

## **Measurement and Assessment Methodology Introduction**

The success of an e-Diagnostics implementation is dependent upon many consistent and standard communication points between the IC Maker, Supplier, and potential Third Parties. A scorecard or checklist is a tool for clarifying the tasks, roles, and responsibilities that must be defined prior to implementation. At minimum, scorecards focus discussion when the feature item isn't clear. Self-assessment by means of a scorecard will ultimately lead to fewer implementation mistakes and surprises.

## **Background**

The e-Diagnostics Scorecard is available for Level 0 – Access and Remote Collaboration, Level 1 – Collection and Control, and Analysis. Level 0 includes “Remote Connectivity to the tool and Remote Collaboration capabilities, Field service access.” Level 1 includes “Remote Tool Operation, Remote Performance Monitoring, Data Collection and Storage.” Level 2 includes “Automated Reporting and Advanced Analysis with SPC Capability. Predictive Maintenance, Self Diagnostics, and Automated Notification are all part of Level 3. Security is pervasive throughout all checklists.

## **Usage**

Most equipment engineers follow a script or checklist when performing preventive maintenance procedures. Pilots perform a pre-flight checklist. The e-Diagnostics Compliance Scorecard is intended for use in the same manner for the same purpose – agreement on compliance. Feature elements that cannot be answered with a definitive “yes” or “no” become discussion points for resolution between IC Maker, Supplier, and Third-party implementations.

## **Format**

The e-Diagnostics Compliance Scorecard contains 6 areas of readiness:

- e-Diagnostics Level 0, Level 1, Level 2, and Level 3 Capability
- IC Maker Implementation
- Supplier Implementation

All scorecards include Owner, Area of Focus, Compliance Element Code (for reference), Feature Name, and Feature Description. For the purpose of these checklists, OEM means the equipment supplier coupled with the e-Diagnostics solution provider.

## **e-Diagnostics Capability Scorecard**

The Capability scorecard specifically identifies the capability elements of the e-Diagnostics “tool-server” architecture.

The Level 0 Areas of Focus include: Collaboration, File Transfer, Remote Administration, and Sign In (Login). The Level 1 Areas of Focus include Data Collection, Data Security, Remote Equipment Operation, and all the Level 0 capabilities. The Level 2 Areas of Focus include: Data Analysis, Filtering, Performance, Reporting, Data Compression, and all Level 0 and 1 capabilities. Level 3 includes Self-Diagnosis, Decision Logic, Notification, and all Level 0, 1, and 2 capabilities.

Required (must have) and optional (could have) items for Level 0, 1, 2, and 3 compliance are identified as well.

### **IC Maker and Supplier Scorecards**

The IC Maker and Supplier scorecards identify the “owners” of an implementation – IT and Business.

Areas of focus include: Network Administration, System and Product Administration, User Management, Change Control, Information Security Policies and Procedures, Training, Service Level Agreements, Legal, and Operational Procedures.

Areas of shared responsibility are identified where the IC Maker and Supplier must communicate / collaborate on the details of the feature (choice of encryption, authorization, protocols, ...).

### **References**

S. Bradner, Harvard University, “Key words for use in RFCs to Indicate Requirement Levels”, <http://www.ietf.org/rfc/rfc2119.txt>.