# Peppol

The future is open

# Peppol Service Provider Community
# Regular meeting

June 8th 2021

www.peppol.eu

# Agenda

1.  Peppol CTC model introduction to Service Providers

2.  Peppol Agreement framework hot topics

3.  AoB

Peppol CTC
Service Provider Community meeting
June 2021

OpenPeppol CTC project team
Ahti Allikas (Reference Group)
Paul Killie, DFO
Nazar Paradivskyy, Pagero

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# Agenda

- Peppol CTC
  - Project overview
  - Scenarios
  - Architecture
  - Proof of Concept (PoC)
  - Next steps
- PoC invitation to Service Providers
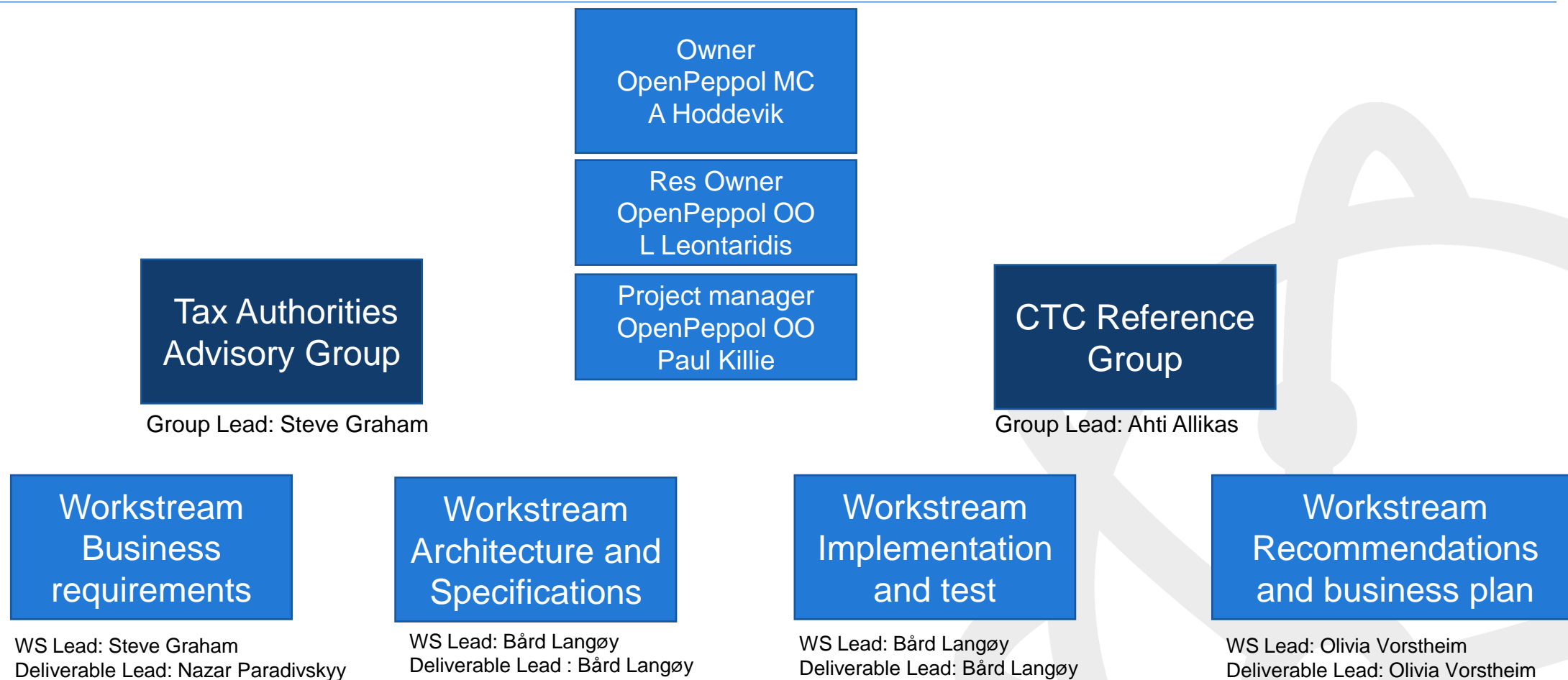  - Useful links and sources

# Peppol CTC Project
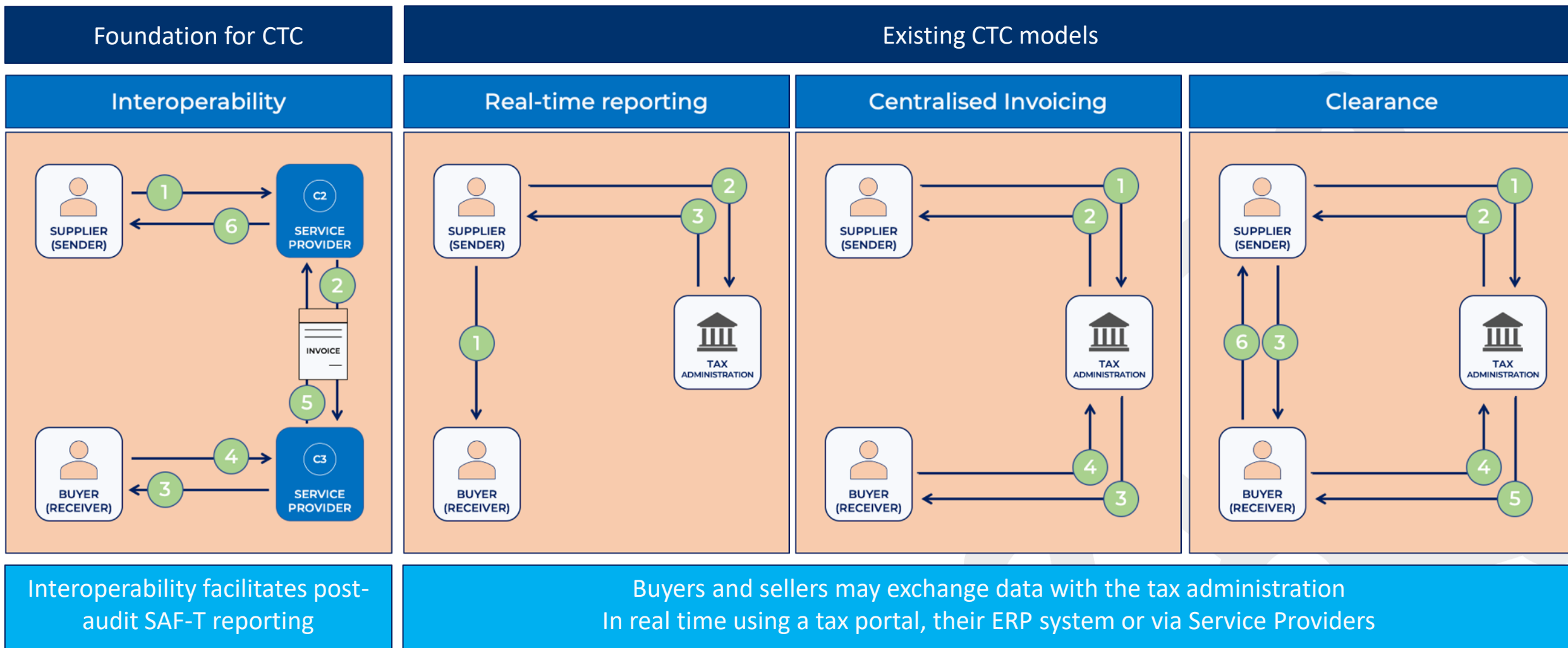
# Peppol CTC project

The Peppol CTC project covers the following high-level steps:

- review existing CTC models and implementations

- understand the business requirements of tax administrations

- incorporate CTC practice principles from International Chamber of Commerce

- develop an architecture to meet the needs of tax administrations and businesses

- implement the selected architecture through a Proof-of-Concept test

- develop a business plan for Peppol CTC to enter into production

- implement Peppol CTC in a production environment

# CTC project organisation

**Owner**
OpenPeppol MC
A Hoddevik

**Res Owner**
OpenPeppol OO
L Leontaridis

**Project manager**
OpenPeppol OO
Paul Killie

**Tax Authorities
Advisory Group**

Group Lead: Steve Graham

**CTC Reference
Group**

Group Lead: Ahti Allikas

**Workstream
Business
requirements**

WS Lead: Steve Graham
Deliverable Lead: Nazar Paradivskyy

**Workstream
Architecture and
Specifications**

WS Lead: Bård Langøy
Deliverable Lead : Bård Langøy

**Workstream
Implementation
and test**

WS Lead: Bård Langøy
Deliverable Lead: Bård Langøy

**Workstream
Recommendations
and business plan**

WS Lead: Olivia Vorstheim
Deliverable Lead: Olivia Vorstheim

# Overview of the primary CTC models in use



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| Foundation for CTC | Existing CTC models | | |
|---|---|---|---|
| **Interoperability** | **Real-time reporting** | **Centralised Invoicing** | **Clearance** |

Interoperability facilitates post-audit SAF-T reporting

Buyers and sellers may exchange data with the tax administration
In real time using a tax portal, their ERP system or via Service Providers

# Peppol analysis of CTC models and target CTC model

| Key requirements (From ICC principles, tax administrations and best practice) | Inter operability | Real time reporting | Centralised invoicing | Clearance (centralised or delegated) | Target Peppol CTC model |
|---|---|---|---|---|---|
| Improved tool(s) to prevent and combat tax evasion | possible | ✓ | ✓ | ✓ | ✓ |
| Proportionality between tax controls and business processes | ✗ | possible | ✗ | ✗ | ✓ |
| Tax data provided in real-time, only once | ✗ | ✓ | ✓ | ✓ | ✓ |
| No singe point of failure | ✓ | ✗ | ✗ | ✓ delegated ✗ centralised | ✓ |
| Data security, protection, collection proportionality | ✓ | ✓ | ✗ | ✗ | ✓ |
| Incremental deployment, based on long-term holistic and scalable infrastructure | ✓ | ✗ | ✗ | ✗ | ✓ |
| Based on international, familiar or otherwise reusable standards, technologies or principles | ✓ | ✗ | ✗ | ✗ | ✓ |
| Harmonised and interoperable between different systems and jurisdictions | ✓ | ✗ | ✗ | ✗ | ✓ |
| Balance between trade impact, non-discrimination and sovereignty needs | possible | possible | possible | possible | ✓ |
| Balanced implementation costs and timelines | possible | possible | possible | possible | ✓ |
| Embedded in and aligned with broader digitalisation strategy | ✓ | possible | possible | possible | ✓ |

# Peppol CTC scenarios
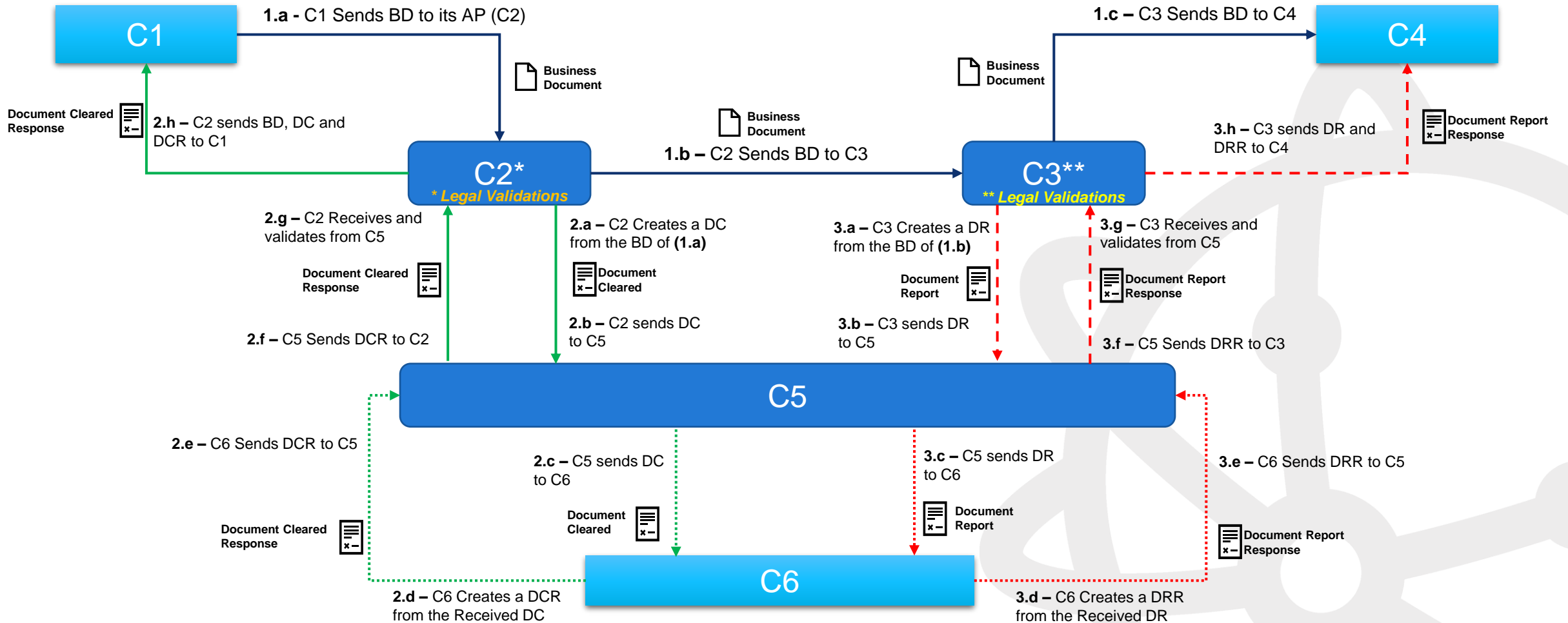
# Peppol CTC scenarios

- Primary scenarios
  - **Extension**. Jurisdiction, that has already adopted Peppol Network for B2G and wants to extend Peppol CTC to both B2G and B2B transactions
  - **Greenfield**. Jurisdiction, that has not adopted any CTC model and would like to implement Peppol CTC from the scratch for both B2G and B2B transactions

- Other scenarios
  - During the analysis of existing CTC models and discussions with Tax Administrations, the project group recognizes that there may be other scenarios how Peppol can be utilized for their CTC demands. No final position has been taken yet on the deviating use of Peppol CTC components.

# Architecture

# Peppol CTC – important new terms and elements

| Abb. | Description | Additional clarification |
|---|---|---|
| **CTC** | Continuous Transaction Controls | • Peppol CTC provisions for real-time validation and reporting of information to a country's Tax Administration |
| **CTC SP** | CTC Service Provider | • Refers to C2/3 Service Provider that opted in and has been CTC certified by C6 (e.g. Tax Administration) to operate as part of the CTC infrastructure<br>• It is not mandatory for all SP's to become CTC certified |
| **C5** | Tax Administration SP | |
| **C6** | Tax Administration (default) | • C6 could either have own C5 or outsource |
| **BD** | Any Business Document exchanged via the Peppol Network | • Peppol CTC will initially cover Invoice and Credit note, however, aimed to be extended to other BD, e.g. IR.<br>• As default, Peppol BIS |
| **DC** | Document Cleared | • As default, subset of the BD, but could be full BD. Created by C2 and transmitted to C5<br>• As default, Peppol BIS |
| **DR** | Document Reported | • As default, subset of the BD, but could be full BD. Created by C3 and transmitted to C5<br>• As default, Peppol BIS<br>• Optional feature |
| **DCR** | Document Cleared Response | • Created by C5 and transmitted to C2, upon successful reception of DC<br>• As default, Peppol BIS |
| **DRR** | Document Reported Response | • Created by C5 and transmitted to C3, upon successful reception of DR<br>• As default, Peppol BIS<br>• Optional feature |
| **TDD** | Tax Data Documents | • Grouping name of all documents exchanged between C2/3 and C5/6: DC, DCR, DR, DRR |

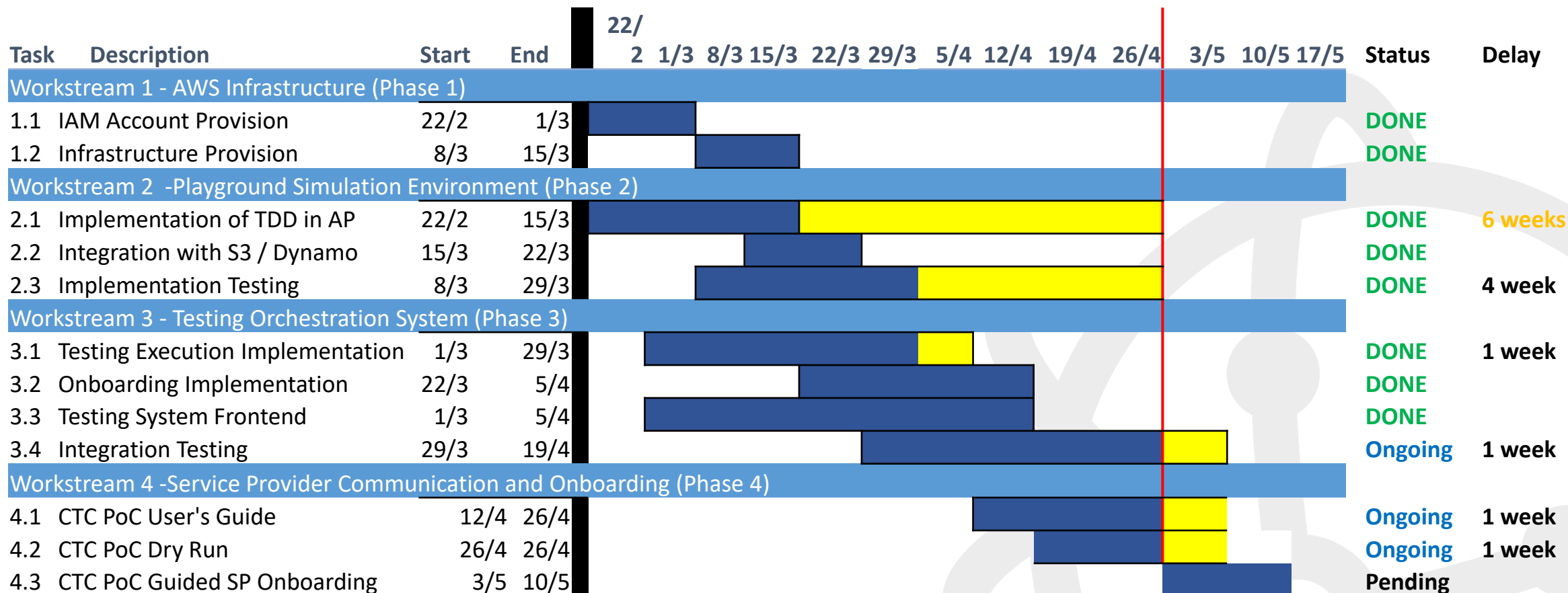# (1) Delegated CTC model with (2) regulated exchange

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**C1**

**1.a -** C1 Sends BD to its AP (C2)

**1.c –** C3 Sends BD to C4

**C4**

Business Document

Business Document

**Document Cleared Response**

**2.h –** C2 sends BD, DC and DCR to C1

Business Document

**Business Document**

**1.b –** C2 Sends BD to C3

**3.h –** C3 sends DR and DRR to C4

Document Report Response

**C2***
*Legal Validations*

**C3****
**Legal Validations*

**2.g –** C2 Receives and validates from C5

**2.a –** C2 Creates a DC from the BD of (1.a)

**3.a –** C3 Creates a DR from the BD of (1.b)

**3.g –** C3 Receives and validates from C5

**Document Cleared Response**

**Document Cleared**

**Document Report**

**Document Report Response**

**2.f –** C5 Sends DCR to C2

**2.b –** C2 sends DC to C5

**3.b –** C3 sends DR to C5

**3.f –** C5 Sends DRR to C3

**C5**

**2.e –** C6 Sends DCR to C5

**2.c –** C5 sends DC to C6

**3.c –** C5 sends DR to C6

**3.e –** C6 Sends DRR to C5

**Document Cleared Response**

**Document Cleared**

**Document Report**

**Document Report Response**

**C6**

**2.d –** C6 Creates a DCR from the Received DC

**3.d –** C6 Creates a DRR from the Received DR

*\* Validations incl. fatal errors*

*\*\* Validations, less extensive, no fatal errors, deviations in DR*

# PoC playground

# Implementation Plan – Current Status

| Task | Description | Start | End | | Status | Delay |
|------|-------------|-------|-----|--|--------|-------|
| **Workstream 1 - AWS Infrastructure (Phase 1)** | | | | | | |
| 1.1 | IAM Account Provision | 22/2 | 1/3 | | DONE | |
| 1.2 | Infrastructure Provision | 8/3 | 15/3 | | DONE | |
| **Workstream 2 -Playground Simulation Environment (Phase 2)** | | | | | | |
| 2.1 | Implementation of TDD in AP | 22/2 | 15/3 | | DONE | 6 weeks |
| 2.2 | Integration with S3 / Dynamo | 15/3 | 22/3 | | DONE | |
| 2.3 | Implementation Testing | 8/3 | 29/3 | | DONE | 4 week |
| **Workstream 3 - Testing Orchestration System (Phase 3)** | | | | | | |
| 3.1 | Testing Execution Implementation | 1/3 | 29/3 | | DONE | 1 week |
| 3.2 | Onboarding Implementation | 22/3 | 5/4 | | DONE | |
| 3.3 | Testing System Frontend | 1/3 | 5/4 | | DONE | |
| 3.4 | Integration Testing | 29/3 | 19/4 | | Ongoing | 1 week |
| **Workstream 4 -Service Provider Communication and Onboarding (Phase 4)** | | | | | | |
| 4.1 | CTC PoC User's Guide | 12/4 | 26/4 | | Ongoing | 1 week |
| 4.2 | CTC PoC Dry Run | 26/4 | 26/4 | | Ongoing | 1 week |
| 4.3 | CTC PoC Guided SP Onboarding | 3/5 | 10/5 | | Pending | |

Timeline columns: 22/2  1/3  8/3  15/3  22/3  29/3  5/4  12/4  19/4  26/4  3/5  10/5  17/5

# Implementation Plan – Playground AP CTC Simulation

- Integration with AWS: **DONE, On Time**

- Implementation of CTC Flow: **DONE** (6-week delay)
  - Implementation of Business Document Exchange: **DONE**
  - Implementation of External Trigger (Integration with Orchestration Engine): **DONE**
  - Implementation of Document Clearance Simulation: **DONE** (6-week delay)
    - Delay due to Specification and architectural gaps.
    - Input provided to Architecture and Specification teams – Issues Rectified.
  - Integration Testing: **DONE**, (4-week delay)
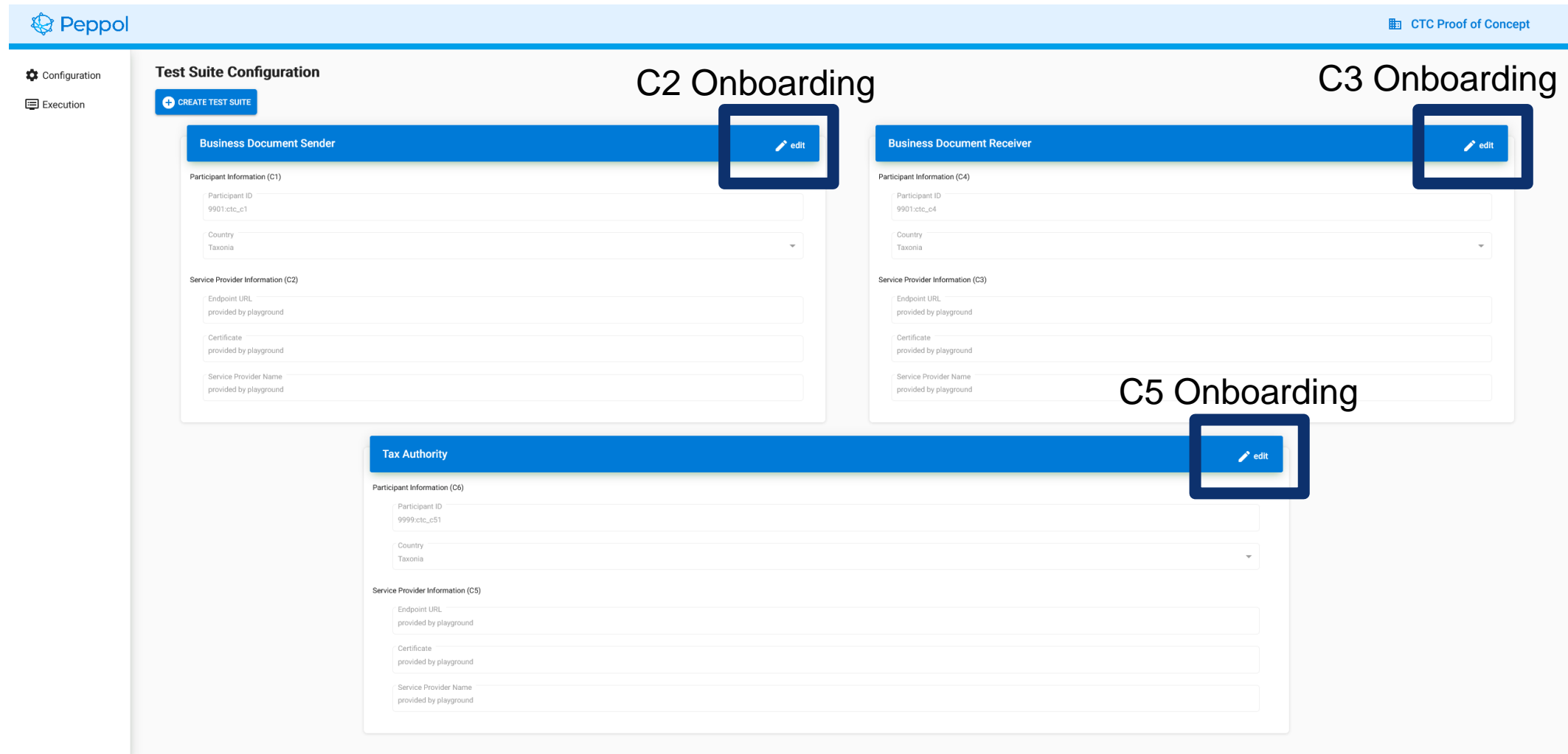
# Implementation Plan – Test Orchestration System

- Testing Execution: **DONE, On Time** (Currently bug fixing)
  - Integration with AWS (SNS, S3)
  - Validation of Received Artifacts
  - Structured submission of Test Result
  - UI Fully Aligned

- Service Provider Onboarding **Done, On Time** (Currently bug fixing)
  - Support for External onboarding of C2, C3 and C5
  - Creation and Registration of Participant Identifiers and Required SMP Entries for specific Test Session
    - Registration of DCR Reception when C2 Onboarding
    - Registration of BD and DRR when C3 Onboarding
    - Registration of DC and DR Reception when C5 Onboarding
  - Automatic Cleanup
  - Fully Aligned UI

# Service Provider Communication and Onboarding

- External Onboarding Dry Run: **Done** (2-week delay)
  - Onboarding of an external SP in a controlled environment
  - Correct any issues
  - Generate documentation material

- SP Onboarding Documentation: **Done** (2-week delay)
  - Fully document the onboarding process for each corner
    - Prerequisites for each corner
    - Onboarding process
    - Execution procedure

- PoC Environment Preparation
  - Deployment of stable components in Acceptance Environment: **Done**

# CTC PoC – Onboarding UI

# CTC PoC – Test Execution - Results



**Message Flow Of C2**
1. Send DC
2. Send BD (to C3)
3. Receive DCR

**Message Flow Of C5**
1. Receive DC
2. Send DCR
3. Receive DR
4. Send DRR

**Message Flow Of C3**
1. Send DR
2. Receive BD (by C4)
3. Receive DRR

# Next steps

# Planned next steps in the project

- Short term:
  - Conduct playground simulations and testing with Tax Administrations
  - Conduct playground simulations and testing with Service Providers

- Long-term (indicative):
  - Create unified TDD specifications
  - Create unified CTC SP Certification requirements
  - Create unified CTC SP Audit requirements
  - Continue the work on Cross-Border scenario
  - Continue the work on inclusion of other BD's
  - Investigate possibilities to support B2C traffic

- Planning for Peppol CTC Service Domain

# Service Provider PoC invitation and requirements

# Service Provider requirements towards CTC

- Provide value added services to the customers - be a single service provider for the customer in case of BD and TDD transfer

- Guaranteed data security for the customers

- Cooperation discussion between service providers and CTC authorities to achieve proportional and flexible solution

- Have standardized and harmonized model for CTC implementations internationally.
  - Provide data once
  - Interoperability
  - Sustainability and stability
  - Consistency

- Increase the awareness of eInvoicing as source of efficiency not as the source of tax collection improvement only

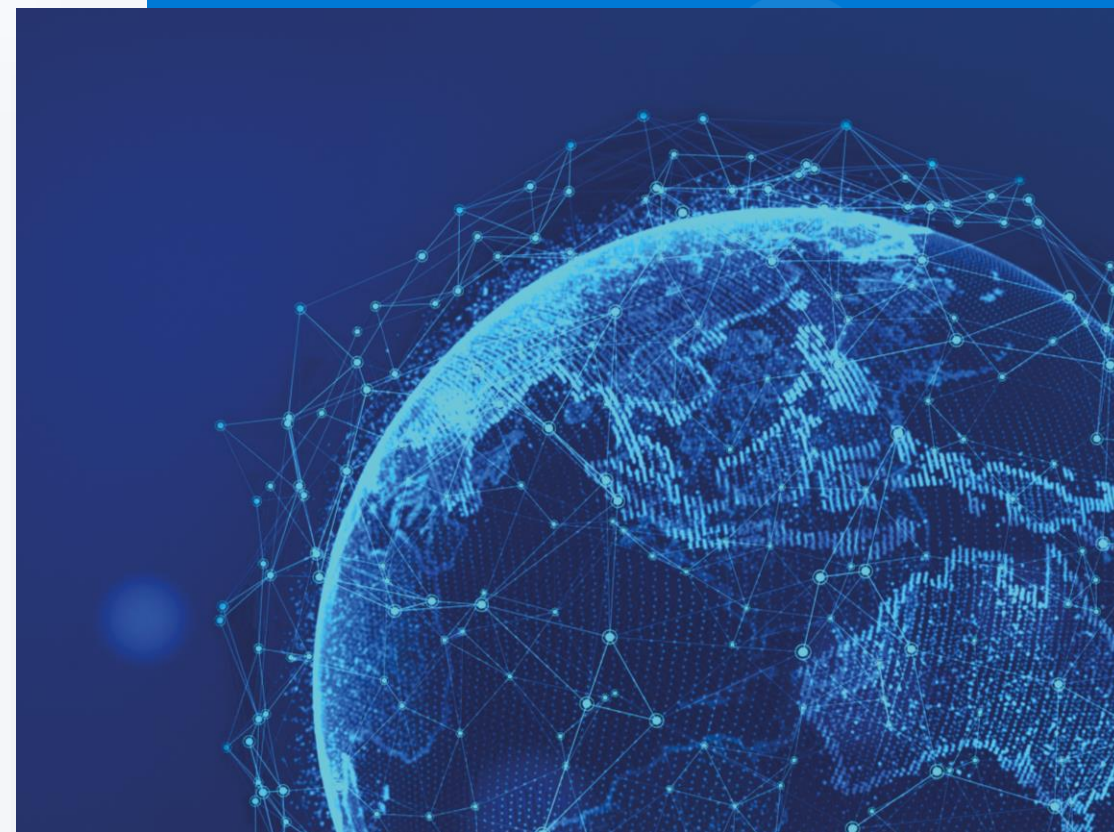- Resolve the conflict between CTC and Peppol as delivery model

# Useful links and sources

# Useful links

- Peppol CTC project
  - https://openpeppol.atlassian.net/wiki/spaces/CPWGS/overview

- Peppol CTC Q&A page
  - https://openpeppol.atlassian.net/wiki/spaces/CPWGS/pages/2417262627/Questions%2BAnswers

- Reference document, POC User Guide, Specificatons
  - https://openpeppol.atlassian.net/wiki/spaces/CPWGS/pages/2336260097/Peppol%2BCTC%2BSpecifications

# Next steps

- Questions?

- eMail       info@peppol.eu

- Website     www.peppol.eu

# Peppol Agreement framework hot topics

| | | |
|---|---|---|
| Peppol Service Provider Agreement | Definition of End User and how it is applied across all documents. | Define Better |
| Peppol Service Provider Agreement | 9.5.6 "Engaging with other Peppol Service Providers to resolve issues related to transfer of Peppol Dataset Types between them" | Hard to execute |
| Peppol Service Provider Agreement | 13.1 "The Parties affirm that they are fully aware of the terms of this process, and that they accept the applicability of this process to this Agreement without reservation provided, however, that the Internal Regulations and Operational Procedures at all times provide for a fair and open change process, and that no changes to this Agreement shall be determined with less than 75 % of the votes casted of the Peppol Authorities." | Why do only PAs vote? |
| Peppol Service Provider Agreement | 17.4 The Parties agree and affirm that the performance of this Agreement as such does not create any joint controllership between them, nor any controller/processor relationship, and that both Parties shall act as independent data controllers as defined under applicable law, each bearing its respective responsibilities and liabilities independently. Any provisions in this Agreement that affect data protection compliance, including with respect to data retention, shall be implemented in relevant agreements applicable between the Peppol Service Provider and the End User. | End user identification will include personal data |
| Internal Regulations | 3.3.1 Peppol Service Providers shall ensure that the following information is known for all End Users (senders and receivers) to which they provide Peppol services: | About which end users |
| Internal Regulations | 3.3.1 The information for KYC is exaturated | Too much information |
| Internal Regulations | 4.3 Service Provider Reporting about End Users | |
| Internal Regulations | 7.4.4 A Peppol Authority may make the use of the Peppol Directory mandatory for End Users which are legally based within its territorial jurisdiction | |
| Internal Regulations | 4.4  - Reporting of statistical data. | |
| Internal Regulations | 2.2.7 - Notice period required for minor releases of 2 weeks. | |