

ABSTRAK

PT PLN Icon Plus Regional Sumbagsel, khususnya divisi *Preventive Maintenance* bertanggung jawab atas pengelolaan dan pemantauan pekerjaan pemeliharaan aset jaringan melalui *Work Order*. Sistem utama ICRM+ telah mendukung proses distribusi pekerjaan dan dokumentasi lapangan, namun dalam pelaksanaannya masih terdapat kendala seperti kesalahan disposisi petugas, keterbatasan perubahan data *Work Order*, hambatan pengunggahan dokumentasi akibat validasi GPS, serta kebutuhan pencatatan ulang melalui *spreadsheet* untuk *Monitoring* dan rekapitulasi pekerjaan. Penelitian ini bertujuan untuk merancang dan membangun Sistem Informasi Manajemen dan Pelaporan Progres *Work Order* berbasis *Web* sebagai sistem pendukung yang dapat membantu proses pencatatan, penjadwalan, disposisi, *Monitoring*, pengunggahan dokumentasi pekerjaan yang terkendala, dan pemeriksaan hasil pekerjaan secara lebih terstruktur. Metode pengembangan sistem yang digunakan adalah *Waterfall*, yang meliputi tahap analisis kebutuhan, perancangan sistem, implementasi, pengujian, dan pemeliharaan. Sistem dibangun dengan hak akses pengguna, yaitu Admin, Pegawai Kantor, Petugas Lapangan, dan Pegawai Mitra. Hasil implementasi menunjukkan bahwa sistem mampu mengelola data asset, mitra, tim, user, *Work Order*, pengunggahan dokumentasi pekerjaan yang terkendala, serta pemeriksaan hasil pekerjaan dalam satu sistem yang terintegrasi. Pengujian menggunakan metode *black-box testing* menunjukkan bahwa fitur utama pada setiap hak akses berjalan sesuai kebutuhan. Dengan demikian, sistem ini dapat mendukung proses kerja berupa pengelolaan *Work Order* agar lebih tertata, terdokumentasi, dan mudah dipantau.

Kata Kunci : *Monitoring*, Sistem Informasi, Preventive Maintenance, *Work Order*, *Waterfall*

ABSTRACT

PT PLN Icon Plus Regional Sumbagsel, specifically the Preventive Maintenance division, is responsible for managing and Monitoring network asset maintenance work through Work Orders. The main ICRM+ system has supported the work distribution process and field documentation, but in its implementation there are still obstacles such as officer disposition errors, limited changes to Work Order data, obstacles in uploading documentation due to GPS validation, and the need for re-recording via spreadsheets for work Monitoring and recapitulation. This study aims to design and build a Web-based Work Order Progress Reporting and Management Information System as a supporting system that can assist the process of recording, scheduling, disposition, Monitoring, uploading work documentation that is constrained, and checking work results in a more structured manner. The system development method used is the Waterfall, which includes the stages of needs analysis, system design, implementation, testing, and maintenance. The system is built with user access rights, namely Admin, Office Staff, Field Staff, and Partner Employees. The implementation results show that the system is able to manage asset data, partners, teams, users, Work Orders, uploading work documentation that is constrained, and checking work results in one integrated system. Black-box testing demonstrated that the key features of each access right functioned as intended. This system can support work processes such as Work Order management, making them more organized, documented, and easily monitored.

Keywords: Monitoring, Information System, Preventive Maintenance, Work Order, Waterfall