ABSTRACT

The better development of Infrastructure, politics and world social because of information technology makes BUMN establishes applied information technology for supporting business competitive advantages and transformation. PT Kereta Api Indonesia (Persero) as a BUMN implements SAP for enterprise business transformation. SAP will be a challenge for PT Kereta Api Indonesia (Persero) in its implementation.

In alignment of business and information technology, one of the purposes of applying enterprise architecture is creating an alignment for both business and information technology in need of organization. Enterprise Architecture Implementation will success according how good organization planning and designing enterprise architecture. Designing enterprise architecture needs a complete and understandable methodology.

TOGAF ADM gives a detailed method on how to build, manage and also implement enterprise architecture and information system. The designing architecture in TOGAF ADM has a complete cycle containing Preliminary, Architecture Vision, Business Architecture, Information System Architecture, Technology Architecture, **Opportunities** and Solution, *Implementation* Governance and Architecture Change Management Phase. Mega Suite is an application for designing architecture blueprint. Mega Suite will create catalogs, matrices, and diagrams for each of architecture planning phase. After designing in phase A trough phase C will produce business architecture and data architecture. Application and Technology Architecture designing will create definition blueprint of target application architecture and target technology architecture including roadmap components for a build and development base for implementing SAP at PT Kereta Api Indonesia (Persero).

Key Word : Enterprise Architecture, SAP, TOGAF ADM, Application Architecture, Technology Architecture, PT Kereta Api Indonesia (Persero)