

# Announcement Notice 241.1

## Web Service for STI

October 2014

### CONTENTS

- 1.0 About the STI Announcement Web Service
  - 1.1 [Announcement Notice 241.1](#)
  - 1.2 [OSTI's Web Service for AN 241.1](#)
- 2.0 Using the STI Announcement Web Service
  - 2.1 [Authentication](#)
  - 2.2 [POST \(Create or Update\) and GET \(Retrieve\)](#) [Client to OSTI]
  - 2.3 [Response and Notifications](#) [OSTI to Client]
- 3.0 AN 241.1 Web Service Metadata
  - 3.1 [AN 241.1 Required Fields](#)
  - 3.2 [Access Limitations \(Attributes and Values\)](#)
  - 3.3 [AN 241.1 Optional Fields](#)
  - 3.4 [Examples of XML 241.1 Metadata Records](#)

## 1.0 About

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### 1.1 Announcement Notice 241.1

Announcement Notice (AN) 241.1 provides the Office of Scientific and Technical Information (OSTI) with the information needed to identify, process, and announce/or disseminate the results of work funded by the DOE or performed in DOE facilities. ([See DOE Order 241.1B](#)). When submitted, the AN 241.1 set of metadata creates a citation/record that is processed by E-Link, then transferred into the appropriate OSTI databases for access.

DOE sites can submit AN 241.1 metadata a record at a time through a web interface on E-Link or submit multiple records in an XML file via E-Link's Batch Upload system. Harvesting and the AN 241.1 Web Service provide two additional options for submitting DOE's scientific and technical (STI) products to OSTI for dissemination. The STI product will be a full text document, such as a technical report, thesis/dissertation, book, journal literature, conference literature, or a program document. It could also be multimedia.

STI from DOE's research and development activities is disseminated through OSTI's databases such as [SciTech Connect](#), through multiagency databases such as [Science.gov](#), through global databases such as [WorldWideScience.org](#), and through arrangements with major Internet search engines such as Google.

## 1.2 OSTI's AN 241.1 Web Service

OSTI's Web Service allows a submitting site to send AN 241.1 information in a completely automated manner. Metadata is generated at the submitting site per the programming set up by the site's IT developers and POSTed as an output file to OSTI. The schedule for the POST operation may be multiple times daily, once daily, once weekly, etc.

Records with Unlimited Access status and those with Limited Access can both be transmitted through the secure AN 241.1 Web Service. DOE organizations may post the STI products they generate on their own websites and send the URL in the metadata or they may transmit the full text product to OSTI. All Limited Access records are required to be sent to OSTI and cannot be posted on the site's public web.

The AN 241.1 Web Service provides the ability to submit new AN records, edit/update records, or retrieve a record for review. A user manipulates a record by performing HTTP operations on the web service URL and providing XML metadata. The POST command/request allows a submitter to create or edit/update AN 241.1 records. The GET command/request allows a submitter to retrieve a record for review.

Submitters must coordinate with OSTI and submit records to a test environment before POSTing their first file for actual dissemination. The URL for TEST E-Link in the test environment is <https://www.osti.gov/mlinktest/2411api>. OSTI's production web service for announcing STI is available at <https://www.osti.gov/mlink/2411api>.

## 2.0 Using the AN 241.1 Web Service

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### 2.1 Authentication

All AN 241.1 transactions require an active E-Link user account. For details or to request access to E-Link and obtain an active account, visit <https://www.osti.gov/mlink/register.jsp>.

The AN 241.1 Web Service supports HTTP Basic authentication over SSL. With this method, the client connects to the HTTPS URL for either TEST E-Link or, when testing is complete, for production E-Link. The POST and GET verb commands will pass along the standard Authentication HTTP header (base64 encoding).

## 2.2 POST (Create or Update) and GET (Retrieve) [Client to OSTI]

After successful authentication, the input body of the POST or GET request is read as an XML document, parsed, and submitted appropriately. HTML status codes (200=OK, 401=Unauthorized, 500=System error, etc.) and an XML response, which includes certain metadata fields, are returned by OSTI's server to the client server.

The POST command/request is used to submit metadata for a new record that is being provided to OSTI for the first time, but it can also be used to edit or update an existing record that has previously been submitted. Submitters must "tell" the system which of the two activities they intend for a record. The OSTI ID is key to this. How and why is explained below:

When POSTING to an existing record **in order to update it, the OSTI ID must be included in the XML record.** The updated information will then overwrite the previously submitted information. **If the OSTI ID is not included** when POSTing to an existing record, the Web Service will create a **duplicate** record, **but with a different OSTI ID. This situation always requires correction by logging into E-Link manually and manually deleting the duplicate record.**

Metadata can be retrieved for any record previously submitted by your organization by using a GET request and supplying the OSTI ID as a parameter in the request. Authentication is required and is handled in the same fashion as a Create/Update command. The requested OSTI ID returns that specific XML record. A GET operation will not update a record, however.

## 2.3 Response and Notifications [OSTI to Client]

OSTI's server makes an immediate response when the client-side server sends a POST or a GET request. The primary goal of the response is two-fold: to let the client server "know" if it connected successfully and to provide a status message about the record that was POSTed or retrieved. The status says SUCCESS if the record correctly transmitted and the metadata loaded into E-Link. The status says FAILURE if the record was unable to load for any reason. The FAILURE response includes a status message indicating the error or problem that kept the record from

loading. Errors leading to a FAILURE response occur when a required metadata field is missing, when a site URL cannot be validated as correct by the automated validation process, when a value is too long for the field it must load into, etc.

Note that the successful record returns its newly assigned OSTI ID. The response for the failed record will not have an OSTI ID since IDs cannot be assigned to records that never actually make it into E-Link.

E-Link also generates an email containing the SUCCESS or FAILURE information about each submitted record. The site will be asked to provide to OSTI the names of the people to whom these automated emails will be sent.

**It is the submitting site’s responsibility to review the results of the web service transactions and to correct, then resubmit those records that initially failed.**

## 3.0 AN 241.1 Web Service Metadata

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### 3.1 AN 241.1 Required Fields

The following is a list of the required fields for the AN 241.1 Web Service. These fields are also designated by an asterisk (\*). Records without required fields will fail to load into E-Link for processing. The other fields available for your use are optional, though some, such as the Abstract/Description, are highly encouraged.

Note that the **OSTI ID is a required field** for all POST requests **where the intent is to edit or update records**. The GET request must also include the OSTI ID and will allow retrieval of a record previously submitted by your site.

#### REQUIRED

	Field Name	XML Tag Name	Additional Information
R1	OSTI ID+	<osti_id>	The OSTI ID is required in all requests intended to edit or update existing records. When POSTing new records to OSTI, no <osti_id> tag is needed in the XML. E-Link automatically assigns an OSTI ID to each new record successfully submitted.
R2	Record Status*	<new/> <revdata/> <revprod/>	These tags are required to inform the system of the status of the record being submitted. For new records, only the <new/> is needed. For revised metadata <revdata> or full text products (revprod), the OSTI ID must be included as an attribute. See format below.

	<b>Record Status Attributes are needed for revdata tag and revprod tag.</b> <revdata osti_id='1053369' /> <revprod osti_id='1053370' />																						
<b>R3</b>	Site Code*	<site_input_code>																					
<b>R4</b>	Product Type*	<product_type/>	Correct alpha code must be used as the value. Note that the values are upper case letters. Only one code can be placed in this field. Depending on the code, additional information may be needed. The allowed values are:																				
			<table> <thead> <tr> <th>Code</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td><b>TR</b></td> <td>Technical Report or Workshop Report</td> </tr> <tr> <td><b>CO</b></td> <td>Conference/Event Paper, Proceedings, or Presentation</td> </tr> <tr> <td><b>FS</b></td> <td>Factsheet</td> </tr> <tr> <td><b>JA</b></td> <td>Journal Article</td> </tr> <tr> <td><b>TD</b></td> <td>Thesis or Dissertation</td> </tr> <tr> <td><b>PD</b></td> <td>Program Document</td> </tr> <tr> <td><b>B</b></td> <td>Book/Monograph</td> </tr> <tr> <td><b>AR</b></td> <td>Accomplishment Report</td> </tr> <tr> <td><b>P</b></td> <td>Patent</td> </tr> </tbody> </table>	Code	Definition	<b>TR</b>	Technical Report or Workshop Report	<b>CO</b>	Conference/Event Paper, Proceedings, or Presentation	<b>FS</b>	Factsheet	<b>JA</b>	Journal Article	<b>TD</b>	Thesis or Dissertation	<b>PD</b>	Program Document	<b>B</b>	Book/Monograph	<b>AR</b>	Accomplishment Report	<b>P</b>	Patent
Code	Definition																						
<b>TR</b>	Technical Report or Workshop Report																						
<b>CO</b>	Conference/Event Paper, Proceedings, or Presentation																						
<b>FS</b>	Factsheet																						
<b>JA</b>	Journal Article																						
<b>TD</b>	Thesis or Dissertation																						
<b>PD</b>	Program Document																						
<b>B</b>	Book/Monograph																						
<b>AR</b>	Accomplishment Report																						
<b>P</b>	Patent																						
<b>R4.1 If product type = CO, the following field is also required:</b> Conference Information <conference_information/> Include name of conference, location, and inclusive dates.																							
<b>R4.2 If product type = JA, the following field is also required:</b> Journal Type <journal_type> Allowed values are AC (for announcement citation only), FT (author's early manuscript), or AM (Accepted Manuscript, meaning the final author's version <b>after peer review</b> comments are incorporated). When FT or AM are the values, the medium code used will be ED (see later in this table). <b>Note that the requirement to make the Accepted Manuscript available to OSTI and to place AM as the value in &lt;journal_type&gt; begins October 1, 2014.</b> ..... <b>These fields are also needed for JA records:</b> Journal Name <journal_name> Journal Volume <journal_volume> Journal Issue <journal_issue> Journal Serial ID <journal_serial_id>																							
<b>R4.3 If product type = B, the following field is also required:</b> Publisher Information <publisher_information/> Include name of publisher and city, state, and country if other than U.S.																							
<b>R4.4 If product type = P, the following field is also required:</b> Patent Assignee <patent_assignee/>																							
<b>R5</b>	STI Product Title*	<title/>	Full title of the STI Product. Include version number, if applicable.																				
<b>R6.1</b>	Author(s)*	<author/> (Note: R6.2 format	Format is Last Name, First Name, MI Separate multiple authors with a semi-colon followed by a space.																				

		preferred)	
R6.2	Author(s)  (Note: You cannot mix R6.1 and R6.2 formats for author names in the same record. R6.2 format is the preferred one always.)	<authors> <authors_detail> <first_name/> <middle_name/> <last_name/> <affiliation/> <private_email/> <orcid_id/> </authors_detail> </authors>	Use the R6.2 format for author names if at all possible for all records. ORCIDs are not required for use of this author block format. However, be sure to use the <authors>block format if you ARE including ORCID number with <b>any</b> of the creators/PIs (authors) in the submitted record.  In other words, when the submitted record has the combination of <authors> and <authors_detail> tags, <b>ALL</b> creator/PI/author names in the record <b>MUST</b> be broken out into this block format ( <b>even if only one of the names has an accompanying ORCID</b> ).
R7	Report/Product Number(s)*	<report_nos/>	A value in this field is required but may be the word, None, if no valid report number or product number exists. TR and TD product types should always have valid reports numbers.
R8	DOE Contract Number(s)*	<doe_contract_nos/>	Use the format of the contract “as is,” but please leave off any preceding “DE”. If multiple contract numbers apply, separate with a semi-colon followed by a space.
R9	Originating Research Organization*	<originating_research_org/>	Use the spelled-out text exactly as shown in the Originating Research Organization Authority at <a href="https://www.osti.gov/mlink/authorities.jsp">https://www.osti.gov/mlink/authorities.jsp</a> If work for this product was done at more than one research organization, multiple values may be listed; they should be separated by a semicolon and a space. The primary DOE organization should be listed first, followed by any others. If non-DOE orgs are included, input the spelled-out, full name of the organization.
R10	Publication/ Issue Date*	<publication_date/>	Use one of these three Publication Date formats: <ul style="list-style-type: none"> <li>• mm/dd/yyyy</li> <li>• yyyy</li> <li>• yyyy Month</li> </ul> <p>If product type = TR or TD, the mm/dd/yyyy format must always be used.</p>
R11	Language*	<language/>	Up to 75 characters; use format from OSTI’s Language Authority; e.g. English  Authority values are available at <a href="https://www.osti.gov/mlink/authorities.jsp">https://www.osti.gov/mlink/authorities.jsp</a>
R12	Country of Origin/ Publication*	<country_publication_code/>	Use two character code from OSTI’s Country Code Authority; e.g. US  Authority values are available at

			<a href="https://www.osti.gov/eliink/authorities.jsp">https://www.osti.gov/eliink/authorities.jsp</a>
<b>R13</b>	Sponsoring Organization(s) *	<sponsor_org/>	Use the spelled-out text as shown in the Sponsoring Organization Authority at <a href="https://www.osti.gov/eliink/authorities.jsp">https://www.osti.gov/eliink/authorities.jsp</a> . The DOE Order 241.1B now requires that three levels of sponsoring information be provided for DOE funding: Agency, Program Office, and the sub-program within the DOE Program Office. If funding for this product was provided from more than one organization, multiple values may be listed; they should be separated by a semicolon and a space. The primary DOE sponsor should be listed first, followed by any others. If any of the others are not included in the Sponsor Organization Authority (non-DOE organizations, for example), please include the spelled-out, full name of the other sponsoring organization.
<b>R14</b>	Access Limitation*	<access_limitation/>  <b>Note: There are several attribute tags and values associated with the list of limited access codes. See 3.2 Access Limitations – Attributes and Values for additional information needed when submitting access limitation values.</b>	Access /Distribution Limitation(s) should be one of the following code values. Note XML formatting in 3.2 Access Limitations - Attributes and Values: <ul style="list-style-type: none"> <li>• UNL (Unlimited Announcement)</li> <li>• OPN (OpenNet)</li> <li>• CPY (Copyright Material with Restrictions)</li> <li>• OUO (Official Use Only)</li> <li>• OUOECI (Export Controlled Information)</li> <li>• OUOSSI (Security Sensitive Information)</li> <li>• OUOPROT (Protected Data – CRADA or Other)</li> <li>• OUOPAT (Patent Pending)</li> <li>• OUOLRD (Limited Rights Data (Proprietary/Trade Secret))</li> <li>• OUOAT (Applied Technology)</li> <li>• OUOPDOUO (Program Determined Official Use Only)</li> <li>• NNPI (Naval Nuclear Propulsion Info)</li> </ul>
<b>R15</b>	Medium Code*	<medium_code/>	Allowed values are <ul style="list-style-type: none"> <li>• ED (if the full text document is being uploaded or FTP'd to OSTI or if a site URL is being provided for a full text document posted at the submitting site)</li> <li>• X (if the full text document can not be posted at the site or uploaded to OSTI.) If X , no URL is provided in the metadata; the submission is considered “Announcement Notice Only”.</li> <li>• AV (if the product is audiovisual material) Any product type may exist in</li> </ul>

			<p>an audiovisual format. The most common product type that gets an AV medium code is CO for conference/event presentations. .</p> <p>Note that the alpha codes should be upper case. Also note that, depending on the value put in this field, additional information will be needed.</p>
<b>R15.1 If medium code = ED and the full-text product is posted at the site, the following 2 fields are required and/or needed.</b>			
	Site URL*	<site_url/>	
	File Format	<file_format/>	<p>Allowed values are</p> <ul style="list-style-type: none"> <li>• PDF/A</li> <li>• PDFN</li> <li>• HTML</li> <li>• PPT</li> </ul>
<b>R15.2 If medium code = ED and the full-text product is being transmitted to OSTI, the following field is required and/or needed.</b>			
	File Format	<file_format/>	<p>Allowed values are</p> <ul style="list-style-type: none"> <li>• PDF/A</li> <li>• PDFN (searchable PDF full text)</li> <li>• PDFI (non-searchable PDF)</li> <li>• HTML</li> <li>• PPT</li> </ul>
<b>R15.3 If medium code = AV and the video is posted at your site or websites such as YouTube or Scivee, the following 3 fields are required and/or needed.</b>			
	Site URL*	<site_url/>	
	Audio/Video Content	<av_content/>	
	File Format	<file_format/>	<p>Allowed values: "WMA", "WMV", "MP2", "MP3", "MP4", "MPEG", "ASF", "AVI", "ACV", "DV", "FLV", "MOV", "RM", "WAV"</p> <p>(See <a href="http://www.osti.gov/stip/audiovisualsti">http://www.osti.gov/stip/audiovisualsti</a> for more on these formats)</p>
	Format Other	<format_other>	<p>Provide the length of the video as shown in this example: Run time: 00:50:25</p>
<b>R16</b>	Released by Name*	<released_by/>	The name of the designated releasing official responsible for approval of distribution/access limitation and for ensuring no PPI is contained in the metadata or the full text. OSTI admin field; does not display in output databases.
<b>R17</b>	Released Date*	<released_date/> mm/dd/yyyy	Date that the record was released to OSTI by the releasing official.
<b>R18</b>	Released by Email* ; Released by Phone*	<released_by_email/>  <released_by_phone/>	Both of these fields must be included in the metadata. This is contact information only and will not be display in the output databases.

### 3.2 Access Limitation(s) Attributes and Values

Unclassified, unlimited information (UNL) is available to the U.S and non-U.S. public, but certain types of information have restricted access whose publication or distribution is restricted by various laws, federal codes, executive orders, international agreements, etc. Records describing STI products with access limitations are not released to OSTI’s publicly available databases. They are available to DOE and DOE contractors in Science Research Connection (SRC) with different levels of access based on the product and the requestor.

Records with access limitation codes other than UNL may require additional, different information formatted as “attributes” rather than “elements.” The following table provides this formatting guidance. For more guidance on the actual restrictions, markings, and handling of STI with access limitations, see the STIP home page at <http://www.osti.gov/stip/> or contact OSTI staff.

Access Limitation Codes	Definition	Tags, examples, other information													
R14.1 UNL (Unlimited Announcement)	Select this option if the STI Product should have unlimited and unrestricted distribution to the U.S. and non-U.S. public.	Example: <access_limitation> <unl/> <access_limitation>													
R14.2 OPN (OpenNet)	OpenNet is a website supported by DOE’s Office of Classification to provide access to declassified documents and other related information, in support of the national Openness Initiative.	Example: <access_limitation> <opn/> <access_limitation>	See OpenNet policy and guidance at <a href="https://www.osti.gov/opennet/">https://www.osti.gov/opennet/</a>  STI Products marked as OpenNet will be announced by OSTI on the OpenNet database as well as on the STI announcement systems. To enable OSTI to transfer data to the OpenNet database, the following OpenNet data must be provided.  Non-STI OpenNet products should be submitted using the DOE F 475.1.												
<b>R14.2.1 Required/Needed Attributes of &lt;access_limitation/&gt; if Access Limitation is OpenNet (OPN)</b> <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">OpenNet Accession Number*</td> <td style="width: 20%;">&lt;opennet_accession_no&gt;</td> <td style="width: 30%;"></td> <td style="width: 20%;"></td> </tr> <tr> <td>OpenNet Document Location</td> <td>&lt;opennet_doc_location&gt;</td> <td></td> <td></td> </tr> <tr> <td>Applicable field Office Acronym</td> <td>opennet_fieldoffice_acronym</td> <td>Use the appropriate acronym provided in OpenNet DeClassified Information Database Data</td> <td></td> </tr> </table>				OpenNet Accession Number*	<opennet_accession_no>			OpenNet Document Location	<opennet_doc_location>			Applicable field Office Acronym	opennet_fieldoffice_acronym	Use the appropriate acronym provided in OpenNet DeClassified Information Database Data	
OpenNet Accession Number*	<opennet_accession_no>														
OpenNet Document Location	<opennet_doc_location>														
Applicable field Office Acronym	opennet_fieldoffice_acronym	Use the appropriate acronym provided in OpenNet DeClassified Information Database Data													

<p>OpenNet Declassification Status*</p> <p>OpenNet Declassification Date*</p> <p>OpenNet Document Categories*</p> <p><b>Example:</b> &lt;access_limitation&gt;</p> <p>&lt;opn opennet_accession_no='111' opennet_document_location='doc loc' opennet_fieldoffice_acronym='test OFC' opennet_document_keywords='OPN KEYS' opennet_declass_date='01/01/2001' opennet_declass_status='U'/&gt;</p> <p>&lt;/access_limitation&gt;</p>	<p>&lt;opennet_declass_status&gt;</p> <p>opennet_declass_date</p> <p>opennet_document_keywords</p>	<p>Input Specifications,' revised April 3, 1998.</p> <p>Allowed values: D (Declassified) S (Sanitized) N (Never Classified) U (Unknown).</p> <p>Required if opn_declass_status = 'D' or 'S'. Format is mm/dd/yyyy</p>
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<p><b>R.14.3</b> CPY (Copyright Material with Restrictions)</p>	<p>Copyrighted material may be subject to restrictions on reproduction, distribution, the preparation of derivative works, including translations; public display of the material; and public performance of the material.</p>	<p><b>Example:</b> &lt;access_limitation&gt; &lt;cpy/&gt; &lt;/access_limitation&gt;</p>
<p><b>R.14.4</b> OUO (Official Use Only)</p>		<p>(Provide exemption number if OUO and no other OUO category applies.)</p>
<p><b>R14.5</b> OUOECI (Export Controlled Information)</p>	<p>Information containing technical data as defined in and controlled by U.S. export control statutes. (e.g., under ITAR/EAR) (FOIA Exemption 3)</p>	
<p><b>R.14.6</b> OUOSSI (Security Sensitive Information)</p>		<p>&lt;access_limitation&gt; &lt;ouossi/&gt; &lt;access_limitation&gt; &lt;access_limitation_other&gt;other access</p>

		lim<access_limitation_other>
<b>R14.7</b> OUOPROT (Protected Data – CRADA or Other)	Information produced in the performance of a CRADA that is marked as being Protected CRADA Information by a party to the agreement and that would have been proprietary information had it been obtained from a non-Federal entity. It may be protected for a period up to 5 years from the date it was produced, except as expressly provided for in the CRADA.	Example: <access_limitation> <ouoprot protected_data_crada='Y' access_limitation_rel_date='01/21/2011' /> </access_limitation>
<b>R.14.7.1 Required Attributes of &lt;access_limitation/&gt; if Access Limitation is Protected Data (OUOPROT)</b>		
	Protected Data CRADA	protected_data_crada
	Protected Data Other	protected_data_desc
	Access Limitation Release Date (mm/dd/yyyy)	access_limitation_rel_date
	PDOUO Exemption Number	exemption_number
		Allowed values: "Y" or "N" Required if Access Limitation equals Protected Data (OUOPROT) and protected_data_crada = 'N'
<b>R14.8</b> OUOPAT (Patent Pending)	Federal agencies are authorized to withhold from public disclosure any invention in which the Government owns or may own a right, title, or interest, for a reasonable length of time so that a patent application can be filed.	<access_limitation> <ouopat/> </access_limitation>
<b>R14.9</b> OUOLRD (Limited Rights Data (Proprietary/Trade Secret))	Information that embodies trade secrets or is commercial or financial and confidential or privileged, to the extent that such data pertain to items, components,	<access_limitation> <ouolrd/> </access_limitation>

	or processes developed at private (not government) expense, including minor modifications.	
<b>R14.10</b> OUOAT (Applied Technology)	Unclassified category established by NE to preserve the foreign trade value of certain NE-funded progress and topical reports containing engineering, development, design, construction, and operation information pertaining to particular programs.	<access_limitation> <ouoat/> </access_limitation>
<b>R14.11</b> OUOPDOUO (Program Determined Official Use Only)	This type of OUO is based on approved guidance as reflected in DOE Order 471.3, Identifying and Protecting Official Use Only Information.	Example: <access_limitation> <ouopdouo exemption_number='7'/> <access_limitation> <access_limitation_other>Additional note about the access lim</access_limitation_other>
<b>R14.11.1 Required/Needed Attributes of &lt;access_limitation/&gt; if Access Limitation is Program Determined Official Use Only (OUOPDOUO)</b> Access Limitation Release Date (mm/dd/yyyy)      access_limitation_rel_date PDOUO Exemption Number      exemption_number  <b>Note;</b> The access_limitation_other shown in the example for R14.11 is optional and exists to provide a place for an additional note from the submitter, if desired.		
<b>R14.12</b> NNPI (Naval Nuclear Propulsion Info)	Unclassified information related to any aspect of propulsion plants of naval nuclear-powered ships and prototypes, including the associated shipboard and shore-based nuclear support facilities. See Chief of Naval Operations Instruction N9210.3, Safeguarding of Naval Nuclear Propulsion Information.	Example: <access_limitation> <nnpi/> </access_limitation>

### 3.3 AN 241.1 Optional Fields

The following is a list of optional fields for the AN 241.6 STI Announcement Web Service. Inclusion of some of these fields, such as the Abstract/Description, is highly encouraged, however.

#### OPTIONAL

	<b>Field</b>	<b>XML Tag</b>	<b>Comments</b>
<b>01</b>	Author(s) Email Address(es)	<author_emails/>	Admin info only; it will not be displayed in public databases. Note: use this field only when NOT using the ORCID block of fields.
<b>02</b>	Related Document Information	<related_doc_info>	Provide additional useful information related to the STI Product that should be included in the published announcement notice, but does not fit elsewhere.
<b>03</b>	Availability	<availability/>	Normally used to provide the name of an organization, a division within a lab, a specific employee's title, etc. to which a request for further information may be made.
<b>04</b>	R&D Project ID(s)	<rd_project_ids>	Enter the unique and permanent Project ID assigned to the project itself by the DOE Field Office, Program Office, lab, or other installation to identify a particular research project. Separate multiples with a semicolon and a space. Sample formats: P/ORNL--2533; TTP/RL439005
<b>05</b>	Work Proposal Number	<work_proposal_number>	Enter the unique seven-character identifier specific to the document that was used for proposing work to the program office. Multiple numbers are separated with a semicolon and a space.
<b>06</b>	Work Proposal Revision Number	<proposal_revision_number>	If the initial proposal is changed, enter the assigned sequential number of the work proposal revision.
<b>07</b>	Work Authorization Number	<work_authorization_number>	Enter the unique, standardized seven-character identifier assigned by the issuing organization, specific to the work authorization. The standard format is two characters identifying the issuing DOE organizational code, four-digit sequential number assigned by the issuing organization, and one digit signifying the last digit of fiscal year. Multiple numbers are separated with a semicolon and a space.
<b>08</b>	Work Authorization Revision	<authorization_revision_number>	If the initial authorization is changed, enter the assigned sequential number of the work authorization revision.

	Number		
<b>O9</b>	Other Identifying Numbers(s)	<other_identifying_nos/>	Any other numbers that users might wish to retrieve on or need to recognize. If there are multiple values in this field, separate them with a semicolon followed by a space.
<b>O10</b>	Subject Categories	<subject_categories_code/>	Use the complete value (numerical code and spelled-out category title) as shown in the Subject Category Authority at <a href="https://www.osti.gov/mlink/authorities.jsp">https://www.osti.gov/mlink/authorities.jsp</a> . As many multiples as needed are allowed in this tag set; separate them with a semicolon and a space. List the primary subject category first.
<b>O11</b>	Keywords	<keywords/>	
<b>O12</b>	Description/ Abstract	<description/> 4000 character limit	Though not required, this field is highly encouraged. Including it will greatly enhance the retrieval of the STI Product.
<b>O13</b>	DOI	<doi/>	Sites may include the DOI of a journal article in their metadata or may leave this information out. If it is left out, OSTI will query CrossRef for the correct DOI and insert it into the record. This latter approach is recommended.
<b>O14</b>	Product Size	<product_size>	Provide information that gives an indication of the size of the STI Product. (i.e., 3500 kilobytes; 100 pages; etc.)
<b>O15</b>	Publisher Name and Location	<publisher_information>	Provide the publisher name and location when the originating research organization is not the organization that issued the document for dissemination.
<b>O16</b>	Contributors (Organizations)	<contributor_organizations>	Provide the name of a collaboration in this field rather than in the regular Author field.  Also, you may provide the names of any organizations other than the originating research org and the sponsor org that played a contributing role in the full text product.  Separate any multiple entries with a semi-colon and a space.

### 3.4 Example of XML 241.1 Metadata Records

Here is an example of a 241.1 dataset record as it would come to OSTI's 241.1 web service. Immediately following it is what the xml response from web service back to the submitting service would be in case of a successful submission and what you would see if the submission failed. POST SUBMISSION SAMPLE:

```

<records>
<record>
<new/>
<site_input_code>PNNL</site_input_code>
<product_type>TR</product_type>
<title>This is a test record</title>
<authors>
<authors_detail>
<first_name>James</first_name>
<middle_name>Richard</middle_name>
<last_name>Test</last_name>
<affiliation>University of Washington</affiliation>
<private_email/>
<orcid_id/>
</authors_detail>
</authors>
<report_nos>PNL-17991</report_nos>
<doe_contract_nos>AC00-76RL00000</doe_contract_nos>
<other_identifying_nos>248607</other_identifying_nos>
<originating_research_org>Pacific Northwest National Laboratory (PNNL), Richland, WA
(US)</originating_research_org>
<publication_date>10/31/2008</publication_date>
<language>English</language>
<country_publication_code>US</country_publication_code>
<sponsor_org>USDOE Office of Environmental Management</sponsor_org>
<keywords>Emergent Sandbar Habitat; Missouri River; Least Tern; Piping Plover; adaptive
management; EIS</keywords>
<description>The goal of the Emergent Sandbar Habitat (ESH) program is to provide sufficient
habitat throughout the Missouri River system to allow self-sustaining populations of Interior
Least Tern (Sternula antillarum) and Piping Plover (Charadrius melodus). The adaptive
management (AM) strategy described herein establishes the process, understanding and tools
necessary to adaptively manage the ESH element of the response to the 2003 Biological Opinion
for the next 10-15 years. The AM strategy is intended to assist the Corps of Engineers, U.S. Fish
and Wildlife Service and their stakeholders in making decisions regarding how to best improve
populations of tern and plover through habitat creation. This AM strategy is guided by the
framework and principles described in Adaptive Management, the U.S. Department of the
Interior Technical Guide.</description>
<medium_code>ED</medium_code>
<access_limitation>
<unl/>
</access_limitation>
<site_url>http://www.test.gov/test/1234.pdf</site_url>
<released_by>Test Official</released_by>
<released_date>02/05/2009</released_date>
<released_by_email>tester@osti.gov</released_by_email>
<released_by_phone>(865)576-9999</released_by_phone>
</record>
</records>

```