



NDIA C4 vs PDF Tasking/Recommendation

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Tasking Requested Recommendation

- **AUTOMATIC TEST SYSTEMS EXECUTIVE DIRECTORATE**

- NAVAIRSYSCOM PMA-260
- 47123 Buse Rd, #IPT
- Patuxent River, MD 20670-1547

- From: DoD ATS Executive Directorate

- To: Chairman, National Defense Industrial Association Automatic Testing Committee

- Subj: Request for Recommendations Relative to Changing Operational Test Program Set (OTPS) Technical Data Package (TDP) File Formats

- 1. The Navy is considering a change in format of OTPS (TDP) JEDMICS files from C4 Compressed Raster Image File format to Adobe Portable Document File (PDF) format.
- 2. Current requirements call for submission of the final complete OTPS TDP on CD-ROM as MIL-PRF-28002 JEDMICS C4 Compressed Raster Image Files using the JEDMICS Compact Disk Data Exchange (CDEX) specification. A recommendation has been made to change the requirement to submission of the final complete TDP on CD-ROM in PDF format.
- 3. It is requested that the NDIA ATC review this potential change and provide a recommendation to the DoD ATS Executive Directorate relative to positive or negative cost, technical or schedule impact to the TPS development process.
- 4. Please direct questions to the undersigned at (301) 757-6907 (e-mail william.ross@navy.mil) or to Ed Holland at (609) 304-3251 (e-mail: eholland@tamimail.com).

W. A. ROSS
Assistant Director

Approach via Analysis & Pole

- Questionnaire was used to Pole
 - Sent to 12 organizations which perform TPS development
 - Government Sites (multiple orgs)
 - Industry
- Pro's and Con's were reviewed
- Both were utilized to provide recommendation

Form

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- TPS Developer Questionnaire
- Change Statement for Consideration:
- **The current requirement is to deliver the Technical Data Package in two formats. One is the native files of the drawing package software (i.e. Pro E, Solid Works) and the other is in a C4 format for use in JEDMICS.**
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- **A change is being considered that would require delivery in Portable Document Format (PDF) in lieu of the C4 files. The native files would still be required.**
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- *Questions:*
- *Positive Impact*
- *Negative Impact*
- *No Anticipated Impact*
- Would this change impact TPS development costs?

- Would this change cause technical or schedule impacts to the TPS development process?
- If so, please explain reasoning and extent of the impacts below:
- Comments:

- Cost:
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- Technical / Schedule:

Responses to Pole Questionnaire

- Sent to 12 organizations which perform TPS development with 7 responses
 - AF
 - Navy
 - Marine Corp
 - Boeing
 - DRS
 - DME
 - IEEE
- All responses were positive (no negatives)

General Comment Summary

- Adobe reader widely available
 - C4 formatting requires unique viewer
- PDF is an acceptable format for JEDMICS
- PDF currently delivered in most cases
- PDF files can be searched
- PDF files are easy to scan into an image

Cost Findings

- “widespread use of PDF”
- Free converters are available as are low-cost commercial products.”
- “Minimal development impacts will equate to minimal cost impacts” vs C4
- “The positive impact is the ease of use of known PDF converters compared to”C4” lower manhours

Technical/Schedule Findings

- “Generally speaking, the ease of use should prove beneficial”
- “PDF document”“retains an ability to be “searched””
- Tools available to yield indexed PDF files
- “positive Development schedule impact”
- “Adobe’s Illustrator applications” would be even better
- “directly imported in to Technical Order”

Cost, Technical & Schedule

RECOMMEDATION:

- The JEDMICS C4 is not as capable or generally accepted as PDF. Our analysis and pole results unanimously indicated that PDF would be more beneficial in cost, technical attributes and schedule. We recommend that C4 requirements be replaced with PDF.