



### Communiqué on upcoming changes to the Aerospace Industry Controlled Other Party (ICOP) Scheme

Greetings and our wishes for a prosperous 2009 to all of you. As we embark on this new year, I would like to let you know that DNV Certification North America has decided to focus even closer on the Aviation, Space & Defense Sector. A dedicated group has now been formed to address the needs of this critical and strategic sector, and our President and CEO, Mr. Richard Stolk has asked me to lead this prestigious team.



The goal of this document is to communicate with our Aviation, Space & Defense clients some of the issues surrounding the ICOP Scheme, since they will affect all of us involved in this process. In the true spirit of partnership with our clients, DNV wants to keep you informed of the concerns and countermeasures involving our stakeholders.



We expect to see some significant changes during the 2009-2010 period. The first and most significant one comprises the revision cycle to the Aerospace Quality Management standards: 9100, 9110 and 9120. In addition to that, we will also see a major change in the 9101 document, a supporting standard that will guide and facilitate process based audits against the 3 previously mentioned standards. AS9100 Revision C was released by SAE, earlier in January. The document can be purchased from the SAE website (<http://www.sae.org>). The International Aerospace Quality Group has released a number of support documents to assist organizations in better understanding the expectations surrounding transition to AS9100 Rev. C. Please check the information available at <http://www.iaqg.sae.org/iaqg/organization/requirements.htm>

9110 and 9120 are also in the final stages of balloting and we will see revisions to both documents, probably, during the first quarter of 2009.

AS9100 Rev. C. will bring several changes. Some new requirements will be added, some will be relocated and some will be deleted from the current standard. DNV has been running a number of [free live webinars](#) and [free on demand webinars](#), where we discuss the key changes to the document. We encourage you take advantage of these webinars and keep abreast of the latest developments. The most significant changes to AS9100 are the inclusion of requirements associated with Project and Risk Management. Both items have been added to the AS9100 Standard as an outcome of broadening the scope of the document to include also expectations from the stakeholders in the Space and Defense sectors.

While Project and Risk management are not new challenges for large contractors, time will tell how these issues will be addressed by the less sophisticated, smaller suppliers, such as build-to-print, machine shops, with 10 or fewer employees.

### Changes to the AS9101 document:

Most of you are probably familiar with the 9101 checklist, a document that is mandated as part of the

AS9100 audits conducted by DNV and the other approved certification bodies. Much criticism has been offered to the 9101 checklist, with special emphasis over the concern that the document, in its present form, inhibits a process approach to audits. The IAQG has been listening to the feedback and a decision was made to introduce a major revamping to the 9101 document. Revision D of 9101 will no longer be a checklist, but a separate standard. Audits, conducted under the new 9101 standard, will no longer have a quantified score, either.

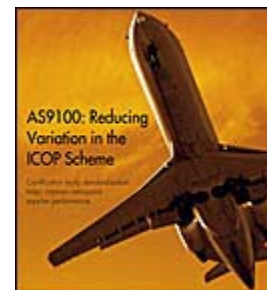
The requirements associated with 9101 will foster increased communication between the audit team leader and the organization being assessed. Information about customer feedback will be used to adequately plan the audits. The revised 9101 document will also require external auditors to make an assessment and document their review about the organization's quality management system's and processes effectiveness. Auditors will no longer focus solely on the organization's degree of conformance to its own command media and customer requirements, but also assess the system for effectiveness in achieving results. That will be a significant shift for some registrants and, also, for some auditors.

Let me add that, according to the proposed IAQG deployment of the new standards, upon release of 9100/9110/9120 & 9101, an auditor training package will be commissioned by the IAQG. It is expected that all certification bodies will have to formally train their auditors, before they are allowed to perform audits and certification to the revised standard. Based on the current status, at best, we don't expect to see the revised AS standards until late Summer, early Fall 2009 at the earliest.

The IAQG, on the other hand, will also require that all organizations certified to the ICOP endorsed Aerospace standards migrate their certificates to the revised documents within 24 months of publication. Certificate upgrades can be performed during surveillance or re-certification audits.

### Improvements to the ICOP Scheme:

The Aviation, Space & Defense stakeholders are committed to ensure that certification to one of the Aerospace QMS standards (AS9100, 9110 & 9120) means something. Organizations that rely on an AS certificate from a supplier want to be able to trust and have confidence in the robustness of the supplier's system in identifying requirements and delivering accordingly. At this stage, there are some concerns over the efficacy of the ICOP scheme in weeding out sub-standard quality systems and under performing suppliers. The IAQG is fostering several initiatives to enhance the confidence associated with AS certificates.



For the most part, the changes will be introduced via the release of the AS9104-1 Standard, Requirements for Aviation, Space, and Defense Quality Management System Certification Programs.

In a nutshell, some of the changes AS9104-1 will bring:

- Revised tables for estimation of audit days
- Refined criteria for multi-site certification
- Enhanced controls for CB to review and approve corrective actions
- Tighter controls on transfer of certificates from a CB to another
- Use of the feedback loops in OASIS as input to audit planning
- Limitations on length of engagement that a lead auditor might have with an organization
- Limitations on instances where a certified organization can request auditor reassignment

On top of all of that, the IAQG is also communicating to all Aerospace registrars about the

[Quality Digest](#) in 2008, soft grading is addressed (see below),

### **Soft grading**

Another aspect under scrutiny is the practice of “soft grading” nonconformities. Soft grading refers to situations when CB auditors have found that a nonconformity exists, but fail to report the finding as a nonconformity and categorize it appropriately. The auditor may rationalize the finding as isolated or document it incorrectly as an opportunity for improvement. AS9104 describes the definition of a nonconformity and the need for adequate categorization as follows:

“3.9 Nonconformity:

“The absence of, or the failure to implement and maintain, one or more quality management system requirements, or a situation that would, on the basis of available objective evidence, raise significant doubt as to the quality of what the organization is supplying.

“Major: The absence of, or total breakdown of a quality management system element specified in the AQMS standard or any nonconformities where the effect is judged to be detrimental to the integrity of the product, processes, or service.

“Minor: A single system failure or lapse in conformance with a procedure relating to the AQMS standard.

“Note: A number of minor nonconformities against one requirement can represent a total breakdown of the system, and this can be considered as a major nonconformity. Any finding (e.g., comments, observations) that equates to the above definition shall be documented as a nonconformity, categorized as major or minor, and dealt with in accordance with 8.3.”

The implications of soft-grading nonconformities are serious. If the finding was only noted as an observation or opportunity for improvement, the organization being assessed would not need to perform effective root cause analysis and implement corrective actions to prevent the recurrence of such nonconformities.

In practical terms, this allows known system deficiencies to linger, with the risk of performance degradation. Soft grading also results in higher audit scores, computed via the AS9101 checklist. Soft grading may also be misused to allow for expedited certification of registrants. Remember that one of the requirements contained in the AS9104 standard states that no certificates shall be issued until corrective action has been accepted and verified for all nonconformities identified in certification and recertification audits.

One might then ask, “Why would some CB auditors soft-grade nonconformities and be

part of this insidious practice?” Once again, a possible answer can be derived from the competitive nature of the certification business. Because CBs are selected and contracted directly by the registrants, they too have to deliver on the “customer satisfaction” expectations of their clients. Some misguided clients apply undue pressure on the CB auditors not to report nonconformities, trying to artificially boost their audit scores and prevent the initiation of corrective action requests, which could be time-consuming and require significant investments to perform root cause analysis and implement fixes. However, both parties promoting and allowing soft grading fail to realize that, by being accomplices in this practice, they are undermining stakeholder confidence in the ICOP process.

It is very important for you to understand that, when one of our auditors finds an isolated instance of non-conformity, s/he is expected to issue you a non-conformity note. You will have to perform an investigation in order to determine if the identified breakdown is indeed the only case of failure, or other instances were found. And, in addition to contain the problem and perform correction, when necessary and justified, full corrective action is needed. We hope our clients understand that this is the expectation of the stakeholders responsible for the rule making associated with the ICOP scheme. Our auditors have been extensively indoctrinated in this and DNV will ensure that none of our auditors could be misperceived as practicing softgrading



On a more positive and final note for this communiqué, the IAQG is also working on creating mechanisms to foster knowledge transfer throughout the aerospace supply chain. One of the tools being currently developed is the Supply Chain Management Handbook. This initiative will allow people to gain access to guidance material, in a variety of subjects that are part of the Aerospace Quality Management Body of Knowledge.

Anybody, registered in the OASIS database (<http://www.sae.org/oasis>) has access to the material. Some of the chapters are still being developed, but the table of contents for the handbook includes:

- Chapter 1 : Sales Master Scheduling & Sequencing (07 Jan 2009)
  - 1.1 Master Scheduling -To Be Developed
  
- Chapter 2 : Contract Requirements Flowdown (01 Oct 2008)
  - 2.1 Requirements and Flowdown
  
- Chapter 3 : Design and Development (07 Jan 2009)
  - 3.1 New Product Introduction -To Be Developed
  
- Chapter 4 : Sourcing Selection & Approval (01 Oct 2008)
  - 4.1 Supplier Selection & Capabilities Assessment
  - 4.2 Supplier Capability Assessment detailed checklists
  
- Chapter 5 : Plant, Material, Skills, Capacity Planning & Scheduling (01 Oct 2008)
  - 5.1 To Be Developed
  
- Chapter 6 : Order Management and Logistics (07 Jan 2009)
  - 6.1 Lean Assessment Tool -To Be Developed
  
- Chapter 7 : Manufacturing and Inspection (07 Jan 2009)

- 7.1 Variation Management of Key Characteristics
- 7.2 First Article inspection FAI 9102 Education Package -To be developed
- 7.3 Foreign Object Debris -To be developed

Chapter 8 : Supplier Operational Management and Product Validation (07 Jan 2009)  
8.1 Supplier Quality Management Basics -To Be Developed

Chapter 9 : Control of Non Conformities, corrective and preventive actions (07 Jan 2009)  
9.1 Root Cause Analysis and Problem Solving  
9.2 Preventive Action -To be developed

Chapter 10 : Customer Support (07 Jan 2009)  
10.1 Counterfeit/Unapproved Part Prevention -To Be Developed

Chapter 11 : Business Processes Performance Management and Customer Satisfaction Monitoring  
(01 Oct 2008)  
11.1 Work Transfer Management

We hope you've found this communiqué informative. This is the first of a series and we will keep you posted. In the meantime, should you have any questions for us, please send us an email at [ContactUs@dnv.com](mailto:ContactUs@dnv.com).

Looking forward to strengthening our partnership,

Respectfully,

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