

26 SEP 1983



PROJECT STATUS AND DEVELOPMENT APPROACH

- 0 CHRONOLOGY OF EVENTS:
 - 0 PROJECT RE-DIRECTION - SUMMER 1982
 - 0 DATA BASE MANAGEMENT STUDY - FALL 1982
 - 0 SYSTEM DESIGN REVIEW - FEB. 1983
 - 0 SAFE EARLY CAPABILITY DEVELOPMENT AND IMPLEMENTATION - WINTER 1982 AND SPRING 1983
 - 0 TECHNICAL RE-DIRECTION CONFIRMATION - APRIL 1983
 - 0 PARALLEL ACTIVITIES - SUMMER 1983
 - SYSTEM DESIGN UPDATE
 - SYSTEM DESIGN DOCUMENT
 - HARDWARE CONFIGURATION DOCUMENT
 - DELIVERY 2 REQUIREMENTS TRACEABILITY MATRIX
 - DELIVERY 1 DESIGN AND IMPLEMENTATION
 - DELIVERY 2 PRELIMINARY DESIGN
 - DELIVERY 3 PRELIMINARY DESIGN



PROJECT STATUS AND DEVELOPMENT APPROACH

RE-DIRECTION APPROACH

- 0 MINIMIZE SOFTWARE DEVELOPMENT BY TAKING ADVANTAGE OF:
 - 0 EXISTING AND AVAILABLE EXPERTISE
 - IBM MVS AND VM OPERATING SYSTEMS
 - 0 EXISTING SOFTWARE WITH AUGMENTATIONS
 - INQUIRE AND M-204 DATA BASE MANAGEMENT SYSTEMS
 - AUTOMATIC INFORMATION MANAGEMENT (AIM) SYSTEM
 - MESSAGE PROCESSING SYSTEM (MPS)
 - HOST BASED WORD PROCESSING (HBWP)
 - SAFE EARLY CAPABILITY SYSTEM EXTERNAL INTERFACES
 - CIA DATA EXCHANGE (DATEX) COMMUNICATION FACILITY
 - DIA PENTAGON CONSOLIDATED TELECOMMUNICATION SYSTEM (PCTCS)
 - DIA DEFENSE SPECIAL SECURITY COMMUNICATIONS SYSTEM (DSSCS)



PROJECT STATUS AND DEVELOPMENT APPROACH

RE-DIRECTION APPROACH (CONT.)

- 0 INCLUDE QUALITY ASSURANCE CONTRACTOR TO:
 - 0 OBTAIN AN INDEPENDENT AND OBJECTIVE PROJECT PERSPECTIVE
 - 0 PROVIDE ASSISTANCE IN:
 - VERIFICATION AND VALIDATION ACTIVITIES
 - CONFIGURATION MANAGEMENT ACTIVITIES



PROJECT STATUS AND DEVELOPMENT APPROACH

SAFE PROJECT PLAN OVERVIEW

- 0 BASED ON TECHNICAL FEASIBILITY DEVELOPMENT APPROACH
 - 0 CONTINUE EARLY CAPABILITY APPROACH
 - 0 PERMIT EARLY INTRODUCTION TO DIA CONVERSION ACTIVITY
 - 0 FACILITATE ENHANCEMENTS TO EARLY CAPABILITY SYSTEMS
 - 0 INCLUDE DELIVERIES AS BRIDGE TO INTEGRATED SYSTEM
 - 0 MAINTAIN INTEGRATED DEVELOPMENT APPROACH



PROJECT STATUS AND DEVELOPMENT APPROACH

SDR SYSTEM DESIGN MODIFICATIONS

- 0 NO SYSTEM PRELIMINARY DESIGN BECAUSE OF TIME CONSTRAINTS
- 0 IMPLEMENT SYSTEM INCREMENTALLY AS DELIVERIES
- 0 ALLOCATE ALL REQUIREMENTS TO:
 - 0 COMPUTER PROGRAM CONFIGURATION ITEMS (CPCIs)
 - 0 COMPUTER PROGRAM COMPONENTS (CPCs)
 - 0 DELIVERIES
- 0 FOLLOW FORMAL DEVELOPMENT PROCEDURES FOR EACH DELIVERY
 - 0 PRELIMINARY DESIGN REVIEWS (PDRs)
 - 0 CRITICAL DESIGN REVIEWS (CDRs)
 - 0 PRELIMINARY QUALIFICATION TESTS (PQTs)
 - 0 FINAL QUALIFICATION TEST (FQT)
 - 0 SYSTEM TEST
 - 0 ACCEPTANCE TEST
 - 0 OPERATIONAL EVALUATION PHASE



PROJECT STATUS AND DEVELOPMENT APPROACH

SYSTEM DESIGN MODIFICATIONS

- 0 TAKE ADVANTAGE OF :
 - o EXISTING SEC SOFTWARE COMPONENTS
 - AUTOMATED INFORMATION MANAGEMENT (AIM)
 - MESSAGE PROCESSING SYSTEM (MPS)
 - HOST BASE WORK PROCESSING
 - o ADDITIONAL EXISTING CAPABILITIES
 - AIM IMPORT/EXPORT
 - IBM 3088 CTC
 - INQUIRE TEXT STREAMING
- 0 REDUCE VM DEVELOPERS DEPENDENCIES
- 0 EMPLOY DISTRIBUTED VICE CENTRALIZED RECOVERY
 - EXISTING PRODUCTS' RECOVERY FACILITIES
 - DUAL WRITE OF IMPORTANT DATA FILES (MAP JOURNAL AND DAP INQUIRE RECOVERY FILES)



PROJECT STATUS AND DEVELOPMENT APPROACH

SYSTEM DESIGN DOCUMENTATION CHANGES
SYSTEM DESIGN DOCUMENT (SDD)
HARDWARE CONFIGURATION DOCUMENT

- 0 MAIN BODY - OVERALL SYSTEM DESIGN
- 0 APPENDICES - ONE PER DELIVERY
- 0 CURRENT STATUS:
 - o FINAL STAGES OF REVIEW
 - o BASELINED AT PDRS



PROJECT STATUS AND DEVELOPMENT APPROACH

SYSTEM DEVELOPMENT SCHEDULE

DELIVERY 1

SAFE-C (SEPT - NOV 1983) SAFE-D (SEPT - DEC 1983)

- 0 NEW DISSEMINATION ALGORITHM - CRW
- 0 INQUIRE DATA BASE MANAGEMENT SYSTEM PROTOTYPE - INFODATA
- 0 MODEL 204 DATA BASE MANAGEMENT SYSTEM - TRW/CCA
- 0 USER POPULATION - 300/150



PROJECT STATUS AND DEVELOPMENT APPROACH

SYSTEM DEVELOPMENT SCHEDULE (CONT.)

DELIVERY 2

SAFE-C (NOV 1984)

- 0 SINGLE USER LOG-ON - CRW
- 0 DOCUMENT AND SYSTEM CATALOG FILES IN INQUIRE DBMS - INFODATA
- 0 INITIAL INTEGRATION OF AIM AND MAIL FUNCTIONS - CRW & ODP
- 0 INTRODUCTION OF SAFE USER LANGUAGE COMMANDS AND BASIC SCREEN CONFIGURATIONS - CRW
- 0 INTER-MACHINE (MVS-VM) COMMUNICATIONS - ODP
- 0 USER POPULATION - 500/250



PROJECT STATUS AND DEVELOPMENT APPROACH

SYSTEM DEVELOPMENT SCHEDULE (CONT.)

DELIVERY 3

SAFE-D (MAR 1985)

- 0 ALL FUNCTIONS INCLUDED IN DELIVERY 2
- 0 SECOND PASS DISSEMINATION, CRD AND HUMINT FILE
CONVERSION - CRW & TRW
- 0 PROTOTYPE DODIIS NETWORK FRONT-END - TRW
- 0 SIMPLE INDEX FILES IN INQUIRE DBMS - INFODATA & CRW

SAFE-C (MAR 1985)

- 0 SIMPLE INDEX FILES IN INQUIRE DBMS - INFODATA & CRW



PROJECT STATUS AND DEVELOPMENT APPROACH

SYSTEM DEVELOPMENT SCHEDULE (CONT.)

DELIVERY 4

SAFE-D (AUG 1985)

- 0 AIF, DIOBS AND ELINT FILE CONVERSIONS - TRW
- 0 OPERATIONAL INTERFACE TO DODIIS - TRW
- 0 USER INTERFACE ENHANCEMENTS INCLUDING MODEL 204 DBMS
INTERFACE - CRW & TRW
- 0 BATCH PROCESSING SUPPORT - TRW
- 0 COLLATERAL PRODUCTION - TRW



PROJECT STATUS AND DEVELOPMENT APPROACH

SYSTEM DEVELOPMENT SCHEDULE (CONT.)

DELIVERY 5

SAFE-C (DEC 1985)

- 0 USER INTERFACE ENHANCEMENTS FROM DELIVERY 4 AND ENHANCEMENTS TO SUPPORT SYNCHRONOUS TERMINAL ACTIVITIES - CRW
- 0 CENTRAL INDEX FILE AND RELATED PRODUCTS IN INQUIRE DBMS - INFODATA, TRW & CRW
- 0 USER POPULATION - 1000/500

SAFE-D (FEB 1986)

- 0 USER INTERFACE ENHANCEMENTS TO SUPPORT SYNCHRONOUS TERMINAL ACTIVITIES - CRW
- 0 USER POPULATION - 1000/500



PROJECT STATUS AND DEVELOPMENT APPROACH

SYSTEM DEVELOPMENT SCHEDULE (CONT.)

- 0 CURRENTLY 5 DELIVERY PRELIMINARY DESIGNS UNDERWAY
- 0 SUBSEQUENT DELIVERIES WILL :
 - 0 SATISFY REMAINING REQUIREMENTS
 - 0 FACILITATE USER FEEDBACK



SAFE REQUIREMENTS BASELINE

- 0 SYSTEM REQUIREMENTS SPECIFICATION (SRS)
- 0 CONVERSION REQUIREMENTS SPECIFICATION (SAFE-C CRS)
- 0 CONVERSION REQUIREMENTS SPECIFICATION (SAFE-D CRS)
- 0 EXTERNAL INTERFACE SPECIFICATION (SAFE-C IFS)
- 0 EXTERNAL INTERFACE SPECIFICATION (SAFE-D IFS)
- 0 USER INTERFACE REQUIREMENTS SPECIFICATION (UIRS)



PROJECT STATUS AND DEVELOPMENT APPROACH

DELIVERY REQUIREMENTS ALLOCATION METHODOLOGY

- 0 ALLOCATE HIGH LEVEL FUNCTIONAL REQUIREMENTS
- 0 DOCUMENT ALLOCATION IN DELIVERY RTM
- 0 VALIDATE RTM
- 0 VERIFY DEVELOPERS' DESIGN



REQUIREMENTS MANAGEMENT

- 0 REQUIREMENTS CHANGES ARE HANDLED VIA FORMAL CONFIGURATION MANAGEMENT PROCEDURES
- 0 UPDATE PROCESS ALLOWS CHANGES RESULTING FROM:
 - 0 VALIDATION OF USER INTERFACE THROUGH PROTOTYPING
 - 0 LESSONS LEARNED FROM EARLIER CAPABILITY RELEASES
 - 0 NEW USER NEEDS



SYSTEM CAPABILITY DESCRIPTION

FUNCTIONAL CAPABILITIES

- 0 MESSAGE PROCESSING
- 0 DATA BASE MAINTENANCE/RETRIEVAL
- 0 BATCH PROCESSING
- 0 ON-LINE PROGRAMMING
- 0 REPORT GENERATION
- 0 ANALYST-TO-ANALYST COMMUNICATION
- 0 EXTERNAL LINKS
 - DIA UNIQUE
 - CIA UNIQUE



SYSTEM CAPABILITY DESCRIPTION

FUNCTIONAL CAPABILITIES (CONT.)

- 0 SAFE USER LANGUAGE
- 0 DATA BASE CONVERSION
- 0 TEXT COMPOSITION
- 0 STRUCTURED FILE REPORT GENERATION
- 0 USER POPULATION: 1000/500



SYSTEM CAPABILITY DESCRIPTION

SAFE DATA BASES

0 MAJOR SYSTEM DATA BASES

- DOCUMENT FILES
- STRUCTURED FILES

0 MAJOR USER DATA BASES

- PRIVATE FILES

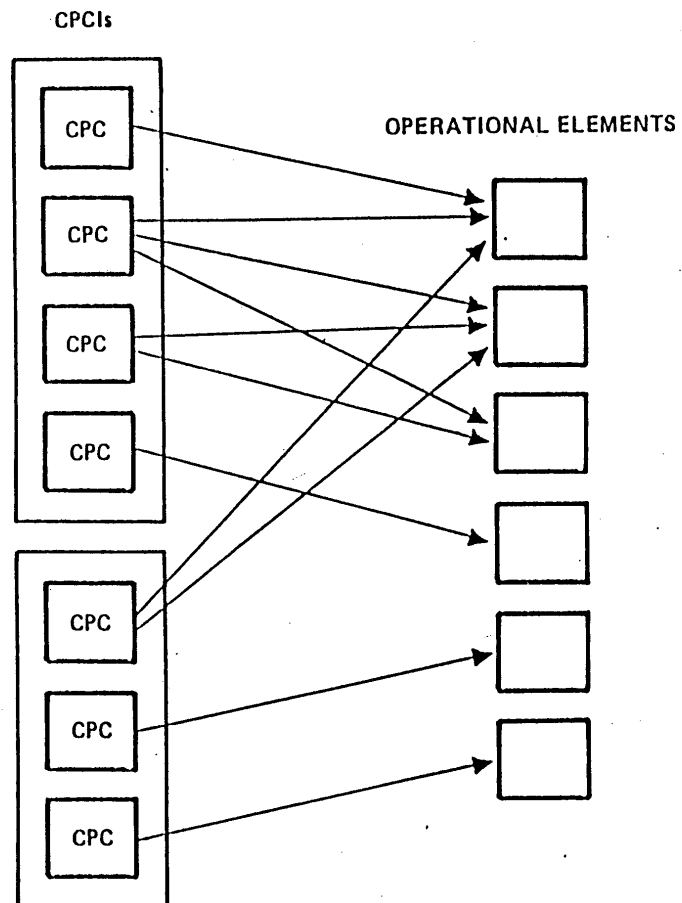


REQUIREMENTS ALLOCATION

- 0 SYSTEM-LEVEL REQUIREMENTS HAVE BEEN DECOMPOSED AND ALLOCATED TO ELEVEN COMPUTER PROGRAM CONFIGURATION ITEMS
- 0 CPCI SPECIFICATIONS ARE THE TECHNICAL ALLOCATIONS OF DEVELOPMENT ACTIVITIES
- 0 REQUIREMENTS TRACEABILITY ENSURES COMPLETE COVERAGE OF SYSTEM REQUIREMENTS

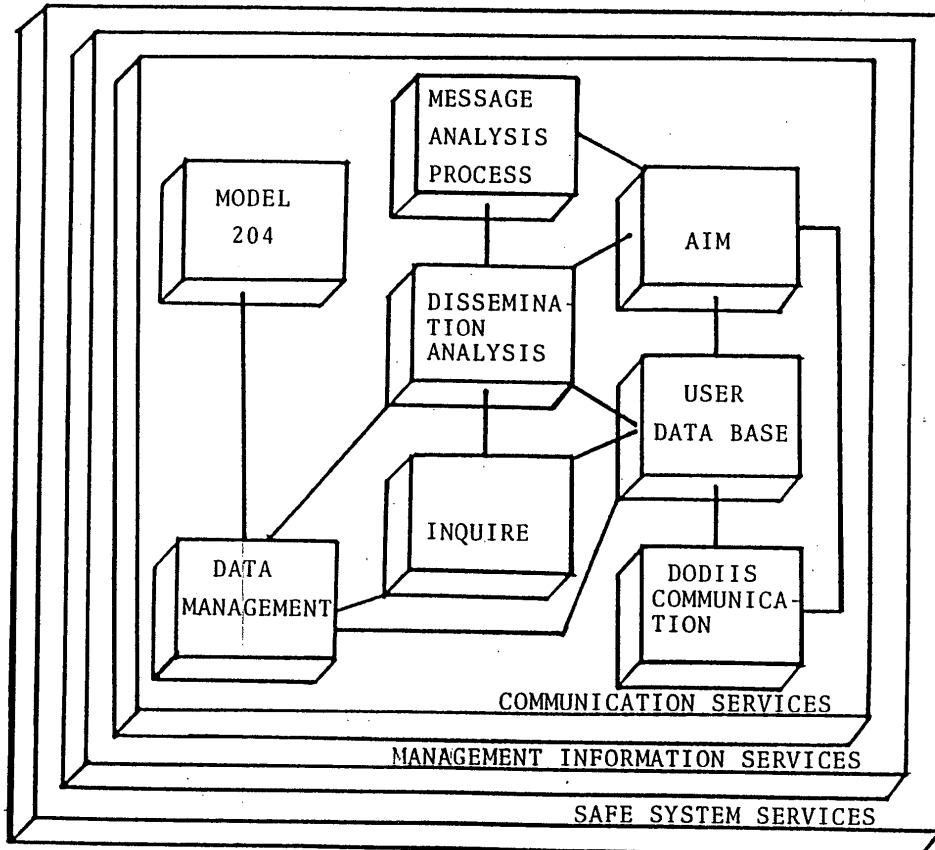


MAPPING OF DEVELOPMENT COMPONENT TO OPERATIONAL ELEMENT



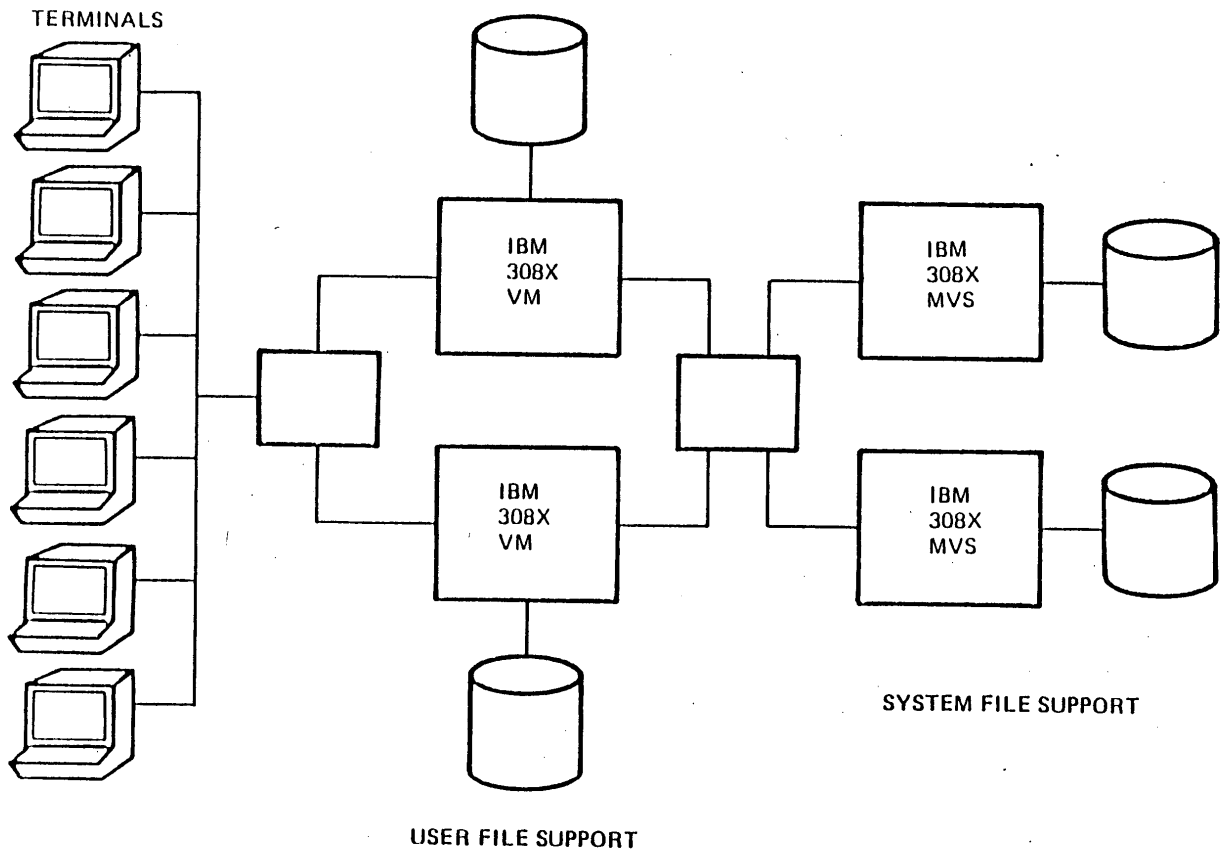


COMPUTER PROGRAM CONFIGURATION ITEMS





OVERVIEW SYSTEM DESIGN HARDWARE





INTER-MACHINE COMMUNICATIONS

- 0 CTC/HASP AND AIM IMPORT/EXPORT
- 0 SHARED DISK
 - 0 DAP AND UDB FOR MAIL FILES
 - 0 INQUIRE FOR SYSTEM CATALOG/DOCUMENT DATA BASE
- 0 REMOTE SPOOLING CONTROL SUBSYSTEM (RSCS)
 - 0 SYSTEM RESTART
 - 0 REMOTE PRINT CONTROL
 - 0 BATCH PROCESSING SUPPORT
- 0 COMMUNICATION NETWORK SUBSYSTEM (CNS)
 - 0 ODP CONNECTIVITY
 - 0 BACK-UP TO CTC HASP



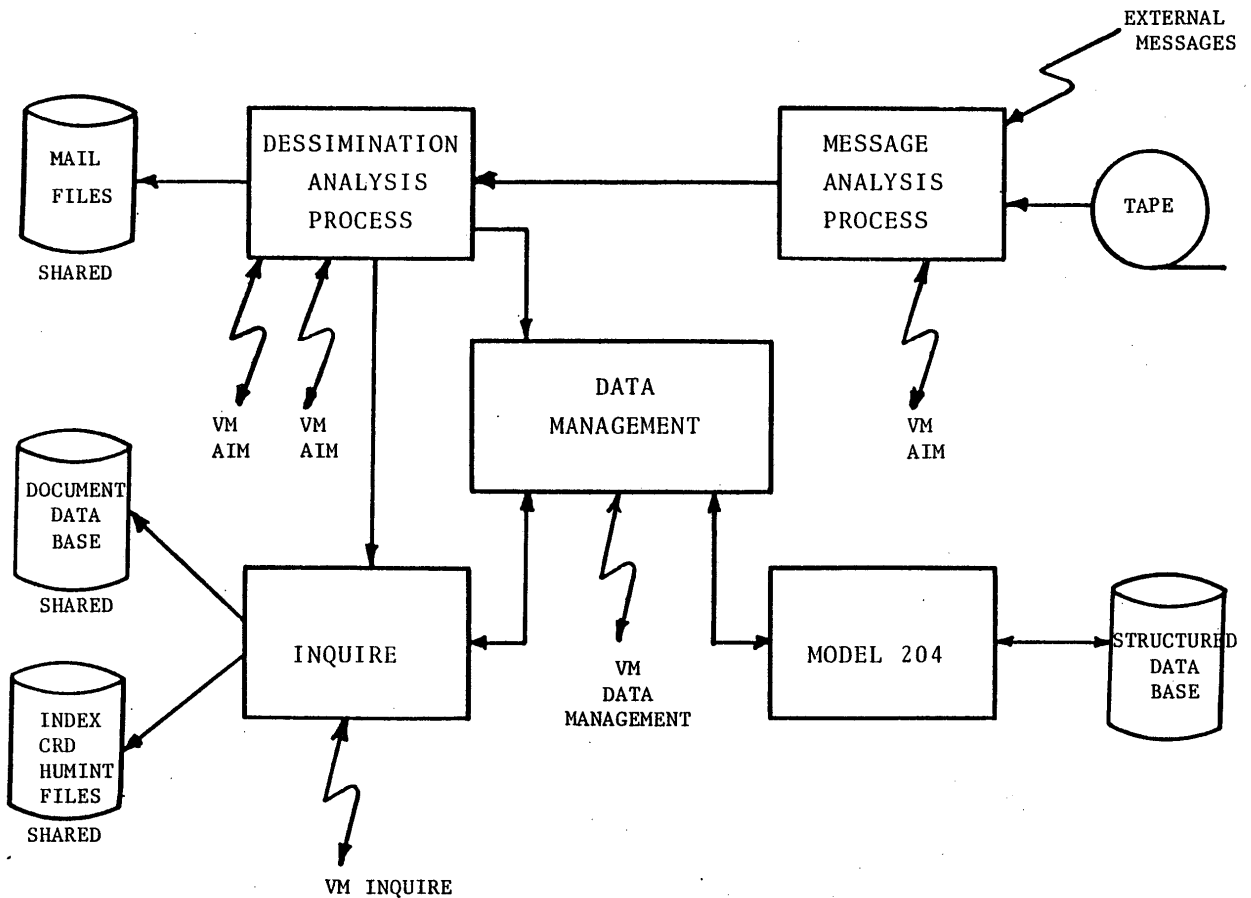
SOFTWARE MANAGEMENT

MANAGED AT CPCI AND CPC LEVELS

- 0 COMPUTER PROGRAM CONFIGURATION ITEMS
 - 0 MESSAGE ANALYSIS PROCESS (LOGICON/OSD)
 - 0 DISSEMINATION ANALYSIS PROCESS (CRW)
 - 0 DATA MANAGEMENT (TRW)
 - 0 INQUIRE DATA BASE MANAGEMENT SYSTEM (INFODATA)
 - 0 MODEL 204 DATA BASE MANAGEMENT SYSTEM (TRW/CCA)
 - 0 USER DATA BASE (CRW)
 - 0 AUTOMATIC INFORMATION MANAGEMENT (ODP/IBM)
 - 0 DODIIS COMMUNICATIONS (TRW)
 - 0 COMMUNICATION SERVICES (ODP)
 - 0 MANAGEMENT INFORMATION SERVICES (TRW)
 - 0 SYSTEM SERVICES (TRW)

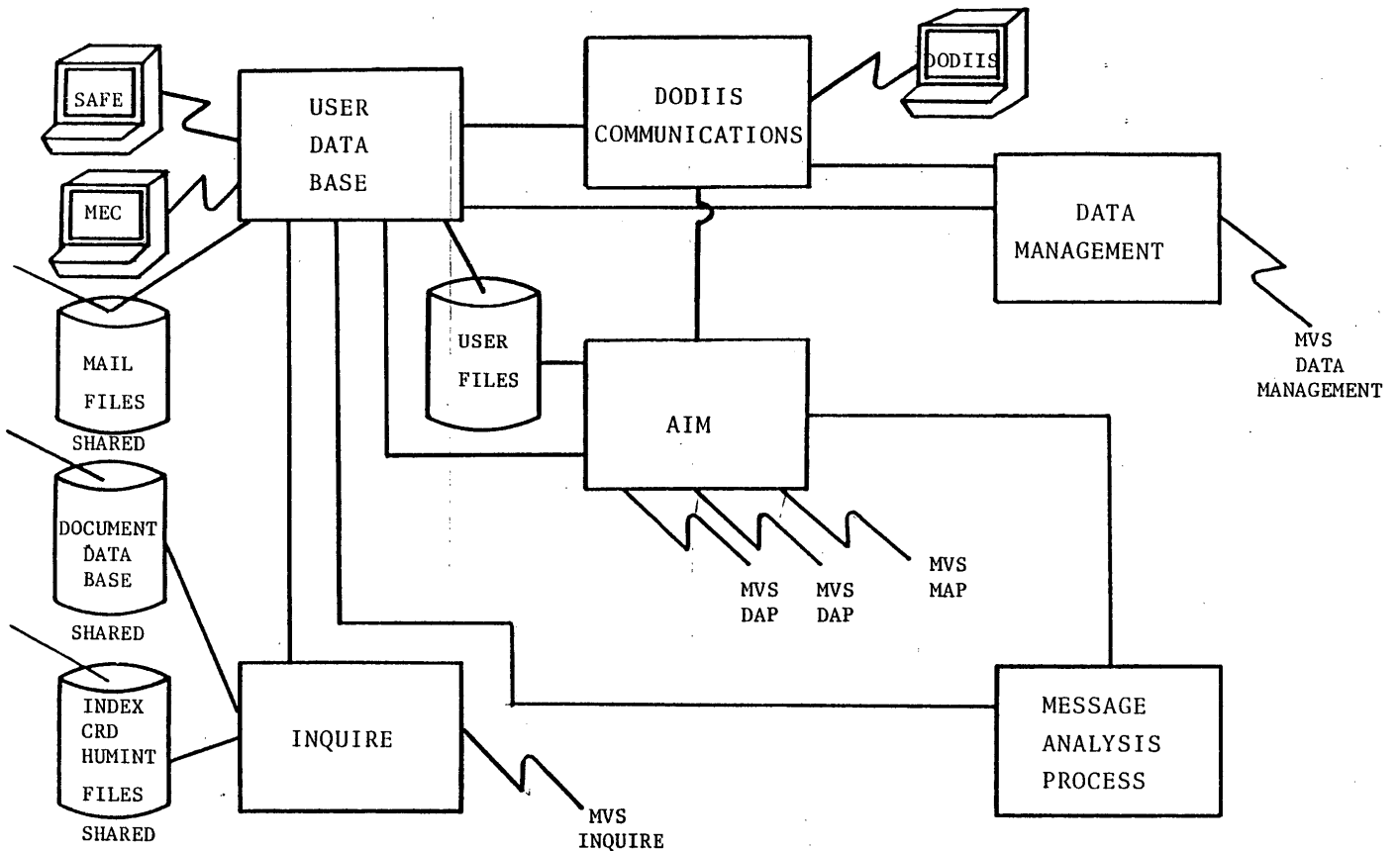


MVS HOST CONFIGURATION





VM HOST CONFIGURATION





PROJECT STATUS AND DEVELOPMENT APPROACH

PROJECT DEVELOPMENT MILESTONES

0	DELIVERY 1:	
	- SAFE-C	NOV. 1983
	- SAFE-D	DEC. 1983
0	DELIVERY 2 PDR	SEP. 1983
0	DELIVERY 3 PDR	NOV. 1983
0	DELIVERY 2 CDR	JAN. 1984
0	DELIVERY 4 PDR	MAR. 1984
0	DELIVERY 3 CDR	MAY 1984
0	DELIVERY 4 CDR	AUG. 1984



PROJECT STATUS AND DEVELOPMENT APPROACH

PRELIMINARY DESIGN REVIEW PROCEDURE

- 0 IDENTIFY AND DOCUMENT PRELIMINARY DESIGN ISSUES:
 - 0 SYSTEM AND DELIVERY DESIGN INCONSISTENCIES
 - 0 DELIVERY COMPONENT INTERFACE INCONSISTENCIES
- 0 ASSIGN ACTION ITEMS FOR DOCUMENTED ISSUES
- 0 WITHIN 30 DAYS,
 - 0 RESOLVE ALL PDR ISSUES
 - 0 UPDATE AND BASELINE ALL PDR DOCUMENTS
 - PRELIMINARY DESIGN SPECIFICATIONS
 - INTER-CPCI INTERFACE CONTROL DOCUMENT
 - DATA SPECIFICATION DOCUMENT
 - DELIVERY 2 REQUIREMENTS TRACEABILITY MATRIX
 - 0 BASELINE ALL UPDATED SDR DOCUMENTS
 - SYSTEM DESIGN DOCUMENT AND APPENDICES
 - HARDWARE CONFIGURATION DOCUMENT



SAFE DELIVERY 2 PDR

26-29 SEPT. 1983

AGENDA

26 SEPTEMBER 1983

<u>TIME</u>	<u>TOPIC</u>	<u>PRESENTER</u>	<u>STAT</u>
0800-0815	INTRODUCTION		
0815-0830	ATTENDANCE ADMINISTRATION PROCEDURES		
0830-0900	SAFE DESIGN STATUS AND DEVELOPMENT APPROACH		
0900-1000	SAFE SYSTEM DESIGN		
1000-1015	----BREAK-----		
1015-1045	DELIVERY 2 REQUIREMENTS SUMMARY		
1045-1200	DELIVERY 1 AND 2 DESIGN		
1200-1300	----LUNCH-----		



AGENDA (CONT.)

26 SEPTEMBER 1983

<u>TIME</u>	<u>TOPIC</u>	<u>PRESENTER</u>	
1245-1300	LOGICON/OSD EXECUTIVE SUMMARY		STAT
1300-1315	MAP ARCHITECTURAL DESIGN		
1315-1430	MAP MVS DESIGN EXTERNAL MESSAGE INTERFACE CPC MESSAGE RESOLUTION PROCESS CPC	LOGICON	
1430-1445	----BREAK----		
1445-1530	MAP MVS DESIGN (CONT.) MESSAGE SEQUENCE AND CONTROL CPC	LOGICON	
1530-1600	MAP MVS DESIGN ISSUES AND ACTION ITEMS	GEODYNAMICS	
1600-1615	SESSION WRAP-UP		STAT



SAFE DELIVERY 2 PDR

26-29 SEPT. 1983

AGENDA

27 SEPTEMBER 1983

<u>TIME</u>	<u>TOPIC</u>	<u>PRESENTER</u>	
0830-0845	REMARKS	<input type="text"/>	STAT
0845-0900	CRW EXECUTIVE SUMMARY		
0900-1000	DAP MVS DESIGN PROFILE COMPILATION AND MAINTENANCE CPC DISSEMINATION ANALYSIS CPC		
1000-1015	----BREAK----		
1015-1130	CONT. DAP MVS DESIGN DATA BASE MAINTENANCE CPC DAP THREADS DAP SUMMARY	<input type="text"/>	STAT
1130-1200	DAP MVS DESIGN ISSUES AND ACTION ITEMS	GEODYNAMICS	
1200-1300	----LUNCH----		



AGENDA (CONT.)

27 SEPTEMBER 1983

<u>TIME</u>	<u>TOPIC</u>	<u>PRESENTER</u>	
1300-1315	INFODATA EXECUTIVE SUMMARY	<input type="text"/>	STAT
1315-1330	INQUIRE REQUIREMENTS SUMMARY	<input type="text"/>	
1330-1445	INQUIRE MVS DESIGN	INFODATA	
1445-1500	----BREAK----		
1500-1600	INQUIRE VM DESIGN INQUIRE SUMMARY	INFODATA	
1600-1630	INQUIRE MVS AND VM DESIGN ISSUES AND ACTION ITEMS	GEODYNAMICS	
1630-1645	SESSION WRAP-UP	<input type="text"/>	STAT



SAFE DELIVERY 2 PDR

26-29 SEPT. 1983

AGENDA

28 SEPTEMBER 1983

<u>TIME</u>	<u>TOPIC</u>	<u>PRESENTER</u>
0830-0845	REMARKS	<div data-bbox="1230 1333 1425 1585" style="border: 1px solid black; width: 120px; height: 120px;"></div>
0845-0900	AIM REQUIREMENTS SUMMARY	
0900-1000	AIM VM DESIGN	
0945-1000	----BREAK----	
1000-1030	AIM VM DESIGN (CONT.)	
1030-1100	AIM VM DESIGN ISSUES AND ACTION ITEMS	
1100-1200	MAP VM DESIGN MESSAGE ERROR CORRECTION	
1200-1300	----LUNCH----	

STAT



AGENDA (CONT.)

28 SEPTEMBER 1983

<u>TIME</u>	<u>TOPIC</u>	<u>PRESENTER</u>	
1300-1330	MAP SUMMARY MAP RECOVERY AND RELIABILITY MAP PERFORMANCE MAP IMPLEMENTATION	LOGICON	
1330-1400	MAP VM DESIGN ISSUES AND ACTION ITEMS	GEODYNAMICS	
1400-1415	----BREAK----		
1415-1515	SAFE-C CONVERSION	<input type="text"/>	STAT
1515-1545	SAFE-C CONVERSION ISSUES AND ACTION ITEMS	GEODYNAMICS	
1545-1600	SESSION WRAP-UP	<input type="text"/>	STAT



SAFE DELIVERY 2 PDR

26-29 SEPT. 1983

AGENDA

29 SEPTEMBER 1983

<u>TIME</u>	<u>TOPIC</u>	<u>PRESENTER</u>	
0830-0845	REMARKS		STAT
0845-1000	UDB VM DESIGN UDB SUMMARY	<input type="text"/>	
1000-1015	----BREAK----		
1015-1100	UDB VM DESIGN (CONT.)		
1100-1130	UDB VM DESIGN ISSUES AND ACTION ITEMS	GEODYNAMICS	
1130-1145	SESSION WRAP-UP	<input type="text"/>	STAT
1145-1245	DELIVERY 2 DESIGN ISSUES AND ACTION ITEMS	GEODYNAMICS	