Electronic Court Filing 4.0 Web Services Service Interaction Profile Version 2.0

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Related work:
>   This specification replaces or supercedes:

>   - OASIS LegalXML Electronic Court Filing Web Services Service Interaction Profile 1.0
>   - OASIS LegalXML Electronic Court Filing Web Services Service Interaction Profile 1.1

>   This specification is related to:

>   - OASIS LegalXML Electronic Court Filing v4.0 Specification

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Abstract:

This document defines a Service Interaction Profile, as defined in section 5 of the LegalXML Electronic Court Filing 4.0 (ECF 4.0) specification. The Web Services Service Interaction Profile may be used to transmit ECF 4.0 messages between Internet-connected systems.

Status:

This document was last revised or approved by the LegalXML Electronic Court Filing TC on the above date. The level of approval is also listed above. Check the "Latest Version" or "Latest Approved Version" location noted above for possible later revisions of this document.

Technical Committee members should send comments on this specification to the Technical Committee's email list. Others should send comments to the Technical Committee by using the "Send A Comment" button on the Technical Committee's web page at http://www.oasis-open.org/committees/legalxml-courtfiling/.

For information on whether any patents have been disclosed that may be essential to implementing this specification, and any offers of patent licensing terms, please refer to the Intellectual Property Rights section of the Technical Committee web page (http://www.oasis-open.org/committees/legalxml-courtfiling/ipr.php.

The non-normative errata page for this specification is located at http://www.oasis-open.org/committees/legalxml-courtfiling/.

Notices

Table of Contents

1 Introduction

This document defines a Service Interaction Profile, as called for in section 5 of **[ECF 4.0]**. The purpose of the Web Services Service Interaction Profile is to provide a web service-based system in conformance with the WS-I Basic Profile 1.1 (**[WS-I BP 1.1]**) and Basic Security Profile 1.0 (**[WS-I BP 1.0]**) for use with the **[ECF 4.0]** specification. This version adds support for bulk filings. improves security support for tokens, attachments, and rights management through inclusion of WS-Security 1.1 and adds supports for message splitting and assembly through inclusion of WS-Reliable Messaging 1.0.. This specification requires an active network connection between the sending and receiving MDEs.

1.1 Relationship to ECF 4.0 Specifications

The ECF 4.0 specification describes the technical architecture and the functional features of an electronic court filing system, that is, features needed to accomplish electronic filing in a court, pointing out both normative (required) and non-normative (optional) business processes it supports. The non-functional requirements associated with electronic filing transactions, and actions and services needed to accomplish the transactions, such as network structures and security infrastructures, are defined in related specifications, namely:

- Service interaction profile specifications defining communications infrastructures within which electronic filing transactions can take place.

- Document signature profile specifications that define mechanisms for stating or proving that a person signed a particular document.

This specification represents an ECF 4.0 service interaction profile based on web-services. It is intended for implementation in conjunction with the ECF 4.0 specification and at least one ECF 4.0 document signature profile specification. Specifically, in this service interaction profile, the implementation details for each of the Major Design Elements (MDEs), operations, and messages defined in the ECF 4.0 specification, are defined in Web Services Description Language (WSDL).

1.2 Relationship to other XML Specifications

Consistent with the ECF 4.0 principle of leveraging other existing, non-proprietary XML specifications wherever possible, this service interaction profile specification leverages previous specifications for web services messaging and security including the following:

- W3C XML Schema 1.0.

- W3C Namespaces in XML.

- W3C Simple Object Access Protocol (SOAP) 1.1.

- W3C Web WSDL 1.1.

- W3C XML-Signature Syntax and Processing.

- W3C SOAP 1.1 Binding for MTOM 1.0

- WS-I Basic Profile Version 1.1.

- WS-I Basic Security Profile Version 1.0.

- OASIS WS-Reliable Messaging 1.0.

The use of each of these specifications is described below.

1.2.1 W3C XML Schema 1.0

The W3C XML Schema 1.0 specification defines an application protocol for imposing constraints on the storage layout and logical structure of data objects using text tags or "markup." Compliance with the

43   requirements of the XML Schema 1.0 specification is REQUIRED for compliance with this service
44   interaction profile.

1.2.2 W3C Namespaces in XML

46   The W3C Namespaces in XML specification defines conventions for defining and referring to separate
47   XML tags. Compliance with the requirements of the Namespaces in XML specification is REQUIRED for
48   compliance with this service interaction profile.

1.2.3 W3C Simple Object Access Protocol (SOAP) 1.1

50   The W3C SOAP 1.1 specification defines message exchange patterns and message structures for use
51   with XML. Compliance with the requirements of the SOAP 1.1 specification is REQUIRED for compliance
52   with this service interaction profile.

1.2.4 W3C Web Services Description Language (WSDL) 1.1

54   The W3C WSDL specification enables the description of services as sets of endpoints operating on
55   messages. Compliance with the requirements of the WSDL 1.1 specification is REQUIRED for
56   compliance with this service interaction profile.

57   An MDE implementation MUST consist of a SOAP 1.1 web service that implements the SOAP HTTP
58   binding for that MDE's portType from the `ECF-4.0-WebServicesProfile-Definitions.wsdl` document
59   (provided with this specification). Further, the implementation MUST be accompanied by an
60   implementation-specific WSDL document that imports the namespace defined in `ECF-4.0-`
61   `WebServicesMProfile-Definitions.wsdl`, and defines a `<wsdl:service>` element containing a
62   `<soap:address>` element with a `location` attribute whose value provides an HTTP URL at which the
63   MDE implementation can be invoked.

64   (Note that in the previous paragraph, a namespace prefix of "wsdl" is assumed to map to the
65   http://schemas.xmlsoap.org/wsdl/ namespace, while the namespace prefix of "soap" is
66   assumed to map to the http://schemas.xmlsoap.org/wsdl/soap/ namespace.)

67   An example implementation-specific WSDL document (`ECF-4.0-WebServicesProfile-`
68   `ImplementationExample.wsdl`) is provided with this specification.

1.2.5 W3C XML-Signature Syntax and Processing

70   The W3C XML Signature Syntax and Processing specification defines representations of signatures of
71   Web resources, portions of protocol messages (anything that may be referenced by a URI), and
72   procedures for computing and verifying such signatures. Compliance with the requirements of the XML
73   Signature Syntax and Processing specification is REQUIRED for compliance with this service interaction
74   profile.

1.2.6 WS-I Basic Profile 1.1

76   The WS-Interoperability Basic Profile 1.1 (**[WS-I BP 1.1]**) specification defines a set of best practices for
77   implementing interoperable web services. Compliance with the requirements of the **[WS-I BP 1.1]** is
78   REQUIRED for compliance with this service interaction profile.

1.2.7 W3C SOAP 1.1 Binding for MTOM 1.0

80   The SOAP 1.1 Binding for MTOM 1.0 (**[SOAP MTOM 1.0]**) defines a set of best practices for
81   implementing interoperable serialization of the SOAP envelope and its representation in the message.
82   This binding MUST be used as a replacement for the WS-I Attachments Profile 1.0 and the W3C Simple
83   SOAP Binding Profile in the WS-I Basic Profile **[WS-I BP 1.1]**. Compliance with the requirements of the **[**
84   **SOAP MTOM 1.0]** and the specifications that this binding references, the SOAP Message Transmission
85   Optimization Mechanism (MTOM) (**[MTOM)]** and the W3C XML-binary Optimized Packging (XOP)
86   specifications (**[XOP]**), is REQUIRED for compliance with the web services service interaction profile.

1.2.8 WS-I Basic Security Profile 1.0

The WS-Interoperability Basic Security Profile Version 1.0 (**[WS-I BSP 1.0]**) complements **[WS-I BP 1.0]** and defines a set of best practices for implementing interoperable and secure web services. With the exception of the requirements for use of the WS-I Attachments Profile 1.0 and the W3C Simple SOAP Binding Profile 1.0, compliance with the requirements of **[WS-I BSP 1.0]** is REQUIRED for compliance with this service interaction profile. However, in many cases, **[WS-I BSP 1.0]** is underspecified. The following options in **[WS-I BSP 1.0]** are REQUIRED for compliance with this web services service interaction profile:

- E0002 - Security Tokens - Security tokens MUST be specified in additional security token profiles. (NOTE: This will be determined in Court Policy)

- R3103 - A SIGNATURE MUST be a Detached Signature as defined by the XML Signature specification.

1.2.9 WS-ReliableMessaging Version 1.0

The WS-Reliability 1.1 (**[WS-RM 1.0])** specification complements **[WS-I BP 1.1]** and defines a set of extensions for exchanging SOAP messages with guaranteed delivery, no duplicates, and guaranteed message ordering.

1.3 Terms and Definitions

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in **[RFC2119]**.

The key terms used in this specification include:

Attachment

Information transmitted between MDEs that is of an arbitrary format, and is related to the message(s) in the transmission in a manner defined in the ECF 4.0 specification. An attachment may be in XML format, non-XML text format, encoded binary format, or un-encoded binary format.

Callback message

A message transmission returned by some operations some time after the operation was invoked (asynchronously).

Document

Represents an electronic version of the paper that would have been sent as paper.

Docketing

The process invoked when a court receives a pleading, order, or notice, when no errors in transmission or in presence of required content have occurred, and when the pleading, order, or notice is recorded as a part of the official record.

Filer

Attorneys or pro se litigants are individuals who assemble and submit Filings (data and documents).

Filing

Electronic document collection that has been assembled for filing on a designated court case.

Major Design Element (MDE)

A logical grouping of operations representing a significant business process supported by ECF 4.0. Each MDE operation receives one or more messages, returns a synchronous response message, and optionally sends an asynchronous response message back to the original sender.

132 **Message**

133 Information transmitted between MDEs that consists of a well-formed XML document that is valid
134 against one of the defined message structure schemas in the ECF 4.0 specification. A message
135 may be related to one or more attachments in a manner defined in the ECF 4.0 specification.

136 **Message Transmission**

137 The sending of one or more messages and associated attachments to an MDE. Each
138 transmission must invoke or respond to an operation on the receiving MDE, as defined in the
139 ECF 4.0 specification.

140 **Operation (or MDE Operation)**

141 A function provided by an MDE upon receipt of one or more messages. The function provided by
142 the operation represents a significant step in the court filing business process. A sender invokes
143 an operation on an MDE by transmitting a set of messages to that MDE, addressed to that
144 operation.

145 **Operation signature**

146 A definition of the input message(s) and synchronous response message associated with an
147 operation. Each message is given a name and a type by the operation. The type is defined by a
148 single one of the message structures defined in the ECF 4.0 specification.

149 **Receiving MDE**

150 In an Electronic Court Filing operation, the MDE that receives the request with the operation
151 invocation performs the operation and sends the response.

152 **Sending MDE**

153 In an Electronic Court Filing operation, the MDE that sends the request including the operation
154 invocation and receives the response with the results of the operation.

155 **Synchronous response**

156 A message transmission returned immediately (synchronously) as the result of an operation.
157 Every operation has a synchronous response.

158 ## 1.4 Symbols and Abbreviations

159 The key symbols and abbreviations used in this specification include:

160

161 **ECF 4.0**

162 OASIS LegalXML Electronic Court Filing 4.0

163 **MDE**

164 Major Design Element

165 **OASIS**

166 Organization for the Advancement of Structured Information Systems

167 **SOAP**

168 Simple Object Access Protocol

169 **XML**

170 eXtensible Markup Language

171 **W3C**

172 World Wide Web Consortium

173 **WSDL**

174 Web Services Description Language

175 **WS-I**

176   Web Services Interoperability Organization

177

178 1.5 Normative References

179 **[ECF 4.0]**	180 A. Angione (editor), *LegalXML Electronic Court Filing v4.0*, http://www.oasis-open.org/apps/org/workgroup/legalxml-courtfiling/, OASIS Working Draft, August 2008.
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185 **[Namespaces]**	186 T. Bray, *Namespaces in XML*, http://www.w3.org/TR/REC-xml-names/REC-xml-names-19990114, W3C Recommendation, January 14, 1999.
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204 **[Schema Part 2]**	205 P. Biron, A. Malhotra, *XML Schema Part 2: Datatypes Second Edition*, http://www.w3.org/TR/2004/REC-xmlschema-2-20041028/, W3C Recommendation, October 28, 2004.
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213 **[WSDL 1.1]**	214 E. Christensen, F Curbera, G Meredith, S. Weerawarana, *Web Services Description Language 1.1*, http://www.w3.org/TR/2001/NOTE-wsdl-20010315, , W3C Note, March 15, 2001.
216 **[WS-I BP1.1]**	217 K. Ballinger, D. Ehnebuske, C. Ferris, M. Gudgin, M. Nottingham, C. K. Liu, M. Nottingham, P Yendluri, *Basic Profile Version 1.1*, http://www.ws-i.org/Profiles/BasicProfile-1.1.html , WS-I Organization, April 10, 2006.
219 **[WS-I BSP 1.1]**	220 M. McIntosh, M. Gudgin, K. Scott Morrison, A. Barbir, *Basic Security Profile Version 1.1 (Working Group Approval Draft)*, http://www.ws-i.org/Profiles/BasicSecurityProfile-1.1.html, WS-I Organization, February 20, 2007.

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233 http://www.w3.org/TR/2002/REC-xmldsig-core-20020212/, W3C
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238 1.6 Non-Normative References

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242

2 Profile Design

This section describes the design of the Web Services Service Interaction Profile and identifies how it satisfies the requirements of a document signature profile listed in Section 5 of the **[ECF 4.0]** specification. In addition, this profile is intended for compatibility with the Global Justice Reference Architecture Web Services Service Interaction Profile **[JRA WS-SIP]**.

2.1 Service Interaction Profile Identifier

Each ECF 4.0 service interaction profile MUST be identified with a unique URI which is used in the ECF 4.0 court policy to identify the service interaction profile(s) that a given MDE supports. The ECF 4.0 Web Services Service Interaction Profile 2.0 will be identified by the following URI:

`urn:oasis:names:tc:legalxml-courtfiling:schema:xsd:WebServicesProfile-2.0`

All ECF 4.0 messages sent via this service interaction profile MUST include this URI in the `<SendingMDEProfileCode>` element. In addition, any court supporting this service interaction profile MUST include this URI in the `<SupportedMessageProfile>` element in the **CourtFilingResponseMessage**.

2.2 Transport Protocol

Each ECF 4.0 message transmission sent using this service interaction profile MUST be encapsulated in a SOAP message over the HTTP 1.1 protocol as defined in the **[WSI-I BP 1.1]** and **[SOAP MTOM]** specifications. Figure 1 illustrates the containment of ECF 4.0 messages and attachments within a SOAP Message Package. For compliance with this specification, a SOAP envelope MUST contain one or more messages and MAY contain one or more attachments.

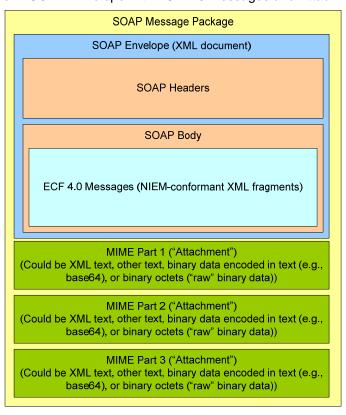Figure 1. SOAP Envelope with ECF 4.0 Messages and Attachments

2.3 MDE Addressing

Each ECF message transmission sent using this service interaction profile MUST identify the sending and receiving MDEs with universally unique address identifiers. The identifier for each MDE will be assigned by the organization that manages the MDE and MUST be the HyperText Transfer Protocol (HTTP) or HTTP over Secure Socket Layer (SSL) permanent URL for the MDE web service.

This URL MUST be the value of the `location` attribute of the `<soap:address>` element contained within the `<wsdl:service>` element that binds the MDE's portType to a service, and that is defined in the implementation-specific WSDL document discussed in section 1.2.4 above.

For instance, a conformant MDE ID of a web service at courts.wa.gov using HTTP over SSL on port 8000 would be as follows:

        https://courts.wa.gov:8000

2.4 Operation Addressing

Each message transmission MUST either identify the operation or operations being invoked or be a synchronous response to a previous request. Each operation MUST be either a required operation as defined in the ECF 4.0 specification or an optional operation identified as supported by the court through the current machine-readable court policy. The response to a request for an operation not supported by the court MUST be reported using the ECF 4.0 `<ErrorCode>` element in the core message and MAY also include a `SOAPFault` in the SOAP envelope.

2.5 Request and Operation Invocation

Each message transmission MUST identify the operation being invoked within the SOAP Body only; the (qualified) operation name MUST be the qualified name of the first child element of the SOAP body element, as called for in section 7.1 of the **[SOAP 1.1]** specification.

An MDE implementation MAY allow message transmissions that include a `SOAPAction` HTTP header.

In compliance with the **[WSI-I BP 1.1]** specification, a receiving MDE MAY NOT rely on the value of the `SOAPAction` HTTP header in processing the message.

2.6 Synchronous Mode Response

Synchronous responses to requests MUST be encoded using the MIME binding defined in Section 4.1.1 of the **[SOAP MTOM 1.0]** specification.

2.7 Asynchronous Mode Response

The receiving MDE MUST deliver the asynchronous response to a request sent using the web services service interaction profile by sending the asynchronous response to the sending MDE via the web services service interaction profile. The response message transmission MUST conform to the rules for message transmissions established in section 2.5 of this specification above.

2.8 Message/Attachment Delimiters

The ECF 4.0 messages MUST be encapsulated in the SOAP Body. All other attachments MUST be included in separate MIME parts as shown in Figure 1. The delimiters between the message and the first attachment, and between attachments, must comply with the rules for delimiting MIME parts as defined in **[RFC2045].**

2.9 Message Identifiers

Each MIME part that includes an attachment MUST have a unique "Content-ID" as defined in **[RFC2045]** that uniquely identifies the content within that part.

2.10 Message Non-repudiation

The SOAP message MAY include a digital signature applied to the SOA Body and all MIME parts that contain messages or attachments. The digital signature MUST be conformant with Section 8 of the **[WS-I BSP 1.0]** specification which references the **[XMLSIG]** specification. The algorithms defined by **[XMLSIG]** support non-repudiation of the signer and signing date through a digital signature created using the signer's private key. Because the sender is the only one with access to the private key and the date is included in the signature, receivers can be reasonably assured of the signer and signing date.

2.11 Message Integrity

The algorithms defined by **[XMLSIG]** support message integrity through inclusion of a public-key-based digital signature. Because the signing date and message hash are included in the signature and the entire signature is computed using the sender's private key, the receiver can compare the hashes to verify that the message has not been altered since it left the control of the sender on the specified date.

2.12 Message Confidentiality

If the Filing Review MDE supports the filing of confidential filings and publishes the court's public key in court policy, messages and attachments MAY be encrypted for filing into the court according to Section 9 of the **[WS-I BSP 1.0]** specification which references the **[XMLENC]** specification. Because the Filing Review MDE is the only one with access to the court's private key, filers can be reasonably assured that only the Filing Review MDE will be able to read the message or attachment.

This mechanism MAY be used to protect sensitive or confidential information in a filing such as the FilingPaymentMessage However, this specification does NOT support the transmission of messages and attachments encrypted with the court's public key to other parties in the case. Any messages and attachments transmitted to other parties MUST be either encrypted with the party's public key or not encrypted. This specification and the ECF 4.0 specification do NOT define the exchange or publication of public keys by persons or organizations other than the court.

2.13 Message Authentication

Each MDE MAY define HTTP credentials for authentication to access the operations supported by that MDE. If authentication is required, the sending MDE MUST include the credentials in the request as defined in **[RFC2617]**.

For instance, the Filing Review MDE MAY assign user ID and password pairs to each supported Filing Assembly MDE, and require authentication for ReviewFiling operations but not query operations. In that case, each Filing Assembly MDE would include the user ID and password assigned to them in each filing.

2.14 Message Reliability

If a court expresses support for message reliability in human-readable court policy, a sending MDE MAY include reliability extensions to the SOAP envelope as defined in the **[WS-RM 1.0]** specification. An MDE that receives a request with a SOAP envelope that includes reliability extensions MUST include reliability extensions as defined by **[WS-RM 1.0]** in the response.

2.15 Message Splitting and Assembly

WS-Reliable Messaging defines mechanisms by which messages MAY be split into multiple pieces that are assigned sequence numbers and transmitted separately by the RM Source (sending MDE) and reassembled into the complete message by the RM Destination (receiving MDE).

348 2.16 Transmission Auditing

349 An implementation of the web services message profile MUST ensure that the complete SOAP message,
350 including the SOAP envelope, any attachments, and signatures, is available to the receiving MDE for
351 persisting and auditing purposes.

352

3 Service Definitions

Implementation of this service interaction profile MUST be described in a WSDL file that imports the service definitions from the `ECF-4.0-WebServicesProfile-Definitions.wsdl` file included with this specification.

Appendix A. (Informative) Acknowledgments

The following individuals were members or voting members of the committee during the development of this specification:

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Appendix B. (Informative) Revision History

Revision	Date	Editor	Changes Made
Wd01	2008-08-18	James Cabral	Initial version
Wd02	2008-08-25	James Cabral	Revised WSDL
Wd03	2008-09-03	James Cabral	Changed "WebServicesMessagingProfile" to "WebServicesProfile"

401

Appendix C. (Informative) Example Implementation

This non-normative section provides an example WSDL implementation of this service interaction profile. This is also included in `ECF-4.0-WebServicesProfile-ImplementationExample.wsdl` file included with this specification.   Note that the following is for illustrative purposes only.

```
<definitions
    targetNamespace="urn:oasis:names:tc:legalxml-courtfiling:wsdl:WebServiceProfile-
ImplementationExample-4.0"
    xmlns:wsmp="urn:oasis:names:tc:legalxml-courtfiling:wsdl:WebServiceProfile-
Definitions-4.0"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema"
    xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
    xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
    xmlns="http://schemas.xmlsoap.org/wsdl/">

    <import namespace="urn:oasis:names:tc:legalxml-courtfiling:wsdl:WebServiceProfile-
Definitions-4.0" location="ECF-4.0-WebServicesProfile-Definitions.wsdl"/>

    <service name="ServiceMDEService">
        <port name="ServiceMDEPort" binding="wsmp:ServiceMDEPortSOAPBinding">
            <soap:address location="https://localhost/..."/>
        </port>
    </service>

    <service name="FilingAssemblyMDEService">
        <port name="FilingAssemblyMDEPort"
binding="wsmp:FilingAssemblyMDEPortSOAPBinding">
            <soap:address location="https://localhost/..."/>
        </port>
    </service>

    <service name="CourtRecordMDEService">
        <port name="CourtRecordMDEPort" binding="wsmp:CourtRecordMDEPortSOAPBinding">
            <soap:address location="https://localhost/..."/>
        </port>
    </service>

    <service name="FilingReviewMDEService">
        <port name="FilingReviewMDEPort" binding="wsmp:FilingReviewMDEPortSOAPBinding">
            <soap:address location="https://localhost/..."/>
        </port>
    </service>

</definitions>
```

449 Appendix D. (Informative) Example Transmissions

450 This non-normative section provides an example transmission that demonstrates an operation invocation,
451 a synchronous response, and an asynchronous response using this service interaction profile. Note that
452 these examples are for illustrative purposes only.

453 D.1 Operation Invocation

454 This is an example of a request including a ReviewFiling operation invocation.

455

```
MIME-Version: 1.0
Content-Type: Multipart/Related; boundary=boundary;
   type="application/xop+xml";
   start="Envelope"
   start-info="text/xml"

--boundary
Content-Type:application/xop+xml;
 text/xml; charset="UTF-8"
Content-Transfer-Encoding: 8bit
Content-ID: Envelope

<?xml version='1.0' ?>
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
    <env:Body xmlns:types="http://example.com/some-namespace">
        <types:ReviewFiling>

            <CoreFilingMessage>
                    …
            </CoreFilingMessage>

            <PaymentMessage>
                    …
            </PaymentMessage>

        </types:ReviewFiling>
    </env:Body>
</env:Envelope>

--boundary
Content-Type: application/pdf
Content-Transfer-Encoding: binary
Content-ID: Attachment1

...Lead Document...
--boundary—
Content-Type: application/pdf
Content-Transfer-Encoding: binary
Content-ID: Attachment2

...Connected Document...
--boundary--
```

499

500

D.2 Synchronous Response

This is an example of a MessageReceiptMessage synchronous response.

```
MIME-Version: 1.0
Content-Type: Multipart/Related; boundary=boundary;
   type="application/xop+xml";
   start="Envelope"
   start-info="text/xml"

--boundary
Content-Type:application/xop+xml;
 text/xml; charset="UTF-8"
Content-Transfer-Encoding: 8bit
Content-ID: Envelope

<?xml version='1.0' ?>
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
    <env:Body xmlns:types="http://example.com/some-namespace">
        <types:ReviewFiling-Response>

            <MessageReceiptMessage>
                    …
            </MessageReceiptMessage>

        </types:ReviewFiling-Response>
    </env:Body>
</env:Envelope>
```

D.3 Asynchronous Response

This is an example of a NotifyFilingReviewComplete asynchronous response.

```
MIME-Version: 1.0
Content-Type: Multipart/Related; boundary=boundary;
   type="application/xop+xml";
   start="Envelope"
   start-info="text/xml"

--boundary
Content-Type:application/xop+xml;
 text/xml; charset="UTF-8"
Content-Transfer-Encoding: 8bit
Content-ID: Envelope

<?xml version='1.0' ?>
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
    <env:Body xmlns:types="http://example.com/some-namespace">
        <types:NotifyFilingReviewComplete>

           <ReviewFilingCallbackMessage>
                    …
           </ReviewFilingCallbackMessage>

           <PaymentReceiptMessage>
                    …
           </PaymentReceiptMessage>

        </types:NotifyFilingReviewComplete>
    </env:Body>
</env:Envelope>

--boundary
Content-Type: application/pdf
Content-Transfer-Encoding: binary
Content-ID: Attachment1

...Lead Document...
--boundary—
Content-Type: application/pdf
Content-Transfer-Encoding: binary
Content-ID: Attachment2

...Connected Document...
--boundary--
```