

Category: Non-Confidential, Information purpose



# Oxalis Community

Technical Meeting - September, 2023

# Oxalis – Latest Status Update



- **[Oxalis 6.1.1](#) and [Oxalis-AS4 6.1.1](#) released on 24<sup>th</sup> September 2023:**
- Added support for [Peppol Business Message Envelope specification \(SBDH\) 2.0.1](#)
- Support [OpenPeppol eDEC Code Lists version 8.6](#)
- Bump vefa-peppol to 3.2.0
- Peppol specifications to 2.2.0
- Bump H2 to 2.2.220
- Artifacts are available in [Oxalis Network maven repositories](#) and [Norstella Docker hub](#) repositories
- Vulnerability Scanning report of Latest Oxalis Release:
  - There is one “High” and two “Medium” vulnerability reported by GitHub “Dependabot” scanning and Sonatype Scanning.
  - High Level vulnerability is applicable if you are using H2 database. This vulnerability is fixed in Oxalis master (not released yet).
  - Medium level vulnerabilities are in Jetty and BouncyCastle bcprov. Jetty vulnerability is fixed in Oxalis master (not released yet) and BouncyCastle bcprov vulnerability will be fixed soon.
- Contribution:
  - Thanks a lot “Dmitriy Lapko” for actively participating in GitHub discussion, issue management etc. Highly appreciated 🙌
  - We are in active discussion with ERST, Denmark to incorporate Nemhandel standard specific changes within Oxalis. We can handle Peppol and Nemhandel specific compliance needs through configuration & plugin. This way we can utilize development and testing bandwidth in effective way by handling this through single product instead of managing multiple repositories.
  - Thanks a lot “Richard van Maaren” and other as well for their valuable contribution 🙌

# Peppol Business-Message-Envelope and Reporting



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- **Business Message Envelope/SBDH:**

- Peppol Business Message Envelope specification [SBDH v2.0.1](#) is basic building block or supporting specification of Peppol Reporting. This will be used to pass C1 Country code from C2 to C3 via SBDH header (StandardBusinessDocumentHeader/BusinessScope/Scope[Type="COUNTRY\_C1"]).
- Oxalis is supporting this specification since version [Oxalis 6.1.1/ Oxalis-AS4 6.1.1](#)

- **Reporting Specification:**

Peppol "[Transaction Statistics Reporting](#)" specification v1.0.1 and Peppol "[End User Statistics Reporting](#)" specification v1.1.0 will be mandatory from 1<sup>st</sup> January 2024 (2024-01-01).

To support Peppol Reporting, Peppol AP/SP need to perform following activities:

- Data Gathering or Collection
- Data Preparation or Aggregation
- Report Validation
- Data Transmission

**Data Gathering or Collection:** Input required to implement peppol reporting i.e., "data gathering/collection" is available either in SBDH header or AS4 transmission message except C4 country code. AP/SP must store all relevant information of Peppol incoming and outgoing messages. Historically AP/SPs developed their own way to store transaction data which they used to report transactions to Peppol Authority. *Originally Oxalis did provided support for storing Transaction statistics, but it was later moved to legacy component and no longer maintained.*

For data collection, we need data storage so that this data can be used for data aggregation during report generation process. Best way to store data is to store it in some relational or NoSQL database. There are plenty of options here: Oracle, MS SQL Server, MySQL, H2 database, MongoDB etc...

SP/AP can capture data from SBDH & AS4 message transmission by creating [Oxalis plugin](#) and store required information in the database of choice.

# Peppol Reporting – Data Gathering/Collection



## Data collection fields/column:

1. **“ExchangeTime”**: Message exchange time in UTC, precision up to second – Available in AS4 Transmission message *“eb:UserMessage/eb:MessageInfo/eb:Timestamp”* – Column/Field used in both TSR, EUSR
2. **“Direction”**: Direction of exchange (incoming or outgoing) – Column/Field used in both TSR, EUSR
3. **“C2SeatID”**: Peppol Seat ID of C2 – *“For outgoing (sending), C2SeatID can be extracted from the CN of the Peppol Service Provider certificate used for signing the AS4 message and for incoming (receiving), C2SeatID can be deduced from the Peppol signing certificate that is part of the received AS4 message (X.509 Certificate Subject CN value)”* – Column/Field used in TSR only
4. **“C3SeatID”**: Peppol Seat ID of C3 – *“For outgoing (sending), C3SeatID can be deduced from the Peppol certificate extracted from the SMP query, used for the encryption of the AS4 message” and incoming (receiving), C3SeatID is a constant value, typically extracted from the CN of the Peppol Service Provider certificate used for decrypting the received AS4 Message (X.509 Certificate Subject CN value) and for* – Column/Field used in TSR only
5. **“DocType ID”**: Document Type ID of exchanged message – *“Available in AS4 User Message (eb:UserMessage/eb:CollaborationInfo/eb:Action) and in the SBDH (StandardBusinessDocumentHeader/BusinessScope/Scope[Type=“DOCUMENTID”])”* – Column/Field used in both TSR, EUSR
6. **“Process ID”**: Process ID of exchanged message – *“Available in AS4 User Message: eb:UserMessage/eb:CollaborationInfo/eb:Service(incl. @type) and in the SBDH: StandardBusinessDocumentHeader/BusinessScope/Scope[Type=“PROCESSID”]”* – Column/Field used in both TSR, EUSR
7. **“TransportProtocol”**: Transport Protocol used during exchange – *“Default value peppol-transport-as4-v2\_0”* – Column/Field used in TSR only
8. **“C1Country”**: The Country code of Sender End User – *“Available in SBDH header StandardBusinessDocumentHeader/BusinessScope/Scope[Type=“COUNTRY\_C1”]”* – Column/Field used in both TSR, EUSR
9. **“C4Country”**: The Country code of Receiver End User – *“There is no “field” in the transmitted data to hold the C4 country code, C3 must retrieved it from SP based on its KYC. If the specific Receiver has a Business Card for the Peppol Directory, then the Country Code required for reporting should match the Country Code of the Business Card”* – Column/Field used in both TSR, EUSR
10. **“End User ID”**: This is implementation specific to each Service Provider and used to aggregate data - Column/Field used in EUSR only

## Feedback required – From Oxalis Users (OMT Decision Pending):

Though OMT is of the view that SP can create their own implementation using Oxalis *plugin* architecture & based on database of their choice, but OMT still want to hear views of Oxalis Users.

Oxalis (if Oxalis user vote in favor & OMT ready) can provide example implementation with only one database implementation as it is difficult for Oxalis to provide support for each and every database on earth and then continue maintain it. If done so, SP can use that example implementation as reference to support database of their choice. REMEMBER that even in example implementation, there will be placeholder (TODO) in code where SP must fill in C4 country code by accessing it some way or other (*API call- Internal API or Peppol Directory Business Card if business card is available for all C4 Participant*).

# Peppol Reporting – Cont.



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## Data Preparation or Aggregation:

For specific reporting period (*i.e.*, *from 1st till last day of month*), SP need to prepare data by aggregating it. Data aggregation feature is solely dependent on database that SP is/will be using.

### **Feedback required – From Oxalis Users (OMT Decision Pending):**

OMT is of the view that SP can create their own implementation based on database of their choice, but OMT still want to hear views of Oxalis Users during Technical Meeting.

Oxalis (*if Oxalis user vote in favor & OMT ready*) can provide example implementation using any only one database. In that case, SP can use that example implementation as reference to support database of their choice.

## Report Validation:

Validation of any document was never ever part of Oxalis codebase.

Oxalis Community/Maintainer took strategic decision in the past that Oxalis will Not provide validation support and SP must rely on their own way of validating outgoing documents.

So, it is out of scope at this moment, unless OMT decide to support this in near future.

## Data Transmission:

[Oxalis 6.1.1](#) and [Oxalis-AS4 6.1.1](#) support sending both EUSR and TSR from SP AP to OO AP.

# Peppol Reporting - Reference



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- **Peppol Reporting – Guideline for Service Providers** : <https://docs.peppol.eu/edelivery/changelog/2023-08/2023-08-20%20Peppol%20Reporting%20-%20SP%20Guideline%20v2.0.pdf>
  - **Webinar – EUSR**: <https://openpeppol.atlassian.net/wiki/spaces/EDNCC/pages/3156475905/2023.09.19+Webinar+reporting+specifications>
  - **TSR BIS Specification**: <https://docs.peppol.eu/edelivery/specs/reporting/tsr/bis/>
  - **EUSR BIS Specification**: <https://docs.peppol.eu/edelivery/specs/reporting/eusr/bis/>
  - **Peppol Business Message Envelope specification**: <https://docs.peppol.eu/edelivery/envelope/Peppol-EDN-Business-Message-Envelope-2.0.1-2023-08-17.pdf>
  - **eDelivery Specification**: <https://docs.peppol.eu/edelivery/>
  - **eDEC Code Lists**: <https://docs.peppol.eu/edelivery/codelists/index.html>

# Oxalis GitHub Dashboard / ROADMAP



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Public Dashboard: <https://github.com/orgs/OxalisCommunity/projects/12/views/1>

Dashboard for Members: <https://github.com/orgs/OxalisCommunity/projects/11/views/1>

Oxalis Developers Dashboard: <https://github.com/orgs/OxalisCommunity/projects/13/views/1>

## Next Steps



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- Join Us: <https://www.oxalis.network/join>

All activity in the Oxalis Community is funded by its members, by fees determined by the Oxalis Community. An overarching principle is to keep administration to a minimum, to ensure that funds are spent on improvements, bug fixing and development of the software – to benefit all implementers.

[Register Now](#), if you are not “Oxalis Member” Yet

- Questions? Contact us:
  - Slack Channel: <https://norstellaoxalis.slack.com>
  - Email: [oxalis@norstella.no](mailto:oxalis@norstella.no)
  - Contact us Form: <https://www.oxalis.network/contact-us>
  - Website: <https://www.oxalis.network/>
  - Github Issues: <https://github.com/OxalisCommunity/oxalis/issues>
  - GitHub Discussion: <https://github.com/OxalisCommunity/oxalis/discussions>





More information:  
[www.oxals.network](http://www.oxals.network)