ABSTRACT

The construction industry played a central role in supporting the national economy as a developing country and as an archipelago. However, the role of the organization of the construction was not maximized. This is because the function of the organization of materials and construction equipment (MCE) national had not been fully able to be integrated as part of the implementation of the system of national construction and also as part of the national economic system. This condition was due to some functions on the basis of implementation of the MCE which was still part of the institutional authority and regulation of products outside the construction sector (law construction services) as supporting sector.

This encouraged researcer to propose a comprehensive study to fill the gap related to the implementation of MCE. The purpose to be achieved in this study was to obtain formulation conceptualization MCE implementation in Indonesia, whereas the objectives to be achieved include: (1) to map existing condition supply chain (SC) implementation of MCE in Indonesia; (2) To build a conceptualization of the SC implementation of MCE in Indonesia; (3) To measuring the maturity level of the implementation of the SC implementation of MCE in Indonesia; and (4) to formulate a description of relationship between MCE system implementation SC as part of the implementation of construction (industrial economic activity), and also as a part of the implementation of the Indonesian economy. Methods used to achieve the purpose and objectives was a qualitative approach in the form of a mixture approach of qualitative descriptive analysis, Grounded Theory (GT) and case studies.

The results showed that (1) The scope of implementation MCE direct contact with upstream sector in the 3rd tiers (suppliers of materials and components) and became one of the links in moving MCE on across regulation and authority. (2) Institutional and regulatory aspects governing SC MCE has no implementation of existing and new arrangements of components which were part of the SC (logistics and transport systems). Formal regulation of the national logistic system (presidential regulation) had not power at laws level, whereas the transport systems that were part of the logistics and had its own laws and did not refer to the logistics system. (3) The spirit of establishing the regulation and the formal institutions under the president was not yet exist, so it had not been able to discipline the implementation MCE from upstream to downstream. (4) The formulation of five stages (elementary, structured, visionary, integrated, collaborative) the maturity of the SC as an integral part of the roadmap the government as the organizer of the construction that had a life cycle that could be defined, managed, measured and controlled at all times. (5) Achieving maturity level in Indonesia was different in each region, on a case study of this research was obtained level of SC maturity MCE nationally are at the 2nd stage (44.38%), to Central Java province was at the 2nd stage (49.44%) while for East Nusa Tenggara Province was at the 1st stage (18.7%). (6) Description linkage MCE implementation in Indonesia resulted in conditions which were more mature a SC implementation MCE, the greater a capacity of the construction industry in a region and vice versa, but these conditions were not always followed by the type of MCE market that increasingly competitive (the transition from monopoly to free competition). However, the type of MCE market increasingly led to free competition (the transition from monopoly to free competition) would be followed by the maturity of the SC implementation MCE and followed by the growing strength of a capacity of the construction industry.

Keywords: Construction Industry, Industry Capacity, Materials and Construction Equipment, Maturity, Market Structure, Supply Chain