



Publications Office

IMMC transmission protocol rules

1. between the contractors responsible for the OJ ACT by ACT production and Publications Office in delivery phase and
2. the interaction between CERES and ESEAL inside the Publications Office in signature phase

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Document History

Version	Date	Author	Summary of changes
0.1	06/01/2021	Homeyra HARIRCHIAN	Template version for OJ ABA production phase
1.0	27/01/2021	Martin SCHERBAUM	Describe OJ ABA delivery phase IMMC messages
1.1	16/02/2021	Martin SCHERBAUM	Precision on the ETSI signature validation report

Approvals

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(*) I = for information ; A = for action

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Abbreviations and definitions

1.1 References

R1	Specifications for the composition of filenames in Act by Act production	-	2020-02-13
R2	IMMC transmission protocol rules between the Publications Office and its contractors responsible for the OJ ACT by ACT production in preproduction phase	v1.1	2021-01-27
R3	CERES / OJ ACT by ACT - Reception & Validation Workflows - Functional Specifications	v0.6	2020-12-01

1.2 Abbreviations

IMMC	Interinstitutional Metadata Maintenance Committee
CERES	Central Electronic Reception System
OJ	Official Journal of the European Union
OP-RECVAL	Publications Office, reception and validation service
OP-OJ	Publications Office, OJ production unit
OP-SIGN	Publications Office, OJ signature platform
CONTR	OJ production contractor

1.3 Definitions

CERES	IT system which receives all incoming IMMC packages, validates, evtl. dispatches and evtl. processes them. Monitoring is done by OP-RECVAL.
PlanJO	IT system in which the OJ production unit coordinates the OJ production life cycle.
ESEAL	IT system which provides the service to digitally sign a PDF file and thus establishes the legally Authentic OJ.

IMMC package	A ZIP package containing at least the IMMC descriptor file + optionally transported content files.
IMMC descriptor	A (schema valid) XML file which contains the administrative and descriptive metadata of an IMMC transmission.

1. Introduction

1.1 Purpose of the Document

This document defines the specific usage rules of the IMMC protocol for exchanging content (files) and metadata between the OJ act-by-act production contractors and the Publications Office (Reception and validation) in the context of the OJ act-by-act publication in delivery phase.

1.2 Scope

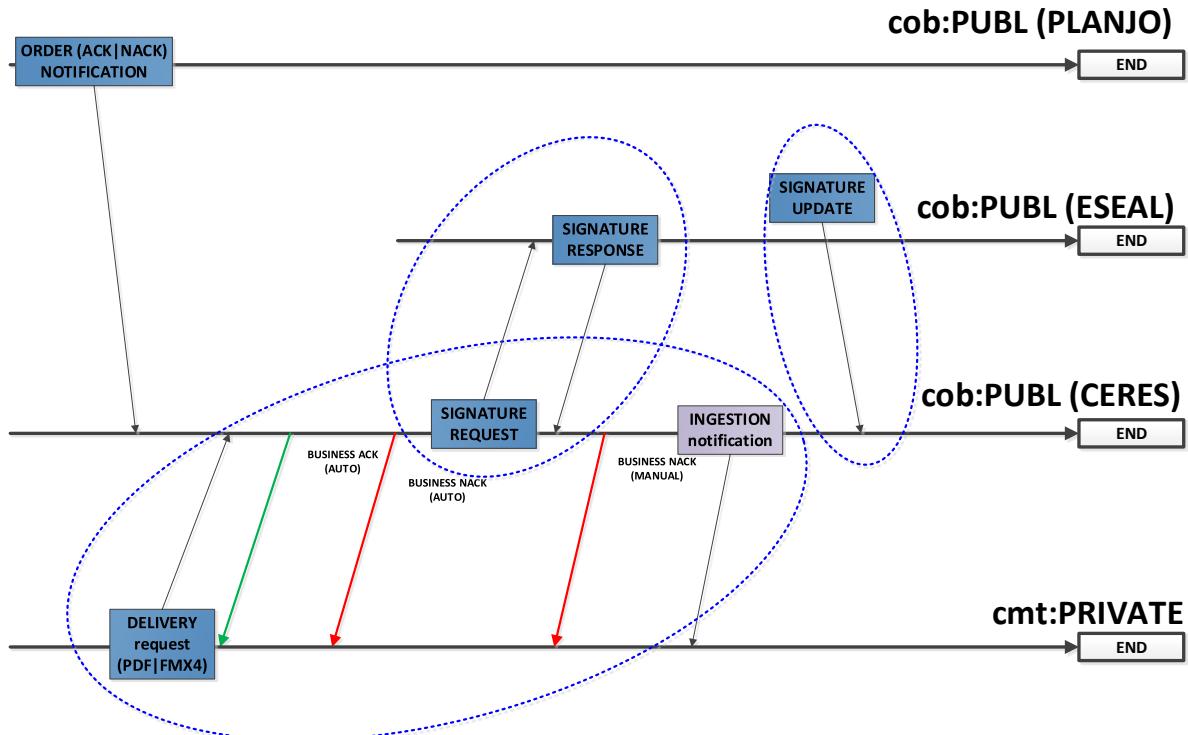
This specification document describes in detail the content of the IMMC descriptors for the exchanges during the OJ act-by-act publication in the delivery phase starting with the delivery of PDF for the Authentic OJ and Formex4 data. The phase ends with the ingestion notification for the Authentic OJ PDF files. It has an interlude with the signature phase as well covered by this document.

The overall OJ publication process can be split into 3 major phases:

- the preproduction phase being described in [R2]
- the delivery phase (this document)
- the signature phase (this document)

2. Transmission rules

The stakeholders exchange IMMC messages in the context of the act-by-act publication in delivery phase as depicted in the diagrams below (the diagram is taken from [R3])



Although the actual delivery phase is initiated by the OJ production contractor's delivery request messages, this situation is already anticipated by the reception of the close act message from PlanJO in CERES (as described in [R2] and referred to in [R3] as "OJ-ABA order ACK notification"). This message is used as a forecast for the to be expected delivery messages. In order to signal changes in the production of an OJ act, PlanJO may copy the close act cancellation message to CERES (as described in [R2]) and referred to in [R3] as "OJ-ABA order NACK notification").

CERES will receive per OJ act 2 types of delivery packages:

- The OJ act PDF delivery, containing PDF files for the authentic OJ act in all published LVs
- The OJ act Formex4 delivery, containing Formex4 files for dissemination and generation of XHTML files; per transmission files for all published LVs have to be provided

For both types of delivery packages only complete deliveries (files for all LVs at once) will be accepted. Partial deliveries (only a subset of the LVs defined by the corresponding close act package) will be rejected to the contractor. Upon reception of every IMMC package, CERES will perform validation controls and report back to the contractor any errors, namely: unexpected deliveries, metadata errors, content file

errors and content errors (business validation NACK) or accept the request (business validation ACK) and proceed with the signature generation and subsequent ingestion in the repository for dissemination.

3. Basic IMMC concepts

4.1 Introduction to IMMC packages

The IMMC messages cover the information exchanged during the OJ act by act publication.

In particular, IMMC messages shall be used for sending data files (e.g. manuscripts in different formats such as .doc, .pdf etc.) and business level metadata (e.g. title of the document, language of the document, publication date, etc.).

The recipient of an initiative IMMC message is expected to reply with an acknowledgment message to the sender.

Each IMMC package and the corresponding IMMC descriptor shall respect the formal file naming convention defined in this document.

Other data files included in the IMMC package respect their author's naming conventions. The stakeholders are not required to perform any control to verify their names.

Each IMMC package shall contain:

- An IMMC descriptor: this is an XML file that contains basic information concerning the message itself, like the transmission identifier, the sender, the recipient, the date and time of the transmission etc. and the business level metadata.
- The data files: the message can include manuscripts in several languages and formats.

4.2 Extended IMMC transmission header

The OJ act extension as described in this document uses some modern features of IMMCv2, namely the extended IMMC transmission header already known from IMMCv3. In the scope of OJ act by act production only the latter will be used.

The extended transmission header consists of information about the sender and the recipient of a transmission in separate elements (<cmt:sender>, <cmt:recipient>). Both elements have the same principle structure.

When the recipient replies to an IMMC message they will simply "swap" the sender and recipient element in the message.

The information from the transmission header is used especially in the context of IMMC message routing between the different exchange participants and must contain thus well-defined and reliable contact information.

4.3 Transmission inventory

The recently introduced (IMMCv2 cm-20201216-beta) transmission inventory shall be used in all file delivery transmissions.

The element `//cmt:transmission/cmt:inventory_transmission` can be seen as the explicit list of files contained in that transmission (previously this was induced from the list of `//cm:reference_manifestation` elements not being URLs). Besides the mandatory file name (relative to the package root directory) a checksum, size and file date can be specified per `cmt:file` element as optional attributes. In the scope of the OJ deliveries the checksum attribute has to be considered mandatory as it makes it possible to have an audit trail on the integrity of the data from source to destination. As checksum algorithm SHA-2 (acronym: "sha256") has to be used.

It is mentioned with the different messages below when the use of the transmission inventory is necessary.

4.4 XML Namespaces

In the scope of OJ act by act IMMC messages the following XML namespaces will be used:

Namespace prefix ¹	Namespace URI
<code>cmt:</code>	http://publications.europa.eu/resource/core-metadata-transmission
<code>cm:</code>	http://publications.europa.eu/resource/core-metadata
<code>cmext:</code>	http://publications.europa.eu/resource/core-metadata-extensions
<code>ojecttrans:</code>	urn:eu:oject:transmission
<code>ojectext:</code>	urn:eu:oject:extensions
<code>comext:, councilext:, ...</code>	Author domain specific namespaces introduced by the OJ manuscripts. They will remain untouched by the OJ production process.

4.5 Message: ACK / NACK

As a good practice of confirming proper reception of a transmission the recipient of an initiative message shall send an acknowledgement message as response to the reception (where indicated).

Each request message is returned to the sender with detailed status at each level of the structural elements contained in a `cmext:validation` extension element according to the level. The occurrence of such an element only prejudgetes on the validation outcome on its own level. In the course of exhaustive validation different outcomes may be found for different structural elements with no implication of contradiction between the levels. A `cmext:validation_outcome` with value "FAILED" indicates a problem on that specific element, the value "PASSED" indicates a positive validation outcome for that element, no indication of an outcome might indicate a non-occurring validation of that entity.

¹ The namespace prefixes used in actual IMMC message instances my deviate, however, they need to be assigned properly to their namespace URIs. The values shown here are used consistently for the description.

In recent IMMCv2 schema changes the `cmt:receipt` root element has been introduced (as harmonization with IMMCv3 which has this element from the beginning). By using this root element, the complete core metadata based FRBR structure of a document can be sustained, however all non-core metadata extension elements are removed. Instead, each FRBR level can hold a validation extension element (see paragraph above) indicating the validation status of that element and evtl. a user comment and one or more validation report file references. Like that an acknowledgement or refusal message can be returned by adding a status and a comment indicating the reason for the sending of the message or confirming proper continuation of the requested activity.

The element `cmt:response_transmission` shall contain the reference of the original message (the value of the previous message's `cmt:transmission/@id`). Furthermore, sending context (`original //cmt:sender/cmt:context`) and moment of the original transmission (`//cmt:transmission/cmt:date_time`) shall be kept in the optional attributes "context" and "date_time". By keeping subsequently `cmt:response_transmission` elements the complete transmission history of a document can be kept.

4. Messages from CONTR to OP-RECVAL

This chapter presents the list and the structure of the messages sent from Publications Office to contractors.

Message	Description
Delivery (PDF)	<p>This message is used to fulfill the production contract and provide the produced formats (here: PDFA/2a) for an OJ act document to OP.</p> <p>The message is packed in a zip file as the IMMC xml message and accompanied by the PDF files for publication.</p>
Delivery (Formex4)	<p>This message is used to fulfill the production contract and provide the produced formats (here: Formex4) for an OJ act document to OP.</p> <p>The message is packed in a zip file as the IMMC xml message and accompanied by the Formex4 XML and TIFF files for publication.</p>
Ingestion notification	<p>This message is sent after all workflow steps have successfully finished indicating also the location of the delivered content files in the dissemination repository.</p> <p>The message is packed in a zip file as the IMMC xml message.</p>

4.1 Message: PDF delivery

ZIP file name: CONTR-ccc-ooooooooo-pdf-YYYYMMDDHHMMSSmmm_immc.zip

where:

- CONTR: constant string indicating a contractor as sender
- ccc: the supplier value from OJ act extension being the identifier of the CONTR
- ooooooooooooo : The fixed length 9 position OJ act ID as from the ojactext:identifier_oj element
- pdf : fixed text representing the format (PDFA/a2) of the files in the current delivery flow
- YYYYMMDDHHMMSSmmm : timestamp representing the package construction time
- _immc.zip : suffix to characterize the archive file as an IMMC package

Example for the package name:

- CONTR-NUMEN-L_202012345-pdf-20201210T121314000_immc.zip

Content:

- IMMC descriptor name : CONTR-ccc-ooooooooo-pdf-YYYYMMDDHHMMSSmmm_immc.xml
- PDFA/2a content files, 1 per LV, all LVs in one package ; following naming convention from [R1]

IMMC descriptor	Root Element:	ojacttrans:ojact_transmission_request
	Phase workflow:	delivery, context="pdf.delivery"
	Allowed extensions:	<ul style="list-style-type: none">- ojactext:WorkflowExtensionType- ojactext:ActWorkExtensionType- ojactext:ActManifestationExtensionType- The extension sent from the author of the document
	Work	<ul style="list-style-type: none">- One work of representing the OJ act document together with the related PDFA/2a files for all LVs
	Transm. inventory	Mandatory

4.2 Message: Formex4 delivery

ZIP file name: CONTR-ccc-ooooooooo-fmx-YYYYMMDDHHMMSSmmm_immc.zip

where:

- CONTR: constant string indicating a contractor as sender
- ccc: the supplier value from OJ act extension being the identifier of the CONTR
- ooooooooooooo : The fixed length 9 position OJ act ID as from the ojactext:identifier_oj element
- fmx : fixed text representing the format (Formex4) of the files in the current delivery flow
- YYYYMMDDHHMMSSmmm : timestamp representing the package construction time
- _immc.zip : suffix to characterize the archive file as an IMMC package

Example for the package name:

- CONTR-NUMEN-L_202012345-fmx-20201210T121314000_immc.zip

Content:

- IMMC descriptor name : CONTR-ccc-ooooooooo-fmx-YYYYMMDDHHMMSSmmm_immc.xml
- Formex4 content files, at least 3 Formex4 files per LV +optional TIFF image files, all LVs in one package ; following naming convention from [R1]

IMMC descriptor	Root Element:	ojacttrans:ojact_transmission_request
	Phase workflow:	delivery, context="formex.delivery"
	Allowed extensions:	<ul style="list-style-type: none"> - ojactext:WorkflowExtensionType - ojactext:ActWorkExtensionType - ojactext:ActManifestationExtensionType - The extension sent from the author of the document
	Work	<ul style="list-style-type: none"> - The work of the document with Formex4 files for all L
	Transm. inventory	<ul style="list-style-type: none"> - mandatory

5. Messages from OP-RECVAL to CONTR

This chapter presents the list and the structure of the messages sent from OP-RECVAL to the OJ production contractors.

Each contractor must receive a unique code by the Publication Office in order to start using the IMMC protocol. This code is then used in file names and XML envelopes.

Message	Description
Data validation acceptance	<p>OP-RECVAL accepts the delivery after having applied all automatic validations with positive outcome.</p> <p>The message consists of an IMMC package with solely an IMMC descriptor file.</p> <p>In [R3] this is referred to as “OJ-ABA (PDF FMX) automatic validation ACK notification”.</p>
Order rejection	<p>OP-RECVAL found a discrepancy between the close act message (final order description) from PlanJO and the delivery message from CONTR. This may be because of not expected or incomplete delivery. This message implies potentially on the side of CONTR a redelivery (depending on the rejection reason).</p> <p>The message consists of an IMMC package with an IMMC descriptor file and an optional set of validation reports/comments describing the rejection cause.</p> <p>In [R3] this is referred to as “OJ-ABA (PDF FMX) automatic validation NACK notification”.</p>
Data validation rejection	<p>OP-RECVAL rejects the delivery after having applied all automatic validations of which one or more had a negative outcome. Usually the reception of such a message requires the CONTR to redeliver a corrected package.</p> <p>The message consists of an IMMC package with an IMMC descriptor file and an optional set of validation reports/comments describing the rejection cause.</p> <p>In [R3] this is referred to as “OJ-ABA (PDF FMX) automatic validation NACK notification”.</p>
Manual validation rejection	<p>OP-RECVAL or OP-SIGN discovers an error in the (meta-)data transmitted with the delivery by manual inspection of the data. Usually the reception of such a message requires the CONTR to redeliver a corrected package.</p> <p>The message consists of an IMMC package with an IMMC descriptor file and an optional set of validation reports/comments describing the rejection cause.</p> <p>In [R3] this is referred to as “OJ-ABA (PDF FMX) manual validation NACK notification”.</p>

The reception of the Data validation acceptance message by the CONTR usually concludes the delivery cycle for a given format (PDF or Formex4). However, a later manual validation rejection may require redelivery on specific reasons. The delivery as a whole can be usually considered finished when both PDF and Formex4 deliveries have been positively validated.

5.1 Message: Data validation acceptance

ZIP file name: REVAL-oooooooooooo-fff-dva-YYYYMMDDHHMMSSmmm_immc.zip

where:

- REVAL : fixed text to represent OP-REVAL as the sender of the message
- oooooooooooo : The fixed length 9 position OJ act ID as from the ojactext:identifier_oj element
- fff : fixed text representing the formats (pdf or fmx) of the current delivery flow
- dva : fixed text representing the message type
- YYYYMMDDHHMMSSmmm : timestamp representing the package construction time
- _immc.zip : suffix to characterize the archive file as an IMMC package

Example for the package name:

- REVAL-L_202012345-pdf-dva-20201210T121314000_immc.zip
- REVAL-L_202012345-fmx-dva-20201210T121314000_immc.zip

Content:

- IMMC descriptor name : REVAL-oooooooooooo-fff-dva-YYYYMMDDHHMMSSmmm_immc.xml

IMMC descriptor	Root Element:	cmt:receipt
	Phase workflow:	automatic validation, context="data validation"
	Allowed extensions:	- cmext:validation extension elements on all structural levels of the transmission
	Work	- The work of the OJ act, metadata only.

None of the cmext:validation elements in the transmission must contain an element cmext:outcome_validation with value "FAILED".

5.2 Message: Order validation rejection

ZIP file name: REVAL-oooooooooooo-fff-ovr-YYYYMMDDHHMMSSmmm_immc.zip

where:

- REVAL : fixed text to represent OP-REVAL as the sender of the message
- oooooooooooo : The fixed length 9 position OJ act ID as from the ojactext:identifier_oj element
- fff : fixed text representing the formats (pdf or fmx) of the current delivery flow
- ovr : fixed text representing the message type
- YYYYMMDDHHMMSSmmm : timestamp representing the package construction time
- _immc.zip : suffix to characterize the archive file as an IMMC package

Example for the package name:

- REVAL-L_202012345-pdf-ovr-20201210T121314000_immc.zip
- REVAL-L_202012345-fmx-ovr-20201210T121314000_immc.zip

Content:

- IMMC descriptor name : REVAL-oooooooooooo-fff-ovr-YYYYMMDDHHMMSSmmm_immc.xml

- Any report file mentioned in the IMMC descriptor metadata

IMMC descriptor	Root Element:	cmt:receipt
	Phase workflow:	automatic validation, context="order"
	Allowed extensions:	- cmext:validation extension elements on all structural levels of the transmission
	Work	The work of the OJ act, metadata only.

The cmext:validation element on the resp. workflow extension will contain an element cmext:outcome_validation with value "FAILED", the comment and evtl. report file indicating the reason for the rejection.

5.3 Message: Data validation rejection

ZIP file name: REVAL-oooooooooooo-fff-dvr-YYYYMMDDHHMMSSmmm_immc.zip

where:

- REVAL : fixed text to represent OP-REVAL as the sender of the message
- oooooooooooo : The fixed length 9 position OJ act ID as from the ojactext:identifier_oj element
- fff : fixed text representing the formats (pdf or fmx) of the current delivery flow
- dvr : fixed text representing the message type
- YYYYMMDDHHMMSSmmm : timestamp representing the package construction time
- _immc.zip : suffix to characterize the archive file as an IMMC package

Example for the package name:

- REVAL-L_202012345-pdf-dvr-20201210T121314000_immc.zip
- REVAL-L_202012345-fmx-dvr-20201210T121314000_immc.zip

Content:

- IMMC descriptor name : REVAL-oooooooooooo-fff-dvr-YYYYMMDDHHMMSSmmm_immc.xml
- Any report file mentioned in the IMMC descriptor metadata

IMMC descriptor	Root Element:	cmt:receipt
	Phase workflow:	automatic validation, context="data"
	Allowed extensions:	- cmext:validation extension elements on all structural levels of the transmission
	Work	The work of the OJ act, metadata only.

There will be any number of cmext:validation elements on the structural levels (e.g. manifestation level for files) containing an element cmext:outcome_validation with value "FAILED", the comment and evtl. report file indicating the reason for the rejection.

5.4 Message: Manual validation rejection

ZIP file name: RECAL-oooooooooooo-fff-mvr-YYYYMMDDHHMMSSmmm_immc.zip

where:

- RECAL : fixed text to represent OP-RECAL as the sender of the message
- ooooooooooooo : The fixed length 9 position OJ act ID as from the ojactext:identifier_oj element
- fff : fixed text representing the formats (pdf or fmx) of the current delivery flow
- mvr : fixed text representing the message type
- YYYYMMDDHHMMSSmmm : timestamp representing the package construction time
- _immc.zip : suffix to characterize the archive file as an IMMC package

Example for the package name:

- RECAL-L_202012345-pdf-mvr-20201210T121314000_immc.zip
- RECAL-L_202012345-fmx-mvr-20201210T121314000_immc.zip

Content:

- IMMC descriptor name : RECAL-oooooooooooo-fff-mvr-YYYYMMDDHHMMSSmmm_immc.xml
- Any report file mentioned in the IMMC descriptor metadata

IMMC descriptor	Root Element:	cmt:receipt
	Phase workflow:	manual validation
	Allowed extensions:	- cmext:validation extension elements on all structural levels of the transmission
	Work	- The work of the OJ act, metadata only.

6. Messages between CERES and ESEAL

This chapter presents the list and the structure of the messages sent from CERES to the signature platform ESEAL and its response messages.

Message	Description
Signature request	<p>CERES requests the ESEAL signature platform to sign all PDFs contained in the signature request transmission.</p> <p>The message consists of an IMMC package with an IMMC descriptor file and the PDF files to be signed by ESEAL.</p> <p>In [R3] this is referred to as “OJ-ABA PDF delivery for signature”.</p>
Initial signature delivery	<p>After generating a digital signature on the request by CERES, the signature is transmitted back to CERES for publication.</p> <p>The message consists of an IMMC package with an IMMC descriptor file, signature XML file and the PDF files as signed by the signature, further more the ETSI signing report file.</p> <p>In [R3] this is referred to as “OJ-ABA signed PDF delivery”.</p>
Signature request rejection	<p>While executing the signature process an error was detected by ESEAL and results in a rejection of the signature request.</p> <p>The message consists of an IMMC package with an IMMC descriptor file and an optional set of validation reports/comments describing the rejection cause and possibly the offending PDF file.</p> <p>In [R3] this is referred to as “OJ-ABA (PDF FMX) manual validation NACK notification”.</p>
Longterm signature delivery	<p>After a predefined period the originally temporary digital signature is finalized and transmitted for ingestion from ESEAL to CERES. This is an initiative sending.</p> <p>The message consists of an IMMC package with an IMMC descriptor file and the longterm signature XML file.</p> <p>In [R3] this is referred to as “OJ-ABA signature update”.</p>

There will be only a single response on a signature request message issue by CERES to ESEAL, either a delivery with PDF and signature file or a rejection. The longterm signature is only sent by ESEAL if the generation of the digital signature in the previous phase succeeded.

In case of a rejection it is to CERES if the rejection message is directly forwarded to the OJ production contractor for correction of the original delivery or if CERES or OP-RECVAL has to further qualify the error and then issue a manual validation rejection message as described above.

Signature delivery messages (initial signature delivery and longterm signature delivery) will provide always 2 manifestations: the actual signature as an XML file, the ETSI signature validation report as an XML with (to be created) file-type ETSI_XML.

6.1 Message: Signature request

ZIP file name: CERES-ooooooooooooo-sigreq-YYYYMMDDHHMMSSmmm_immc.zip

where:

- CERES : fixed text to represent CERES as the sender of the message
- oooooooooooo : The fixed length 9 position OJ act ID as from the ojactext:identifier_oj element
- sigreq : fixed text representing the message type
- YYYYMMDDHHMMSSmmm : timestamp representing the package construction time
- _immc.zip : suffix to characterize the archive file as an IMMC package

Example for the package name:

- CERES-L_202012345-sigreq-20201210T121314000_immc.zip

Content:

- IMMC descriptor name : CERES-ooooooooooooo-sigreq-YYYYMMDDHHMMSSmmm_immc.xml

IMMC descriptor	Root Element:	ojactext:ojact_transmission_request
	Phase workflow:	signature request
	Allowed extensions:	- Any extension contained in the OJ act PDF delivery
	Work	- The work of the OJ act, metadata only.

6.2 Message: Initial signature delivery

ZIP file name: ESEAL-ooooooooooooo-sig-YYYYMMDDHHMMSSmmm_immc.zip

where:

- ESEAL : fixed text to represent ESEAL as the sender of the message
- oooooooooooo : The fixed length 9 position OJ act ID as from the ojactext:identifier_oj element
- sig : fixed text representing the message type
- YYYYMMDDHHMMSSmmm : timestamp representing the package construction time
- _immc.zip : suffix to characterize the archive file as an IMMC package

Example for the package name:

- ESEAL-L_202012345-sig-20201210T121314000_immc.zip

Content:

- IMMC descriptor name : ESEAL-ooooooooooooo-sig-YYYYMMDDHHMMSSmmm_immc.xml

IMMC descriptor	Root Element:	ojactext:ojact_transmission_request
	Phase workflow:	signature initial
	Allowed extensions:	- Any extension contained in the OJ act PDF delivery
	Work	- The work of the OJ act as provided in the signature required by the work of the OJ signature.

6.3 Message: signature request rejection

ZIP file name: ESEAL-oooooooooooo-nack-YYYYMMDDHHMMSSmmm_immc.zip

where:

- ESEAL : fixed text to represent ESEAL as the sender of the message
- oooooooooooo : The fixed length 9 position OJ act ID as from the ojactext:identifier_oj element
- nack : fixed text representing the message type
- YYYYMMDDHHMMSSmmm : timestamp representing the package construction time
- _immc.zip : suffix to characterize the archive file as an IMMC package

Example for the package name:

- ESEAL-L_202012345-nack-20201210T121314000_immc.zip

Content:

- IMMC descriptor name : ESEAL-oooooooooooo-nack-YYYYMMDDHHMMSSmmm_immc.xml

IMMC descriptor	Root Element:	cmt:receipt
	Phase workflow:	signature nack
	Allowed extensions:	- cmext:validation extension elements on all structure levels of the transmission
	Work	- The work of the OJ act, core metadata only.

6.4 Message: Longterm signature delivery

ZIP file name: ESEAL-oooooooooooo-ltv-YYYYMMDDHHMMSSmmm_immc.zip

where:

- ESEAL : fixed text to represent ESEAL as the sender of the message
- oooooooooooo : The fixed length 9 position OJ act ID as from the ojactext:identifier_oj element
- Ltv : fixed text representing the message type
- YYYYMMDDHHMMSSmmm : timestamp representing the package construction time
- _immc.zip : suffix to characterize the archive file as an IMMC package

Example for the package name:

- ESEAL-L_202012345-ltv-20201210T121314000_immc.zip

Content:

- IMMC descriptor name : ESEAL-oooooooooooo-ltv-YYYYMMDDHHMMSSmmm_immc.xml

IMMC descriptor	Root Element:	ojactext:ojact_transmission_request
	Phase workflow:	signature ltv
	Allowed extensions:	<ul style="list-style-type: none"> - ojactext:WorkflowExtensionType - ojactext:SignatureWorkExtensionType
	Work	<ul style="list-style-type: none"> - The work of the OJ signature (similar to the one from the signature delivery).

7. Messages from CERES to PLANJO

This chapter presents the list and the structure of the messages sent from CERES to PlanJO.

Message	Description
Ingestion notification	<p>This message is sent after all workflow steps have successfully finished indicating also the location of the delivered content files in the dissemination repository.</p> <p>The message consists of an IMMC package with an IMMC descriptor file. No further files included.</p> <p>In [R3] this is referred to as “OJ-ABA (PDF FMX) ingestion notification”.</p>

7.1 Message: PDF/Formex4 ingestion notification

ZIP file name: CERES-ooooooooo-fff-YYYYMMDDHHMMSSmmm_immc.zip

where:

- CERES : fixed text to represent CERES as the sender of the message
- ooooooooooooo : The fixed length 9 position OJ act ID as from the ojactext:identifier_oj element
- fff : fixed text representing the formats (pdf or fmxA) of the current delivery flow
- YYYYMMDDHHMMSSmmm : timestamp representing the package construction time
- _immc.zip : suffix to characterize the archive file as an IMMC package

Example for the package name:

- CERES-L_202012345-pdf-20201210T121314000_immc.zip
- CERES-L_202012345-fmx-20201210T121314000_immc.zip

Content:

- IMMC descriptor name : CERES-ooooooooo-fff-YYYYMMDDHHMMSSmmm_immc.xml

IMMC descriptor	Root Element:	ojacttrans:ojact_transmission_request
	Phase workflow:	publication reference, context=”pdf.delivery”
	Allowed extensions:	<ul style="list-style-type: none">- ojactext:WorkflowExtensionType- ojactext:ActWorkExtensionType- ojactext:ActManifestationExtensionType- The extension sent from the author of the document
	Work	<ul style="list-style-type: none">- One work of representing the OJ act document together with the related PDFA/2a files for all LVs with their CELIA
	Transm. inventory	no

