
PRINCIPAL SUBMITTING PERSON (PSP) ROLES IN DELIVERY QUALITY HOUSING

Reni Ismalia Edy* and Norkhadijah Hussin

*Department of Real Estate, Faculty of Geoinformation and Real Estate,
Universiti Teknologi Malaysia, 81310 Johor Bahru, Johor, Malaysia.*

**Email: ismaliyaedy@gmail.com*

Abstract

Professional architects are identified as a responsible profession for overseeing the entire housing projects development that resulting in the issuance of quality housing through Certificate Completion and Compliance (CCC). The appointed architects referred as Principal Submitting Person (PSP). The purpose of this paper is to identify the roles and responsibilities of PSP, in the hope that the quality housing delivery process can be improved through CCC method that was certified by PSP. This paper presents a conducted survey using questionnaires on respondents. Quantitative Data were obtained from respondents consisting of representatives from architectural firm throughout peninsular Malaysia. These quantitative methods were measured using numbers and analyzed using statistical. Data analysis showed six variables that need to be taken seriously for PSP to carry out their duties and roles accordingly to deliver quality housing. The six variables of PSP also have to follow the law and rules stated ensuring the service provide able to achieve the CCC goals comprehensively. However, the goals of the implementation of this method is achieved by CCC, appointed PSP to provide quality services to ensure that all processes, procedures and requirements are followed. All the six PSP roles and responsibility found to be significant to the effectiveness of the PSP under this CCC method. The success of quality housing certification is entirely depending on PSP whereby they need to play their roles as the responsible professional throughout the stage of project undertaken undoubted a result of building quality built and ensure the safety and comfort of building occupants. Thus by keeping the accountability as PSP and compiles with prescribed the roles are certainly the quality of their service is always maintained.

Keywords: *Principal submitting person, quality housing, certificate of completion and compliance*

1.0 INTRODUCTION

Quality housing, in its most straightforward definition, refers to housing that meets the basic of human being. According to the National Housing Policy (NHP) there are several issues related to the quality of housing; low quality construction, shortcomings in ensuring implementation and compliance in the service and housing delivery system and weaknesses in control, monitoring and reinforcement of laws.

Professional architects have been identified as a professional responsible for overseeing the entire housing projects development that resulting in the issuance of quality housing through Certificate of Completion and Compliance (hereinafter referred to as CCC) method. Implementation of CCC is a new system

introduced by the government to overcome the delay of local authorities in approving building plans, a new system in which stage issued by the Professional in place of issuing the CCC, which previously issued by the Local Authority (Fuad, 2007).

Generally speaking, when it comes to home-quality issues, it is a comprehensive scope to assess whether a home can be said to be quality house or otherwise. It depends on which angle the quality is seen. According to Nurizan (1982), she has classified the quality of housing into three contexts which is economic, social and physical. In the CCC system such as the CFO, the two main processes of Planning Permission and Building Plan still need to be submitted and approved by the PBT before construction can begin at the site.

The new system also sets the Building Plan submitted by the PSP while others submitted by other professionals such as Professional Architects or Professional Engineers will rely on which professionals provide the design and submit the plans. It is the responsibility of the PSP to ensure the preparation and submissions of these other drawings are in an orderly manner. The aim of this study is to determine the effectiveness of the roles of "People of the Submission of Applications" or Principle Submitting Person (PSP) under the CCC.

2.0 LITERATURE REVIEW

2.1 Quality Housing

Housing is a product associated with multiple social, economic, and physical processes that involve issues of location, construction quality, durability, cost, long-term financing, land tenure, turnover, accessibility, household preferences and neighborhood externalities (Strassmann, 1998).

Lawrence calls for an integrated definition of housing quality in which "sets of architectural, demographic, economic, ecological and political factors are explicitly interrelated" (Lawrence, 1995). Quality housing is subjectively perceived by inhabitants, whether they feel satisfied or deprived. In other hand, it is multidimensional. Dwelling structure will interact with other component of quality housing in order to provide housing services or utilities that satisfy the inhabitants' needs (Filali, 2012).

A normative definition of housing quality or housing quality standards generally refers to the grade or level of acceptability of dwelling units and their associated and immediate residential environment, including the design and functionality of housing structures, building materials used, the amount of internal and external space pertaining to the dwelling, housing utilities, and basic service provision (Meng and Hall, 2006).

According to Zey-Ferrell et al. (1977) constructing a quality housing index from a set of indicators including interior and exterior housing condition, heating and cooling, indoor plumbing and persons-per bedroom. The most obvious and

fundamental housing conditions of quality housing is through dwelling size and facilities (Michelle and Shiels, 2007). The determination of housing quality embraces many factors which include the physical condition of the building and other facilities and services that make living in a particular is conducive (Okewole and Aribigbola, 2006).

In Islam, quality housing is one that has legal regulations related to housing that connects the three life corners of the relationship between man and Allah, man and man and man and environment; associated with the teachings of Islam that there is an element of faith, practice and ethics (Omer, 2010).

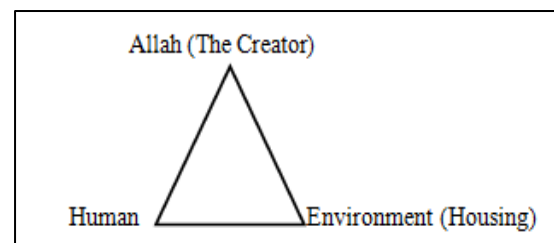


Figure 1: Relationship of Three Corner of Life
Source: Spahic Omer, (2010)

Based on Figure 1, the importance of quality house in life is very important in Islam, that is to protect the five elements in Syariah purpose (Maqasid Syariah) through the care of religion, life, intellect, wealth and dignity (Muhammad, 1985). The main goal of the quality of housing through Surah Al-Nahl verses 80 to 81 illustrates some of the blessings provided by Allah SWT for the survival of mankind including dwelling houses, ornaments and clothing. The various forms and sources of building material made into residential homes are proof of the power of God who knows the different human environment.

Islam also put some conditions to fulfill the meaning of quality housing. A good residential home environment will impact on quality housing. Anas Mustafa Abu Ata asserted that the home in Islam should meet three basic requirements such as health (al-Sihhah), security (al-Amn) and privacy (al-Khatsiyah). The requirements are also in line with the objective of the 10th Malaysia Plan (RMK10) to prevent the poor quality control at the construction stage which will contribute to the decline in housing

quality to foster a safe, healthy and comfortable housing.

2.2 Principal Submitting Person (PSP)

The appointed architect is called the Principal Submitting Person (PSP). A professional architect has been identified as a profession who is responsible for overseeing the entire projects development and building that resulting in the issuance of the CCC.

In Malaysia, the procedures of CCC issuance are where the PSP responsibility is to ensure that a development project undertaken shall comply with the technical requirements that have been approved by the local authorities (Ahmad, 2008). Under the CCC’s system, 21 components have been identified for the certificate of construction stages. For this purpose, 21 forms (form G1 to G21) was introduce under the Second Schedule of the Uniform Building by Law (UBBL) 1984 (Amendment) Order 2007.

To ensure that the CCC’s business becomes easier and smoother, every appointed architect, responsible to all contractors involved must comply with all conditions and regulations of approval before the housing certificate can be issued.

Feng et al. (2010) state, professionals whom issue a building certificate may enter or occupy the building. Project architect or PSP shall ensure that all repair work has been done according to the regulations and have been satisfied with the repair work to issue the certificate. This is to ensure that the building is to be delivered in good condition and can be used or in quality condition as stated by the 10th Malaysia Plan, which is comfortable, healthy and safe for a living.

2.3 Working System

Through literature review, two major factors were identified which may impact the issuance of certificate of Quality Housing by PSP.

Ethic is a set of moral principles in which it is a guideline and should be complied with by a group of professional (Azmie, 2008). Through literature studies that have been done, the work ethic sub-factors include credibility of PSP, PSP knowledge and expertise, conflicts of interest, the ability to face the problem and accountability of

PSP (Walter & Michael, 2010) and Professional integrity (Bank, 2012).

The working system is a plan that has been defined and drafted or an existing work practices in order to become competent professionals to perform a work or tasks (Rahim et al., 2006). In addition, the working system in an organization should be seen as a continued collaborative efforts and over between individuals and organizations in strengthening the available resources in order to become more competent and capable of bringing the organization to a higher level in the future (Norhani et al., 2009).

The study of literature, found that the bureaucracy, organization and management of the company of PSP, regulation, documentation, financial, information systems, and processes and procedures of CCC is a sub-factor under the working system factor (Sabda, 2008).

3.0 METHODOLOGY

Based on extensive literature review and survey conducted using questionnaires on respondent. Quantitative Data were obtained from 210 respondents consisting of representatives from architectural firm throughout peninsular Malaysia. For the selection of the respondents, it consists of the issuing of the CCC; namely Professional Architect and Draftsman registered with the Board of Architects Malaysia (hereinafter called LAM) (Frank, 2007).

Theoretical framework for this research is shown in Figure 1.

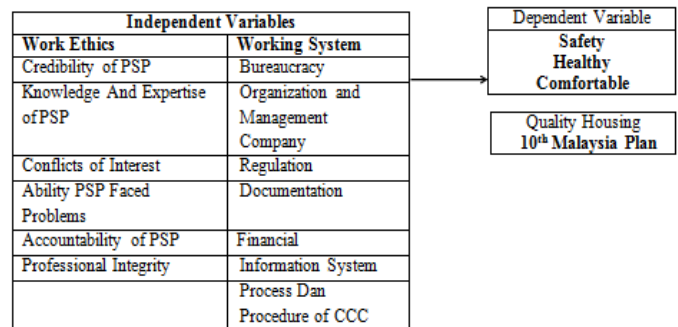


Figure 1. Theoretical research framework

These quantitative methods are measured using numbers and analyzed using statistical procedures that will produce data that is not abstract, reliability and undoubted (Naoum, 2012). According to Sekaran and Bougie (2010), the sampling method is most suitable for many populations of respondents. This paper used sampling methods and the need to obtain a total of 210 respondents (minimum-Table 1) of the actual amount by 467 (round to 460). The calculation formula is as follows with the significant level setting defined in Social Science research is $p < .05$ (alpha value α).

$$n = X^2 NP (1-P)$$

$$d2 (N-1) + X^2 P(1-P)$$

$$n = 3.84 (109) 0.5 (1-0.5)$$

Note: 'N' Population Size

'S' Sample Size

Table 1: Calculation table of sample size and population size determination

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	381
95	76	270	159	750	256	2600	335	100000	384

Source: Krejcie & Morgan (1970)

4.0 RESULTS AND FINDINGS

4.1 Assessing the Validity of Variables

To assess the extent to which variables in this investigation are reliable, the Cronbach's Alpha coefficients were used to calculate each of the variables involved. It aims to see whether the variables used are variables that consistent and high reliability (Pallant, 2001). Table 2 shows the results of tests for the coefficient Cronbach's Alpha.

Table 2. Reliability Test Results

	Variable	Coefficient Value for Cronbach's Alpha
		Quality Housing
1	Credibility of PSP	0.866
2	Knowledge And Expertise of PSP	0.867
3	Conflicts of Interest	0.870
4	Ability PSP Faced Problems	0.868
5	Accountability of PSP	0.865
6	Professional Integrity	0.866
7	Bureaucracy	0.868
8	Organization and Management Company	0.867
9	Regulation	0.870
10	Documentation	0.869
11	Financial	0.866
12	Information System	0.867
13	Process and Procedure of CCC	0.869

Results Table 2 clearly shows that all the variables involved in this research has high reliability and consistency in which the coefficients greater than 0.70. According to Pallant (2001) and corresponding variables can be adopted with the coefficient exceeding 0.70.

4.2 Relationship between the Variables of Efficacy of Principal Submitting Person (PSP)

For this purpose, Pearson correlation coefficient was used to test and measure the strength of the relationship that may exist between the variables considering all the variables are normally distributed. According to Zulkarnain and Hishamuddin (2001) to avoid nonsense correlation (two-dimensional unrelated give a high correlation coefficient), sub-factors were not measured to do with the key factor because it is the same data set. Table 3 shows the relationship between the variables involved in this study.

All negative readings indicate that there is a significant linear relationship whether significant, moderate or not significant between the independent variables and the variable being tested. In Table 3, there is a high significant linear

correlation among the variables like PSP credibility, knowledge and expertise of PSP and accountability of PSP with the aspects of housing quality.

Table 3. Relationship between the Variables

No.	Independent Variables	Quality Housing	
		Pearson Correlation	Relationship
1	Credibility of PSP	-0.227*	Significant
2	Knowledge And Expertise of PSP	-0.193*	Significant
3	Conflicts of Interest	-0.136*	Moderate
4	Ability PSP Faced Problems	0.006	Not Significant
5	Accountability of PSP	-0.241*	Significant
6	Professional Integrity	-0.159*	Moderate
7	Bureaucracy	-0.160	Moderate
8	Organization and Management Company	-0.080	Not Significant
9	Regulation	-0.047	Not Significant
10	Documentation	-0.049	Not Significant
11	Financial	0.019	Not Significant
12	Information System	0.021	Not Significant
13	Process Dan Procedure of CCC	-0.021	Not Significant

To provide the best and quality service, the PSP should be focused on variables that have an impact on their roles. Based on the results of this study, the variables that should be given serious consideration is the credibility of the PSP, knowledge and expertise of PSP, PSP accountability, conflict of interest, professional integrity and bureaucracy. Identified significant variables can also be a guide to the PSP in maintaining the quality of services provided for this CCC method to achieve its goals.

5.0 DISCUSSION

Significant variables that have been identified can be a guide to the PSP in maintaining the quality of services provided and their role in order to achieve quality housing. From the data analysis, work ethic and working systems play an important role in ensuring that PSP can maintain professionalism and can provide quality services

to ensure the quality of building delivered to occupants.

Problems of conflict of interest and bureaucracy arise likely because PSP only following the requirement of the clients only (developers) and no interference from other parties. Analysis of the data also reflect whether PSP carry out its responsibility to comply with all the work ethic, work systems, conditions, processes, procedures and laws that specified the role of the PSP under the CCC is effective to achieve the purposes of certification of a building in terms of quality housing certification.

Although conflicts of interest and bureaucracy variables shows a moderate relationship but the feedback from respondents indicated both also affect the quality of service PSP. Factors of credibility, knowledge and expertise, PSP accountability and professional integrity should be maintained to practice in ensuring the effectiveness of the quality of services by PSP provided either to developers or purchasers of the Housing.

6.0 CONCLUSION

Results that were obtained, clearly show that there are major findings are important and should be taken seriously by the Ministry of Housing and Local Government and local authorities to assess the effectiveness of the services provided by the PSP under the CCC. It is to achieve the implementation of CCC in the government efforts to improve the existing Quality Housing Delivery System for the public interest can be fully achieved. Referring to the results of the analysis, the study found six variables that need to be addressed as explained before.

In addition to the six variables to be considered, there are also variables obtained through literature review indirectly affecting the effectiveness of PSP services under this CCC method. It means that ignoring these variables can also affect the quality of PSP's services to the safety and comfort of the built-up building although the impact is not as big as the six main variables mentioned above.

REFERENCES

- Abdullah, A. A., Harun, Z., & Abdul Rahman, H. (2011). Planning process of development project in the Malaysian context: a crucial brief overview. *International Journal of Applied Science and Technology*, 1(2).
- Ahmad, S. (2008). *Benefits of CCC system in term of local authorities experience*. Majlis Perbandaran Kajang.
- Azmie, M. Z. (2008). Sopan daripada perspektif pengurusan organisasi. Kuala Lumpur: Utusan Publications & Distributors Sdn. Bhd.
- Beaton, W. P. (1986). On the use of expert opinion in housing quality analysis: an application of the "Five City Housing Survey". *Journal of Planning Education and Research*, 5(3), 178-190.
- Djebarni, R., & Al-Abed, A. (1998). Housing adequacy in Yemen: an investigation into physical quality. *Property Management*, 16(1), 16-23.
- Everard A. van Kemenade Teun W. Hardjono Henk J. de Vries. (2011). The willingness of professionals to contribute to their organisation's certification. *International Journal of Quality & Reliability Management*, 28(1), 27 – 42.
- Filali, R. (2012). Housing conditions in Tunisia: the quantity-quality mismatch. *Journal of Housing and the Built Environment*, 27(3), 317-347.
- Fuad, I. (2007). Pelaksanaan kaedah pengeluaran perakuan siap dan pematuhan oleh para profesional. Kertas Kerja Persidangan Mempertingkatkan Sistem Penyampaian Perkhidmatan Kerajaan-Penambahbaikan Urusan-urusan Pemajuan Serta Penyenggaraan dan pengurusan Hartanah. Anjuran Kementerian Perumahan dan Kerajaan Tempatan. Pusat Bandar Damansara, Kuala Lumpur, 14 April.
- Feng, L., Anke, S. M. & John, F. H. (2010). *Mainstreaming Building Energy Efficiency Codes in Developing Countries: Global Experiences and Lessons from Early Adopters*. Washington: The World Bank.
- Hall, G. B., & Meng, G. (2006). Assessing housing quality in metropolitan Lima, Peru. *Journal of Housing Built Environment*, 21: 413.
- Ismail, E. H., Hassan, N. A., & Ariffin, S. A. I. S. (2016). Perceptions Differences in Professional Integrity and the Risk of Public Safety in Architectural Self-Regulation System. *Journal of Science, Technology and Innovation Policy*, 2(1).
- Ismail, I., Che-Ani, A. I., Tawil, N. M., Razak, M. Z. A., & Yahaya, H. (2012). Pembangunan Indeks Kecacatan Rumah Bagi Perumahan Teres. *Journal of Surveying, Construction and Property*, 3(2).
- Ismail, D. A. (2007). Pelaksanaan Kaedah Pengeluaran Perakuan Siap dan Pematuhan (CCC) oleh Para Profesional. Kuala Lumpur: Kementerian Perumahan dan Kerajaan Tempatan.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607-610.
- Kutty, N. K. (2005). A New Measure of Housing Affordability: Estimates and Analytical Results. *Housing Policy Debate*, 16(1), 113-142.
- Lawrence, R. J. (1995). Housing Quality: An Agenda for Research. *Urban Studies*, 32(10), 1655-1664.
- Leong, I. C. (2005). Certificate of Fitness for Occupation (CFO): Towards Self-Certification, with Certificate of Completion and Compliance (CCC). Kuala Lumpur: Association of Consulting Engineers Malaysia.
- Malcolm Harrison (2004): Defining Housing Quality and Environment: Disability, Standards and Social Factors. *Housing Studies*, 19:5, 691-708.
- Norris, M., & Shiels, P. (2007). Housing affordability in the Republic of Ireland: is planning part of the problem or part of the solution? *Housing Studies*, 22(1), 45-62.
- Naoum, S. G. (2012). *Dissertation research & writing for construction students*. Ed. ke-3. UK: Taylor & Francis Inc.
- Noraliah Idrus, H. C. (2008). Affordable and quality housing through the low-cost housing provision in Malaysia. Toyohashi, Aichi, Japan.
- Nor, K. M. (2008). Self-certification versus private certification doctrines on the issuance of the Certificate of Completion and

- Compliance for buildings in Malaysia. *Journal of Building Appraisal*, 4(2), 125-131.
- Norhani, B., Yoong, S. K. & Hanipah, H. (2009). Hubungan antara peranan individu dan organisasi dengan amalan pembangunan kerjaya. *Journal of Human Capital Development*, 2(1), 13-24.
- Norris, M., & Shiels, P. (2007). Housing affordability in the Republic of Ireland: is planning part of the problem or part of the solution? *Housing Studies*, 22(1), 45-62.
- Okewole, I. A., & Aribigbola, A. (2006). Innovations and sustainability in housing policy conception and implementation in nigeria. *The built environment: Innovation policy and sustainable development*. Ota, Covenant University, Ota, 414-420.
- Pallant, J. (2001). SPSS survival manual. USA: Open University Press.
- Rahim, A. R., Sufean, H. & Jalil, O. (2006). *Hala tuju pengurusan: Sumber manusia dan kerjaya*. Kuala Lumpur: Utusan Publications & Distributors Sdn. Bhd.
- Sabda, S. (2008). *Karenah organisasi – Mengagumi pekerja faktor utama produktiviti*. Kuala Lumpur: Utusan Publication & Distributors Sdn. Bhd.
- Shafii, H. (2012). Keselesaan Terma Rumah Kediaman dan Pengaruhnya Terhadap Kualiti Hidup Penduduk (Thermal comfort of house and its influence on people's quality of life). *Geografia: Malaysian Journal of Society and Space*, 8(4), 28-43.
- Sekaran, U. & Bougie, R. (2010). *Research methods for business: A skill building approach*. Ed. ke-5. New York: John Wiley & Sons, Inc.
- Shinnick, E. (1997). Measuring Irish Housing Quality. *Journal of Economic Studies*, 24(1/2), 95-119.
- Spahic Omer. 2010. *Islam and Housing*. Kuala Lumpur: A.S. Noordeen. p. 339.
- Strassmann, W. P. (1998). *The third world*. In W. V. Vliet (Ed.), *The encyclopedia of housing*. Thousand Oaks—London—New Delhi: SAGE Publications.
- Walter, R. & Michael, D. (2010). *The professional practice of landscape architecture*. Ed. ke-2. New Jersey: John Wiley & Sons Inc.
- Zakaria, R., Ani, A.C. and Ali, A.S. (2014). CCC Method: The Rules of Professionals as a Building Certifier. MATEC Web of Conferences, 15(01022). EDP Sciences.
- Zaidi, M. A., & Davies, H. (2010). A Prospective Study on Building Quality: Enforcement of Control in the Australian Housing Industry. Sustainable Building Conference: Innovation and Transformation, Wellington, New Zealand, May (pp. 26-27).
- Zakaria, R., dan Azlan, A. I. C. A., & Ali, S. (2013). Keberkesanan Perkhidmatan PSP dalam Kaedah CCC bagi Pensijilan Bangunan di Negeri-Negeri Maju di Malaysia. *Journal of Surveying, Construction and Property*, 4(2).
- Zey-Ferrell, M., Kelley, E. A., & Bertrand, A. L. (1977). Consumer preferences and selected socioeconomic variables related to physical adequacy of housing. *Family and Consumer Sciences Research Journal*, 5(4), 232-243.
- Zulkarnain, Z. & Hishamuddin, M. S. (2001). *Analisis data: Menggunakan SPSS windows*. Johor: Universiti Teknologi Malaysia.