



Oxalis Community

Technical Meeting - March, 2024

Oxalis – Latest Status Update



- **[Oxalis 6.5.0](#) and [Oxalis-AS4 6.5.0](#) released on 4th March 2024:**
 - Bump vefa-peppol to 3.5.0
 - Added certificate validation
 - Added new dummy certificates
 - Fixed test cases which were failing due to change in SMP registration (Transport Profiles, Document Types, Participant Identifier Scheme etc) & expired SMP certificate
- Artifacts are available in [Oxalis Network maven repositories](#) and [Norstella Docker hub](#) repositories
- Vulnerability Scanning report of Latest Oxalis Release:
 - There are one “High” and four “Medium” vulnerability reported by GitHub “Dependabot” scanning and Sonatype Scanning.
 - Vulnerabilities are in “Xmlsec”, “bcprov-*, “H2” and “logback-core”.
 - These vulnerability will be fixed in next oxalis release («Oxalis NG»).
- Contribution and Communication:
 - Good to see lots of topics/issues being discussed in [Slack](#), GitHub issues and GitHub discussion etc
 - We encourage all Oxalis Paying Members to make effective use of [Slack](#) to receive faster, up-to-date, consolidated, and real time information. By joining slack channel, you will get valuable insight and support for your day-to-day queries.
 - Avoid sending direct email and message via Oxalis network site as it add extra layer and sometimes it become difficult to follow multiple request channel.
 - Always post in #general channel (*avoid direct 1-to-1 messages*) so that most of users will get benefits of response. Let us make interaction happen there in [Slack](#) . If required, we will create additional channels.

Malaysia Mandate



Malaysia is using pre-clearance model that means invoice must be validated with IRBM/LHDNM before sending it to Buyer. Peppol network is “*supported and preferred but not compulsory network*”, so routing & delivery can be done via another channel as well.

For pre-clearance, service provider (C2) need to integrate with [API](#), which was provided by MDEC on 9th February (*beta version*) for validating invoice with Malaysia Tax authority. Once service provider (C2) have validated invoice it can then be sent to C3 service provider over Peppol network. Malaysia has released [MY PINT BIS 1.0](#) specification and was published by OpenPeppol on 1st March 2023. Oxalis already supporting PINT & DDTS (Peppol Wildcard Scheme) since version [5.3.0](#).

Important details:

- Malaysia Timeline: 1 August 2024
- Model: Pre-Clearance, Centralized Clearance
- API: <https://sdk.myinvois.hasil.gov.my/api/> (*API Sandbox availability: Sometime in April 2024*)
- Guidelines: <https://www.hasil.gov.my/en/e-invoice/guidelines/>
- Direct Portal: MyInvois Portal
- Format: PINT BIS Billing MY, PINT BIS Self Billing MY (<https://docs.peppol.eu/poac/my/>)
- Network: Peppol (“*supported and preferred but not compulsory network*”)

Acronym/Abbreviation:

IRBM = Inland Revenue Board Of Malaysia aka LHDN

LHDN = Lembaga Hasil Dalam Negeri aka HASiL (The Malaysian tax authority for Tax Reporting & Compliance)

MDEC = Malaysia Digital Economy Corporation (Peppol Authority, Malaysia - Take care of Peppol PINT and eDelivery Network)

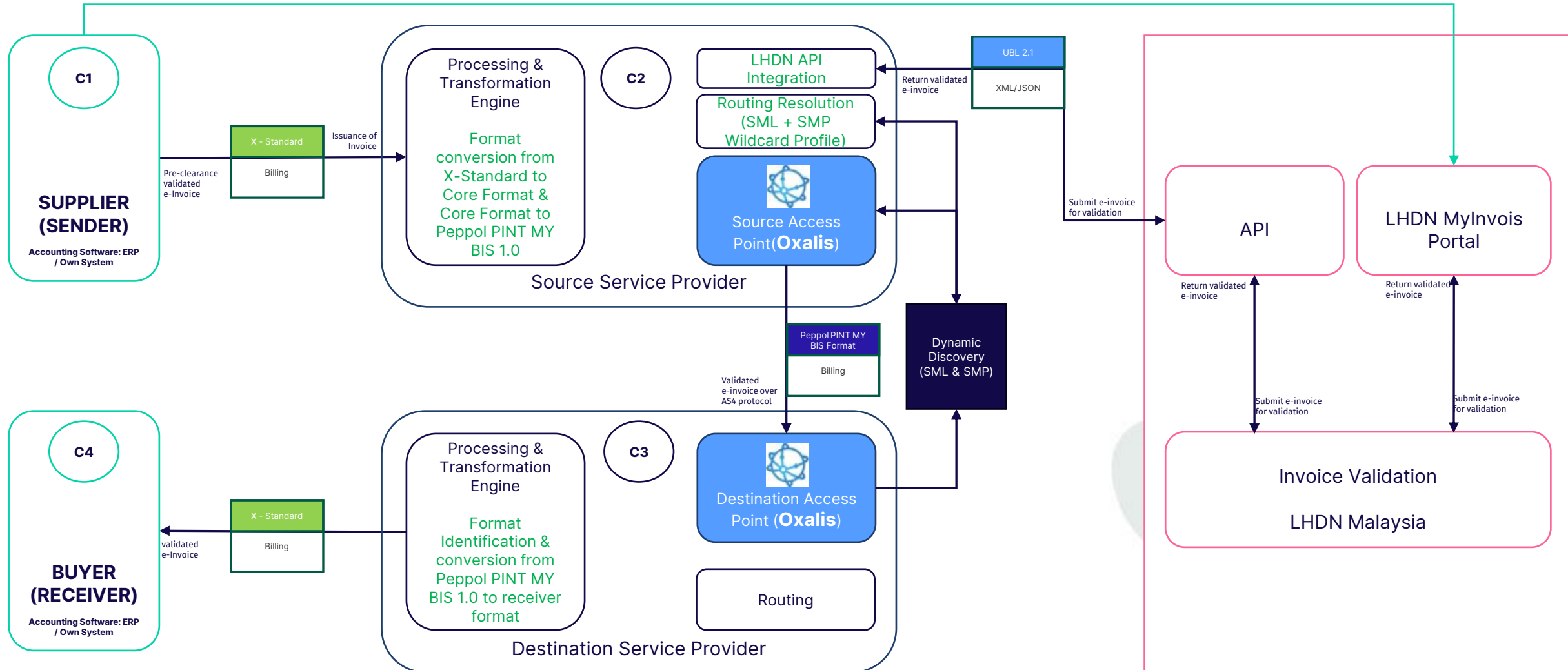
Malaysia Mandate

LHDN Pre-Clearance API and

Peppol PINT BIS & eDelivery Network*



*Peppol network “supported and preferred but not compulsory network”



PINT DDTS Support



Starting version 5.3.0, Oxalis started supporting “Dynamic Document Type Scheme” by means of “Peppol Wildcard Scheme” aka “peppol-doctype-wildcard”. Oxalis support two different document type identifier schemes. These are:

1. “busdox-docid-qns” - *current & default*
2. “peppol-doctype-wildcard” - *introduced to support the Peppol International Invoicing project (PINT)*

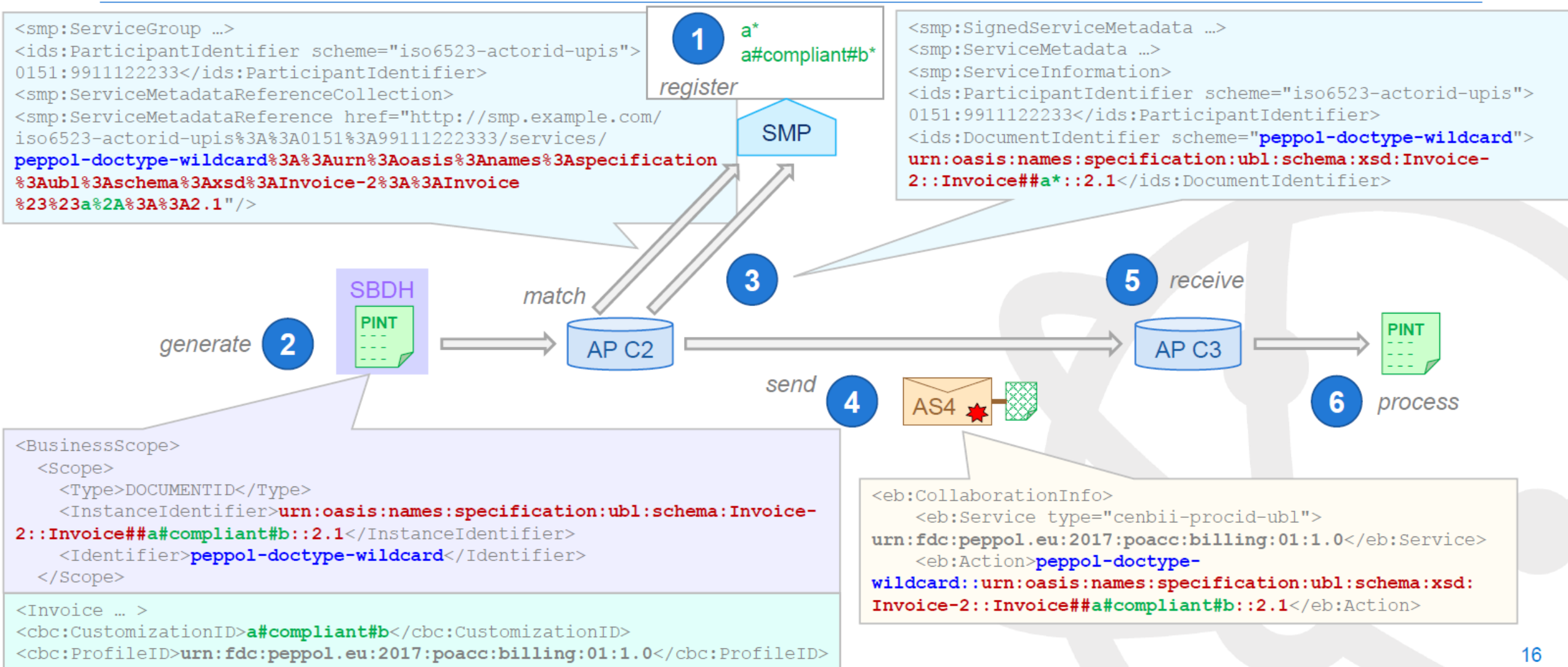
DDTS - Wildcard

- Enables receivers to register for a certain document type and all narrower specifications
- Narrower means that some or all features of the Parent Document Type are used, and all rules of the Parent Document Type are respected
- The Wildcard is represented as a * (star or asterisk)
- The Wildcard MUST be the last character of the Customization ID

DDTS – Wildcard Usages

- Where to apply the Wildcard?
 - In the SMP as a receiving capability
- Where Not to apply the Wildcard?
 - In the AS4 message
 - In the Peppol envelope (SBDH)
 - In the BIS payload document

eDEC DDTS – Usage examples



Malaysia PINT DEMO with Oxalis



http://smp.playground.acc.peppol.eu/iso6523-actorid-upis%3A%3A0230%3Atest-participant/services/peppol-doctype-wildcard%3A%3Aurn%3Aoasis%3Anames%3Aspecification%3Aubl%3Aschema%3Axsd%3AInvoice-2%3A%3AInvoice%23%23urn%3Apeppol%3Apint%3Abilling-1%40my-1*%3A%3A2.1



MLS Update



MLS (Message Level Status) is an extension of MLR (Message Level Response), where it provides delivery statuses (failure/RE, accept/AB, acknowledge/AP) in addition to whatever included as part of MLR. MLS is exchanged between C2 and C3.

- Failure (*Status code: RE*): Message Rejected or Delivery failed
 - Validation errors (same as MLR) - XML Schema and Schematron validation)
 - General content errors (e.g., Virus or malware detected, XML file size exceeds specifications, XML elements too long, MIME Type mismatch, Malformed content etc)
 - Failure of C3 to pass on the business document to C4
- Acknowledge (*Status code: AP*): Message Delivery succeeded i.e., Message Delivered with confirmation
- Accept (*Status code: AB*): Message Delivered without confirmation

Changes required:

SBDH Specification: New SBDH specification will be published which will introduce two new business scope elements (MLS_TO & MLS_TYPE) just like “COUNTRY_C1” introduced by Peppol Reporting

- **MLS Recipient:** MLS Recipient can be identified by “MLS_TO” element in “SBDH”. Here C2 will be identified by Peppol Seat ID e.g., XXXX:000100. Other way to identify MLS Recipient is via AS4 User Message. Example:
 - From AS4 User message:

```
<eb:From>  
  
    <eb:PartyId type="urn:fdc:peppol.eu:2017:identifiers:ap">POP000100</eb:PartyId>  
    <eb:Role>http://docs.oasis-open.org/ebxml-msg/ebms/v3.0/ns/core/200704/initiator</eb:Role>  
  
</eb:From>
```
 - From SBDH:

```
<sh:Scope>  
  
    <sh:Type>MLS_TO</sh:Type>  
    <sh:InstanceIdentifier>XXXX:POP000100</sh:InstanceIdentifier>  
  
</sh:Scope>
```
- **MLS Response Type (MLS_TYPE):**
 - For failure only (*default, if no type is included in SBDH*):

```
<sh:Scope>  
    <sh:Type>MLS_TYPE</sh:Type>  
    <sh:InstanceIdentifier>FAILURE_ONLY</sh:InstanceIdentifier>  
</sh:Scope>
```


MLS Continue



-
- Always send an MLS message (*Send MLS messages with status RE, AB and AP*):
 <sh:Scope>
 <sh:Type>MLS_TYPE</sh:Type>
 <sh:InstanceIdentifier>ALWAYS_SEND</sh:InstanceIdentifier>
 </sh:Scope>

Current state of specification:

- Feedback/Review period (currently)
- Next action will be to “Submit new BIS to eDEC”
- eDEC & OO will then take over and conduct any required consultation and determine next steps

Support for receiving MLS will be mandatory across OpenPeppol (*in future TBD*), PAs may optionally mandate either MLS ‘type’ scenario. There is very likely that MLS may become mandatory January 2025.

Oxalis Support

- SBDH changes will be done by Oxalis.
- Validation/MLR generation is currently out of scope of Oxalis. But if you want to include validation to be part of Oxalis community offering than please raise a feature request.

2024, H1 – Technical Roadmap



Following would be the Technical roadmap for H1, 2024 and beyond:

1. **Evolve and adjust OXALIS libraries:** We are planning to release new version called «Oxalis NG» via new repository by merging Oxalis-AS4 with Oxalis-Core and discontinuing AS2 support.
2. **Upcoming OpenPeppol specifications:** OpenPeppol May 2024 release, etc.
3. **Address missing** profile, certificate, and envelope validation to uphold high standards and specifications
4. Start building basic support for MLS
5. Facilitate **country-specific implementations** through Oxalis Plugin Architecture, such as Danish Nemhandle / ERST Integration.

General Guidance and Principles

- Ensure OpenPeppol specification **compliance** with a dedicated focus on core capability
- Address urgent and critical bug fixes and vulnerabilities

H2, 2024 roadmap will be published shortly (*Most probably in Oxalis Community Business Meeting on 20th March*)

Oxalis GitHub Dashboard / ROADMAP



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



- 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
 - 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