

# ERP-1045: DDFS - S2S - Safety to Sustainability

## Document Links

[blocked URL](#)ERP-1045 - Datasphere foundation build for S/4 - S2S FS IN PROGRESS

## Introduction

The DDFS covers the end to end Datasphere data flows for S2S area. The sub area it covers include EHS - **Environment, Health & Safety** , PRC - **Product Compliance**, SCT - **Sustainability Control Tower** and SFM - **Sustainability Footprint Management**. Below are the details on each sub area and KPIS it will cover:

Sub-Area	Details	Example KPIs	Comments
EHS - Environment, Health & Safety	The <b>SAP EHS (Environment, Health and Safety)</b> module is designed to help organizations capture, analyse and communicate safety, environmental and compliance data in a structured way. At its core, SAP EHS reporting consolidates data from different subcomponents like incident management, occupational health, product safety, and environmental compliance into meaningful outputs for both operational and regulatory use.	Emissions, waste, and resource usage (air, water, energy), tracking workplace incidents, near misses, injuries, and illnesses	
PRC - Product Compliance	The <b>SAP Product Compliance (PRC)</b> is part of SAP's EHS and product stewardship portfolio. From a <b>reporting perspective</b> , its main role is to ensure companies can <b>track, document, and report regulatory compliance data</b> for products across global markets. It is created as a <b>separate sub-module in Datasphere</b> considering the <b>authorisation rules</b> to only provide a sub-user group access to this data.	Compliance reporting, SVT, SVHC, Substance & Composition Reporting	
SCT - Sustainability Control Tower	<b>SAP Sustainability Control Tower (SCT)</b> is designed to centralize, standardize, and automate ESG (Environmental, Social, Governance) data reporting across an organization. It enables <b>automated, compliant and audit-ready</b> sustainability reporting. SCT relies on SAP <b>Datasphere</b> for <b>data foundation and scalability</b> . SAP Datasphere acts as the <b>data layer beneath SCT</b> . It <b>integrates</b> data from various SAP and non-SAP sources, <b>models and harmonizes</b> this data before it reaches SCT. This integration happens via SAP supplied <b>DPI (Data Provisioning &amp; Integration)</b> .	Emissions, Energy, Water Management, Waste, Social KPIs, Carbon Credits, Financial KPIs	
SFM - Sustainability Footprint Management	<b>SAP Sustainability Footprint Management (SFM)</b> is a cloud-based solution designed to calculate, analyse, and report product and corporate level carbon footprints. From a <b>reporting perspective</b> , its value lies in turning complex emissions data into structured, auditable and decision ready outputs. Datasphere will be used to send some of the already <b>consolidated data (like waste)</b> and also to <b>extract the footprint data</b> to be used in reporting.	Product Carbon Footprints (PCF) per product and supplier	

## Jira Requests Coverage

The models covered under this DDFS will cater towards requirements from the following Jira Requests -

-  [ERP-481](#) - Jira project doesn't exist or you don't have permission to view it.
-  [ERP-781](#) - Jira project doesn't exist or you don't have permission to view it.
-  [ERP-782](#) - Jira project doesn't exist or you don't have permission to view it.
-  [ERP-1089](#) - Jira project doesn't exist or you don't have permission to view it.



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## Source System Extractors

Standard extractors are listed in the data flow diagram (above) and are not documented here unless extended.

Extractor Name	Details	Build Jira Ref For Extension Information
/SYQ/I_WasteTransportDocument	CDS view on top of 'I_WasteAnalyticsDimension' with associations created similar to 'I_WasteAnalyticsCube'. This view will be extraction and delta enabled.	
/SYQ/I_*	A custom CDS view on top of a table (name to be confirmed) to extract emissions threshold information.	

## Inbound Layer

### 1TL\* Tables

Each 1TL\* table in the **Inbound layer** of S/4 systems will be populated as 1:1 with the corresponding S/4 CDS views.

Three new fields, Source System Identifier, Date and Time will be added to each of 1TL\* tables.

### 1TL\_CNTR0L\_SERFCODES

The **ESG reporting** for Syensqo is done via **Serf Codes**. The **waste transport document** is the main controller of the waste KPIs, it contains **R&D code** which are **mapped** to **Serf Codes**. Further the serf codes are **classified into categories** which help to classify waste into **disposal or recovery** types. The mapping file will be provided by the functional consultant, which will be then uploaded into this table.

Below are the columns from the mapping file,

- **R&D Code** - Code from the waste transport document
- **SERF Code** - Corresponding code for R&D code
- **Disposal Type** - Waste disposal type, e.g. incineration, etc
- **Recovery Type** - Waste recovery type, e.g. recycling, etc

### 1TL\_CNTR0L\_SCTWATERDPIFILTER

The **ESG reporting** for Syensqo is done via **Serf Codes**. The **Environment Management (EM) module** will hold all the input and calculated amounts for water management against various Serf Codes. A **subset** of these **Serf Codes** are only required by SCT and it will be configured using this table as a **control for mapping** what needs to be sent to SCT from Datasphere.

Below are the columns and values for the table,

Data Collection Name/ Serf Codes	Use Type	Stress Category	Water Source	Water Usage	Discharge Type	Water Losses (Custom Dimension)
E74000	C					Evaporative water losses
E74010	C					Non-evaporative water losses (leakages)
E74020	C					Water incorporated into end products
E74030	C					Water incorporated into waste materials
E113070 - AI	C	STRESS_CAT_05				

E74040	R			Cooling		
E74050	R			Process Water		
Calc	C					
E113078	W		Z_SOURCE_08			
E113065 - AI	W		Z_SOURCE_07			
E113065 - AI	W	STRESS_CAT_04				

## 1TL\_CNTROL\_SCTEMISSIONSDPIFILTER

The **ESG reporting** for Syensqo is done via **Serf Codes**. The **EM module** will hold all the input and calculated amounts for air & water emissions against various Serf Codes. A **subset** of these **Serf Codes** are only required by SCT and it will be configured using this table as a **control for mapping** what needs to be sent to SCT from Datasphere.

Below are the columns and values for the table,

This is still under discussion with S2S consultants.

## Harmonisation Layer

### 2TL\* Tables

Each **2TL\*** table in the **Harmonisation layer** will be populated from the corresponding **1TL\*** tables for each source system (**RoW and China**).

A **Source System Identifier** will be included as part of the **primary key** in the **2TL\*** tables to uniquely distinguish records originating from different source systems.

### 2VR\_S4HARM\_C\_EHSAmount

#### Purpose

Join EHS Amounts (from EM) with Data Classification data to create a reusable view for periodic amounts against various classifiers used in EM. This will provide contextual data combining amounts against serf codes.

#### Join

LHS: 2TL\_S4HARM\_C\_EHSAmountDex

RHS: 2TL\_S4HARM\_SYQI\_EHSDDataCollectionClsfrDex

Join Field: EHSAmountSourceUUID to DataCollectionUUID

Join type: Left outer join

Cardinality: 1:n

### Other 2VR\* Relational Views

Remaining each **2VR\*** view in the **Harmonisation layer** will be built on corresponding **2TL\*** tables. These views will be used to harmonise the data before applying business rules.

## Propagation Layer

### 3TL\_S2SEHS\_WASTEHistory

A **2 year history (.csv) file** for waste data will be **provided by Syniti** and uploaded into this table. The layout of the file is still under discussion and will be confirmed during the functional specification stage. Syniti will be responsible for all data mappings and validations and the file provided will be uploaded as is in Datasphere. No transformation to the base file is required in Datasphere.

## Reporting Layer

## Outbound Layer