جهاز الضرائب
TAX AUTHORITY

# Oman SMP API Specifications
# v1.3
# (18-11-2026)

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# 1. Oman SMP API Specifications – v1.3 (18-11-2026)

## 1.1 Version Control

| Version | Date | Description | Detailed Changelog |
|---|---|---|---|
| 1.0 | 4-6-2026 | First version | - |
| 1.1 | 7-7-2026 | Adding production URL | - |
| 1.2 | 12-7-2026 | Enhance error handling | • Added more descriptive error codes<br>• Added a structured response for errors and success message<br>• The Participant Registration API will now validate that a Business Entity name is provided as part of the request. |
| 1.3 | 18-11-2026 | Enhance error code detailing / endpoint detailing | • Added more details regarding requirement for Fawtara portal connection status<br>• Added more details on service providers registering their own capabilities, such as MLS<br>• Added error examples for failed Fawtara validation |

## 1.2 SMP Service Description

The Oman SMP REST API provides secure, standards-based access to Service Metadata Publisher (SMP) resources for participant SML, participant service metadata, and participant Peppol Directory publication/amendment/removal.

## 1.3 Table of URLs

| API Category | Security | Path Prefix | Environments | |
|---|---|---|---|---|
| | | | T-SMP URL | Production SMP URL |
| POST/PUT/DELETE APIs | mTLS Secured | /v1/secure/smp/wrapper | test-smp-ext-api.taxoman.gov.om | smp-ext-api.taxoman.gov.om |

## 1.4 For Developers

For an interactable view please utilize the following editor: https://editor.swagger.io/, Copy and Paste the full API Specification (see below) on the editor's text box.

## 1.5 API Routes

### 1.5.1 API Routes - Table of API Routes

| API Routes | Available Methods | Version | Description | Request Security |
|---|---|---|---|---|
| /{participantId}/services/{documentTypeId} | **PUT** | v1.2 | Add participant (if not created before)<br><br>Add service meta data including process list for the documents | Authenticated using certificate |
| | **DELETE** | v1.2 | Delete a document type from the participant's list of applicable documents | Authenticated using certificate |
| /{participantId} | **DELETE** | v1.2 | Deletes the participant from the SMP, SML & Directory | Authenticated using certificate |

### 1.5.2 API Routes – Source Code

**/{participantId}**

```
/{participantId}:
  parameters:
    - name: participantId
      in: path
      required: true
      description: The participant identifier (e.g. iso6523-actorid-upis::0088:123456).
      schema:
        type: string
        example: iso6523-actorid-upis::9915:test-participant
        description:
          The identifier must be URL-encoded when used in the path. For example, the '#' character
should be encoded as '%23', and ':' should be encoded as '%3A'.
  delete:
    tags:
      - ServiceGroup
    summary: Delete Service Group
    description: |
      Removes a participant ID and issues a deletion command to the SML and Peppol directory.

      Notes to consider:
        - This operation requires that the service provider and the taxpayer being deleted have
disconnected on OTA's Fawtara Portal,
        - In case the schema code is 0242, the operation validation is different, it ensures that the
provider provided certificate SPID matches the participant first 6 digits, and will skip connection
status validation from Portal.
    operationId: deleteServiceGroup
    security:
      - mTLS: []
    responses:
      '200':
        description: Service Group successfully deleted.
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/SuccessResponseType'
            example:
              message: Service group successfully deleted
              participantId: iso6523-actorid-upis::9915:test-participant
              timestamp: "2026-07-06T14:30:00Z"
      '400':
        description: Bad request.
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ErrorResponseType'
            example:
              status: 400
              code: BAD_REQUEST
              message: Bad request
              details: "Action rejected: Service Provider and Taxpayer connection status must be
Disconnected to remove participant. Connection status must be Disconnected."
              timestamp: "2026-11-18T08:11:40.446102845Z"
      '404':
        description: Service Group does not exist.
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ErrorResponseType'
            example:
              status: 404
              code: NOT_FOUND
              message: Service group not found
              details: The participant identifier does not exist in the system.
              timestamp: "2026-07-06T14:30:00Z"
      '422':
```

```
        description: Invalid Peppol identifier.
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ErrorResponseType'
            example:
              status: 422
              code: INVALID_PEPPOL_IDENTIFIER
              message: Invalid Peppol participant identifier
              details: The participant identifier does not conform to Peppol syntax; ensure correct
scheme and encoding.
              errors:
                - field: participantId
                  issue: Missing or invalid scheme
              timestamp: "2026-07-06T14:30:00Z"
      '424':
        description: Dependency failure when contacting with external systems (SML or Directory).
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ErrorResponseType'
            example:
              status: 424
              code: DEPENDENCY_FAILURE
              message: Failed to contact with one or more external dependencies
              details: SML contact failed; Directory update failed.
              errors:
                - field: SML
                  issue: Connection timeout to SML endpoint
                - field: Directory
                  issue: Connection timeout to Directory endpoint
              timestamp: "2026-07-06T14:30:00Z"
      '500':
        description: Internal server error.
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/ErrorResponseType'
            example:
              status: 500
              code: INTERNAL_ERROR
              message: Internal server error
              details: An unexpected error occurred while processing the deletion request.
              timestamp: "2026-07-06T14:30:00Z"
```

**/{participantId}/services/{DocumentTypeId}**

```
  /{participantId}/services/{documentTypeId}:
    parameters:
      - name: participantId
        in: path
        required: true
        schema:
          type: string
          example: iso6523-actorid-upis::9915:test-participant
          description:
            The identifier must be URL-encoded when used in the path. For example, the '#' character should be encoded as '%23', and ':'
should be encoded as '%3A'.
      - name: documentTypeId
        in: path
        required: true
        description: The document type identifier representing the standard and format.
        schema:
          type: string
          example: busdox-docid-qns::urn:oasis:names:specification:ubl:schema:xsd:Invoice-
2::Invoice%23%23urn:cen.eu:en16931:2017%23compliant%23urn:fdc:peppol.eu:2017:poacc:billing:3.0::2.1
          description: The identifier must be URL-encoded when used in the path. For example, the '#' character should be encoded as
'%23', and ':' should be encoded as '%3A'.
    put:
      tags:
        - ServiceMetadata
      summary: Create or Update Service Metadata & Optionaly the business card
      description: |
        As per wrapper defitintion, this method does the following:
        - Creates the AP endpoint URLs, transport profiles, and certificates. Overwrites existing.
        - Creates the participant if not already existing.
        - Pushes participant to SML
        - Pushes participant to Peppol Directory
```

```
        Note that validations and restrictions can happen on above actions.
        - Only on PRODUCTION url, It is required that you have a valid connection status with the taxpayer you are adding, the connection
is done through OTA's Fawtara Portal.
        - Ensure the certificate provided is valid and correctly formatted as a PEM encoded X509 DER value.
        - In case the schema code is 0242, the operation validation is different, it ensures that the provider provided certificate SPID
matches the participant first 6 digits, and will skip connection status validation from Portal.
      operationId: putServiceMetadataAndBusinessCard
      security:
        - mTLS: []
      requestBody:
        required: true
        content:
          application/xml:
            schema:
              $ref: '#/components/schemas/ParticipantDetailsType'
            example: |
              <ParticipantDetails>
                <smp:ServiceMetadata xmlns:wsa="http://www.w3.org/2005/08/addressing"
xmlns:smp="http://busdox.org/serviceMetadata/publishing/1.0/" xmlns:id="http://busdox.org/transport/identifiers/1.0/">
                  <smp:ServiceInformation>
                    <id:ParticipantIdentifier scheme="iso6523-actorid-upis">0248:OM0000000000</id:ParticipantIdentifier>
                    <id:DocumentIdentifier scheme="busdox-docid-qns">urn:oasis:names:specification:ubl:schema:xsd:Invoice-
2::Invoice##urn:cen.eu:en16931:2017#compliant#urn:fdc:peppol.eu:2017:poacc:billing:3.0::2.1</id:DocumentIdentifier>
                    <smp:ProcessList>
                      <smp:Process>
                        <id:ProcessIdentifier scheme="cenbii-procid-
ubl">urn:fdc:peppol.eu:2017:poacc:billing:01:1.0</id:ProcessIdentifier>
                        <smp:ServiceEndpointList>
                          <smp:Endpoint transportProfile="peppol-transport-as4-v2_0">
                            <wsa:EndpointReference>
                              <wsa:Address>http://test.smpserver/as4</wsa:Address>
                            </wsa:EndpointReference>
                            <smp:RequireBusinessLevelSignature>false</smp:RequireBusinessLevelSignature>
                            <smp:Certificate>PEM encoded X509 DER formatted value</smp:Certificate>
                            <smp:ServiceDescription>Unit test service</smp:ServiceDescription>
                            <smp:TechnicalContactUrl>https://tms.taxoman.gov.om/portal/</smp:TechnicalContactUrl>
                          </smp:Endpoint>
                        </smp:ServiceEndpointList>
                      </smp:Process>
                    </smp:ProcessList>
                  </smp:ServiceInformation>
                </smp:ServiceMetadata>
                <BusinessCard xmlns="http://www.peppol.eu/schema/pd/businesscard/20180621/">
                  <BusinessEntity registrationDate="2026-01-01">
                    <Name language="en">Oman</Name>
                    <Name language="ar">عمان</Name>
                    <CountryCode>OM</CountryCode>
                  </BusinessEntity>
                </BusinessCard>
              </ParticipantDetails>
      responses:
        '200':
          description: Successful update.
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/SuccessResponseType'
              example:
                message: SML, Service metadata and business card successfully created/updated
                participantId: iso6523-actorid-upis::9915:test-participant
                documentTypeId: busdox-docid-qns::urn:oasis:names:specification:ubl:schema:xsd:Invoice-
2::Invoice##urn:cen.eu:en16931:2017#compliant#urn:fdc:peppol.eu:2017:poacc:billing:3.0::2.1
                timestamp: "2026-07-06T14:30:00Z"
        '400':
          description: Bad request.
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ErrorResponseType'
              examples:
                invalidConnectionStatus:
                  value:
                    status: 400
                    code: BAD_REQUEST
                    message: Bad request
                    details: "Action rejected: Service Provider and Taxpayer connection status must be Connected to add or amend
participant. Connection status must be Connected."
                    timestamp: "2026-11-18T08:04:42.983253325Z"
                badRequest:
                  value:
                    status: 400
                    code: BAD_REQUEST
                    message: Bad request
                    details: The request body contains invalid XML structure or missing required fields.
                    timestamp: "2026-07-06T14:30:00Z"
        '422':
          description: Invalid Peppol identifiers (participant, documentTypeId, or processId).
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ErrorResponseType'
              example:
                status: 422
                code: INVALID_PEPPOL_IDENTIFIERS
                message: One or more Peppol identifiers are invalid
                details: The request contains invalid Peppol identifiers.
                errors:
```

```
                  - field: participantId
                    issue: Invalid Format
                  - field: participantId
                    issue: The participant ID in body does not match the Participant ID in the URL
                  - field: documentTypeId
                    issue: The documentType ID in body does not match the Document Type ID in the URL
                  - field: documentTypeId
                    issue: DocumentTypeID not conforming to format
                  - field: processId
                    issue: A process in the payload contains an invalid process identifier scheme/value
                  - field: endpoint
                    issue: Two endpoints under the same process and transport profile have overlapping validity periods
                timestamp: "2026-07-06T14:30:00Z"
        '424':
          description: Dependency failure when contacting with external systems (SML or Directory).
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ErrorResponseType'
              example:
                status: 424
                code: DEPENDENCY_FAILURE
                message: Failed to contact with one or more external dependencies
                details: SML contact failed; Directory update failed.
                errors:
                  - field: SML
                    issue: Connection timeout to SML endpoint
                  - field: Directory
                    issue: Connection timeout to Directory endpoint
                timestamp: "2026-07-06T14:30:00Z"
        '500':
          description: Internal server error.
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ErrorResponseType'
              example:
                status: 500
                code: INTERNAL_ERROR
                message: Internal server error
                details: An unexpected error occurred while processing the service metadata request. Please ensure to use valid ICD and
revise entered values.
                timestamp: "2026-07-06T14:30:00Z"
    delete:
      tags:
        - ServiceMetadata
      summary: Delete Service Metadata
      description: |
        As per wrapper defitintion, this method does the following:
        - Removes specific routing configurations for a document type.
      operationId: deleteServiceMetadata
      security:
        - mTLS: []
      responses:
        '200':
          description: Successfully deleted.
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/SuccessResponseType'
              example:
                message: Service metadata successfully deleted
                participantId: iso6523-actorid-upis::9915:test-participant
                documentTypeId: busdox-docid-qns::urn:oasis:names:specification:ubl:schema:xsd:Invoice-
2::Invoice##urn:cen.eu:en16931:2017#compliant#urn:fdc:peppol.eu:2017:poacc:billing:3.0::2.1
                timestamp: "2026-07-06T14:30:00Z"
        '404':
          description: Metadata not found.
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ErrorResponseType'
              example:
                status: 404
                code: NOT_FOUND
                message: Metadata not found
                details: Service metadata for the given participant/document type does not exist.
                timestamp: "2026-07-06T14:30:00Z"
        '422':
          description: Invalid Peppol identifier, DocumentTypeID, or ProcessID.
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ErrorResponseType'
              example:
                status: 422
                code: INVALID_PEPPOL_IDENTIFIERS
                message: One or more Peppol identifiers are invalid
                details: The request contains invalid Peppol identifiers.
                errors:
                  - field: participantId
                    issue: ParticipantID not conforming to format
                  - field: documentTypeId
                    issue: DocumentTypeID not conforming to format
                timestamp: "2026-07-06T14:30:00Z"
        '500':
          description: Internal server error.
          content:
```

```
            application/json:
              schema:
                $ref: '#/components/schemas/ErrorResponseType'
              example:
                status: 500
                code: INTERNAL_ERROR
                message: Internal server error
                details: An unexpected error occurred while deleting the service metadata.
                timestamp: "2026-07-06T14:30:00Z"
```

# 2. Schemas

## 2.1 Schemas – Table of Schemas

Schemas are defined, referenceable objects with fields that can have rules such as "maxLength". They are reusable and can reference/nest each-other.

### 2.1.1 Table of Schemas

| Schema Name | Description |
|---|---|
| **ErrorResponseType** | Standard structure for errors |
| **SuccessResponseType** | Standard Structure for success messages |
| **ParticipantDetailsType** | Used for when the service provider does an SMP /services request for a participant |
| **ServiceMetadataType** | Contains either detailed service information (ServiceInformation) or a redirect to another SMP (Redirect). |
| **ServiceInformationType** | Contains the full details of a service, including participant and document identifiers, and a list of processes. |
| **ProcessType** | Defines a specific business process, identified by a ProcessIdentifier, and lists the service endpoints for that process. |
| **EndpointType** | Defines the technical details of a transport endpoint, including its address, transport profile, certificate, and other metadata. |
| **RedirectType** | Defines a redirect to another SMP for a specific document type, including the target SMP's URL and certificate UID. |
| **ParticipantIdentifierType** | A standardized identifier for a participant in the network, consisting of a scheme and a value. |
| **DocumentIdentifierType** | A standardized identifier for a document type, consisting of a scheme and a value. |
| **ProcessIdentifierType** | A standardized identifier for a business process, consisting of a scheme and a value. |
| **ExtensionType** | A generic object used for future extensions to the SMP specification. |
| **BusinessCardType** | Root element for a single Peppol Directory business card. |
| **BusinessEntityType** | Represents a single business entity as contained in a business card. |
| **ContactType** | Resembles the structure of a single business contact. |

| | |
|---|---|
| **MultilingualNameType** | Represents a name that can be provided in multiple languages. In XML, 'language' is an attribute. |

# 2.2 Schemas – Source Code

**ErrorResponseType**

```
ErrorResponseType:
 type: object
 properties:
   status:
     type: integer
     description: HTTP status code representing the error.
     example: 422
   code:
     type: string
     description: Short machine-readable error code.
     example: INVALID_PEPPOL_IDENTIFIER
   message:
     type: string
     description: Human-readable error message summarizing the problem.
     example: Invalid Peppol identifier
   details:
     type: string
     description: Longer description or guidance for remediation.
     example: The participant identifier does not conform to the required Peppol scheme and
encoding.
   errors:
     type: array
     description: Optional list of field-specific errors.
     items:
       type: object
       properties:
         field:
           type: string
         issue:
           type: string
   timestamp:
     type: string
     format: date-time
     description: timestamp when the error occurred.
     example: "2026-07-06T14:30:00Z"
```

**SuccessResponseType**

```
SuccessResponseType:
 type: object
 properties:
   message:
     type: string
   participantId:
     type: string
   documentTypeId:
     type: string
   timestamp:
     type: string
     format: date-time
```

**ParticipantDetailsType**

```
ParticipantDetailsType:
  type: object
```

```
  required:
    - ServiceMetadata
  xml:
    name: ParticipantDetails
  properties:
    ServiceMetadata:
      $ref: '#/components/schemas/ServiceMetadataType'
    BusinessCard:
      $ref: '#/components/schemas/BusinessCardType'
```

**ServiceMetadataType**

```
ServiceMetadataType:
  type: object
  xml:
    name: ServiceMetadata
  properties:
    ServiceInformation:
      $ref: '#/components/schemas/ServiceInformationType'
    Redirect:
      $ref: '#/components/schemas/RedirectType'
```

**ServiceInformationType**

```
ServiceInformationType:
  type: object
  xml:
    name: ServiceInformation
  required:
    - ParticipantIdentifier
    - DocumentIdentifier
    - ProcessList
  properties:
    ParticipantIdentifier:
      $ref: '#/components/schemas/ParticipantIdentifierType'
    DocumentIdentifier:
      $ref: '#/components/schemas/DocumentIdentifierType'
    ProcessList:
      type: object
      xml:
        name: ProcessList
      properties:
        Process:
          type: array
          minItems: 1
          xml:
            wrapped: false
            name: Process
          items:
            $ref: '#/components/schemas/ProcessType'
    Extension:
      $ref: '#/components/schemas/ExtensionType'
```

**ProcessType**

```
ProcessType:
  type: object
  xml:
    name: Process
  required:
    - ProcessIdentifier
    - ServiceEndpointList
  properties:
    ProcessIdentifier:
      $ref: '#/components/schemas/ProcessIdentifierType'
    ServiceEndpointList:
      type: object
      xml:
        name: ServiceEndpointList
      properties:
```

```
        Endpoint:
          type: array
          minItems: 1
          xml:
            wrapped: false
            name: Endpoint
          items:
            $ref: '#/components/schemas/EndpointType'
    Extension:
      $ref: '#/components/schemas/ExtensionType'
```

**EndpointType**

```
EndpointType:
  type: object
  xml:
    name: Endpoint
  required:
    - transportProfile
    - EndpointReference
    - RequireBusinessLevelSignature
    - Certificate
    - ServiceDescription
    - TechnicalContactUrl
  properties:
    transportProfile:
      type: string
      xml:
        attribute: true
    EndpointReference:
      type: object
      xml:
        name: EndpointReference
      required:
        - Address
      properties:
        Address:
          type: string
          format: uri
    RequireBusinessLevelSignature:
      type: boolean
    MinimumAuthenticationLevel:
      type: string
    ServiceActivationDate:
      type: string
      format: date-time
    ServiceExpirationDate:
      type: string
      format: date-time
    Certificate:
      type: string
    ServiceDescription:
      type: string
    TechnicalContactUrl:
      type: string
      format: uri
    TechnicalInformationUrl:
      type: string
      format: uri
    Extension:
      $ref: '#/components/schemas/ExtensionType'
```

**RedirectType**

```
RedirectType:
  type: object
  required:
    - CertificateUID
    - href
  properties:
    CertificateUID:
```

```
      type: string
    href:
      type: string
      format: uri
```

**ParticipantIdentifierType**

```
ParticipantIdentifierType:
  type: object
  xml:
    name: ParticipantIdentifier
  required:
    - scheme
    - value
  properties:
    scheme:
      type: string
      xml:
        attribute: true
    value:
      type: string
```

**DocumentIdentifierType**

```
DocumentIdentifierType:
  type: object
  xml:
    name: DocumentIdentifier
  required:
    - scheme
    - value
  properties:
    scheme:
      type: string
      xml:
        attribute: true
    value:
      type: string
```

**ProcessIdentifierType**

```
ProcessIdentifierType:
  type: object
  xml:
    name: ProcessIdentifier
  required:
    - scheme
    - value
  properties:
    scheme:
      type: string
      xml:
        attribute: true
    value:
      type: string
```

**ExtensionType**

```
ExtensionType:
  type: object
```

**BusinessCardType**

```
BusinessCardType:
  type: object
  description: Root element for a single Peppol Directory business card.
  xml:
    name: BusinessCard
  properties:
    ParticipantIdentifier: # Must not be included in case of using the /{pid}/services/{docId} route
      $ref: '#/components/schemas/ParticipantIdentifierType'
    BusinessEntity:
      type: array
      description: "A list of business entities (companies, public bodies) reachable via the
ServiceGroup. In XML, this will be represented by one or more <BusinessEntity> elements."
      items:
        $ref: '#/components/schemas/BusinessEntityType'
      xml:
        wrapped: false
```

**BusinessEntityType**

```
BusinessEntityType:
  type: object
  description: Represents a single business entity as contained in a business card.
  required:
    - Name
    - CountryCode
  xml:
    name: BusinessEntity
  properties:
    Name:
      type: array
      description: "The multilingual name of the business entity. At least one name must be
provided."
      minItems: 1
      items:
        $ref: '#/components/schemas/MultilingualNameType'
      xml:
        wrapped: false
    CountryCode:
      type: string
      description: "A 2-letter ISO 3166-1 alpha-2 country code"
      minLength: 2
      maxLength: 2
      xml:
        name: CountryCode
    registrationDate:
      type: string
      format: date
      description: "The date when the participant was registered for Peppol."
      xml:
        attribute: true
    GeographicalInformation:
      type: string
      description: "Specific geographic information, such as an address or a region."
      xml:
        name: GeographicalInformation
    Identifier:
      type: array
      description: "Additional identifiers for this entity, like VAT number, national organisation
number, etc."
      items:
        properties:
          value:
            type: string
            description: "The value of the identifier (the element's text content)."
          scheme:
            type: string
```

```
            description: "The scheme of the identifier. For Peppol, this is typically 'iso6523-
actorid-upis'."
            xml:
              attribute: true
      xml:
        wrapped: false
    WebsiteURI:
      type: array
      description: "URIs linking to the business entity's websites."
      items:
        type: string
        format: uri
        xml:
          name: WebsiteURI
      xml:
        wrapped: false
    Contact:
      type: array
      description: "Business contact points to get in touch with the business entity."
      items:
        $ref: '#/components/schemas/ContactType'
      xml:
        wrapped: false
    AdditionalInformation:
      type: string
      description: "Any other relevant information that does not fit into a structured field."
      xml:
        name: AdditionalInformation
```

**ContactType**

```
ContactType:
  type: object
  description: Resembles the structure of a single business contact.
  xml:
    name: Contact
  properties:
    Type:
      type: string
      description: "The type of the contact (e.g., sales, support)."
      xml:
        name: Type
    Name:
      type: string
      description: "The name of the contact (individual or organisational unit)."
      xml:
        name: Name
    PhoneNumber:
      type: string
      description: "The public telephone number of the contact."
      xml:
        name: PhoneNumber
    Email:
      type: string
      description: "The public email address of the contact."
      xml:
        name: Email
```

**MultilingualNameType**

```
MultilingualNameType:
  type: object
  description: "Represents a name that can be provided in multiple languages."
  required:
    - value
  xml:
    name: Name
  properties:
    value:
      type: string
      description: A string that must not be empty.
      minLength: 1
    language:
      type: string
      description: "A 2-letter ISO 639-1 language code (e.g., 'en' for English)."
      minLength: 2
      maxLength: 2
      xml:
        attribute: true
```

## 3. Full SMP API Specification Source Code

**Full SMP API Specification Source Code**

```
openapi: 3.1.0

info:
  title: Oman Tax Authority SMP REST API
  description: |
    The Oman Tax Authority SMP REST API provides secure, standards-based
    access to Service Metadata Publisher (SMP) resources for participant
    service group management, service metadata publication, and
    peppol directory integration.

    mTLS Authentication is required for write operations.
  version: 1.3.0

servers:
  - url: https://test-smp-ext-api.taxoman.gov.om/v1/secure/smp/wrapper
    description: Test Oman SMP API server.
  - url: https://smp-ext-api.taxoman.gov.om/v1/secure/smp/wrapper
    description: Production Oman SMP API server.

tags:
  - name: ServiceGroup
    description: Operations related to managing Participant Identifiers and SML contact.
  - name: ServiceMetadata
    description: Operations defining document types, business processes, and AS4 transport
endpoints.

paths:
  /{participantId}:
    parameters:
      - name: participantId
        in: path
        required: true
        description: The participant identifier (e.g. iso6523-actorid-upis::0088:123456).
        schema:
          type: string
          example: iso6523-actorid-upis::9915:test-participant
          description:
            The identifier must be URL-encoded when used in the path. For example, the '#' character
should be encoded as '%23', and ':' should be encoded as '%3A'.
    delete:
      tags:
        - ServiceGroup
      summary: Delete Service Group
      description: |
        Removes a participant ID and issues a deletion command to the SML and Peppol directory.

        Notes to consider:
          - This operation requires that the service provider and the taxpayer being deleted have
disconnected on OTA's Fawtara Portal,
          - In case the schema code is 0242, the operation validation is different, it ensures that
the provider provided certificate SPID matches the participant first 6 digits, and will skip
connection status validation from Portal.
      operationId: deleteServiceGroup
      security:
        - mTLS: []
      responses:
        '200':
          description: Service Group successfully deleted.
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/SuccessResponseType'
              example:
                message: Service group successfully deleted
                participantId: iso6523-actorid-upis::9915:test-participant
                timestamp: "2026-07-06T14:30:00Z"
        '400':
          description: Bad request.
```

```
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ErrorResponseType'
              example:
                status: 400
                code: BAD_REQUEST
                message: Bad request
                details: "Action rejected: Service Provider and Taxpayer connection status must be
Disconnected to remove participant. Connection status must be Disconnected."
                timestamp: "2026-11-18T08:11:40.446102845Z"
        '404':
          description: Service Group does not exist.
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ErrorResponseType'
              example:
                status: 404
                code: NOT_FOUND
                message: Service group not found
                details: The participant identifier does not exist in the system.
                timestamp: "2026-07-06T14:30:00Z"
        '422':
          description: Invalid Peppol identifier.
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ErrorResponseType'
              example:
                status: 422
                code: INVALID_PEPPOL_IDENTIFIER
                message: Invalid Peppol participant identifier
                details: The participant identifier does not conform to Peppol syntax; ensure
correct scheme and encoding.
                errors:
                  - field: participantId
                    issue: Missing or invalid scheme
                timestamp: "2026-07-06T14:30:00Z"
        '424':
          description: Dependency failure when contacting with external systems (SML or Directory).
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ErrorResponseType'
              example:
                status: 424
                code: DEPENDENCY_FAILURE
                message: Failed to contact with one or more external dependencies
                details: SML contact failed; Directory update failed.
                errors:
                  - field: SML
                    issue: Connection timeout to SML endpoint
                  - field: Directory
                    issue: Connection timeout to Directory endpoint
                timestamp: "2026-07-06T14:30:00Z"
        '500':
          description: Internal server error.
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ErrorResponseType'
              example:
                status: 500
                code: INTERNAL_ERROR
                message: Internal server error
                details: An unexpected error occurred while processing the deletion request.
                timestamp: "2026-07-06T14:30:00Z"
  /{participantId}/services/{documentTypeId}:
    parameters:
      - name: participantId
        in: path
        required: true
```

```
        schema:
          type: string
          example: iso6523-actorid-upis::9915:test-participant
          description:
            The identifier must be URL-encoded when used in the path. For example, the '#' character
should be encoded as '%23', and ':' should be encoded as '%3A'.
      - name: documentTypeId
        in: path
        required: true
        description: The document type identifier representing the standard and format.
        schema:
          type: string
          example: busdox-docid-qns::urn:oasis:names:specification:ubl:schema:xsd:Invoice-
2::Invoice%23%23urn:cen.eu:en16931:2017%23compliant%23urn:fdc:peppol.eu:2017:poacc:billing:3.0::2.1
          description: The identifier must be URL-encoded when used in the path. For example, the
'#' character should be encoded as '%23', and ':' should be encoded as '%3A'.
    put:
      tags:
        - ServiceMetadata
      summary: Create or Update Service Metadata & Optionaly the business card
      description: |
        As per wrapper defitintion, this method does the following:
        - Creates the AP endpoint URLs, transport profiles, and certificates. Overwrites existing.
        - Creates the participant if not already existing.
        - Pushes participant to SML
        - Pushes participant to Peppol Directory

        Note that validations and restrictions can happen on above actions.
        - Only on PRODUCTION url, It is required that you have a valid connection status with the
taxpayer you are adding, the connection is done through OTA's Fawtara Portal.
        - Ensure the certificate provided is valid and correctly formatted as a PEM encoded X509 DER
value.
        - In case the schema code is 0242, the operation validation is different, it ensures that
the provider provided certificate SPID matches the participant first 6 digits, and will skip
connection status validation from Portal.
      operationId: putServiceMetadataAndBusinessCard
      security:
        - mTLS: []
      requestBody:
        required: true
        content:
          application/xml:
            schema:
              $ref: '#/components/schemas/ParticipantDetailsType'
            example: |
              <ParticipantDetails>
                <smp:ServiceMetadata xmlns:wsa="http://www.w3.org/2005/08/addressing"
xmlns:smp="http://busdox.org/serviceMetadata/publishing/1.0/"
xmlns:id="http://busdox.org/transport/identifiers/1.0/">
                  <smp:ServiceInformation>
                    <id:ParticipantIdentifier scheme="iso6523-actorid-
upis">0248:OM0000000000</id:ParticipantIdentifier>
                    <id:DocumentIdentifier scheme="busdox-docid-
qns">urn:oasis:names:specification:ubl:schema:xsd:Invoice-
2::Invoice##urn:cen.eu:en16931:2017#compliant#urn:fdc:peppol.eu:2017:poacc:billing:3.0::2.1</id:Docu
mentIdentifier>
                    <smp:ProcessList>
                      <smp:Process>
                        <id:ProcessIdentifier scheme="cenbii-procid-
ubl">urn:fdc:peppol.eu:2017:poacc:billing:01:1.0</id:ProcessIdentifier>
                        <smp:ServiceEndpointList>
                          <smp:Endpoint transportProfile="peppol-transport-as4-v2_0">
                            <wsa:EndpointReference>
                              <wsa:Address>http://test.smpserver/as4</wsa:Address>
                            </wsa:EndpointReference>
                            <smp:RequireBusinessLevelSignature>false</smp:RequireBusinessLevelSignat
ure>
                            <smp:Certificate>PEM encoded X509 DER formatted value</smp:Certificate>
                            <smp:ServiceDescription>Unit test service</smp:ServiceDescription>
                            <smp:TechnicalContactUrl>https://tms.taxoman.gov.om/portal/</smp:Technic
alContactUrl>
                          </smp:Endpoint>
                        </smp:ServiceEndpointList>
```

```
                    </smp:Process>
                  </smp:ProcessList>
                </smp:ServiceInformation>
              </smp:ServiceMetadata>
              <BusinessCard xmlns="http://www.peppol.eu/schema/pd/businesscard/20180621/">
                <BusinessEntity registrationDate="2026-01-01">
                  <Name language="en">Oman</Name>
                  <Name language="ar">عمان</Name>
                  <CountryCode>OM</CountryCode>
                </BusinessEntity>
              </BusinessCard>
            </ParticipantDetails>
      responses:
        '200':
          description: Successful update.
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/SuccessResponseType'
              example:
                message: SML, Service metadata and business card successfully created/updated
                participantId: iso6523-actorid-upis::9915:test-participant
                documentTypeId: busdox-docid-
qns::urn:oasis:names:specification:ubl:schema:xsd:Invoice-
2::Invoice##urn:cen.eu:en16931:2017#compliant#urn:fdc:peppol.eu:2017:poacc:billing:3.0::2.1
                timestamp: "2026-07-06T14:30:00Z"
        '400':
          description: Bad request.
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ErrorResponseType'
              examples:
                invalidConnectionStatus:
                  value:
                    status: 400
                    code: BAD_REQUEST
                    message: Bad request
                    details: "Action rejected: Service Provider and Taxpayer connection status must
be Connected to add or amend participant. Connection status must be Connected."
                    timestamp: "2026-11-18T08:04:42.983253325Z"
                badRequest:
                  value:
                    status: 400
                    code: BAD_REQUEST
                    message: Bad request
                    details: The request body contains invalid XML structure or missing required
fields.
                    timestamp: "2026-07-06T14:30:00Z"
        '422':
          description: Invalid Peppol identifiers (participant, documentTypeId, or processId).
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ErrorResponseType'
              example:
                status: 422
                code: INVALID_PEPPOL_IDENTIFIERS
                message: One or more Peppol identifiers are invalid
                details: The request contains invalid Peppol identifiers.
                errors:
                  - field: participantId
                    issue: Invalid Format
                  - field: participantId
                    issue: The participant ID in body does not match the Participant ID in the URL
                  - field: documentTypeId
                    issue: The documentType ID in body does not match the Document Type ID in the
URL
                  - field: documentTypeId
                    issue: DocumentTypeID not conforming to format
                  - field: processId
                    issue: A process in the payload contains an invalid process identifier
scheme/value
```

```
                  - field: endpoint
                    issue: Two endpoints under the same process and transport profile have
overlapping validity periods
                timestamp: "2026-07-06T14:30:00Z"
        '424':
          description: Dependency failure when contacting with external systems (SML or Directory).
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ErrorResponseType'
              example:
                status: 424
                code: DEPENDENCY_FAILURE
                message: Failed to contact with one or more external dependencies
                details: SML contact failed; Directory update failed.
                errors:
                  - field: SML
                    issue: Connection timeout to SML endpoint
                  - field: Directory
                    issue: Connection timeout to Directory endpoint
                timestamp: "2026-07-06T14:30:00Z"
        '500':
          description: Internal server error.
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ErrorResponseType'
              example:
                status: 500
                code: INTERNAL_ERROR
                message: Internal server error
                details: An unexpected error occurred while processing the service metadata request.
Please ensure to use valid ICD and revise entered values.
                timestamp: "2026-07-06T14:30:00Z"
    delete:
      tags:
        - ServiceMetadata
      summary: Delete Service Metadata
      description: |
        As per wrapper defitintion, this method does the following:
        - Removes specific routing configurations for a document type.
      operationId: deleteServiceMetadata
      security:
        - mTLS: []
      responses:
        '200':
          description: Successfully deleted.
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/SuccessResponseType'
              example:
                message: Service metadata successfully deleted
                participantId: iso6523-actorid-upis::9915:test-participant
                documentTypeId: busdox-docid-
qns::urn:oasis:names:specification:ubl:schema:xsd:Invoice-
2::Invoice##urn:cen.eu:en16931:2017#compliant#urn:fdc:peppol.eu:2017:poacc:billing:3.0::2.1
                timestamp: "2026-07-06T14:30:00Z"
        '404':
          description: Metadata not found.
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ErrorResponseType'
              example:
                status: 404
                code: NOT_FOUND
                message: Metadata not found
                details: Service metadata for the given participant/document type does not exist.
                timestamp: "2026-07-06T14:30:00Z"
        '422':
          description: Invalid Peppol identifier, DocumentTypeID, or ProcessID.
          content:
```

```
            application/json:
              schema:
                $ref: '#/components/schemas/ErrorResponseType'
              example:
                status: 422
                code: INVALID_PEPPOL_IDENTIFIERS
                message: One or more Peppol identifiers are invalid
                details: The request contains invalid Peppol identifiers.
                errors:
                  - field: participantId
                    issue: ParticipantID not conforming to format
                  - field: documentTypeId
                    issue: DocumentTypeID not conforming to format
                timestamp: "2026-07-06T14:30:00Z"
        '500':
          description: Internal server error.
          content:
            application/json:
              schema:
                $ref: '#/components/schemas/ErrorResponseType'
              example:
                status: 500
                code: INTERNAL_ERROR
                message: Internal server error
                details: An unexpected error occurred while deleting the service metadata.
                timestamp: "2026-07-06T14:30:00Z"
components:
  securitySchemes:
    mTLS:
      type: mutualTLS
      description: |
        Mutual TLS (mTLS) authentication.
        The client must present a valid X.509 certificate during the TLS handshake.
        The certificate will be validated by the server.

  schemas:
    ErrorResponseType:
      type: object
      properties:
        status:
          type: integer
          description: HTTP status code representing the error.
          example: 422
        code:
          type: string
          description: Short machine-readable error code.
          example: INVALID_PEPPOL_IDENTIFIER
        message:
          type: string
          description: Human-readable error message summarizing the problem.
          example: Invalid Peppol identifier
        details:
          type: string
          description: Longer description or guidance for remediation.
          example: The participant identifier does not conform to the required Peppol scheme and
encoding.
        errors:
          type: array
          description: Optional list of field-specific errors.
          items:
            type: object
            properties:
              field:
                type: string
              issue:
                type: string
        timestamp:
          type: string
          format: date-time
          description: timestamp when the error occurred.
          example: "2026-07-06T14:30:00Z"

    SuccessResponseType:
```

```
      type: object
      properties:
        message:
          type: string
        participantId:
          type: string
        documentTypeId:
          type: string
        timestamp:
          type: string
          format: date-time

    PartialSuccessResponseType:
      type: object
      properties:
        message:
          type: string
        participantId:
          type: string
        results:
          type: object
          properties:
            serviceMetadataStatus:
              type: string
            businessCardStatus:
              type: string
            smlUpdateStatus:
              type: string
            directoryUpdateStatus:
              type: string
        failures:
          type: array
          items:
            type: object
            properties:
              component:
                type: string
              reason:
                type: string
        timestamp:
          type: string
          format: date-time

    ParticipantDetailsType:
      type: object
      required:
        - ServiceMetadata
        - BusinessCard
      xml:
        name: ParticipantDetails
      properties:
        ServiceMetadata:
          $ref: '#/components/schemas/ServiceMetadataType'
        BusinessCard:
          $ref: '#/components/schemas/BusinessCardType'

    ServiceMetadataType:
      type: object
      xml:
        name: ServiceMetadata
      properties:
        ServiceInformation:
          $ref: '#/components/schemas/ServiceInformationType'
        Redirect:
          $ref: '#/components/schemas/RedirectType'

    ServiceInformationType:
      type: object
      xml:
        name: ServiceInformation
      required:
        - ParticipantIdentifier
        - DocumentIdentifier
```

```
      - ProcessList
    properties:
      ParticipantIdentifier:
        $ref: '#/components/schemas/ParticipantIdentifierType'
      DocumentIdentifier:
        $ref: '#/components/schemas/DocumentIdentifierType'
      ProcessList:
        type: object
        xml:
          name: ProcessList
        properties:
          Process:
            type: array
            minItems: 1
            xml:
              wrapped: false
              name: Process
            items:
              $ref: '#/components/schemas/ProcessType'
      Extension:
        $ref: '#/components/schemas/ExtensionType'

  ProcessType:
    type: object
    xml:
      name: Process
    required:
      - ProcessIdentifier
      - ServiceEndpointList
    properties:
      ProcessIdentifier:
        $ref: '#/components/schemas/ProcessIdentifierType'
      ServiceEndpointList:
        type: object
        xml:
          name: ServiceEndpointList
        properties:
          Endpoint:
            type: array
            minItems: 1
            xml:
              wrapped: false
              name: Endpoint
            items:
              $ref: '#/components/schemas/EndpointType'
      Extension:
        $ref: '#/components/schemas/ExtensionType'

  EndpointType:
    type: object
    xml:
      name: Endpoint
    required:
      - transportProfile
      - EndpointReference
      - RequireBusinessLevelSignature
      - Certificate
      - ServiceDescription
      - TechnicalContactUrl
    properties:
      transportProfile:
        type: string
        xml:
          attribute: true
      EndpointReference:
        type: object
        xml:
          name: EndpointReference
        required:
          - Address
        properties:
          Address:
            type: string
```

```
            format: uri
      RequireBusinessLevelSignature:
        type: boolean
      MinimumAuthenticationLevel:
        type: string
      ServiceActivationDate:
        type: string
        format: date-time
      ServiceExpirationDate:
        type: string
        format: date-time
      Certificate:
        type: string
      ServiceDescription:
        type: string
      TechnicalContactUrl:
        type: string
        format: uri
      TechnicalInformationUrl:
        type: string
        format: uri
      Extension:
        $ref: '#/components/schemas/ExtensionType'

  RedirectType:
    type: object
    required:
      - CertificateUID
      - href
    properties:
      CertificateUID:
        type: string
      href:
        type: string
        format: uri

  ParticipantIdentifierType:
    type: object
    xml:
      name: ParticipantIdentifier
    required:
      - scheme
      - value
    properties:
      scheme:
        type: string
        xml:
          attribute: true
      value:
        type: string

  DocumentIdentifierType:
    type: object
    xml:
      name: DocumentIdentifier
    required:
      - scheme
      - value
    properties:
      scheme:
        type: string
        xml:
          attribute: true
      value:
        type: string

  ProcessIdentifierType:
    type: object
    xml:
      name: ProcessIdentifier
    required:
      - scheme
      - value
```

```
      properties:
        scheme:
          type: string
          xml:
            attribute: true
        value:
          type: string

    ExtensionType:
      type: object

    BusinessCardType:
      type: object
      description: Root element for a single Peppol Directory business card.
      xml:
        name: BusinessCard
      properties:
        ParticipantIdentifier:
          $ref: '#/components/schemas/ParticipantIdentifierType'
        BusinessEntity:
          type: array
          description: "A list of business entities (companies, public bodies) reachable via the
ServiceGroup. In XML, this will be represented by one or more <BusinessEntity> elements."
          items:
            $ref: '#/components/schemas/BusinessEntityType'
          xml:
            wrapped: false

    BusinessEntityType:
      type: object
      description: Represents a single business entity as contained in a business card.
      required:
        - Name
        - CountryCode
      xml:
        name: BusinessEntity
      properties:
        Name:
          type: array
          description: "The multilingual name of the business entity. At least one name must be
provided."
          minItems: 1
          items:
            $ref: '#/components/schemas/MultilingualNameType'
          xml:
            wrapped: false
        CountryCode:
          type: string
          description: "A 2-letter ISO 3166-1 alpha-2 country code"
          minLength: 2
          maxLength: 2
          xml:
            name: CountryCode
        registrationDate:
          type: string
          format: date
          description: "The date when the participant was registered for Peppol."
          xml:
            attribute: true
        GeographicalInformation:
          type: string
          description: "Specific geographic information, such as an address or a region."
          xml:
            name: GeographicalInformation
        Identifier:
          type: array
          description: "Additional identifiers for this entity, like VAT number, national
organisation number, etc."
          items:
            properties:
              value:
                type: string
                description: "The value of the identifier (the element's text content)."
```

```
              scheme:
                type: string
                description: "The scheme of the identifier. For Peppol, this is typically 'iso6523-
actorid-upis'."
                xml:
                  attribute: true
          xml:
            wrapped: false
        WebsiteURI:
          type: array
          description: "URIs linking to the business entity's websites."
          items:
            type: string
            format: uri
            xml:
              name: WebsiteURI
          xml:
            wrapped: false
        Contact:
          type: array
          description: "Business contact points to get in touch with the business entity."
          items:
            $ref: '#/components/schemas/ContactType'
          xml:
            wrapped: false
        AdditionalInformation:
          type: string
          description: "Any other relevant information that does not fit into a structured field."
          xml:
            name: AdditionalInformation

    ContactType:
      type: object
      description: Resembles the structure of a single business contact.
      xml:
        name: Contact
      properties:
        Type:
          type: string
          description: "The type of the contact (e.g., sales, support)."
          xml:
            name: Type
        Name:
          type: string
          description: "The name of the contact (individual or organisational unit)."
          xml:
            name: Name
        PhoneNumber:
          type: string
          description: "The public telephone number of the contact."
          xml:
            name: PhoneNumber
        Email:
          type: string
          description: "The public email address of the contact."
          xml:
            name: Email

    MultilingualNameType:
      type: object
      description: "Represents a name that can be provided in multiple languages."
      required:
        - value
      xml:
        name: Name
      properties:
        value:
          type: string
          description: A string that must not be empty.
          minLength: 1
        language:
          type: string
          description: "A 2-letter ISO 639-1 language code (e.g., 'en' for English)."
```

```
          minLength: 2
          maxLength: 2
          xml:
            attribute: true
```