

# Peppol

The future is open

## Peppol MLS Phase-in

Status: Published - Version: 1.0.0  
Last updated: 2026-07-02

**OpenPeppol AISBL**  
Rond-point Schuman 6, box 5  
1040 Brussels Belgium

[info@peppol.eu](mailto:info@peppol.eu)  
[www.peppol.org](http://www.peppol.org)  
Last updated: 02.07.2026



## Contents

1	Introduction .....	3
2	Summary of Obligations .....	3
2.1	From the Peppol MLS Specification v1.1.0 .....	3
2.2	From the Peppol Business Message Envelope (SBDH) v2.0.2 .....	3
2.3	From the Peppol Network Policy (PNP) v1.0.0 .....	4
3	Intended Impact for different Actors .....	5
3.1	Peppol Service Providers .....	5
3.2	Peppol Authorities .....	6
4	Migration Plan.....	7
4.1	Peppol Service Providers .....	7
4.1.1	Phase 1 .....	8
4.1.2	Phase 2 .....	9
4.2	Peppol Authorities .....	9

## 11 Introduction

2 This document is a guideline to support implementing the MLS obligations described and  
3 defined by the following approved specifications:

- 4 • **Peppol MLS Specification v1.1.0** – the primary technical specification governing  
5 MLS message structure, process, and rules.
- 6 • **Peppol Business Message Envelope (SBDH) v2.0.2** – introduces MLS  
7 Customisation Options (MLS\_TO, MLS\_TYPE) and the corresponding reserved  
8 SBDH attributes.
- 9 • **Peppol Network Policy (PNP) v1.0.0** – introduces mandatory MLS rules (MLS-1  
10 through MLS-4), timing milestones (M1–M3), and Service Level Requirements  
11 (SLR MLS-1, SLR MLS-2).

12 The target audience of this document is primarily Peppol Service Providers (SPs), as they  
13 are directly impacted by the obligations. Peppol Authorities and software vendors may also  
14 use this document to support their SPs in implementing the changes.

15 This document is accompanied by the Service Provider Operational Guideline on MLS  
16 [SPOG MLS], which provides detailed implementation guidance. This plan defines the  
17 *when*; the SPOG defines the *how*.

## 182 Summary of Obligations

19 This section summarises the obligations introduced by each source specification. Full  
20 operational detail is provided in [SPOG MLS].

### 21 2.1 From the Peppol MLS Specification v1.1.0

22 Key changes in v1.1.0 relevant to this phase-in:

23 **SPIS scheme standardised to 0242** – All MLS sender and receiver identifiers must use  
24 scheme 0242. No other Participant Identifier Scheme is permitted.

25 → SP action: Verify that all MLS-related SMP registrations use scheme 0242.

26 **Rejection reason list is now exhaustive** – The list of situations in which C3 may issue a  
27 rejection MLS (Response Code RE) is a closed list (see [MLS] section 2.2). C3 MUST NOT  
28 reject documents for reasons outside this list.

29 **Schematron updates** – Participant identifier comparison is now case-insensitive (rules  
30 SCH-MLS-09 and SCH-MLS-14). Usage of scheme 0242 is enforced (rules SCH-MLS-11  
31 and SCH-MLS-16).

32 → SP action: Validate outgoing MLS messages against the updated Schematron rules.

### 33 2.2 From the Peppol Business Message Envelope (SBDH) v2.0.2

34 The following changes in SBDH v2.0.2 are specific to MLS support:

35 **MLS\_TO** – Optional SBDH field. Allows C2 to specify an alternative participant identifier  
36 for receiving MLS responses. If present and valid, C3 MUST honour it. The value must  
37 correlate to C2's SPIS Main ID from the Peppol AP Certificate – redirecting MLS to a  
38 different SP is not allowed.

39 → SP action as C2: Optionally populate **MLS\_TO** in outgoing SBDH when operating  
40 multiple Access Points or Access Point instances.

41 → SP action as C3: Parse and validate **MLS\_TO** from incoming SBDH. Implement the  
42 fallback chain defined in [SPOG MLS] section 5.1 when **MLS\_TO** is absent, invalid, or  
43 unregistered.

44 **MLS\_TYPE** – Optional SBDH field. Allows C2 to request **ALWAYS\_SEND** or  
45 **FAILURE\_ONLY**. If absent or invalid, the default defined in [PNP] applies  
46 (**FAILURE\_ONLY**).

47 → SP action as C3: Parse **MLS\_TYPE** from incoming SBDH and apply the fallback  
48 chain in [SPOG MLS] section 5.2.

49 → SP action as C2: Optionally populate **MLS\_TYPE** in outgoing SBDH to opt in for  
50 positive MLS responses.

51 **Reserved attributes** – **MLS\_TO** and **MLS\_TYPE** are now reserved SBDH attribute keys.  
52 SPs MUST NOT use these keys for any other purpose.

### 53 2.3 From the Peppol Network Policy (PNP) v1.0.0

54 The PNP is an entirely new document. All content is new and every rule constitutes a new  
55 obligation for SPs.

56 **Rule MLS-1** – Every SP offering the exchange of Peppol Document Types MUST support  
57 both sending and receiving MLS messages. MLS support is no longer optional.

58 **Rule MLS-2** – Every SP MUST register MLS receiving capabilities in an SMP using its  
59 SPIS Main ID participant identifier (**0242:<6-digit-number>**). Additional SPIS Use  
60 Case ID **MLS** identifiers MAY be registered.

61 → SP action: Register the MLS Document Type Identifier in SMP for at least the SPIS  
62 Main ID participant. The exact Document Type Identifier and Process Identifier are  
63 specified in [MLS] section 9.1 and detailed in [SPOG MLS] section 4.1.

64 **Rule MLS-3** – The default MLS usage is **FAILURE\_ONLY** (only negative MLS responses).  
65 Positive MLS responses MUST NOT be sent unless the sending SP has opted in via  
66 **MLS\_TYPE=ALWAYS\_SEND**.

67 → SP action: Implement logic to parse **MLS\_TYPE** from the incoming SBDH and  
68 honour it when sending MLS responses.

69 **Rule MLS-4** – MLS messages MUST be sent as soon as the status is known. Artificial or  
70 intentional delays are not permitted. If transmission is temporarily impossible, the message  
71 must be queued and retried as soon as conditions permit.

72 → SP action: Implement an MLS queuing and retry mechanism per [SPOG MLS]  
73 section 8.

74 Milestones **M1**, **M2**, **M3** – A new timing framework is introduced:

75 ➤ **M1** = AS4 Timestamp of the original business document transmission at C2

76 ➤ **M2** = AS4 Timestamp of the MLS message transmission at C3

77 ➤ **M3** = Reception time of the MLS message at C2

78 **SLR MLS-1** – 99.5% of MLS messages for business documents with Payload Size < 10  
79 MB must have  $M2 - M1 \leq 20$  minutes, measured monthly.

80 **SLR MLS-2** – 99.5% of MLS messages for business documents with Payload Size < 10  
81 MB must have  $M3 - M1 \leq 25$  minutes, measured monthly.

82 → SP action: Instrument systems to record M1, M2, and M3 timestamps. Build  
83 monitoring and alerting for SLR compliance. See [SPOG MLS] section 7.

## 843 Intended Impact for different Actors

85 This section summarises the anticipated activities for each actor. The phase-in plan with  
86 the dates and durations can be found in chapter 4.

### 87 3.1 Peppol Service Providers

88 The following activities are required of all Peppol Service Providers offering the exchange  
89 of Peppol Document Types.

#### 90 **SMP Registration**

91 • Register the SPIS Main ID participant (`0242:<6-digit-number>`) in SMP with  
92 the MLS Document Type Identifier and Process Identifier as specified in [MLS]  
93 section 9.1.

94 • Optionally register additional SPIS Use Case ID "MLS" participant identifiers  
95 derived from the Main ID (e.g. `0242:<6-digit-number>-MLS`).

96 • SPs that use a Centralised SMP provided by a Peppol Authority should confirm  
97 with their Authority whether MLS participant registration is handled centrally or  
98 must be performed individually (see section 3.2).

#### 99 **MLS Receiving Infrastructure**

100 • Deploy and operate an MLS receiving endpoint capable of accepting inbound MLS  
101 AS4 messages.

102 • Validate received MLS messages against XML Schema and [MLS] Schematron  
103 rules.

104 • Instrument systems to record MLS timing milestones M1 and M3 to enable SLR  
105 compliance monitoring.

- 106           • Relate an incoming MLS message to the matching outgoing business document.

107           **MLS Sending**

- 108           • Parse and validate the `MLS_TO` and `MLS_TYPE` fields from the SBDH of incoming  
109           business documents and apply the fallback chains defined in [MLS] sections 4.1  
110           and 4.2.
- 111           • Implement MLS creation, validation, and AS4 transmission logic for outbound MLS  
112           messages.
- 113           • Perform SML/DNS lookup followed by SMP lookup for the effective MLS receiver  
114           participant identifier before sending each MLS.
- 115           • Implement queuing and retry logic for failed MLS transmissions (PNP Rule MLS-4)  
116           and elaborated in [SPOG MLS] section 8.
- 117           • Instrument systems to record MLS timing milestone M2 to enable SLR compliance  
118           monitoring.
- 119           • Ensure MLS messages are sent as soon as the processing status is known (PNP  
120           Rule MLS-4). No artificial delays are permitted.

121           **For all phases**

- 122           • Ensure all XML documents (including MLS messages) use the UTF-8 character set  
123           (PNP Rule XML-1).
- 124           • Ensure MLS messages are never sent in response to another MLS or MLR  
125           message (OP-MLS-03).
- 126           • Positive MLS messages (Response Code AP or AB) **MUST NOT** be sent before  
127           attempting delivery of the original business document to C4 (OP-MLS-12).

128           **3.2 Peppol Authorities**

129           Jurisdictions offering a Centralized SMP solution may consider providing the SPID  
130           participants in their SMP solution for their SPs. However, it is to be considered that many –  
131           especially international – SPs run their own SMP and therefore have the capability to  
132           register their own SPID in their own SMP.

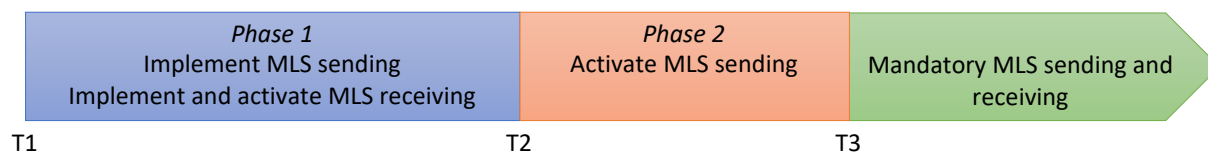
133           Therefore, the operators of Centralized SMPs

- 134           • **MAY** mandate the registration of the SPID participants for local SPs
- 135           • **MUST NOT** mandate the registration of the SPID participants for foreign SPs

136           Peppol Authorities should communicate clearly to their SPs which registration tasks are  
137           handled centrally, and which must be performed by the SP individually, before T1.

## 1384 Migration Plan

139 This section contains the overall migration plan for the changes described in this  
 140 document.



141

142

Figure 1: Overall Migration Plan

143 This migration contains the following milestones:

- 144 • **T1**: Start point; specifications effective; phase-in clock starts. (July 1<sup>st</sup>, 2026)
- 145 • **T2**: End of *Phase 1*. MLS receiving capability **MUST** be in production. MLS sending  
 146 activation window opens. T1 plus 8 months implementation time (February 28<sup>th</sup>,  
 147 2027)
- 148 • **T3**: End of *Phase 2*. MLS sending is mandatory. SLRs are enforceable. T2 plus 1  
 149 month activation time (March 31<sup>st</sup>, 2027)

150 The main action items for the phases between the milestones are as follows:

- 151 • *Phase 1*, between **T1** and **T2** (8 months):
  - 152 ○ Implement MLS sending infrastructure
  - 153 ○ Implement MLS queuing/retry
  - 154 ○ Implement MLS receiving infrastructure
  - 155 ○ Parse and evaluate SBDH MLS fields
  - 156 ○ Register SMP capabilities (=active MLS receiving)
  - 157 ○ Perform mandatory Testbed test suite
- 158 • *Phase 2*, between **T2** and **T3** (1 month):
  - 159 ○ Activate MLS sending
  - 160 ○ Instrument timestamps
  - 161 ○ Test SLR compliance
- 162 • From **T3** onwards:
  - 163 ○ MLS sending mandatory
  - 164 ○ SLR MLS-1 and SLR MLS-2 enforceable

### 165 4.1 Peppol Service Providers

166 This section describes the Peppol SP activities in relationship to the previously shown  
 167 timeline:

168

## 169 4.1.1 Phase 1

170 The goal of *Phase 1* (between **T1** and **T2**) is for every SP to be ready to send and  
171 receive MLS messages and to have registered the corresponding SMP capabilities.  
172 MLS sending is not required during *Phase 1*, but MAY be activated early (see section  
173 4.1.2).

174 **MLS Sending Implementation:**

- 175 • Implement parsing of `MLS_TO` and `MLS_TYPE` from incoming business  
176 document SBDHs. Apply fallback logic per [SPOG MLS] sections 5.1 and 5.2.
- 177 • Implement MLS document creation and AS4 transmission logic.
- 178 • Implement SML/DNS lookup and SMP lookup for the effective MLS receiver  
179 participant identifier prior to each MLS transmission (see [SPOG MLS] section  
180 5.4).
- 181 • Implement MLS queuing and retry with exponential backoff as specified in  
182 [SPOG MLS] section 8.
- 183 • Implement MLS timing milestone recording (M1, M3) to enable SLR compliance  
184 monitoring per [SPOG MLS] section 7.

185 **MLS Receiving Implementation:**

- 186 • Deploy an MLS receiving endpoint accessible via AS4.
- 187 • Implement validation of received MLS messages against the [MLS] Schematron  
188 ruleset.
- 189 • Implement MLS timing milestone recording (M2) to enable SLR compliance  
190 monitoring per [SPOG MLS] section 7.
- 191 • Test receiving end-to-end in the Peppol Test Network before going live.
- 192 • Implement relating incoming MLS message to the matching outgoing business  
193 document.

194 **SMP Registration (=Activate MLS Receiving):**

- 195 • Register MLS receiving capabilities in SMP for the SPIS Main ID participant  
196 identifier using the exact Document Type Identifier and Process Identifier  
197 specified in [MLS] section 9.1.
- 198 • Optionally register additional SPIS Use Case ID "MLS" derived identifiers.
- 199 • Verify that no MLS registrations exist under Participant Identifier Schemes other  
200 than `0242`.
- 201 • SPs using a Centralised SMP should confirm with their Peppol Authority that  
202 the registration has been completed (see section 3.2).



- 238                   • Monitor MLS compliance among SPs within the Authority's jurisdiction.
- 239           **Before T2:**
- 240                   • Support SPs in completing *Phase 1* SMP registration and implementing MLS.
- 241                   • For Centralised SMP offerings: complete MLS participant registration on behalf
- 242                   of SPs where applicable.
- 243           **From T3 onwards:**
- 244                   • Report compliance concerns to the OpenPeppol Operating Office as
- 245                   appropriate.