NIST Special Publication 881-31

Federal Implementation Guideline for Electronic Data Interchange

ASC X12 003050 Transaction Set 839F Project Cost Reporting

Implementation Convention

NIST

*T*he National Institute of Standards and Technology was established in 1988 by Congress to "assist industry in the development of technology . . . needed to improve product quality, to modernize manufacturing processes, to ensure product reliability . . . and to facilitate rapid commercialization . . . of products based on new scientific discoveries."

NIST, originally founded as the National Bureau of Standards in 1901, works to strengthen U.S. industry's competitiveness; advance science and engineering; and improve public health, safety, and the environment. One of the agency's basic functions is to develop, maintain, and retain custody of the national standards of measurement, and provide the means and methods for comparing standards used in science, engineering, manufacturing, commerce, industry, and education with the standards adopted or recognized by the Federal Government.

As an agency of the U.S. Commerce Department's Technology Administration, NIST conducts basic and applied research in the physical sciences and engineering, and develops measurement techniques, test methods, standards, and related services. The Institute does generic and precompetitive work on new and advanced technologies. NIST's research facilities are located at Gaithersburg, MD 20899, and at Boulder, CO 80303. Major technical operating units and their principal activities are listed below. For more information contact the Publications and Program Inquiries Desk, 301-975-3058.

Office of the Director
- National Quality Program
- International and Academic Affairs

Technology Services
- Standards Services
- Technology Partnerships
- Measurement Services
- Technology Innovation
- Information Services

Advanced Technology Program
- Economic Assessment
- Information Technology and Applications
- Chemical and Biomedical Technology
- Materials and Manufacturing Technology
- Electronics and Photonics Technology

Manufacturing Extension Partnership Program
- Regional Programs
- National Programs
- Program Development

Electronics and Electrical Engineering Laboratory
- Microelectronics
- Law Enforcement Standards
- Electricity
- Semiconductor Electronics
- Electromagnetic Fields[1]
- Electromagnetic Technology[1]
- Optoelectronics[1]

Chemical Science and Technology Laboratory
- Biotechnology
- Physical and Chemical Properties[2]
- Analytical Chemistry
- Process Measurements
- Surface and Microanalysis Science

Physics Laboratory
- Electron and Optical Physics
- Atomic Physics
- Optical Technology
- Ionizing Radiation
- Time and Frequency[1]
- Quantum Physics[1]

Materials Science and Engineering Laboratory
- Intelligent Processing of Materials
- Ceramics
- Materials Reliability[1]
- Polymers
- Metallurgy
- NIST Center for Neutron Research

Manufacturing Engineering Laboratory
- Precision Engineering
- Automated Production Technology
- Intelligent Systems
- Fabrication Technology
- Manufacturing Systems Integration

Building and Fire Research Laboratory
- Structures
- Building Materials
- Building Environment
- Fire Safety Engineering
- Fire Science

Information Technology Laboratory
- Mathematical and Computational Sciences[2]
- Advanced Network Technologies
- Computer Security
- Information Access and User Interfaces
- High Performance Systems and Services
- Distributed Computing and Information Services
- Software Diagnostics and Conformance Testing

[1] At Boulder, CO 80303.
[2] Some elements at Boulder, CO.

Federal Implementation Guideline for Electronic Data Interchange

ASC X12 003050 Transaction Set 839F Project Cost Reporting

Implementation Convention

Electronic Commerce Acquisition Program Management Office
Standard Management Committee - Secretariat
National Institute of Standards and Technology
Gaithersburg, MD 20899-0001

Editor: Dr. Jean-Philippe Favreau

January 1998

Reports on Information Technology

The National Institute of Standards and Technology (NIST)'s Information Technology Laboratory (ITL) develops standards and guidelines, provides technical assistance, and conducts research for computers and resources. As part of the overall federal effort to establish a single face to industry for conducting electronic commerce, ITL has been designated as the organization responsible for coordinating the development of Federal Implementation Conventions (ICs) for Electronic Data Interchange (EDI). ICs are defined by functional-area experts who create and select options from standard EDI Transaction Sets to yield the implementations to be used for practical EDI. These ICs are made available to federal agencies and industry by electronic means and this Special Publication Series.

839 Project Cost Reporting

Functional Group ID=PK

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Project Cost Reporting Transaction Set (839) for use within the context of an Electronic Data Interchange (EDI) environment. This transaction set provides the transmission of cost and schedule information to support performance measurement (earned value), program management reporting, and contract funds status reporting. This transaction set will also support the Department of Defense (DoD), Department of Energy (DoE), NASA, and other government agency Cost/Schedule Control Systems Criteria (C/SCSC) and funds status reporting requirements. It is designed to serve the needs of government agencies, prime contractors, and their subcontractors.

Notes:

1. This implementation convention addresses how the 839 Project Cost Reporting transaction set can be used to send Contract Funds Status Report (CFSR) data electronically to a government customer.

2. This implementation convention is designed to be used when a Contract Data Requirements List (CDRL) for a given contract specifies the Contract Funds Status Report (CFSR) Data Item Description (DID) DI-MGMT-81468.

3. There are two appendices for this implementation convention. The example appendix provides additional reference information on how this transaction set is used to exchange funds data electronically. The other appendix is a form cross reference table that outlines how the CFSR DID requirements are mapped to the X12 standard EDI format.

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
Must Use	010	ST	Transaction Set Header	M	1		
Must Use	020	BCS	Beginning Segment for Project Cost Reporting	M	1		
	030	REF	Reference Numbers	O	100		
Not Used	040	DLV	Deliverable Information	O	10		
Must Use	050	AMT	Monetary Amount	O	30		
Not Used	060	PCT	Percent Amounts	O	30		
Must Use	070	DTM	Date/Time Reference	O	30		
			LOOP ID - CFT			100	
Must Use	080	CFT	Cost Reporting Format Type	M	1		
Must Use	085	CAL	Calendar	O	50		
			LOOP ID - BSD			>1	
Must Use	090	BSD	Breakdown Structure Description	O	1		
	100	REF	Reference Numbers	O	100		
	105	DTM	Date/Time Reference	O	50		
Must Use	110	AMT	Monetary Amount	O	100		
Not Used	115	QTY	Quantity	O	100		
	120	PAM	Period Amount	O	100		
Not Used	130	PCT	Percent Amounts	O	100		
	140	MSG	Message Text	O	1000		
			LOOP ID - N1			200	
Must Use	150	N1	Name	M	1		n1
	160	N2	Additional Name Information	O	1		

003050F839F0

15 July 1997

839F Project Cost Reporting (Funds Status)

	170	N3	Address Information	O	1
	180	N4	Geographic Location	O	1
Must Use	190	PER	Administrative Communications Contact	O	10
Not Used	195	REF	Reference Numbers	O	10
Must Use	200	DTM	Date/Time Reference	O	10
Must Use	210	SE	Transaction Set Trailer	M	1

Transaction Set Notes

1.   At least one iteration of the N1 loop is required to identify the contractor.

Segment:	**ST** Transaction Set Header	
Position:	010	
Loop:		
Level:		
Usage:	Mandatory	
Max Use:	1	
Purpose:	To indicate the start of a transaction set and to assign a control number	
Syntax Notes:		
Semantic Notes:	1	The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
Comments:		

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	ST01	143	**Transaction Set Identifier Code**	**M** **ID 3/3**
			Code uniquely identifying a Transaction Set	
			839 X12.31 Project Cost Reporting	
Must Use	ST02	329	**Transaction Set Control Number**	**M** **AN 4/9**
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

A unique number assigned by the originator of the transaction set or by the originator's application system. This number is the same as the number in SE02.

Segment:	**BCS** Beginning Segment for Project Cost Reporting	
Position:	020	
Loop:		
Level:		
Usage:	Mandatory	
Max Use:	1	
Purpose:	To indicate the beginning of the project cost reporting transaction set, and information to identify a program name, number, contract type, and security classification.	
Syntax Notes:		
Semantic Notes:	1 BCS02 is the transaction set date.	
	2 BCS04 is the report effective date.	
	3 BCS06 is the program name.	
	4 BCS07 is the program number identification.	
	5 BCS10 is the customer share ratio number.	
	6 BCS11 is the contractor share ratio number.	
	7 BCS12 is the notation for the total project monetary costs.	
	If BCS12 is absent, the total project monetary costs are assumed to be whole dollar amounts.	
Comments:		

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	BCS01	353	**Transaction Set Purpose Code**	M ID 2/2
			Code identifying purpose of transaction set	

          00   Original

This code is typically used for transmitting the funds status data.

          05   Replace

Use this code to overwrite any previously transmitted data for a given reporting period - i.e., old data is deleted and new data is entered into the database.

          14   Advance Notification

Use this code in the event preliminary funds status data must be transmitted for a given reporting period. This preliminary transmission is then followed with a final transmission (code 20) to provide the final funds status data for the given reporting period.

          20   Final Transmission

Use this code to transmit final funds status data when preliminary data (code 14) has been sent for a given reporting period.

          22   Information Copy

Must Use	BCS02	373	**Date**	M DT 6/6
			Date (YYMMDD)	

Enter the date the data report was created. This date is used for reference purposes only.

Must Use	BCS03	367	**Contract Number**	M AN 1/30
			Contract number	

Enter the contract number.

Must Use	BCS04	373	Date	M	DT 6/6

Date (YYMMDD)

Enter the report effective date, this is typically the reporting period end date.

Must Use	BCS05	1166	Contract Type Code	O	ID 2/2

Code identifying a contract type

CW	Cost Plus Award Fee
CX	Cost Plus Fixed Fee
CY	Cost Plus Incentive Fee
FD	Fixed Price Redetermination
FE	Fixed Price with Escalation
FI	Fixed Price Incentive
FR	Firm Fixed Price
OC	Other Contract Type

A type of contract which is neither covered by an existing code nor previously mutually defined

Use the REF (1/030) segment to provide a description of the contract type when this code is used.

TM	Time and Materials

Must Use	BCS06	352	Description	O	AN 1/80

A free-form description to clarify the related data elements and their content

Provide a name or short description of the program.

Not Used	BCS07	127	Reference Number	O	AN 1/30

Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.

Not Used	BCS08	1193	Program Type Code	O	ID 2/2

Codes identifying a program type

	BCS09	786	Security Level Code	O	ID 2/2

Code indicating the level of confidentiality assigned by the sender to the information following

Typically all data is assumed to be company proprietary information and is treated as government non-classified information (code 90). In the event codes 92, 93, or 94 are used, additional security measures such as encryption are used to protect the data.

11	Competition Sensitive
90	Government Non-Classified
92	Government Confidential
93	Government Secret
94	Government Top Secret

Not Used	BCS10	954	Percent	O	R 1/10

Percentage expressed as a decimal

Not Used	BCS11	954	Percent	O	R 1/10

Percentage expressed as a decimal

	BCS12	355	Unit or Basis for Measurement Code	O	ID 2/2

Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

Use this data element to indicate all total contract monetary amounts have been factored (for example, numbers represent dollars in thousands). Use the CFT (Cost Reporting Format Type) segment to indicate the monetary amount factor used for a given funds status report at the detail level.

DO	Dollars, U.S.

Use this code when the monetary amounts have NOT

		been factored.
	HU	Hundred
		Use this code to indicate monetary amounts have been factored by a hundred -- i.e., hundreds of dollars.
	R5	Thousands of Dollars
	R6	Millions of Dollars

		REF Reference Numbers
Segment:		

Position: 030
Loop:
Level:
Usage: Optional
Max Use: 100
Purpose: To specify identifying numbers.
Syntax Notes: 1 At least one of REF02 or REF03 is required.
Semantic Notes:
Comments:

Data Element Summary

Must Use	Ref. Des.	Data Element	Name		Attributes
Must Use	REF01	128	Reference Number Qualifier		M ID 2/2

Code qualifying the Reference Number.

93 Funds Authorization

Reference numbers to identify funds authorization (document or other reference number) in the government contracting environment

Use this code to provide a unique reference number for this Project Cost Reporting (839) transaction set and contract funds status data. Enter the unique reference number for this transaction set in REF02. Use this code only one time for each 839 transaction set.

AT Appropriation Number

Typically, CFT08 (Appropriation Code) is used to identify the type or general category of appropriation. Use this code along with REF03 to provide a description of the appropriation (name). This code can also be used when CFT08 is code "ZZ" (used for other appropriation types) to provide a description of the appropriation type.

C4 Change Number

Use this code to identify the latest modification number associated with the contract number. Enter the number in REF02.

CT Contract Number

Use this code when BCS05 is code "OC" for other contract types. Enter the description of the contract type in REF03.

DX Department/Agency Number

Use this code to provide a DoD Component name. Enter the name of the DoD Component in REF03.

	REF02	127	Reference Number		X AN 1/30

Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.
Use this data element when REF01 is code 93 or C4.

	REF03	352	Description		X AN 1/80

A free-form description to clarify the related data elements and their content

Use this data element when REF01 is code AT, CT, or DX.

Segment:	**AMT** Monetary Amount
Position:	050
Loop:	
Level:	
Usage:	Optional (Must Use)
Max Use:	30
Purpose:	To indicate the total monetary amount
Syntax Notes:	
Semantic Notes:	
Comments:	
Notes:	*This segment is required. Use this segment to provide all header (i.e., title block) monetary amount information.*

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	AMT01	522	Amount Qualifier Code	M ID 1/2

Code to qualify amount

64	Initial Contract Price Target	
	Value of initial negotiated contract target price	
65	Initial Contract Price Ceiling	
	Value of initial negotiated contract ceiling price	
66	Adjusted Contract Price Target	
	Value of initial contract plus supplemental agreements	
67	Adjusted Contract Price Ceiling	
	Value of adjusted ceiling price	

	Ref. Des.	Data Element	Name	Attributes
Must Use	AMT02	782	Monetary Amount	M R 1/15

Monetary amount

For all monetary amounts, if entering factored monetary amount such as thousands of dollars (notation from BCS12), use only one decimal place when applicable.

	Ref. Des.	Data Element	Name	Attributes
Not Used	AMT03	478	Credit/Debit Flag Code	O ID 1/1

Code indicating whether amount is a credit or debit

Segment:	**DTM** Date/Time Reference
Position:	070
Loop:	
Level:	
Usage:	Optional (Must Use)
Max Use:	30
Purpose:	To specify pertinent dates and times
Syntax Notes:	1 At least one of DTM02 DTM03 or DTM06 is required.
	2 If either DTM06 or DTM07 is present, then the other is required.
Semantic Notes:	
Comments:	
Notes:	*This segment is required. Use this segment to provide all header (i.e., title block) date information.*

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	DTM01	374	Date/Time Qualifier		M ID 3/3

Code specifying type of date or time, or both date and time

283	Funds Appropriation - Start
	The date that funds appropriation begins
	Use this code to indicate the beginning date for the contract funding.
284	Funds Appropriation - End
	The date that funds appropriation ends
	Use this code to indicate the ending date for the contract funding.
723	Current Month Ending
	Use this code to indicate the current report date for the funds status data.
724	Previous Month Ending
	Use this code to indicate the previous report date for the funds status data.

	Ref. Des.	Data Element	Name		Attributes
Must Use	DTM02	373	Date		X DT 6/6

Date (YYMMDD)

	Ref. Des.	Data Element	Name		Attributes
Not Used	DTM03	337	Time		X TM 4/8

Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

	Ref. Des.	Data Element	Name		Attributes
Not Used	DTM04	623	Time Code		O ID 2/2

Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow

	Ref. Des.	Data Element	Name		Attributes
Not Used	DTM05	624	Century		O N0 2/2

The first two characters in the designation of the year (CCYY)

	Ref. Des.	Data Element	Name		Attributes
Not Used	DTM06	1250	Date Time Period Format Qualifier		X ID 2/3

Code indicating the date format, time format, or date and time format

	Ref. Des.	Data Element	Name		Attributes
Not Used	DTM07	1251	Date Time Period		X AN 1/35

Expression of a date, a time, or range of dates, times or dates and times

Segment:	**CFT** Cost Reporting Format Type	
Position:	080	
Loop:	CFT	Mandatory
Level:		
Usage:	Mandatory	
Max Use:	1	
Purpose:	To identify the cost reporting type, type of units reported, and funds details for the Contract Funds Status Report (CFSR)	
Syntax Notes:		
Semantic Notes:	1 If CFT01 equals CY, then CFT03, CFT04, CFT05, CFT06, CFT07 and CFT08 are required.	
	2 CFT02 is the notation for the report monetary costs or quantities. If CFT02 is blank, the report monetary costs are assumed to be in whole dollar amounts.	
	3 CFT04 and CFT05 are used for the funds appropriation start date.	
	4 CFT06 and CFT07 are used for the funds appropriation end date.	
Comments:		

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	CFT01	755	**Report Type Code**	M ID 2/2

Code indicating the title or contents of a document, report or supporting item

CY Contract Funds Status Report (CFSR)

Status report for funds appropriation including commitments, actual cost, forecast of billings, and estimated termination costs

	Ref. Des.	Data Element	Name	Attributes
Must Use	CFT02	355	**Unit or Basis for Measurement Code**	O ID 2/2

Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

Use this data element to indicate the monetary amount factor for the funds status report detail data.

DO Dollars, U.S.

Use this code when the monetary amounts have NOT been factored.

HU Hundred

Use this code to indicate the monetary amounts have been factored by a hundred -- i.e., hundreds of dollars.

R5 Thousands of Dollars

R6 Millions of Dollars

	Ref. Des.	Data Element	Name	Attributes
	CFT03	1198	**Contracting Funding Code**	O ID 2/2

Code identifying the funding type

01 Multi-Year Procurement

Contract procurement that extends beyond one year

02 Incrementally Funded Contract (INC)

Contract funded in increments based on agreed performance criteria

03 Contract for a Single Year (SYC)

Funding for a contract for a single, specific year

	Ref. Des.	Data Element	Name	Attributes
	CFT04	374	**Date/Time Qualifier**	O ID 3/3

Code specifying type of date or time, or both date and time

090 Report Start

CFT05	**373**	**Date**		**O**	**DT 6/6**

Date (YYMMDD)

For contracts which are financed with funds appropriated in more than one fiscal year, enter the fiscal year start date for this report.

CFT06	**374**	**Date/Time Qualifier**		**O**	**ID 3/3**

Code specifying type of date or time, or both date and time

    091   Report End

CFT07	**373**	**Date**		**O**	**DT 6/6**

Date (YYMMDD)

For contracts which are financed with funds appropriated in more than one fiscal year, enter the fiscal year ending date for this report.

CFT08	**1199**	**Appropriation Code**		**O**	**ID 2/2**

Code indicating the funds appropriation

    01   Research, Development, Test & Evaluation (RDT&E)

    02   Procurement (PROC)

    03   Operations and Maintenance (O&M)

    04   Military Construction (MILCOM)

    ZZ   Mutually Defined

Use this code when other appropriation types need to be identified. Use the REF (1/030) segment to provide this information (REF01 is code AT, REF03 contains the appropriation description).

Segment:	**CAL** Calendar
Position:	085
Loop:	CFT Mandatory
Level:	
Usage:	Optional (Must Use)
Max Use:	50
Purpose:	To identify the calendar and working shift details for the plan or schedule
Syntax Notes:	1 If either CAL14 or CAL15 is present, then the other is required.
Semantic Notes:	1 CAL01 identifies whether a reference number is a calendar or shift.
Comments:	
Notes:	*This segment is required and used to describe the projected time frame columns at the bottom of the funds status report. Repeat this segment as needed to describe each projected time frame column. This includes a period number reference, number of reporting periods in a given time frame, and a short description.*

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	CAL01	128	**Reference Number Qualifier**	M ID 2/2
			Code qualifying the Reference Number.	
			70 Calendar Number	
			Identifies a working calendar (for example, Monday through Friday) for a company, division, or labor group	
Must Use	CAL02	127	**Reference Number**	M AN 1/30
			Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	
			Enter the period number "1", "2", "3", "4", "5", "6", "7", "8", or "9" to identify the projected time frames.	
Not Used	CAL03	344	**Unit of Time Period or Interval**	O ID 2/2
			Code indicating the time period or interval	
Not Used	CAL04	374	**Date/Time Qualifier**	O ID 3/3
			Code specifying type of date or time, or both date and time	
Not Used	CAL05	373	**Date**	O DT 6/6
			Date (YYMMDD)	
Not Used	CAL06	337	**Time**	O TM 4/8
			Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	
Not Used	CAL07	623	**Time Code**	O ID 2/2
			Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow	
Not Used	CAL08	678	**Ship/Delivery or Calendar Pattern Code**	O ID 1/2
			Code which specifies the routine shipments, deliveries, or calendar pattern	
Not Used	CAL09	374	**Date/Time Qualifier**	O ID 3/3
			Code specifying type of date or time, or both date and time	
Not Used	CAL10	373	**Date**	O DT 6/6
			Date (YYMMDD)	
Not Used	CAL11	337	**Time**	O TM 4/8
			Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	

Not Used	CAL12	623	Time Code	O	ID 2/2

Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow

Not Used	CAL13	678	Ship/Delivery or Calendar Pattern Code	O	ID 1/2

Code which specifies the routine shipments, deliveries, or calendar pattern

Must Use	CAL14	673	Quantity Qualifier	X	ID 2/2

Code specifying the type of quantity

    1O   Calendar Units

                The number of calendar units such as 1 per day or 1 per week

Must Use	CAL15	380	Quantity	X	R 1/15

Numeric value of quantity

Enter the number of reporting months (or periods) for the projected time frame. For example, enter "3" for a quarter year, enter "12" for a fiscal or calendar year.

	CAL16	369	Free-form Description	O	AN 1/45

Free-form descriptive text

Enter a short description of the projected time frame (for example, "FY98"). A maximum of four characters is recommended. This data element is optional.

Segment:	**BSD** Breakdown Structure Description			
Position:	090			
Loop:	BSD	Optional (Must Use)		
Level:				
Usage:	Optional (Must Use)			
Max Use:	1			
Purpose:	To define discrete line items within industry or government reports			
Syntax Notes:	1	At least one of BSD02 or BSD03 is required.		
Semantic Notes:	1	BSD05 is the summary level structure code reference.		
Comments:	1	BSD07 is the summary level reporting structure identification.		
Notes:	*This segment is required.*			

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	BSD01	128	**Reference Number Qualifier**	M ID 2/2

Code qualifying the Reference Number.

74 Work Breakdown Structure (WBS)

A product-oriented family tree composed of hardware, software, services, and data that completely defines the project or program

Must Use	BSD02	127	**Reference Number** .	X AN 1/30

Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.

Enter the appropriate element code. The receiving application for the government may have certain requirements for the element codes. Confirm any element code requirements (content and number of characters) with your customer.

	BSD03	352	**Description**	X AN 1/80

A free-form description to clarify the related data elements and their content

This description is optional.

Must Use	BSD04	1178	**Level**	O AN 1/3

Reporting structure identification

Not Used	BSD05	127	**Reference Number**	O AN 1/30

Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.

	BSD06	1196	**Breakdown Structure Detail Code**	O ID 2/2

Codes identifying details relating to a reporting breakdown structure tree

01 Labor

Direct labor costs

02 Material

Direct material

04 Subcontract

Direct subcontract

06 Labor Overhead

Indirect costs associated with direct labor

07 Material Overhead

Indirect costs associated with direct material

08 Other Overhead

Indirect costs associated with other direct costs

33 General & Administrative

34 Cost of Money

			35	Profit or Fee		
Not Used	**BSD07**	**1178**	**Level**		O	AN 1/3
			Reporting structure identification			
Not Used	**BSD08**	**786**	**Security Level Code**		O	ID 2/2
			Code indicating the level of confidentiality assigned by the sender to the information following			

Segment:	**REF** Reference Numbers	
Position:	100	
Loop:	BSD	Optional (Must Use)
Level:		
Usage:	Optional	
Max Use:	100	
Purpose:	To specify identifying numbers.	
Syntax Notes:	1	At least one of REF02 or REF03 is required.
Semantic Notes:		
Comments:		

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	REF01	128	Reference Number Qualifier	M ID 2/2

Code qualifying the Reference Number.

The receiving application for the government may have certain requirements for the REF qualifiers you can use and the number of characters that can be entered in REF02. Confirm these details with your customer.

    AT   Appropriation Number

Use this code to provide an appropriation identification for the element code described in BSD02. Use this code only one time for each BSD reference.

    IX   Item Number

Use this code for other line item reference numbers that relate to the element described in BSD02. Use this code only one time for each BSD reference.

	Ref. Des.	Data Element	Name	Attributes
Must Use	REF02	127	Reference Number	X AN 1/30

Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.

	Ref. Des.	Data Element	Name	Attributes
Not Used	REF03	352	Description	X AN 1/80

A free-form description to clarify the related data elements and their content

	Segment:	**DTM** Date/Time Reference
	Position:	105
	Loop:	BSD Optional (Must Use)
	Level:	
	Usage:	Optional
	Max Use:	50
	Purpose:	To specify pertinent dates and times
	Syntax Notes:	1 At least one of DTM02 DTM03 or DTM06 is required.
		2 If either DTM06 or DTM07 is present, then the other is required.
	Semantic Notes:	
	Comments:	
	Notes:	*Use this segment to provide any applicable date information for the element described in BSD02. Typically, this is the fiscal year that applies to the line item or element.*

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	DTM01	374	Date/Time Qualifier	M	ID 3/3
			Code specifying type of date or time, or both date and time		
			581 Contract Period		
Not Used	DTM02	373	Date	X	DT 6/6
			Date (YYMMDD)		
Not Used	DTM03	337	Time	X	TM 4/8
			Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)		
Not Used	DTM04	623	Time Code	O	ID 2/2
			Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow		
Not Used	DTM05	624	Century	O	N0 2/2
			The first two characters in the designation of the year (CCYY)		
Must Use	DTM06	1250	Date Time Period Format Qualifier	X	ID 2/3
			Code indicating the date format, time format, or date and time format		
Must Use	DTM07	1251	Date Time Period	X	AN 1/35
			Expression of a date, a time, or range of dates, times or dates and times		

Segment:	**AMT** Monetary Amount	
Position:	110	
Loop:	BSD	Optional (Must Use)
Level:		
Usage:	Optional (Must Use)	
Max Use:	100	
Purpose:	To indicate the total monetary amount	
Syntax Notes:		
Semantic Notes:		
Comments:		
Notes:	*This segment is required.*	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	AMT01	522	Amount Qualifier Code	M ID 1/2

Code to qualify amount

68   Funds Authorized to Date

Value of contract fund authorized from the beginning through the current reporting period

69   Accrued Expenditures

Actual cost to date

Use this code for actual to date values.

70   Open Commitments

Value of supplies or other items committed to for payment (such as on delivery of products)

Use this code for actual to date values.

71   Forecast of Billings

This is a forecast of billings to the government; includes cummulative amounts already billed (including progress or advance payments) and a forecast of amounts that will be billed to the government

Use this code for actual to date values.

72   Estimated Termination Costs

Cost that would be necessary to liquidate all government obligations if the contract were to be ended in that reporting period

Use this code for actual to date values.

73   Accrued Expenditures plus Open Commitments

Sum of actual costs and committed costs

74   Contract Work Authorizied - Definitized

The estimated price for the authorized work including profit or fee, and incentive and cost sharing associated with projected over or under runs

75   Contract Work Authorized - Not Definitized

The estimate of the fund requirements for performing required work that firm contract prices have not yet been agreed to

76   Contract Work Authorized - Total

Sum of Contract Work Authorized - Definitized and Contract Work Authorized - Not Definitized

Typically this value is calculated. Confirm with your

customer if you need to transmit this information.

77	Forecast of Work - Not Yet Authorized	

An estimate of fund requirements including fee or profit for changes proposed, but not yet directed by the customer

78	Forecast of Work - All Other

An estimate of fund requirements for additional work that the contractor expects to do

79	Forecast of Work - Total

Sum of Forecast Work - Not Yet Authorized and Forecast of Work - All Other

Typically this value is calculated. Confirm with your customer if you need to transmit this information.

80	Funding - Total Requirements

The estimate of total fund requirements for contract work authorized and forecast

Typically this value is calculated. Confirm with your customer if you need to transmit this information.

81	Funds Carryover

For incrementally funded contract, this is the amount that the prior Federal fiscal year funding was in excess of the prior year's requirement

82	Net Funds Required

An estimate of net funds required, less funds carryover

Typically this value is calculated. Confirm with your customer if you need to transmit this information.

Must Use	AMT02	782	**Monetary Amount**		M R 1/15

Monetary amount

For all monetary amounts, if entering factored amounts such as thousands of dollars (notation from CFT02), use only one decimal place when applicable.

Not Used	AMT03	478	**Credit/Debit Flag Code**	O ID 1/1

Code indicating whether amount is a credit or debit

Segment:		**PAM** Period Amount		

Position: 120
Loop: BSD Optional (Must Use)
Level:
Usage: Optional
Max Use: 100
Purpose: To indicate a quantity, and/or amount for an identified period
Syntax Notes:
1 If any of PAM01 PAM02 or PAM03 is present, then all are required.
2 At least one of PAM02 or PAM05 is required.
3 If either PAM04 or PAM05 is present, then the other is required.
4 If either PAM06 or PAM07 is present, then the other is required.
5 If PAM07 is present, then at least one of PAM08 or PAM09 is required.
6 If PAM08 is present, then PAM07 is required.
7 If PAM09 is present, then PAM07 is required.
8 If PAM10 is present, then at least one of PAM11 or PAM12 is required.
9 If PAM11 is present, then PAM10 is required.
10 If either PAM13 or PAM14 is present, then the other is required.
Semantic Notes:
1 PAM10, PAM11, or PAM12 are used when two dates are required.
Comments:
Notes: *This segment is used for the projected time frame column values on the funds status report. The projected time frames used in this segment directly relate to the time frames described in the CAL segment for the funds status report.*

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Not Used	PAM01	673	Quantity Qualifier Code specifying the type of quantity	X	ID 2/2
Not Used	PAM02	380	Quantity Numeric value of quantity	X	R 1/15
Not Used	PAM03	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	X	ID 2/2
Must Use	PAM04	522	Amount Qualifier Code Code to qualify amount	X	ID 1/2

69   Accrued Expenditures
Actual cost to date
70   Open Commitments
Value of supplies or other items committed to for payment (such as on delivery of products)
71   Forecast of Billings
This is a forecast of billings to the government; includes cummulative amounts already billed (including progress or advance payments) and a forecast of amounts that will be billed to the government
72   Estimated Termination Costs
Cost that would be necessary to liquidate all government obligations if the contract were to be ended in that reporting period

Must Use	PAM05	782	Monetary Amount Monetary amount	X	R 1/15
Must Use	PAM06	344	Unit of Time Period or Interval Code indicating the time period or interval	X	ID 2/2

CY   Calendar Year
FY   Fiscal Year
MO   Month

			QY	Quarter of a Year		
			SA	Semiannual		
Must Use	PAM07	374	**Date/Time Qualifier**		X	**ID 3/3**

Code specifying type of date or time, or both date and time

174	Month Ending	
194	Period End	
404	Year Ending	

Must Use	PAM08	373	**Date**	X	**DT 6/6**

Date (YYMMDD)

Enter the month, period, or year ending date.

Not Used	PAM09	337	**Time**	X	**TM 4/8**

Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

Not Used	PAM10	374	**Date/Time Qualifier**	X	**ID 3/3**

Code specifying type of date or time, or both date and time

Not Used	PAM11	373	**Date**	X	**DT 6/6**

Date (YYMMDD)

Not Used	PAM12	337	**Time**	X	**TM 4/8**

Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

Not Used	PAM13	1004	**Percent Qualifier**	X	**ID 1/2**

Code to qualify percent

Not Used	PAM14	954	**Percent**	X	**R 1/10**

Percentage expressed as a decimal

Segment:	**MSG** Message Text	
Position:	140	
Loop:	BSD	Optional (Must Use)
Level:		
Usage:	Optional	
Max Use:	1000	
Purpose:	To provide a free form format that would allow the transmission of text information.	
Syntax Notes:		
Semantic Notes:		
Comments:	1 MSG02 is not related to the specific characteristics of a printer, but identifies top of page, advance a line, etc.	
Notes:	*Use this segment if you need to provide limited remarks or comments about the funds status data. Use is limited to 100 repetitions, any format is fine.*	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	MSG01	933	**Free-Form Message Text**	M AN 1/264
			Free-form message text	
Not Used	MSG02	934	**Printer Carriage Control Code**	O ID 2/2
			A field to be used for the control of the line feed of the receiving printer	

Segment:	**N1** Name
Position:	150
Loop:	N1 Mandatory
Level:	
Usage:	Mandatory
Max Use:	1
Purpose:	To identify a party by type of organization, name, and code
Syntax Notes:	1 At least one of N102 or N103 is required.
	2 If either N103 or N104 is present, then the other is required.
Semantic Notes:	
Comments:	1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
	2 N105 and N106 further define the type of entity in N101.
Notes:	*Whenever possible, identification and address information should be provided using N101, N103, and N104. Use N102 and segments N2, N3, and N4 as applicable when this information cannot be provided by using one of the codes listed in N103.*

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	N101	98	**Entity Identifier Code**	**M**	**ID 2/2**
			Code identifying an organizational entity, a physical location, or an individual		
			FR	Message From	
				Use this code to identify the organization sending the funds status data.	
			TO	Message To	
				Use this code to identify the organization receiving the funds status data.	
			ZD	Party to Receive Reports	
				The organization designated to receive reports	
				Use this code to identify the organization that receives an information copy of the funds status data.	
	N102	93	**Name**	**X**	**AN 1/35**
			Free-form name		
	N103	66	**Identification Code Qualifier**	**X**	**ID 1/2**
			Code designating the system/method of code structure used for Identification Code (67)		
			1	D-U-N-S Number, Dun & Bradstreet	
			9	D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
			10	Department of Defense Activity Address Code (DODAAC)	
			33	Commercial and Government Entity (CAGE)	
	N104	67	**Identification Code**	**X**	**AN 2/20**
			Code identifying a party or other code		
Not Used	N105	706	**Entity Relationship Code**	**O**	**ID 2/2**
			Code describing entity relationship		
Not Used	N106	98	**Entity Identifier Code**	**O**	**ID 2/2**
			Code identifying an organizational entity, a physical location, or an individual		

Segment:	**N2** Additional Name Information	
Position:	160	
Loop:	N1	Mandatory
Level:		
Usage:	Optional	
Max Use:	1	
Purpose:	To specify additional names or those longer than 35 characters in length	
Syntax Notes:		
Semantic Notes:		
Comments:		
Notes:	*This segment should only be used when N102 is used and it is necessary to provide additional name information.*	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	N201	93	Name	M	AN 1/35
			Free-form name		
	N202	93	Name	O	AN 1/35
			Free-form name		

Segment:	**N3** Address Information	
Position:	170	
Loop:	N1 Mandatory	
Level:		
Usage:	Optional	
Max Use:	1	
Purpose:	To specify the location of the named party	
Syntax Notes:		
Semantic Notes:		
Comments:		
Notes:	*This segment should only be used when N102 is used.*	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	N301	166	**Address Information** Address information	M AN 1/35
	N302	166	**Address Information** Address information	O AN 1/35

	Segment:	**N4** Geographic Location
	Position:	180
	Loop:	N1 Mandatory
	Level:	
	Usage:	Optional
	Max Use:	1
	Purpose:	To specify the geographic place of the named party
	Syntax Notes:	1 If N406 is present, then N405 is required.
	Semantic Notes:	
	Comments:	1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
		2 N402 is required only if city name (N401) is in the USA or Canada.
	Notes:	*This segment should only be used when N102 is used.*

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	N401	19	**City Name** Free-form text for city name	O	AN 2/30
Must Use	N402	156	**State or Province Code** Code (Standard State/Province) as defined by appropriate government agency	O	ID 2/2
Must Use	N403	116	**Postal Code** Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	O	ID 3/11
	N404	26	**Country Code** Code identifying the country	O	ID 2/3
Not Used	N405	309	**Location Qualifier** Code identifying type of location	X	ID 1/2
Not Used	N406	310	**Location Identifier** Code which identifies a specific location	O	AN 1/30

Segment:	**PER** Administrative Communications Contact
Position:	190
Loop:	N1 Mandatory
Level:	
Usage:	Optional (Must Use)
Max Use:	10
Purpose:	To identify a person or office to whom administrative communications should be directed
Syntax Notes:	1 If either PER03 or PER04 is present, then the other is required.
	2 If either PER05 or PER06 is present, then the other is required.
	3 If either PER07 or PER08 is present, then the other is required.
Semantic Notes:	
Comments:	
Notes:	*At least one repetition of the PER segment is required per transaction set to identify a contact person for the report. This should be a specific individual's name.*

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	PER01	366	**Contact Function Code**		M ID 2/2
			Code identifying the major duty or responsibility of the person or group named		
			AA	Authorized Representative	
				Use this code for the sending contractor's contact person's name. This code is required.	
			BD	Buyer Name or Department	
				Use this code to identify the sending contractor's organization or department. This code is optional.	
			PP	Program Manager	
				Use this code to identify the receiving Program Manager or Program Office contact person's name. This code is optional.	
Must Use	PER02	93	**Name**		O AN 1/35
			Free-form name		
			1. When PER01 is code AA or PP, enter the person's name. Provide the last name, first name, and middle initial if available. Include blank spaces between name components and periods after initials. Omit the comma between the last name and first name.		
			2. When PER01 is code BD, enter the sending contractor's organization code or department reference.		
	PER03	365	**Communication Number Qualifier**		X ID 2/2
			Code identifying the type of communication number		
			EM	Electronic Mail	
			FX	Facsimile	
			TE	Telephone	
	PER04	364	**Communication Number**		X AN 1/80
			Complete communications number including country or area code when applicable		
	PER05	365	**Communication Number Qualifier**		X ID 2/2
			Code identifying the type of communication number		
			EM	Electronic Mail	

			EX	Telephone Extension		
			FX	Facsimile		
			TE	Telephone		
PER06	**364**	**Communication Number**			X	AN 1/80

Complete communications number including country or area code when applicable

PER07	**365**	**Communication Number Qualifier**			X	ID 2/2

Code identifying the type of communication number

			EM	Electronic Mail		
			EX	Telephone Extension		
			FX	Facsimile		
			TE	Telephone		
PER08	**364**	**Communication Number**			X	AN 1/80

Complete communications number including country or area code when applicable

PER09	**443**	**Contact Inquiry Reference**			O	AN 1/20

Additional reference number or description to clarify a contact number

Use this data element when PER01 is code AA or PP to enter the title of the person named in PER02.

Segment:	**DTM** Date/Time Reference	
Position:	200	
Loop:	N1 Mandatory	
Level:		
Usage:	Optional (Must Use)	
Max Use:	10	
Purpose:	To specify pertinent dates and times	
Syntax Notes:	1 At least one of DTM02 DTM03 or DTM06 is required.	
	2 If either DTM06 or DTM07 is present, then the other is required.	
Semantic Notes:		
Comments:		
Notes:	*This segment is required.*	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	DTM01	374	**Date/Time Qualifier**	M	ID 3/3
			Code specifying type of date or time, or both date and time		
			275 Approved		
			Date report was approved by contractor representative		
			Use this code to indicate the date the data was approved for submission.		
Must Use	DTM02	373	**Date**	X	DT 6/6
			Date (YYMMDD)		
Not Used	DTM03	337	**Time**	X	TM 4/8
			Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)		
Not Used	DTM04	623	**Time Code**	O	ID 2/2
			Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow		
Not Used	DTM05	624	**Century**	O	N0 2/2
			The first two characters in the designation of the year (CCYY)		
Not Used	DTM06	1250	**Date Time Period Format Qualifier**	X	ID 2/3
			Code indicating the date format, time format, or date and time format		
Not Used	DTM07	1251	**Date Time Period**	X	AN 1/35
			Expression of a date, a time, or range of dates, times or dates and times		

Segment:	**SE** **Transaction Set Trailer**	
Position:	210	
Loop:		
Level:		
Usage:	Mandatory	
Max Use:	1	
Purpose:	To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments).	
Syntax Notes:		
Semantic Notes:		
Comments:	1 SE is the last segment of each transaction set.	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	SE01	96	**Number of Included Segments**	M N0 1/10
			Total number of segments included in a transaction set including ST and SE segments	
Must Use	SE02	329	**Transaction Set Control Number**	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	
			SE02 is the same number as the number in ST02.	

NIST Technical Publications

Periodical

Journal of Research of the National Institute of Standards and Technology—Reports NIST research and development in those disciplines of the physical and engineering sciences in which the Institute is active. These include physics, chemistry, engineering, mathematics, and computer sciences. Papers cover a broad range of subjects, with major emphasis on measurement methodology and the basic technology underlying standardization. Also included from time to time are survey articles on topics closely related to the Institute's technical and scientific programs. Issued six times a year.

Nonperiodicals

Monographs—Major contributions to the technical literature on various subjects related to the Institute's scientific and technical activities.

Handbooks—Recommended codes of engineering and industrial practice (including safety codes) developed in cooperation with interested industries, professional organizations, and regulatory bodies.

Special Publications—Include proceedings of conferences sponsored by NIST, NIST annual reports, and other special publications appropriate to this grouping such as wall charts, pocket cards, and bibliographies.

National Standard Reference Data Series—Provides quantitative data on the physical and chemical properties of materials, compiled from the world's literature and critically evaluated. Developed under a worldwide program coordinated by NIST under the authority of the National Standard Data Act (Public Law 90-396). NOTE: The Journal of Physical and Chemical Reference Data (JPCRD) is published bimonthly for NIST by the American Chemical Society (ACS) and the American Institute of Physics (AIP). Subscriptions, reprints, and supplements are available from ACS, 1155 Sixteenth St., NW, Washington, DC 20056.

Building Science Series—Disseminates technical information developed at the Institute on building materials, components, systems, and whole structures. The series presents research results, test methods, and performance criteria related to the structural and environmental functions and the durability and safety characteristics of building elements and systems.

Technical Notes—Studies or reports which are complete in themselves but restrictive in their treatment of a subject. Analogous to monographs but not so comprehensive in scope or definitive in treatment of the subject area. Often serve as a vehicle for final reports of work performed at NIST under the sponsorship of other government agencies.

Voluntary Product Standards—Developed under procedures published by the Department of Commerce in Part 10, Title 15, of the Code of Federal Regulations. The standards establish nationally recognized requirements for products, and provide all concerned interests with a basis for common understanding of the characteristics of the products. NIST administers this program in support of the efforts of private-sector standardizing organizations.

Order the **following** *NIST publications—FIPS and NISTIRs—from the National Technical Information Service, Springfield, VA 22161.*

Federal Information Processing Standards Publications (FIPS PUB)—Publications in this series collectively constitute the Federal Information Processing Standards Register. The Register serves as the official source of information in the Federal Government regarding standards issued by NIST pursuant to the Federal Property and Administrative Services Act of 1949 as amended, Public Law 89-306 (79 Stat. 1127), and as implemented by Executive Order 11717 (38 FR 12315, dated May 11, 1973) and Part 6 of Title 15 CFR (Code of Federal Regulations).

NIST Interagency Reports (NISTIR)—A special series of interim or final reports on work performed by NIST for outside sponsors (both government and nongovernment). In general, initial distribution is handled by the sponsor; public distribution is by the National Technical Information Service, Springfield, VA 22161, in paper copy or microfiche form.