

BICS OnePK/ SDN Customer Experience Testing

Berlin & Madrid, January - April 2015

1 Description of the Customer

BICS (Belgacom International Carrier Services) operates in the telecommunication industry and provides wholesale carrier services to wireline and wireless operator, and service providers globally. BICS provides voice, connectivity and messaging, roaming and mobile financial services to over 700 fixed and wireless carriers and service providers, including more than 400 mobile operators.

BICS' international network includes over 500 direct connections in 160+ countries, capacity on 75 submarine cables with 200 landing points, participation in the Intelsat and Eutelsat satellite systems, and over 300 bilateral agreements with other operators.

<http://www.bics.com>

2 Project Goals

BICS operates an automated business continuity and optimization solution to address the needs for enhanced network connectivity in Africa under the name RouteFlex. RouteFlex provides an intelligent and cost-efficient IP over Satellit (IPoSAT) back-up solution, supported by an SDN (Software Defined Network) which enables BICS customers to configure mission-critical IP data backup across satellite per application.

In preparation for the RouteFlex service launch BICS commissioned EANTC to develop tests to proof the solution design and provide recommendation for testing tools.

3 Course of Action

EANTC created a test plan for the validation of the Traffic Optimization Gateway design and configuration. In a pilot run, EANTC reviewed the solution design and developed a test plan with 29 specific test cases in 4 areas: qualification of the TOG controller, network dynamics, NetFlow and resiliency.

Furthermore BICS asked EANTC to recommend suitable testing tools. EANTC conducted a gap analysis focusing on open source tools and bridged the gap by further developing and modifying the open source testing tool. EANTC delivered the test tools including the modifications to the source code and detailed usage examples for each test case.

4 Customer Benefits

- **Proof of Solution Reliability Due to Tests Developed by an Independent Test Lab**

BICS was able to demonstrate the RouteFlex functionality and performance to its customers following a test plan – developed by an independent test laboratory.

- **Reducing Time to Market**

By off-loading tasks to the experienced EANTC team, BICS engineers were able to focus on the rollout of the solution. Ultimately, this accelerated the deployment of the service and providing BICS with a competitive advantage in this innovative market.

- **Reducing Capex for Test Environment**

EANTC helped BICS to identify a suitable open source tool, avoiding the investment in often costly commercial test equipment. EANTC mitigated the inconveniences of using open source test tools by developing suitable configurations and guiding BICS through the introduction of the test tools.

- **Enabling Efficient Regression Testing**

EANTC created test methodologies and configurations that can be used effectively for regression testing with any new RouteFlex software release, reducing software upgrade risks.