Third Laureate Applied Research

Electronics & Computer

▼ **Research Work Title**

CANKASH Solution
(Telecom Network Performance Monitoring System)

Executive Organization

Sciences Green Inc.

Representative

Morteza Elyasi (Ph.D.)

Collaborators

Amir Shahhosseini, Saeid Momen, Reza Kazemzadeh, Saeid Farhadipari, Ali Mousazadeh, Abouzar Ostadi, Shokoufeh Nobahari, Mohammad Salehi, Ali Soleymani, Akbar Fallah, Taha Usefbeiki

Abstract

Cankash solution is used to extract signaling information from mobile telecom network to analyze, diagnose and improve network performance quality.

The system collects subscriber Call Details Record (CDRs) from Mobile telecommunication interfaces in both Probe-based and Probeless environments. Afterwards, CDRs are decoded in probe appliances based on 3GPP and GSMA standards to calculate the Key Performance/Quality Indicators (Counter/KPI/KQI) which are applied to analysis and performance monitoring of mobile networks.

Because of the availability of local experts, it can be customized and expanded at user's request, providing and supporting the operator`s requirements locally.

- Supporting various generations of mobile networks (2G/3G/4G) for improving a network quality independent from the manufacturer of telecommunication vendors
- Applying Big Data/BI solutions to store and analyze information (Over 20 billion transactions a day)
- Access Fail Cause details in xDRs for Activity Analysis Service
- View protocol details of each xDR based on time order (Call Flow Service)
- Awareness of quality problems before customer`s complaints (based on defined Alarming)
- Analyze the quality of Roamers, VIPs and specific locations
- Analysis of the quality of the services which were provided based on the model of handset profiling

The implementation of composite coatings on the floor of a corroded tank Petroleum storage tank after reinforcement by laminated composites