

SAF-E195-84 28 JUN 1984

MEMORANDUM FOR: Director of Data Processing	
FROM: Director, Consolidated SAFE Project Office, ODE	STAT P
SUBJECT: A. D. Little, Inc. SAFE Evaluation Presentation	n ·
The results of the recent evaluation of the SAFE Project by	у
A.D. Little, Inc. were presented in a briefing on 15 June 1984	
by The briefing was given to senior CIA and	d
DIA managers. A copy of the presentation is attached for your	
information.	
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1. OBSERVATIONS AND IMPLICATIONS

1.1 USER REACTIONS

- GENERAL SATISFACTION WITH MAIL/TEXT FUNCTION GROUP
 - DIFFICULTY MASTERING ALL CAPABILITIES
 - VARIOUS IDEAS FOR ENHANCEMENTS
- Desires for new services diverse
 - DIFFERENT WORD PROCESSING, CMS TOOLS
 - MORE INTEREST IN COMMUNICATIONS SCOPE AND INTERFACES THAN FUNCTIONS
- DIA USERS FRUSTRATED WITH "SEEDING" APPROACH
 - NEED FOR ROUTING, SHARING, HELPING
- MANAGERS USING SAFE VERY LITTLE

REVIEW OF PROJECT SAFE

By ARTHUR D. LITTLE, Inc. 15 June, 1984

- 1. OBSERVATIONS AND IMPLICATIONS
 - 1.1 USER REACTIONS
 - 1.2 SUL vs. AIM
 - 1.3 CONTRACTOR ROLES
 - 1.4 RELEASE SCHEDULES
 - 1.5 SCHEDULE REALISM
 - 1.6 DEGREE OF SOFTWARE UNIQUENESS
- 2. OVERALL RECOMMENDATIONS
 - 2.1 FUTURE SAFE
 - 2.2 PROJECT PERFORMANCE Vs. ORIGINAL GOALS
 - 2.3 ORGANIZATION CHANGES

- MORE EMPHASIS ON RATE OF TERMINAL INSTALLATION,
 LESS ON NEW FEATURES*
 - BUT D2, 3, 4 CANNOT BE DELAYED FURTHER. MAYBE D5 CAN.
 - DIA INSTALLATION RATE SHOULD BE ACCELERATED, IF POSSIBLE.
 - TRAINING SHOULD BE MORE MODULAR WITH SELF-TEACHERS AND BUDDY SYSTEM.
- FUTURE PLANS SHOULD BECOME MORE RESPONSIVE TO USAGE THAN TO A PRIORI DESIGNS.

^{*}REPEAT FROM EARLIER REPORT.

1.2 SUL Vs. AIM

- AIM "LANGUAGE" HAS APPROACHED UIRS BK. 1.
- AIM ARCHITECTURE BEING RE-BUILT FOR FLEXIBILITY, THROUGHPUT.
- D2-3 NOW MAJOR EVOLUTIONARY STEP FROM AIM RATHER THAN ALL NEW: BETTER UNDERSTOOD.
- OMISSIONS FROM SUL ARE UNIMPORTANT (AND INTERFACE IS SIMPLER).

IMPLICATIONS

- D2-3 OUGHT TO WORK; SHOULD MEET USER NEEDS WELL; SHOULD BE CONSIDERED FIRST RELEASE OF BASIC OR CORE SAFE.

But

- WILL BE FIRST REAL CHALLENGE TO SOFTWARE INTEGRATION, QA AS SUCH, DOCUMENTATION. (ALL OF THESE LOOK OK, BUT ARE NOT PROVED YET.)
- PERFORMANCE LIMITATIONS ARE UNKNOWN (MODELLING HAS NOT BEEN DONE AND SHOULD BE.*

^{*}REPEAT FROM EARLIER REPORT.

1.3 CONTRACTOR ROLES

- QA CONTRACTOR NOW PERFORMING PROJECT MANAGEMENT OK
 - MORE TECHNICAL INVOLVEMENT DESIRABLE
- DEVELOPMENT CONTRACTORS SEEM TO BE OK
 - OUR REVIEW VERY LIMITED, BUT FEELS REASONABLE
- CSPO HAS OVERMANAGED (E.G., DOCUMENTATION STANDARD), BUT
 - BETTER NOW
 - DIA NEEDS SPECIFICITY
 - PROJECT CREDIBILITY REQUIRES COMPLETENESS

- No changes in roles or reporting relationships, except
 - QA BECOME MORE TECHNICAL
 - SOMEBODY DO PREDICTIVE PERFORMANCE MODELLING
- CAN ANY CONTRACTOR TAKE OVER CORE SAFE AS A PRODUCT? (We Doubt IT.)

1.4 RELEASE SCHEDULES

- SPECS FOR D2-3 NOW CLEAR AND BOUNDED.
- DIA-CRITICAL REQUIREMENTS FOR D4 NOW CLEAR AND BOUNDED, BUT SOME LOOSE ENDS REMAIN (RELATED TO CONTENT AND SEQUENCE OF D5).
- D5 NOT PRECISELY DEFINED, BUT CONSISTS MAINLY OF ENHANCEMENTS TO CORE SAFE.

- D4 SHOULD BE FIRMED UP INDEPENDENT OF D5, WITH PRIORITY FOR RESOURCES.
- D5 SHOULD BE VIEWED AS HAVING TWO PARTS:
 - AN EVOLUTIONARY ADDITION TO CORE SAFE (A NEW RELEASE).
 - A SET OF CIA-SPECIFIC ADDITIONS AND INTERFACES.
 - THESE CAN BE SCHEDULED INDEPENDENTLY.

1.5 SCHEDULE REALISM

- D2. 3 & 4 TASKS APPEAR FEASIBLE (INCLUDING 204 MODIFICATIONS).
- CONTRACTORS APPEAR TO BE ON SCHEDULE (ON SURFACE).
- SYSTEM TEST ALLOWANCES SEEM CONSERVATIVE.
- IDB is in good shape conceptually.
- Dodiis will have a NFE/MVS/204 module.

IMPLICATIONS

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- If release priorities are followed as recommended,
 D2, D3, AND D4 OPTION B DATES SHOULD BE MET.
- 10/86 SHUTDOWN OF DIALOS FEASIBLE.
 - NFE/MVS CONTINGENCY PLAN ADVISABLE.

1.6 DEGREE OF SOFTWARE UNIQUENESS

- ABOUT AS NON-STANDARD AS IN FIRST REVIEW
 - AIM, SUL EQUALLY UNIQUE
 - INQUIRE MORE STANDARD, 204 LESS SO
- SAFE CORE WILL NOT BE OVERTAKEN BY COMMERCIAL PRODUCT FOR AT LEAST FIVE YEARS
 - ELECTRONIC MAIL MARKET EVOLVING SLOWLY
 - PC USER STATE MACHINE CONCEIVABLE

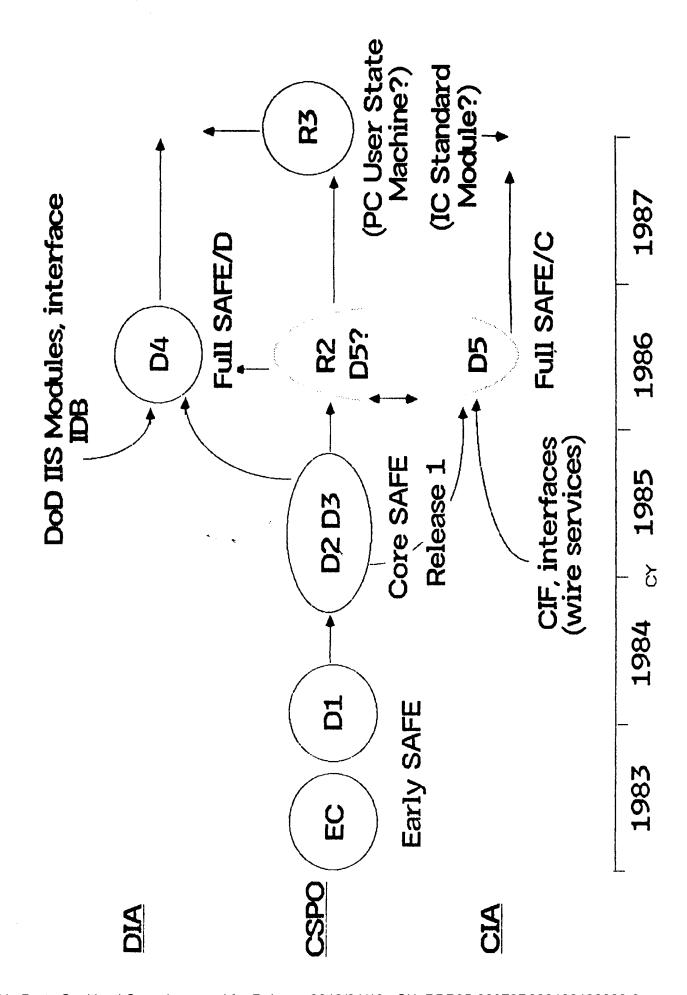
- CIA RESOURCES WILL HAVE TO PROVIDE SUPPORT FOR CORE SAFE FOR AT LEAST FIVE YEARS, UNLESS
 - CONTRACTOR CAN TAKE IT OVER (UNLIKELY), OR .
 - DIA DUPLICATES CIA CAPABILITY AND SUPPORT SPLITS (WASTEFUL, UNNECESSARY)
- STANDARDIZE TO IC, DOD SPECS IF MORE APPROPRIATE THAN COMMERCIAL ONES (AS LONG AS EXISTING COMMERCIAL SOFTWARE REMAINS STANDARD). IF THIS HAPPENS, CORE SUPPORT MIGHT BE MOVED.

2.1 FUTURE SAFE

- 1. FUTURE OF CORE SAFE SHOULD BE IN FORM OF EVOLUTIONARY RELEASE PACKAGES (ANNUALLY?)
 - D2-3 PROGRAM AND USER INTERFACE STANDARDS SHOULD BE DESIGNED TO ACCOMMODATE EVOLUTION
 - "MARKET-ORIENTED" APPROACH DESIRABLE AFTER D4
 - MORE CONTRACTUAL EMPHASIS ON SUPPORT AND EVOLUTION VS. NEW DEVELOPMENTS
 - DEVELOPMENT AND CONFIGURATION CONTROL SHOULD BE STREAMLINED

- 2. AGENCIES SHOULD TAKE RESPONSIBILITY FOR THEIR ADDITIONS TO CORE SAFE.
 - DIA TAKE RESPONSIBILITY AFTER D4 (EARLIER FOR DODIIS INTEROPERATION). SHOULD BE FEASIBLE. IF CSPO PEOPLE RETURN.
 - CIA TAKE RESPONSIBILITY FOR D5 AFTER D2 (UNLESS D5 IS PART OF CORE SAFE: APPEARS TO BE EXCEPT FOR INTER- FACES).
 - CORE SAFE GROUP RETAIN RESPONSIBILITY FOR CORE.
 - -- MAY INVOLVE ARCHITECTURE CHANGE TO USE OF PERSONAL COMPUTER FOR USER STATE MACHINE.
 - -- MAY BECOME IC STANDARD FOR CIRS.
 - -- MAY PHASE OUT IN FAVOR OF COMMERCIAL PRODUCT.

FUTURE SAFE



2.2 PROJECT PERFORMANCE Vs. ORIGINAL GOALS

(REF. PROJECT SAFE REPORT TO CONGRESS 23 SEPT. 1982)

- SAFE WAS TO BE COMPLETE IN FY 1987 FOR \$192 MILLION ADDITIONAL.
- 1. ITS FUNCTIONS WILL BE SOMEWHAT DIFFERENT
 - FEWER FEATURES;
 - MORE INTERFACES.
- 2. IT WILL CONTINUE EVOLVING.
- 3. SUBJECT TO THESE PROVISOS, IT WILL BE "COMPLETE."
- 4. \$192 MILLION SHOULD BE ENOUGH:
 - UNLESS MAJOR UNFORESEEN COMPUTER POWER ADDITIONS NEEDED (SHOULD BE OFFSET BY PRICE DECLINES).

2.3 ORGANIZATION CHANGES

- 1. NEAR TERM
 - CSPO QA BECOME MOSTLY DIA.
 - SYSTEM DEVELOPMENT, SYSTEM ENGINEERING,
 OPERATIONS SUPPORT ASSIGN AGENCY PERSONNEL BY
 DELIVERY (D2 & 5 CIA PEOPLE, D3 & 4 DIA PEOPLE).
 - D2-D5 TEAM PREPARE TO BECOME SUPPORT GROUP FOR CORE.
- 2. AFTER D4 DELIVERY (BY END 1986)
 - CSPO DISSOLVE. QA & D3-4 TEAM RETURN TO DIA, D2-5 TEAM RETURN TO CIA.
 - D2-5 TEAM CONTINUE AS MARKET-ORIENTED CORE SAFE EVOLUTION GROUP WITHIN CIA (AT LEAST INITIALLY).
 - SINGLE BOARD REPRESENTS CUSTOMERS, PROVIDES FUNDS.