

(Projects submitting final reports after 1 January 2014 must use this format.)



LIFE Project Number
LIFE13 ENV/UK/000549

MIDTERM Report
Covering the project activities from **02/06/2014** to **31/12/2016**

Reporting Date
28/02/2017

LIFE+ PROJECT NAME or Acronym
Smarter Regulation of Waste in Europe - LIFE SMART Waste Project

Project Data

Project location	United Kingdom (Scotland, Wales), Belgium (Bruxelles-Brussels)
Project start date:	02/06/2014
Project end date:	31/05/2019 Extension date: <N/A >
Total Project duration (in months)	60 months (including Extension of 0 months)
Total budget	€ 4,325,101
Total eligible budget	€4,325,101
EU contribution:	€2,146,825
(%) of total costs	50%
(%) of eligible costs	50%

Beneficiary Data

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Instructions:

The final report must be submitted to the Commission no later than 3 months after the project end date.

One paper and one electronic version of the report is sufficient for the Commission. These documents must be sent in identical versions also to the monitoring team. The report must also be sent to the national authority.

Please refer to the Common Provisions annexed to your grant agreement for the contractual requirements concerning a final report.

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2. Executive Summary

The ‘LIFE SMART Waste’ project aims to demonstrate innovative ways of understanding, tackling and reducing waste-related crime for “challenging” waste streams. The project will develop, test and apply new and modern ways of working, and demonstrate direct interventions to assess and target illegality in waste streams. Its innovative aspect lies in the ‘collaborative approach’, where environmental bodies set intelligence objectives using common tools around shared areas of concern, then together identify and tackle illegality.

Challenging waste streams (those that are of low quality and value, or are difficult to treat) persistently attract criminal activities that profit at the expense of the environment and legitimate operators in Europe’s waste industry. These illegal practices are constantly changing and are not easily visible. For environmental and partner bodies, there are big gaps in understanding how such illegal markets behave and how to tackle criminal behaviour. This poses opportunities for innovation.

2.1 Assessment as to whether the project objectives and work plan are still viable

The LIFE SMART Waste Project objectives are still relevant and viable. The overarching goal of the Project is *to demonstrate innovative ways to understand, tackle and reduce waste crime*. Specific objectives are:

Objective 1 – Understand waste crime

To develop and demonstrate innovative intelligence gathering and analytical approaches to identify and understand significant waste crime issues (current and future) associated with “challenging” waste streams, problem waste operators and illegal waste activities.

Objective 2 – Tackle, reduce and evaluate

To design innovative intelligence-led interventions and demonstrate how these can be used to tackle significant waste crime issues and reduce their impacts in targeted areas associated with “challenging” waste streams, problem waste operators and illegal waste activities.

Objective 3 – Dissemination, learning and legacy

To communicate the project results and learning to others selling the benefits of the approach in tackling waste crime, and to influence European policy and legislative changes.

The Project is working towards achievement of all three aforementioned objectives. The LIFE SMART Waste Project has attracted interest from across Europe and continues to increase since its start in June 2014, clearly demonstrating the importance and need for this project and the relevance of its objectives. For example:

- At the Environmental Crime Task Force Conference in November 2014, Government Ministers from Scotland and Northern Ireland recognised that waste crime is a serious issue in Europe and that new ways of working are needed to understand and tackle it. They specifically referenced the LIFE SMART Waste project as a key means to develop and demonstrate the new and innovative tools and approaches needed.
- INTERPOL (intergovernmental organization facilitating international police cooperation) recognises the importance of the project and is actively engaging with LSW through:
 - [Environmental Compliance and Enforcement Committee \(ECEC\) Advisory Board](#), currently chaired by Calum MacDonald, SEPA’s Executive Director and Sponsor of the LSW Project Control Board; and

- [Pollution Crime Working Group](#) (PCWG) who will undertake complementary work alongside the LSW project utilising the LSW Intelligence Communications Hub.

The number of stakeholders already involved in the project and committed to undertaking complementary work through the External Steering Group or Intelligence Communications Hub is also increasing, again demonstrating the need and importance of the LIFE SMART Waste project. An updated list of External Steering Group members and other stakeholders who are expressing an interest in the project is presented in MTR Annex 7.1.1.

The work plan is still viable and is being well managed by the Project Control Board and Project Management, Technical, Communications and Accounting Team. On the technical side, work has already commenced on actions under Objectives 1 and 3 through work-stream delivery, workshops and individual meetings bringing together the expertise of SEPA and the Associated Beneficiaries, the External Steering Group and many others from across Europe.

A table containing project deliverables for the European Commission's approval is listed in Mid-Term Report (MTR) Section 7.

2.2 General Progress

The project formally launched at the Environmental Crime Taskforce Conference in Edinburgh on 26 November 2014¹. The key areas of focus from June 2014 to February 2015 was around the project start up; project governance, organisation and management, and the initial scoping and concept testing for technical actions and deliverables. From March 2015 the project has shifted to the design and procurement of the Intelligence Communications Hub taking forward key technical actions for the Intelligence Gathering Strategy, Development of Innovative Tools and Techniques, Partner and Stakeholder Engagement; and Dissemination.

Key project achievements in these areas are as follows:

1. Project governance, organisation and management

- Project Control Board established with first meeting held 03 November 2014 and regular meetings held thereafter
- Project organisation document approved by Project Control Board on 07 November 2014
- Project Initiation Document approved by Project Control Board on 18 February 2015.
- SEPA Senior Project Manager, Project Manager, Junior Project Manager, Communications Officer, Accountant and Associated Beneficiary Project Managers in place in January 2015
- SEPA Technical Team (Technical Team Manager, Intelligence Officer and Waste Specialist) and NRW Waste Specialist in post in August 2015 and 2 FTEs SEPA Intervention Officers in October 2016 and NRW Intelligence Officer in place in May 2016
- Recruitment process for outstanding Phase 2 Technical Team members (Intelligence Development Officer and Intervention Officer) ongoing at time of writing this report (January 2017)

¹ SEPA press release: <http://media.sepa.org.uk/media-releases/2014/scotlands-first-conference-on-environmental-waste-crime/>

2. Technical actions and deliverables

Progress has been made in the initial scoping, planning and testing of concept of the following key actions:

- Waste flow audits (B5)
- Financial investigation (B6)
- Waste tracking devices (B7)
- Remote sensing (B8)

A number of innovative tools and techniques were delivered, to end December 2016:

- Report on Barriers to Joint Working between agencies nationally and trans-nationally (B12) delivered in December 2015
- Interventions Design Manual (B14) delivered in April 2016
- Report on effective partnership working (B13) delivered in August 2016
- Draft Financial Investigation (Risk assessment) Tool (B6) delivered in December 2016.
- Intelligence Report No. 1 (B11) delivered in December 2016

3. Intelligence Communications Hub (B1, B2 and B9)

- The Intelligence Gathering Strategy (B2) for the Intelligence Communications Hub was produced in September 2015
- The Hub business requirements specification produced in collaboration with stakeholders to support Hub design and procurement, completed in September 2015
- Procurement of the collaborative platform software for the Hub completed in February 2016 with IBM Cloud Connection (S2) and the formal Hub contract signed with IBM on 19 April 2016
- Demonstrations of the Hub took place with external audiences (IMPEL and Interpol) in June 2016

4. Partner and stakeholder engagement

- Stakeholder workshops were held at External Steering Group meetings on 18 September 2014 and 27 November 2014. Environment Agency England, the Swedish Police and Dutch Police (also representing Europol) attended the meeting in November 2014 in addition to the formal External Steering Group members
- The LIFE SMART Waste External Steering Group met on a further two occasions during 2015; on 28 April 2015 in Brussels and in Glasgow on 26 August 2015. The latter meeting also included a workshop on barriers to joint working and interventions design and planning. This was attended by a wide range of stakeholders including the UK and Irish Environment Agencies, Police Scotland, Driver & Vehicle Standards Agency Enforcement for Scotland, Office of the Traffic Commissioner, HM Revenue & Customs, Health & Safety Executive, Marine Scotland, Keep Scotland Beautiful, Valpak, Scottish Business Resilience Centre and Scottish Environmental Services Association
- The LIFE SMART Waste project continued to forge a partnership with INTERPOL's [Pollution Crime Working Group](#) (PCWG). For example, meetings and workshops were held between the LIFE SMART Waste project and the Interpol Pollution Crime Working Group (PCWG) in Scotland on 6 and 7 June 2016. The PCWG will undertake complementary work alongside the LIFE SMART Waste Project using the new LIFE SMART Waste Hub (Intelligence Communications Hub)

- A formal Declaration of Cooperation between the LIFE ENPE and LIFE SMART Waste projects was signed on 22 November 2016. The declaration defines the scope of cooperation between the two LIFE-funded projects and confirms the willingness of each to cooperate to provide mutual support and exchange of experiences.
- Formal and informal meetings were held with a number of stakeholders; for example Scottish Environmental Crime Task Force, Police Scotland, Interpol, Europol, Dutch Police, Environment Agency England, HM Revenue & Customs, Care Inspectorate, Scotland Excel, SIA and Food Standards Scotland.

5. Dissemination

- The Dissemination Strategy (D1) was submitted in March 2015
- An ‘Inter-agency Networking Events Timetable’ was created in September 2015 to record the ongoing dissemination activity to enforcement agencies and industry representatives (D2) undertaken by the beneficiaries
- Preliminary activity to make policy makers and legislators aware of the project (D3) was undertaken in Scotland and Europe and an ‘EU Policymaker and Legislator Engagement Action plan’ is scheduled for completion Q1 2017
- SEPA and ACR+ continued to issue regular updates on project activities to wider stakeholders (D4) via press articles, web articles, web content, e-newsletters and social media
- The first of three [digital brochures](#) (D4) was published in English, Welsh, French, Dutch and German on 22 September 2015
- The project’s first annual [digital e-newsletter](#) (D4) was issued on 9 December 2015 and [second digital e-newsletter](#) was issued on 31 October 2016
- The project website (D6) continues to be updated and developed on an ongoing basis to suit the evolving needs of the project.

The project has a sound foundation as a result of this work. Key project deliverables and their status to end December 2016 are presented in MTR Section 4.2.8.

Work done under Project’s actions reaffirms the importance of the LSW Project objectives as well as valuable partnerships that have been established to date.

2.3 Project Issues

During the reporting period, the project has encountered a number of problems. Main issues that have been managed by the project team have arisen in the following areas:

- **Recruitment**

Delayed appointments of Technical Team members (Intelligence Analysts, Waste Specialists and Intervention Officers started in posts later than envisaged by the Grant Agreement). Together with the delayed recruitment of two outstanding Intervention Officers, this has resulted in an underspend in Personnel Category

- **Procurement**

Drafting of statement of requirements for the technical actions' deliverables and procurement processes have taken longer than estimated resulting in delayed appointment of contractors (by 2-4 months)

- **Budget Underspend**

The budget underspend (caused by delays in staff allocation/recruitment for the project) resulted in delayed MTR submission date (originally scheduled for June 2016)

- **Lack of Pilot stated in Technical Actions**

In the Grant Agreement, there is no provision of time dedicated to piloting tools, techniques and approaches before guidance and training are delivered and tools are shared with other environmental regulators. Additional time may be required for actions delivering innovative tools and approaches (B5, B7) whilst for some actions the time for testing out the new approaches has already been factored in the stage plans (B3, B8).

Detailed information on project issues is provided in the MTR section 4.2.2.

2.4 Summary Chapters Contained In Mid-Term Report

The main report contains the following chapters:

- **Chapter 1** – Contents table.
- **Chapter 2** – Executive summary listing the project's objectives and deliverables achieved from project start to 31 December 2016, for each of the seven work streams.
- **Chapter 3** – Introduction gives the background to the project, the environmental problem being addressed and the solutions with expected benefits.
- **Chapter 4** – Administration chapter describes the governance and project planning process used in the project together with any problems which have been dealt with.
- **Chapter 5** – Technical products' progress chapter gives progress on each of the technical actions and dissemination actions; with an outline of personnel involved, tasks completed to date and any issues faced.
- **Chapter 6** – Financial statement provides the overall project costs and any variances with the original budget. It also explains the financial procedures used in the project.
- **Chapter 7** – Lists all annexes and acronyms used throughout the report.
- **Chapter 8** – Covers the detailed financial report.

3. Introduction

Environmental Problem / Issue Addressed

High volumes of waste resources are generated in Europe and each year in the EU, its citizens throw away 2.7 billion tonnes of waste (Eurostat) with the overall trend for waste rising upwards (EEA, 2012). The increasing volumes of waste being generated and recycled in Europe in-hand with the increasing price, competition for scarce resources and the complexity of waste markets all provide opportunities for illegal activity.

Waste streams that are of low quality and value, or are difficult to treat, persistently attract criminal activities that profit at the expense of the environment and legitimate operators in Europe's waste industry. These illegal practices are ever-changing and are not easily visible. For environmental and partner bodies, there are big gaps in understanding how such illegal markets behave and how to tackle criminal behaviours. This poses major challenges, but also opportunities for innovation.

The overarching goal of the LIFE SMART Waste project is to demonstrate innovative ways to understand, tackle and reduce waste crime, with the following key objectives:

- **Objective 1 – Understand waste crime**

To develop and demonstrate innovative intelligence gathering and analytical approaches to identify and understand significant waste crime issues (current and future) associated with "challenging" waste streams, problem waste operators and illegal waste activities.

- **Objective 2 – Tackle, reduce and evaluate**

To design innovative intelligence led interventions and demonstrate how these can be used to tackle significant waste crime issues and reduce their impacts in targeted areas associated with "challenging" waste streams, problem waste operators and illegal waste activities.

- **Objective 3 – Dissemination, learning and legacy**

To communicate the project results and learning to others selling the benefits of the approach in tackling waste crime, and to influence European policy and legislative changes.

Hypothesis to Be Demonstrated/Verified by the Project

The LSW project will develop, test and apply new and modern ways of working and demonstrate direct interventions to assess and target illegality in waste streams. The innovative aspect lies in the 'collaborative approach', where environmental bodies will set intelligence objectives using common tools around shared areas of concern, then together identify and tackle illegality

Description of the Technical/Methodological Solution

The LSW Project will deliver the following products to create beneficial results for target audiences and stakeholders: A collaborative platform (Hub), interventions and case studies, reports, training packages and new practises/technologies that will be used to form coalitions with regulatory or enforcement bodies beyond the life of the project.

Expected Results and Environmental Benefits

The detection and disruption of a minimum of three illegal operations (in challenging waste streams) will be delivered within the project lifetime by joint interventions. Longer term results are expected to be realised across the UK as well as other EU Member States through the use of LSW products, resulting in environmental, financial and social benefits. Environmental and financial improvements will be realised through reduced costs to Member

States tackling waste crime and keeping more waste within the circular economy. Social benefits are associated with improved health and wellbeing of people living near illegal waste operations as a result of removing nuisances caused by illegal activities.

4. Administration part

4.1 Description of the management system

All project management documents, processes and activities are based on the contractual requirements of the LIFE SMART Waste Grant Agreement and the LIFE Common Provisions 2013. SEPA has adopted the PRINCE2 project management methodology to manage the Project. The LIFE actions have been separated into seven work streams, each owned and managed by a delivery lead/subject expert, as follows:

- Communications (Actions D1-D9)
- Intelligence Communications Hub (Actions B1, B2 & B9)
- Tools, Approaches & Techniques (Actions B3-B8)
- Investigations & Intelligence (Actions B10-B11)
- Interventions (Actions B12-B16)
- Project Impact Monitoring (Actions C1-C3)
- Project Management (Actions E1-E3)

In order to meet the aims and objectives set out in the Grant Agreement the Project Team have identified discrete products which will need to be delivered for each of the above work streams (MTR Annex 7.1.2 highlights delivery of products to end December 2016).

The Project is managed in timed stages (individual stage plans are annexed to the MTR):

Stage 1 – Work started on Hub, Intervention and Communication Actions (PR1 7.2.3)

Stage 2 – Work started on Tools, Approaches & Techniques Actions (MTR Annex 7.1.4)

Stage 3 – Work continues on Tools & Techniques and starts on Interventions and investigations (Stage 3 Plan baselined in January 2017, MTR Annex 7.1.5).

A Gantt chart is also presented in Figure 1 showing progress for each project action versus agreed timelines within the Grant Agreement.

The Project governance and Project roles and responsibilities are detailed in the Project Organisation document (MTR Annex 7.1.3).

External Steering Group

Provides direction and advice on the technical aspects of the Project. Its members actively promote the Project ensuring alignment between the Project and complementary work being undertaken by partner organisations and building legacy beyond the LIFE funding. Meet annually and organised by SEPA Project Manager and Junior Project Manager.

The External Steering Group continues to evolve as we move into the investigation and intervention phase of the project, with six new members joining in December 2016; Zero Waste Scotland, Glasgow Caledonian University, HMRC, Legambiente, Environment Agency England, and The Crown Office and Procurator Fiscal Service. A member of the LIFE+ ENPE project will also potentially join the ESG group, however this is to be confirmed at time of writing this report. One member withdrew from the External Steering Group during 2015 (Federal Office of the Environment Switzerland), as they felt Switzerland could not benefit from research of Intelligence issues within Scotland, also funding may not be available to implement new strategies. They will continue to remain a corresponding member

for the project and remain interested in the Project deliverables. External Steering Group members and other stakeholders who are expressing an interest in the Project are presented in MTR Annex 7.1.1.

Project Control Board

Responsible for ensuring the project delivers objectives of the Grant Agreement within time and financial budget. Manages project risks and issues. Meet monthly and organised by SEPA Project Manager and Junior Project Manager (Examples of meeting minutes presented in IR Annex 7.2.1 and MTR Annex 7.1.7).

Project Team

Made up of SEPA and NRW staff responsible for specific areas of delivery (work stream leads and project management staff). Responsible for the day-to-day running of the Project and delivery in line with the Grant Agreement. Meet weekly and organised by SEPA Junior Project Manager.

Changes were made to the structure of the project management and communications team following a detailed review of job requirements and specifications. These changes were discussed with NEEMO-GEIE on 01 October 2014 and the advice received was that these proposed changes would not be seen as a significant modification to the Project from the Grant Agreement.

The letter received from the European Commission on 13 April 2015 (full letter presented in PR1 Annex 7.2.6, Point: Project management structure) acknowledged the proposed changes to the structure of the core project management team as detailed in IR Annex 7.5. The EC whilst agreeing in principle with the rationale for increasing the resources available for a Business Analyst post, requested for the impact of project management changes to be monitored for any effects on delivery of the project, especially in light of the reduction of senior level input. An update was requested with the next formal progress report and the External monitor is to be updated with any further changes to the staffing structure.

At time of writing this report during January 2017, the impact of project management changes were evaluated; there is 0.3FTE of the Senior Project Manager Resource allocated to the Project and no adverse effects noted on the Projects delivery. The Project Team following Stage 3 planning meetings have however identified the need for additional staff resource in the area of administrative project support, intelligence and interventions, and dissemination. The workloads in those areas was underestimated in the Grant Agreement and additional Project Team resource (pending team decision on prioritised staff resource) will be recruited early 2017 utilising the current budget underspend within the current Project budget. Full details will be presented in the next EU report (Progress Report No. 2, submission date 31 January 2018).

4.1.1 Reports delivered to European Commission

The memorandum of agreement (partnership agreement) was included in the Inception report, accepted by the EU on 23 March 2015.

The revised report submission schedule was included in Progress Report 1, accepted by the EU on 09 January 2017 and is presented below:

Progress Report Name	Beneficiary reporting period	Due Date to EU	Date Submitted to EU
Inception Report	02/06/2014 – 28/02/2015	28/02/2015	27/02/2015
Progress Report No. 1	28/02/2015 – 30/06/2016	16/09/2016	16/09/2016
Mid-Term Report	02/06/2014 – 31/12/2016	28/02/2017	28/02/2017
Progress Report No. 2	01/01/2017 – 31/12/2017	31/01/2018	N/A
Progress Report No. 3	01/01/2018 – 31/12/2018	31/01/2019	N/A
Final Report	02/06/2014 – 31/05/2019	31/08/2019	N/A

No extension to project duration is currently envisaged.

(Projects submitting final reports after 1 January 2014 must use this format.)

4.2 Evaluation of the management system

The methodology has worked well to date, the first two stage plans have been delivered and Stage 3 (October 2016 to September 2017) is progressing well. Lessons learned meetings were held allowing the Project to continually improve through the Project Team's reflection on how the Project was managed, progress of Project deliverables and any challenges faced. (MTR Annex 7.1.8 and 7.1.9).

4.2.1 Problems Encountered

The Project has experienced problems with obtaining resources and procurement of goods and services. As a result there have been delays to the delivery of some products. Mitigation of these problems through for example establishing interim staffing arrangements has ensured that they will not impact on the timely completion of the Project and the delivery of products to required time and quality. Despite delays with delivery of some of the technical actions the overall Project remains on schedule. Budgetary impacts have been managed within the context of the overall Project budget. Some Project actions will not be completed by the dates set out in the Grant Agreement due to the problems outlined below.

Recruitment

A detailed review of the job requirements and specifications was required prior to recruitment for the project management, communications, technical and accounting staff. Staff in post in January 2015. Problems of recruiting a Business Analyst (BA) were resolved using a SEPA's Senior BA. The delay in appointment of Technical Analyst was mitigated by securing a contractor to deliver action B1. Delay in appointment of 4 FTE Technical staff was mitigated in part by SEPA staff (2 FTE) to support key actions. The recruitment for the other two posts Intelligence Development Officer and Intervention Office was approved November 2016 and recruitment is underway. Delays in the appointment of an Intelligence Officer for NRW was mitigated by the NRW Intervention Officer covering much of the required work until the Intelligence Officer was appointed in May 2016. The IO requires training to fully support the Project. There had been a delay in finalising the Targeted Dissemination Strategy which was due in December 2014 due to delays in the recruitment of the Project Communications Officer.

Procurement

The Project has managed significant delays in procurement for actions B3, B4 and B8. The niche area of expertise required to deliver action B3 meant that three rounds of recruitment were required before a successful candidate found in July 2016.

For actions B4 and B8 it took longer to prepare and evaluate the tender documentation than anticipated. Both suppliers were appointed in November 2016. The delivery of B4 is postponed by three months to June 2017. For B8 SEPA secured an innovation internship for 6 months to deliver aspects of this action. The original approach of using a PhD student to undertake this work proved to be too challenging to deliver. Despite this it is anticipated that this action will deliver on schedule by September 2017.

Budget Underspend

Due to the delays noted above and also from some Project staff not recording their time to the Project correctly the MTR was delayed due to the threshold 150% spend of initial upfront payment not being reached by June 2016. The threshold spend was achieved in November 2016 (5 months delay in reaching the threshold of €1.288.095) with the current expenditure to date of €1.384.125. All SEPA and Associated Beneficiary staff allocated to the Project have

now ensured all time allocated to the Project is recorded appropriately. The Project schedule has been reviewed and adjusted to ensure delayed work is completed within an acceptable timeframe.

4.2.2 Partnerships and their added value

Partnership is fundamental to success of the LSW project as collaborative working with partners provides greater capability and ability to tackle waste crime. The number of partners already involved in the Project and committed to undertaking complementary work through the External Steering Group or Intelligence Communications Hub is increasing. A list of External Steering Group members and other stakeholders who are committed to undertaking complementary work alongside the project is presented in MTR Annex 7.1.1.

4.2.3 Deviations from Arrangements Contained in Partnership Agreement

List of deviations from partnership agreement, as follows:

1. Schedule changes

There have been delays in the delivery of individual technical and evaluation actions:

- Action B3 – due to unsuccessful procurement, the action has not delivered by May 2016 as per the Grant Agreement. Discussions with NEEMO confirmed the action’s delivery could be postponed to allow testing of the new approach. Delivery of the action has been agreed with supplier Christophe Bisson as September 2017.
- Action B4 – delayed by 3 months due to longer procurement, delivery estimated by June 2017.
- Action B5 – has not delivered by September 2016, due to higher complexity of work which is still ongoing. It is the intention to carry on with work under action B10 (design a collaborative investigation bundle) and action B15 (pilot consolidated approach by cross-agency intervention).
- Action B11 – first Intelligence Report delivered 3 months later than estimated.
- Action B10 – action has not fully started yet.
- Action B15 – action has not fully started yet.

Detailed information is provided in Technical Section 5.

2. Change in approach to actions

In terms of delivering feasible and effective toolkits it will be necessary to carry out small scale pre-testing so that the Project can identify points of weakness and failure that can be resolved prior to the final release of the products to the wider regulatory community. Conducting pilot projects will allow the LSW Project to assess reliability of approaches, collect preliminary data, uncover potential problems and convince potential users to adopt the toolkit in their own areas of work. Pilots are to be factored in some of the technical implementation actions: B3, B4, B6, B7 and B15 (for B5).

3. Scope of Intelligence Communication Hub

The Intelligence Communication Hub platform provides a collaborative space for stakeholders interested in waste related topics. It does not provide the means to exchange intelligence (classified OFFICIAL-Sensitive and above) as these were already in existence. Procurement for a platform enabling exchange of sensitive material would need to be risk assessed which would take substantially more time than the Project has at its disposal.

4.2.4 Communication with the EU & Monitoring Team (NEEMO-GEIE)

LIFE+ monitor Chris Rose (from December 2014 to May 2016)

LIFE+ monitor Hannah Wilson (from June 2016).

Communication with the EU and the LIFE monitoring team NEEMO-GEIE has proved to be supportive and informative.

Emails and phone calls have taken place with NEEMO to discuss any project issues (e.g. delivery date changes for EU reporting). The Project Manager also sends project monthly highlight reports to the monitoring team, to provide a high level overview of project's progress. Visits and meetings as detailed below:

- **17 February 2015** – NEEMO's first visit to SEPA Strathallan Office as an introduction, to meet the SEPA project team and review the progress of the project, the inception report, communication materials and the financial reporting system.
- **11 December 2015** - SEPA project manager and finance assistant participated in the all UK and Ireland LIFE funded projects conference, focusing on sustainability of LIFE+ co-funded projects' products.
- **01 August 2016** - NEEMO's second visit to SEPA to review the Mid-Term Report, provide feedback and first visit for NEEMO's monitor Hannah Wilson (and Lynne Barratt senior NEEMO member) to meet the Project Team. It was agreed with the monitor at this meeting that the project would submit a Progress Report instead of the Mid-Term Report by 16 September 2016.

4.2.5 Progress against project deliverables

Action number and name	Grant Agreement Deadline	Amended Deadline	Completed Status	Location Deliverable for EC Approval
D6 – LIFE SMART Waste project website	05/12/2014	-	Completed	PR1 Annex 7.3.24
B1 – Innovative intelligence communications Hub design, specification and protocols	30/09/2015	30/09/2015	Completed	PR1 Annex 7.2.8 and 7.2.9 MTR Annex 7.2.21
B2 – Intelligence Gathering Strategy	30/09/2015	30/09/2015	Completed	PR1 Annex 7.2.11
B12 – Barriers to joint interventions report	31/12/2015	31/12/2015	Completed	PR1 Annex 7.2.17
B9 – Intelligence Communications Hub Deployment and Testing	31/01/2016	31/03/2018	In progress	MTR* Annexes 7.2.27, 7.2.28, 7.2.29
B13 – Group structure specification report	31/03/2016	31/08/2016	Completed	MTR Annex 7.2.31
B14 – Innovative design manual and interventions menu	31/03/2016	30/04/2016	Completed	MTR Annexes 7.2.32,

				7.2.33, 7.2.34
B3 – A competitive behaviour analytical tool – for use by environmental authorities for waste markets	31/05/2016	30/09/2017	In progress	-
B6 – A guidance and training package for innovative financial investigation approaches and associated tools	30/09/2016	31/03/2017	In progress	MTR* Annex 7.2.25
B7 – A guidance and training package setting out the waste tracking approach	30/09/2016	30/11/2017	In progress	MTR* Annex 7.2.26
B5 – Guidance and training package for innovative waste flow audit approaches – setting out the approach and associated tools	30/09/2016	27/02/2017	In progress	MTR* Annex 7.2.24
B15 – Intervention bundle 1	31/12/2016	31/05/2017	In progress	-
B10 – Investigation bundle 1	31/12/2016	30/04/2017	In progress	-
B10 – Investigation bundle 2	31/03/2017	30/09/2017	Not started	-
B4 – Training package with guidance and associated tools – for the emerging threats and predictive analysis approach	31/03/2017	30/06/2017	Not started	-
B8 – Pilots of the novel remote sensing approaches, reports and intelligence products	30/09/2017	-	In progress	-
B15 – Intervention bundle 2	31/12/2017	-	Not started	-
B10 – Investigation bundle 3 & 4	31/12/2017	-	Not started	-
B9 – Three packages of intelligence and data produced by the Hub	31/12/2017	-	Not started	-
B11 – Four intelligence and investigation reports	30/03/2018	-	In progress	MTR Annex 7.2.30
C1 – Evaluation reports for market trend, waste crime horizon scanning and predictive analysis, innovative intelligence gathering tools and intelligence communication Hub	30/06/2018	-	Not started	-
D2 – Agency and industry representative reports, user manual, training pack and online tool kit	28/09/2018	-	In progress	-
C2 – Four intervention evaluation and case study reports	31/12/2018	-	Not started	-
B15 – Intervention bundle 3	31/12/2018	-	Not started	-
B16 – Three policy and legislative intervention recommendation reports	31/12/2018	-	Not started	-
D3 – Policy recommendation report and EU briefing papers	15/02/2019	-	In progress	-
D9 – Brussels conference	30/05/2019	-	Not started	-
D8 – "After LIFE +" communication plan	31/05/2019	-	Not started	-
C3 – Project evaluation and final project report	31/05/2019	31/08/2019	Not started	-

- = Not Applicable.

* = Project deliverables in progress, sub-products referenced (B5, B6, B7, B9).

IR = Inception Report. Date of Submission to EU 27/02/2015

PR1 = Progress Report 1. Date of Submission to EU 16/09/2016

MTR = Mid-Term Report. Date of Submission to EU 28/02/2017

4.2.6 Envisaged progress until next report

The next report supplied to the EC in January 2018 will be the Progress Report No. 2 providing an update from January 2017 to December 2017. This report will include progress on the following actions:

- B3 – Work in progress on competitive intelligence and market analysis toolkit (work ongoing by December 2016)
- B4 – Work underway on horizon scanning and predictive analysis tools (work ongoing by December 2016)
- B6 – Delivery of financial investigation toolkit completed (completion anticipated by March 2017)
- B7 – Progress of the action will deliver a pilot outline (including feasibility assessment – if found feasible then procurement, training and test deployment are envisaged to follow by October 2017) (work ongoing by December 2016)
- B9 – Hub Testing: all technical products will be put on the Hub to enable their utilisation and further development. Increase number of stakeholders to collaborate on the Hub – Associated Beneficiaries and Stakeholders. Three packages of intelligence and data will be produced utilising the Hub by Q2 2018
- B11 – Delivery of Intelligence Report No. 2 (work ongoing by December 2016)
- B15 – Set up of inter-agency intervention groups in progress (work ongoing by December 2016)

5 Technical part

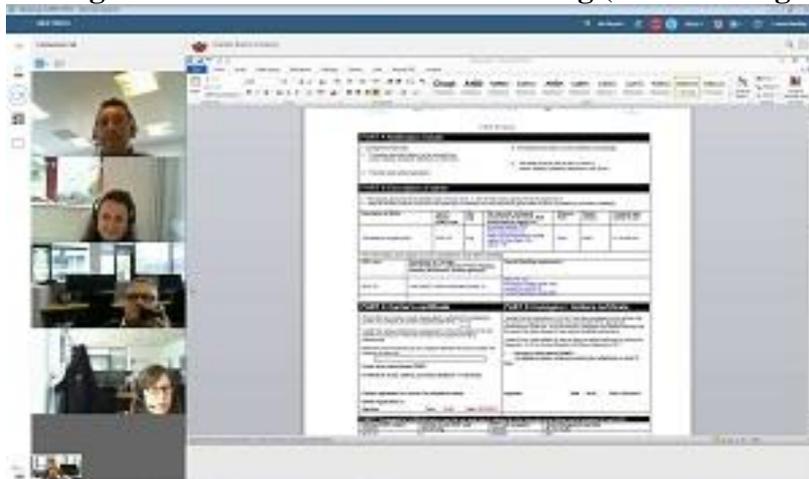
5.1. Technical progress, per task

5.1.1 Action B1 - Design an innovative intelligence communications hub

Project personnel involved

Business Analyst, Technical Analyst, Technical Team Manager, Business Assurance, Intelligence Officer (SEPA), Waste Specialist (SEPA), Communications Officer, SEPA Information Security Officer & SEPA Internal Intelligence Team Members

Intelligence Communications Hub meeting (UAT Testing August 2016)



What has been done?

- Initial discussions and testing of concept with INTERPOL at their offices in Lyon in August 2014
- Presentation on concept to the Pollution Crime Working Group (INTERPOL) at Interpol offices in Lyon in November 2014 (IR Annex 7.2.4)
- Initial scoping of the requirements of the innovative intelligence communications hub through a workshop with External Steering Group members and experts from other interested parties (Environment Agency England, Dutch Police/Europol, Swedish Police) at a meeting of the External Steering Group in November 2014 (IR Annex 7.2.2)
- Presented the project to EnviCrimeNet (Europol) in The Hague in November 2014. Significant support for an intelligence communications hub was expressed (IR Annex 7.2.3)
- Informal discussions have been held with Police Services Scotland about the logistics of establishing the Hub.
- SEPA Business Analyst appointed to the project in April 2015, external assistance of Technical Analyst procured in June 2015, Project Manager (SEPA) coordinated work on specifications for the Hub from April to September 2015.
- Intelligence Communication Hub Product Description produced in collaboration with Associated Beneficiaries, ESG members (ESG meeting agenda April 2015 presented in PR1 Annex 7.2.7), external stakeholders and approved by the PCB in June 2015.

- Identification of appropriate stakeholders to participate on the Hub has started in April 2015 (reps on PCWG and those within the project)
- High Level Business Requirements document prepared in collaboration with business and external stakeholders (INTERPOL, SESA, NIEA) during May to July 2015 and refined into Business Requirements Specification document finalised in July 2015 (MTR Annex 7.2.21)
- Recommendation Report and Hub High Level Design Document delivered (PR1 Annex 7.2.8 and 7.2.9) and approved by PCB in September 2015
- Design and description of Hub information security protocols (Governance documentation) started (during Stage 1 of the project) and progressed further under Action B9 (during Stage 2) with approval in June 2016
- Procurement of the Hub was managed via Scottish Government framework G-Cloud 6, with 23 potential suppliers identified
- Shortlist of 5 potential suppliers produced and evaluated by the project team resulting in IBM being chosen as the preferred supplier in February 2016 and contracts signed April 2016
- Live system IBM Cloud Connection (S2) in use from June 2016, with availability of up to 50 licenses
- Ongoing User Acceptance Testing from June 2016 captured under Actions B1 and B9

Problems/ timings/ impacts

The duration of this action as per the Grant Agreement was from 01 March 2015 to 30 September 2015.

Work commenced on this action ahead of schedule, however the Technical Team and Technical Analyst responsible for taking forward this action were not in place until beginning of April and July 2015 respectively. Therefore this action was one month behind schedule due to recruitment issues as discussed in Section 4.2.2 above.

The issue of delay in recruitment of the technical team was mitigated by tapping into the expertise of the External Steering Group, the Scottish Environmental Crime Task Force and other interested parties to start scoping the user requirements of the Hub (see what has been done above).

Regular workshops within SEPA and externally were held from April to July 2015 and were facilitated by the Business Analyst to produce the product description and high level user requirements catalogue for the Hub. The document was further refined during August and Hub High Level User Requirements document approved by the business in September 2015.

Intelligence Communications Hub specification and high level design were delivered on schedule in September 2015. However, completion of the Hub governance documentation was ongoing until November 2016. Extension of the deadline for delivery of the Hub protocols was discussed and endorsed by NEEMO-GEIE prior to that.

Finalisation of Hub Detailed design document and Governance documents was delayed until completion of the Hub design. This is due to the dependency of the governance documents on the technical details of the Hub system (Hub protocols are based upon the final design of the IBM software solution).

More time will be required for adoption of the platform by staff utilising the Hub in their daily tasks than originally envisaged.

Link between the Hub and Europol via Eco-message has been put out of the scope of the LSW project due to the fact that means for sharing classified intelligence between enforcement agencies (Eco-message) was already existent at the point of gathering of the

business requirements for the Hub. Therefore it would not only be counter-productive to duplicate the existing link but also might not be possible to deliver the system by agreed deadline (as such system would have to undergo a profoundly more complex technical risk assessment which is time and resource consuming).

Meeting objectives?

Yes, the work undertaken on this action has demonstrated that the concept of the Hub collaboration platform is viable and proved that there is significant interest in developing the Hub from INTERPOL and other stakeholders. The Hub provides a collaborative platform for information classified up to OFFICIAL therefore intelligence classified OFFICIAL-SENSITIVE and higher will be shared out with the Hub via already agreed systems and protocols. The Hub will provide an IT connection between law enforcement stakeholders, academia and industry representatives to elaborate on issues relating to waste crime. This action is therefore meeting its objectives.

5.1.2 Action B2 - Develop an intelligence gathering strategy for intelligence communication hub

Project personnel involved

Technical Team Manager, Business Analyst & Internal SEPA Intelligence Specialist

What has been done?

- Work commenced on this action in March 2015 as per the schedule. However, initial discussions had taken place ahead of the schedule with the External Steering Group members, the Scottish Environmental Crime Task Force and other stakeholders across Europe who showed interest in sharing intelligence for this project
- Workshop held with ESG during April 2015 (ESG meeting agenda PR1 Annex 7.2.7)
- Intelligence Gathering Strategy Product Description prepared by Project Manager and Technical Team Manager and discussed with internal SEPA Intelligence Team in June 2015 (PR1 Annex 7.2.10)
- LSW Business Assurance provided feedback on the draft prior to external circulation for input
- The initial Intelligence Gathering Strategy was produced and circulated for review to Associated Beneficiaries and partners including EPA Ireland and Police Scotland in June 2015
- Feedback on Intelligence Strategy version 0.3 received from NRW, NIEA, SEPA EST Intelligence and SEPA Waste Crime Team during August and September 2015
- The Intelligence Gathering Strategy version 1.0 was approved by the Project Board in September 2015 (PR1 Annex 7.2.11).
- Further development / revision of the Intelligence Gathering Strategy is being planned for March 2017 to align the Strategy with SEPA Waste Crime Strategy

Problems/ timings/ impacts

The duration of this action as per the Grant Agreement was from 01 March 2015 to 30 September 2015.

Work commenced on this action ahead of schedule, however the technical team responsible for taking forward this action were in place at beginning April 2015, one month behind schedule due to recruitment issues as discussed in Section 4.2.2 above. The issue of delay in recruitment of the technical team was mitigated by tapping into the expertise of the External Steering Group, the Scottish Environmental Crime Task Force and other interested stakeholders.

The action was delivered on schedule however, further work on this action needs to be undertaken to align the Intelligence Gathering Strategy to SEPA Waste Crime Strategy in Q1 2017. There is no negative impact anticipated on the action or the project's overall budget.

There has been a delay with application of the Strategy to information shared on the Intelligence Communication Hub as a specific work package to provide a topic for cross-agency collaboration on the Hub is still in development.

There may be issues in relation to data sharing over the Hub arising once genuine collaborative work with external stakeholders starts on the Hub. It yet needs to be worked out with project partners utilising the Hub platform what the obstacles to the data sharing over the Hub are. Individual Hub users will have to abide by Hub Terms and Conditions, apply their own risk assessment prior to sharing data as well as their own organisations' data sharing

rules. The risk of Hub users being in breach with data sharing has been mitigated by production of a risk paper for SEPA SIRO; listing conditions which the Hub needs to fulfil and the Hub Protocols providing a controlled environment for data sharing. These conditions were met by the Hub platform and Hub Governance documents, delivered under action B9.

Meeting objectives?

Yes. The Intelligence Gathering Strategy will continually be reviewed and updated as required, to ensure it remains applicable to ongoing work in the project.

5.1.3 Action B3 – Design and demonstrate innovative methods to understand and analyse competitive behaviour in waste businesses and market trends and how this relates to waste crime

Project personnel involved

Technical Team Manager, Business Assurance, Waste Economist & Christophe Bisson (External Assistance)

What has been done?

- Technical team engaged with academic and professional experts to gauge feasibility of the Action B3 and its approach (Sheila Wright of Strategic Partnerships Limited and Craig Fleischer, Aurora WDC, Madison, Wisconsin, USA)
- The documentation to procure for an external contractor (Statement of Requirements and Evaluation Matrix) was developed in collaboration with the business during September to October 2015
- Two rounds of procurement took place between October 2015 and March 2016
- The first round resulted in one tender submission received which was found of lower quality than required and the tender was cancelled
- Statement of Requirements (SoR) has been refined to extend the period for delivery of the B3 products (adding 50-100% of extra time)
- The second round of tender resulted in no responses received and was cancelled as well
- Project Manager (SEPA) co-ordinated further discussions with the Technical Team and Business Assurance. As a result, the SoR was refined substantially adding extra time for delivery of more specified deliverables
- The third round of procurement has led to an appointment of a contractor Christophe Bisson (CI researcher, sole trader) during September 2016
- Inception meeting held with Christophe Bisson and schedule of deliverables agreed at beginning of October 2016 (meeting notes in MTR Annex 7.2.22)
- Draft Phase 1 Desk-Top Research Report delivered in December 2016 and currently being reviewed and commented on by the project team members
- Work on Phase 2 Framework Report underway and draft anticipated in January 2017

Problems/ timings/ impacts

The duration of this action as per the Grant Agreement was from the 01 October 2015 to 31 May 2016.

This action is behind schedule as competitive intelligence is a niche area of expertise that has not been applied to waste crime previously and therefore it has been difficult to appoint suitable external assistance for this action. Due to above outlined issues with procurement for the resource it was necessary to re-scope the delivery timeline of this action. It was agreed with NEEMO-GEIE this action can deliver a year later so long as there is going to be sufficient time to pilot the new approach and toolkit. Build of initial pilot under action B3 will commence in Q2 2017. A competitive behaviour analytical tool on waste markets is anticipated to be delivered by September 2017. Pilot of the toolkit is planned as part of investigation and intervention work (Actions B10 and B15). However, it may be required to schedule in time for piloting of the toolkit before it can be shared with other regulatory agencies. The impact on the project is considered low as there is sufficient time to trial the competitive behaviour analytical tool on the Hub until the end of the project in May 2019.

Another issue experienced lately has been around clarity and practical application of this work. Despite emphasis on non-specialist readership of the Phase 1 Report the product has been delivered in academic language which is difficult to access by audiences with no CI expertise. Meeting will be organised in January/February 2017 to seek assurance from the supplier that this can be rectified and revised products delivered.

Meeting objectives?

Yes, this action is still anticipated to meet its objectives. Work being undertaken fully delivers on the innovation criteria for the project as no competitive analysis of commercial waste market has been done yet (according to the accomplished desk-top research).

5.1.4 Action B4 – Build and demonstrate an innovative emerging threats and predictive analysis tool and approach for waste crime

Project personnel involved

Technical Team Manager, Business Assurance, & Cranfield University and Waverley Consultants (External Assistance)

What has been done?

- Statement of Requirements (SoR) document drafted by the project team for procurement of external assistance
- Draft SoR consulted with internal SEPA horizon scanning experts
- Suggested amendments were factored in the specification during July 2016 and tender published in September 2016
- It is envisaged this action will be undertaken by a research team or at least two individuals specialising in market research, emerging threats and horizon scanning and predictive analysis intelligence
- Procurement documentation (SoR and evaluation matrix) finalised and published during September 2016
- During October 2016 three meetings were held to evaluate 8 tender submissions received. The evaluation was completed reaching consensus on the preferred supplier in November 2016
- Inception meeting with Cranfield University and Waverley Consultants (sub-contractor) held at beginning of December 2016 (meeting notes in MTR Annex 7.2.23)
- Planning of initial workshop to gather external requirements for the predictive analysis tool has commenced in December 2016
- Work on Phase 1 Desk-Top Research Report commenced in December 2016 and draft expected in January 2017

Problems/ timings/ impacts

The duration of this action as per the Grant Agreement is from 01 June 2016 to 31 March 2017.

The procurement process has taken longer than estimated due to a minor internal delay with publishing of the tender documentation and subsequent time to evaluate four tender submissions. The prolonged procurement has resulted in a delay appointing the external supplier, who has requested for the original schedule to be upheld. It has been agreed that this action will deliver about 3 months later (than envisaged in the Grant Agreement) by end of June 2017.

Meeting objectives?

Yes, this action is expected to deliver its objectives.

5.1.5 Action B5 - Develop innovative waste flow audit approaches

Project personnel involved

Technical Team Manager, Waste Specialist, Intervention Specialist (all SEPA), Waste Specialist (NRW), Project Manager (NRW), SEPA Intelligence Team, SEPA Regulatory Services Local Team Members, SEPA Senior Scientists, SEPA Scientist

What has been done?

- Work commenced ahead of schedule; a workshop was held on waste flows and auditing approaches with the External Steering Group and other interested stakeholders at an External Steering Group meeting in Edinburgh in November 2014 (IR Annex 7.2.2)
- The technical team delivering this action was in place in July 2015
- Number of external meetings and workshops were held on waste flows through the year by SEPA (e.g. meetings with ZWS about use of eDoc; with Environment Agency, NRW and NIEA about waste flows work; with NRW about eTool including its demonstration to see if it could be adapted to waste flows monitoring) as well as SEPA internal meetings (with waste data officers to explore quality of data available for analysis held in SEPA datasets)
- A waste data report was produced by NRW during March 2016 assessing the value and feasibility of “waste flows” as indicators/early warning of waste crime (PR1 Annex 7.2.12)
- During April 2016, SEPA began a similar exercise to that carried out by NRW; analysing SEPA waste data and intelligence to produce a report which had assessed the value and feasibility of “waste flows” as indicators / early warning of waste crime
- The Technical Team Manager gave a presentation on waste flow audit approaches to the PCB in May 2016 and endorsement was received for further exploration of waste flows’ work (pilot study) beyond end of this action (September 2016)
- Internal SEPA workshop prepared and held during August 2016 and findings submitted to SEPA Waste ODT to approve and deploy resources on the pilot
- SEPA Technical Team supported by SEPA Local Operations team members visited waste operator sites to collect material for subsequent analysis during September 2016
- Challenging waste streams “waste crime indicators” report was produced in October 2016 and presented to the PCB in November 2016 (MTR Annex 7.2.24)

Problems/ timings/ impacts

The duration of this action as per the Grant Agreement was from 01 October 2015 to 30 September 2016.

This action has not been fully delivered by end September 2016, due to:

- (1) B5 staff resource being allocated to other actions within the project,
- (2) Pilot project being proposed as an additional step (to precede production of the toolkit and guidance)
- (3) Work undertaken has proved more complex and challenging than originally envisaged (further described below).

It has not been possible to design an innovative approach that meets the specific objectives of being less complex, less time consuming and less labour intensive. The primary reason for this is that the delivery of these objectives was based on assumptions that have (at least in the context of the time and resource available to this activity) proved to be inaccurate. The

activity assumed that data was suitably robust, accurate and in a form that allows for innovation in audit. The Project's work has shown that this assumption was wrong; data is often inaccurate and lacking detail. Moreover, data collection is still predominantly paper-based and this means that data cleansing and collation must take place on a large scale before analysis is considered.

All of this precludes effective analysis and has hindered the development of the B5 action deliverables. In addition, it became clear that the scale of the issue is beyond the capacity available to the activity within the Project. The project team concluded that this activity will require a broader, participatory group from across multiple environmental agencies, and this is the LSW Project's proposal for development in the second half of the Project.

Original budget for this action was €61.628. Owing to aforementioned challenges (more time was required to elaborate on this action due to higher complexity of the work) the action has overspent on personnel by €49.431 (80%). The overspend has been accommodated within the overall Project budget. Further work planned to be undertaken on waste flows auditing will be carried out as a pilot and budgeted for under interventions action B15.

Aim is to bring the B5 action's learnings together and design a collaborative investigation bundle (Action B10) allocating more resource to the action B10 to explore if this approach would add value by obtaining useful intelligence. Furthermore, it is the LSW intention to bring a proposal to the PCB to carry out a pilot on action B5 under action B15 (cross-agency interventions) to produce a consolidated, streamlined approach. Also, considerations will be given to collating the action's learning into a policy recommendation report (Action B16).

The project is seeking the Commission's agreement to carry out the pilot under Action B15 after December 2016.

Meeting objectives?

This action has not fully met its objectives. The following products (as per the Grant Agreement) have not been delivered: waste flows audit toolkit, guidance and training on use of the toolkit. The Project will attempt to deliver these at a later stage if at all possible, though no guarantee can be given at this stage. However, there has been a greater scope in learning of the agencies involved, findings include that there is a requirement for an electronic system to track the waste flows efficiently. However, it is clear from work undertaken to date that the issues around waste flow monitoring and auditing affects other regulators across Europe and joint work is going to be required to address this issue. A collaborative waste flow approach is required with partnership approaches to tackle the series of issues beyond individual agencies' capabilities. Learnings from this action will be proposed to be taken forward as investigation bundle pilot under Action B10.

5.1.6 Action B6 – Develop innovative financial investigation approaches

Project personnel involved

Technical Team Manager, Business Assurance, Intelligence Officer (SEPA), Waste Economist & Cranfield University (External Assistance)

What has been done?

- External procurement route (Public Contract Scotland) was used to secure external assistance during September 2015
- Two tender submissions received and evaluated during November 2015
- The contract was awarded to Cranfield University and signed in January 2016
- Project Manager has scheduled and manages a series of progress meetings (mainly teleconferences, face-to-face meetings at the outset and finish of the action) to monitor progress, mitigate risks and provide information the contractor requires to deliver the action to the specification
- Due to limited availability of the supplier's team members, the Inception meeting (face-to-face meeting) took place later than planned in March 2016
- Phase 1 (Desk top assessment research) conducted and Literature review delivered in May 2016 (PR1 Annex 7.2.13)
- Phase 2 Recommendation Report delivered July 2016 (MTR Annex 7.2.25)
- Enforcement cases submitted to Cranfield for testing and validation of the new financial investigation tool during August 2016
- Draft financial investigation tool introduced to SEPA Project team in October 2016
- Draft guidance document on use of the Tool produced during November and December 2016
- In addition to the original specification of work, a workshop has been planned to test and validate the Tool; by demonstrating to external stakeholders and factoring their feedback into the final versions of the products
- Preparations for the workshop took place during December 2016 (workshop planned for January 2017)
- Delivery of final Financial Investigation Toolkit anticipated by March 2017

Problems/ timings/ impacts

The duration of this action as per the Grant Agreement was from 01 October 2015 to 30 September 2016.

There has been a slight delay with appointment of the external supplier, who has also requested for the original delivery period to be upheld (as per specification of requirements) to complete this action. This meant that the Toolkit would not be delivered until November 2016 at earliest. This amendment has been discussed and endorsed by NEEMO-GEIE in September 2016. This had no impact on budget.

During the desk research it became clear that UK environmental regulators may not have as wide access to financial information required for financial investigation (due to restrictions in Scottish/UK legislation) as originally anticipated, which was reflected in a reduced scope of the Tool. However, this product delivers well on innovation criteria for LSW Project deliverables as financial risk assessment has not been undertaken by environment regulatory agencies to date. Development of a pilot project will be the next step

in Q1 2017. The financial risk assessment tool for scanning on potential financial offending is anticipated to be available for use by end March 2017.

Meeting objectives?

Yes, this action will meet objectives.

5.1.7 Action B7 - Develop innovative ways to use waste flow tracking devices

Project personnel involved

Technical Team Manager, Project manager (NRW), Interventions Officer (NRW), Intelligence Officer (NRW), Waste Specialist (SEPA) & Business Assurance

What has been done?

- Work commenced ahead of schedule; a workshop was held on waste flow and auditing approaches with the External Steering Group and other interested stakeholders at an External Steering Group meeting in Edinburgh in November 2014 (IR Annex 7.2.2)
- The technical team was in place for the commencement of this action in October 2015
- SEPA approached Harper MacLeod Legal firm in January 2016 to deliver legal advice on the use of waste flow tracking devices and remote sensing techniques in Scotland
- Engagement took place January to March 2016 with Belgium Federal Police, Environmental Regulators (Holland, Sweden, England, Wales and Ireland and BAN network) on experience on their use of waste tracking devices
- Harper MacLeod delivered initial legal advice on the use of waste flow tracking devices and remote sensing techniques in Scotland in February 2016 (PR1 Annex 7.2.14)
- Draft feasibility report was produced by NRW for the use of tracking devices during April 2016 and circulated to all PCB members and external stakeholders Grant Pink and Rob Whyte (established for critique and endorsement)
- Final Waste Flows Tracking Devices Recommendation Report and Scope of Pilot approved by the PCB in September 2016 (MTR Annex 7.2.26)
- Work is underway at time of writing this report on:
 - Pilot Feasibility Report and scoping of the pilot project (in collaboration with Police Scotland experts to identify practical and legal barriers)
 - Commissioning a legal note on legal barriers on deployment of waste tracking in Wales

Problems/ timings/ impacts

The duration of this action as per the Grant Agreement was from 01 October 2015 to 30 September 2016.

Originally it was envisaged in the Grant Agreement that apart from the report on current and innovative waste flow approaches, production of a new toolkit would be completed and a guidance and training package would also be delivered by end September 2016. This plan was very ambitious and the project team feel that a more appropriate approach would be to launch a pilot project (to ensure confidence on its effectivity) before production of the training package commences. This will require further work on the pilot that the project team plan to carry out as part of action B15.

This action has met a barrier in terms of practical and legal challenges, but these are anticipated to be progressed imminently with a view to have a pilot ready for deployment by summer 2017. The intention is to pilot waste flow approach (track the waste moves through different sites), however if this cannot be achieved due to aforementioned challenges there is an alternative to proceed with waste crime approach (receive intelligence and obtain evidence by deployment of waste tracking devices).

This action has not been progressing substantially since September 2016. A revised timeline would accommodate additional time required for completion of the feasibility study

(including the legal advice for Wales). The feasibility study is anticipated for completion by June 2017 ready for deployment of the pilot in summer 2017 (providing the legal advice confirms its feasibility). There is budget available to accommodate an extension to the duration of this action.

The Project is seeking the Commission's agreement to extend duration of this action until end July 2017 at which point it should be possible to confirm whether the project team will be able to carry out the pilot for this action.

Meeting objectives?

Yes, there is significant interest in this action from stakeholders across Europe and it is anticipated it will meet objectives.

5.1.8 Action B8 – Develop innovative remote sensing techniques, pilot them and produce evaluation and intelligence reports

Project personnel involved

Project Manager (SEPA), Technical Team Manager, Waste Specialist (NRW), Waste Specialist (SEPA), Business Assurance, Intelligence Officer (NRW), Principal Specialist Scientist (SEPA) & Cambrensis and Air and Space Evidence (External Assistance)

What has been done?

- Work commenced ahead of schedule; discussions were held at the External Steering Group meeting in Brussels in September 2014 with Josiane Masson (Policy Officer) from the European Commission DG Environment, Compliance promotion, governance and legal issues unit (D4) on the European Copernicus Programme and use of remote sensing for inspections (IR Annex 7.2.2)
- A workshop was held on remote sensing approaches with the External Steering Group and other interested stakeholders at an External Steering Group meeting in Edinburgh in November 2014 (IR Annex 7.2.2)
- Initial legal advice on use of remote sensing techniques by SEPA delivered in February 2016 (PR1 Annex 7.2.14)
- Engagement with Professor Jim Baird at Glasgow Caledonian University and his PhD student to deliver a baseline study on remote sensing techniques to be employed by environmental agencies in detection and tackling waste crime. This proved too challenging a task for the student, therefore the project team revisited the approach and decided to seek an external supplier for the research
- Project Manager (SEPA) coordinated discussions with internal SEPA remote sensing experts and SEPA procurement specialists on the optimal way to deliver work on this action. It has been decided to split the work into two phases (Phase 1 will deliver desk-top research, scoping report and recommendation report on innovative techniques and approaches available to environment regulators, whilst Phase 2 will focus on actual deployment of a pilot project of selected recommendations)
- Phase 1 SoR (for external assistance in remote sensing techniques field) produced in collaboration with SEPA remote sensing scientists
- Four tender submissions were received in October 2016 and the evaluation was completed in November 2016
- Contract was awarded to Cambrensis, subcontracting Air and Space Evidence experts in November 2016
- Inception meeting with supplier was held in December 2016
- Work on Phase 1 Desk-top research report (on applications in tackling environmental and waste crime) commenced in December 2016

Problems/ timings/ impacts

The duration of this action as per the Grant Agreement is from 01 October 2015 to 30 September 2017.

Work commenced ahead of schedule during September 2014 for this action and it was anticipated sourcing of remote sensing contractors would commence in spring 2015. The start of the remote sensing contractors was delayed due to:

(1) The project team trying to explore internal SEPA expertise and local academic institutions (which did not find suitable expertise) before appointing external contractors

(2) Unavailability of internal specialist resource required for detailing technical requirements for the research.

It is however anticipated that the piloting and evaluation of novel remote sensing approaches will be completed by 30 September 2017.

Meeting objectives?

Yes, it is clear from initial work and the significant interest in this action from stakeholders across Europe that it will meet objectives.

5.1.9 Action B9 – Deploy and test the intelligence communication hub for challenging waste streams and related waste crime issues

Project personnel involved

Technical Team Manager, Business Analyst (SEPA), Technical Analyst (SEPA), Waste Specialist (SEPA), Waste Specialist (NRW), Intelligence Officer (SEPA), Intelligence Officer (NRW), Business Assurance, SEPA Solicitor, SEPA Procurement Specialist, SEPA Head of Regulatory Services (LSW PCB Member)

INTERPOL PCWG meeting (Glasgow, 8 June 2016)



What has been done?

- This action commenced October 2015 as scheduled. Some initial testing of concept has been undertaken through discussions with key stakeholders e.g. Police Scotland, Europol and INTERPOL
- Hub Pilot project launched in May 2016
- Poor Audio/Video (A/V) performance of Hub online meeting function for SEPA users identified
- Project Manager co-ordinated User Acceptance Testing of the Hub online meeting function during May and June 2016; to gain data for analysis. Solution was identified in a purchase of IBM Minutes (combination of the IBM minutes and video proved successful) in June 2016.
- Presentations and demonstrations of the Hub given to INTERPOL (Glasgow) on 8 June 2016 and IMPEL (Frankfurt am Main) 9 June 2016, positive feedback received and interest in international collaboration on the Hub triggered
- SEPA and NRW project staff and selected INTERPOL staff access the Hub on daily basis, intelligence and intervention officers work on intelligence products using the Hub functionality. ACR+ and IBGE-BIM were granted access to the Hub in August 2016
- Governance documents (Data Sharing Agreement, Privacy Statement and combined T&C's & SyOps) were signed by NRW, ACR+ and INTERPOL users during July and August 2016 (presented in MTR Annexes 7.2.27, 7.2.28, and 7.2.29)
- Further UAT testing of Audio/Video quality was carried out from July till September 2016.

- The PCB agreed to progress with purchase of IBM Minutes on pay as you go basis (as an alternative to Hub VoIP Meetings functionality) August 2016
- 20 Docs licences (simultaneous editing functionality) procured for the Hub for a trial period from 01 October 2016 to 31 May 2017
- Complementary testing of WebEx (as potential alternative to Hub online/VoIP meetings) carried out with mixed results during September 2016
- Successful test meetings with Hub external users (EA, ShARE) carried out in September 2016
- Further extensive testing of WebEx free trial account functionality on VDI carried out by SEPA staff members (as a potential alternative to Hub online/VoIP meetings however mixed results achieved) during October and November 2016

Problems/ timings/ impacts

The duration of this action as per the Grant Agreement is from 01 October 2015 to 31 March 2018.

There has been a delay of 3 months in IBM transferring SEPA S2 Connections instance on to the production environment. This had a knock on effect on User Acceptance Testing (UAT), which did not begin until May 2016

UAT testing (screen shot in PR1 Annex 7.2.15) revealed an issue with poor quality of Audio/Video on the Hub web-conferencing functionality for VDI/Citrix environment users (affecting SEPA users only). Extensive investigation has been carried out to investigate and mitigate for the issue and the solution was identified in the purchase of IBM Minutes. The Hub has been deployed in an unofficial manner on schedule in August 2016; however official deployment of the platform is envisaged in Q1 2017. Three packages of intelligence and data will be produced utilising the Hub from Q1 2017 till Q2 2018.

Meeting objectives?

Yes, the work undertaken on this action has demonstrated that the concept of the collaboration on the Hub is viable and that there is a significant interest in utilising the Hub (indicated by INTERPOL and other stakeholders) therefore this action is meeting its objectives.

5.1.10 Action B10 – Undertake investigations to fill intelligence gaps and pilot innovative investigatory tools

Project personnel involved

Intelligence Officer (SEPA), Technical Team Manager, Intelligence Officer (NRW), Waste Specialist (SEPA), Waste Specialist (NRW), Waste Economist, Intervention Officer (SEPA), Intelligence Specialist (SEPA)

What has been done?

Although this action has already commenced (as per Grant Agreement timeline), work to be delivered under action B10 has not fully started yet. Investigatory tools are required to be available firstly (produced by actions B3, B4, B5, B6, B7 and B8) before being tested under B10. The action can however progress when Intelligence Reports are in place (before the tools are delivered by work stream W3) and when the Hub is deployed.

- Project Manager (SEPA) escalated an issue of lack of Phase 2 Technical staff resource (4.0 FTEs) to the LSW PCB during October 2015 to October 2016
- Two members of SEPA staff (2.0 FTEs) allocated to the LSW project to progress investigation work in October 2016
- The LSW Project Team suggested recruitment of two outstanding members of the Technical Team (2.0 FTEs) and this was endorsed by Project Executive in October 2016
- First Investigation Bundle in the format of Scottish Waste Crime Perception Survey (257 respondents) carried out in July and August 2016 to provide the LSW project with a baseline (<https://www.sepa.org.uk/media/219228/performance-reporting-framework-2016-17.pdf>.)
- Job specifications (Generic and Specific) were drafted for Intelligence Development Officer (1.0 FTE) and Intervention Officer (1.0 FTE) roles by the LSW Project Manager, Technical Team Manager and Business Assurance
- Posts of Intelligence Development Officer and Intervention Officer (2.0 FTEs) approved by SEPA AMT in November 2016
- Recruitment of above posts has been scheduled for January to February 2017

Problems/ timings/ impacts

The duration of this action as per the Grant Agreement is from 01 October 2015 to 31 December 2017.

This action has not fully started yet. There is a dependency on work stream W3 (Tools, Approaches and Techniques) for this action (investigatory tools are required to be available for use under this action). There has been slow progress with delivery of W3 technical actions and Intelligence reports which are necessary prerequisites for this action. However, the Financial Investigation Toolkit delivered under Action B6 should be ready for pilot in Q2 2017 and Waste Flow Tracking Pilot (pending on the direction provided by Welsh legal advice) to be scoped out by summer 2017.

The below milestones are anticipated to slip by 4 to 12 months as follows:

- **Investigation bundle 1:** Deadline 31 December 2016 – Waste Crime Perception Survey Report is anticipated to be approved by the LSW PCB by March 2017

- **Investigation bundle 2:** Deadline 31 March 2017 – Investigation into waste hauliers anticipated from end of March till August 2017 (internal analysis of enforcement and prosecution of hauliers will take place first then a collaborative group is to be created)
- **Investigation bundle 3 & 4:** Deadline 31 December 2017 – it is envisaged that a B3 CI toolkit is to be used for the Investigation Bundle No. 3 which will not be available before Q4 2017.

It is the Technical Team's intention to initiate Bundle No. 3 by end 2017 and continue during 2018. Therefore the project is seeking the Commission's approval to postpone the deadline for Bundle 3 and 4 until Q2 2018.

Meeting objectives?

Yes, this action is anticipated to meet objectives.

5.1.11 Action B11 – Produce four intelligence reports

Project personnel involved

Technical Team Manager, Intelligence Officer (SEPA), Intervention Officer (NRW), Intelligence Officer (NRW), Project Manager (NRW), Waste Economist, Internal SEPA Regulatory Services Local Team Member, Internal SEPA Intelligence Analyst

What has been done?

- NRW produced a report reviewing 2015 waste intelligence in support of action B11, during February 2016
- Draft Intelligence Report No. 1 (baseline report) reviewing 2015 to 2016 SEPA and NRW waste intelligence presented to the LSW PCB in November 2016
- Feedback received and factored in the final version of the Intelligence Report No. 1 (baseline) which was approved by the PCB in December 2016 (MTR Annex 7.2.30)
- Intelligence Report No. 1 (recommending an issue of unregulated rented warehousing units being exploited for illegal waste activities) to be taken forward for joint intervention work under Action B15. Intelligence Report No. 1 will lead straight into Intervention Bundle No. 1 under action B15 (rather than Investigation Bundle No. 1 under action B10) to test an initial cross-agency intervention approach first
- Draft Vulnerabilities methodology has been developed since September 2016. The methodology is going to be applied to three levels of waste market: waste sector level, waste stream analysis and business process. The application of the methodology is yet to be tested in a pilot study in 2017.

The vulnerability study should deliver at least three intelligence products (Intelligence Reports No. 2, 3 and 4 under action B11). It is anticipated that the methodology will be applied to the waste stream analysis and business process in Q1, Q2 and Q3 2017. Vulnerabilities methodology application to the sector level, based on competitive intelligence, will require completion of the CI toolkit (delivered under Action B3) in the first place and is anticipated to commence in Q3 2017.

Problems/ timings/ impacts

The duration of this action as per the Grant Agreement is from 01 April 2016 to 31 March 2018, with delivery of four intelligence reports.

There was around 3 months delay in delivery of the first intelligence report, due to the intelligence resource being in place later than anticipated (delay of 6 months) and the resource being spread thinly over several actions (B12, B13, B5 and B11). To ensure continuity of this action and timely delivery of all products under action B11, the project is seeking to extend an existing SEPA Intelligence Officer's contract (which is in place till November 2017) until the project end. There is budget available to fund more staff resource for this action and no impact on the overall project budget is anticipated.

Meeting objectives?

Yes, this action is anticipated to meet objectives. Intelligence Report No.1 has successfully contributed to the objectives of Action B11, to date. It has been peer reviewed and the delivery of actions from the recommendations provided by the Report No. 1 is currently being progressed.

5.1.12 Action B12 – Scope out the barriers to joint working between agencies nationally and transnationally on interventions to tackle waste crime

Project personnel involved

Intelligence Officer (SEPA), Technical Team Manager, Intelligence Officer (NRW), Waste Specialist (SEPA), Waste Specialist (NRW), Head of Regulatory Services (LSW PCB Member, SEPA), Business Assurance, Internal SEPA Senior Specialist

ESG Stakeholder workshop (Glasgow, August 2015)



What has been done?

- Engagement with industry at ESG stakeholder workshop in August 2015 (agenda in PR1 Annex 7.2.16)
- SEPA Intelligence Officer held 19 qualitative research interviews with UK and European individuals with experience and background in environmental regulation, law enforcement and industry
- Draft Report on Barriers to Joint Working: Issues affecting joint working in tackling waste crime (B12) produced by SEPA Intelligence Officer and reviewed by Associated Beneficiaries and external stakeholders in November 2015
- Received comments were factored in the final version which was approved by PCB in December 2015 (PR1 Annex 7.2.17)

Problems/ timings/ impacts

The duration of this action as per the Grant Agreement was from July 2015 to December 2015.

This action has delivered on schedule despite the fact that organisation of the expert interviews proved more time-consuming than originally envisaged.

Meeting objectives?

This action was delivered on time and met its objectives (provided input necessary for Action B13: Specify how to set up group structures to overcome barriers and delivery joint interventions). The report is available on LIFE SMART Waste website.

5.1.13 Action B13 – Specify how to set up group structures to overcome barriers and delivery joint interventions

Project personnel involved

Intelligence Officer (SEPA), Technical Team Manager, Waste Specialist (SEPA), SEPA Senior Specialist Scientist, Business Assurance, SEPA Intelligence Specialist

What has been done?

- Scoping for approach to this action started ahead of schedule in October 2015
- Structured interviews using MCM methodology (the Hub has been utilised) were undertaken during February to May 2016 with law enforcement partners, environmental regulators, public authorities in UK and EU (including LSW Beneficiaries) on effective partnership working structures (remote interviews were conducted on the Hub)
- Initial draft Report on better partnership working was presented to the PCB in May 2016 and LSW sought feedback from Dr Grant Pink and Professor Rob White (established for critique and endorsement)
- Final Report approved by the PCB in August 2016 (MTR Annex 7.2.31)

Problems/ timings/ impacts

The duration of this action as per the Grant Agreement was from October 2015 to March 2016.

Due to lack of intelligence analysis resource (issue with appointments of SEPA interventions officers, NRW intelligence officer started 6 months later than expected, this action delivered 5 months later than anticipated. Organisation of interviews, actual interviews with experts and subsequent analysis of obtained data proved more time consuming than estimated at the outset of this action, therefore the final Report on Effective Group Structures was approved by the PCB during August 2016 (5 months later).

Original budget for this action was €22.638. This action has overspent by €7.197 due to higher staff time allocation to the work delivered under this action.

Meeting objectives?

Yes, this action met its objectives and provided an essential input for action B15 (Set up cross agency intervention groups and deliver interventions). The report is available on LIFE SMART Waste website.

5.1.14 Action B14 – Create an innovative interventions menu and design manual that allows interventions to be selected according to the specifics of the situation

Project personnel involved

Technical Team Manager, Business Assurance, Intervention Officers (SEPA), SEPA Waste Specialist, SEPA Regulatory Services Local Team Members, SEPA Unit Managers, SEPA Intelligence Analyst, SEPA Principal Scientist, SEPA Senior Business Consultants & Cambrensis (External Assistance)

What has been done?

- Internal discussion took place on options for delivery of this action. Due to limited capacity of the Technical Team it was decided to procure for external assistance.
- Regular meetings between supplier and project team (including design workshop with SEPA operational staff) ensured required quality of products were delivered: Literature review (MTR Annex 7.2.32), Recommendation Report (MTR Annex 7.2.33) and Intervention Design Manual (MTR 7.2.34)
- Intervention Design Manual (including Intervention Menu) approved by the PCB in April 2016
- Intervention Design Manual presented at INTERPOL meeting in June 2016
- Lessons Learned meeting with project team in November 2016 identified a need to revisit the Manual and rewrite it so that it is accessible to ordinary intervention officers (its language found to be a mixture of academic language with practical guidance which some officers found difficult to put in practice)
- Revision assessment being planned for January 2017; training on the revised Manual planned for February 2017 (after which Intervention Officers will commence application of the Manual's methodology to design innovative interventions under Implementation action B15).

Problems/ timings/ impacts

The duration of this action as per the Grant Agreement was from 01 October 2015 to 31 March 2016.

Final Intervention Design Manual (including Intervention Menu) has been approved by PCB with a delay of one month.

Original budget for the staff cost was €54,042 for this action. There has been a personnel overspend of €15,816 owing to more of project staff's time allocation to delivery of this work (time assigned to review individual sub-deliverables and final product before approval) which has been managed within the overall project budget.

The Grant Agreement had no provision of budget for external assistance in Action B14. However, owing to lack of in-house resource and expertise the action has been delivered utilising external assistance budget (resulting in external assistance category overspend of €54,591). There will be a reduction in use of External Assistance Category under B8 to compensate for this overspend ensuring the project has not overspent on this Category.

Meeting objectives?

Yes, this action met its objectives. Work on enhancement of the Intervention Design Manual is being planned as part of implementation interventions work stream (W5, Action B15).

5.1.15 Action B15 – Set up cross agency intervention groups and delivery a minimum of three packages of interventions

Project personnel involved

Technical Team Manager, Intervention Officer (SEPA, 2.0 FTEs), Intervention Officer (NRW) , Intelligence Officer (SEPA), Intelligence Officer (NRW), SEPA Regulatory Services Local Team Members, SEPA Waste Specialist, SEPA Intelligence Specialist

Roadside stop during Operation Nortese (May 2016)



What has been done?

To further the LSW knowledge on interventions, the project linked with Operation NORTESE (road side checks carried out in May and June 2016) that explored how Fixed Monetary Penalties can be used by SEPA. The learning and outputs from this (toolkit for road side stops) will be incorporated into an Interventions Menu to be developed by the LSW project. Although the LSW project facilitated the operation, genuinely innovative work to be delivered under action B15 will proceed from Intelligence Report No. 1 to explore barriers in cross-agency working. The First Intervention Bundle will test a new approach to building joint interventions and the Second and Third Intervention Bundles will primarily focus on problem-solving. Work to enhance Intervention Design manual delivered by Action B14 is currently being planned.

Intelligence Reports (delivered under Action B11) will provide recommendations for key points in the waste flow for at least one challenging waste stream, where interventions should be targeted. Intelligence Report No. 1 identified warehousing and waste hauliers as the top priority issues for intervention and investigation. The output from Action B13 will also be used to specify the group structures needed to design and undertake the interventions. Interventions groups will be established by the Technical Team Manager drawing on the Project Intervention Officers and through collaboration with other key organisations such as the police, customs and industry representative bodies. These interventions groups will aim to build on existing collaborations and systems established through organisations such as INTERPOL, Europol and IMPEL which best fit the interventions work identified. The intervention groups will also use the innovative Intervention Design Manual (developed under Action B14) to create packages of interventions unique to the problem identified.

Problems/ timings/ impacts

The duration of this action as per the Grant Agreement is from 01 April 2016 to 31 December 2018.

Three bundles of interventions were expected to be delivered by the following dates:

- **Intervention Bundle 1:** Deadline 31 December 2016
- **Intervention Bundle 2:** Deadline 31 December 2017
- **Intervention Bundle 3:** Deadline 31 December 2018

There has been a delay in delivery of Intervention Bundle No. 1 which is anticipated to be completed by April to May 2017. Delivery of Bundle No. 2 and 3 is anticipated to be on schedule. There is no impact on the overall project budget.

Meeting objectives?

Yes, this action is anticipated to meet objectives.

5.1.16 Action B16 – Produce recommendation reports for policy and/or legislative interventions

What has been done?

Not due to start until January 2017.

5.1.17 Action C1 – Produce evaluation reports for the intelligence communications hub and innovative investigatory tools and approaches

What has been done?

This action has not started yet.

The production of the evaluation reports will be phased at key points as the different approaches (tools and the Hub) are piloted over the period from June 2016 to June 2018.

Problems/ timings/ impacts

The duration of this action is from 01 October 2015 to 30 June 2018.

Due to the dependency of this action on delivery of innovative tools and techniques and intervention staff resource in post, this action will be progressed later than anticipated. It is being considered whether the project needs to provide a baseline evaluation, second evaluation after the pilot/trial phase and whether it will be possible to bundle tools together.

Meeting objectives?

Yes, this action is expected to meet objective 1.

5.1.18 Action C2 – Produce intervention evaluation, protocols and case study reports

What has been done?

Due to dependency of this action on action B15 this action has not fully progressed yet.

- Issue of lack of technical staff resource (2.0 FTEs SEPA Intervention Officer) had been escalated to PCB
- Technical and Project management team discussed and agreed type of staff resource required to progress action C2 (depending on action B15)
- Generic and Specific Job specifications were drafted with support of SEPA HR department during September and October 2016
- Papers recommending recruitment of outstanding LSW staff resource were produced and presented to SEPA AMT which approved the recruitment in November 2016
- Advertisement and recruitment of outstanding staff resource has been scheduled for January and February 2017 respectively
- Participation of SEPA Intervention Officer planned at ShARE workshop with EA on how to build intervention and measure effectiveness (Evaluation work conference, London 2017)

Problems/ timings/ impacts

This action will produce four reports which will be developed and published in a phased manner over the period from 01 April 2016 to December 2018. Delay in progress of action B15 defers commencement of action C2 however it is not anticipated to be an issue.

Meeting objectives?

Yes, this action is expected to meet objective 2.

5.1.19 Action C3 – Undertake overall evaluation of the LIFE SMART Waste project & produce final report

What has been done?

Not due to start until December 2018.

5.2 Dissemination actions

5.2.1 Objectives

The LIFE SMART Waste project's dissemination objectives are to:

- Communicate the project results and learning to others, selling the benefits of the approach in tackling waste crime
- Influence European policy and legislative changes

In general terms, the project's dissemination will aim to:

- Help achieve the project's overall objectives
- Engage effectively with internal and external stakeholders
- Demonstrate the success of the project's work
- Ensure people understand the project's work
- Change behavior and perceptions where necessary

To achieve these objectives, dissemination activities and messaging are tailored to the project's specified audiences:

- EU regulatory bodies
- Policy makers and legislators
- Wider stakeholders

As outlined in the project's dissemination strategy, the project employs a range of communications channels and techniques to reach and engage with these target audiences.

5.2.2 Dissemination: overview per activity

5.2.2.1 Action D1 - Develop a targeted dissemination strategy

Project personnel involved

Communications Officer (SEPA), Project Manager (SEPA), Project Team, PCB

What has been done?

- The SEPA Communications Officer presented the Targeted Dissemination Strategy (following project team review) to the Project Control Board on 12 March 2015 and received approval, with minor amendments on 31 March 2015
- The final version of the Targeted Dissemination Strategy was submitted to Chris Rose (NEEMO-GEIE) on 31 March 2015 by SEPA's Project Manager (PR1 Annex 7.3.1)
- In support of the strategy document, a dynamic, updatable 'Dissemination and Engagement Schedule and Log' (PR1 Annex 7.3.2) was set up by SEPA's Communications Officer on 12 March 2015. This will serve as a guide to communication activity during the project

Problems/ timings/ impacts

The targeted dissemination strategy was due for delivery during Q4 2014. Production was delayed by 3 months, due to delays in recruitment of the Project Communications Officer as

highlighted in Section 4.2.2. The Communications Officer delivered the Targeted Dissemination Strategy by the revised deadline (31 May 2015).

There was minimal impact on the project due to delayed delivery, as there was already active and on-going engagement and dissemination to enforcement agencies, industry representatives, policy makers and legislators. The strategy, and the supporting 'Dissemination and Engagement Schedule and log', will be developed and updated as required throughout the project.

Meeting objectives?

Yes, the document has provided a clearly targeted strategy and timetable for dissemination activity.

5.2.2.2 Action D2 - Disseminate to enforcement agencies and industry representatives

Project personnel involved

Communications Officer (SEPA), Graphic Designer (SEPA), Media relations team (SEPA), Associated Beneficiaries, Project personnel attending networking events (as listed MTR Annex 7.3.25)

LIFE+ LSW and LIFE+ ENPE Declaration of cooperation (Bristol, UK, November 2016)



What has been done?

In addition to the activity targeting wider stakeholders (Action D4), extensive dissemination activity was undertaken by networking with a wide range of enforcement agencies, industry representatives and related projects. Key dissemination activities since commencement of the project in June 2014 have been:

- An 'Inter-agency Networking Events Timetable' was created on 21 September 2015 (ahead of the Q4 2015 schedule) by the SEPA Communications Officer (MTR Annex 7.3.25)
- Presentations and networking activity at relevant meetings and events throughout Scotland, the UK, Europe and beyond have been undertaken for disseminating to enforcement agencies and industry representatives. As detailed in MTR Annex 7.3.25, a range of project personnel and associated beneficiaries participated in 38 dissemination and networking events aimed at enforcement agencies and industry representatives up to 31 December 2016. The bodies and organisations reached by this activity included IMPEL, INTERPOL's PCWG and Advisory Board, EnviCrimeNet, Scotland's Environmental Crime Taskforce, the CIWM, Police Scotland, Revenue Scotland, HMRC, Ireland's EPA, NIEA, Environment Agency and other related projects (supporting images provided in PR1 Annex 7.3.4 and MTR Annex 7.3.26)
- SEPA networking with related EU projects (as summarised in MTR Annex 7.3.27) including:

- [The European Network of Prosecutors for the Environment \(ENPE\)](#)
- [DOTCOM Waste](#)
- [Tackling Environmental Crime through standardized Methodologies \(TECUM\)](#)
- [BLOCKWASTE](#)
- [European Union Action to Fight Environmental Crime \(EFFACE\)](#)
- To support the networking activity of project personnel events and meetings, the SEPA Communications Officer coordinated the design, print and delivery (22 February 2016) of LIFE SMART Waste project business cards (PR1 Annex 7.3.5). The business cards were designed by SEPA's in-house graphic designer
- SEPA led an extensive communications campaign (see Section 5.1.21) and partnered with a range of UK and Irish environment and enforcement agencies as leader of Operation NORTESE during May and June 2016. Dissemination activity was coordinated by SEPA's Communication Officer with support from SEPA's media relations team and graphic designer. This pilot inter-agency intervention (part of Action B15) included a range of key external partners (PR1 Annex 7.3.4)

A formal Declaration of Cooperation between the ENPE and LIFE SMART Waste projects was signed on 22 November 2016. The declaration defines the scope of cooperation between the two LIFE-funded projects and confirms the willingness of each to cooperate to provide mutual support and exchange of experiences in issues connected with administrative, financial, information and communication tasks (see MTR Annexes 7.3.26, 7.3.35 and 7.3.36).

Problems/ timings/ impacts

This action commenced ahead of the scheduled start date (July 2015). Dissemination to enforcement agencies and industry representatives will be delivered throughout the project and will continue to be delivered through External Steering Group meetings; the Scottish Environmental Crime Task Force; meetings with key partners and stakeholders (e.g. INTERPOL and Europol); and presentations to networks (e.g. IMPEL and the UK and Ireland 5 Agencies Better Regulation meetings).

Meeting objectives?

Yes, this action is meeting its objectives for active engagement and dissemination to enforcement agencies and industry representatives. Dissemination activities have been very successful to date and the project has gained notable attention across Europe and beyond.

5.2.2.3 Action D3 - Disseminate to policy makers and legislators

Project personnel involved

Communications Officer (SEPA), Associated Beneficiaries, Project personnel attending meetings (as listed in MTR Annex 7.3.25)

What has been done?

As listed in MTR Annex 7.3.25, key dissemination activities undertaken since commencement of the project in June 2014 have included:

- SEPA presentation to Scottish Government in June 2014
- Briefings by SEPA, NRW and NIEA on the project to government ministers in Northern Ireland, Wales and Scotland ahead of the Scottish Environmental Crime Task Force Environmental Crime Conference in November 2014
- Attendance by Josiane Masson (Policy Officer) from the European Commission DG Environment Governance, information and reporting Unit D4 at the LIFE SMART Waste External Steering Group meeting in Brussels in September 2014. The discussion included the topic of remote sensing (e.g. the EU Copernicus Programme and use of remote sensing for inspections) (see IR Annex 7.2.2 for meeting minutes)
- A meeting with Policy Officers from the European Commission DG Environment Governance, information and reporting Unit D4 was undertaken by ACR+'s Senior Project Manager in Brussels during January 2015 (see IR Annex 7.2.3 for meeting notes)
- SEPA presentation to representatives of the Scottish Government and Revenue Scotland in Edinburgh on 1 October 2015
- SEPA presentation at a Scottish Government Consumer & Competition Policy Unit Awareness Raising Event in the Scottish Crime Campus on 9 November 2015
- SEPA presentation to Revenue Scotland Board Members and staff during a waste crime seminar in Edinburgh on 11 November 2015
- SEPA Executive Director Calum MacDonald (accompanying Dr George Burgess, Scottish Government Environmental Quality Division) presented on the work undertaken by SEPA - including the LIFE SMART Waste project in tackling waste crime in Scotland at the 2nd INTERPOL–UNEP International Environmental Compliance and Enforcement Conference in Singapore on 16 to 18 November 2015
- SEPA's LIFE SMART Waste project team facilitated a Fit and Proper Person (FaPP) workshop in Scotland on 14 January 2016 by bringing together an experienced panel of interested parties to discuss FaPP policy recommendations. Workshop delegates included senior representatives from a wide range of organisations, including: Scottish Government; Security Industry Authority; Traffic Commissioner for Scotland; HMRC; Scotland Excel; Police Scotland (Vetting, Licensing & Intervention units); ECTF; and SEPA
- ACR+ represented the project while exhibiting at the 8th European Conference on Sustainable Cities & Towns event in Bilbao, Spain on 27-29 April 2016 to raise awareness and investigate networking opportunities. The event brought together local and regional government representatives, European and international institutions, multilateral organisations, members of the research community, business leaders, and civil society

- To supplement the Targeted dissemination strategy (PR1 Annex 7.3.1), a first draft of the Engagement action plan for policymakers and legislators was prepared during Q4 2016 by SEPA's Communication Officer. This was circulated to the LIFE SMART Waste project team and Associated Beneficiaries for review and feedback (18/12/16)

Problems/ timings/ impacts

This action commenced in June 2014, well ahead of the scheduled start date of July 2015.

It was envisaged that the Engagement action plan for policymakers and legislators would be developed during Q3 and Q4 in 2016. As the project has limited communications resource (0.5FTE), the plan was started during Q4 2016 and will be ongoing through Q1 2017. To help to mitigate this issue the Communication Officers hours will be increased to 1.0FTE until June 2017.

Acknowledging that the first recommendations report (Action B16) has been delayed, no adverse impacts for delivery of project objectives are envisaged. Dissemination to policy makers and legislators will be delivered throughout the project and will continue to be delivered through appropriate channels.

Meeting objectives?

Yes, this action is meeting its objectives for active engagement and dissemination to policy makers and legislators.

5.2.2.4 Action D4 - Disseminate to wider stakeholders

Project personnel involved

Communications Officer (SEPA), Graphic Designer (SEPA), Communications Manager (ACR+), Associated Beneficiaries, PCB

What has been done?

Key actions have included the following:

- A range of content suitable for wider stakeholders - including a project summary, regular project news and publications – has been created for the LIFE SMART Waste project website by the SEPA Communications Officer (see Section 5.2.2.6)
- ACR+ continued to provide regular project updates to their members and interested parties throughout Europe via weekly and quarterly e-bulletins (e.g. ACR+ Newslines), website news features and via social media (further details and links are available in MTR Annex 7.3.28)
- Social media (via Twitter, Facebook and LinkedIn) and related digital activity (e-mails and online) was undertaken by SEPA's Communications Officer and dissemination partners in support of dissemination initiatives as summarised in MTR Annex 7.3.28 and MTR Annex 7.3.29
- A generic PowerPoint project presentation was prepared by the SEPA Communications Officer for use and adaptation by the project team and Associated Beneficiaries on 17 August 2015 (Annex PR1 7.3.6). This presentation was updated with new project branding on 21 November 2016 (MTR Annex 7.3.30)
- [Digital brochures](#) (English, Welsh, French, Dutch and German), as approved by the Project Control Board and Associated Beneficiaries, were published on the project website by the SEPA Communications Officer on 22 September 2015 (PR1 Annexes 7.3.7 to 7.3.11)
- [Project summary flyers](#) (in English, Welsh, French, Dutch and German) were issued, with Project Control Board approval, to Associated Beneficiaries and published on the project website by the SEPA Communications Officer on 30 September 2015 (PR1 Annexes 7.3.12 to 7.3.14)
- An ongoing recruitment campaign to build a subscriber database for the project's e-newsletter was initiated via digital media in September 2015 by SEPA's Communication Officer, achieving 277 subscribers by 31 December 2016 (as listed in MTR Annex 7.3.31)
- The project has published two annual digital e-newsletters:
 - The [first digital e-newsletter](#) was issued on 9 December 2015 to 129 subscribers (PR1 Annex 7.3.16)
 - Following an update to the template to improve branding and engagement, the [second digital e-newsletter](#) was successfully issued to 276 subscribers on 31 October 2016 (MTR Annex 7.3.32)
- A case study template was prepared and circulated to the project team on 19 January 2016 (PR1 Annex 7.3.18)
- Pre-event digital communications support (social media postings, etc.) was provided by the SEPA Communications Officer to publicise SEPA's project presentation at the Metal Theft Summit 2016 on 23 February 2016
- A 'waste crime' communications campaign targeting 7,659 registered waste carriers in Scotland and wider stakeholders was delivered by the SEPA Communications Officer to

support a pilot multi-agency intervention (B15) during May 2016. The campaign included: dissemination of a [‘waste crime’ leaflet](#) (PR1 Annexes 7.3.19 and 7.3.20) via direct mail, e-mail, the project website and roadside distribution by enforcement officers; social media activity and media activity (see PR1 Annex 7.3.22 and MTR Annex 7.3.29) the in-house graphic designer at SEPA was involved with graphics for the leaflet.

- Media coverage for the project was secured by SEPA and ACR+ through proactive releases and journalistic enquires, included radio coverage (BBC Radio Scotland), national (UK) and Scottish regional press coverage (further details and links are provided in PR1 Annex 7.3.22)
- A new project logo and supporting guidelines for project partners were created and published on the project website on 19 October 2016 (MTR Annex 7.3.33)
- An ‘inspiring story’ article submitted by SEPA’s Communications Officer to the UK’s Joint Nature Conservation Committee (JNCC) was published on the JNCC website (14 November 2016) and is scheduled for inclusion in JNCC’s eNews mailing to contacts (web link in MTR Annex 7.3.29)
- Dissemination activity, including a web news article and social media activity, was undertaken by SEPA’s Communication Officer to highlight the formal Declaration of Cooperation between the ENPE and LIFE SMART Waste projects (22 November 2016). Links are provided in MTR Annexes 7.3.29

Problems/ timings/ impacts

This action commenced on schedule and is ongoing.

Dissemination opportunities and delivery are inextricably linked to the implementation of technical activities, including the planned interventions, production of toolkits and publication of reports. Any delays in the delivery of technical activities have a corresponding impact on the availability and delivery of suitable content for dissemination purposes.

Meeting objectives?

Yes, this action continues to meet its objectives.

5.2.2.5 Action D5 - Produce notice boards

Project personnel involved

Communications Officer (SEPA), Associated Beneficiaries

Scottish Resources Conference 2016 (Edinburgh, October 2016)



What has been done?

- In consultation with the project's Associated Beneficiaries (NRW, ACR+ and IBGE-BIM), notice boards were developed via a graphic design contractor. The noticeboard designs included versions translated into the respective languages of the project partners (i.e. French, Flemish and Welsh) and three noticeboards were subsequently issued to each of the partner organisations in December 2014.
- Building upon the new designs, and using budget savings, a pop-up display banner was also designed and three were produced for use at public events, including the Environmental Crime Taskforce Conference held in Edinburgh in November 2014 and the Scottish Resources Conference held in Edinburgh in October 2016.

The artwork for these materials (with supporting images of notice boards in situ) is included in PR1 Annex 7.3.23.

Problems/ timings/ impacts

This action was scheduled for completion by the end of August 2014. Although the delay in the recruitment of the Project Communications Officer contributed to a minor delay in the delivery of the noticeboards (December 2014), there has been no impact to the project and achievement of objectives.

Meeting objectives?

Yes, this action has been completed and the objectives of raising awareness and generating interest at target organisations are being met.

5.2.2.6 Action D6 - Produce LIFE SMART Waste website

Project personnel involved

Communications Officer (SEPA), IS Team (SEPA), Graphic Designer (SEPA), Associated Beneficiaries

What has been done?

The following work has been undertaken by the SEPA Communications Officer (unless otherwise stated) to create and develop the LIFE SMART Waste project website:

- For promotional purposes, suitable web domain names - lifesmartwaste.com and lifesmartwaste.eu – were registered and directed to the project website by SEPA’s IS Team on 29 October 2014, ahead of website publication
- In consultation with the project’s Associated Beneficiaries, a preliminary project website - www.lifesmartwaste.com - was developed and subsequently published in November 2014. The website is hosted on the SEPA website to enable SEPA’s Communications team to cost-effectively manage the content throughout the life of the project and for at least five years after the project end
- The project website was rebuilt on a new content management system (Umbraco) for launch on 31 March 2015
- A supplementary page dedicated to the project’s [External Steering Group](#) was created on 5 August 2015
- A web options paper with recommendations for development of the project website structure and aesthetics was submitted to the Project Team and Associated Beneficiaries in September 2015 and subsequently endorsed by the project team, NRW and ACR+ (21 October 2015)
- The web option paper’s recommendations – inclusive of a new landing page and dynamic sections dedicated to project news, publications and e-newsletter registration - were implemented in October 2015
- A landing page dedicated to the Communications Hub (Action B1) was developed during June 2016 in readiness for wider dissemination activity. This page has not yet been published
- New website graphics were developed by SEPA’s in-house graphic designer in October 2016 to incorporate the newly-created project logo (as outlined in Section 5.2.2.4). The graphics were applied to the website on 19 October 2016

The website continues to be updated with fresh content and developed on an ongoing basis to suit the evolving needs of the project. Images of the evolving website identity are available in MTR Annex 7.3.34.

Problems/ timings/ impacts

This action was completed on 24 November 2014 ahead of schedule (05 December 2014).

Additional work was required to migrate the project website to a new content management system (from Alterian to Umbraco) to comply with SEPA’s corporate web strategy. The need to develop the website content to include more details on the progress of each project action has been noted. This work will be undertaken during Q2 2017.

Meeting objectives?

Yes, the project website was launched earlier than scheduled is used as the primary means through which information about the progress of the project is communicated to the wider public.

5.2.2.7 Action D7 – Produce a Layman’s report**What has been done?**

Not due to start until December 2018.

5.2.2.8 Action D8 – Produce after LIFE+ communication plan**What has been done?**

Not due to start until December 2018.

5.2.2.9 Action D9 – Dissemination conference in Brussels**What has been done?**

Not due until Q1/Q2 2019.

5.3 Evaluation of Project Implementation

Task	Foreseen in the revised proposal	Achieved	Evaluation
B1	Not applicable.	30 September 2015	The action to design an innovative Intelligence Hub has delivered within budget. The Hub user requirements specification and design documentation had provided a very useful input to the subsequent Action B9 including procurement of the actual technical solution for the Intelligence Communication Hub.
B2	Not applicable.	30 September 2015	The action to develop an Intelligence Gathering Strategy for the Hub has delivered within budget. The Strategy sets out a structured approach that the Hub users will use to gather data to analyse and build understanding of causes of criminal activities relating to challenging waste streams. Too early to evaluate if this approach can be replicated by other enforcement organisations.
B3	Deadline revised from 31 May 2016 to 30 September 2017.	Due to complete 30 September 2017.	The action to design innovative methods to analyse competitive behaviour and market analysis is anticipated to be delivered within budget. Competitive intelligence is a niche area of expertise. It has proved difficult to procure external assistance to help deliver this action. Although a market research has been done and prospective suppliers made aware of the tenders coming, results received were poor at the outset. Developing more detailed SoR has proved helpful as well as increasing the budget for delivery of this work. Third round of procurement resulted in a successful appointment of an external supplier.
B4	Deadline revised from 31 March 2017 to 30 June 2017.	Due to complete 30 June 2017.	The action to build and demonstrate an innovative emerging threats and predictive analysis tool is anticipated to be delivered within budget. After reviewing internal capacity to utilise SEPA experts the Project decided to procure external assistance. This led to a small delay in the start of the procurement process and more time was also required by the Project Team to evaluate the tender submissions. Completion of this action was

			agreed with the supplier for June 2017.
B5	Deadline revised from 30 September 2016 to 31 January 2017.	Pilot anticipated to be progressed under Action B15 (pending EC approval).	The action to develop innovative waste flow audit approach has spent more than estimated (due to higher complexity of work required). The Project thought it could develop a less complex, less time consuming and less resource intensive waste flow audit approach. However, this has not been achieved as the successful delivery of such an approach, with accompanying guidance and training, was based on assumptions that have proven to be inaccurate. Nevertheless, two reports have been produced which explore the value of data indicators and waste flows analytical approaches for use by regulators' intelligence teams, and we will design a pilot study to explore this in more detail. In addition, a cross-agency partnership group will be formed, and facilitated by LSW, to progress development of more innovative techniques.
B6	Deadline revised from 30 September 2016 to 30 November 2016.	Due to complete in January 2017.	The action to develop innovative financial investigation is anticipated to be delivered within budget. Expectation of the action was that the Project could deliver a financial investigation toolkit which could be used by environment protection officers to carry out an assessment to detect financial indicators of (potentially) illegal waste activities. Although SEPA (UK environment regulators) do not currently have access to financial information to analyse (apart from court cases) it has been possible to produce a Financial Risk Assessment Tool which is going to be validated by external stakeholders in workshop planned in January 2017. The innovative Tool is to support agencies intelligence teams' work. From working with external suppliers we have learnt that we need to factor in more time for supplier and/or staff time as well as building in some contingency to delivery plans.
B7	Deadline revised from 30 September 2016 to 31 August 2017.	Due to complete by August 2017.	The action to develop innovative ways to use waste flow tracking devices is anticipated to be delivered within budget. The deployment of tracking devices by regulatory agencies is constrained by legal barriers which may, practically, prevent the progression of this action. Additional legal

			research is being conducted, and a partnership group has been formed with colleagues with NIEA to review and revise the current proposal. It is anticipated that a pilot deployment will be available for consideration by summer 2017.
B8	Not applicable.	Due to complete in September 2017.	The action to develop innovative remote sensing techniques and pilot them is anticipated to be delivered within budget. The Project Team explored several ways of delivering the initial research on use of innovative remote sensing techniques and opportunities for their application on waste sector. Collaboration between SEPA and Glasgow Caledonian University has been established in 2015. However, despite positive assumptions a PhD student could not deliver a report on current innovative remote sensing techniques and technologies which could be utilised by environmental agencies. Therefore, after reviewing internal and Project partners' capacity to utilise their experts, the Project decided to procure external assistance. Due to a different nature of the main deliverables under this action it has been agreed that procurement for external assistance would be split into two phases. Phase 1 delivers research on innovation available and practical to use by the environmental regulators and provide recommendations for the subsequent phase. Phase 2 will deliver the actual pilot project and produce evaluation reports.
B9	Not applicable.	Due in 2018.	The action to deploy and test the Hub for challenging waste streams and related waste crime issues is anticipated to be delivered within budget. Outputs of Action B1 were successfully used in procurement of the Hub technical solution. Procurement was done over G-Cloud (Scottish Government framework to procure Software as a Service) to ensure fast progress. A long-list of potential suppliers was produced and further refined into a short-list. Shortlisted prospective suppliers delivered live demonstrations of their systems. IBM S2 Connections selected for the Intelligence Communication Hub solution. However, despite time savings and efficiencies realised by utilisation of the

			<p>government framework, final version of the software was not available to the Project until May 2016 due to delays with finalisation of the contract agreement paperwork.</p> <p>Initial testing of the Hub has proved that sufficient staff-time needs to be dedicated to new ways of working on the Hub which was not envisaged in the Grant Agreement. After the Hub launch SEPA users (only) experienced issues with A/V component of online meetings functionality. This has been rectified by purchase of IBM minutes and testing is ongoing to identify other alternatives. Learnings realised to date also include the need to provide and steer focussed collaborative work. This is an area the Project is working on now.</p>
B10	Deadline revised from December 2017 to Q3 2018.	Due in 2018.	<p>The action to undertake investigations to fill intelligence gaps and pilot investigatory tools is anticipated to be delivered within budget.</p> <p>This action will progress substantially in 2017 following the approval of the first B11 report by the Project Board. It is anticipated that by summer 2017, draft investigation plans will have been developed for at least one challenging waste stream circumstance; that one industry engagement exercise will be available and reported under this action; and that pilot applications of project investigatory and intelligence tools will have been initiated.</p>
B11	Not applicable.	Due in 2018.	<p>The action to produce four intelligence reports is anticipated to be delivered within budget.</p> <p>First Intelligence Report successfully delivered a baseline for intelligence currently available to SEPA and NRW. The project team is considering requirements for the next intelligence report such as exploring the value of Social Network Analysis in extracting intelligence and insight from bulk data sets such as Special Waste Consignment Notes. The main analytic direction of the project is to identify vulnerabilities that attract criminals or criminalise behaviours, and by early 2017 we expect to have initiated research in two areas related to this methodology.</p>

B12	Not applicable.	Completed in December 2015.	<p>The action to scope out barriers to joint working between agencies on interventions to tackle waste crime was delivered within budget.</p> <p>Methodology employed in this action was one-to-one interview/discussions with individuals from various organisational sectors to capture their experiences with barriers to joint and partnership working. A Terms of Reference document was distributed to the participants, which included a list of questions that would be explored at the interview. In order to get a broad range of perspectives, interviewees were chosen from a wide variety of backgrounds (environmental regulatory, law enforcement/public body, industry, and European). Insightful valuable information was delivered in the Report on barriers to joint working between agencies nationally and trans-nationally on interventions to tackle waste crime and provided good input to steer success of action B13.</p>
B13	Deadline revised from 30 March 2016 to 31 August 2016.	Completed in August 2016.	<p>The action to specify how to set up group structures to overcome barriers and deliver joint interventions exceeded its budget due to more staff resource required for its delivery.</p> <p>MCM technique proved as an innovative methodology to approach research for this action to produce the Report specifying how to set up effective group structures to deliver joint interventions. However, conducting the expert interviews and subsequent analysis of the quantitative and qualitative data obtained proved more time and resource consuming than anticipated at the beginning of this action. Therefore, completion of this action was delayed. There is also a limitation in the study to be noted. Given that there were a small number of respondents the Report provides an indication of the barriers rather than a comprehensive review.</p>
B14	Not applicable.	30 April 2016	<p>The action to create an innovative intervention menu and design manual exceeded its budget due to more staff resource required for its delivery.</p> <p>Action B14 delivered an innovative Menu to approach building of interventions.</p>

			However, subsequent review of the finished product and feedback received from SEPA environment protection officers revealed that the Manual's language is too academic making the tool difficult to access. The Manual is now being revised and training is scheduled for February 2017.
B15	Not applicable.	Due in December 2018.	The action to set up cross-agency intervention groups and deliver a minimum of three packages of interventions is estimated to deliver within budget. Intelligence Report No.1 effectively provided recommendations for interventions to test the approach. The first option has been agreed by the PCB as warehousing, and intervention design will initiate by end February 2017.
B16	Not applicable.	Due to start January 2017.	Not applicable.
C1	Not applicable.	Due in 2018.	The action to produce evaluation reports for the Hub and innovative investigatory tools is estimated to deliver within budget. This action is dependent on the Hub, use of the innovative tools as part of investigations which have not fully progressed yet.
C2	Not applicable.	Due in 2018.	The action to produce intervention evaluation, protocols and case study reports is estimated to deliver within budget. This action is dependent on progress of the intervention work which has not fully advanced yet.
C3	Not applicable.	Due in 2019.	Not applicable.
D1	Deadline revised from 31 December 2014 to 31 March 2015.	The strategy document was submitted to revised deadline.	The document has provided a clearly targeted strategy and a dynamic, evolving timetable for dissemination activity.
D2	Not applicable.	Dissemination activity is on track (and ongoing).	This action is meeting its objectives for active engagement and dissemination to enforcement agencies and industry representatives. Dissemination and engagement activities have been successful to date and the project has gained notable attention across Europe and beyond.
D3	Not applicable.	Preliminary dissemination and engagement activity is on track (and	This action will largely be undertaken towards the end of the project, making it too early to evaluate its success.

		ongoing).	
D4	Not applicable.	Yes, this activity is on track (and ongoing).	This action is meeting its objectives for dissemination to wider stakeholders. For example, as a measure of the growing interest in the project, between September 2015 and December 2016, 277 stakeholders subscribed to receive project e-newsletters.
D5	This action was originally scheduled for completion by the end of August 2014.	The action was completed in December 2014.	The minor delay in delivery of this action had no adverse impact on the project.
D6	Not applicable.	The action was completed in November 2014, ahead of schedule (December 2014) and development work is ongoing.	The Project website is the primary means through which information about the progress of the Project is communicated to the wider public. The website is being hosted on the SEPA website and this has ensured that maintenance and development activities are highly cost-effective.
D7	Not applicable.	The production of the Layman's report is not due to start until December 2018.	Not applicable.
D8	Not applicable.	Production of the plan is not due to start until December 2018.	Not applicable.
D9	Not applicable.	The conference is not due until Q2 2019.	Not applicable.
E1	Not applicable.	Due to complete 31 May 2019.	Adopting PRINCE2 methodology and tailoring it to the needs of the Project has proved invaluable in day-to-day management of its progress. There has been a lesson learned with procurement taking longer than originally estimated by the Project Team. Importantly, the Project would benefit from having time contingency factored in the delivery plan which has not been foreseen in the Grant Agreement.
E2	Not applicable.	Due to complete 31 August 2019.	Monitoring and steering of the project implementation has gone well. There have been challenges relating to greater technical complexities of some of the actions as well as lack of staff resource to deliver the actions which have been managed utilising

			SEPA existing staff resource. Envisaged delays in delivery of technical actions have been discussed upfront with NEEMO-GEIE whenever these became likely. The Project is meeting its monitoring and evaluation requirements and is progressing successfully.
E3	Not applicable.	Due to complete 31 July 2019.	Not applicable.

5.4 Analysis of long-term benefits

1. Environmental benefits:

The LSW Project aims to detect and disrupt at least three illegal waste operations over the lifetime of the project which will deliver environmental benefits through the reduction of the environmental impact of illegal waste operations (e.g. water, air and soil pollution).

Other direct project environmental benefits may also include decreasing adverse impact of illegal waste operations on local communities such as reduced noise and odour pollution, reduction in dust and vermin spread and fire risk.

In addition, the Project (by stopping illegal waste operations) may deliver savings in resources by keeping more materials within the circular economy (For LSW Benefits Map please refer to MTR Annex 7.1.10)

The LSW Project is expected to contribute towards resource-efficient economies of EU Member States by helping them adopt novel and innovative approaches to tackle waste crime and keep waste materials within the circular economy. The LSW Project has also the potential to help EU Member States tackle international illegal activities related to waste management which would help meet the horizontal priority objective of current EU Environment Action Plan (to address international environmental challenges more effectively).

2. Long-term benefits and sustainability:

The long-term environmental benefits of the LSW Project lie in the ongoing nature of solving waste crime. The Project will deliver and demonstrate innovative approaches, techniques and tools which can be replicated by other agencies and provide training and other dissemination activities to help embed the approaches across the EU Member States to enable enforcement agencies and others to better tackle waste crime. As such, the Project is a short-term investment delivering long-term multiple benefits.

These long-term environmental benefits could include:

- Reducing adverse health and well-being impacts (e.g. noise, odour, dust, vermin, fire risk and loss of amenity) on local communities, leading to happier communities.
- Environmental improvements e.g. reduced contamination of water, soils and air with knock on benefits of reduced impacts on human health, domestic animals, wildlife and ecosystems
- More waste being kept within the circular economy

Long-term economic benefits:

LSW Project's long term economic benefits are based on reducing opportunities for organised crime groups to infiltrate the waste management industry. It is anticipated that the Project's

products will help enforcement agencies better prevent, detect and disrupt illegal activities resulting in a more level playing field for legitimate businesses involved in waste management (fairer and more stable waste markets) in the EU Member States, across Europe and wider. This should result in reduced costs to Member States in tackling the impacts of waste crime and increased revenue (e.g. landfill tax) to Member States through legal management of waste.

By protecting and re-establishing compliance in the marketplace, compliant and legitimate operators will be able to flourish without being undercut by illegal operators. It will allow legitimate businesses scope to invest and grow in the real economy (paying taxes, employing workers and driving progress towards high quality recycling and resource efficient recovery and reuse of resources).

It will also help improve investor confidence in delivering the next generation waste management facilities and technologies that push wastes up the waste hierarchy and deliver resource efficient economies. Investment from compliant companies will encourage innovation and development of waste treatment technologies, deliver more skilled jobs that support families, and better control the potential impacts of waste management on local communities and communities in export destinations.

In addition there could be a saving of public money due to for example, improved health of people that lived near illegal waste sites, which would otherwise be needed by regulators to address public complaints, by healthcare system required to treat higher rate of illnesses in people living nearby polluting sites, etc.

The Project aims to achieve at least one legislative or policy change through its dissemination activities and better regulatory approach. This will help make policy implementation more accessible to industry and regulators. By flagging the Project's findings early in the process and by production of policy and legislative change recommendation reports the Project may contribute towards implementation of improved environmental legislation.

In summary, the overall long-lasting effect of the LSW Project is improved implementation of the EU acquis by enforcement agencies beyond those that take part or support the Project currently. The Commission has reported that full implementation of existing waste law would result in savings of €72b (€4.9b if external impacts were excluded) with 400.000 jobs generated (Biointelligence, 2011). It is supposed that even small improvements in implementation by Member States will generate significant savings.

Long-term social benefits:

Dealing effectively with at least three illegal waste operations as part of the Project will have long-lasting positive effects on the communities within which they operated. It will reduce the environmental and health impacts of the illegal operations on the communities affected, for example: reduction in noise, odour, dust and vermin, decreased fire risk, and improvements to amenity. Disrupting waste crime, which is also a vehicle for laundering money from other criminal activities, will have a broader positive impact and potentially reduce criminal activity in society and local communities.

In addition, providing a more level playing field for the waste industry creates more profitable and resilient legitimate businesses, potentially creating more jobs in the local community and jobs that last.

All of above would result in improvement of health and well-being of local people bringing about happier communities.

Continuation of the project actions by the beneficiary or by other stakeholders:

LSW will ensure that training packages and case studies are made available to Project partners and beyond to demonstrate the effectiveness of initiatives in identifying, understanding and addressing waste crime. Partnerships created by the project will be maintained and new ones created to keep promoting the innovative tools and approaches and to continue to gather intelligence and deliver innovative interventions to tackle waste crime.

3. Replicability, demonstration, transferability, cooperation: Potential for technical and commercial application:

The LSW Project is structured in a way that will allow the replication of its constituent innovative tools and approaches in other EU Member States or regions. The tools and approaches will be tested out and demonstrated by the Project Beneficiaries working with supporting countries such as England and Ireland. This will allow testing within a cluster of a few adjoining smaller countries and across well-known borders. One of the outputs of the Project will be recommendations based on the lessons learned on how the pilots can be scaled up for clusters of many and larger countries and number of bordering countries is greater.

The Project will have relevance and transferability to other locations in the EU as it is delivering approaches, tools and techniques that can be applied in other countries to help EU regulators to improve the implementation of EU waste legislation in the most straightforward and effective way possible.

It will help reduce infringements of European waste legislation through interventions to prevent pollution and to deter those individual and groups involved in waste crimes. This will help safeguard human health and the environment both within Europe and outwith the Community.

The Project is also envisaged to provide an approach that can be also applied for other environmental pollution issues and other areas of regulation, for example in the monitoring of uses of restricted chemicals.

The innovative tools and approaches developed by the Project will be applied to a subset of challenging waste streams. Recommendations resulting from joint investigations and interventions will include how the tools and approaches demonstrated for particular waste streams and activities can be scaled up and applied to many other types of waste streams.

The Project will also work with a small number of enforcement agencies (environmental, police, customs) in the first instance increasing the number of organisations for example that are part of the Hub or taking part in collaborative interventions through the lifetime of the Project. This will demonstrate how such collaborations could be applied on a larger scale if such work has proved beneficial.

In summary, the Project will have EU-wide applicability as it provides approaches, tools and techniques that can be applied in other countries to help regulators across the EU to improve the implementation of EU waste legislation in the most effective way possible. Approaches being delivered by the Project can also be applied to other environmental pollution issues and other areas of regulation.

4. Best Practice lessons:

The LSW Project is developing new tools such as Financial Investigation Toolkit, Competitive Intelligence, Horizon Scanning and Predictive Analysis approach and Interventions Design. As part of this the Project is assessing best practice from other sectors (e.g. financial sector) and drawing on Project's partners expertise and experience to see how this can all be brought together, adapted and/or adjusted to help deliver a suite of tools that can help enforcement agencies and others better understand and tackle waste crime issues.

5. Innovation and demonstration value:

Innovation is derived from a collaborative approach where environmental bodies set intelligence and investigatory objectives using common tools around shared areas of concern and then together use common structured ways to identify and tackle illegality.

There are a number of innovative tools and approaches that the Project is working on, for example as follows:

- Waste market diagnostic tool is being developed and tested for use by environmental regulators to understand competitive behaviour in waste businesses and market trends that lead to illegal waste issues.
- Innovative horizon scanning and predictive analysis approach is created and piloted for waste crime issues at a European scale.
- Financial risk assessment tool is created and piloted to detect and identify non-sustainable business models.
- More cost-effective and easier to use remote sensing technologies approaches are developed and applied to gain intelligence on illegal activities.
- Vulnerabilities approach which has not previously been done for waste sector. LSW is working towards delivery of first waste sector vulnerability study which should help identify weak points (vulnerabilities) in waste markets that are exploited by waste criminals.

These innovative products will enhance and add significant value to environmental regulators' capabilities by:

- Using partnerships as a principal way of delivering outcomes
- Producing information and evidence that environmental regulators use to make decisions
- Helping people implement successful innovation; agencies will be able to:
 - Identify potential criminal waste operators using innovative indicators on waste offending
 - Screen for emerging threats, anticipate and prevent waste related criminality from happening
 - Identify and fill intelligence gaps and lack of data
 - Identify waste market vulnerabilities and ways of effective regulatory response
 - Design more effective interventions
- Providing organisations/working environment that people are motivated to work for as a result of:
 - Environmental and enforcement agencies staff feeling more empowered and motivated to tackle waste crime
 - Staff developing their expertise and experience further and gain more job satisfaction.

6. Long term indicators of the project success:

The Project is working to ensure that environmental regulators can implement LSW products to enhance capabilities and help deliver better and more effective environmental regulation as follows:

- At least three environment or enforcement agencies (not participating in the Project) use the Hub beyond the life of the Project.
- New practices and technologies have been tested and are available for use by interested enforcement agencies in Europe. At least six environment or enforcement agencies (not participating in the Project) adopt a LSW product in their environmental crime work.
- Coalitions, resource and information sharing between regulatory or enforcement bodies go beyond the end of the project. At least four partnerships between agencies and/or member states (adopting the new intelligence sharing approaches and novel interventions) are sustained or created after the Project has finished.
- Reports to relevant EU bodies recommending policy or legislative interventions to disrupt or mitigate illegal behaviours in certain waste markets are delivered. One short term policy or legislative change recommendation is adopted in a Member State.
- Case studies detailing the application of SMART, intelligence led regulation and its benefits including awareness raising activities. In regulatory or enforcement bodies, senior decision makers and practitioners are aware of the benefits and practical requirements of the Project learnings. A minimum of one in Eastern Europe, three in southern Europe and four in the North-western region of Europe.
- Training packages and courses for enforcement organisations involved with the environment and /or waste management markets. Six agencies (not participating in the Project) adopt intelligence led and/or novel tool as a result of the Project's learning and dissemination activity.
- Illegal waste practices interventions applied within Member States to disrupt or mitigate illegal behaviours. Three illegal operations (in challenging waste streams) are detected and disrupted during the lifetime of the Project resulting in a minimum of €0.5M saved by stopping the criminal practices. The benefit of removing criminal practice is realised by a local community or legitimate businesses in the relevant Member State.

6. Comments on the financial report

6.1 Continued availability of co-financing

The project is being funded by LIFE (49.64%), SEPA (44.81%) and three Associated Beneficiaries contributing (5.55%). SEPA and the three Associated Beneficiaries (NRW, ACR+ and IBGE-BIM) have committed resources for the duration of the project.

6.2 Summary of Costs Incurred

The report shows a current spend overall of 32 % of the total budget to December 2016. This is in keeping with anticipated expenditure and deliverables to follow in the remaining portion of the Project. There have been no budget shifts between Categories.

PROJECT COSTS INCURRED			
Cost category	Budget according to the grant agreement	Costs incurred within the project duration	%
1. Personnel	2773749	1062471	38.30
2. Travel	371510	7295	1.96
3. External assistance	717049	219820	30.66
4. Durables: total <u>non-depreciated</u> cost	62900	-	-
- <i>Infrastructure sub-tot.</i>	-	-	-
- <i>Equipment sub-tot.</i>	-	-	-
- <i>Prototypes sub-tot.</i>	-	-	-
5. Consumables	21000	3988	18.99
6. Other costs	98000	0	0
7. Overheads	280893	90550	32.24
TOTAL	4325101	1384125	32.00

* = The figure of €4,325,101 represents the original budget agreement at time of the Grant Agreement.

- = Not applicable.

As outlined in MTR Section 4.1, the membership of the External Steering Group has evolved to ensure delivery of the Project's technical products (Tools, Approaches & Techniques) which benefit from review and feedback provided by experts external to the Project. In December 2016 the Project welcomed new ESG members; Zero Waste Scotland, Glasgow Caledonian University, HMRC, Legambiente, Environment Agency England, and The Crown Office and Procurator Fiscal Service (a member of the LIFE+ ENPE project may also potentially join the ESG group, however this is to be confirmed at time of writing this report). These Members were not originally foreseen in the Grant Agreement and the additional travel and subsistence they incur shall be managed within the original budget categories.

The Project is seeking the Commission's approval to cover travel and subsistence claims of the new ESG members.

6.3 Accounting system

A procedure for managing expenditure has been put in place and is available under IR Annex 7.2.1, with SEPA finance systems under MTR Annex 8.1.1.

Internal SEPA workload planning has been completed and resources allocated to each action. Staff will allocate and record time spent on each action and the project manager will receive a monthly financial report allowing comparison between predicted and actual. Similarly equipment, travel and other costs associated with the project have been budgeted within the resource plan, allowing comparison of predicted versus actual spend.

Supporting documents as follows:

- MTR Annex 8.1.2 SEPA business expense and allowance policy
- MTR Annex 8.1.3 SEPA purchasing and procurement of goods and services policy
- MTR Annex 8.1.4 SEPA supplier payments
- MTR Annex 8.1.5 Approval levels using the Agresso system

SEPA use the financial system Agresso to record staff time in total, split by all hours worked (clearly identifying the LIFE project work). The Associated Beneficiaries use the timesheets as supplied by the EU.

SEPA's corporate financial management system Agresso is an enterprise resource planning solution that has been designed to handle corporate processes such as: HR, payroll, employee, expenses, procurement, assets, paying suppliers, and debtors.

Agresso enables staff to buy goods and services, to record income, claim expenses, provide detailed analysis of expenditure and view reports. All screens and steps involved in processing these activities within Agresso have been hard-coded to reflect requirements of SEPA's SFIs. Delegated authority levels are built into Agresso through workflow processes, which operate throughout the system

The workflow processes for the LIFE SMART Waste Project are captured under the Cost Centre S011 (LIFE 13ENV/UK/000543), with the following approval limits and responsibilities for authorisation:

- Expenditure up to £10K can be authorised by the Project Manager.
- Expenditure between £10 and £30K has to be authorised by the Senior Project Manager.
- Expenditure between £30K and £75K has to be authorised by Project Executive.
- Expenditure over £75K has to be authorised by SEPA's Chief Executive.

When requisitions are raised in Agresso, text must be included to clarify that this item of expenditure is part of the LIFE SMART Waste Project. Assigned codes are provided so that it will correspond with a relevant LIFE action.

Within Agresso, the cost centre S011 has been set up for EU expenditure, along with the 30 individual actions set up as project codes, enabling us to catch all expenditure by both the applicable cost centre and action. The Associated Beneficiaries list their expenditure by action code, on the information sent to SEPA as the Co-ordinating Beneficiary.

The letter received from the European Commission on 09 January 2017 (full letter presented in MTR Annex 7.1.6, Point 10: Timesheets) confirms that on the basis of the information provided and the precedent set by the SEWeb project, the timesheet system is considered to be compliant with the requirements of the Common Provisions and is therefore acceptable.

In order to ensure all invoices include clear reference to the Project, all suppliers are asked to include the LIFE narrative (LIFEENV/UK/000549) on all invoices. If this is not possible, each invoice is manually stamped with the Project code. The Associated Beneficiaries have a similar practice.

6.4 Partnership arrangements (if relevant)

The Associated Beneficiary supplies the Co-ordinating Beneficiary with a copy of invoices duly stamped. These are entered into the project spread sheets by the Co-ordinating Beneficiary. Example of Operational Control Worksheets is attached (MTR Annex 8.1.6).

6.5 Auditor's report/declaration

It is our intention to use the same auditor employed for auditing our recent LIFE project (LIFE10 ENV-UK-000182, SEWeb):

Scott-Moncrieff
Exchange Place 3,
Semple Street,
Edinburgh,
EH3 8BL

Companies House registration number is SC110660.
VAT registration number is 269110857.

6.6 Summary of costs per action

There are three Major discrepancies at Actions B5, B13 and B14 all which have explanation within the technical report and are highlighted with a brief summary in MTR Annex 8.1.7.

Action no.	Short name of action	1. Personnel	2. Travel and subsistence	3. External assistance	4.a Infra-structure	4.b Equipment	4.c Prototype	5. Purchase	6. Consumables	7. Other cost	TOTAL
B1	Design an innovative intelligence communications hub	56651	34	29188							85872
B2	Develop an intelligence gathering strategy	3372	4								3376
B3	Design innovative methods to analyse competitive behaviour in waste markets	40759		1106							41865
B4	Build innovative emerging threats and predictive analysis tool	1516									1516
B5	Develop innovative waste flow audit approaches	109604	1456								111059
B6	Develop innovative financial investigation approaches	9776	34	27675							37485
B7	Develop innovative ways to use waste flow tracking devices	20999									20999
B8	Develop innovative remote sensing techniques	14781		13332							28112
B9	Deploy and test the intelligence communication hub	92898	212	78360							171470
B10	Undertake investigations to fill intelligence gaps and pilot innovative investigatory tools	24426	1023	98							25546
B11	Produce four intelligence reports	35937	88								36024
B12	Scope out the barriers to joint working between agencies	15130	237								15367
B13	Specify how to set up group structures to overcome barriers	29753		82							29835
B14	Create an innovative interventions design menu	15205	63	54591							69858
B15	Set up cross agency intervention groups and delivery interventions	94079	495	195							94770
B16	Produce recommendation reports for policy and/or legislative interventions	458		114							572
C1	Produce evaluation reports for the Hub and investigatory tools	182									182
C2	Produce intervention evaluation, protocols and case study reports	284									284
C3	Undertake evaluation of the LSW project, produce final report	403									403
D1	Develop a targeted dissemination strategy	16652									16652
D2	Disseminate to enforcement agencies and industry representatives	23912	426								24338
D3	Disseminate to policy makers and legislators	6424									6424
D4	Disseminate to wider stakeholders	50549		2413					3772		56734
D5	Produce notice boards	601		3632							4233
D6	Produce LIFE SMART Waste website	1919									1919
D7	Produce a Layman's report	0									0
D8	Produce an "After-LIFE+" communication plan	0									0
D9	Dissemination conference in Brussels	151									151
E1	Project Management by SEPA	333944	3146	9036					217		346342
E2	Project Monitoring & Evaluating	62107	78								62185
E3	Audit	0									0
Overheads											90550
TOTAL		1062471	7295	219820	0	0	0	0	3989	0	1384125

7. Annexes

7.1 Administrative annexes

A full list of administrative annexes and the respective EU report which they were filed with are summarised in the table below.

Description	EU Report Filed	Annex Number
Partnership Agreement	Inception Report	7.1
Project Initiation Document (PID) v1.0		7.2.1
Organisation v1.1		7.2.1
Minutes from November 2014 PCB (LSW PB 14 004 Minutes v0.2)		7.2.1
Minutes from February 2015 PCB (LSW PB 15 010 Minutes v0.3)		7.2.1
Project monthly summary report January 2015 (LSW PB 15 003 Monthly Highlight Summary)		7.2.1
ESG Minutes (External Group Minutes Sep14)		7.2.2
ESG Minutes (External Group Minutes Nov 14)		7.2.2
PCWG Meeting Nov14		7.2.3
Envicrimenet Meeting Nov14		7.2.3
DG-ENV Meeting Jan15		7.2.3
Output Indicators v0.1.		7.4
Changes to Team		7.5
Project stakeholder table v0.1		Progress Report 1
Project organisation document v2.7	7.2.2	
Stage Plan 1 (01 March 2015 to 30 September 2015)	7.2.3	
Stage Plan 2 (01 October 2015 to 30 September 2016)	7.2.4	
Stage Plan 2 (highlighting progress to 30 June 2016)v1.18	7.2.5	
Letter received from European Commission (13 April 2015)	7.2.6	
External Steering Group Agenda (28 April 2015)	7.2.7	
Stakeholder Workshop Agenda (26 August 2015)	7.2.16	
Project stakeholder table v0.2	Mid-term Report	7.1.1
Project breakdown structure		7.1.2
Project organisation document v2.8		7.1.3
Stage Plan 2 (highlighting progress to 30 September 2016)v1.22		7.1.4
Stage Plan 3 (highlighting progress to 31 December 2016)v1.0		7.1.5
Letter received from European Commission (09 January 2017)		7.1.6
Minutes from November 2016 PCB (LSW PB 16 077 Minutes v1.0)		7.1.7
Stage 1 lessons learned report v0.3		7.1.8
Stage 2 lessons learned report v0.5		7.1.9
LIFE SMART Waste Benefits Map v1.0		7.1.10

7.2 Technical annexes

7.2.1 List of keywords and abbreviations used

Term	Definition
ACR+	The Association of Cities and Regions for Recycling and Sustainable Resource Management
AMT	SEPA Agency Management Team
BAN	Basel Action Network
CI	Competitive Intelligence
EC	European Commission
ECEC	Environmental Compliance and Enforcement Committee
eDoc	Electronic Duty of Care (LIFE Co-funded Project)
EFFACE	European Union Action to Fight Environmental Crime
ENPE	European Network for Prosecutors for Environment
EnviCrimeNet	Environmental Crime Network
ESG	External Steering Group
EST	Enforcement Support Team (SEPA)
EU	European Union
EUFJE	European Union Forum of the Judges for the Environment
EUROPOL	The European Police Office
FTE	Full Time Employee
FaPP	Fit and Proper Person
HMRC	Her Majesty's Revenue and Customs
IBGE-BIM	Brussels Institute for the Management of the Environment
IMPEL	EU Network for the Implementation and Enforcement of Environmental Law
INTERPOL	The International Criminal Police Organization
IR	Inception Report
IT	Information Technology
LIFE+	European Commission Financial Instrument for the Environment
LSW	LIFE SMART Waste project
MCM	Multi-Criteria Mapping (methodology)
MTR	Mid-Term Report
NEEMO-GEIE	LIFE+ Project Monitor
NIEA	Northern Ireland Environment Agency
NRW	Natural Resource Wales
ODT	Operation Delivery Team
PBS	Product Breakdown Structure (project management product delivery mapping technique)
PCB	Project Control Board
PCWG	Pollution Crime Working Group (INTERPOL)
PR1	Progress Report 1
Q1, 2, 3, 4	Quarter (of a year) 1, 2, 3 and 4
RAG	Red, Amber, Green (project status monitoring technique)
SFI	Standard Financial Instruction
SEPA	Scottish Environment Protection Agency
SEWeb	Scotland's Environment Web (SEPA project)

SIRO	Senior Information Risk Officer
SoR	Statement of Requirements
UAT	User Acceptance Testing
VDI	Virtual desktop infrastructure
VoIP	Voice over Internet Protocol (phonecall done using the PC only)
WebEx	online meetings and Video Conferencing product of Cisco (company)
ZWS	Zero Waste Scotland

7.2.2 Technical Reports and Deliverables:

A full list of technical annexes and the respective EU report which they were filed with are summarised in the table below. The European Commission is asked to review and approve the products highlighted in **bold**.

Description	EU Report Filed	Annex Number	
B1 Hub Recommendation Report v1.0	Progress Report 1	7.2.8	
B1 Hub (High Level) Design Document v1.0		7.2.9	
B2 Intelligence Gathering Strategy Product Description v1.0		7.2.10	
B2 Intelligence Gathering Strategy v1.0		7.2.11	
B5 Waste Data Report (NRW) v0.5		7.2.12	
B6 Literature Review v1.0		7.2.13	
B7&B8 Legal Advice on Remote Sensing Techniques		7.2.14	
B9 Hub UAT Testing		7.2.15	
B12 Barriers to Joint Working Report v1.0		7.2.17	
B14 Literature Review v1.0		7.2.18	
B14 Recommendation Report v1.0		7.2.19	
B14 Interventions Design Manual v3.1		7.2.20	
B1 Hub Business Requirements Specification		Mid-term Report	7.2.21
B3 Inception Meeting Minutes (03 October 2016)			7.2.22
B4 Inception Meeting Minutes (09 December 2016)v1.0	7.2.23		
B5 Waste crime indicators report v0.6	7.2.24		
B6 Recommendation Report v1.0	7.2.25		
B7 Waste Flow Tracking Devices Report v1.0	7.2.26		
B9 Hub Data Sharing Agreement v1.0	7.2.27		
B9 Hub Terms & Conditions & SyOps v1.0	7.2.28		
B9 Hub Privacy Statement v1.0	7.2.29		
B11 Intelligence Report No. 1v1.0	7.2.30		
B13 Overcoming Barriers to Joint Working: Group Structures Required Report v1.0	7.2.31		
B14 Literature Review v1.0 (with updated cover page)	7.2.32		
B14 Recommendation Report v1.0 (with updated cover page)	7.2.33		
B14 Interventions Design Manual v3.1 (with updated cover page)	7.2.34		

7.3 Dissemination annexes

7.3.1 Layman's report

Not applicable at this stage.

7.3.2 After-LIFE Communication plan – for LIFE+ Biodiversity and LIFE Environment Policy and Governance projects

Not applicable at this stage.

7.3.3 Other dissemination annexes

A full list of dissemination annexes and the respective EU report which they were filed with are summarised in the table below. The European Commission is asked to review and approve the products highlighted in **bold**.

Description	EU Report Filed	Annex Number
Dissemination to wider stakeholders (PB 14 003 Project Overview)	Inception Report	7.2.4
ACR+ weekly and quarterly newsletters (Newline 10 Oct 2014)		7.2.4
ACR+ weekly and quarterly newsletters (Newline 28 Nov 2014)		7.2.4
ACR+ weekly and quarterly newsletters (ACR+ Update Winter 2015)		7.2.4
D1 Dissemination strategy 2015-19_Final v1.0	Progress Report 1	7.3.1
D1 Dissemination and engagement schedule and log		7.3.2
D2 Inter-agency networking events timetable		7.3.3
D2 Dissemination images		7.3.4
D2 Business cards		7.3.5
D4 Project presentation		7.3.6
D4 Digital brochure – English		7.3.7
D4 Digital brochure – French		7.3.8
D4 Digital brochure – Dutch		7.3.9
D4 Digital brochure – Welsh		7.3.10
D4 Digital brochure – German		7.3.11
D4 Project summary - English only		7.3.12
D4 Project summary - French and Flemish		7.3.13
D4 Project summary - English and Welsh		7.3.14
D4 E-newsletter database (30/06/16)		7.3.15
D4 Digital E-newsletter (Issue 1)		7.3.16
D4 ACR+ dissemination		7.3.17
D4 Case study template		7.3.18
D4 Waste crime leaflet – Digital		7.3.19
D4 Waste crime leaflet – Print		7.3.20
D4 Social media		7.3.21
D4 Media coverage	7.3.22	
D5 Notice Boards / Pull-up Banners	7.3.23	

D6 Website landing pages		7.3.24
D2 Inter-agency networking events timetable	Mid-term Report	7.3.25
D4 Dissemination images		7.3.26
D2 Project networking		7.3.27
D4 ACR+ dissemination		7.3.28
D4 Digital dissemination		7.3.29
D4 Re-branded project presentation		7.3.30
D4 E-newsletter database (31/12/16)		7.3.31
D4 Digital E-newsletter (Issue 2)		7.3.32
D4 Logo guidelines		7.3.33
D6 Re-branded website landing pages		7.3.34
D2 Declaration of cooperation		7.3.35
ENPE LIFE project & LIFE SMART Waste networking meeting minutes		7.3.36

7.4 Final table of indicators

Not applicable at this stage.

8. Financial report and annexes

Financial supporting documents as follows:

- MTR Annex 8.1.8 Section 8 MTR financial
- MTR Annex 8.1.9 Section 8 MTR financial SEPA
- MTR Annex 8.1.10 Section 8 MTR financial NRW
- MTR Annex 8.1.11 Section 8 MTR financial ACR+
- MTR Annex 8.1.12 Section 8 MTR financial IBGE-BIM
- MTR Annex 8.1.13 External Assistance Invoice 1
- MTR Annex 8.1.14 External Assistance Invoice 2
- MTR Annex 8.1.15 External Assistance Invoice 3
- MTR Annex 8.1.16 Comparison to F1
- MTR Annex 8.1.17 NRW signed beneficiary certificate
- MTR Annex 8.1.18 ACR+ signed beneficiary certificate
- MTR Annex 8.1.19 IBGE-BIM signed beneficiary certificate
- MTR Annex 8.1.20 Consolidated cost statement for the project (signed)
- MTR Annex 8.1.24 SEPA beneficiary certificate

Responses to further information or clarifications, requested in previous letters from the Commission, as follows:

1. EU Comment - Civil servant posts:

I confirm that it is no requirement to backfill positions vacated by project staff employed by public sector beneficiaries and that it is acceptable to second staff to the project. A note on the personnel file or letter of secondment should be issued and be made available as a supporting document if requested by the Commission

SEPA Response: See LSW letter (MTR Annex 8.1.22), which is included in each member of staff working on the project, staff file.

2. EU Comment – External Assistance:

I understand that IBGE-BIM use an electronic procurement system. Whilst this is acceptable in principle, please ensure that all relevant procurement documentation (including tender specifications, tenders received, evaluations and award notices) can be accessed and shared with the EC if requested.

SEPA Response: Not applicable at this point of reporting.

3. EU Comment – VAT:

For those beneficiaries that intend to recover the costs of non-recoverable VAT please ensure that they comply with the requirements specified in Article 30.2 of the common Provisions (*For VAT charges to be considered eligible, the coordinating beneficiary must prove with documents emitted by the responsible authorities or included in legal acts that it and/or its associated beneficiaries must pay and may not recover the VAT for the assets and services required for the project. In lieu of such legal documents, the Commission may accept, as proof of VAT eligibility, an explicit declaration in the independent financial audit mentioned*

in article 31 listing the amounts of VAT that have been paid and that may not be recovered by the coordinating beneficiary and/or its associated beneficiaries)

SEPA Response: See SEPA liability of income (MTR Annex 8.1.21) and SEPA VAT certificate issued 2013 (MTR Annex 8.1.23).

8.1 Financial annexes

A full list of financial annexes and the respective EU report which they were filed with are summarised in the table below. The European Commission is asked to review and approve the products highlighted in **bold**.

Description	EU Report Filed	Annex Number
Procedure for managing expenditure (Financial Procedures)	Inception Report	7.2.1
SEPA finance systems	Mid-term Report	8.1.1
SEPA business expense and allowance policy		8.1.2
SEPA purchasing and procurement of goods & services		8.1.3
SEPA supplier payments		8.1.4
Approval levels using Agresso system		8.1.5
Operational control worksheets		8.1.6
Note of finance discrepancies		8.1.7
Section 8 MTR financial		8.1.8
Section 8 MTR financial SEPA		8.1.9
Section 8 MTR financial NRW		8.1.10
Section 8 MTR financial ACR+		8.1.11
Section 8 MTR financial IBGE-BIM		8.1.12
External Assistance Invoice 1		8.1.13
External Assistance Invoice 2		8.1.14
External Assistance Invoice 3		8.1.15
Comparison to F1		8.1.16
NRW signed beneficiary certificate		8.1.17
ACR+ signed beneficiary certificate		8.1.18
IBGE-BIM signed beneficiary certificate		8.1.19
Consolidated cost statement for the project (signed)		8.1.20
SEPA liability of income		8.1.21
LSW letter		8.1.22
SEPA VAT certificate issued 2013		8.1.23
SEPA Beneficiary certificate		8.1.24