# Disposition of Public Review Comments on "eDelivery SMP 2.0 (2023 PR draft)"

## **13 February 2024**

#### 1. Introduction

In June 2023, the eDelivery team requested public review comments on its first draft ("2023 PR draft") of a new eDelivery SMP 2.0 profile. The new draft specification supports OASIS SMP version 2.0 and allows publishing multiple certificates (signing, encryption, key exchange) for a transport and supports both eDelivery AS4 profiles 1.x and 2.0.

Please consult this page for more details.

The review comments received are addressed in this document.

### 2. DISPOSITION OF COMMENTS

#	<b>Public Consultation Comment(s)</b>	eDelivery Disposition			
	OASIS SMP 2.0 Semantics				
1	Add profiling on the Redirection class to require the inclusion of the certificate of the redirected SMP. This enables the client to verify the redirection.	<ul> <li>In our answer we distinguish between two different use cases:</li> <li>known SMP: redirection to an(other) SMP already known/trusted in/by the network using network-specific rules (dedicated PKI, etc.).</li> <li>unknown SMP: redirection to an SMP that is not already known/trusted in/by the network.</li> <li>We don't see a benefit from profiling the establishing of this additional trust when considering redirection to a known SMP. It also creates a maintenance problem when the SMP's certificate changes.</li> <li>The suggestion is retained and will be further evaluated in the case of redirection to an unknown SMP. It would be premature to profile this at this stage as eDelivery user communities may have different requirements or approaches to trust establishment for SMP.</li> </ul>			
2	The sentence above the first table in section 3.2 is confusing. Could this be rephrased as "The following table summarizes how the Access Point selects the Endpoint meta-data from the SMP ServiceMetadata XML:"?	The sentence was rephrased to "The following table summarizes the mapping of the AS4 parameters required to select data from the SMP ServiceMetadata XML:".  The reason is that the table only intends to explain the mapping of elements, not define a process to select the Endpoint metadata from the SMP responses.			
3	The first two rows and last row are not really used to find the Endpoint element to use because these values are always the same as the given P-Mode parameters are the SMP query parameters and only when Service Meta-data is available a response XML is returned. Maybe it would be clearer to separate the mapping from P-Mode parameters to SMP query input and the	The table – and profile – does not aim to define a process to query the SMP and select the Endpoint element from the SMP responses, only to explain the mapping of AS4 P-Mode parameters to the corresponding structures in the SMP 2.0 XML.  To improve clarity, we rearranged the table rows in the expected order.			

	description of how to find the correct Endpoint element into two tables?		
4	As the Endpoint is contained in the ProcessMetadata class it would be logical to first specify the selection of the correct ProcessMetadata instance and then within that element the correct Endpoint.	The table – and profile – does not aim to define a process to query the SMP and select the Endpoint element from the SMP responses, only to explain the mapping of AS4 P-Mode parameters to the corresponding structures in the SMP 2.0 XML.  The order of the rows is not meant to be significant.  To improve clarity, we rearranged the table rows in the expected order.	
5	In the OASIS SMP 2.0 Standard the zero or more Processes can be included in one ProcessMetadata instance. The semantics of such an empty Process collection is not defined and therefore should be defined in a usage profile, such as the eDelivery one. When one document/service is used in many processes but is received through the same Endpoint, it may be useful to interpret the empty collection as "all processes" and used the associated Endpoint as a default. When one document/service is related to only one process or each process uses a specific Endpoint the empty collection could be forbidden by requiring at least one Process to be included.	The semantics of an empty Process collection was added to the SMP 2.0 profile as suggested.	
Alignment with OASIS AS4 Interoperability Profile for Four-Corner Networks			
6	Use the certificate type code list as specified in section 2.3 of the OASIS AS4 Interoperability Profile for Four-Corner Networks for better alignment and interoperability. The same code can be used for the encryption regardless the eDelivery version as it clear from the transport profile how the key is to be used.	We consider the code list from the W3C Recommendation XKMS 2.0 to be a more accurate reflection of the key usage (especially as it distinguishes between key agreement and encryption certificates).	

#### U-NAPTR record service field

In general, OpenPeppol would be in favour of a separate value for the U-NAPTR record service field to reduce the potential ambiguities for callers. This could provide an easy way to handle SMP 1.0 participants and SMP 2.0 participants on different SMP servers. This would also allow to gradually transition from one specification to another. The obvious drawbacks of the separate U-NAPTR record service field are of course the increased amount of DNS records that have an impact on DNSSEC. Another drawback is the potential requirement for clients to change their implementation, to be able to scan through multiple U-NAPTR records and filter out the correct one.

Following the public consultation, we agree that it is preferable to use different service field values for the U-NAPTR records. In a new version of the eDelivery BDXL 2.0 profile, we now propose the use of the value "Meta:SMP2" for publishing links to OASIS SMP 2.0 documents.

We find that this approach indeed provides for a more canonical profiling of the standards without preventing practical operational alternatives where needed.

Section 3.4 does not specify any requirements related to the selection of the U-NAPTR record and therefore the record with service value "oasis-bdxr-smp-2" must be used as stated in section 5.5 of the OASIS SMP 2.0 Standard. In a note on the consultation page however it is stated that the same service field value will be used for both the old SMP and new SMP profiles. If that should indeed be the case this should be made explicit in section 3.4. Using the same value however complicates migration as client are unable to determine which SMP version is used based on the BDXL lookup and may need to perform two queries to find the metadata. As the number of DNS records does not need to increase when only one SMP version is used for a participant it is unclear what the benefit is of using a shared service field value.

Through comparison with the equivalent section 3.5 of the OASIS SMP 1.0 standard, which refers to a different value than "Meta:SMP" (i.e., the value "http://docs.oasis-open.org/bdxr/ns/SMP/2016/05"), we do not understand section 5.5 of the OASIS SMP 2.0 standard to refer to the U-NAPTR service value.

Following the public consultation, we agree that it is preferable to use different service field values for the U-NAPTR records. In a new version of the eDelivery BDXL 2.0 profile, we now propose the use of the value "Meta:SMP2" for publishing links to OASIS SMP 2.0 documents.

We still consider that multiple DNS records may need to be published during the (potentially yearslong) network transition from SMP 1.0 to SMP 2.0, but for large networks where this would cause operational issues, the network can decide to refrain from adding the duplicate "Meta:SMP2" records and use the "Meta:SMP" record for both SMP 1.0 and SMP 2.0.

We find that this approach indeed provides for a more canonical profiling of the standards without preventing practical operational alternatives where needed.

		As a result of this change, we also needed to update the eDelivery BDXL specification. Therefore in this second review, we also add an eDelivery BDXL 2.0 draft.				
	Use of "::" instead of ":" as separator					
9	The OASIS SMP 2.0 Standard states a scheme ID SHOULD be used for identifiers. Therefore only the second usage of the ebCore PartyId Type format as described in section 3.3 should be used. A problem with the first usage is also that the identifier must always be treated as case insensitive as no scheme ID is specified.	We aligned the advice in section 3.3 to the OASIS 2.0 standard by recommending the second usage. We still allow the first usage for backwards compatibility reasons.				
10	Use "::" as separator between the scheme ID and identifier value instead of the ':' currently described in the last sentence of section 3.3 as that conflicts with the requirements on the URL representation of Participant IDs as given in section 3.6.3 of the OASIS SMP 2.0 Standard.	We note that section 3.3 of the profile is limited to OASIS ebCore PartyId Type, it is not applicable to other formats of Party identifiers.  Given the conflict between the two standards (section 2.7 of OASIS ebCore Party Id Type Technical Specification 1.0 and section 3.6.3 of OASIS SMP 2.0), we adapted the new draft to allow both the "::" and ":" separators when dealing with OASIS ebCore PartyId Type.  Section 3.6.3 of the OASIS SMP 2.0 standard applies for all other formats of Party identifiers.				
11	Chapter 3.3: In the last paragraph, it is mentioned that a single colon should be used to separate scheme and value. We want to point out, based on our experience, it is possible that identifier values also contain colons. In that case it would not be possible to consistently split scheme and value later on. For example, use the scheme "a:b" and the value "c:d" — if they are combined with a colon, the resulting string is "a:b:c:d" and that allows for three different ways to split. We propose to use a double colon (::) as a separator, as this is way more unlikely to be contained in identifier	We note that section 3.3 of the profile is limited to OASIS ebCore PartyId Type, it is not applicable to other formats of Party identifiers.  Given the conflict between the two standards (section 2.7 of OASIS ebCore Party Id Type Technical Specification 1.0 and section 3.6.3 of OASIS SMP 2.0), we adapted the new draft to allow both the "::" and ":" separators when dealing with OASIS ebCore PartyId Type.  Section 3.6.3 of the OASIS SMP 2.0 standard applies for all other formats of Party identifiers.				

	values. The above example values would render to "a:b::c:d" and are would be splittable in an unambiguous way.		
	Editorial		
12	Chapter 3.2: In the "Notes" to the AS4 PMode Parameter "PMode[]. Security. X509. Signature. Algorithm", in the last paragraph, the leading "b" is missing in the identifier "bdxr-transport-ebms3-as4-v2p0-curve25519	Correction implemented.	
13	Chapter 3.4: In the box "Sample URIs", the second URI ends with "2.0a". To the best of our knowledge there is not UBL "2.0a" and we propose to remove the trailing "a" from the sample URI.	Correction implemented.	
14	Chapter 7: The correct wording of our organization name is "OpenPeppol" and not "OpenPeppol" – please correct it.	Correction implemented.	
15	Chapter 7: Please change the link to our website from https://peppol.eu to https://peppol.org	Correction implemented.	
16	Chapter 8: Reference [PEPPOL-SMP]: Please provide the link inline and not as a footnote like the other entries as well.	Correction implemented.	
17	Chapter 8: Reference [PEPPOL-SMP]: Please update the link to https://docs.peppol.eu/edelivery/.	Correction implemented.	