

**ABSTRACT**  
**ENTERPRISE ARCHITECTURE ANALYSIS AND DESIGN USING**  
**TOGAF ADM APPROACH IN RESEARCH AND DEVELOPMENT**  
**FUNCTION**  
**(CASE STUDY : PERUSAHAAN DAERAH AIR MINUM TIRTA**  
**RAHARJA KABUPATEN BANDUNG)**

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Tirta Raharja Regional Water Company is a state-owned company responsible for the distribution of clean water in the Bandung Regency, West Bandung regency, and Cimahi regency that has stood since 1926. Tirta Raharja Regional Water Company has a vision with excellent become the most advanced PDAM and competitive. For the sake of the realization of this vision, Tirta Raharja Regional Water Company must always improve especially in research and development function. Research and development is a function that aims to develop the company's internal capabilities and also conduct research that can support the company's business processes. To improve performance and performance hence required integrated information system as supporting of research and development function. In the design of information systems often do not meet what is required by the company, then before entering into the stage of system development, designing enterprise architecture is required.

The design of enterprise architecture for Tirta Raharja Water Supply Company's information system on research and development function using TOGAF ADM, because it is flexible and iterative, and also can fulfill requirement in enterprise architecture development. In this study will use TOGAF ADM in designing enterprise architecture, namely Preliminary Architecture Vision, Business Architecture, Information System Architecture, Technology Architecture, Opportunities and Solutions and Migration Planning sessions by comparing existing and target conditions. The architectures to be made on the study are data architecture, business architecture, information

system architecture (application architecture and technology architecture), opportunity architecture and solutions, and migration architecture. The output of this research is the blueprint of architecture and IT Roadmap as the basis of integration of IT strategy with business strategy at Tirta Raharja Water Company, where Tirta Raharja Water Supply Company wishes to reform its blueprint and IT roadmap.

Keywords: Research and Development, enterprise architecture, TOGAF ADM, PDAM, information system, IT roadmap