contain two parts-a written test and a practical test. Comments of licensing officials and data on failure rates both indicate that the written test is more restrictive. Also, the potential for biases on the written test appears o be much stronger than on the practical examination. It is likely that better educated individuals have an advantage on the written test. Some licensing examinations require knowledge of academic subjects such as

mathematics and physics. For example, previous research in college-level algebra was considered necessary to pass the optician's exam, and barber exams emphasize knowledge of anatomy, physiology, and biology<sup>34</sup>. Education also improves language proficiency. Candidates with limited reading ability, or whose native tongue is not English, will be at a strong disadvantage. The better educated individuals usually acquire experience with testing, which improves their ability to cope with written tests. Licensing requirements typically include some type of specific job training prior to examinations. We may expect, then, those less educated applicants and those choosing apprenticeship rather than formal classroom training will be more likely to fail the written examination than trade-school graduates and applicants with higher levels of education. Also, any specific group of applicants that systematically receive lower quantities and/or qualities of education and training will have a lesser chance of gaining entry. Yet it is not clear that the. Factors that will cause the less educated and apprentices to score lower on the written test will have any effect on productivity. If not, potentially productive workers are rejected. Another implication is an incentive for applicants to invest in education and training beyond that required to perform the activity. Ironically, trade schools seem to feel that the demand for classroom training is derived mainly from the examination requirement<sup>35</sup>.

## **2.6 Occupational licensing & Quality**

Supporters of licenses argue that they are necessary because there is a lack of information available to consumers. If consumers are not able to gauge the quality of services, this will lead to two negative effects. The first is that consumers will be unable to find the appropriate level of quality they desire and will likely pay the wrong price for what they are receiving since they are unable to accurately assess the quality and skill of professional, consumers will be taken advantage of and will pay for the services of quacks. This will be especially dangerous in professions like medicine and dentistry where poor quality service can cause permanent physical injury. Licenses can alert consumers that a certain professional is poorly qualified and that the

---

<sup>34</sup> Shimberg's survey of licensing practices found that the quality of examinations was generally quite low. They are often written by licensing go officials who have no training in testing procedures (see [11], p. 3).

<sup>35</sup> The Occupational Licensing Queue , Stuart Dorsey , The Journal of Human Resources, Vol. 15, No. 3 (Summer, 1980), pp. 424-434 .

consumer's money is better spent elsewhere. The second negative effect is that high quality sellers will leave the market. Sophisticated consumers will know that some of the sellers are of poor quality. Taking the chance that they will receive the services of a poor seller into account, consumers will reduce the price they are willing to pay. With no guarantee of what they are going to receive, the maximum that a consumer will pay is less than they would pay if there had been some assurance of the quality of the service. This is necessarily lower than what the value of the highest quality sellers and those sellers will have to either lower their prices or exit the market<sup>36</sup>. All of the reasons that supporters of licensing laws have given, including safety and setting a minimum quality standard, are connected to the central problem of informational asymmetry. In a world with perfect information, licenses would be unnecessary because consumers would know exactly what quality of service they were purchasing and the safety risks of that service. But we live in a world with a certain degree of informational asymmetry; the sellers of a service almost always know more about what is being sold than the consumer does. Overall, licenses benefit consumers when informational asymmetry is high and hurts consumers when information asymmetry is low. Licensing helps to increase the average quality of services where reputations take a long time to develop. By requiring a certain level of training, licenses reduce the appeal of selling low quality services. Normally, low quality sellers will invest very little in training, gain higher income than they deserve under Akerlof equilibrium, and then suffer a smaller income for a short period of time once reputations are established. But if licenses force these sellers to invest more in their training, the strategy of providing high quality services is more appealing. Since the seller has already been forced to invest in their training, they may as well invest a little more and start pursuing the high quality strategy. The overall effect is to push more sellers into the high quality strategy, which should raise the overall average quality. The net effect is that licensing tends to hurt low quality suppliers while helping higher quality suppliers<sup>37</sup>.

---

<sup>36</sup> *The Market for "Lemons"*, George A. Akerlof, *Quality Uncertainty and the Market Mechanism*, 84 Q. J. ECON. 488 (1970).

<sup>37</sup> *Consumer Information*, Carl Shapiro, *Product Quality, and Seller Reputation*, 13 BELL J. ECON. 20, 22 (1982).

## 2.7 Occupational Licensing & Improvement Skills

The effects of licensing were seen to be in line with the Ministry of Economic Development<sup>38</sup> assessment of better skilled practitioners. The word best used to describe it would be that of "professionalism". That is, licensing would be the defining factor in raising the esteem of practitioners themselves and their own standing in society. Licensing would ensure a minimum threshold of competency is fulfilled. Increasing Professionalism due to licensing was found to be the common theme amongst the participants. Occupational licensing could be seen to have three effects in the context of skills needs. Two of these effects are clearly pointed out in the literature from other industries, and countries, which have licensed professionals. The first being improved quality of service through improved skills and restrictive entry and the second an increase in skills shortages. These effects are confirmed in this research which shows an expected increasing professionalism in after licensing is introduced. Introduced occupational licensing as a way of protecting the public from building industry failures of standards and quality. Occupational licensing is beneficial to that it will lead to an increase in professionalism and improved standards of work. Whilst previous studies have found that quality of service improves in terms of better and more professional service proportional to the intensity of licensing no parallels exist in the literature for licensing leading to skills becoming more specialized or changing as a result of the way in which licensing is inherently structured<sup>39</sup>.

## 2.3 Conclusion

This research explained the literature review of the occupational licensing, the first topic discussed the definitions of occupational licensing and its importance, the second topic of the research showed the previous studies that depicted the advantages and disadvantages of occupational licensing and its impact on the labor market, consumer and employer. The third one introduced the licensing effects on raising wages of professional licensed. Also showed how

---

<sup>38</sup> MED (2003a). Social and Economic Impact Research of Changes to Building Regulation, A research by PricewaterhouseCoopers for the New Zealand Ministry of Economic Development, Available at [www.med.govt.nz](http://www.med.govt.nz), Accessed on 15 January 2006.

<sup>39</sup> The Effects of Occupational Licensing on Skills Needs in the Building Industry: Evidence from New Zealand Yadeed B Lobo (Department of Civil and Environmental Engineering, University of Auckland, New Zealand) and Suzanne Wilkinson (Department of Civil and Environmental Engineering, University of Auckland, Auckland, New Zealand)

reduction the price of product or service protected the consumer from this effects ,How professional licensing controls in workers' wages rising and falling, studies have shown 10 ó 15 % of worker for higher wages have occupational licensing , government workers are more likely to have a license than nongovernment workers , but have is no difference in the rate of licensing by gender ,Fourth defined the barrier of licensing and how entry to have license, So the worker must have the specific skills to carried out the works efficiently and have multi skills across trades are quite rare , Fifth the research represented the most important result of the occupational licensing it was increased quality of service and productivity , Sixth the studies explained the availability of high education , skills , and mathematical task and training to helps workers to passed the professional licensing exam and accessed to degrees enables them to take a professional license from the government and accomplished their work efficiently and effectively and provided services with high quality and favorable price to the consumer . Seventh research showed multilayer subcontracting of specialist work, finally explained occupational health and safety (OHS).

## **Chapter 3: Previous studies**

### **3.1 Does Occupational Licensing Deserve Our Approval? A Review of Work by Morris Kleiner**

Morris Kleiner studied and published many books talked about occupational licensing, this research to explore the impact of occupational regulation on the three facets of the relevant labor market Kleiner uses a variety of statistical approaches to tease out, from numerous databases, what the impact of mild to heavy regulation on labor markets appears to be.

#### ***3.1.1 Methodology***

Kleiner describes first the work of the occupation and the history of its regulation. Next he explores the impact of that regulation on the relevant labor market, focusing on three main facets of the market: (1) levels of employment in the occupation, (2) wages earned in the occupation, and (3) outcome for the occupation's customers' quality of services, errors, customer satisfaction' as best as can be defined and measured for each particular occupation. For electricians and plumbers, he includes in 'outcomes' also the hazard to the practitioners themselves. Finally, Kleiner also offers analyses on economic factors in a state that might encourage occupational regulation.

#### ***3.1.2 Recommendations:***

Kleiner's splendid volume is recommended reading for the many graduate students in economics specializing in industrial organization, labor economics, or health economics. Moreover, it calls out to doctoral students searching for research topics for their dissertations. Kleiner's own extensive research and the literature he surveys in the concluding chapter can serve as a springboard for further research in this area.

### **3.2 Occupational Licensing and the Quality of service Sidney L. Carroll\* and Robert J. Gastont**

This research gathered, presented, and evaluated the current state of economic research concerning the interconnection between occupational licensing (and other occupational) restrictions and quality of service.

### *3.2.1 Methodology*

This review of the empirical work demonstrates several things. First, the type of quality measure varies widely. Also, many different restrictiveness measures have been used; they differ greatly among professions. Finally, and most strikingly, a few useful generalizations are available.

### *3.2.2 Recommendations and Results*

The results summarized in this research would be consistent with the proposition that licensing has gone far enough to ensure adequate quality in most places and has gone too far in others. Would likely opt for more expensive, highly trained service even without licensing. Private search costs are thus saved for these. It is the lower middle income classes and poor, those less likely to be articulate and vocal on this type of policy question, who tend to be short-changed and offered low quality or no service at all.

## **3.3 Occupational Licensing Verses Company- led training, Joachim Haast**

The research provided an analyzed of the major controversy which occurred between national aviation authorities during their work on the European harmonization of the aircraft technicians competence. Focused on the institutional method to assure the high skills level required for that profession.

### *3.3.1 Methodology*

- The company training option highlights the fact that "organization" is a traditional strategy for competence assurance in higher liability contexts.
- The quality recognition required for the international outsourcing of safety-critical services favors the licensing system.
- Both systems of competence assurance are densely intertwined with specific industrial relation patterns and vested interests.

### *3.3.2 Recommendation and Results:*

The research on aircraft maintenance leads to several suppositions related to European educational cooperation:

- The company training model existing at a global scale, and even dominating in some countries, causes us to recall organizational “self-regulation” as an established variant of competence assurance.
- The quality recognition required for the international outsourcing of safety-critical services (like aircraft maintenance) favors the licensing system.
- The French case shows that the established system of competence assurance is densely intertwined with domestic industrial relation patterns and vested interests.

### **3.4 Occupational Licensing and the Transition from Welfare to Work THOMAS W. HAZLETT & JENNIFER L. FEARING**

This research recognized that labor market interventions have often been used precisely because of this effect, proceeds to examine various restrictions which directly affect low-skilled workers in the U.S. economy who now have stronger incentives to participate in labor markets in response to recent welfare policy reforms.

#### ***3.4.1 Methodology***

1. Identified the licensing of professional, high-skilled occupations tends to crowd workers into lower-skilled occupations, lowering such wages and thus weakening work incentives among the welfare population
2. Quantity' license restrictions (permits which set quotas limiting the overall number of suppliers in a market) suppress demand for low-skilled workers, and may substantially reduce work opportunities and, thus, incentives.
3. Quality license restrictions, where entrants face higher entry costs (typically through educational requirements above the requirements of the market)

#### ***3.4.2 Recommendation research:***

This is highly likely where occupations are allowed to "self-regulate," erecting quotas or fixed entry costs for potential competitors. As important and controversial as the consumer consequences of such policies have been, we have sought to focus on occupational licensure as it relates to the transition of welfare recipients into labor markets.

### **3.5 Some Evidence on Occupational Licensing and Occupational Income, Jeffery Pfeffer**

This research examined the effects of occupational Licensing on occupational incomes and the effects of various organizational arrangements and degrees of entry restriction.

#### ***3.5.1 Methodology***

Fully understand professionalization and professional associations, a conceptualization of professional association, as semi ó governmental bodies operating to enhance their own economic and social position would be useful.

#### ***3.5.2 Recommendations and Results***

Some of occupations examined are clearly more professionalized than others, and in the presentation this variation in the degree of professionalization is not explicitly accounted for. The data seek to indicate the effect of varying institutional arrangements on occupational income, regardless of other characteristics of occupation.

### **3.6 The Economies of Occupational Licensing, NEIL KATSUYAMA**

The research explained precisely how licenses operate as an anticompetitive mechanism, why licenses facilitate consumer welfare, and when each of these effects will be more pronounced.

#### ***3.6.1 Methodology***

It would be a tedious task to have to determine what skills are necessary for every occupation. What training does an egg trader really need, and how many hours must a barber practice before becoming proficient? And even if these questions could be answered, what happens when new methods are developed or if a whole new occupation arises? It would indeed be difficult for courts to separate all the necessary from unnecessary licensing requirements, but this is precisely how courts have tried to solve the problem.

#### ***3.6.2 Recommendations and Results***

Courts should be particularly suspect of any justification given for a license. Since courts will also be able to draw upon decades of antitrust case law, the application of this test should be easier than analyzing the health and safety impact of each licensing law. The debate should not

be about whether licenses do more harm than good, but how to prevent that harm. Whether a license is required for practicing medicine or for fortune telling, an economic approach will better serve all professions.

### **3.7 The Prevalence and Effects of Occupational Licensing, Morris M. Kleiner and Alan B. Krueger**

Research provided the first national analysis of the labor market implications of workers who are licensed by any agency of the government in the USA. Using a specially designed Gallup survey of a nationally representative sample of Americans.

#### *3.7.1 Methodology*

We provide an analysis of the influence of this form of occupational regulation. We find that 29 per cent of the workforce is required to hold a license, which is a higher percentage than that found in other studies that rely on state-level occupational licensing data or single states. Workers who have higher levels of education are more likely to work in jobs that require a license. Union workers and government employees are more likely to have a license requirement than are non-union or private sector employees.

#### *3.7.2 Recommendations and Results*

Workers who have higher levels of education are more likely to work in jobs that require a license. This pattern suggests that our results are not spuriously reflecting driver's licenses. Union workers and government employees are more likely to have a license requirement than are non-union or private sector employees.

### **3.8 Analyzing the Extent and Influence of Occupational Licensing on the Labor Market, Morris M. Kleiner, Alan B. Krueger**

This research examined occupational licensing in the United States using a specially designed national labor force survey. Estimates from the survey indicated that 35% of employees were either licensed or certified by the government and that 29% were licensed. Another 3% stated that all who worked in their job would eventually be required to be certified or licensed, bringing the total that are or eventually must be licensed or certified by government to 38%. We find that

licensing is associated with about 18% higher wages but that the effect of governmental certification on pay is much smaller.

### *3.8.1 Methodology*

Using a specially designed survey of a nationally representative sample of Americans carried out by West at, we provide an examination of the prevalence and influence of various forms of occupational licensing. We show that the consistency of reporting in having a license is high but that it is more difficult to externally verify licensing through government databases, in part due to the lack of on-line or computer-readable data of licensed practitioners by states and local governments

### *3.8.2 Recommendations and Results*

Licensing is a growing phenomenon in the US economy, reaching almost 29% of workers in our 2008 survey. Workers who have higher levels of education are more likely to work in jobs that require a license, and most licensing is implemented at the state level. results also lend support for the interpretation that occupational licensing often serves as a means to enforce entry barriers to a profession that raise wages.

## **3.9 Occupational Licensing of Building Trades: Case of Western Australia, Peter E. D. Love; Peter R. Davis; and Denis Worrall**

This research to ensure that people in the building industry are competent and accountable for their work and that it is undertaken õright the first time,ö

### *3.9.1 Methodology*

Occupational licensing has been advocated as a mechanism for improving the performance of the building industry. There are considerable benefits and major disadvantages of implementing occupational licensing.

### *3.9.2 Recommendations and Results*

As a result of this divergence the concept of occupational licensing has become a contentious issue with government, professional bodies, and industry practitioners. In this paper the

perceived benefits and disadvantages of occupational licensing were explored using two focus groups and 13 in-depth interviews. In principle participants agreed that occupational licensing would go some way in improving quality and reducing the incidence of disputes in the building industry. Benefits that were identified included improvements in safety, education, and skills, professionalization of building trades, and workmanship.

### **3.10 A Just Measure of Forgiveness: Reforming Occupational Licensing Regulations for Ex-Offenders Using BFOQ Analysis KAROL LUCKEN and LUCILLE M. PONTE**

This research was given classic expression by historian David Rothman when he posed the question “Why is it that reforms so often turn out to be in need of reform?” That public officials are now discussing the problem of collateral sanctions and seeking to fund reentry programs, a policy that is a near return to the presumably defunct rehabilitative policy of offender reintegration, suggests that many of the reforms of the get-tough era have now arrived at their predictable destiny.

#### ***3.10.1 Methodology***

The current analysis focuses on these occupational barriers from a criminological and legal perspective. We briefly examine the various rationales for removing and/or retaining these barriers, paying particular attention to the crime, punishment, and employment nexus and the scope and basis of employer reluctance to hire ex-offenders. This is followed by a review of the statutory and regulatory occupational barriers that have developed over the past two decades and recent government proposals that seek to mitigate or eliminate these barriers.

#### ***3.10.2 Recommendations and Results***

The foregoing analysis has focused on the reform of get-tough policies that have limited employment prospects for millions of ex-offenders. Adjusting statutory and regulatory restrictions and prohibitions on employment, particularly in the context of occupational licensing, has been identified in reentry policy circles as one means of increasing the likelihood of ex-offender employment and the “collateral benefits” that may accrue as a result of employment.

### **3.11 Occupational Licensing and Minorities: A Reply to Klein, Powell, and Vorotnikov** **Marc T. Law and Mindy S. Marks**

Research investigated the impact of the adoption of state-level occupational licensing regulation on the participation of minority workers in a range of skilled and semi-skilled occupations.

#### *3.11.1 Methodology*

We took advantage of quasi-experimental variation, afforded by the fact that different states adopted occupational licensing regulation at different times, to identify the effect these laws had on the prevalence of female and black workers in eleven different occupations using a differences-in-differences framework. We found that the adoption of these laws did not reduce minority participation in most occupations. In fact, for many occupations, we found that the adoption of licensing laws was correlated with increases in minority participation.

#### *3.11.2 Recommendations and Results*

Perfect and few are definitive. As empirical social scientists, we must live with the fact that to address many questions, we must resort to observational data, which are recorded with error. Additionally, we have to accept that there are factors that may be relevant for our analysis but for which we cannot control. Finally, there are all the other human errors that arise, intentionally or otherwise, simply because none of us is infallible

### **3.12 The impact of licensing requirements on industrial organization and labour: Evidence from the U.S. private security market , Brian Meehan**

This research measured the impacts of licensing requirements on the average wage of private security guards, the number of firms in a state, and size of those firms, in an effort to better inform the occupational licensing debate with empirical evidence on a particular labor market.

#### *3.12.1 Methodology*

The evidence presented above suggests that three particular licensing requirements ó the training, experience, and testing requirements ó for the private security industry tend to reduce the number of private security firms per 100,000 people in a state, and tend to reduce the prevalence of relatively small firms.

### *3.12.2 Recommendations and Results*

This paper adds to the growing literature on the economic impact of occupational licensing. It explores the implications of particular occupational licensing regulations in the private security industry. While the view that occupational licensing is a method to control for asymmetric information problems in this industry is not ruled out, evidence suggests that experience, testing, and training requirements serve as barriers to entry, reducing competition and presumably increasing rents for the industry incumbents, and income cases, for labor.

### **3.13 Occupational Licensing in a "Competitive" Labor Market: The Case of Cosmetology , A. FRANK ADAMS , JOHN D. JACKSON and ROBERT B. EKELUND, JR .**

Model of supply and demand is developed to analyze the regulation of a "competitive" industry - - cosmetology -- with demand shifts representing an enhancement of "quality" and supply shifts representing restricted entry.

#### *3.13.1 Methodology*

Reduced form models are established to estimate both price and quality shifts, adjusted for the joint determination of cosmological price, quantities, and state regulation.

#### *3.13.2 Recommendations and Results*

Our results reveal a significant net decrease in quantity from the imposition of state occupational regulation in the cosmetology market. Rents to cosmetologists would be on the order of \$1.7 billion per year with deadweight losses totaling an additional \$111 million per annum under reasonable and conservative assumptions.

### **3.14 The Effects of Occupational Licensing on Skills Needs in the Building Industry: Evidence from New Zealand**

The paper developed a deeper understanding of the effects of occupational licensing on an industry, above those of increased quality and training, to determine the effects of licensing on future skills needs in the New Zealand building industry.

### *3.14.1 Methodology*

First the definition of the term occupational licensing is presented. Then its effects on skills and skills shortages are analyzed. New licensing regimes in the New Zealand building industry are reviewed and the potential impacts of these regimes are discussed from the perspective of top industry players in government, companies and industry training organizations.

### *3.14.2 Recommendations and Results*

The results extend the literature on the effect of licensing into a third area - that of future skills needs. The observation that the way an occupational licensing regime is structured (in the form of specialist license classes) has an effect on the change in direction of skills towards increasing specialization is shown in this research.

## **3.15 Doctors with borders: occupational licensing as an implicit barrier to high skill migration, Brenton D. Peterson • Sonal S. Pandya • David Leblang**

We show that occupational licensure rules function as implicit, non-visa policy barriers to skilled immigration. Our analysis of US physician licensure exploits the unique structure of US physician training to distinguish between public interest and protectionist motives.

### *3.15.1 Methodology*

We analyze an original dataset of state licensure requirements for immigrant physicians for 1973-2010 to show that states with self-financing medical boards, we investigate how licensing requirements influence where migrant physicians settle within the United States.

### *3.15.2 Recommendations and Results*

Research highlights the new challenges that advanced economies face from global economic integration. As we demonstrate with the case of physician licensing, unelected state regulators determine the mobility of skills across borders. Long standing fixtures of the regulatory landscape take on new meaning in a globalized economy.

### **3.16 Licensing Requirements and Occupational Mobility Among Highly Skilled New Immigrants in Canada, Rupa Banerjee and Mai Phan.**

This research examined the effect of licensing requirements on the occupational mobility of highly skilled new immigrants in Canada using longitudinal data.

#### ***3.16.1 Methodology***

We find that immigrants who worked in regulated professions in their home country, but unregulated fields in Canada, experienced significantly greater occupational downgrading than those who worked in unregulated professions prior to migration. Immigrants who worked in regulated fields in their home country who were able to find work in regulated fields in Canada did not experience any occupational downgrading after migration. Policy implications of these findings are discussed.

#### ***3.16.2 Recommendations and Results***

The results of this research highlight the importance of ensuring that the licensing process is made easier to navigate for new immigrants. Our findings clearly indicate that immigrants who are able to successfully enter a regulated profession soon after migration fare much better in terms of occupational status than those who are unable to become licensed.

### **3.17 The de-licensing of occupations in the United States**

Research identified and analyzed those rare instances when occupational licensing laws have been eliminated—what we refer to as de-licensing.

#### ***3.17.1 Methodology***

Discuss recent examples in which courts decided to limit the scope of occupational licensing laws, and we analyze recent efforts (almost uniformly unsuccessful) of a few states to de-license groups of occupations. The reason proposed for most of these efforts is that excessive levels of licensing have hindered job creation, especially for people with lower levels of education. We argue that the paucity of successful de-licensing efforts is due to intense lobbying by associations of licensed professionals as well as the high costs of sunset reviews by state agencies charged with the periodic review of licensing and its possible termination.

### ***3.17.2 Recommendations and Results***

Occupational licenses are issued to individuals giving them the right to practice, whereas business licenses are issued to companies. Still, the de-licensing of an occupation no doubt rarely occurs. Recent attempts in nine states to collectively de-license groups of occupations have shown more potential, but as of yet, they have been almost uniformly unsuccessful.

## **3.18 The Effects of Occupational Licensing on Complainants Against Real Estate Agents**

**James D. Shilling , C.F. Sirmans**

This research provided the first empirical evidence on the simultaneous relationship between anticompetitive effects and minimal quality standards.

### ***3.18.1 Methodology***

Using data on real estate agents we find that restrictions on entry improve the quality of service (by lowering complaints), but, at the same paper to significant anticompetitive side effects.

### ***3.18.2 Recommendations and Results***

The result of our inquiry into the relationship between companies against real estate agents and pass rates suggest that a decrease in the level of complaints against real estate agents is smaller if the licensing board is comprised a greater number of industry members.

## **3.19 Occupational Licensing: Scant Treatment in Labor Texts, E. Frank Stephenson and Erin E. Wend**

Research examined the distributional effects of licensing barriers to entry. Finds that òlicensing regulations exclude less educated and minority workers more than proportionally.

### ***3.19.1 Methodology***

Focuses on undergraduate labor economics texts that are currently in print. As a supplement to our piece, Shruti Rajagopalan, a doctoral student at George Mason University, kindly compiled comparable information for some out-of-print texts. Coverage of the minimum wage and unionization may reflect the extensive literature on these topics, our review of the research on occupational licensing shows that there is ample cause and material to give at least a chapter to licensing.

### *3.19.2 Recommendations and Results*

Measuring the effects of licensing on incomes is relatively easy compared to measuring the effects on lifetime returns or profits, Although the empirics of quality are murky, concludes that it would be false to assert that on balance the literature constitutes evidence of consumer benefit, which is the only thing that, if large enough, could possibly outweigh the costs of licensing.

### **3.20 Projects in The Gaza Strip Adnan Enshassi, Sherif Mohamed, Saleh Abushaban (2009)**

**Enshassi** et al (2009) examine the construction projects located in the Gaza Strip. They show that the construction sector in Gaza Strip suffer from many problems and complex issues. Therefore, the main objective of **Enshassi** et al (2009) is to identify the factors affecting the performance of local construction projects; and to elicit perceptions of their relative importance.

#### *3.20.1 Methodology*

The quantitative methodology was applied by using a total of 120 structured interviews were distributed to 3 key groups of project participants; namely owners, consultants and contractors.

#### *3.20.2 Recommendations and Results*

The survey findings indicate that all 3 groups agree that the most important factors affecting project performance are: delays because of borders/roads closure leading to materials shortage; unavailability of resources; low level of project leadership skills; escalation of material prices; unavailability of highly experienced and qualified personnel; and poor quality of available equipment and raw materials. Based on these findings, the **Enshassi** et al (2009) suggest the following recommendation: 1) project owners must work collaboratively with contractors and facilitate regular payments in order to overcome delays, disputes and claims; 2) project participants should actively have their input in the process of decision-making; and 3) continuous coordination and relationship between project participants are required through the project life cycle in order to solve problems and develop project performance.

## **Chapter 4 The Construction Sector In Context**

This chapter presents the context of construction sector in Gaza Strip. It also focuses on the subcontracting on construction sector.

### **4.1 Multilayer subcontracting of specialist works**

Multilayer subcontracting has been alleged to be one of the major causes of poor construction quality. A thorough understanding of how the multilayer subcontracting system works is critical to evaluating its benefits and drawbacks and, in turn, to deciding if the practice should be put under regulatory control or moderated through other measures. Multilayer subcontracting practice has led to the emergence of a large number of small firms and self-employed workers. For maximizing income, these small firms and workers will seek to work for multiple employers on a jobbing basis<sup>40</sup>. Winch <sup>41</sup> reviewed the rise of self-employment in the UK construction industry and concluded that construction employers' choice to maximize their flexibility in the context of declining and fragmented demand was the main cause of the trend, which had negative impacts on training, productivity and quality. Likewise, multilayer subcontracting has been alleged to be one of the major causes of poor construction quality and construction site safety<sup>42</sup>. Besides poor work quality and excessive amount of rework, which may be due to causes other than substandard work quality of workers<sup>43</sup>, a major problem with multilayer subcontracting is that arrears in payments for downstream subcontractors and wage payments for workers could arise when any upstream subcontractor has cash-flow difficulties or becomes insolvent<sup>44</sup>. This in itself can lead to substandard works, project delays and disputes<sup>45</sup>.

### **4.2 Advantageous features of the multilayer subcontracting**

The multilayer subcontracting system provides a career development path to young workers who cannot further their studies at senior forms in schools or at universities.

---

<sup>40</sup> Best practices in managing specialist subcontracting practices , Yik FWH, Lai JHK, Chan KT, Yiu ECY, ,Final Research Project Report. Hong Kong , Construction Industry Institute; 2006.

<sup>41</sup> The growth of self-employment in British construction, Winch G , Constr Manage Econ , 1998;16:531642.

<sup>42</sup> Construct for excellence, Report of the Construction Industry Review Committee , Hong Kong , Government of Hong Kong Special Administration Region , January 2001.

<sup>43</sup> Love PED, Li H, Quantifying the causes and costs of rework in construction, Constr Manage Econ 2000,18:479 90.

<sup>44</sup> Soo GKL , Protecting against insolvency of contractors in Hong Kong , Constr Law J , 2003;7:406618.

<sup>45</sup> Construct for excellence, Report of the Construction Industry Review Committee , Hong Kong , Government of Hong Kong Special Administration Region , January 2001.

A young worker may start his career as an unskilled worker and later move up to a skilled worker, a head worker and to a subcontractor at higher tiers. This hinges on whether the worker can acquire the needed technical and interpersonal skills, as well as on whether he treats his companion workers and the workers he employs with good faith. The career prospect, therefore, is also an incentive to the worker to continue to learn, behave in good faith and save his earnings such that he will have the necessary capital for him to become a subcontractor, as he will then need to pay upfront wages of workers he employs and costs for materials but will only be paid for the completed subcontract works sometime later<sup>46</sup>.

The transactions among the subcontractors within the multilayered subcontract pyramid are governed largely by relationship and trust, which can operate smoothly without the need for detailed formal contracts. In effect, they are adopting strategic and/or project partnering from time to time<sup>47</sup>.

The multilayer subcontracting system is particularly efficient in mobilizing labor force for project works, and also offers a degree of resilience to impacts of rise and fall of available works and fluctuations in labor wage rates. However, problems will arise if the subcontractors are confronted with very large rises in prices of materials and labor wage rates, or when any of them becomes insolvent<sup>48</sup>.

### **4.3 Occupational Health and Safety (OHS)**

The occupational health and safety (OHS) Regulation in 2001 was meant to be a catalyst for improving the construction industry's poor health and safety performance. It represented a shift in OHS policy towards a more self-regulated, consultative, performance-based approach, placing much larger responsibilities on principal contractors and subcontractors for the effective management of OHS risks. The success of any self-regulatory system depends heavily on the receptivity, skills and knowledge of those who have to administer these greater responsibilities.

#### ***4.3.1 The relationship between subcontracting and OHS***

Trade subcontracting is a key feature of the construction industry, providing economic flexibility and specialist expertise for principal contractors in a highly competitive, uncertain environment

---

<sup>46</sup> The quasi-firm in the construction industry , Eccles RG , J Econ Behav Org , 1981 , 2:335657.

<sup>47</sup> Lai International Journal of Project Management , F.W.H. Yik, J.H.K. , 26 (2008) 3996407

<sup>48</sup> International Journal of Project Management , F.W.H. Yik, J.H.K. Lai , 26 (2008) 3996407 .

of increasing technical complexity. However, trade subcontracting has also created many management problems for principal contractors which have been widely recognized as contributing to inefficiencies in the industry, not least in the area of OHS because of the complex web of constantly changing contractual relationships which can confuse responsibilities for OHS management and reporting<sup>49</sup>. The dominant culture of risk transfer which pervades the construction industry also ensures that any responsibilities for OHS handed to the principal contractor are off-loaded incrementally in back to-back contracts to subcontractors which often lack the expertise and legal resources to interpret and implement them effectively. The unlikelihood of compliance is exacerbated by the common practice of pyramid contracting and the highly competitive environment of subcontracting which often places untenable financial and time pressures on these small highly geared organizations<sup>50</sup>. In Australia, the subcontracting industry is also characterized by a high degree of cultural diversity and there is evidence that many simply cannot understand the meaning of regulations and simple workplace instructions and signage, even when written in plain English<sup>51</sup>. The subcontracting industry is also characterized by large number of itinerant workers, making knowledge levels of OHS prevention difficult to maintain and many of these work on piecework payments which further reduce the focus on OHS<sup>52</sup>. There is also evidence that many of those who work for small subcontractors have not had positive experiences of classroom learning, which modern OHS training tends to reinforce these memories and sentiments<sup>53</sup>. So not only is there a lack of time, inclination and resources to comply, but there may be a linguistic and cognitive inability to do so. Much of the subcontracting industry is not covered by union representation and the union negotiated collective agreements that help to govern safety<sup>54</sup>. The collective result of these characteristics can be ambiguity or even ignorance of OHS requirements and an undermining of safety systems

---

<sup>49</sup> Loosemore M, Dainty A, Lingard H. Human resource management in construction projects ó strategic and operational aspects, London: Taylor and Francis Ltd, 2003

<sup>50</sup> RCBCI. Final report of the royal commission into the building and construction industry, reform ó occupational health and safety, Royal Commission into the Building and Construction Industry, Melbourne; 2003.

<sup>51</sup> Trajkovski S, Loosemore M. Deficiencies in construction safety as a result of low English proficiency of site operatives, Sociological , Focus, under review, 2005

<sup>52</sup> Quinlan M, Mayhew C. Evidence versus ideology: lifting the blindfold on OHS in precarious employment, UNSW, School of In, 2001.

<sup>53</sup> Loosemore M, Dainty A, Lingard H. Human resource management in construction projects ó strategic and operational aspects. London: Taylor and Francis Ltd.; 2003.

<sup>54</sup> RCBCI. Final report of the royal commission into the building and construction industry, reform ó occupational health and safety, Royal Commission into the Building and Construction Industry, Melbourne; 2003.

and practices. The result is often reluctance to pay for safety training, long hours of work, low concern for safety and corner-cutting in management and construction practices<sup>55</sup>.

## **Chapter 5: Research Methodology**

### **5.1 Focus Group definition and analysis**

**Qualitative research** is characterized by its aims, which relate to understanding some aspect of social life, and its methods which (in general) generate words, rather than numbers, as data for analysis (Patton and Cochran,2000).

Qualitative research is concerned with qualitative phenomenon involving quality. Some of the characteristics of qualitative research/method are:

ÉIt is non-numerical, descriptive, applies reasoning and uses words.

ÉIts aim is to get the meaning, feeling and describe the situation.

ÉQualitative data cannot be graphed.

ÉIt is exploratory.

ÉIt investigates the why and how of decision making (V. Chinnathambi et al,2013).

### **5.2 Methods of collecting qualitative data**

Data collection approaches for qualitative research usually involves:

1. Direct interaction with individuals on a one to one basis
2. Or direct interaction with individuals in a group setting

Qualitative research data collection methods are time consuming, therefore data is usually collected from a smaller sample than would be the case for quantitative approaches - therefore this makes qualitative research more expensive.

The benefits of the qualitative approach is that the information is richer and has a deeper insight into the phenomenon under research

---

<sup>55</sup> Alfeld L. Construction productivity. USA: McGraw Hill; 1988.

Work Cover. Statistical bulletin: workers compensation statistics, Work Cover Authority of NSW, Sydney, 2001.

The main methods for collecting qualitative data are:

1. Individual interviews
2. Focus groups
3. Observations
4. Action Research (James,2007). Here we will deal with the focus group.

### ***5.2.1 Group interviews:***

Group discussions may be more appropriate for some topics. Some issues, such as dissatisfaction with health services, are often more readily discussed in groups. Some sensitive topics work better with a group, if all members of the group share an experience. Group interviews will also tell you more about the social structure of the community in which you will be working and give you a more in-depth understanding of the context and social fabric of the community, and of how opinions and knowledge are formed in social contexts.

What is a group interview?

A group interview is any discussion with a group of people. This could include informal, spontaneous chats with groups as they are waiting for services, or meeting at a social event. These are discussed under contextual information here we discuss more formal groups, which are organized on purpose. It is helpful to think about two different kinds of formal group interview: the focus group and the natural group interview.

#### ***5.2.1.1 Focus group:***

- Participants selected to meet sampling criteria.
- Seeks broad range of ideas on open-ended topic.
- Formal, controlled pre-arranged time and place.
- Usually audio-taped and transcribed for analysis.

#### ***5.2.1.2 Natural group:***

Group exists independently of the research.

Formal or informal format.

Interview guide loosely followed.

Often recorded by written notes.

### ***5.2.1.3 The recruitment of focus group participants:***

To run group discussions, you will need people who will discuss! It is often difficult to get the participation needed and inadequate recruitment efforts are a common source of problems in research projects.

Whether people will want to come will depend on how involved the researchers or their organization are with the community, how well they understand the topic of your research, how interested the community is in the research topic, and what they think they will gain by attending the discussions. To recruit your participants, you can ask for volunteers from the population of interest, or ask for the help of gate-keepers, leaders or contacts in the community who can invite participants for you. The other option is to recruit people systematically from a sampling frame for the population of interest. Obviously, if you want a natural group, you need to invite a group that already exists. You can invite one individual to invite their colleagues or other members of the household as well.

**Note:** Groups typically have between 6 and 10 people. Below 6, it may be difficult to sustain a discussion; above 10, it may be difficult to control it. If you aim for 10, it is usually a good idea to over recruit by about 25%.

Paul (2002) suggests some issues that deal with the questions of the focus group as follow:

### ***5.2.1.4 Developing a question set:***

Firstly, the researcher needs ***a pre-prepared schedule*** of questions, which helps in:

- Help ensure each group is given adequate opportunity to discuss all the key issues in a similar fashion;
- Help the facilitator to stay on track and on time.

### ***5.2.1.5 Types of Questions:***

Remember that you are not merely seeking oral responses to a structured interview, it is important to encourage open exchanges and discussion. As part of your preparation you should

focus on how to introduce questions and topics in a conversational manner. The set of questions should include:

- **Introductory questions:** Questions should be designed to get participants discussing the issue of work-related stress in general before homing in on particular issues
- **Linking questions:** Questions which enable the facilitator to move from the broad general discussion, following the introductory question, to the more specific areas of interest;
- **Key questions:** Questions which address the main topics in depth.

#### **5.2.1.6 Number of questions:**

A rule of thumb is that you will have time for no more than four or five key questions in a focus group lasting 1.5 to 2 hours.

#### **5.2.1.7 Statement on future action:**

It is helpful to include at the end of your question schedule a prepared statement on what will happen next, for example:

- How results will be summarized, interpreted and reported;
- What other specific actions will be taken;
- The timescales for reporting and subsequent action;
- How participants will be kept informed of progress.

#### **5.2.1.8 Guides when preparing the questions of the focus group:**

The goal is to create conversation. Ask open-ended questions. When you're writing questions, read them aloud to see how they sound.

Stick to one thought/idea per question. You may think you're asking one question when you are really asking two (or more!). Look for words like "and" or "or" to see if you're including two concepts in one question. For example: "Did you eat breakfast or lunch yesterday?" People may not know how to respond – maybe they ate breakfast but skipped lunch.

At the beginning of the group you may want to start with one or two general questions that will allow each group member a chance to speak and can reinforce their similarities. These may or may not be related to your research questions.

É Use “think back” phrasing when asking participants to reflect on their personal experiences.

Ask participants to “think back” to a certain point in time (last week, yesterday, last year) to ground their responses in a specific experience. This lets them know you want them to be specific in their responses and not generalize to what other people might think.

É Avoid asking “why”. Answers to this question are often rationalized and socially-acceptable, which may not necessarily be true or reliable. People can also become defensive when asked “why” repeatedly. Sometimes “why” questions can be broken down into questions about influence (“What influenced you to do it?”) and attributes (“What features do you like?”).

É Use the shortest way of asking a question clearly.

É If you use examples, give them as probes after participants have already given their insights.

É For sequencing questions:

- o Ask general questions before specific questions
- o Positive before negative
- o Un-cued before cued

## **Questions to use:**

### ***Open questions***

Open questions, or open-ended questions, should be the most frequently used questions in focus groups. They allow the respondents as much freedom as possible in deciding how to reply. They do not constrain them to “Yes / No” answers or a limited range of options, they don’t imply the type of response that is expected. They are useful at all stages of a focus group but particularly in the early stages. Examples of open-ended questions are:

É “What did you think about the course?”

É “What is it like to work here?”

É “How did you feel about that?”

They are sometimes phrased as requests for information or invitations to “Tell me about...”. For example,

É “Can you tell me a bit about what it felt like?”

When the idea is to encourage participants to be spontaneous and give 'first thoughts' rather than tell you what they think you want to hear, you can ask the question along the lines:

É      'What are your first thoughts about í ?'

É      'What's the first thing that strikes you about í the new proposals?'

### ***Closed questions***

Closed questions have important uses but must be used with caution as they can stifle discussion. Closed questions include questions which call for 'Yes /No', 'one word' or brief answers. For example:

É      'How old are you?';

É      'Are you married or single?'

They tend to close down discussions rather than open them up, so they are generally avoided early on in focus group sessions. They can be very useful later on in focus group sessions when you want to narrow down the focus of the discussion, for example:

É 'Which of these issues needs tackling first?';

Or to check understanding:

É 'Do you mean by that that í ?';

And they can be good lead-ins to open-ended questions:

É 'Which is the most important í . ?';

followed by an open-ended question:

É 'How do you feel about it?'

### ***Summary questions***

At the end of each period of discussion, and at the end of the focus group session, the facilitator can give a summary of the points to emerge. The facilitator should attempt to express the issues raised by participants in the language in which they were expressed by participants. The facilitator can then ask:

É      'How well does that capture what was said?'

É     öHave I managed to adequate summaries the discussions?ö;

and finish by asking:

É     öIs there anything weöve missed?ö

É     öHave we covered everything?ö.

### **Running a group**

The moderator's role is crucial: you will need to provide a clear explanation of the purpose of the group, help people feel at ease and facilitate interaction between group members.

The moderator will need to promote the debate by using the topic guide, sometimes challenging participants, drawing out differences in opinion, asking for details and tactfully moving things forward when the conversation is drifting. The moderator will also need to ensure that everyone speaks while not favoring any particular participant.

It is usual to have two moderators, so that one can concentrate on the topic guide and managing the discussion, while the other takes notes, checks the tape recorders and helps with the organization (e.g meeting and greeting participants). Both can take notes on body language, attitudes etc.

### **Setting**

Make sure that you have your discussion in a quiet, comfortable place so that people feel relaxed and inclined to speak. What feels comfortable and just the right level of intimacy will depend on the context. Think about the space and the seating ó organize in a circle, so people can see each other and there is space for a flip chart or some other way of recording issues.

### **How to run the discussion?**

#### **The start**

A good icebreaker is to ask each person in the group to give a brief self-introduction. If you want to relax the atmosphere, you could start by asking each person to say something about what they like to do in their spare time.

### **Discussion starter**

You then need to move on to the discussion starter question, it will present the basic topic for the session and throw the discussion open to the group as a whole. When you start the actual discussion, the aim is to get each participant to give some meaningful response or opening statement. Hence a key feature of the discussion-starter question is that one should be easily able to respond to it. This should get everyone on record with their different experiences and opinions before a consensus emerges during the group discussion. Examples might be getting each participant to say their name and one thing about their experiences of the topic, such as last time they used the local clinic, or how long they have lived in the camp.

### **The discussion**

After this first discussion starter, you can start tapping into your topic guide. Do try to relate your questions to what has been mentioned during the opening statements.

It is also useful to provide a clear indication of when the session is ending. Focus groups should last about 90 minutes but it is better to announce to the group that it will take two hours. To indicate that the discussion is coming to a close, you could for example ask each participant for a final summary statement within which you should ask them to point out what they think are the most important points.

Also, do remember common courtesy at the end and thank all participants for their time and energy, and provide whatever refreshments might be appropriate in the setting (Patton and Cochran, 2000).

#### ***5.2.1.9 Analyzing Focus Group Data with Qualitative Data Analysis Techniques:***

There are several analytical techniques to analyze the qualitative data which are: the constant comparative method, classical content analysis, keywords-in-context and discourse analysis. The most famous and appropriate method in analyzing the focus group data is the Constant Comparative Method (CCM) which will be discussed in the following part:

*Constant comparison analysis* was developed by Glaser and Strauss (Glaser, 1978, 1992; Glaser & Strauss, 1967, Strauss, 1987), constant comparison analysis, also known as the method of constant comparison, was first used in grounded theory research. Yet, as Leech and Onwuegbuzie (2007, 2008) have discussed, constant comparison analysis can also be used to analyze many types of data, including focus group data. Three major stages characterize the

constant comparison analysis (Strauss & Corbin, 1998): During the first stage (i.e., open coding), the data are chunked into small units. The researcher attaches a descriptor, or code, to each of the units. Then, during the second stage (i.e., axial coding), these codes are grouped into categories. Finally, in the third and final stage (i.e., selective coding), the researcher develops one or more themes that express the content of each of the groups (Strauss & Corbin, 1998) (J. Onwuegbuzie, et al,2009).

**The CCM is discussed in detail as the following:**

**Data reduction:** In qualitative research, data reduction continues throughout the duration of the research. Data reduction is a process that involved selection, simplification, transcription, abstraction and transformation of the raw data. Data reduction is a form of analysis that can be used to combine pieces of information into categories.

**Coding:** Strauss and Corbin (2008) refer to the process of analyzing data as coding. Coding involves three levels of analyses:

(a) open coding, (b) axial coding, and (c) selective coding, to gather a complete picture of the information obtained during the data collection process. During this first phase of the coding process the researcher is comparing data and continually asking questions about what is and is not understood. The identification of different categories, properties, and dimensions within and among the data can be accomplished by a variety of techniques that examine parts or the whole document

in a systematic manner (Strauss & Corbin). The next step of coding is the axial coding procedure where data are pieced together in new ways after open coding allowing connections between categories. By the continuation of asking question and making comparisons, the inductive and deductive thinking process of relating subcategories to a category is the main emphasis of the axial coding (Strauss & Corbin).In the final stage of coding, Strauss and Corbin (2008) define selective coding as the process of identifying and choosing the core category, systematically connecting it to other categories, validating those similarities and relationships and then completing categories that, that need further refinement and development. Only after the process of crucial integration of weaving and refining all the major categories into the selection of a core category can the grounded theory emerge (Strauss & Corbin). The concepts and relationships

that are developed through the coding process help guide the data collection and analysis process referred to as theoretical sampling.

**Theoretical sampling:** In qualitative research, the process of theoretical sampling combined with the constant comparative method mentioned above is a significant strategy used by researchers in the development of grounded theory (Glaser & Strauss, 1967). The theoretical sampling is a procedure of selecting additional cases to be studied to gather new insights or expand and refine concepts already gained. Theoretical sampling is often used in conjunction with the three levels of coding as describe by Strauss and Corbin (2008). During the first level of open coding, sampling is purposeful and systematic; the second level of axial coding incorporates sampling in a more structured systematic approach to help validate relationships among the data; and the final level, selective coding, specifically seeks a more deliberate agenda of sampling to help test and integrate categorical findings until the point of data saturation (Strauss & Corbin, 2008). Data saturation is the point when the information collected. It is necessary for data saturation to occur to help ensure that adequate information has been gathered to accurately reflect the perspectives of the researchø participants (Kolb,2012).

**Theoretical Memos:** memos are the written analysis related to the development of the theory. Haslam (2002) describes memos as building blocks of a theory development similar to the grounded theory process. Glaser (1978) suggested that the memos are the core stage in the process and without using them to write an idea, the researcher is not in fact doing grounded theory (Ng and Hase, 2008). Memos enable the researcher to document their ideas, thoughts and emerging propositions (Kelly, 2008). It is used during each phase of the analysis and helps the researcher to write the final substantive theory.

**Theoretical Sorting:** Glaser (1992) argued that theoretical sorting is the key of writing a theory. It requires arranging the memos that are constructed into integrated theory (Ng and Hase, 2008). In addition, theoretical coding requires reviewing the preset propositions and show how the emerged propositions supported the preset propositions and how concepts are linked to each other. This is the basis for writing a theory. The purpose of theoretical sorting is to sort the memos that the researcher has written during the research in order to identify the emerging

theory (Kelly, 2008). The theoretical sorting may lead to discover the core category if it has not been discovered. The major focus of the theoretical coding is to put all the memos, categories and the analyzed data in a whole picture of a theory (Kelly, 2008).

#### ***2.2.1.10 Ethical issues in qualitative research:***

Some ethical considerations used in this research are as follow:

##### **Informed consent:**

Everyone who participates in the research as interviewee has freely consented to participation, without being under force, or unfairly pressurized. This means that they should be well-informed about what participation details. While written consent may in some situations scare the participants talked with.

##### **Confidentiality:**

It is essential to protect the identity of the person from whom you gather information. If collected, the identity of the participants must be protected at all times and must not be left lying around in notebooks or un-protected computer files (Cochran and Patton, 2002).

**Anonymity and Privacy:** The information of the participants remained anonymous and protected from those who have interest conflict with the interviewees. The names of the participants and organizations must be secret to preserve participant's anonymity.

##### **The Storage of Data:**

All data, including tape recordings, memos and written materials pertaining to the research must securely be stored. During the research, information was explored for the use of the research. Backup copies must be stored at a locked secondary site for safekeeping (Kelly, 2008).

##### **Transparency:**

There is a need to be explicit, clear, and open for the propositions made and the methods and procedures used. The credibility of any qualitative research lies in the transparency of its specific

paradigm assumptions. In planning, designing and carrying out qualitative research, there must be conscious examination of research strategies, selection of participants and decisions made in collecting and interpreting the data. Methods of inquiry, which include the procedures of data collection and data analysis and interpretation, must be clear enough for others to replicate and therefore must be transparent (Cermak and Hiles, 2007).

## Chapter 6: Data analysis, Results and Findings

This Chapter discusses the structured interview design, application and analysis. It also shows the main findings from the structured interview. This research was conducted in two phases:

1. **Focus Group:** We conducted 2 focus groups with tripartite committee representatives from the main stakeholder's representatives as we can see from Table 1 Focus Group Composition. The focus group aimed to:
  - a. Validating the research problem and the applicability of Occupational Licensing as a valid solution in the Palestinian context.
  - b. Formulating and refining the main questions and metrics of any proposed Occupational Licensing system: its objectives, aims, vision, mission, implementation issues, enforcement and approach.

The findings of the focus groups have confirmed that the Occupational Licensing is a valid and applicable system for Palestine and can be implemented on a national level. The main issue here is to find the right structure, procedure and implementation approach. The other main outcome of the focus group is the final structured interview questions and type of answers as included in Appendix I: Structured Interview (English Version).

The questions were designed to be gradual: it starts by validating the subject, asking for how much the respondent agree/disagree with the premise of the question, then it ends with the detailed answer of the respondent on the targeted issues. The implementation of the structured interview has also confirmed that the final questions were appropriate, relevant and covered the main points.

**Table 1 Focus Group Composition**

	Stakeholder class	Organization	Job title
1	Government	Ministry of Labour	General Manager Of Inspection And Work Conditions
2		Ministry of Labour	Manager Of Employment Development Department
3		Ministry of Labour	General Manager / TVET Department
4		Ministry of Education	Assistant Deputy Minister
5	Workers representatives	Trade unions / Construction And Carpentry Workers	Head Of Syndicate
6		Trade Unions	Member Of Secretariat
7	Employers representative	Gaza Chamber Of Commerce	Manager Of Capacity Development And Training Department
8		Palestinian contractors union	Executive manager

**2. Structured Interview:** the structured interview was conducted with 31 informants who hold a management and representative position at his/her organization as we can see from Table 2 Structured Interview Composition. We detail the issues related to the design, implementation and results of the structured interviews in the following section.

### 6.1 Structured Interview design

The structured interview has been designed based on the research objectives and the questions. The structured interview questions have been influenced by the focus group discussions and was refined using the focus group attendants.

The structured interview is divided into the following sections:

- Meta data and individual's information (Name of the organization, background, Job title).
- Knowledge and understanding of the occupational licensing concept in general and in the local community.

- The applicability of the occupational licensing in Palestine (importance, laws, benefits and costs, impact on wages and health and safety and barriers to implementation).
- The characteristics of the most suitable occupational licensing system in Palestine (Scope, priorities, feasibility, goals, regulation and enforcement, standardization and levels, organizational structure and financial model).
- The possible participant in the occupational licensing body, their responsibilities, and level of oversight and implementation issues.

The detailed questions and items are included in Appendix I: Structured Interview (English Version).

## 6.2 Data Collection and Structured Interview Application

The structured interview was applied to 31 key informants. The sample breakdown represents the stakeholders representation is included in Figure 1 Sample breakdown based on organization.

What kind of Organizations you are working with: (31 responses)

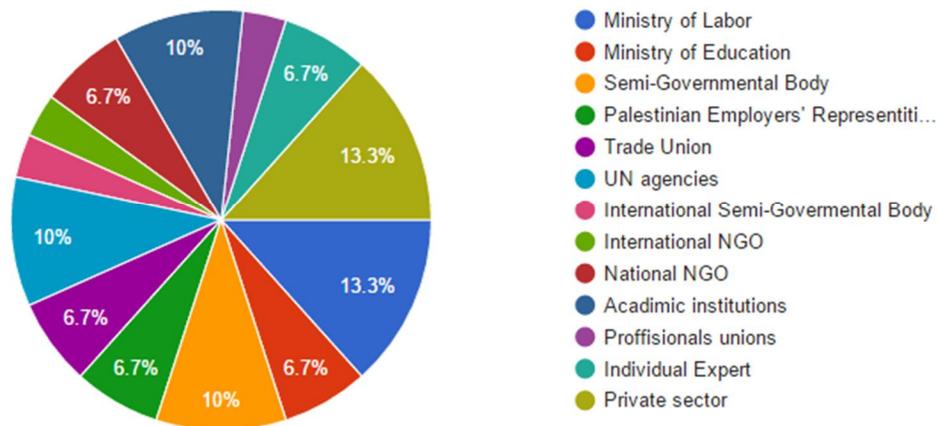


Figure 1 Sample breakdown based on organization.

The informant's job roles are varied in type and levels as shown in Table 2 Structured Interview Composition:

*Table 2 Structured Interview Composition*

	Stakeholder Category	Organization	Job title
1	Government	Ministry of education	Assistant Deputy Minister,
2		Ministry of Labour	General Manager Of Inspection And Work Conditions department
3		Ministry of Labour	General Manager / TVET Department
4		Ministry of Labour	Manager Of Employment Development Department
5	Semi ó	Municipality Of Khozaa	Projects Manager
6	Government	Municipalities Development Fund	Gaza Office Manager
7		Municipalities Development Fund	Area Engineer
8		Palestinian employment fund	Gaza office Manager
9	Local Communities	NGO Development Center	Gaza Programme Manager
10	Donors/international organization	GIZ	Senior Programme Adviser /TVET
11		Islamic Relief	Programme Manager /Enhancing Youth Employability
12		UNRWA	Head Of Gaza Training Center
13		UNDP	Program Manager-Engineering Department
14	Private Sector	Chamber of commerce	Manager of Business Development Unit Manager
15		Palestinian contactors union	Member of board of director
16		Palestinian contactors union	Executive Manager

17		Federation of Palestinian industry	Executive Manager
18		Abu shammalah and abu dan company	Site Engineer
19		Three brothers company	Contractor
20	Unions	Syndicate of Construction And Carpentry Workers - Trade Unions	Head Of Syndicate
21		Trade Unions	Member Of Secretariat
22		Syndicate Engineers	Member of board of directors
23	Academic	Islamic university of Gaza	Dean of engineering department
24	institutions	University college of applied sciences	Lecturer
25		OSH institution	Executive manager
26		Freelancer	Curricula Development expert

We believe that the management level is the most comprehensive of the stakeholder organizations. More studies are needed to determine the level of commitment of the involved organizations and whether the management positions are represented and shared by middle and lower management.

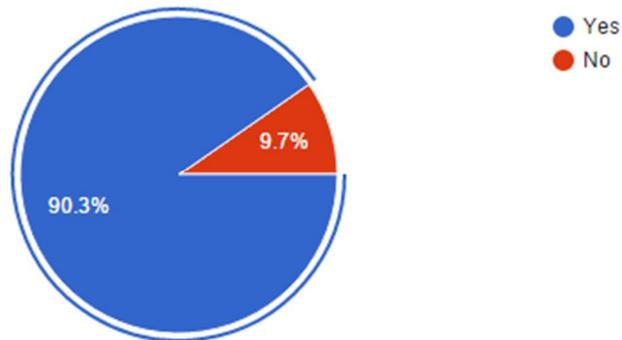
### **6.3 Results of the structured interviews concerning the applicability of the Occupational Licensing System**

#### **6.3.1 Results of the close ended questions of the structured interview**

The informant responses are shown in Figure 2. The informant response regarding their knowledge of Occupational licensing. It indicates that 90.3% of them know previously about the concepts of occupational licensing system. This percentage indicates that the sample has targeted the appropriate level and individuals who are concerned with the issues of employability, skilling

and licensing in Palestine. This is also indicating the level of awareness among the stakeholders is appropriate and makes it applicable to carry out this research at this stage.

Do you know about occupational licensing before? Yes/No (31 responses)

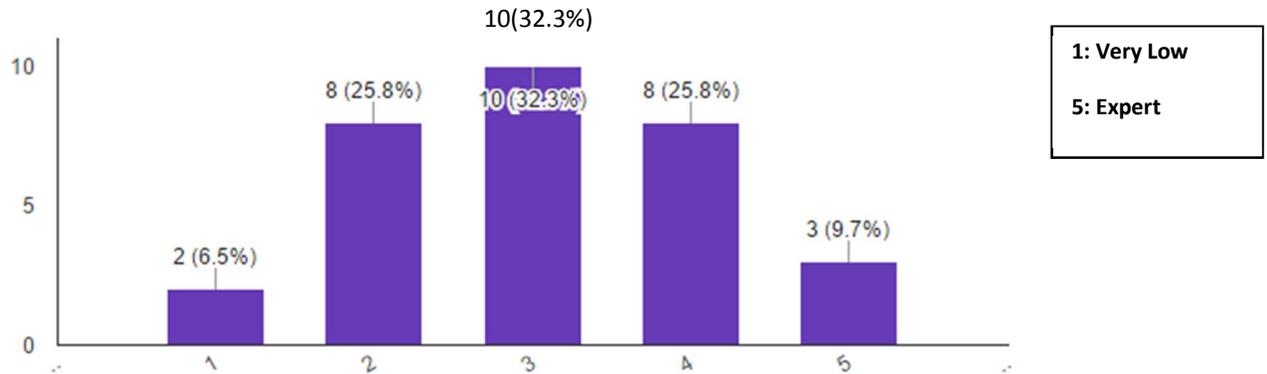


*Figure 2* The informant response regarding of their knowledge of Occupational licensing.

However, their confidence regarding how much they know about the occupational licensing system, shown in the Figure 3 Informants Confidence in their knowledge of Occupational Licensing System, fits the normal distribution model and means that if the system is to be implemented, there is a need to confirm this result and improve knowledge of the system concepts.

## How well do you evaluate your knowledge of the occupational licensing system

(31 responses)

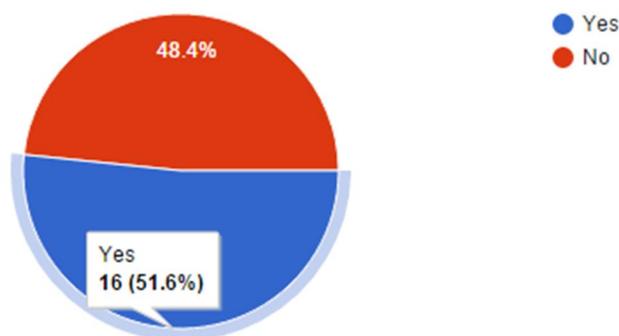


*Figure 3 Informants Confidence in their knowledge of Occupational Licensing System*

In addition, the informants' responses show that their knowledge is not uniform as they are divided about the knowledge of the presence of occupational licensing model in the local community as shown in the Figure 4 the knowledge of the presence of occupational licensing model in the local community.

## Do you know about the presence of any occupational licensing in the local community?

(31 responses)

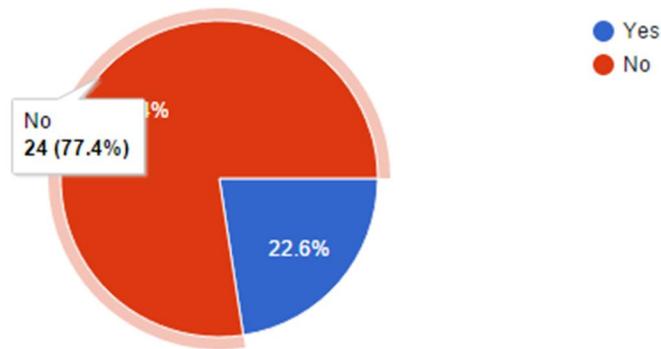


*Figure 4 the knowledge of the presence of occupational licensing model in the local community*

The answers regarding whether there is any presence of provisions in the Palestinian labor law connected to OL? Shows that 77.4% of the responses indicate that there is no presence of laws regarding the Occupational responses in the Palestinian laws as illustrated in the Figure 5 Is there any presence of provisions in the Palestinian labor law connected to OL?. Again, this shows that more work needed to be done to analyze Palestinian laws to form a technical opinion in this regard.

Is there any presence of provisions in the Palestinian labor law connected to OL?

(31 responses)



*Figure 5 Is there any presence of provisions in the Palestinian labor law connected to OL?*

Regarding whether the occupational licensing can prevent workers from accessing formal jobs, the majority indicated that it will be an issue that need to be addressed in the implementation of the occupational licensing system and its enforcement mechanism as show in Figure 6 The relation between the Occupational Licensing and access to formal jobs.

To what extent you agree on the following: Occupational licensing in some stages prevents workers in informal sector from accessing formal jobs.  
(30 responses)

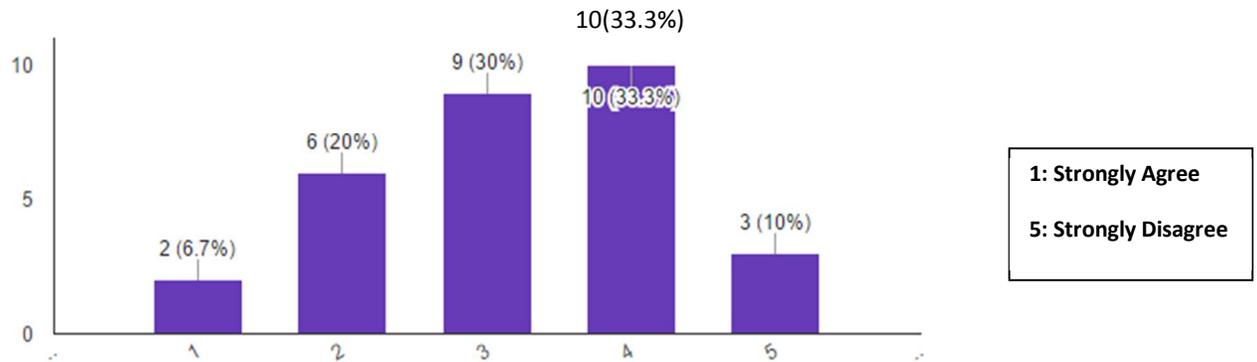


Figure 6 The relation between the Occupational Licensing and access to formal jobs.

On the other hand, 60% agreed that the most important purpose of the Occupational Licensing system is increase quality of services and improve public safety which is reflected in Figure 7 Relation between Occupational Licensing and quality of services and public safety.

The purpose of occupational licensing is to protect the consumers and environment by increased quality of services /products and improved public safety.

(30 responses)

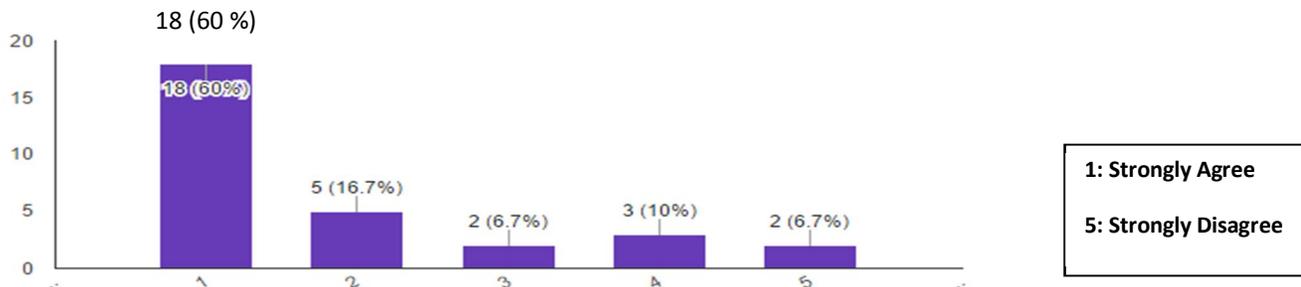


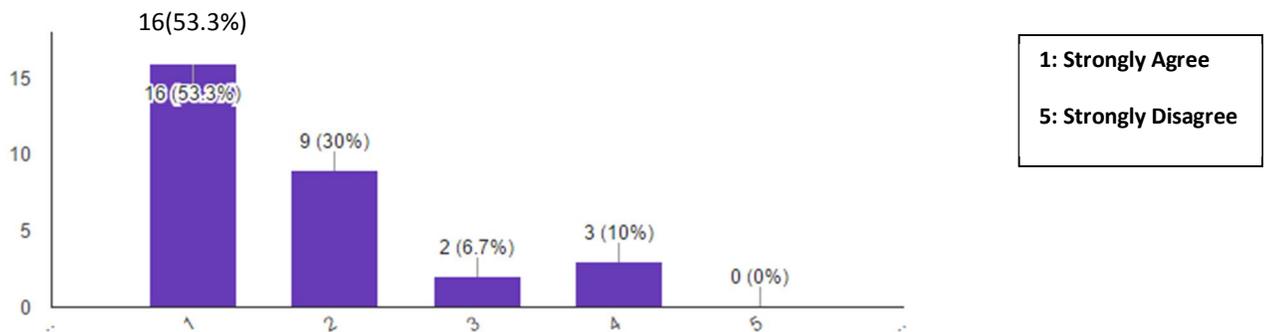
Figure 7 Relation between Occupational Licensing and quality of services and public safety.

The responses also show that more than 83% of respondents view the occupational licensing system in construction sector to have a positive impact on work conditions and occupational

safety. This is an important issue facing workers in the field of construction as it is one of the highest risk jobs in the labour force in Palestine. The breakdown of the responses is shown in Figure 8 The perceived impact of occupational licensing and work conditions and occupational health and safety. Only 3% of the responses viewed the Occupational licensing to have a negative impact on the work conditions.

**There is positive impact on the work conditions and occupational safety and health if any particular occupation license existed?**

(30 responses)



*Figure 8 The perceived impact of occupational licensing and work conditions and occupational health and safety.*

It must be mentioned that the responses show that compulsory enforcement of the system will have a negative or they are not sure about their response. This means that the immediate impact of occupational licensing on employability must be considered carefully in the first phases of application. The Figure 9 Relation between compulsory enforcement procedures and impact on employability. shows the breakdown of the results.

Occupational licensing system with compulsory enforcement procedures has a negative impact on employment?

(30 responses)

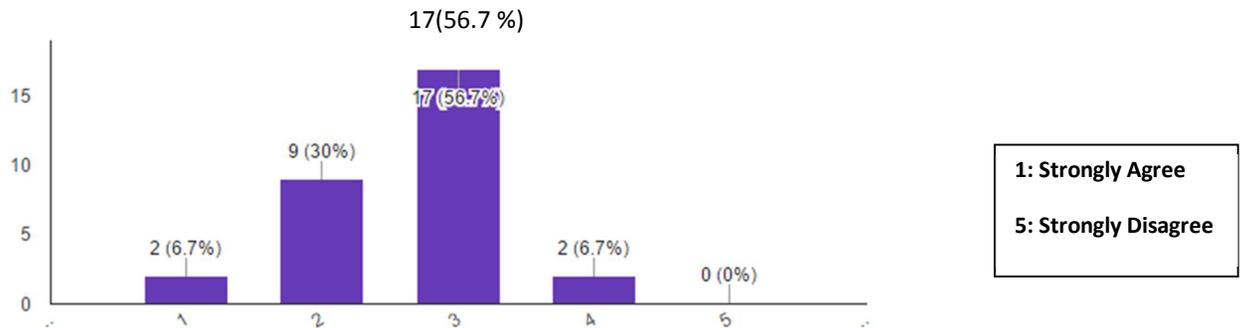


Figure 9 Relation between compulsory enforcement procedures and impact on employability.

A majority (76.7%) of the responses agreed or strongly agreed that it is important to have an Occupational license for a particular occupation as shown in Figure 10 The perceived importance of occupational license.

How important is it to have license for particular occupations ? (30 re

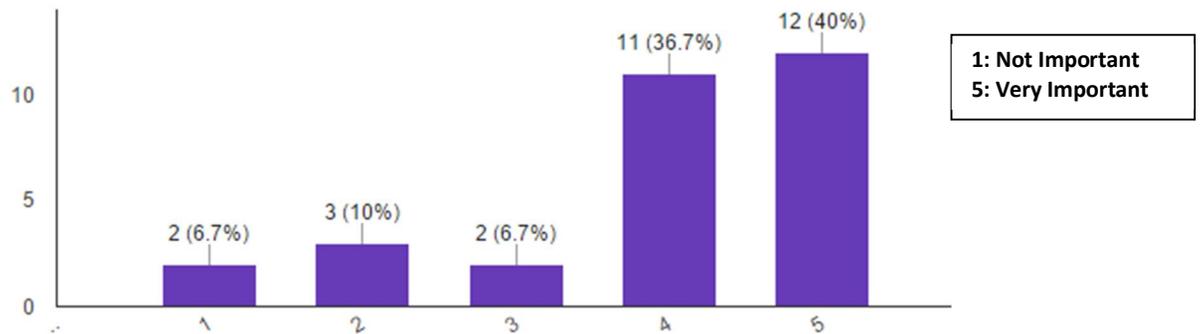


Figure 10 The perceived importance of occupational license.

The most important problems currently being faced with the occupational licensing seems to be the skills gap and the lack of a credible reputation/quality assurance system for workers as shown in Figure 11 Most important problems that the Occupational Licensing will address.

What problems currently being faced within the construction sector do you think that could be addressed by occupational licensing?

(30 responses)

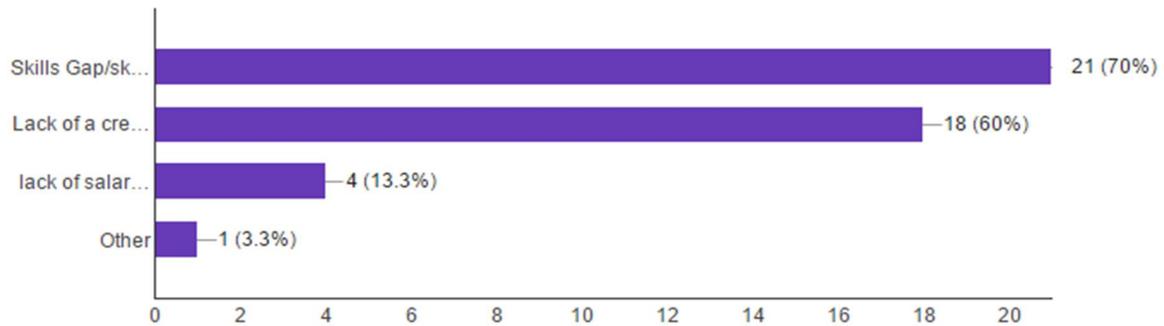


Figure 11 Most important problems that the Occupational Licensing will address.

While the main barriers according to the sample are the lack of capacity on the governmental bodies side and Financial barriers as summarized in Figure 12 Main barriers to implementing the Occupational Licensing in Construction Sector.

What do you consider to be the main barriers in implementing occupational licensing in construction sector?

(30 responses)

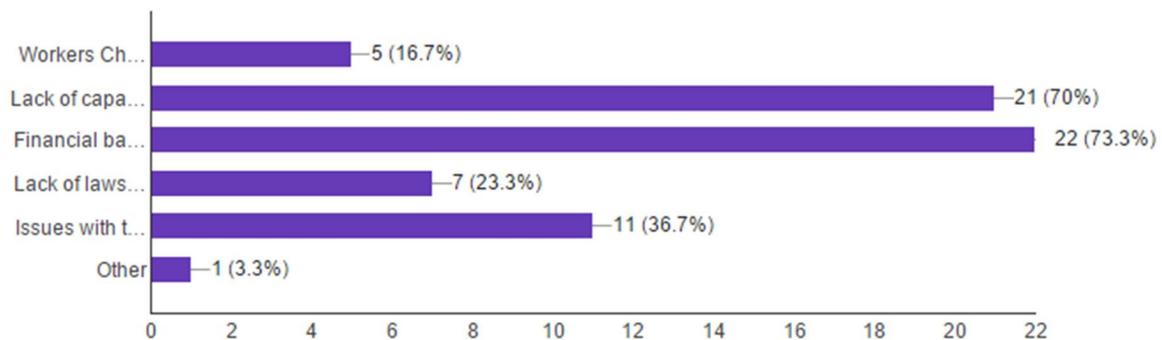
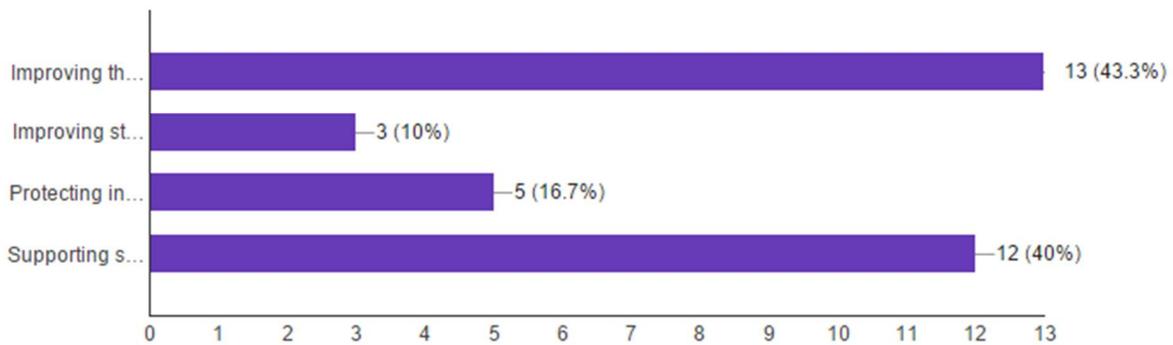


Figure 12 Main barriers to implementing the Occupational Licensing in Construction Sector.

The most important goal of the occupational licensing system in Palestine is to improve the quality of service /products and to supporting skills recognition, mobility and development. The responses don't show a clear priority which means that they must be considered as a one goal of the occupational licensing. Figure 13 Goals of The Occupational Licensing. shows that 43.3% choose improving the quality of services while 40% of the responses choose supporting skills recognition, mobility and development. Those two goals are not orthogonal and suggest a strong correlation between the skills development and the quality of services.

**Prioritize the most convenient goal of Occupational licensing. (Choose one only)**

(30 responses)

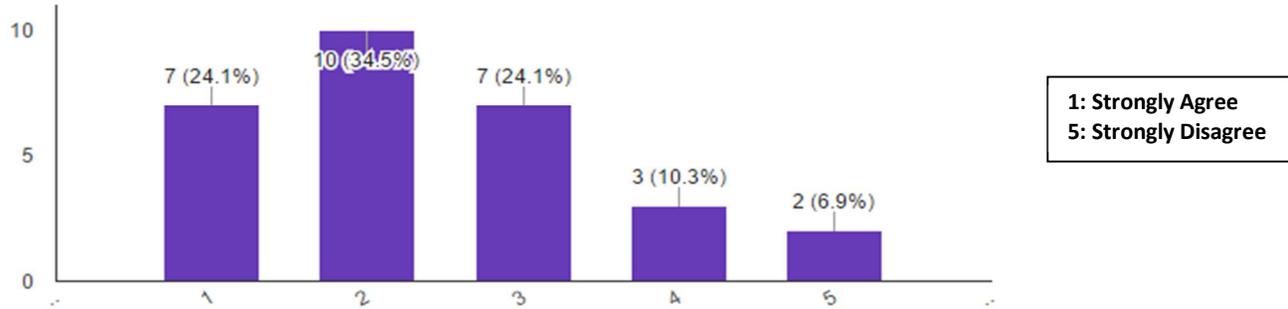


*Figure 13 Goals of The Occupational Licensing.*

Although, the current economic situation of the Palestinian territories is not optimal, responses indicate that it is still feasible to apply occupational licensing. 58.6% of the responses agreed or strongly agreed that it is feasible to apply the system in the current economic situation as shown in Figure 14 Feasibility of the Occupational Licensing in the Palestinian economic situation.

### How much is it feasible to apply the occupational licensing in the current economic situation?

(29 responses)

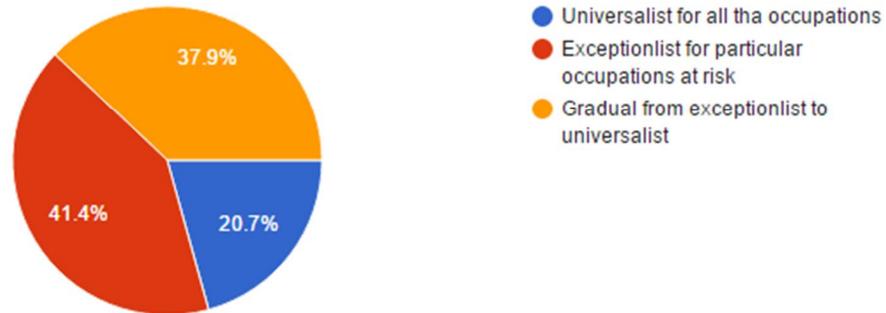


*Figure 14 Feasibility of the Occupational Licensing in the Palestinian economic situation.*

However, the weak economy of Palestine might have influenced the view on the best approach to apply the occupational licensing in the construction sector. Only 20.7% of responses want to apply a Universalist approach for all occupation. While 41.4% want to apply an exceptionalist approach for particular occupations at risk. The remaining 37.9% wanted a gradual approach that starts from the exceptionalist approach and progress gradually to reach the universalist approach according to Figure 15 The most convenient approach to Occupational Licensing in Palestine.

Which approach is more convenient to apply the OL in the construction sector in the current economic and social condition?

(30 responses)



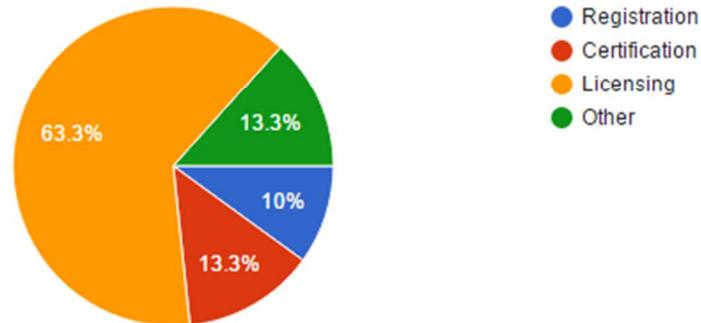
*Figure 15 The most convenient approach to Occupational Licensing in Palestine.*

The most desired approach for the regulation of the occupational licensing system in the construction sector is licensing according to 63.3% of the responses as seen in Figure 15 The most convenient approach to Occupational Licensing in Palestine.

The certification and registration approaches seem unpopular with the informants who can be attributed to the low confidence in the education system and in the capacity of the governmental bodies.

## Which regulation system is most appropriate for occupations in the construction sector in Gaza?

(30 responses)



*Figure 16 The most appropriate regulation approach to Occupational Licensing*

Given that the Occupational Licensing system is not present at the moment, it is encouraging that informants are either willing to hold their judgement (43.3%) while 35.4% either agree or strongly agree that the customers will have the ability to judge the skills of the workers and the quality of services as in Figure 17 The relation between the Occupational licensing and customers' confidence.

The customers has the ability to judge the skills and quality of the services /products.  
 (30 responses)

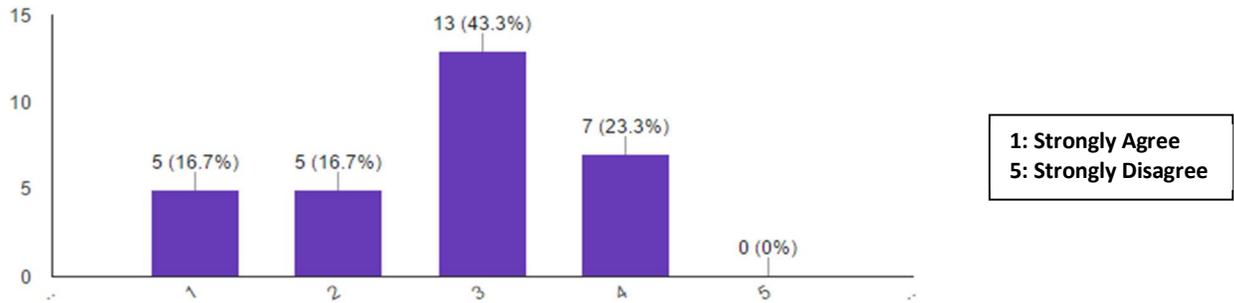


Figure 17 The relation between the Occupational licensing and customers' confidence.

In Figure 18 The focus of the Occupational Licensing System. the occupational licensing system should focus on the skills and wages together according to 63.3% of the respondents. The majority feels that there has to be an incentive for the licensing system. While only 36.7% viewed that the regulation should only focus on skills only and the free market mechanism of supply and demand will be able to improve the wages of the workers.

Will the regulation focus on ... (30 responses)

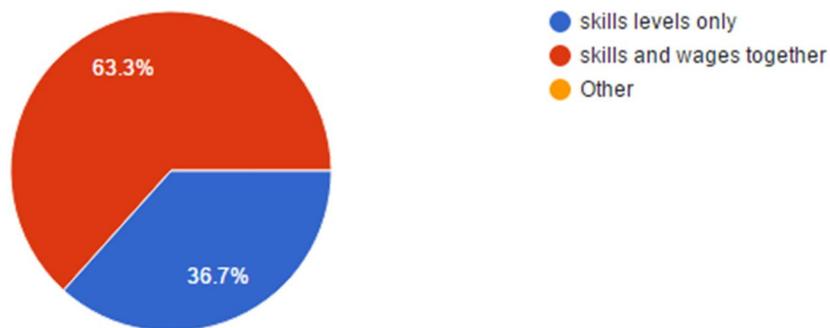


Figure 18 The focus of the Occupational Licensing System.

For the appropriate standards for skills to be enforced, 75% of the responses, as in Figure 19 Skills Standard to be enforced., see that the National Qualification Standards are the best and most suitable approach. None of the responses want to use international qualification standards while 25% want a regional qualification standard to be used for the skills enforcement mechanism of the construction sector occupational license system.

What standards for skills to be enforced? (28 responses)

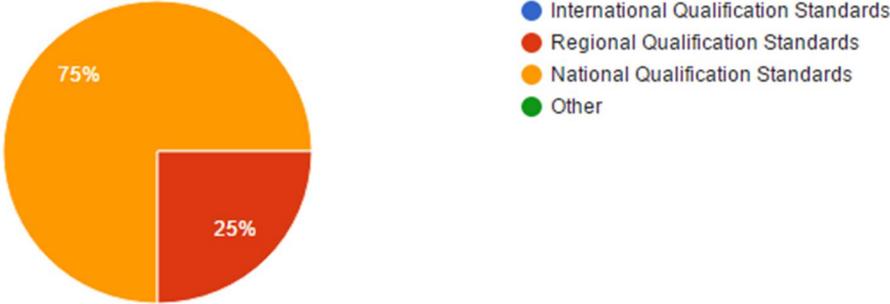


Figure 19 Skills Standard to be enforced.

The occupational skills level that most appropriate for the Palestinian Occupational Licensing system is the Craftsman and Technician levels. This is logical given that the professional level is already regulated by the Engineering syndicate while the limited skilled workers and skilled workers are working under the guidance of the other more senior craftsman and technician as we can see in Figure 20 The level that the Occupational Licensing should address.

What levels should be addressed? (30 responses)

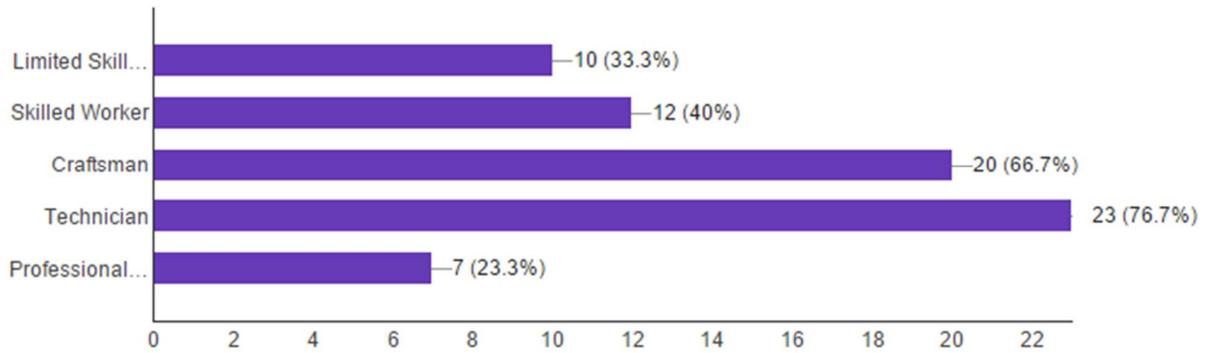


Figure 20 The level that the Occupational Licensing should address.

The occupations that have the highest complaints are:

- Plumber
- Tiling
- Electrician

Based on the structured interview response in Figure 21 The occupations that has the highest complaints in the construction sector.

Which occupations has the highest complaints?(Choose 3) (31 responses)

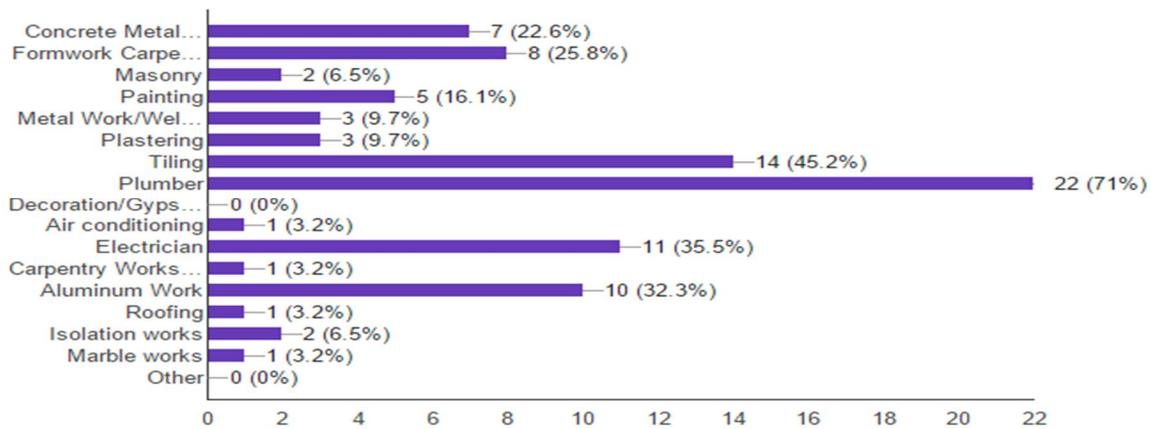


Figure 21 The occupations that has the highest complaints in the construction sector.

While the occupations of the highest skills gap are:

- Plumber
- Aluminum work
- Formwork carpentry work

According the result in Figure 22 The occupations that has the highest skills gap in the construction sector.

Which occupations has the highest skills gap?(Choose 3) (31 responses)

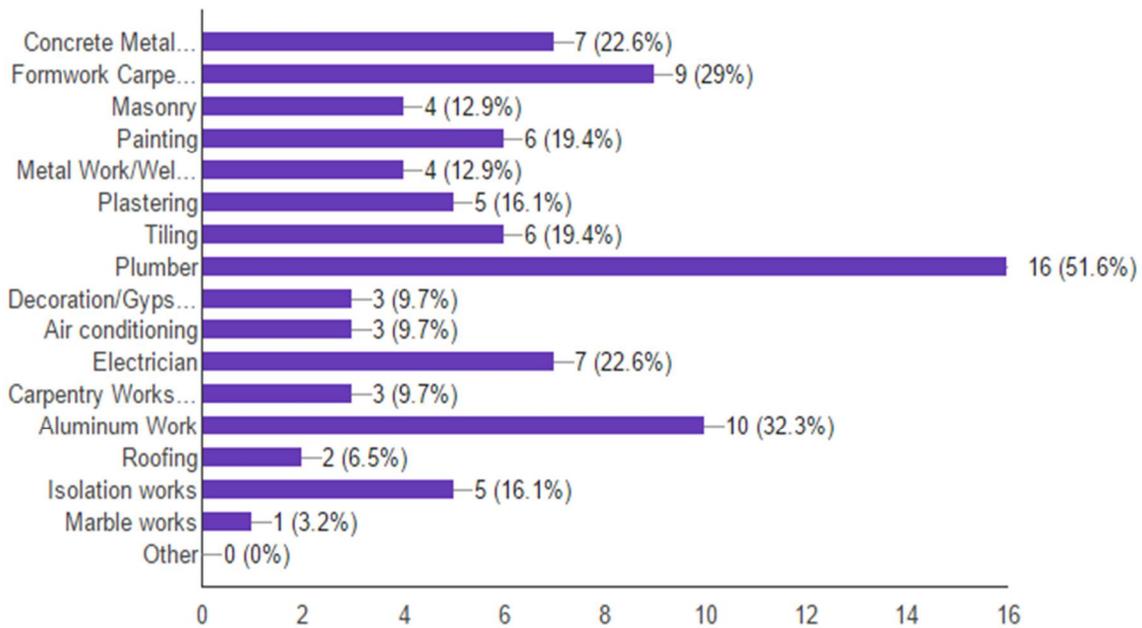


Figure 22 The occupations that has the highest skills gap in the construction sector.

The occupation with the highest worker risk are:

- Concrete Metal Work.
- Metal Work/Welding
- Roofing

As we can see in Figure 23 The occupation that has the highest risk in the construction sector.

Which occupations has the highest worker risk?(Choose 3) (31 responses)

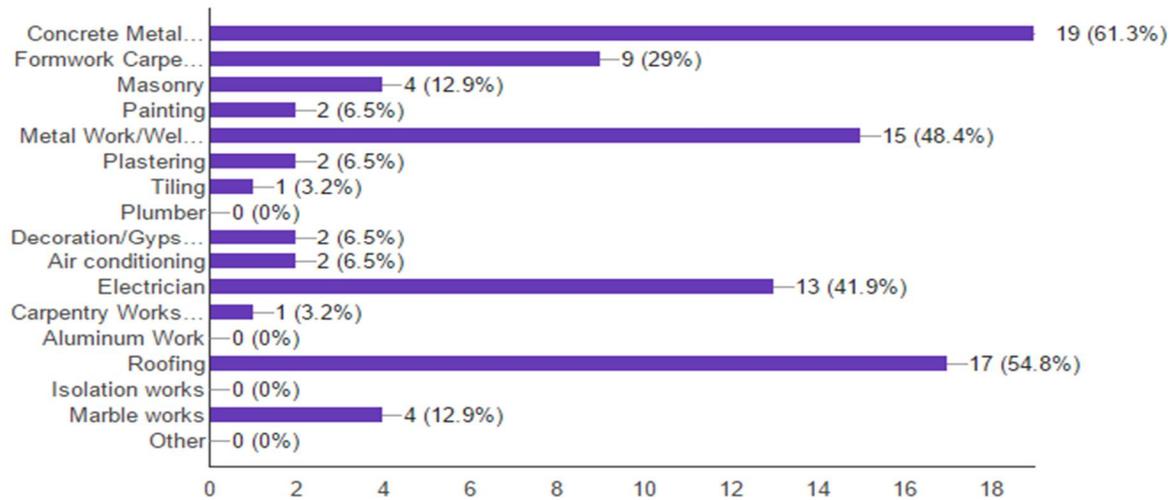


Figure 23 The occupation that has the highest risk in the construction sector

While the research revealed in Figure 24 The occupation that has the highest employer/customer risk in the construction sector show that

- Plumber
- Electrician
- And Concrete Metal Work

Are the occupations with the highest employer/customer risk?

**Which occupations has the highest employer/customer risk? (Choose 3)**  
 (31 responses)

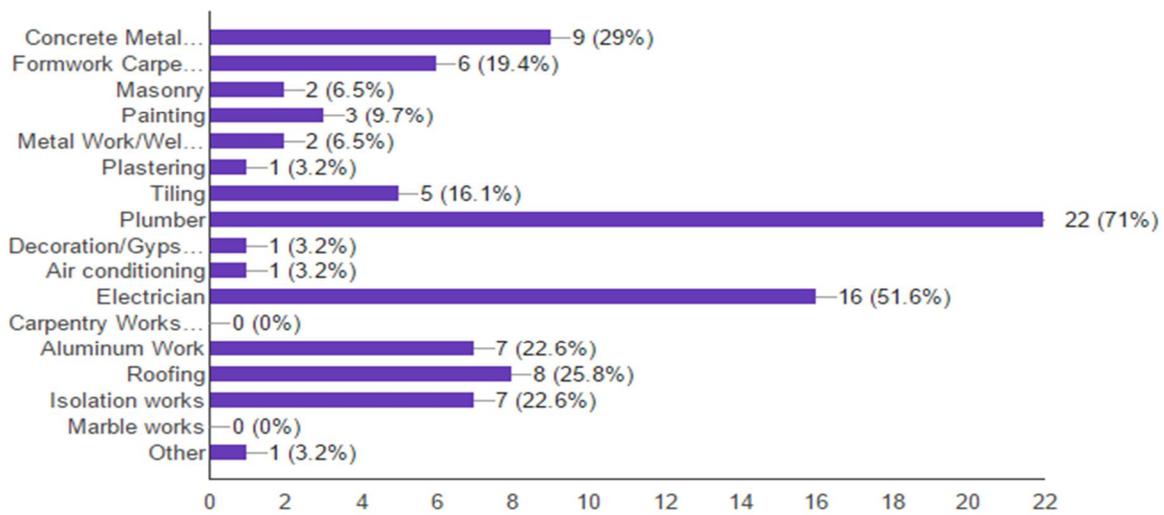


Figure 24 The occupation that has the highest employer/customer risk in the construction sector

Figure 25 The scope of obligation for the licensing process show that licensing process should target the new entrance to the labour force according to a 67.7% of responses.

**Which groups of the Labour force should be obliged to go through the licensing process**

(31 responses)

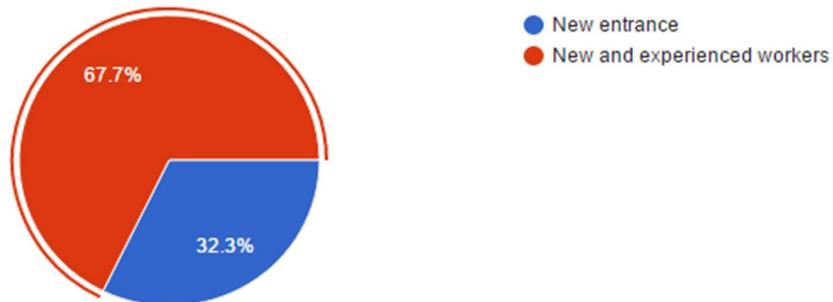


Figure 25 The scope of obligation for the licensing process

The Independent Body with Participatory Scheme is the choice of 65.5% of responses while other options are less popular as we can see in Figure 26 The nature of the occupational licensing authority.

Who has the authority for occupational licensing? (29 responses)

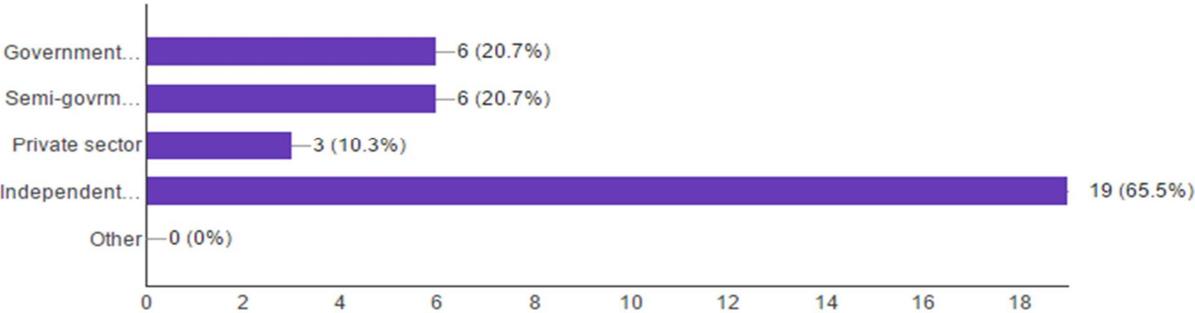


Figure 26 The nature of the occupational licensing authority

To apply the system, 51.7% of the responses want an incentivized system at the first stage and gradually move into the compulsory approach as in Figure 27 The enforcement process.

What are enforcement processes that will be put in place? (29 responses)

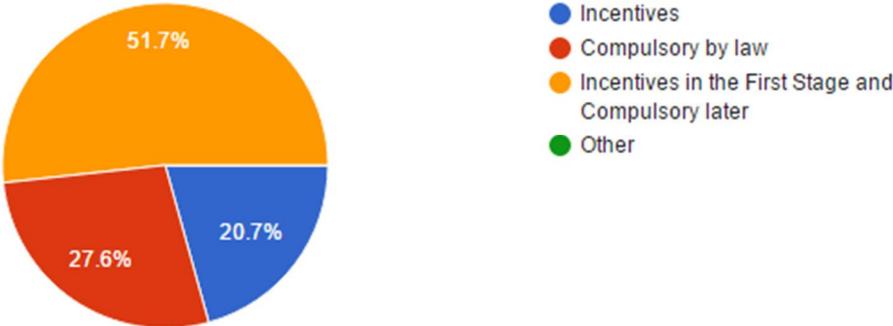


Figure 27 The enforcement process.

The worker license should require Competency test for the knowledge, skills and attitude of workers measured in examination that is mixed written, verbal and practical with the practical part is between 60 to 90% of the examination required for the license. Those results are includes in Figure 28 The requirements for obtaining an Occupational License, Figure 29 The most appropriate form of examination and Figure 30 Emphasis on Practical skills in the examination process.

What are the requirements for obtaining license? (31 responses)

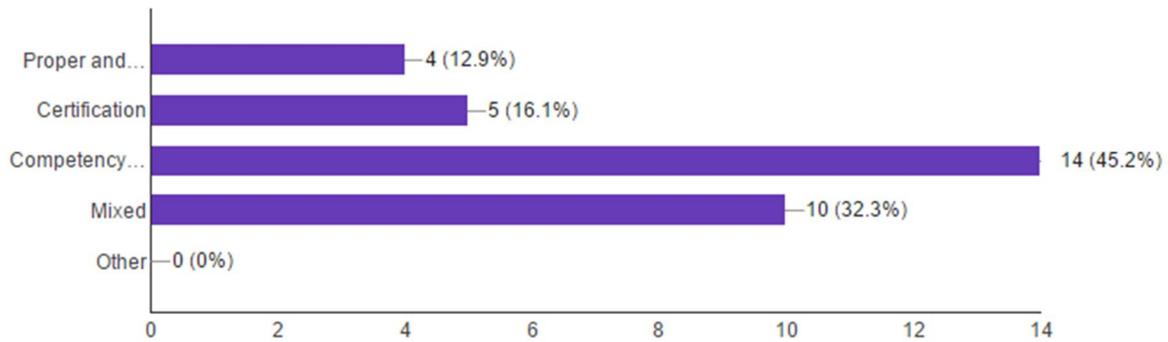


Figure 28 The requirements for obtaining an Occupational License

What form of examination are the most appropriate? (31 responses)

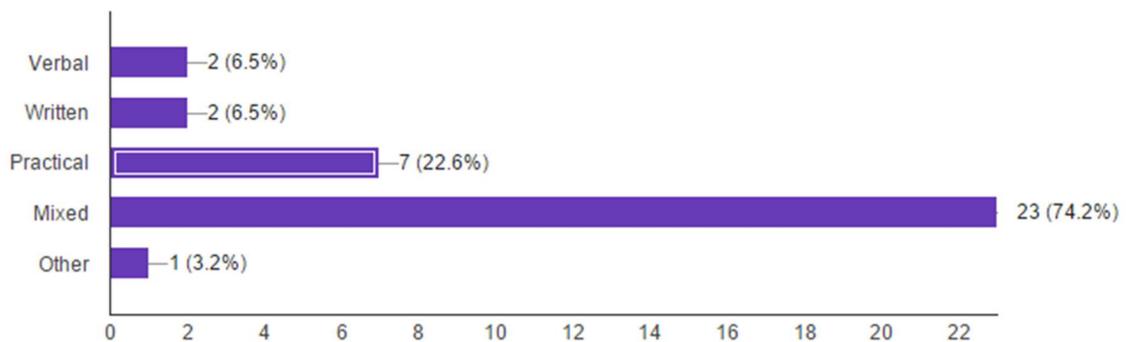
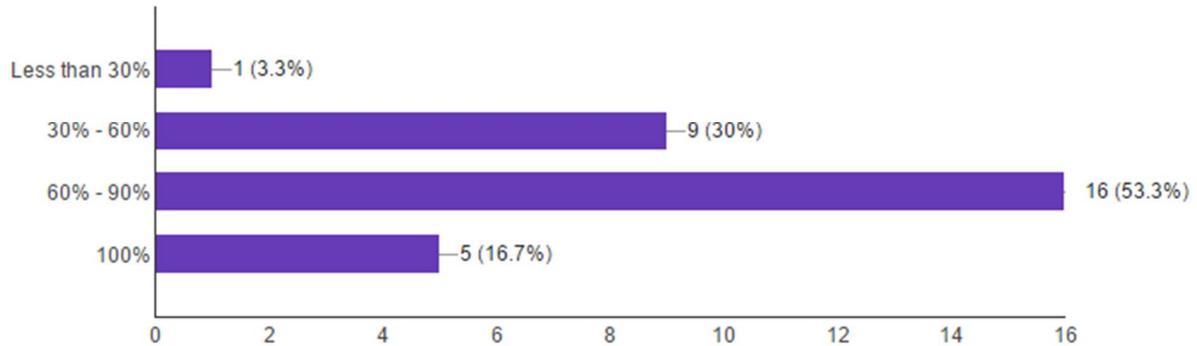


Figure 29 The most appropriate form of examination

## What is the optimal weight of practical examination that are the most appropriate?

(30 responses)

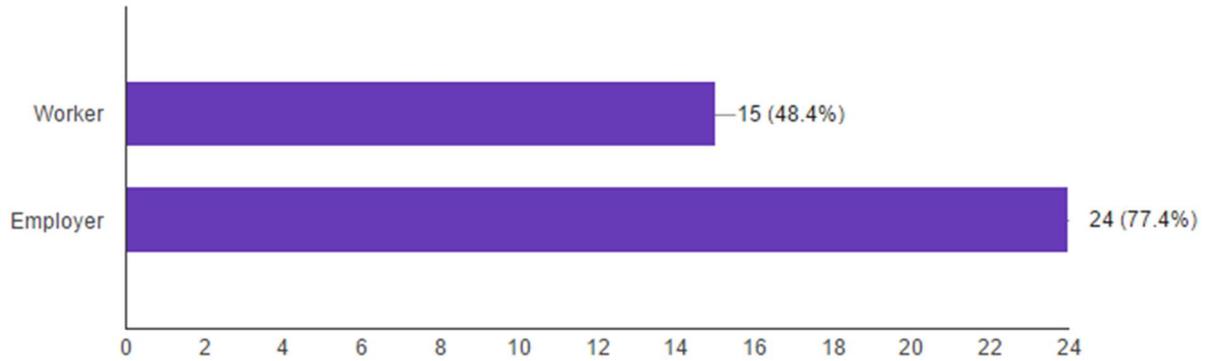


*Figure 30 Emphasis on Practical skills in the examination process*

The legal responsibility of the unlicensed workers should fall on the employer who has a legal responsibility with the customer and therefore he should be the one ensuring that the workers comply with the licensing system. However, it seems that there is a considerable share of the responses requires shared responsibility between the workers and employers as shown in Figure 31 The legal responsibility of unlicensed worker.

In case the OL is compulsory enforced , on whom the legal responsibility fall in the case of unlicensed worker being employed?

(31 responses)



*Figure 31 The legal responsibility of unlicensed worker*

The optimal duration for the Occupational License is to renew the license every 5 years according to 38.7% of the responses while a longer period of 10 years was the view of 38.7% equally. This means that there is no clear preference for the license period. The result from Figure 32 The optimal duration for the Occupational License makes it clear that while stakeholders want long period for the license they want the license to be renewed regularly but they disagree on the period length.

What is the optimal duration for the license? (31 responses)

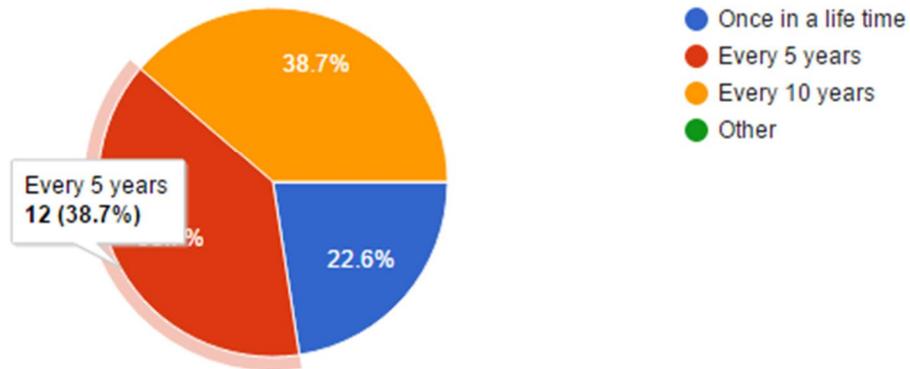


Figure 32 The optimal duration for the Occupational License

The condition of the license's renewal conditions are the evaluation or examination of the worker's skills according to 51.6% of the responses as illustrated in Figure 33 Conditions for license's renewal.

What are the conditions for the license's renewal? (31 responses)

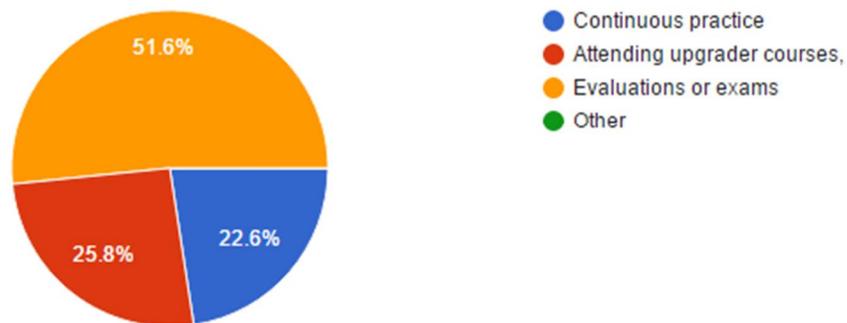
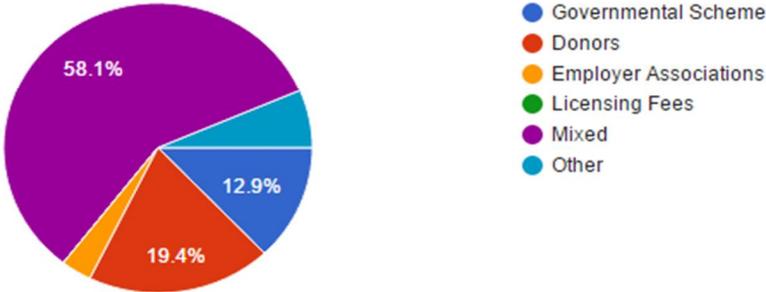


Figure 33 Conditions for license's renewal

The 58.1% of responses want a mixed approach between the donors, licensing fees, employer association and the governmental scheme to ensure the financial sustainability of the occupational licensing as shown in Figure 34 Optimal financing model for the Occupational Licensing sustainability.

**What is the optimal financing model for supporting the licensing to ensure the sustainability of the system?**

(31 responses)

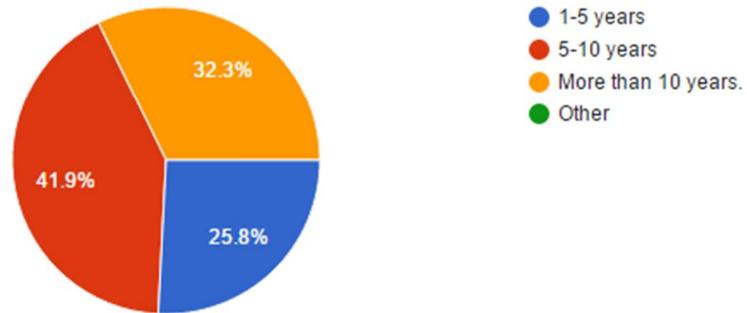


*Figure 34 Optimal financing model for the Occupational Licensing sustainability*

According to Figure 35 The appropriate timeframe to implement the Occupational Licensing System, the most realistic timeframe to design, apply and enforce a working occupational licensing system for Palestine to be 5-10 years while 32.3% predict that this might take more than 10 years.

What is the most realising time frame to design, apply and enforce a working occupational licensing system for Palestine

(31 responses)



*Figure 35 The appropriate timeframe to implement the Occupational Licensing System*

### **6.3.2 Results of the open ended questions of the structured interview:**

#### **1- List some of the occupational licensing systems that you know about.**

50% of the responders agreed that the available Licensing system in the local market are limited in the following occupations: Doctors license, Lawyers, certified accountant, certified translator, and driving license. In addition to computer specific license (Microsoft, Googleí etc ). All agreed that no licensing for any occupation in construction sector.

#### **2- Why is it important to have license for particular occupations?**

While the respondents from governmental bodies where more focused on laws procedures and lack of regulations. The local community representatives where focused on the trade unions were focused on the lack of central bodies to regulate the markets and lack of wages and earning scale. The respondents from private sector, TVET providers, and academic institutions were focused on the lack of skills availability, lack of standardization and improving skills quality.

#### **3- What the benefits due to apply OL.?**

Most of responders agreed on the benefit due applying OL as following:

- Categorization the levels of the workers.
- Enhancing the quality of TVET system.
- Help to having an updated-database of labour market.
- Increase the quality of services and products

Trade union focused on the increase of the quality that linked with clear wages scale, and enhancing the OSH conditions while the employers focused on Protection of Consumers and productivity by providing a skilled worker, and new job opportunities with good conditions could be provided. The government focused on providing accredited certificate that increase the opportunity to find jobs in other markets worldwide.

**4- Why is it feasible to apply the occupational licensing in the current economic situation?**

All responders agreed it is feasibility to apply the OL due to urgent needs to regulate the labor market, but in the condition of using gradually enforcement way, and should be funded by donors at first stages.

**5- What is the importance of occupational licensing in improving the skills in a particular occupation in construction sector?**

The responders agreed on the importance of applying the LS in the construction sector as it is promising sector and has high potential of growth and the high need of regulations, and the clear gab of skills required for development. The responders from the private sectors said that OL could provide clear set of competencies that required to Labour market and could solve any disputes between the employers and workers in the wages issues.

**6- How do the occupational licenses can be organized in various levels linked to education pathways? How do the occupational licenses can be organized in various levels linked to education pathways?**

The occupational licensing system will have a very clear set of levels and categories. These levels and categories are specified by a set of skills and competencies. The clarity of those levels makes it easier for workers, educators, trainers and regulators to plan their carrier pathways and can facilitate the link between those skills, competencies and levels to the education system.

**7- What steps should be taken to introduce and implement the licensing system?**

The responders answered this question in various ways. While the respondents from governmental bodies where more focused on laws procedures and organizational structure. The respondents from private sector focused of capacity building, standardization and improving skills quality. The steps can be summarized as follows:

- Formulating the assessment rules, regulations and methods.
- Defining the qualification framework.
- Determine the targeted occupations and level of skills.

- Analysis of the occupations and their matching skills and competencies.
- Carry out the communication plan to introduce the Occupational Licensing model and encourage workers and employers to participate.
- Implementation which contains: registration, governance, monitoring and evaluation.

**8- What is organizational board structure in charge of the governance of the scheme?**

- The board should include representative of all stakeholders.
- The governance body should include representatives of the three main components in market.
- Advisory committees from local experts
- Educated & experienced workers or/and their representatives.

**9- What exact parties should be involved in the licensing board?**

- Government: MOL labour, MO Education, MO Economy
- Private sector: PCU, Chamber of commerce
- Trade unions: Syndicate of carpentry and construction workers
- TVET providers in construction sector /government and UNRWA

**10- What are the responsibilities for each party?**

- Government: authorize the licensing body and facilitate the work, review the legislations and law, contribute to the implementation process.
- Private sector /PCU: enforcement of the licensing concept within the employers and contractors
- Trade union: advocacy and awareness
- TVET providers: Occupational analysis and identification of the competency profiles and levels
- NGOs: awareness

**11- What kind of oversight required? and who?**

- Professional oversight by professional workers
- Governmental body supervised by MOL
- Governmental oversight.
- Technical oversight.
- Financial oversight.

**12- What steps should be taken to introduce and implement the licensing system?**

- Year 1: Outreach /steering committees /initial framework /LM assessment
- Year 2: recourse mobilization / system building /capacity building activities
- Year 3: piloting /evaluation /Lunching /advocacy
- Year 4: implementation
- Year 5: Exist strategy.

## 6.4 Summary of findings

We can summarize the findings of the structured interviews data analysis as follows:

- 1- The Occupational Licensing as concept is known to decision makers of stakeholder of the Palestinian construction sector labour market.
- 2- There is almost no Palestinian laws related to organizing the labour market using Licensing system or otherwise.
- 3- The majority of decision makers want to know more about occupational licensing systems and their view of their knowledge is normally distributed.
- 4- There is an agreement between the stakeholders representative on the applicability of occupational licensing in construction sector.
- 5- The best way to implement the licensing system is form an independent body constituted from the government, private sector and trade union.
- 6- The main goal of the occupational licensing must is improving quality of the product/services and improving skills of workers.
- 7- The implementation of the licensing system will improve the skills of the workers, provide carrier pathways to worker and improve health and safety.
- 8- The main barrier to the occupational licensing in the Palestinian construction sector is the lack of financial and governmental capacity.
- 9- One of the major advantages of the occupational licensing is to improve the TVET education and improve its outcomes and planning process.
- 10- The most realistic timeframe to design, apply and enforce a working occupational licensing system for Palestine to be 5-10 years while 32.3% predict that this might take more than 10 years.
- 11- The most appropriate model is to a mixed approach between the donors, licensing fees, employer association and the governmental scheme to ensure the financial sustainability of the occupational licensing system.
- 12- The enforcement of the licensing system is better to be using the licensing method rather than registration or certification.

- 13- The implementation of the licensing system should start with a selective approach (exceptionalist) and move incrementally toward the more comprehensive universalist approach.
- 14- The licensing system should also focus on the skills and wages as a package.
- 15- There is a need to use a National Qualification Standards for skills in the construction sector.

### **6.5 Conclusion and summary of results**

In this Chapter we provided the structured interview design, data gathering, assumptions and the results analysis of the numerical and comprehensive questions. Chapter 7: Proposed Occupational Licensing Model for Palestine specifies the proposed Occupational Licensing System for the Palestinian Construction Sector.

## **Chapter 7: Proposed Occupational Licensing Model for Palestine**

In this Chapter, we will discuss the proposed occupational licensing model for Palestine. The model will take the construction sector as a case research and pilot as it meets a number of conditions:

- 1- It has been studied and analyzed previously. The indicators and needs of that sector are clear and well documented.
- 2- The size of the labour force in the construction sector is relatively high which makes it suitable for the purposes of this research.
- 3- It has partially regulated at the professional level.
- 4- TVET programs for construction in Palestine are established and have produced a number of graduates. This suggests that it is a viable option for training and has the infrastructure for growth in the future.
- 5- The health and safety concerns are real for the workers, employers and the customer and there has been legal effort to help reduce the risk in the construction sector.
- 6- The lack of correlation between the quality of the work and the pricing of the workers' wages and services create real problems in the economic planning and forecasting.
- 7- Furthermore, the construction sector has a mature tripartite representation structure: Government, Palestinian Contractors Union and the Trade Union (workers' representative).

In addition, the construction sector in Palestine has been proven to be the most promising prospect of growth in the case the political and economic climate improves.

To achieve the objectives of this Chapter we start by providing a stakeholder analysis of the Construction-sector Occupational Licensing System and responsibility and representation matrix. The proposed system establishes an Independent Occupational Licensing Authority (IOLA). We proceed to discuss and detail the organizational structure of the IOLA. The IOLA strategy: vision, mission, strategic goals and values. This is also augmented by the detailed logical framework of the IOLA for the first 5 years of operation.

## **7.1 National Construction-sector Occupational Licensing System**

The establishment of a National Occupational Licensing System has to be founded on two main principles:

- 1- Participation of all the stakeholders in the process to guarantee a high adoption, acceptance and adequacy of the system.
- 2- The incremental and verification approach where the system is established in phases that are incremental. Each increment/phase will add a number of steps, incentives, responsibilities and monitoring and evaluation indicators.

To achieve that, we suggest the establishment of a Founding Council (FC) formed from the tripartite structure of the construction labour market; government, Palestinian Contractors Union and the Trade Union. The responsibilities of the FC are:

- Determine the strategic directions and of policies.
- Ensure the coordination of policies across governmental ministries.
- Ensure the adequate involvement of all relevant stakeholders in order to achieve wider social goals.
- Take the decision on centralized / decentralized responsibilities and Management.
- Take the decision on qualifications design and quality assurance and the corresponding regulations.
- Steer the development and implementation of the National Occupational Licensing System.

In the first phase the FC will work with other stakeholders to drive a mass registration and surveying of the construction labour market. The design of a classification of jobs and wages. The coordination with the vocational training and education sector to agree on a national approach. The FC will work with the Ministry of Labour, Ministry of Education and Ministry of National Economy on the government side and the Employers representatives, Trade Unions and TVET institutions to produce the following outcomes:

- 1- A legal framework that governs and regulate the licensing system.
- 2- National occupational licensing strategy and policies.

- 3- Communication strategy and plan that targets all the stakeholders.
- 4- Establish a National Independent Body for Occupational Licensing with a clear management structure and financial model that is sustainable and economically viable.

### **7.1.1 Characteristics of the National Construction-sector Occupational Licensing System**

The good governance of the National Independent Body for Occupational Licensing should be ensured by establishing a management group from all stakeholders. The management group is responsible for the following tasks:

- É Ensuring the implementation of agreed upon strategies and policies,
- É Following up the development and the implementation of the licensing system
- É Implementation of awareness campaigns in the society,
- É Leading and organizing the consultation process among all partners and stakeholders,
- É Developing, implementing and reviewing Licensing procedures,
- É Consulting with stakeholders on process development and implementation,
- É Disseminating public information and advice on the licensing,
- É Advising the Ministries on policy and resource implications.

This suggested management group should ensure and work on the following additional tasks:

- Registering qualifications on the NLS,
- Developing standards and qualifications,
- Quality assurance of education and training providers (accreditation),
- Assessment, certification, and licensing.

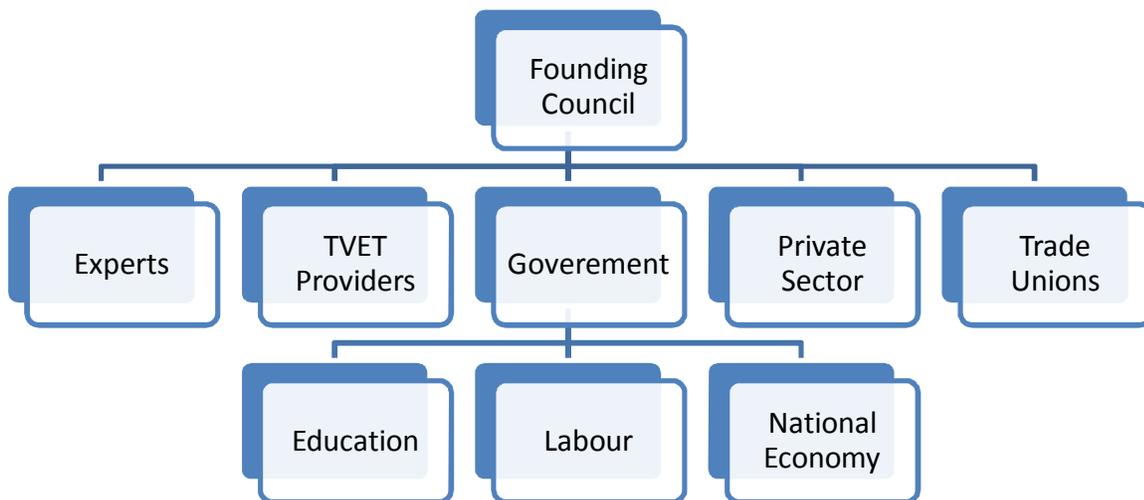
The management Structure of the National Occupational Licensing Independent Body should be supported by secretariats and ad -hoc editorial technical team composed of representatives of the

construction sector. The editorial team is the technical arm of the management group and should be responsible for the following tasks:

- É Organizing all needed workshops, focus groups and meetings,
- É Drafting the consultation paper,
- É Drafting the Licensing system architecture,
- É Inviting all partners to written submissions,
- É Collecting and evaluating submissions,
- É Rewriting draft consultation paper and NLS architecture, taking submissions into account
- É Providing the management group with all needed reports, data and
- É Information.

### 7.1.2 Possible Participants/Stakeholders of the FC and National Occupational Licensing System

*Table 3 Structure of the proposed Founding Council of the National Occupational Licensing*



Potential participants in the consultation process for the development of the Occupations licensing system are proposed to include the following target groups bodies:

- É Learners /students and their parents,
- É Government departments,
- É Agencies bodies responsible for employment, economic development, competition and immigration,
- É Curriculum development centers,
- É Providers of education and training,
- É Awarding bodies and quality assurance agencies,
- É Teachers and trainers staff associations,
- É Employers and workers organizations representatives
- É Community and voluntary organizations, NGOs,
- É Professional bodies,
- É Researchers working on education and labour force policy questions,
- É Educators of teachers and trainers,
- É Career guidance professionals.

**For the implementation of the NLS the following policies should be considered:**

- Ensuring that the laws and regulations applying to education and training are consistent with NLS goals, e.g. curriculum development, licensing, employment standards, etc.
- Implementing the Occupations licensing system in ways that are consistent with current good practice in institutions as well as the policy goals.

- Providing support for institutions such as professional development of personnel (teachers, counselors etc.); provision of appropriate learning materials.
- Supporting learners to pursue learning over time in ways which take account of real financial, social and domestic circumstances which act as constraints on participation in learning.

### 7.1.3 Stakeholders and responsibility matrix

In the following, we show the stakeholders breakdown with their responsibility/tasks and possible roles:

No.	Stakeholder Category	Stakeholders	Role in the OLS
1.	Government	Ministries of Education, Labour and National Economy	Governance, Laws, enforcements.
2.	Donors	UN agencies International NGOs NGOs	Funding, capacity building, rehabilitation and supporting effort.
3.	Local Communities	Academics Media and Political figures. NGOs Local Experts Local representatives.	Provide technical advice. Identify the market needs. Market studies.
4.	Private Sector	Palestinian Contractors Union Gaza Chamber of Commerce Palestinian Federation of Industry	Provide technical support and studies. Identify the market needs in competencies and technologies. Monitoring and Evaluation Process. Provide assessments.
5.	Unions	Palestinian Trade Union ó The Syndicate of Carpentry and Construction Workers	Provide support and advocacy. Identify the market needs.

6.	Local labour market institutions	Employment Fund TVET Providers Palestine Center for Democracy and Workers Right	Provide technical advice and support and advocacy. Identify the market needs. Market studies.
7.	Civil Society Organizations	Human Rights Organization. Engineering Syndicate And others	Play a supporting role of the process.

## **7.1.4 Occupational Licensing Strategy**

### ***7.1.4.1 Vision***

**“A nation of innovative, dynamic and skilled labour force in the world’s economy.”**

### ***7.1.4.2 Mission***

**“To lead the Construction sector towards a high employment and quality economy”**

### ***7.1.4.3 Strategic Goals***

- 1- An Occupational Licensing System that is comprehensive, enforced and sustainable.
- 2- Construction Sector labour force is skilled, protected and sufficiently paid.
- 3- The private sector has increased productivity and quality.

### ***7.1.4.4 Values***

The occupational licensing system values are:

- Sustainability
- Equality
- Participatory
- Life-long Learning orientation
- Transparency

### ***7.1.4.5 Key Indicators***

The following are the main indicators to evaluate the OL.

- 1- An Occupational Licensing System that is comprehensive, enforced and sustainable:
  - a. The size of the informal economy has been reduced significantly. (base-line needed)
  - b. The OL achieves over 80% participation in five years.
  - c. The OL has a sustainable financial model.
  - d. The OL system is enforced and maintained.
- 2- Construction Sector labour force is skilled, protected and sufficiently paid.
  - a. Employees have access to decent, safe and well-paying jobs in the construction sector.
  - b. Construction Sector Labour market has a good permeability.

- 3- The private sector has increased productivity and quality.
  - a. Employers have access to skilled employees easily with a uniformed set of skills.
  - b. Employers are satisfied with the labour work force skills at the entry level.

Obviously, those indicators need to enumerate with realistic numbers and figures which cannot be estimated at the moment given that there are no history of Occupational Licensing effort in Palestine. This means that the FC has a responsibility to carry out a number of base line studies to formulate some realistic and appropriate indicators.

### 7.1.4.6 Proposed Logical Framework

<b>Developing National Occupational Licensing System for workers in Construction Sector</b>					
Outputs	Activities	Sub -Activities	Indicators	Means of verification	Assumptions, hypothesis and Risks
<b>Outcomes /Developing objective : An Occupational Licensing System that is comprehensive, enforced and sustainable</b>					
<b>Phase One : Occupational License framework</b>					
Occupational License framework is identified	1.1 Establish Founding council formed from the tripartite structure	- Conduct Series discussion meeting with stakeholders.  -Prepare TORs and Matrix of responsibilities and roles.  -Develop Communication strategy.	-All stockholder are well represented  -Agreement on the TOR  - Communicat ion strategy is developed ,and aged upon	-Minutes of meetings   -TORs	Risk :No consensus achieved
	1.2 Determine the strategic directions and policies.	-Review regional and international systems.  -Consultation workshops with the main players.	-Systems revised.  -Number of Participants at least 10	-reports  -Minutes of meetings	-Assumption: The available systems are not appropriate for local context.
	1.3 Review Palestinian regulations and legislation.	- Review the relevance of Palestinian Labour law, and legislations.  -Formulate legal framework of governance and regulation.	-Formulated legal frame work	Review report	-Assumption: Absence of legislating in the labour law.  -Risk: it is difficult to revise the legal frame work due the political situation

	1.4 Identify Qualification standard and the system framework	<ul style="list-style-type: none"> <li>-Review the Palestinians and other relevant qualifications standards.</li> <li>- Draft framework for Palestine.</li> <li>Draw the system structure.</li> <li>-Validate the system and approval from all stakeholders.</li> </ul>	<ul style="list-style-type: none"> <li>-Validated System framework</li> </ul>	<ul style="list-style-type: none"> <li>-Signature of the participants</li> </ul>	<ul style="list-style-type: none"> <li>-Assumption: Palestinian National Qualification Framework is under final revision and approval.</li> </ul>
	1.5 Develop the management scheme	<ul style="list-style-type: none"> <li>-Set up and agree on adequate management structure, bodies, and technical arms.</li> <li>-Set up quality control system in line with Qualification framework.</li> <li>-Build sustainable financial model.</li> </ul>	<ul style="list-style-type: none"> <li>-TORs</li> <li>-QC system is existed</li> <li>-Financial model is existed</li> </ul>	<ul style="list-style-type: none"> <li>-Contracts</li> <li>-Reports</li> <li>-Financial transactions</li> </ul>	

### Phase Two : Occupational licencing architecture

Occupational License system is developed	2.1 Establish National independent body for LS.	<ul style="list-style-type: none"> <li>- Agree on the TORs for the management group.</li> <li>- Recruit the management group members formed from tripartite structure.</li> <li>-Recruit the technical arms.</li> </ul>	<ul style="list-style-type: none"> <li>-Recruitment of the staff</li> </ul>	<ul style="list-style-type: none"> <li>-Contracts</li> </ul>	
	2.2 Identify the framework qualification standards, Occupational classifications and occupational levels.	<ul style="list-style-type: none"> <li>- Organize series of workshops and focus group meetings with relevant stakeholders and experts to review and agree on the QS,OC,and Occupational levels.</li> </ul>	<ul style="list-style-type: none"> <li>-Well representation of all stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>-Minutes of meetings</li> </ul>	
	2.3 Draft and validate Licencing system	<ul style="list-style-type: none"> <li>- Drafting the final licencing architecture.</li> <li>-Consult the</li> </ul>	<ul style="list-style-type: none"> <li>-Validation an approval</li> </ul>	<ul style="list-style-type: none"> <li>-Signature of participants</li> </ul>	

	architecture.	stakeholders and validate the system.			
	2.4 Prioritize the occupations to be licensed are	<ul style="list-style-type: none"> <li>-Conduct Labour market surveys to prioritize the targeted sector.</li> <li>-Conduct survey to prioritize which occupations to be licensed.</li> <li>-Identify the occupational level required.</li> </ul>	<ul style="list-style-type: none"> <li>-Labour market research</li> <li>-Number of levels is identified</li> </ul>	-Research report	
	2.5 Prepare Competency profile for each targeted occupations.	<ul style="list-style-type: none"> <li>-Analyze the main duties and tasks for the targeted occupations.</li> <li>-Develop the occupational chart for the required levels.</li> <li>-Validate the charts with relevant stakeholders.</li> <li>-Create competencies profile.</li> </ul>	<ul style="list-style-type: none"> <li>- Competency profiles is prepared</li> </ul>	- Competency profiles	
	2.6 Develop assessment mechanism and procedures.	<ul style="list-style-type: none"> <li>-Consultation with local and international experts on the best practice.</li> <li>-Identify the assessment criteria, indicators, tools and requirements.</li> <li>-Identify the examination scheme.</li> <li>-Identify the assessment stations.</li> </ul>	<ul style="list-style-type: none"> <li>Representati on level</li> <li>Assessment mechanism is created and valid</li> </ul>	<ul style="list-style-type: none"> <li>-Minutes of meetings</li> <li>-Reports</li> </ul>	<ul style="list-style-type: none"> <li>-Assumptions :Existed main TEVET institutions of the Government and UNRWA could be involved to provide their stations for the assessment purposes</li> </ul>
	2.7 Develop the wages and earning scale.	<ul style="list-style-type: none"> <li>-Research the wages scale in the current situation.</li> <li>-Link the wages scale with occupational levels.</li> </ul>	<ul style="list-style-type: none"> <li>-Wages scale is ready</li> </ul>	-Signed agreements.	

		-Consult the worker union on the developed scale.			
<b>Phase Three: Validation and piloting</b>					
The occupational licensing system is validated	3.1 validate the system	-Hold workshop with relevant stakeholders.  -Receive feedback and comments.  -Revise the system.	-Revised system	-Approval and signatures	
	3.2 Piloting the system to insure the effectiveness.	-Conduct experimental exercises with specific number of workers.  -Identify assessment base line to research the impact of the applied system.	-Number of Experiments conducted  -Assessment methodology	- Experiments reports  -Assessment report	
<b>Phase Four : system enforcement</b>					
The system is enforced	4.1 Recruit staff and logistics	-Recruit board of assessors.  -Reroute inspectors.  -Train the staff on the assessment procedures.  -Prepare assessment stations.	-Staff are recruited  -Staff are trained  -Station is ready	-TORs and Contracts  -Training reports	
	4.2 Launching the system for public	-Announcement in newspaper, Radio, and TV.	-The public is well known	-Number of applications	
	4.3 Conduct awareness campaigns	- Awareness activities targeting workers, employers, and costumers.  -Publication with instructions for licensing.	-Activities Implementation	-Report	

	4.4 Receive applications	<ul style="list-style-type: none"> <li>- Identify specific stations for application submission.</li> <li>-Screening and selection.</li> <li>-Plan for assessment process.</li> </ul>	-Number of applications received	-Application numbers	
	4.5 Assessment process	<ul style="list-style-type: none"> <li>-Recruit board of assessors.</li> <li>-Prepare assessment stations.</li> <li>-Conduct the assessment for applicants.</li> </ul>	<ul style="list-style-type: none"> <li>-Board of assessors is formulated</li> <li>-Assessment</li> </ul>	<ul style="list-style-type: none"> <li>Contacts ó TORS</li> <li>Number of participants</li> </ul>	
	4.6 Issue the license	<ul style="list-style-type: none"> <li>-Conduct practical, verbal, and written exams.</li> <li>-Evaluation.</li> <li>-Issue the licenses for successful candidates.</li> </ul>	-Exam prepared and agreed upon	<ul style="list-style-type: none"> <li>-agreement</li> <li>-Number of license issued</li> </ul>	
	4.7 Inspection visits	<ul style="list-style-type: none"> <li>-Develop Inspection mechanism.</li> <li>-Conduct inspection visits.</li> <li>-Reporting.</li> </ul>	<ul style="list-style-type: none"> <li>-Mechanism developed</li> <li>-Number of Visits conducted</li> </ul>	-reports	
<b>Phase Five : system evaluation</b>					
System is evaluated and revised	5.1 Continues evaluation and development process.	<ul style="list-style-type: none"> <li>-Identify monitoring and evaluation mechanism.</li> <li>-Record the feedback complains, proposals, lessons learnt.</li> <li>-Conducting impact studies.</li> <li>Revise the system accordingly.</li> </ul>	<ul style="list-style-type: none"> <li>-M&amp;E report</li> <li>-Tracer research conducted</li> </ul>	<ul style="list-style-type: none"> <li>-M&amp;E report</li> <li>- Research report</li> </ul>	

### 7.1.4.7 Proposed Action Plan

Outcomes /developing objective		An Occupational Licensing System that is comprehensive, enforced and sustainable.							
No	Outputs	Activities	Time frame					Resources	People in charge
			Y1	Y 2	Y 3	Y4	Y5		
<b>Stage one: Occupational License framework</b>									
1.1	Occupational License framework is identified	Establish Founding council formed from the tripartite structure						Members nominated from tripartite structure.	Government
1.2		Determine the strategic directions and policies.						experts in strategic planning ,and policies	FC
1.3		Review Palestinian regulations and legislation.						Lawyers and experts in Palestinian labour law	FC
1.4		Identify Qualification standard and the system framework						Experts in curricula development, vocational training ,and skills assessment	FC
1.5		Develop the management scheme						Member	FC
<b>Phase two: Occupational licensing architecture</b>									
2.1	Occupational License system is developed	Establish National independent body for LS.						Member nominated from tripartite structure and other stakeholders	FC
2.2		Identify the framework qualification standards, Occupational classifications and occupational levels.						Experts in curricula development, vocational training ,employability ,and skills assessment	NIB
2.3		Draft and validate Licensing system architecture.						Experts in curricula development, vocational training, and	NIB

							skills assessment. Other experts	
2.4		Prioritize the occupations to be licensed are					Researcher surveyors (site engineers)	NIB
2.5		Prepare Competency profile for each targeted occupations.					Experts in curricula development, vocational training ,and skills assessment	NIB
2.6		Develop assessment mechanism and procedures					Experts in skills assessment	NIB
2.7		Develop the wages and earning scale.					participants nominated from tripartite structure and other stakeholders	NIB
<b>Phase three: Validation and piloting</b>								
3.1	The occupational licencing system is validated	validate the system					Participants from stakeholders and experts	NIB
3.2		Piloting the system to insure the effectiveness.					Sills assessors from tripartite structure. Places for tests, and equipment	NIB
<b>Phase four : system enforcement</b>								
4.1	The system is enforced	Recruit staff and logistics					Bugged for salaries	Donors
4.2		Lunching the system for the public					Media experts Publications	Trade unions and employers
4.3		Conduct awareness campaigns					Publications Workshops TV and radio	Trade unions
4.4		Receive applications					Staff in 5 Governorate	MOL
4.5		Assessment process					Board of assessors Assessors fees Logistics and	NIB

								assessment stations	
4.6		Issue the license						Licensing committee	MOL,MOE, and NIB
4.7		Inspection visits						Inspectors	MOL
<b>Phase five: system evaluation</b>									
5.1	System is evaluated and revised	Continues evaluation and development process.						M&E expert	NIB
5.2		Conduct Tracer research to measure the impact of the system.						Local researcher	NIB

## 7.2 Summary

This Chapter develops the strategic planning for the national occupational system with the appropriate vision, mission, strategic goals, action plan and logical framework.

## **Chapter 8: Conclusions and recommendations**

The construction sectors in Palestine suffer from high un-employability, lack of appropriate skills and misappropriate distribution of labourers with high risk and low quality. This issue has emerged in the last few decades and is expected to hold back the market growth. Occupational Licensing System is a suitable solution that has been applied in the EU, USA and in the regional labour markets and has proven successful in reducing risks to customers, employers and workers, improved quality, wages and opportunity.

This research aimed to research the applicability of the Occupational Licensing concepts in the local market, the best model of occupational licensing to be used and how to implement it.

The research used literature review, focus group results, structured interview to carry out quantitative and qualitative methods to investigate the research problem.

The research contribution can be summarized as follows:

- 16- The Palestinian construction sector labour market suffers from high low employability due to skills gap and misappropriate skills distribution.
- 17- The Palestinian construction sector has a very high risk to customer, employer and worker.
- 18- The Occupational Licensing as concept is known to decision makers of stakeholder of the Palestinian construction sector labour market.
- 19- There is almost no Palestinian laws related to organizing the labour market using Licensing system or otherwise.
- 20- The majority of decision makers want to know more about occupational licensing systems and their view of their knowledge is normally distributed.
- 21- There is an agreement between the stakeholder's representatives on the applicability of occupational licensing in construction sector.
- 22- The best way to implement the licensing system is form an independent body constituted from the government, private sector and trade union.
- 23- The main goal of the occupational licensing must is improving quality of the product/services and improving skills of workers.

- 24- The implementation of the licensing system will improve the skills of the workers, provide carrier pathways to worker and improve health and safety.
- 25- The main barrier to the occupational licensing in the Palestinian construction sector is the lack of financial and governmental capacity.
- 26- One of the major advantages of the occupational licensing is to improve the TVET education and improve its outcomes and planning process.
- 27- The most realistic timeframe to design, apply and enforce a working occupational licensing system for Palestine to be 5-10 years while 32.3% predict that this might take more than 10 years.
- 28- The most appropriate model is to a mixed approach between the donors, licensing fees, employer association and the governmental scheme to ensure the financial sustainability of the occupational licensing system.
- 29- The enforcement of the licensing system is better to be using the licensing method rather than registration or certification.
- 30- The implementation of the licensing system should start with a selective approach (exceptionalist) and move incrementally toward the more comprehensive universalist approach.
- 31- The licensing system should also focus on the skills and wages as a package.
- 32- There is a need to use a National Qualification Standards for skills in the construction sector.
- 33- New and experienced workers should be obliged to go through the licensing process.
- 34- Licensing should be based mainly on practical skills and the license should be renewed regularly and enforced by law.
- 35- The legal liability of hiring unskilled workers should be shared between the worker and the employer.

In addition, this research recommends the establishment of a national occupational licensing system. The research develops the strategic planning for the national occupational system with the appropriate vision, mission, strategic goals, action plan and logical framework.

In summary, this research demonstrates the occupational licensing is an applicable and appropriate system for the Palestinian labor market and it has established a clear and specific way to implement it.

## References

- ADAMS, A. F., JACKSON, J. D. & EKELUND, R. B. 2002. Occupational licensing in a ðcompetitiveö labor market: The case of cosmetology. *Journal of Labor Research*, 23, 261-278.
- ARKANI, S., CLARKE, L. & MICHIELENS, E. 2003. Regulation for Survival: training and skills in the construction labour market in Jersey, Channel Islands. *Journal of Vocational Education and Training*, 55, 261-280.
- DORSEY, S. 1980. The Occupational Licensing Queue. *The Journal of Human Resources*, 15, 424-434.
- KLEINER, M. M. 2000. Occupational Licensing. *The Journal of Economic Perspectives*, 14, 189-202.
- KLEINER, M. M. 2015. *Reforming Occupational Licensing Policies*.
- LOBO, Y. & WILKINSON, S. 2012. The effects of occupational licensing on skills needs in the building industry: Evidence from New Zealand. *Australasian Journal of Construction Economics and Building*, 6, 55-63.
- PARKER, D., COMLEY, B. & BERI, V. 1997. The reform of occupational regulation in Australia. *Economic Roundup*, 51-82.
- SHILLING, J. & SIRMAM, C. 1988. The effects of occupational licensing on complaints against real estate agents. *Journal of Real Estate Research*, 3, 1-9.
- SKARBEK, D. 2008. OCCUPATIONAL LICENSING AND ASYMMETRIC INFORMATION: POST- HURRICANE EVIDENCE FROM FLORIDA. *CATO Journal*, 28, 73-82.
- ADAMS, A. F., JACKSON, J. D. & EKELUND, R. B. 2002. Occupational licensing in a ðcompetitiveö labor market: The case of cosmetology. *Journal of Labor Research*, 23, 261-278.
- ARKANI, S., CLARKE, L. & MICHIELENS, E. 2003. Regulation for Survival: training and skills in the construction labour market in Jersey, Channel Islands. *Journal of Vocational Education and Training*, 55, 261-280.
- DORSEY, S. 1980. The Occupational Licensing Queue. *The Journal of Human Resources*, 15, 424-434.
- KLEINER, M. M. 2000. Occupational Licensing. *The Journal of Economic Perspectives*, 14, 189-202.
- KLEINER, M. M. 2015. *Reforming Occupational Licensing Policies*.

- LOBO, Y. & WILKINSON, S. 2012. The effects of occupational licensing on skills needs in the building industry: Evidence from New Zealand. *Australasian Journal of Construction Economics and Building*, 6, 55-63.
- PARKER, D., COMLEY, B. & BERI, V. 1997. The reform of occupational regulation in Australia. *Economic Roundup*, 51-82.
- SHAPIRO, C. 1986. Investment, moral hazard, and occupational licensing. *The Review of Economic Studies*, 53, 843-862.
- SHILLING, J. & SIRMAM, C. 1988. The effects of occupational licensing on complaints against real estate agents. *Journal of Real Estate Research*, 3, 1-9.
- SKARBEEK, D. 2008. OCCUPATIONAL LICENSING AND ASYMMETRIC INFORMATION: POST- HURRICANE EVIDENCE FROM FLORIDA. *CATO Journal*, 28, 73-82.

## Appendix I: Structured Interview (English Version)

Islamic University of Gaza  
Deanery of Graduate Studies  
Faculty of Commerce  
Department of Business Administration



A structured interview about

### **Developing National Occupational Licensing System for Subcontractors and Technicians in Construction Sector**

Dear Stakeholder representative,

This structured interview aims to gather information about developing a national occupational licensing system for workers in construction sector. This research aims to answer the following questions: 1) Is an occupational licensing system application in Palestine? 2) What are the barriers if any to design, implement and enforce an occupational licensing framework for workers in Palestine? 3) What is the most suitable occupational licensing framework for Palestine? 4) What is the most suitable licensing implementation and enforcement system and approach for the Palestinian OL framework? 5) What are the strategic goals, objectives and the Logical framework for the Palestinian OL system?

I would highly appreciate it if you could kindly fill in this structured interview for scientific research purposes and the integrity of the research research finding of rely on the validity of your answers.

Yours faithfully,

Researcher: Rashid Al Ruzzi

What kind of Organizations you are working with: \*

- Ministry of Labor
- Ministry of Education
- Semi-Governmental Body
- Palestinian Employers' Representatives
- Trade Union
- UN agencies
- International Semi-Governmental Body
- National Semi-Governmental Body
- International NGO
- National NGO
- Academic institutions
- Professionals unions
- Individual Expert
- Private sector

Job Title

إجابتهك

---

Do you know about occupational licensing before? Yes/No

Yes

No

How well do you evaluate your knowledge of the occupational licensing system

5      4      3      2      1

I am an expert

Not at all

---

Do you know about the presence of any occupational licensing in the local community?

Yes

No

List some of the occupational licensing systems that you know about.

إجابتك

---

Is there any presence of provisions in the Palestinian labor law connected to OL?

Yes

No

How important is it to have license for particular occupations ?

	5	4	3	2	1	
Very Important	<input type="radio"/>	Not Important				

Why is it important to have license for particular occupations ?

إجابتك

---

What the benefits due to apply OL .?

To what extent you agree on the following: Occupational licensing in some stages prevents workers in informal sector from accessing formal jobs.

	5	4	3	2	1	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

The purpose of occupational licensing is to protect the consumers and environment by increased quality of services /products and improved public safety.

	5	4	3	2	1	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

There is positive impact on the wages if any particular occupation license existed?

	5	4	3	2	1	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

There is positive impact on the work conditions and occupational safety and health if any particular occupation license existed?

	5	4	3	2	1	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

Occupational licensing system with compulsory enforcement procedures has a negative impact on employment?

	5	4	3	2	1	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

What problems currently being faced within the construction sector do you think that could be addressed by occupational licensing?

- Skills Gap/skills availability
  - Lack of a credible reputation/quality assurance system for workers
  - lack of salary scale
  - أخرى:
-

What do you consider to be the main barriers in implementing occupational licensing in construction sector?

- Workers Change Resistance
- Lack of capacity on the governmental bodies's side.
- Financial barriers
- Lack of laws and regulations.
- Issues with the Palestinian TVET system
- أخرى:

How much is it feasible to apply the occupational licensing in the current economic situation?

	5	4	3	2	1	
Low feasibility	<input type="radio"/>	High feasibility				

Why is it feasible to apply the occupational licensing in the current economic situation?

إجابتك

Prioritize the most convenient goal of Occupational licensing.  
(Choose one only)

- Improving the quality of service /products
- Improving status, wages and earnings for those in the occupations
- Protecting individual consumers and environment.
- Supporting skills recognition, mobility ,and development

Which approach is more convenient to apply the OL in the construction sector in the current economic and social condition?

- Universalist for all tha occupations
- Exceptionlist for particular occupations at risk
- Gradual from exceptionlist to universalist

Which regulation system is most appropriate for occupations in the construction sector in Gaza?

- Registration
- Certification
- Licensing
- غير ذلك:

The customers has the ability to judge the skills and quality of the services /products.

	5	4	3	2	1	
Strongly Disagree	<input type="radio"/>	Strongly Agree				

What is the importance of occupational licensing in improving the skills in a particular occupation in construction sector?

إجابتك

---

How do the occupational licenses can be organized in various levels linked to education pathways?

إجابتك

---

Will the regulation focus on ...

- skills levels only
  - skills and wages together
  - غير ذلك:
-

What standards for skills to be enforced?

International Qualification Standards

Regional Qualification Standards

National Qualification Standards

غير ذلك:

What levels should be addressed?

Limited Skilled Worker

Skilled Worker

Craftsman

Technician

Professional/Specialist

Which occupations has the highest complaints?(Choose 3) \*

- Concrete Metal Work
- Formwork Carpenter
- Masonry
- Painting
- Metal Work/Welding
- Plastering
- Tiling
- Plumber
- Decoration/Gypsum
- Air conditioning
- Electrician
- Carpentry Works (Doors/Windows)
- Aluminum Work
- Roofing
- Isolation works
- Marble works
- أخرى:

Which occupations has the highest skills gap?(Choose 3) \*

- Concrete Metal Work
  - Formwork Carpenter
  - Masonry
  - Painting
  - Metal Work/Welding
  - Plastering
  - Tiling
  - Plumber
  - Decoration/Gypsum
  - Air conditioning
  - Electrician
  - Carpentry Works (Doors/Windows)
  - Aluminum Work
  - Roofing
  - Isolation works
  - Marble works
  - أخرى:
-

Which occupations has the highest worker risk?(Choose 3) \*

- Concrete Metal Work
  - Formwork Carpenter
  - Masonry
  - Painting
  - Metal Work/Welding
  - Plastering
  - Tiling
  - Plumber
  - Decoration/Gypsum
  - Air conditioning
  - Electrician
  - Carpentry Works (Doors/Windows)
  - Aluminum Work
  - Roofing
  - Isolation works
  - Marble works
  - أخرى:
-

Which occupations has the highest employer/customer risk?  
(Choose 3) \*

- Concrete Metal Work
  - Formwork Carpenter
  - Masonry
  - Painting
  - Metal Work/Welding
  - Plastering
  - Tiling
  - Plumber
  - Decoration/Gypsum
  - Air conditioning
  - Electrician
  - Carpentry Works (Doors/Windows)
  - Aluminum Work
  - Roofing
  - Isolation works
  - Marble works
  - أخرى:
-

Which groups of the Labour force should be obliged to go through the licensing process

New entrance

New and experienced workers

Who has the authority for occupational licensing?

Governmental Body

Semi-govrmental body

Private sector

Independent Body with Participatory Scheme

أخرى:

What is organizational board structure in charge of the governance of the scheme?

إجابتك

What exact parties should be involved in the licencing board?

إجابتك

What are the responsibilities for each party?

إجابتهك

---

What kind of oversight required? and who?

إجابتهك

---

What are enforcement processes that will be put in place?

Incentives

Compulsory by law

Incentives in the First Stage and Compulsory later

غير ذلك:

---

What are the requirements for obtaining license?

Proper and Appropriate Experience

Certification

Competency test for the knowledge, skills and attitude of workers.

Mixed

أخرى:

---

What form of examination are the most appropriate?

Verbal

Written

Practical

Mixed

أخرى:

What is the optimal weight of practical examination that are the most appropriate?

Less than 30%

30% - 60%

60% - 90%

100%

In case the OL is compulsory enforced , on whom the legal responsibility fall in the case of unlicensed worker being employed?

Worker

Employer

What is the optimal duration for the license?

Once in a life time

Every 5 years

Every 10 years

غير ذلك:

---

What are the conditions for the license's renewal?

Continuous practice

Attending upgrader courses,

Evaluations or exams

غير ذلك:

---

What is the optimal financing model for supporting the licensing to ensure the sustainability of the system?

Governmental Scheme

Donors

Employer Associations

Licensing Fees

Mixed

غير ذلك:

---

What steps should be taken to introduce and implement the licensing system?

إجابتك

---

What is the most realising time frame to design, apply and enforce a working occupational licensing system for Palestine

1-5 years

5-10 years

More than 10 years.

غير ذلك:

---