

Management Control System in an Outsourced Solid Waste Management in Malaysia

Che Pak, Nur Azliani^{a*}, Abdullah, Shamsul Nahar^b, Ismail, Suhaiza^b, Mohd Alwi, Norhayati^b,

^a*Tunku Intan Safinaz School of Accountancy, Universiti Utara Malaysia, Malaysia*

^b*Kulliyah of Economics and Management Sciences, International Islamic University of Malaysia, Malaysia*

Abstract

The focus of current business environment has changed to alliances. Hence, it is important to have an appropriate governance structure or a good management control system. This conceptual paper, therefore, discusses the development of management control system and the outsourcing process of solid waste management in Malaysia. Solid waste management is one of the important services provided by the Malaysian government. Due to many negative feedbacks received for solid waste management services provided by local governments, the Malaysian government decided to outsource it to private concessions since 1996. After the outsourcing process comes into action, many parties are involved in managing it. To name a few, it involved National Solid Waste Management Department (JPSPN), SWCorp, private concessions and local governments. Thus, in order to align the objectives of all parties involved, management control system emerge as one of the important and significant tools.

Keywords: Management control system, outsourcing, privatization, solid waste management, public sector

1. INTRODUCTION

Management control system (MCS) is important in tailoring the company's activities towards the achievement of objectives. As defined by Langfield-smith (1997) MCS is a process of managing the resources with the focus to accomplish the organization's objectives. Whereas, Tessier and Otley (2012) referred MCS as a formalized procedure that is used to monitor the organization activities in order to achieve the degree of coherence in the accomplishment of the organization's objectives. However, the traditional MCS is no longer suitable in the current business environment where the attention is changed to focus on alliances, including outsourcing (Otley, 1994). With that, organization boundaries have expanded, which means the new management control is needed to support it.

In Malaysia, local government is a third-tier hierarchy public agency that provides urban services to its communities. Like other public agencies, the local government is expected to provide satisfactory services to the public. The range of services provided by the local governments is so wide, making it a challenging task for them to perform efficient services with limited budget and other resources. Furthermore, the local government also has multiple objectives, such as to ensure the resources are used efficiently, to ensure the service provided is in accordance to the Act, and to ensure transparency and accountability, which differentiate it to the private sector where there is only one main objective of private sector, which is profit maximization. This situation has created conflict in assessing their performance and implementing control.

Thus, in the mid-1980s, the Malaysian government introduced public sector administrative reforms under the umbrella of New Public Management (NPM) for their departments and other government funded agencies. The aim is to ensure that the services are delivered in an efficient and effective way. It is also aimed at improving the accountability (Nichol and Taylor, 2001). Among the various practices and approaches introduced to re-engineer

*Corresponding author. Tel.: +60 12 695 3448; Fax. +000-00000000
E-mail: azliani@uum.edu.my

the public sector are Total Quality Management; Malaysia Incorporated; Client Charters; Quality Management Standard; Public-Private Partnership; Privatization; and Outsourcing (Abdullah and Kaliannan, 2008).

Outsourcing, as mention by Idowu, Omirin and Osagie (2011), is a strategy used by local governments as an effort to provide high quality public services at low cost. Abdul Aziz and Ali (2004), mentioned that there are three objectives of outsourcing in public sector which are, first to attain best practice across the enterprise, at the same time to improve the cost discipline and control skills of managers. Second, to improve the service quality and management by focusing more on the core competencies of the organization. Third, to gain access to new technology and skills, enhance the organization's capability to develop new products and services and reduce capital costs.

The advantages of outsourcing especially in public sector include improvement in client responsiveness, government decision making, cost saving for the government and also the outside vendors, as well as assist the local government to utilize the private sector's learning experience and economies of scale (Barretta and Busco, 2011; Johansson and Siverbo, 2011; Kakabadse and Kakabadse, 2000; Marques, Ribeiro, and Scapens, 2011). The result will be equivalent or better quality services than those provided in house, at a reduced cost to ratepayers. Despite the above stated advantages of outsourcing, there are researchers such as Das and Teng, (2001); Langfield-Smith and Smith, (2003) who have discovered failure in outsourcing process. Among the main reasons for the failure is the different objectives that exist among the parties involved in outsourcing which has created the cooperation problems (Das and Teng, 2001; Kakabadse and Kakabadse, 2000). In addition, as outsourcing relationship is a long term relationship, the outsourcing contract served as the regulatory documents that will play a role as mediating the relationship between parties involved. However, there is a possibility that the parties have difficulties in planning their activities earlier, and it will create the risk of having an incomplete contract (Kakabadse and Kakabadse, 2000).

To reduce the problems and risk in outsourcing, appropriate governance structures and good MCS are suggested by Das and Teng, 2001; Spekle, 2001. It is because MCS is an instrument that can influence the other parties' behavior to ensure that the desirable objectives are achieved (Marques et al., 2011). Hopwood (1996); and Otley (1994) were the first two studies that create attention for the accounting researcher to give more attention to study the relationship between MCS and interfirm relationship including outsourcing. Following it, there are many research on the relationship between MCS and outsourcing (Langfield-Smith and Smith, 2003; Langfield-smith, 1997; Mouritsen, Hansen, and Hansen, 2001; van der Meer-Kooistra and Vosselman, 2006).

However, most of the research are conducted in dyadic relationship especially on the relationship between buyer and supplier in supply chain management. There is not much research done on the network relationship which involved many parties (Mauritsen, Mahama, and Chua, 2010). Furthermore, in public organizations, as Barretta and Busco, (2011) concluded, not much attention was given to study the role of MCS in inter organizational relationship eventhough the outsourcing process at public organizations shows an increase after the introduction of NPM. The following section will discuss on development of MCS in inter-firm relationship.

2. MANAGEMENT CONTROL SYSTEM

MCS is one of the management accounting tool that is extensively used to align the organizations' activities towards the achievement of organizations' objectives. Historically, MCS is used in vertical relationships within firms. The main focus during that time was to constitute the boundary of the firm and reinforce organizational hierarchy (Hakansson, Kraus, and Lind, 2010). During this time, MCS was still dominated by 'financial numbers' and developed within the boundary of single organizations. However, this historical view is in contrast with the contemporary organizations where the current situation now changed to horizontal relationship between firms. Hopwood, (1996); and Otley, (1994) were the first two studies that discussed the orientation of MCS that did not correspond with the current organization environment facing challenges in which the horizontal relationship across organizations' boundaries is increasing. The increase is demonstrated by a large number of inter organizational relationship under names like joint ventures, strategic alliances, strategic partnership, supply chain relationships and outsourcing relationship.

These changes have transformed the role of management control where the scope is enlarged and no longer confined within the boundaries of organization. It is said that the control systems are growing and self-organized outcome of the interactions in the network. It also plays a role as an alarm that pushes the relationship to fluctuate between different patterns and to undertake new areas of inter-organizational space (Caglio and Ditillo, 2008). There are two primary purposes of MCS in an outsourcing relationship as mentioned by Dekker (2004). The first

one is to create the motivating environments between both parties involved in outsourcing in order to achieve the desired outcomes, and the second one is to ensure coordination of independent task between both parties.

The approach used in past research on MCS can be divided into rationalist and constructivist approach (Vosselman and Van der Meer-Kooistra, 2009). The focus of rationalist approach is to relate the control problems with the control devices available to manage the problems. Whereas, the focus of constructivist approach is on the role of accounting in constituting and shaping the inter-firm relationship.

The problems raised by Dekker (2004) in inter organizational relationship is the problems of appropriation concerns and uncertainty. It is related to the investment made by parties in inter organizational relationship. This problem is important to control because it will result in incomplete contracts, and yet incomplete contracts need appropriate control mechanisms.

In using control system to overcome the problem of coordination between parties in inter organizational relationship, control archetypes is an important criteria to focus on. Langfield-Smith and Smith (2003) adopt performance evaluation target as the control archetype used in their model. Whereas, Van der meer-Kooistra and Vosselman (2000) incorporated supervision, detailed ex-post information and directed intervention as a package in their control mechanism archetypes. However, the use of accounting in control archetypes are only limited to certain extend and further research are needed to increase the knowledge on features and roles of accounting in the different control archetypes (Caglio and Ditillo, 2008).

Control archetypes depends on type of control mechanisms. Different control mechanisms are represented by different control archetypes. The introduction of control mechanisms increases the level of information-sharing among the parties involved. This situation will contribute to the cooperative and trustworthy among parties.

The model developed by Van der meer-Kooistra, and Vosselman (2000) dominate the MCS in inter firm relationship. The model indicate the most influencing factors of management control structures. The model describes on the process of developing the contractual relationships between the outsourcing party and the supplier, the process of gaining cooperation between parties involved, and the risk handling process related to the process of contracting out. In their model, they have identified three management control pattern namely market based pattern, bureaucracy based pattern and trust based pattern. The outcome from their research shows the importance to draw up a contract based on rules and control mechanisms that further will create trustworthy behavior and an open commitment. Such a contract creates an atmosphere in which goodwill trust can grow during the execution phase. In any transaction involved in inter firm relationship, different control mechanisms are needed in different patterns.

Following it is a study by Langfield-Smith and Smith (2003). They developed the comprehensive model of management control, where they add trust as one of the variable. Trust consist of contractual trust, competence trust, and goodwill trust. However, this study exclude risk in their study although risk is claimed to be affected in the combination of control and trust (Das and Teng, 2001). The study used case study method and the relationship seen as one to one relationship. The study has generally determined governance structures based on frequency, uncertainty and asset specificity and they concluded that the most influential governance structures is asset specificity. Furthermore, the governance structures were classified into three different pattern known as market based pattern, hybrids based pattern and hierarchies based pattern. Each type of transaction involved in inter firm relationship is grouped into task programmability, output measurability, asset specificity.

In 2009, Vosselman and Van der Meer-Kooistra again came out with another study on control for inter firm relationship. They concluded that formal control device or formal incentive scheme is important in accounting for control in inter firm relationship. Performance measurement and management system, open book accounting, financial incentives scheme are some of the example of formal control device. However, Windolph and Moeller (2012), who focus their study on open book accounting (OBA) to see the influences towards supplier relationship indicate negative findings towards control system. Marques et al. (2011) and Langfield-Smith and Smith, (2003) stress out that MCS is proven as a good tool to reduce the risk in an outsourcing relationship. However, Van der Meer-Kooistra and Vosselman (2006), mentioned that little attention is given to management control issues with regard to cooperation between inter-firm relationship.

There is also attention been given to the relationship between control system and trust (Dekker, 2004; Langfield-Smith and Smith, 2003; Van der Meer-Kooistra and Vosselman, 2006; Velez, Sanchez, and Alvarez-Dardet, 2008; Vosselman and Van der Meer-Kooistra, 2009). Some of the authors concluded that control and trust are

predominantly seen as two distinct concepts, either substitutive of or complementary to each other. There are also some of the authors who saw trust and control as inversely related, thus it implied that more control results in less trust and more trust results in less control. Control systems can actually increase the level of trust among partners, provided the control system is strong enough to generate cooperation among parties in inter firm relationship.

Das and Teng (2001) proposed a framework to link uncertainty, risk and management control. They found that tasks characterized by low output measurability and high programmability are in good agreement with the incidence of relational risk and should be regulated through behavioral control; tasks contemplating high output measurability coupled with low knowledge of the transformation process resulted with performance risk.

There is an issue related to uncertainty in inter firm control raised by Caglio and Ditillo (2008). He concluded that the impact of uncertainty on inter-firm control has been only partially investigated although it has been considered as key variable in the management accounting literature. Das and Teng (2001) comments on this issue saying that it is not clear which control mechanisms should be activated to deal with different sources of uncertainty effects among the various typologies of uncertainties.

However, all the study mentioned above are the study that focused on various industries using case study on single dyadic relationship. They are only two parties in the relationship namely, the buyer and seller. Most of the authors have theorized their findings through transaction cost economics (TCE) (Langfield-smith, 1997; Vosselman and Van der Meer-Kooistra, 2009; Velez et al., 2008; Mouritsen et al., 2001; Spekle, 2001; Van der meer-Kooistra,; Vosselman, 2000; Van der Meer-Kooistra and Vosselman, 2006; Kulmala et al., 2006; Langfield-Smith and Smith, 2003). TCE is a neo classical economics theory and the focus is to design the control system with the aim to minimize the transaction costs associated with the alliances. The focus of transactions in TCE depends on the degree of specificity, uncertainty and transactions frequency.

There has been little discussion on the role of accounting in a more complex situation (Lind and Thrane, 2010). In a complex situation, the relationship is known as network. This kind of relationship is inspired by various theories including institutional theory, actor network theory (ANT), the industrial network approach, and complexity theory. Study by Chua and Mahama, (2007) used ANT to study the accounting in inter-organizational networks. They used case study that focus on the influence of all actors, including human and non-human, that were connected to the networks. They examine the emergence, operations, and functionality of accounting numbers in long term alliances. Their finding shows that the strength of the accounting in network setting rely on how it is involved in defining the boundaries, power, and identity of other actors in the network and how other actors in turn define accounting.

Mouritsen and Thrane, (2006) were concerned of the role of accounting as a force in establishing and developing inter-firm relationship. They analyzed the roles of management technology act as an actor that mediate, shape and construct interfirm relationship using self-regulating and orchestration mechanisms. Based on the case study, they develop a network enterprise. In enterprise forms, the network can reflect on itself with a view of transformation. With that, the network partners find the operation of the network is hopeful and terrible at the same time.

Although the focus is now changed to study the network relationship, the study on it is still scarce. (Chua and Mahama, 2007). Therefore, the purpose of this study is to contribute to the collection of study that focus on network relationship. This study choose solid waste management in Malaysia as the case study since it has been fully outsourced to the private vendor since 2011. Network relationship in this study refer to all parties involved in the outsourced solid waste management. One of the private concessions was selected to be the case of this study. Data were collected via document analysis, observation and interview with all parties involved in the development and implementation of control system for an outsourced solid waste. The next section discuss on outsourced solid waste management in Malaysia.

3. OUTSOURCED SOLID WASTE MANAGEMENT IN MALAYSIA

Changing in lifestyle, the process of urbanization and globalization were the factors that impact the issue of solid waste management (SWM) become increasingly significant. According to Chua, Mat Sahid and Leong (2011), significant factors that influence the generation of solid waste is socio-economic background which is driven by their buying power, cultural background, locality (urban or rural vicinity) and environmental awareness. Other significant driving factors of waste generation include the population growth, velocity of urbanization, economic growth and customs of multicultural society.

According to Periathamby and Hamid (2009), the solid waste generation rate in the 1980s was 0.5 kg/day, and this had increased to 1.3 kg/day by 2006. Manaf et al., (2009) reported the similar trend where the average per capita solid waste generation has increased from 0.67 kg/capita/day in 2001 to 0.8 kg/capita/day in 2005. The quantity of municipal solid waste (MSW) generation, particularly in Peninsular Malaysia, has increased from 16,200 tons to 19,100 tons per day in 2001 and 2005 respectively. In addition, the Ministry of Urban Wellbeing, Housing and Local Government (MUHLG) had forecasted that the generation of solid waste is expected to increase to 3.6 percent by 2020 which will be around 31,000 tons per day. This increasing trend emphasizes the importance of managing the solid waste for the benefit of the future generations.

As many authors have agreed (Abdul Aziz and Ali, 2004; Coad, 2005; Hassan et al., 2001; Hj Awang, Ya, and Wan mustapha, 2005; Idowu et al., 2011; Manaf et al., 2009; Periathamby and Hamid, 2009; Yahaya, 2008), population is the main factor that contributes to solid waste problems. Malaysia is one of the fastest growing nations in region in terms of the economic growth, namely 8.9 percent per annum (Hj Awang et al., 2005). Malaysia's economy expanded 5.8 per cent in the fourth quarter of 2014 ([Department of Statistic Malaysia, 2015](#)). The Gross Domestic Product increased from 543.6 billion in 2005 to 787.6 billion in 2013 ([Department of Statistic Malaysia, 2015](#)). The income per capita generation has increased by 7.3 percent from RM1168 in 2009 to RM1,451 in 2013 (Department of Statistic Malaysia, 2015). Household income has increased up to 6.6 percent particularly in urban area from RM4,705 in 2009 to RM5,742 in 2013 (Department of Statistic Malaysia, 2015). In terms of population, with total population annual growth average rate of 2.3 percent, an increment from 23.26 million in 2000 to 27.48 million in 2013 can be seen (Department of Statistic Malaysia, 2015). This situation has created massive problems in solid waste management because population, economic growth and waste generation are positively related (Periathamby and Hamid, 2009). This situation create an urgent importance of a good solid waste management.

Previously in Malaysia, the responsibility to handle the solid waste management fell under the state governance. This is because the local councils are in better position as compared to federal and state government as they have a direct relationship with local community. Local government has been encouraged to create appropriate management systems for supporting environmental planning and policy making and involve all sectors of the local community to fulfil environmental objectives (Qian et al, 2011).

Despite all the efforts, previous authors have documented various issues, problems and complaints related to inefficacy and ineffectiveness of solid waste management services handled by the local government. The issues, problems and complaints consist of inadequate and low collection coverage, insufficient funding for new areas, unreliable services and issues related to the landfill site (Hj Awang et al., 2005). It shows that the urban waste collection department in local government does not provide satisfactory solid waste collection and disposal service.

Ogawa (2000) noted that solid waste management system in developing countries displays an array of problems, including low collection coverage and irregular collection services, crude open dumping and burning without air and water pollution control, the breeding of flies and vermin, and the handling and control of informal waste picking or scavenging activities. Periathamby and Hamid, (2009) conclude that most of the problems are related with weak enforcement, lack of technology, and ineffective policy implementation that results in the waste to be managed in inefficient way with a very low possibility of improvement. They added also that Malaysia did not have sufficient technologies and facilities to handle the ever increasing rate of waste generation. Manaf et al., (2009) discuss the lack of coordination among the relevant agencies that are responsible in solid waste management, underutilization of resources and unsustainability of overall waste management were the factors that contribute to the problems in managing solid waste. They further added that lack of skilled manpower, irregular collection services, inadequate equipment used for waste collection, inadequate legal provisions, and resource constraints were the problems which could be traced back to the management side.

In term of financial constraint, most researchers agreed that it was the biggest problems faced by local councils in managing solid waste (Abas, 2014; Afroz and Masud, 2011; Othman, 2002; Yahaya, 2008). Although every year it is reported that a huge amount of budget allocated for operation and development of solid waste management (Manaf et al., 2009; Yahaya, 2008), the service provided by local government is still far from satisfactory (Hj Awang et al., 2005).

As a solution for all the problems mentioned above, the government has initiated the outsourcing process of solid waste management from local government to the private vendors in 1993 (Afroz and Masud, 2011; Periathamby and Hamid, 2009) and implemented in 1996 (Manaf et al., 2009; Othman, 2002; Yahaya, 2008). The reason for it

is to provide an integrated, well-planned, well-managed, efficient and effective, technologically advanced solid waste management system in order to enhance the quality of the environment as part of Vision 2020 (Manaf et al., 2009). The outsourcing aimed to reorganize existing solid waste management system used by most local governments into a system that is prepared to undertake disposal of wastes from expanding urban localities, incorporating recycling and safe environmental management measures. Since the power to manage solid waste in Malaysia is in accordance to the Local Government Act (Act 171), the outsourcing process also requires the laws and regulations to be streamlined at the federal, state and local council levels to ensure proper disposal, including mandatory separation of recyclable waste by households.

The scope of privatization with regard to solid waste management involves a number of activities, which are (a) collection; (b) transportation; (c) treatment; (d) transfer stations; (e) recycling; and (f) disposal. Those activities will eventually be extended to include drain cleaning, grass cutting and park maintenance, and road cleaning. The categories of wastes are defined as: (a) domestic; (b) commercial; (c) industrial; (d) institutional; (e) construction debris; and (f) waste from road and drain cleaning and grass cutting.

However, the process to outsource solid waste management in Malaysia is not easy. Although the decision to outsource solid waste was initiated and started in year 1996, the process dragged on for many years. The process starts with federalization, which means transferring executive authority on solid waste management in Malaysia from the local authority to the federal government. The federalization process can be seen via the enactment of the Solid Waste and Public Cleansing Management Act 2007 or known as Act 672.

After the change in solid waste management, solid waste is managed directly and indirectly by the three tier government, which are Federal Government, State Government and Local Councils. At the Federal Government level, solid waste management is under the purview of Ministry of Urban Wellbeing, Housing and Local Government (MUHLG), under the responsibility of National Solid Waste Management Department (JPSPN). The department was established under the Act 672 and it is responsible for solid waste and national cleansing. JPSPN plays a role in providing policy, strategic planning and integrated solid waste management at macro level.

At the second tier, solid waste management is administered by the State Government. The State Government is responsible to guide and assist the local councils in strengthening the institutional and financial capabilities for solid waste management. Finally the third tier is the local councils that are involved directly with the public according to its respective area. The local councils is responsible to determine the areas for collecting solid waste with the assistance from private support.

The outsourced solid waste management started with interim basis based on yearly agreement between private vendors and each local council. As a start, on 1 January 1997, 44 out of 144 local government in Malaysia has been took over by two concessionaries, namely Southern Waste Sdn Bhd and Alam Flora Sdn Bhd. The interim basis of outsourced solid waste has continued for nine years. During that period, no revision is made on the payment of services rendered by the private vendors. Furthermore, there were cases of defaulted payment by the local councils for many years due to insufficient fund. This situation resulted in unfavorable conditions for the private vendors in term of securing funding from the financial institutions and in term of projection of their long term planning.

Taking into consideration the interim period problems, the government decided to expedite the full outsourcing process of solid waste. It started with the finalization of the draft bill to transfer the executive authority from local government to the federal government and execution of full privatization of solid waste management. Finally, in 2007, the Cabinet decided to cease the interim concessionaries and replaced it with full outsourcing or full privatization of solid waste management. The Solid Waste and Public Cleansing Management Act 2007 or known as Act 672 was gazetted. The full outsourcing started with the southern and central zone first. The northern zone followed a year after to give ample time to the concessionary to be ready to execute the process.

In line with the gazetted of Act 672, several changes were made in the Ministry of Housing, Urban Wellbeing and Local Government (MUHLG). The Department of National Solid Waste Management (JPSPN) was formed as an entrusted body to formulate policies, strategies, action plans and to prepare regulations and agreement as well as to implement the Act 672. To undertake the operational issues of solid waste management after full privatization, the MUHLG developed a new corporation namely Solid Waste Management and Public Cleansing Corporation (currently known as SWCorp) in 2007. The function of the SWCorp includes every aspect that is deemed necessary to ensure the implementation and success of an effective and integrated solid waste management plan. It includes recommending and implementing policies and strategies pertaining to solid waste management

services, implementing improvement measures for existing solid waste management services, enforcing the law, and establishing institutions to undertake research activities. It also covers the recommendation and implementation of relevant standards, monitoring of compliance, and promoting participation and awareness among the public (Periathamby and Hamid, 2009).

The final step of the full privatization process of solid waste management is to award the concessionary contract to the private vendor. Thus, in 2011, concessionary contract of solid waste management was awarded to the three private vendors that are responsible to different areas in Peninsular Malaysia. For Perlis and Kedah, the private vendor responsible is Syarikat Environment Idaman Sdn Bhd, while for southern areas covered for Johor, Melaka and Negeri Sembilan is under the responsibility of Syarikat SWM Environment Sdn Bhd. The third private vendor, Syarikat Alam Flora Sdn Bhd, is responsible to cover Pahang, Wilayah Persekutuan Kuala Lumpur and Putrajaya. This concessionary involves 52 local governments and Perbadanan Putrajaya. However, there are four other states did not agree to outsource their local solid waste management to the private vendor appointed by the SWCorp. There are Pulau Pinang, Perak, Kelantan and Terengganu. The main objective of the concessionary is to ensure that the solid waste generated from domestic households, shops, and public institution together with public cleansing are systematically managed to create a great environment.

Nevertheless, it must be pointed out that while solid waste management is now under the responsibility of the private sector, it does not mean that the local government can pass all its responsibilities over to the private vendors. The role of the local government is still significant, particularly in terms of enforcing laws and regulations pertaining to solid waste management and ensuring that the private sector meets the required standards and quality. Among the factors that should be monitored by local government is operational efficiency, waste disposal sites, service fees, and feedback from community.

After the full privatization comes into operation, there are multiple parties involved with different task and functions. Thus, the concessionary agreement is important to align the interest of all parties involved. Among the important issues mentioned in the concessionary contract are (1) usage of new vehicles used for solid waste collection and public cleansing, (2) distribution of new green bin with wheels for free to all dwellings, shops and public institutions, (3) usage of prime and secondary key performance indicator (KPI), (4) standardized waste collection and public cleansing at all states, (5) inform public on the schedule of solid waste and public cleansing and the schedule must be accessible on website, (6) proper uniform for concessionary staff, (7) standardized complaint system, (6) governance mechanism.

In addition, the key performance indicators (KPI) were developed to ensure the efficiency of the private vendors appointed. There are six primary KPI and eighteen secondary KPI which are developed for solid waste collection. On the other hand, there are 13 primary KPI and 36 secondary KPI were developed for public cleansing. The focus of primary KPI are on the quality of the private vendors that will affect the operation, cleanliness of the environment and public health. Meanwhile, the secondary KPI focuses on the service provided by private vendors that affect the routine operations and public convenience.

To ensure the improvement of the service quality, the implementation is done in stages. The implementation is different for the three councils, City Council, Municipalities and District Council. At the early stage, only few basic KPI were enforced such as the importance of following the schedule and frequency for solid waste collection, and ensure that solid waste are collected in good manners and no leachate leakage. The purpose of stages of implementation is to give appropriate time for the private vendors to be ready with the new assets and strengthens overall KPI. After the transition period, it is compulsory for all private vendors to fulfill the both KPI, premier and secondary.

The concessionary were awarded to the private vendors for 22 years with seven years cycle. Since the contract awarded in 2011, thus now is the first year cycle. Therefore, there are many problems and issues that arises. Hence, it is the appropriate time to study the role played by the management control system in aligning the interest of multiple parties involved in an outsourced solid waste in Malaysia.

4. DISCUSSION AND CONCLUSION

The solid waste management in Malaysia has been outsourced since 1996. Among the most influential factor that motivates the local government to share the responsibility with the private vendors is due to the incompetency of local councils to solve the increasing problems of solid waste management. However, outsourcing did not really solved the problems. As Periathamby and Hamid (2009) mentioned, the outsourcing of solid waste management

is just a quick solution to transfer the problems to the private vendors. In addition, there is a lack of systematic cost management tools that seems to lead to poorly managed and non-profitable outsourcing projects.

After outsourcing process, the government will act as a monitoring body on the work done by private concessions. However, Abdul Aziz and Ali, (2004) claimed that it is a challenge for public sector because it is known to have problems of lack in necessary skills and capabilities. This is proven by a study done by Hassan et al. (2001) where they showed that there is a mismatch between the data on waste generated reported by the local government with the private vendors, and also with the data collected at site by the researchers.

In addition, there are two main issues highlighted by the Audit Report 2014, Series III, which were released on 23 November 2015. The first issue was improper payments of RM56.29 million were made to the cleaning concessionaries was 2013. The payment included claims from services not covered in concessions' agreement. The second issue is SWCorp officer were overloaded with work. On average, one SWCorp's officer monitor 6,905 premises, 60,809 square meter of grass areas, 21,858 meter of road and 77,911 meter of drain. The overloaded work on each officer resulted in monitoring task not able to be carried out thoroughly and effectively.

Furthermore, the outsourced solid waste management involved longer tenure. Transactions through longer term interfirm alliances are normally repeated transactions, and thus the uncertainties are high (Chua and Mahama, 2007). For record, the concessionaries were awarded to the private vendor for 22 years with seven years cycle. Since the first cycle will end in 2018, many problems and issues are expected to arise.

The outsourced solid waste management also involved many parties, in a complex interaction. There is separation of work or responsibility between the parties involved. As an example, implementation process are done by the private vendors, while monitoring process are done by SWCorp, and if any penalties are to be charged, it must be done by the local governments. The involvement of many parties with different responsibility makes the relationship becomes complex. Meetings are chosen as a medium to coordinate the work done by each party in the relationship. There are many meetings held. There is monthly meeting between private concessions and SWCorp, known as Regional Implementation Committee Meeting. This meeting was chaired by SWCorp State Director. At the same time, there is also meeting known as Service Level Committee Meeting, held once in three months, between private concessions, SWCorp and JPSPN and this meeting is chaired by the Director of JPSPN. The concessions also are required to attend regular meeting with SWCorp, known as Concessionaries Performance Appraisals Meeting, to present their performance. Apart from that, technical meeting or ad-hoc meeting will be conducted at any time required by any party.

In this relationship, concessionaries agreement, key performance indicators (KPI), inventory and technology (such as i-MEMS, GPS and GIS) serve as the main control system enforced by SWCorp. However, the issues is the understanding of the concessionaries agreement by each party involved is different. Furthermore, there are dissatisfactions among the managers related to the penalty charged and implementation of KPI.

With regard to the issue raised regarding the problems of managing the outsourcing process, it shows that there is a need to coordinate the role played by each party in the relationship. A good MCS is required to achieve this aim. However, not much attention were given to study the role of MCS in inter-firm relationship in public organizations even though the outsourcing process in public organizations shows an increase after the introduction of NPM (Barretta and Busco, 2011).

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