# OGC SWE Pilot – general project plan

This document shall describe the general structure, objectives and timeframes for a possible project concerning the proof of concept of a SWE based life flow of environmental data.

## Participants

Umweltbundesamt (mainly responsible for the national implementation of SWE (Sensor Web Enablement Suite from OGC))

ATKINS DK (mainly responsible for the integration of data provided by services into the EEA ReportNet environment)

EEA (mainly responsible for user requirements and support in the integration into EEA ReportNet)

## Abstract

The main objective of the prototype project is a proof of concept for using OGC SWE technology as an INSPIRE compliant alternative for the current real time reporting. Besides the pure proof of concept, one of the further issues is to test the ability of SWE for reporting purposes for at least one environmental media. This shall be done by implementing SWE services based on an already existing national monitoring network using data available for reporting issues.

In addition, the data provided by the SWE services must be accessed and integrated into the EEA ReportNet Environment. This is a crucial part of the project, because it requires a redesign of the current reporting mechanisms, changing the data flow from the current push by member states to pull from the EEA. The near real time data will be provided by the deployed national SWE services but access tools must be implemented to access and integrate these data on EEA side.

The outcome of the project shall be a prototype providing a live flow of near real time monitoring data via SWE Services, integrated into the EEA portal.

## Project objectives

### original Suggestions By Jan Bliki

* EEA implementing life flows as a SensorWeb enabled network
* National implementation of SensorWeb on a existing network
* EEA to try to hook up using existing SensorWeb networks
* Understand the implementation costs

### Concrete project objectives

**Tasks on national side**

* Implementation and Deployment of SWE services on a national level
* Services shall at least one media (e.g. water or air monitoring data)
* Show how data available can be used for national reporting objectives
* Cost benefit analysis

**Tasks on EEA side**

* Integration of distributed SWE Services into EEA ReportNet environment
* Cost benefit analysis

**Non-objectives**

* establish sensors using SWE
* establish a sensor network
* make data available directly from sensor source

## Milestones & Deliverables

* Task 1.1
  + Requirements specification
* Task 1.2
  + Data model specification
  + Technical architecture specification
  + Ontology specification
* Task 1.5 and Task 2.5
  + Demonstration report
  + SWE Prototype for near real time data within ReportNet
* Task 2.1
  + Requirements specification for accessing SWE services
* Task 2.2
  + Service integration specification
* Task 3
  + Cost benefit analysis concept
  + Cost benefit analysis report

## Risks

The following possible risks factors have been identified and mitigation measures proposed:

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| **Risk** | **Mitigation Measures** |
| **Requirements not clearly specified** | Clear documentation of requirements, close cooperation and communication between ATKINS-UBA-EEA |
| **Requirements not available in time** | Define baseline requirements to be used for implementation |
| **Key member(s) of Project Team incapacitated/leaves** | Identify possible replacements within agency, wide base of experts |
| **IT system meltdown** | Effective maintenance, upgrade and back-up programme for hardware and data |
| **Accident occurs during project** | Company safety and operation measures |
| **Lack of management support** | Strong support assured by company directors |
| **Re-organisation, or organisational structure hinders project delivery** | Interdepartmental cooperation standard within agency |

## Specifications needed from EEA

These further specifications from EEA are necessary for a more detailed project plan as also for the successful realization of the project.

* Specification concerning the involved media and topics
* Specification concerning the planed data interface in the EEA
* Specification concerning ReportNet environment for integration