

ASIGURAREA CALITĂȚII – QUALITY ASSURANCE

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Quality Management Systems Implementation Based on Quality Function Deployment (QFD)

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Abstract

Quality Function Deployment (QFD) is a management instrument used to transform the client demands into specific parameters and elements for the development team. More often, the voice of the customer [VOC] is not expressed into engineering characteristics, so this method helps creating a new product or improving an old one with a minimum of compromises and increase customer satisfaction. In the first part of this paper, an analytical overview of this method - presenting its advantages and disadvantages - is presented. An example of a step-by-step utilization for implementing a quality management system in a company using WHAT (customer demands) and HOW (technical requirements) lists is developed in the second part of this paper. Based on these lists and their interdependences, an illustrative representation using House of Quality technique was created.

Keywords: Quality, Quality Management, Quality Function Deployment, Quality Management System, House of Quality.

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Testability in the Medical Research Environment

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Abstract

The correctness of the results obtained during the medical research activities represents a big challenge for all laboratories conducting such activities. The capability to carry out accurate measurements is pending on the testability characteristics of the measurement set-up in which the test equipment play a main role. Testability is a design characteristic which allows the status of a unit and the location of any faults within the unit to be confidently determined in a timely fashion. The paper analyzes sets of criteria to provide right testability ability for the measurements in medical research environment and highlights the methodology to ensure an accurate assessment of the results. The intent of the paper is to present proposed criteria in order to assist the medical researchers to evaluate the results without errors due to testing equipment.

Keywords: Medical research, Measurement, Testability, Traceability.

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Audits from Integrity Program of Business Social Compliance Initiative

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Abstract

The paper presents the characteristics of the audits from the Business Social Compliance Initiative Integrity programme and the actions that the participants, business partners, producers and auditing companies have to implement in order to fulfil the requirements of Business Social Compliance Initiative secretariat. First the paper presents the integrity programme purposes and characteristics and its color-coded system to categorize the integrity issues of auditing companies in line with their severity and also its system of scoring the performance of the producers. Then the paper presents the new tool of Business Social Compliance Initiative secretariat to evaluate the ability of the producers to maintain the implementation of Business Social Compliance Initiative code of conduct requirements ie the random unannounced checks and the main issues regarding the maintenance of the implementation of these requirements by the producers. Then the paper presents the conclusions of the witness audit and duplicate audits on the performance of the auditing companies and the main issues of integrity resulted from these audits. Finally the paper draw the conclusion that the implementation of the Business Social Compliance Initiative requirements is not enough to fulfil Business Social Compliance Initiative requirements and that actions have to be taken by the producers to maintain the implementation of the requirements and by the auditing companies to ensure quality of audits and avoid soft grading.

Keywords: audit, business social compliance initiative (BSCI), integrity program, social accountability, random unannounced checks, duplicate audit, witness audit, sustainable development.

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Managementul calității energiei și eficiența energetică

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Abstract

Calitatea energiei electrice furnizată utilizatorilor industriali poate influența în mod considerabil eficiența proceselor industriale. Variațiile de tensiune, variațiile de de frecvență, întreruperile de scurtă și de lungă durată, golurile de tensiune, distorsiunea curbilor de tensiune sau de curent electric precum și nesimetria tensiunilor de alimentare pot conduce la reducerea eficienței energetice a utilizatorilor și, în unele cazuri, chiar la avarii în echipamentele electrice. Sistemul electroenergetic de alimentare nu este o sursă ideală de energie electrică și trebuie cunoscute abaterile care apar, efectele asupra eficienței energetice și nivelul riscului acceptat de către utilizator. În prezent, pentru toate tipurile de perturbații din sistemele electrice de alimentare există soluții eficiente care trebuie cunoscute, analizată posibilitatea tehnică și economică a implementării acestora sau, în caz contrar, cunoașterea și acceptarea riscului determinat de o calitate neadecvată a energiei electrice furnizate. Un management energetic corespunzător poate asigura menținerea, în limitele acceptate, a riscului datorat unui nivel inadecvat al calității energiei electrice.

Keywords: calitatea energiei electrice, eficiența energetică, daune, risc.

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On Design of Resilient Internet Communication Networks

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Abstract

This work analysis approaches on providing resilience of a network using the CAN algorithm and presents the manner in which it can be applied to an internet communications protocol, such as the SIP (Session Initiation Protocol). The design of resilient IP telephony P2P-SIP network is analysed. The architecture provides reliability and scalability, inherent in P2P systems, and, additionally, interoperability with existing SIP infrastructure.

Keywords: Resilience, Security, Internet, Communication networks, Peer-to-peer networks, SIP protocol.

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