

PROPOSED DRAFT
(SUBJECT TO WSHWG CONSENSUS)

**Statement of Work for the Wire Systems Harmonization
Working Group**

I. Task Assignment

a. Objective

The Wire Systems Harmonization Working Group (WSHWG) will develop and recommend appropriate changes to Part 25 of the FAR and JARs, and any associated advisory material, related to systems on transport category airplanes. This will be accomplished in accordance with the harmonization tasks given in paragraph (b) of this document. The task statements are those that the Aging Transport Systems Rulemaking Advisory Committee (ATSRAC) has accepted from the FAA (reference FAA Notice FR TBD, 2001).

With a complete understanding of the Task Statement, the WSHWG will aim to achieve fully harmonized regulations and advisory materials. The objective is to develop text, to be adopted by the FAA and JAA that will be identical to the greatest practical extent. In addition, the WSHWG will develop advisory material that is harmonized such that a single compliance demonstration by industry will be acceptable to both FAA and JAA for any particular requirement.

b. Tasking Statements

1. The WSHWG will review the existing FAR 25/ JAR 25 paragraphs, ATSRAC, and ARAC recommendations related to wire systems. Following this review, WSHWG will make recommendations for combining these existing paragraphs and creating a new section covering wire systems. (FAA Task 6.4)
2. The WSHWG will identify requirements for the FAR 25/JAR 25 new wire system rule taking into account known mitigation procedures that will decrease problems due to aging. These requirements will be based on the ATSRAC recommendations contained in the Intrusive Inspection Report, Chapter 7, dated January 2001 (FAA Task 6.5)
3. The will review FAR 25.1309, AC 25.1309-1A, and corresponding JAR-25 material and submit a recommendation on whether particular means of compliance with FAR 25.1309 should be included in the new wire systems rule. (FAA Task 6.6)
4. The WSHWG will review existing FAR 25/JAR 25 requirements for wire separation and determine if a new comprehensive wire separation regulation (in addition to the existing 25.1353 requirement) should be included in the new wire system rule section. (FAA Task 6.7)
5. The WSHWG will examine the need for wire identification and provide a recommendation on effects due to system failure of any particular system whose wire is contained in a given wire bundle. The need for special wire and/or wire bundle identification. This is to be based on airplane level bundle. (FAA Task 6.8)

6. The WSHWG is tasked to provide recommended means of compliance with the requirements established from tasks 1 through 5. Existing advisory material may already provide acceptable means of compliance. If so, the WSHWG is tasked to identify where this guidance exists. This will be accomplished through a review of existing advisory material, guidelines and policies regarding the design and installation of wiring systems, as well as related ARAC recommendations. Based on this review, a recommendation will be made to identify necessary changes considering the aging effects on wiring as noted in the previous recommendations submitted by ATSRAC, and in particular the Intrusive Inspection report. (FAA Task 6.9)

II. Issues

a. Identification and Tracking of Issues

The WSHWG will identify all issues associated with this task. Issues will be tracked by the use of WSHWG meeting minutes. The minutes will document each issue, collect positions from the WSHWG members, identify actions, track developments, and document resolution.

b. Identification of Issues Affecting Other HWG's

The WSHWG will work to establish procedures to coordinate with the ARAC Electrical Systems HWG and the Systems Design and Analysis HWG as those groups are addressing related subjects. In addition the WSHWG will coordinate with the working groups of ATSRAC Task 7, Standards Wire Practices Manual HWG, and Task 9, Enhanced Maintenance Practices for Systems HWG, and others as appropriate. (FAA Tasks 6.2 & 6.3)

III. Assignment of Tasks

In the process of addressing issues, the WSHWG will form a Task Group to handle a specific issue. The Task Group must work via e-mail (or face-to-face meetings if desired) on their individual tasks and provide reports for the plenary meetings of the Working Group. A Task Group is disbanded when all of its assignments are completed.

The WSHWG may request ATSRAC assignment of tasks to existing working groups if necessary. The WSHWG will identify to ATSRAC the need for additional new working groups when existing groups do not have the appropriate expertise to address certain issues.

VI. Work Methods

The Wire Systems Harmonization Working Group will comply with the procedures adopted by ATSRAC (Operating Procedures for the Aging Transport Systems Rulemaking Advisory Committee, February 2000 Revision). As part of the procedures, the working group is expected to:

1. Recommend a Work Plan for completion of the tasks, including the rationale supporting such a plan, for ATSRAC consideration, after the first meeting of the WSHWG.

2. Give a conceptual presentation of the proposed recommendations, prior to proceeding with the work stated in item 3 below.
3. Draft appropriate regulatory material with supporting economic and other required analyses, and/or any other related guidance material or collateral documents the working group determines to be appropriate; or, if new or revised requirements or compliance methods are not recommended, a draft report stating the rationale for not making such recommendations
4. Provide a WSHWG status report at each meeting of ATSRAC held.

The following items describe the WSHWG work methods:

1. The WSHWG will be co-chaired by European and United States Industry members (Jean-Luc Ballenghien - Airbus and Vidmantas Variakojis - Boeing).
2. The role of Secretary for the WSHWG will be a permanent assignment for the duration of this group. It is customary for the FAA representative to provide this service.
3. FAA and JAA will each provide a designated representative to the WSHWG (Steve Slotte -- FAA and TBD - JAA)
4. The WSHWG meetings shall alternate between Europe and the United States to the greatest practical extent.
5. The WSHWG shall coordinate its activities with other groups (e.g. with ARINC ESHWG). Where possible, this will be accomplished by holding concurrent meetings or by cross-membership of WSHWG members in other groups or vice-versa.
6. The Co-chairmen will rely on the industry organizations and regulatory agencies to provide appropriate specialists to support the harmonization process and to conduct the dissemination of information within their organizations (e.g. Draft Rule Material, Draft Advisory Material, etc.). The organizations should also assume the responsibility for ensuring the development of their member's position and providing that information to the designated person for inclusion in the Meeting Minutes.
7. The WSHWG will form Task Groups for the tasks above. The Task Groups will work (via e-mail, telecons, faxes, etc) on their assigned task(s) and bring the material to the WSHWG plenary meetings for discussion and acceptance.
8. The WSHWG shall function as a Working Group under the ATSRAC Charter.
9. The Co-chairmen shall make periodic progress reports to ATSRAC
10. The FAA Designated Representative shall assist the United States Co-chairman in preparing material in a form for submittal to ATSRAC for transmittal to the FAA for NPRM action.
11. The JAA designated member shall be responsible for coordination with relevant JAA Study Groups, Steering Groups and Committees, and for progressing NPA material with the JAA Secretariat.

VI. Membership

The members of the WSHWG will be drawn primarily from individuals representing the Regulatory Authorities and various Industry Associations. The WSHWG will be supplemented with additional technical experts as necessary.

Organization	Nominations
FAA	Steve Slotte (Designated FAA Representative)
JAA	TBD
INDUSTRY	Jean-Luc Ballenghien (Co-chair Europe) Ashok Bhattacharya Issa Ghoreishi Vidmantas Variakojis (Co-chair, US) Others TBD

VII. Schedule

Meeting schedule

WSHWG	Tasks	Dates
#1 – Long Beach	Statement of Work/Work Plan Identify Issues/Schedule Form Task Groups & Assignments	June, 2001
#2 - Europe	Work the Issues Start Draft Material for FAR/JAR; AC/ACJ	August, 2001
#3 – USA	Work FAR/JAR Material	November, 2001
#4 -- Europe	Technical Agreement on FAR/JAR Material (The Rule) Work on AC/ACJ	January, 2002
#5 – USA	Continue AC/ACJ Start on Final ATSRAC Report	April, 2002
#6 – Europe	Finalize AC/ACJ Material Finalize ATSRAC Report	July, 2002

WSHWG Detail Schedule

TBD by the group.