

4 Training Interface Processing

4.1 Training Revision Sheet

Chapter Release No.	Date	Training Revision Description
1.0	05/13/2004	Initial version released to OPM EHRI Program Office
1.1	05/28/2004	Added section 4.3 (old 3.1), reporting requirements. Added text to section 4.4 (old 3.2) to describe how the XML format will be validated prior to loading. Added text to section 4.6.2.1 (old 4.2.1) to indicate that values must be provided for all mandatory fields. Added section 6.4 (old 6.3) to describe edits performed on individual records. Added mandatory fields in section 4.7.2 (old A.2). Added section 0 (old A.3) containing sample delimited file. Added annotation, format and length information to XML schema definition in section 4.9.1 (old B.2). Added schema location information to sample XML file in section 4.9.2 (old B.3). Added section 4.10 (old Appendix C), containing individual field and relational edit rules.
1.2	06/09/2004	Added table D-2 (old table 2-2), Operational Contact List. Modified section 4.6.2 (old 4.2) to indicate that XML is the preferred format. Reformatted section 6.4 (old 6.3). Added explanation of mandatory and optional in section 4.7.2 (A.2). Modified XML Schema to place AgencySubelement element within EmployeeType element. Added Appendix A – Reference Data Value Standards (old Appendix D).
1.3	06/11/2004	Added paragraph on Academic Degree Data to section 4.3 (old 3.1). Made Training Accreditation Indicator an optional element.
2.0	10/11/2004	Updated Appendix D (old 2.0) to include OPM Connect:Direct point of contact information that was originally found in this chapter. Updated section 5.1 to provide more detail on the file transfer process. Updated section 6.4 (old 6.3) to clarify the description for the Add, Correct (previously called Update), and Delete record actions. Modified section 0 (old A.3) to reflect the latest Record Specification. Please refer to Appendix C, C.5 (old Appendix F) for the specification release notes detailing the difference in the file format for this release. Updated section 4.7.1 (old Appendix A.1) to correctly specify the DATE format to not include zero in the day range. Added section 4.7.2 (old Appendix A.2) to explain the new Reporting Criteria column in the file format specification table. This column replaces the previous “Mandatory/Optional” column and includes the third criteria of “Critical.”

Chapter Release No.	Date	Training Revision Description
2.0 (continued)	10/11/2004	<p>Modified section 4.10 (old Appendix C) to update all the edit rules for the new fields added to the file format. Also modified the edit rules to take into consideration the new “Critical” reporting criteria.</p> <p>Updated Appendix A (old Appendix D) with the new valid values for all the training reference values that were originally found in this chapter.</p> <p>Added Appendix C (old Appendix F) to detail all the changes to the file format specification. This revision sheet and Appendix C should be updated in tandem.</p>
3.0	02/02/2005	<p>Provided more specific information regarding training in sections 4.2 and 4.3.</p> <p>Updated section 0, specifically:</p> <ul style="list-style-type: none"> - 18. Training Delivery Type Code: data definitions added to the chart - 21. Materials Cost: new data definition added. (Old definition: Cost of the training materials for training completed by the employee that was paid for by the Federal government. This includes all direct costs associated with purchasing and/or producing the training materials used by the students (e.g, Costs of supplies, licenses, contractor provided services, and costs for equipment and software used specifically for the production of training products and materials). It does not include distribution costs of the training materials or salary costs of government employees involved in producing training materials.
3.1	2/18/2005	<p>Updated 0 with new Training file format.</p> <p>Updated 4.6.2.1 to be more specific about what ASCII character set should be used to create the file.</p> <p>Replaced the Reporting Criteria Explanation section with the Policy Reporting Requirement Explanation (Error! Reference source not found.) and the Record Identifying Requirement Explanation (4.7.2.2) sections.</p>
3.2	07/27/2005	<p>Modified Section 4.9 to remove the Training Funding Source data element from the XML Schema definition. This data element was previously removed from the delimited file record specification.</p>
3.3	10/20/2005	<p>Added note in section 4.7.1 describing handling of null numeric values.</p> <p>Added a new Training Credit Type Code (ICD Seq #16) value to support training that doesn't fit one of the existing types (“N/A”).</p> <p>Modified training credit designation type code, training credit, training credit type code relational edit to include check for N/A in training credit type code.</p>

3.4	8/11/2006	<p>Updated the text in section 4.3 to better describe the reporting requirements and policy dates, and provided contact information for key OPM contacts.</p> <p>Minor wording edits in sections 4.2 and 4.5 to improve clarity.</p> <p>Added a suffix to the training file name to support versioning of the interface. This version of the Guide is 3.4 therefore the version suffix should be “_3.4”.</p> <p>Changed the Delimited and XML File Format sections to subsections of 4.6.2 for clarity.</p> <p>Removed the ASCII character set file format requirement in section 4.6.2 and replaced it with a description of the Connect:Direct functionality that will manage any necessary character set translation.</p> <p>Added text in 4.6.2.1 regarding delimiters not being required before the first field in the record.</p> <p>Added reserved symbols for XML files in section 4.6.2.2, along with some further details about XML file requirements.</p> <p>Added requirements for an email notification of file transmissions in section 4.6.3.</p> <p>Described the proper treatment of negative values in section 4.7.1.</p> <p>Added “Dup” to valid values for the Record Identifying Requirement described in section 4.7.2.2.</p> <p>Added explanation of the record action values in section 4.7.2.3.</p> <p>Changed column headers in section 4.7.3 from “System Rep Req” to “Record ID Req” for consistency between chapters, and “Codes” to “Notes” as the column contains more than code values.</p> <p>Added “Dup” to the Record ID Requirements for every field on the interface.</p> <p>Changed the Policy Reporting Requirement to 2 from 4 for Training Start Date (ICD Seq #9), Continued Service Agreement Expiration Date (ICD Seq # 11), Training Credit (ICD Seq # 14), and Training Credit Type Code (ICD Seq #16).</p> <p>Updated notes for Record Action (ICD Seq # 1) and Birth Date (ICD Seq # 3).</p> <p>Added “Expiration Date” element in the sample XML file in section 4.8.2.</p> <p>Updated edits in section 4.9.1</p> <ul style="list-style-type: none"> - Deleted edit on Continued Service Agreement Expiration Date - Changed edit on all numeric checks to store “zero” vs. “null” if value is not numeric <p>Added Training End Date to add, delete, and correct relational edits in section 4.9.2.</p>
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4.0	06/08/2007	<p>Updated contact information in Section 4.3.</p> <p>Corrected file naming convention to use an underscore (“_”) instead of a period (“.”) between the Version (V) number and Release (R) number in section 4.6.1.</p> <p>Added requirement for a ‘negative report’ email in section 4.6.3.</p> <p>Changed the contents of 4.7.2 to describe the new interface requirements table layout which contains new record identifier, priority, and retirement columns.</p> <p>Updated the data requirements in Sections 4.8 based on the GHRR ICD Version 4.0 requirements approved on 6/5/2007:</p> <ul style="list-style-type: none"> - Changed priority ratings to 1-4 scale. - Added “Retirement” column and flags. - Updated notes and record identifier flags for several existing fields. - Added new travel indicator field (ICD Seq #27). <p>Updated the XML schema and sample XML file.</p> <p>Added additional edits to Section 4.10.</p>
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4.2 Training Interface Processing

The goal for the Training Interface Processing is to securely acquire training data for all Federal Civilian employees by leveraging existing data extraction processes to the extent possible. This section contains an overview of the data acquisition strategy and interface processing.

This chapter is designed to explain and provide guidance on collecting and reporting required training data elements. These data elements support agency mission and objectives and training program evaluation efforts. As Human Resource Development (HRD) specialists, the need to understand government wide organizational processes to collect and report training data is critical in accomplishing agency human capital goals. Training data are also critical in determining workforce needs by documenting the results of training and development programs and evaluating the effectiveness of the training to address those needs. HRD professionals and/or program managers have a special responsibility as stewards of the agency's training and development data to assure that the data collected are accurate and complete when reported.

OPM's authority to require Federal agencies to report training data can be found in Title 5 United States Code, Chapter 4107 and part 410 of Title 5, Code of Federal Regulations (CFR). Federal agencies must report the training data specified in this guide for each employee and establish a schedule of records to be maintained in accordance with regulations promulgated by the National Archives and Records Administration (NARA) and the General Service Administration (GSA). Additional authorities that require Federal agencies to report data can be found in 5 CFR part 293.

4.3 Reporting Requirement

Providers should only submit data for completed training units. A completed training unit is defined as a training event for which the student has accomplished all components in the title of the event.

Agencies should report using all training data elements required in this guide. Training data are reported on an individual employee basis, which means the reporting of all training data element codes for each completed training event for each employee. The data elements required for reporting each training event for each employee are described in detail in the training section of Appendix A of this guide.

Training events must be aligned with the strategic goals and mission of the agency, as well as being aligned with employee performance goals. Agencies will use the appropriate codes and values provided in this guide to report on the training events and costs associated with those events.

Agencies should begin reporting available training data as prescribed by the Final Rule on Training – Reporting Requirements, published on May 17, 2006, in the Federal Register (<http://www.opm.gov/fedregis/2006/71-051006-28547-a.pdf>). According to the regulation, agencies may submit written requests for an extension of the deadline date for reporting data. Although OPM does not encourage extensions of the deadline, agencies must submit a written request that includes a plan for meeting the training submission requirements within the compliance dates set out by the regulation. There will be no extensions granted after December

31, 2007. The request should be addressed to Nancy Randa, Associate Director, Office of Personnel Management Strategic Human Resource Policy, Center for Learning, Executive Resources and Policy Analysis, 1900 E Street NW, Room 6300, Washington, DC 20415. For further questions in reference to the extension process please contact Loretta Reeves at 202-606-2419 or at Loretta.Reeves@opm.gov.

4.4 Data Acquisition Strategy

Depending on the source of training related data, one provider may submit data for many agencies. The data submission method varies by provider, however all providers will be required to submit their data to EHRI via Connect:Direct or Connect:Direct Secure + Option.

For Release 3.0, GoLearn will provide training related data to EHRI. GoLearn will electronically transmit training data to the EHRI production server using Connect:Direct or Connect:Direct Secure + Option. The data files must be formatted as specified in Section 4.6 and transmitted according to the specifications listed in Chapter 5. Providers will be responsible for scheduling data transmissions to EHRI and providing a technical point of contact. Please refer to Appendix D for EHRI operational point of contact information.

4.5 Data Interface Processing

The interface process loads training data files into the EHRI data warehouse staging tables. If the training data file is submitted using the XML format, the interface process ensures that the file is well-formed and validates the file using the training XML schema prior to loading the file into the staging tables. If the delimited file format is submitted, no edits are performed prior to loading the file into the staging tables. The ETL process that moves the data from the staging tables to the EHRI data warehouse performs required edits and audits and applies business rules as needed. The load process captures relevant metadata for reporting and debugging purposes.

4.6 Training File Naming Convention and Format

4.6.1 Naming Convention

The file name will conform to the following naming convention:

TFYYYYMMDDAAAAN_V_R

Each portion of the file name is explained in the following table.

Name Segment	Description
T	Constant value of 'T' indicating the training data file type.
F	Indicates the format of the file (D for delimited files, X for XML files).
YYYY	For file as of date, indicates century (19 to 20) and year (01 to 99)
MM	For file as of date, indicates month (01 to 12)
DD	For file as of date, indicates day (01 to 31)
AAAA	Indicates the agency code or agency/subelement code for the submitting agency.
N	Resubmission Indicator. On the first submission for each as of date, N is a numeric zero. If the data is resubmitted for the same as of date, the value of N is increased by 1.
V_R	Version (V) and Release (R) numbers for this Guide. This will allow the data warehouse load program to identify the correct file layout during transmission and loading of the file. NOTE: Files transmitted using the layouts in this update to the Guide should use “_4_0” as the version suffix.

4.6.2 File Content

The providers are responsible for creating the training files. Two file formats will be accepted – a delimited format and an XML format. XML is the preferred format and providers should submit training data in XML format when possible. EHRI supports the delimited file format only for providers who have no current means of generating XML data files. Only one of the formats should be submitted for each agency/subelement.

4.6.2.1 Delimited File Format

Providers submitting a file in the delimited file format must comply with the following rules:

- Files transferred to EHRI can be made in the format appropriate to the provider's operating environment. For example, providers who are operating in a mainframe environment can submit EBCDIC files to EHRI and allow Connect:Direct to make the necessary codepage translation. Connect:Direct will automatically translate the file into a format that can be interpreted by EHRI.
- Each line of the file must contain one record.
- Each record will contain all of the fields listed in section 4.7.3, ordered by element sequence number, with each field separated by the vertical bar character ('|').
- Even if there is no value supplied for a field, the delimiter must still appear in the file.
- Values must be supplied for all mandatory and critical elements.
- No delimiter is required before the first field or after the last field in the record.

4.6.2.2 XML File Format

Providers submitting a file in the XML file format must comply with the following rules:

- Files transferred to EHRI can be made in the format appropriate to the provider's operating environment. For example, providers who are operating in a mainframe environment can submit EBCDIC files to EHRI and allow Connect:Direct to make the necessary codepage translation. Connect:Direct will automatically translate the file into a format that can be interpreted by EHRI.
- The file must be formatted according to the EHRI Training schema provided in 4.9.
- The file must be a well-formed XML document as defined in the XML 1.0 specification.
- The file validates successfully against the EHRI Training schema.
- Each record will contain all of the fields listed in section 4.7.3.
- If there is no value supplied for a field, the corresponding XML tags can be omitted.
- Values must be supplied for all mandatory and critical elements.
- Reserved symbols in XML must be translated correctly:
 - Less-than (“<”) = “<”
 - Greater-than (“>”) = “>”
 - Ampersand (“&”) = “&”

4.6.3 Email Notification of File Transmission

Providers shall notify OPM of data submissions by sending an email to ehri_files@opm.gov. The email notification is required for a file to be processed, and must contain the name of the file and the record count of the file being transmitted. The email should indicate if the transmission is a resubmission, which is also denoted by the file name. The email should also include a “signature” consisting of the submitter’s name, agency, and telephone number.

A “negative” report email should be transmitted to the above email address in the event there are no records to be reported for the period.

4.7 Training Delimited File Format Specification

4.7.1 Data Element Format Types

This table describes datatypes appearing in the record specification table found in Section 4.8.

Format	Meaning	Examples
VARCHAR(n)	A series of up to n alphanumeric and special characters, not including the vertical bar character ().	123-45-6789 125 Main St., S.W. Y OM00
NUMBER(n)	A series of n numeric characters. Negative values can be sent in this field, and are submitted using a negative symbol ("-") immediately preceding the number being sent, with no leading or trailing spaces. For example, a negative days total is sent as -10. NOTE: any null (empty) values passed into a number field will be translated by the interface into a "0" (zero).	0 180 -10
DECIMAL(n, m)	A series of n numeric characters with up to m characters to the right of the decimal point. The decimal point should appear in the element value if required. A decimal point is neither required nor implied, i.e., 400 represents 400, not 4.00. Negative values can be sent in this field, and are submitted using a negative symbol ("-") immediately preceding the number being sent, with no leading or trailing spaces. For example, a negative one hundred dollar amount is sent as -100 or -100.00. NOTE: any null (empty) values passed into a decimal field will be translated by the interface into a "0" (zero).	For a format of Decimal(9,2): 0 1500 1234567.89 1234.0 0.75 -100 -5.00
DATE	A date consisting of a 4 character year, a 2 character numeric month (01-12), and a 2 character numeric day (01-31), separated by dashes.	1960-01-01 (= January 1, 1960) 2004-12-31 (= December 31, 2004)

4.7.2 Reporting Requirements

This table describes columns appearing in the record specification table found in Section 4.8.

Column	Description	Valid Values
ICD Seq #	Sequential number to identify fields in this version of the record specification. Number assigned to a data element may change between versions.	
EHRI Ref #	Internal EHRI reference number assigned to data elements. Used to tie elements back to EHRI metadata repository.	
Data Concept	Name of grouping for specific data elements in the record specification.	
Name	Standard data element name.	
Record Identifier	Indicates how EHRI will handle incoming records during the data load process.	Y Field must be present on the record or it will be rejected. Dup Field will be used to determine if this record is a duplicate. <blank> Will not reject or be used in duplicate check.
Priority	Indicates the criticality of fields being submitted to EHRI. All data elements are requested (with the exception of priority "4" fields) if they are available and applicable to the employee record. Note the priority scheme changed in version 4.0 of the GHRR to provide more clarity on what EHRI is expecting from providers.	1 Mandatory for Compliance 2 High Priority 3 Low Priority 4 Priority TBD (Not required for submission at this time.)
CPDF	Indicates that the field is part of Office of Personnel Management's CPDF data collection requirements.	Y Field collected in CPDF. <blank> Not a field collected in CPDF.
Retirement	Indicates that the field will be transmitted to the Retirement Systems Modernization (RSM) program.	Y Field transmitted to RSM. <blank> Not a field transmitted to RSM.
Datatype	Data format and length.	See Section 2.7.1 for details.
Definition	Standard data element definition.	
Notes	Additional details including valid value information.	

4.7.3 Explanation of Record Actions

There are three types of record actions in the specification: Add, Correct, and Delete. The majority of records should be sent as Add type (Record Action = "A"). This will satisfy the normal reporting requirements for each training reporting period, and each record should include all fields in the training file specification.

The Correct and Delete record actions should be used to fix previously transmitted data. For example, if a record was sent in the interface and it was determined at a later point that the training did not actually occur, a Delete record would be sent containing only the key fields of the record. A correction record should be sent to fix a record that was sent in error. For correction actions, the entire training record must be submitted including the key fields and ALL training fields. Sending only corrected fields will result in other fields in the previously transmitted record to be removed.

4.8 Record Specification

ICD Seq #	EHRI Ref #	Data Concept	Name	Record Identifier	Priority	CPDF	Retirement	Datatype	Definition	Notes
1	997	Data Record	Record Action	Y / Dup	1			VARCHAR(1)	Indicates action to take with this data record.	A=add, D=delete, C=correct; see description of record actions in the "Explanation of Record Actions" section of this chapter.
2	652	Employee ID	Social Security Number	Y / Dup	1	Y		VARCHAR(35)	Person's social security number.	
3	74	Employee ID	Birth Date	Y / Dup	1	Y		DATE	Date on which the person is born.	Used in combination with SSN to uniquely identify an employee.
4	999	Employee ID	EHRI Employee ID		4			NUMBER(20)	The unique number that EHRI will assign to an employee to identify employee records within the EHRI.	This field is currently assigned and stored within EHRI and should be left blank by providers.
5	17	Employee ID	Agency Subelement Code	Y / Dup	1	Y		VARCHAR(4)	Agency and, where applicable, the administrative sub-division (i.e. subelement) in which a person is employed.	See The Guide to Personnel Data Standards.
6	991	Completed Training Unit	Training Title	Y / Dup	1			VARCHAR(100)	Official title or name of the course or program completed by the employee	
7	723	Completed Training Unit	Training Type Code	Y / Dup	1			VARCHAR(4)	Code for the type of training which has been completed by the employee.	See Appendix A, Training Type Code.
8	1036	Completed Training Unit	Training Sub Type Code	Y / Dup	1			VARCHAR(4)	Code for the sub-type of training which has been completed by the employee.	See Appendix A, Training Sub Type Code.
9	720	Completed Training Unit	Training Start Date		1			DATE	Start date of the training completed by the employee.	
10	710	Completed Training Unit	Training End Date	Y / Dup	1			DATE	End date for the training completed by the employee.	

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ICD Seq #	EHRI Ref #	Data Concept	Name	Record Identifier	Priority	CPDF	Retirement	Datatype	Definition	Notes
11	89	Completed Training Unit	Continued Service Agreement Expiration Date		1			DATE	The date to which an employee is obligated to remain in service as a stipulation for taking the training course.	
12	90	Completed Training Unit	Continued Service Agreement Required Indicator		1			VARCHAR(2)	Indication that an employee is obligated to remain in service as a stipulation for taking the training course.	Y=Yes, N=No, NA=Non Applicable
13	699	Completed Training Unit	Training Accreditation Indicator		1			VARCHAR(2)	Indicates if the training course offers accreditation.	Y=Yes, N=No, NA=Non Applicable
14	704	Completed Training Unit	Training Credit		1			DECIMAL(9,2)	Amount of academic credit hours or continued education units earned by the employee for the completed training.	
15	705	Completed Training Unit	Training Credit Designation Type Code		1			VARCHAR(4)	Code for the type of academic credit hours or continued education units earned by the employee for the completed training course.	See Appendix A, Training Credit Designation Type Code.
16	987	Completed Training Unit	Training Credit Type Code		1			VARCHAR(4)	Code representing the type of credit hours the employee received for the completed training.	01=Semester Hours, 02=Quarter Hours, 03=Continuing Education Unit, 04=N/A
17	709	Completed Training Unit	Training Duty Hours		1			DECIMAL(9,2)	Number of employee duty hours the employee used to complete the training unit.	
18	714	Completed Training Unit	Training Non Duty Hours		1			DECIMAL(9,2)	Number of employee non-duty hours for the completed training course.	
19	707	Completed Training Unit	Training Delivery Type Code		1			VARCHAR(4)	Code for the type of training delivery for the training course completed by the employee.	See Appendix A, Training Delivery Type Code.
20	716	Completed Training Unit	Training Purpose Type Code		1			VARCHAR(4)	Code representing the purpose of the training completed by the employee.	See Appendix A, Training Purpose Type Code.
21	718	Completed Training Unit	Training Source Type Code		1			VARCHAR(4)	Source of the training which has been completed by the employee.	See Appendix A, Training Source Type Code.

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ICD Seq #	EHRI Ref #	Data Concept	Name	Record Identifier	Priority	CPDF	Retirement	Datatype	Definition	Notes
22	713	Training Materials Cost	Training Materials Cost		1			DECIMAL(9,2)	Cost to the Government for the training materials used during the training unit completed by the employee. This includes all direct costs associated with purchasing the training materials used by the employee that is in addition to the tuition cost. It can include but is not limited to costs of supplies, cost of equipment, and cost of software used by the student during the training event.	
23	715	Training Per Diem Cost	Training Per Diem Cost		1			DECIMAL(9,2)	Cost of the per diem (meal, lodging, misc. expenses) for training completed by the employee that was paid for by the Federal Government.	
24	721	Training Travel Cost	Training Travel Cost		1			DECIMAL(9,2)	Cost for the travel, excluding per diem, for training completed by the employee that was paid for by the Federal Government.	
25	722	Training Tuition and Fees Cost	Training Tuition and Fees Cost		1			DECIMAL(9,2)	The cost of the training tuition and fee for training completed by the employee that was paid for by the Federal Government.	
26	1038	Training Nongovernment Contribution Cost	Training Nongovernment Contribution Cost		1			DECIMAL(9,2)	Cost contributed by the employee or other non-government organizations for the training completed by the employee.	
27		Training Travel Indicator	Training Travel Indicator		1			VARCHAR(2)	Indicates if the employee traveled to attend the training course.	Y=Yes, N=No, NA=Non Applicable

4.8.1 Sample Delimited File

A|123456789|1960-01-01|12345678901234567890|AG02|Training Course 1|02|20|2003-10-01|2003-10-1|N|Y|3|01|01|20.5|9.0|02|01|300.00|200.00|1200.00|3020.00|200.00|0|Y
 C|234567890|1970-12-31|12345678901234567890|AG02|Sample Training Course 2|01|04|2004-02-01|2004-02-03|2005-02-25|Y|N|1.5|02|02|40|0|02|05|0|0|0|500.00|100.00|50.00|Y
 D|345678902|1965-10-30|23456789012345678901|AG02|Sample Training Course 3|01|07|2004-03-15|2004-03-15|N|N|3|02|02|39.50|0.50|02|05|0|0|0|0|0|N

4.9 Training XML File Format Specification

4.9.1 W3C XML Schema Definition File

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<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified">
  <xs:annotation>
    <xs:documentation xml:lang="en">Training XML Schema for EHRI.
      Version 4.0.
      06/08/2007
      All rights reserved.
    </xs:documentation>
  </xs:annotation>
  <xs:element name="TrainingExport" type="TrainingExportType"/>
  <xs:element name="TrainingRecord" type="TrainingRecordType"/>
  <xs:complexType name="TrainingExportType">
    <xs:sequence>
      <xs:element ref="TrainingRecord" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attribute name="fileDate" type="xs:string" use="required"/>
    <xs:attribute name="fileSource" type="xs:string" use="required"/>
  </xs:complexType>
  <xs:complexType name="TrainingRecordType">
    <xs:sequence>
      <xs:element name="RecordAction">
        <xs:annotation>
          <xs:documentation>Indicates action to take with this data record.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="1"/>
            <xs:enumeration value="A"/>
            <xs:enumeration value="C"/>
            <xs:enumeration value="D"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="Employee" type="EmployeeType"/>
      <xs:element name="TrainingTitle">
        <xs:annotation>
          <xs:documentation>Official title or name of the course or program completed by the
employee.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="100"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>

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        </xs:simpleType>
    </xs:element>
    <xs:element name="TrainingTypeCode">
        <xs:annotation>
            <xs:documentation>Code for the type of training which has been completed by the
employee.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:maxLength value="4"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="TrainingSubTypeCode">
        <xs:annotation>
            <xs:documentation>Code for the sub type of training which has been completed by the
employee.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:maxLength value="4"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="TrainingStartDate" type="xs:date">
        <xs:annotation>
            <xs:documentation>Start date of the training completed by the employee.</xs:documentation>
        </xs:annotation>
    </xs:element>
    <xs:element name="TrainingEndDate" type="xs:date">
        <xs:annotation>
            <xs:documentation>End date for the training completed by the employee.</xs:documentation>
        </xs:annotation>
    </xs:element>
    <xs:element name="ContinuedServiceAgreement" type="ContinuedServiceAgreementType"/>
    <xs:element name="AccreditationInd" type="IndicatorType">
        <xs:annotation>
            <xs:documentation>Indicates if the training course offers accreditation.</xs:documentation>
        </xs:annotation>
    </xs:element>
    <xs:element name="TrainingCredit" type="TrainingCreditType"/>
    <xs:element name="TrainingDutyHours" type="xs:decimal">
        <xs:annotation>
            <xs:documentation>Number of employee duty hours the employee used to complete the training
unit.</xs:documentation>
        </xs:annotation>
    </xs:element>
    <xs:element name="TrainingNonDutyHours" type="xs:decimal">
        <xs:annotation>
            <xs:documentation>Number of employee non-duty hours for the completed training
course.</xs:documentation>
        </xs:annotation>
    </xs:element>

```

```

        </xs:annotation>
    </xs:element>
    <xs:element name="TrainingDeliveryTypeCode">
        <xs:annotation>
            <xs:documentation>Code for the type of training delivery for the training course completed by the
employee.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:maxLength value="4"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="TrainingPurposeTypeCode">
        <xs:annotation>
            <xs:documentation>Code representing the purpose of the training completed by the
employee.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:maxLength value="4"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="TrainingSourceTypeCode">
        <xs:annotation>
            <xs:documentation>Source of the training which has been completed by the
employee.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:maxLength value="4"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
    <xs:element name="TrainingCost" type="TrainingCostType"/>
    <xs:element name="TrainingTravelIndicator" type="IndicatorType">
        <xs:annotation>
            <xs:documentation>Indicates if the employee traveled to attend the training
course.</xs:documentation>
        </xs:annotation>
    </xs:element>
</xs:sequence>
</xs:complexType>
<xs:complexType name="EmployeeType">
    <xs:sequence>
        <xs:element name="SSN">
            <xs:annotation>
                <xs:documentation>Person's social security number.</xs:documentation>
            </xs:annotation>
        </xs:element>
    </xs:sequence>
</xs:complexType>

```

```

        <xs:restriction base="xs:string">
            <xs:maxLength value="9" />
        </xs:restriction>
    </xs:simpleType>
</xs:element>
<xs:element name="BirthDate" type="xs:date">
    <xs:annotation>
        <xs:documentation>Date on which the person is born.</xs:documentation>
    </xs:annotation>
</xs:element>
<xs:element name="EHRIEmployeeId" minOccurs="0">
    <xs:annotation>
        <xs:documentation>The unique number that EHRI will assign to an employee to identify employee
records within the EHRI.</xs:documentation>
    </xs:annotation>
    <xs:simpleType>
        <xs:restriction base="xs:string">
            <xs:maxLength value="20" />
        </xs:restriction>
    </xs:simpleType>
</xs:element>
<xs:element name="AgencySubelement">
    <xs:annotation>
        <xs:documentation>Agency and, where applicable, the administrative sub-division (i.e. subelement)
in which an a person is employed.</xs:documentation>
    </xs:annotation>
    <xs:simpleType>
        <xs:restriction base="xs:string">
            <xs:maxLength value="4" />
        </xs:restriction>
    </xs:simpleType>
</xs:element>
</xs:sequence>
</xs:complexType>
<xs:complexType name="ContinuedServiceAgreementType">
    <xs:sequence>
        <xs:element name="AgreementRequiredInd" type="IndicatorType">
            <xs:annotation>
                <xs:documentation>Indicates whether a continued service agreement is required for the training
the employee is taking.</xs:documentation>
            </xs:annotation>
        </xs:element>
        <xs:element name="ExpirationDate" type="xs:date" minOccurs="0">
            <xs:annotation>
                <xs:documentation>Date on which the continued service agreement expires.</xs:documentation>
            </xs:annotation>
        </xs:element>
    </xs:sequence>
</xs:complexType>
<xs:complexType name="TrainingCostType">
    <xs:sequence>

```

```

    <xs:element name="MaterialsCost" type="xs:decimal">
      <xs:annotation>
        <xs:documentation>Cost to the Government for the training materials used during the training unit
completed by the employee. This includes all direct costs associated with purchasing the training materials used by the employee that
is in addition to the tuition cost. It can include but is not limited to costs of supplies, cost of equipment, and cost of software
used by the student during the training event.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="PerDiemCost" type="xs:decimal">
      <xs:annotation>
        <xs:documentation>Cost of the per diem (meal, lodging, misc. expenses) for training completed by
the employee that was paid for by the Federal Government.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="TravelCost" type="xs:decimal">
      <xs:annotation>
        <xs:documentation>Cost for the travel, excluding per diem, for training completed by the employee
that was paid for by the Federal Government.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="TuitionAndFees" type="xs:decimal">
      <xs:annotation>
        <xs:documentation> The cost of the training tuition and fee for training completed by the
employee that was paid for by the Federal Government.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="NonGovernmentContribution" type="xs:decimal">
      <xs:annotation>
        <xs:documentation>Cost contributed by the employee or other non-government organizations for the
training completed by the employee..</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="TrainingCreditType">
  <xs:sequence>
    <xs:element name="CreditAmt" type="xs:decimal">
      <xs:annotation>
        <xs:documentation>Amount of academic credit hours or continued education units earned by the
employee for the completed training.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="DesignationType">
      <xs:annotation>
        <xs:documentation>Code for the type of academic credit hours or continued education units earned
by the employee for the completed training course.</xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:maxLength value="4"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
  </xs:sequence>

```

```

        </xs:simpleType>
    </xs:element>
    <xs:element name="CreditType">
        <xs:annotation>
            <xs:documentation>Code representing the type of credit hours the employee received for the
completed training.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:maxLength value="4"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
</xs:sequence>
</xs:complexType>
<xs:simpleType name="IndicatorType">
    <xs:restriction base="xs:string">
        <xs:maxLength value="2"/>
        <xs:enumeration value="Y"/>
        <xs:enumeration value="N"/>
        <xs:enumeration value="NA"/>
    </xs:restriction>
</xs:simpleType>
</xs:schema>

```

4.9.2 Sample XML File

```

<?xml version="1.0" encoding="UTF-8" ?>
- <TrainingExport fileDate="2007-03-31" fileSource="GoLearn"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:noNamespaceSchemaLocation="http://ehr.opm.gov/schemas/training/EHRTTraining_v4_0.xsd">
- <TrainingRecord>
  <RecordAction>A</RecordAction>
- <Employee>
  <SSN>123456789</SSN>
  <BirthDate>1960-01-01</BirthDate>
  <EHREmployeeId>12345678901234567890</EHREmployeeId>
  <AgencySubelement>AG02</AgencySubelement>
  </Employee>
  <TrainingTitle>Sample Training Course</TrainingTitle>
  <TrainingTypeCode>02</TrainingTypeCode>
  <TrainingSubTypeCode>21</TrainingSubTypeCode>
  <TrainingStartDate>2007-03-01</TrainingStartDate>
  <TrainingEndDate>2007-03-09</TrainingEndDate>
- <ContinuedServiceAgreement>
  <AgreementRequiredInd>Y</AgreementRequiredInd>
  <ExpirationDate>2008-02-24</ExpirationDate>
  </ContinuedServiceAgreement>
  <AccreditationInd>Y</AccreditationInd>
- <TrainingCredit>
  <CreditAmt>3</CreditAmt>
  <DesignationType>01</DesignationType>
  <CreditType>01</CreditType>
  </TrainingCredit>
  <TrainingDutyHours>20</TrainingDutyHours>
  <TrainingNonDutyHours>20</TrainingNonDutyHours>
  <TrainingDeliveryTypeCode>02</TrainingDeliveryTypeCode>
  <TrainingPurposeTypeCode>01</TrainingPurposeTypeCode>
  <TrainingSourceTypeCode>01</TrainingSourceTypeCode>
- <TrainingCost>
  <MaterialsCost>300.00</MaterialsCost>
  <PerDiemCost>200.00</PerDiemCost>
  <TravelCost>400.00</TravelCost>
  <TuitionAndFees>3020.00</TuitionAndFees>
  <NonGovernmentContribution>200.00</NonGovernmentContribution>
  </TrainingCost>
  <TrainingTravelIndicator>Y</TrainingTravelIndicator>
  </TrainingRecord>
- <TrainingRecord>
  <RecordAction>C</RecordAction>
- <Employee>
  <SSN>456789999</SSN>
  <BirthDate>1970-11-10</BirthDate>
  <EHREmployeeId>45785678901234567890</EHREmployeeId>
  <AgencySubelement>AG02</AgencySubelement>
  </Employee>
  <TrainingTitle>Sample Training Course 2</TrainingTitle>
  <TrainingTypeCode>01</TrainingTypeCode>
  <TrainingSubTypeCode>14</TrainingSubTypeCode>
  <TrainingStartDate>2007-02-12</TrainingStartDate>
  <TrainingEndDate>2007-02-16</TrainingEndDate>
- <ContinuedServiceAgreement>
  <AgreementRequiredInd>Y</AgreementRequiredInd>
  <ExpirationDate>2008-02-22</ExpirationDate>
  </ContinuedServiceAgreement>
  <AccreditationInd>Y</AccreditationInd>

```

```
- <TrainingCredit>
  <CreditAmt>3</CreditAmt>
  <DesignationType>02</DesignationType>
  <CreditType>02</CreditType>
  </TrainingCredit>
  <TrainingDutyHours>38.5</TrainingDutyHours>
  <TrainingNonDutyHours>2.5</TrainingNonDutyHours>
  <TrainingDeliveryTypeCode>02</TrainingDeliveryTypeCode>
  <TrainingPurposeTypeCode>05</TrainingPurposeTypeCode>
  <TrainingSourceTypeCode>03</TrainingSourceTypeCode>
- <TrainingCost>
  <MaterialsCost>100.00</MaterialsCost>
  <PerDiemCost>0.0</PerDiemCost>
  <TravelCost>0.0</TravelCost>
  <TuitionAndFees>2000.00</TuitionAndFees>
  <NonGovernmentContribution>0.0</NonGovernmentContribution>
  </TrainingCost>
  <TrainingTravelIndicator>N</TrainingTravelIndicator>
  </TrainingRecord>
  </TrainingExport>
```

4.10 Edit Rules

4.10.1 Individual Field Edits

Field Name	Edit Rule	Action Taken If Edit Rule Fails
Record Action	Check if code value is valid	Reject record
Social Security Number	Check if value is numeric	Reject record
Birth Date	Check if valid date	Reject record
EHRI Employee ID	None	N/A
Agency/Subelement Code	Check if code value is valid	Reject record
Training Title	Check if non-blank	Reject record
Training Type Code	Check if code value is valid	Reject record
Training Sub Type Code	Check if code value is valid	Reject record
Training Start Date	Check if valid date	Report error; If date is null, store "No Data Reported"; If date is invalid, store "Invalid Data"
Training End Date	Check if valid date	Report error; If date is null, Reject Record If date is invalid, Reject record
Continued Service Agreement Required Indicator	Check if code value is valid Valid values: Y, N, NA	Report error; If code is null, store "No Data Reported"; If code is invalid, store "Invalid Data" If code is not Y, N, NA report error
Training Accreditation Indicator	Check if code value is valid Valid values: Y, N	Report error; If code is null, store "No Data Reported"; If code is invalid, store "Invalid Data" If code is not Y, N report error
Training Credit	Check if value is numeric	Report error; If value is null or not a number, store zero
Training Credit Designation Type Code	Check if code value is valid	Report error; If code is null, store "No Data Reported"; If code is invalid, store "Invalid Data" If code is not one of the values listed Appendix A report error
Training Credit Type Code	Check if code value is valid	Report error; If code is null, store "No Data Reported"; If code is invalid, store "Invalid Data" If code is not one of the values listed Appendix A report error
Training Duty Hours	Check if value is numeric	Report error; If value is null or not a number, store zero
Training Non Duty Hours	Check if value is numeric	Report error; If value is null or not a number, store zero
Training Delivery Type Code	Check if code value is valid	Report error; If code is null, store "No Data Reported"; If code is invalid, store "Invalid Data" If code is not one of the values listed Appendix A report error
Training Purpose Type Code	Check if code value is valid	Report error; If code is null, store "No Data Reported"; If code is invalid, store "Invalid Data" If code is not one of the values listed Appendix A report error

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Field Name	Edit Rule	Action Taken If Edit Rule Fails
Training Source Type Code	Check if code value is valid	Report error; If code is null, store "No Data Reported"; If code is invalid, store "Invalid Data" If code is not one of the values listed Appendix A report error
Training Materials Cost	Check if value is numeric	Report error; If value is null or not a number, store zero
Training Per Diem Cost	Check if value is numeric	Report error; If value is null or not a number, store zero
Training Travel Cost	Check if value is numeric	Report error; If value is null or not a number, store zero
Training Tuition and Fees	Check if value is numeric	Report error; If value is null or not a number, store zero
Non-Government Contribution to Training	Check if value is numeric	Report error; If value is null or not a number, store zero
Travel Indicator	Check if code value is valid Valid values: Y, N, NA	Report error; If code is null, store "No Data Reported"; If code is invalid, store "Invalid Data" If code is not Y, N, NA, report error

4.10.2 Relational Edits

Field Names	Edit Rule	Action Taken If Edit Rule Fails
EHRI Employee ID, Social Security Number, Birth Date	The employee data must match an existing employee	Reject record
Record Action, EHRI Employee ID, Social Security Number, Birth Date, Training Title, Training End Date, Training Type	If record action is "Add", the employee must not have an existing record with the same training title and start date (if provided)	Reject record
Record Action, EHRI Employee ID, Social Security Number, Birth Date, Training Title, Training End Date, Training Type	If record action is "Correct", the employee must have an existing record with the supplied training title and start date (if provided)	Reject record
Record Action, EHRI Employee ID, Social Security Number, Birth Date, Training Title, Training End Date, Training Type	If record action is "Delete", the employee must have an existing record with the supplied training title and start date (if provided)	Reject record
Training Type, Training Sub Type	Training Sub Type must be valid for the given Training Type.	Reject record
Training Start Date, Training End Date	End date must be greater than or equal to start date	Reject record
Continued Service Agreement Expiration Date, Training End Date	Expiration date must be greater than or equal to end date	Report error
Continued Service Agreement Expiration Date, Continued Service Agreement Required Indicator	If the continued service agreement indicator is 'Y', the continued service agreement expiration date must be a valid date	Report error

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Field Names	Edit Rule	Action Taken If Edit Rule Fails
Training Credit Designation Type Code, Training Credit, Training Credit Type Code	If training credit designation type is valid and not NA, training credit and training credit type code must be provided, and training credit type code must not be NA. If training credit is greater than zero, training designation type code and training credit type code must be provided and must not be NA.	Report error
Training End Date, As of Date	The training end date must be less than or equal to the as of date for the training file.	Report error
Training Accreditation Indicator, Training Credit	If training accreditation indicator is 'Y', training credit must be greater than zero. If training credit is greater than zero, training accreditation indicator must be 'Y'.	Report error
Travel Indicator, Training Per Diem Cost, Training Travel Cost	If travel indicator is 'Y', training per diem cost and training travel cost must both be greater than zero.	Report error
Training Source Type Code, Non-Governmental Contribution to Training	If source type is 'Non-governmental', non-governmental contribution to training must be greater than zero.	Report error
Training Source Type Code, Training Tuition and Fees	If training source type is one of the valid code values and not 'Non-governmental', training tuition and fees must be greater than zero.	Report error