

MASTER THESIS

**Enhancing cross-border Waste Management within Europe under
the Notification Procedure of the Waste Shipment Regulation to
support the European Circular Economy Strategy**



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A dream has come true!

Jacqueline Daalmans
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ABSTRACT

This thesis explores how cross-border Waste Management within Europe under the Notification Procedure of the Waste Shipment Regulation (WSR) can be enhanced in order to support the European Circular Economy Strategy. The 7th Environment Action Programme (EAP) of the European Commission (EC) and the Circular Economy Package adopted in 2015 include measures that will help stimulate Europe's transition towards a circular economy. The main drivers of the European Circular Economy Strategy are the explosive demand for raw materials, dependency on other countries and interconnectivity with the climate (Co2-emissions). The main barriers are considered to be either cultural, regulatory, market or technological related. The regulatory barriers relate to lacking policies that support a circular economy transition.

The Basel Convention of 1989 established the requirement of "prior written consent" before shipments of certain types of wastes are allowed to take place. It was followed by a Ban Amendment in 1995 (not yet entered into force), prohibiting all transboundary movements of hazardous wastes which are destined for final disposal or for recycling or recovery operations from OECD to non-OECD States. With the OECD Decision in 2001, a two-tier system to delineate controls to be applied to transboundary movements of waste was established: the Green Control and the Amber Control procedure. The Waste Shipment Regulation (WSR) of 2006 and the Waste Framework Directive (2008) form the basis of law with regard to cross-border Management of Waste in Europe. The WSR integrated the Basel Convention, the Ban Amendment and OECD Decision in its provisions. Since the WSR entered into force in 2007, it has been subject to amendments in Acts and Annexes.

Enforcement of the WSR is the responsibility of EU Member States individually, with an escalation on EU level to the European Court of Justice (CJEU). In the Netherlands ILT is mandated by the Ministry of Infrastructure and Water Management to enforce the WSR. It cooperates with network partners for the supervision and enforcement of the WSR. Dutch Customs performs – in close cooperation with ILT - its non-fiscal tasks in the field of supervision and enforcement of the WSR.

The purpose of the Notification Procedure is to ensure a high level of protection of the environment and human health. In order to ensure optimum supervision and control of particular waste movements, prior written consent is required by the competent authorities involved. The main 7 steps under a Notification Procedure process are (1) the set-up of a contract between Notifier and Consignee, (2) the establishment of a financial guarantee or equivalent insurance, (3) the application of the Notifier to the competent authority of dispatch, (4) assessment and transmission of the Notification by the competent authority, (5) a prior notification of movement of the waste 3 days before shipment, (6) the actual movement of the waste and (7) a confirmation of disposal or recovery of the waste. Stakeholders involved in the Notification Procedure of waste itself under the WSR are numerous, main ones being the Notifiers, Consignees, competent authorities involved and the customs offices of exit and entry of the waste. Lead-times of a Notification Procedure process (grant permission to move waste) in practice vary amongst EU Member States, which can take weeks, but also several months in practice.

The factors that are influencing the lead-time of a Notification Procedure process are various, some of them related to the type of waste involved and the classification of it, the required additional / documentation or information to be provided by the Notifier to the competent authorities involved or resource availability of the competent authorities involved to process a Notification. There is also a lacuna of law in the WSR: in case a competent authority requests additional information from the Notifier, the WSR does not specify a time period within which this additional information must have been received from the Notifier, nor does it specify a time period that the competent authority must respond to the additional information supplied by the Notifier. In practice, differences in the interpretation in the implementation, execution and enforcement of the WSR exist between EU Member States, creating an unlevel playing field. This also counts for the criteria to be applied for the permits for pre-consented recovery facilities. And if the permit is there, the validity of it is rather short (maximum of 3 years) compared to the effort done to obtain the permit. Last but not least, the Notification Procedure is still a paper-form non-digital process, which explains for itself the administrative burden it puts on all stakeholders involved.

The interviewed stakeholders (representatives of Chemogas NV, Dutch Customs, FHG, ILT, SEPA, Wastepoint B.V. and Van Diepen Van der Kroef Lawyers) are supporting the revision of the WSR, as abolishment could have too many adverse effects on the environment and protection of it in favor of human kind. The interviewed stakeholders share the opinion that the WSR is effective (or to a large extent) in achieving its two main objectives: the protection of the environment and the combat against illegal shipments of waste. However, the stakeholders' perspectives analysis revealed that stakeholders involved in a Notification Procedure process under the WSR are confronted with issues, the main ones being (a) the classification of waste (b) the Notification Procedure process being an burdensome administrative process, lacking digitization, (c) the lack of clear and harmonized criteria for pre-consented facility permits, (d) the differences in the implementation, the execution and the enforcement of the WSR between EU Member States, creating an unlevel playing field in Europe and (e) the old waste definition of 1975, stemming back from a linear economy situation, not fitting the world of today and the move towards a circular economy approach.

To enhance cross-border Waste Management within Europe under the Notification Procedure of the WSR to support the European Circular Economy Strategy, the following four means are to be considered: (1) the establishment of a European Regional Agreement on cross-border Waste Management for intra-EU shipments, (2) the simplification of the Notification Procedure for intra-EU waste shipments, (3) the set-up of a EU Waste Management Certification system and (4) digitization of cross-border Waste Management streams within Europe. These four means will positively contribute to the protection of the environment and the combat against illegal shipments of waste, supporting and promoting environmentally sound management within Europe. If these correlating means are implemented within Europe – in combination with a future change of the current waste definition and classification of waste – cross-border Waste Management within Europe under the Notification Procedure of the Waste Shipment Regulation can be significantly enhanced to support the European Circular Economy Strategy.

GLOSSARY

AEO	Authorised Economic Operator
BDE	BDE Bundesverband der Deutschen Entsorgungs-, Wasser- und Rohstoffwirtschaft
CJEU	The European Court of Justice
EA	Enforcement Actions
EAP	Environmental Action Programme
EC	European Commission
EDI	Electronic Data Interchange
EMA	Environmental Management Act
EMAS	Eco-Management and Audit Scheme
EOA	Economic Offences Act
ESM	Environmentally Sound Management
ETAGIW	Expert Team for Assessing and Guidance for the Implementation of Waste legislation
EU	European Union
EuRIC	European Recycling Industries' Confederation
FEAD	European Federation of Waste And Environmental Services
FHG	Federatie Herwinning Grondstoffen (Recycling Raw Materials Federation)
IA	Impact Assessment
ILT	Inspectie Leefomgeving en Transport (Human Environment and Transport Inspectorate, the Netherlands)
IMPEL	The European Union Network for the Implementation and Enforcement of Environmental Law
IMPEL TFS	IMPEL Trans-frontier Shipment of Waste Cluster
NGO	Non-governmental organization
NSRR	North Sea Resources Roundabout
OECD	Organization for Economic Co-operation and Development
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
Rli	Raad voor de leefomgeving en infrastructuur (Council for the Environment and Infrastructure)
SEPA	Scottish Environment Protection Agency
SMEs	Small and medium-sized enterprises
SOA	Service-Oriented Architectures
TFS	Trans-frontier Shipments of Waste
UCC	Union Customs Code
UNEP	United Nations Environment Programme
WFD	Waste Framework Directive
WCO	World Customs Organization
WSR	Waste Shipment Regulation

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CHAPTER 1: INTRODUCTION

1.1. Background information

As the world population keeps on growing, so is the demand for raw materials, as already was predicted by the Club of Rome in 1972.¹ The for centuries applicable linear economic model – characterized as “take, make, dispose” – is considered to be unsustainable in the future, as this model is disconnected from the physical world. Impacts on human, social and natural capital and the long-term availability of critical resources are not taken into account by the linear model.² Looking beyond the current “take-make-dispose” extractive industrial model, the circular economy is restorative and regenerative by design. Relying on system-wide innovation, it aims to redefine products and services to design waste out, while minimizing negative impacts.³ The key principles of the circular economy are to (1) design out waste and pollution, (2) keep products and materials in use and (3) regenerate natural systems.⁴ The transition to a more circular economy, where the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste minimized, is seen as an essential contribution to the European Union’s efforts to develop a sustainable, low carbon, resource efficient and competitive economy.⁵

The need to move away from a linear economic model towards a circular economy approach is recognized, but this transition in practice appears to be more problematic and requires efforts, changes and commitments in the future ahead from all stakeholders involved, amongst them businesses, non-governmental organizations (NGOs), consumers and governmental institutions on various levels. Although the European Union (EU) considers waste management and waste legislation as key elements of its environmental policy to support the circular economy⁶, thinking and acting in terms of “secondary raw materials” instead of in classical terms of “waste” from a legal perspective is still far away. However, the circular economy approach will require considerable decision-making and changes on an international, European and national legislative level. The European environmental law has its roots in the 1970s and is nowadays contained in international and European treaties, legislation passed by the institutions (such as Regulations and Directives) and judgments and principles of the Court of Justice.⁷ Taking into account that change of European environmental law will take considerable time, this thesis will explore how cross-border Waste Management within Europe under the Notification Procedure of the Waste Shipment Regulation (WSR) can be enhanced to support the European Circular Economy Strategy.

¹ Meadows, D.H. , Meadows, D.L., Randers, J., Behrens III, W.W. 1972, *The limits to growth*, A report for the Club of Rome’s project on the predicament of mankind, A Potomac Associates Book, 55.

² IMSA Amsterdam. 2013, *Unleashing the Power of the Circular Economy*, IMSA Amsterdam, 10.

³ Ellen MacArthur Foundation 2017b, *What is a circular economy?*, retrieved May 24, 2018 from <https://www.ellenmacarthurfoundation.org/circular-economy>.

⁴ Ellen MacArthur Foundation 2017a, *Circular Economy Overview*, retrieved May 24, 2018 from <https://www.ellenmacarthurfoundation.org/circular-economy/overview/concept>.

⁵ EC 2015, *Communication from the Commission to the European Parliament, the Council , the European Economic and Societal Committee and the Committee of the Regions, Closing the loop – an EU action plan for the Circular Economy*, European Commission, Brussels, 2.12.2015 COM(2015) 614 FINAL, 2.

⁶ Ibid, 8.

⁷ Bell, S., McGillivray, D., Pedersen, O.W., Lees, E., Stokes, E. 2017, *Environmental Law*, Ninth Edition OXFORD University Press, 181.

1.2. Problem statement

The main and predominant objective of the European Waste Shipment Regulation (WSR) – as mentioned in the preamble of this Regulation - is the protection of the environment, its effects on international trade being only incidental.⁸ The Regulation distinguishes between three options in case of an international waste shipment: (1) prohibition, (2) notification with permit and (3) shipment with accompanying documentation only. Which of the three options applies, depends on different factors, including the country of destination, the type of waste involved, the processing method, national policy or a combination of these.⁹

In order to achieve the key objective of the WSR, two control procedures are applicable for the shipments of waste¹⁰:

1. The general information requirements of Article 18 WSR, which is normally applicable to shipments for recovery of wastes, listed in Annex III (“green” listed wastes, non-hazardous, such as paper or plastic).
2. The procedure of prior written notification and consent of Article 3 WSR for other types of shipments of waste, including:
 - Shipments of wastes listed in Annex IV (“amber” listed wastes containing both hazardous and non-hazardous parts) or in Part 2 of Annex V (European list of wastes, e.g. wastes from mining, quarrying and physical and chemical treatment of minerals).
 - Shipments for disposal of wastes listed in Annex III (“green” listed wastes).

Article 50 of the WSR forms the basis for enforcement, which is the responsibility of each individual Member State of the EU. In the Netherlands, for example, enforcement of the WSR is carried out by the Human Environment and Transport Inspectorate (ILT), in cooperation with other institutions, their network partners, one of them being Customs. For this collaboration with Customs, a framework agreement (covenant) was concluded.¹¹ In its yearly report of 2015, the ILT reported a compliance rate to the WSR of <70%.¹²

The European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL) - an international non-profit association of the environmental authorities of the EU Member States, acceding and candidate countries of the European Union and EEA countries – also reported a high rate of non-compliance to the WSR. They based their conclusions on the inspections held under the IMPEL-TFS Enforcement Actions projects (EA I, II, III and IV), where inspection data of participating EU Member States were collected.¹³

⁸ Regulation (EC) No 1013/2006 of the European Parliament and the Council of 14 June 2006 on shipments of waste, 12.7.2006, Official Journal of the European Union, L 190/1, preamble, point 1.

⁹ EUROSAI 2013, Report of the audit on the enforcement of EU regulations on waste shipment, Audit ID 1453976251177, The Hague, October 2013, 18.

¹⁰ Ibid, 8, 16.

¹¹ *Handboek VGEM, 1.2. Kaderovereenkomst* [Handbook SHEA, 1.2 Framework agreement], retrieved May 24, 2018 from https://www.belastingdienst.nl/bibliotheek/handboeken/html/boeken/HVGEM/_evoa_overbrenging_afvalstoffen_evoa-inleiding.html#HVGEM-d3414e76.

¹² ILT 2015, *Inspectie Leefomgeving en Transport, Ministerie van Infrastructuur en Milieu, Jaarverslag 2015* [Human Environment and Transport Inspectorate, Ministry of Infrastructure and Environment, Annual report 2015], 8.

¹³ IMPEL-TFS Enforcements Actions I (2008), II (2011), III (2014a) and IV (2016) reports.

Under EA IV a total of 4.784 administrative and 12.396 physical transport inspections were undertaken in 2014 and 2015. Waste shipments accounted for 28.7% of these inspections, of which 16.6% (815 shipments) were in violation with the WSR, either being administrative violations (36.5%), illegal transports (9.3%) or other violations (52.1%, referring to more serious offences such as national regulations, or missing, incomplete or incorrect notifications).¹⁴

Figure 1 shows that in the EA IV data collection period penalties were the most common response to detection of illegal movements with 311 issued (36%), followed by repatriations (17%) closely by prosecutions with 78 cases prepared (9%). These figures are significantly higher than in EA III, during which time 190 penalties were issued and 39 files were prepared for prosecution.¹⁵

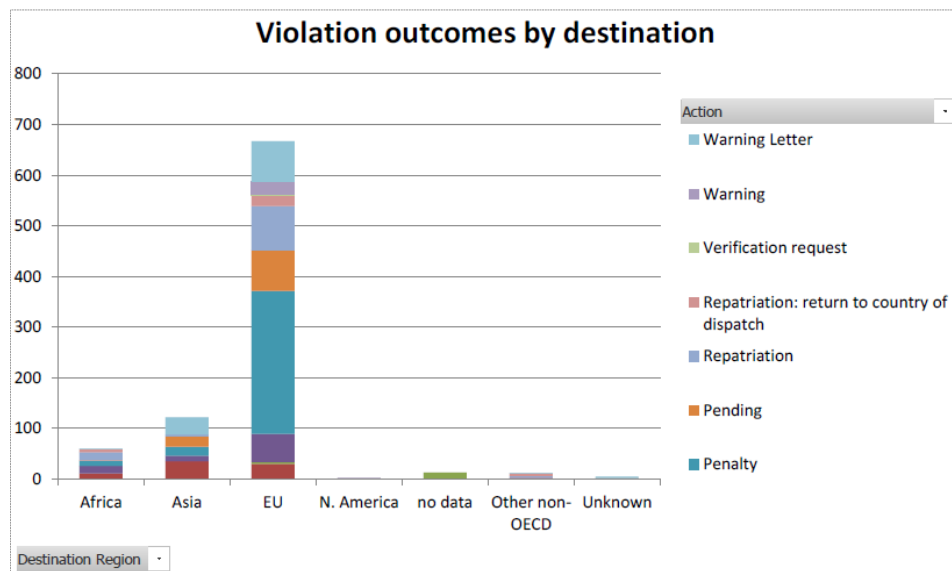


Figure 1: WSR violations outcome under EA IV - 2014-2015¹⁶

In 2010, a report was published by EURinSPECT and SIRA Consulting, which presented the outcomes of a research performed for the EVO in the field of WSR. Outcome of the research was, freely translated, that supply chain parties involved in cross-border management activities of waste encountered quite a few barriers, such as differences between (interpretation of) legislation between parties involved, differences in the execution and supervision on the WSR Member States institutions (agencies, customs) in the EU and unclear definitions in the WSR and Waste Framework Directive.¹⁷ These barriers led to unwanted side effects, such as longer preparation and guidance time of transports, delay of transports, higher transport costs due to the obligation to follow certain longer routes and avoidance of companies to ship waste for recovery purposes.¹⁸

¹⁴ IMPEL 2016, IMPEL-TFS Enforcement Actions, Project Report 2014-2015, Enforcement of the European Waste Shipment Regulation, 29.

¹⁵ Ibid, 40.

¹⁶ Ibid, 40.

¹⁷ Vos, J.M. (EURinSPECT), Bex, P.M.H.H. (SIRA Consulting), Van der Poll, P.A.M. 2010, *Cross-border afvaltransport: Op weg naar onbelemmerd transport in Europa?* [Cross-border waste transport: On the way to unobstructed transport in Europe?], The Hague, 2 September 2010, 13.

¹⁸ Ibid, 19.

The aforementioned was confirmed a few years later by the Dutch Council for the Environment and Infrastructure (Rli)¹⁹, who cited in an English version of their report “Circular Economy: From Wish to Practice” the following: *In the discussion on the circular economy, this directive is cited as a barrier to the international trade of valuable secondary raw materials. Apart from the high administrative burden for companies, which might result in companies not offering flows up for recycling, this directive has also been the subject of criticism due to differences in interpretation and enforcement in the various European countries. These differences result in an unlevel playing field: the Netherlands for instance is allegedly more stringent in this respect. In a letter to parliament, the State Secretary for Infrastructure and the Environment has stated that the Netherlands, in its capacity as a major transit country for waste, is being negatively impacted by the insufficient enforcement of the European Waste Shipment Regulation in other member states and by the fact that the so-called ‘green list’, which lists waste materials that are governed by a relatively lighter regime, is interpreted differently from country to country.*²⁰

Harmonization of enforcement of the WSR in Europe is still unrealized. And probably the calculated violation rate of 16.6% of the WSR (measured in the period 2014-2015) might even be higher, as only a small percentage of waste shipments is inspected by Member States. Realizing that even a small error in the paperwork under the Notification Procedure of the WSR can lead to a penalty or a “criminal offence” classification might make risk-adverse companies hesitating to engage in waste shipment activities. However, Europe will have to deal with the current WSR for many more years. The European Commission (EC) has started an evaluation of the WSR in 2017, with the intent to assess whether the WSR meets its objectives and is coherent with the general objectives of EU environmental policy, the Circular Economy and the internal market. The results of this evaluation – expected to be reported in 2019 – will be used to further identify measures to improve the implementation of the WSR.²¹

Enhancing cross-border Waste Management within Europe now under the Notification Procedure of the WSR can provide a positive contribution to the European Circular Economy Strategy by increasing the efficiency and value of waste products (positive rather than negative connotation) in order to reach the goals of sustainable growth, which will benefit all stakeholders involved.

¹⁹ The Council for the Environment and Infrastructure is an official translation for the “Raad voor de leefomgeving en infrastructuur” (Rli), which is the primary strategic advisory board for the government and parliament in the fields of the physical environment and infrastructure in the Netherlands.

²⁰ Rli 2015, Circular Economy: From Wish to Practice, June 2015, Rli, Council for the Environment and Infrastructure, 78.

²¹ EC 2017a, Evaluation Roadmap, Evaluation of Regulation (EC) No 1013/2006 on shipments of waste (Waste Shipment Regulation – WSR), 27/01/2017, DG ENV B3, 1.

1.3. Research aim and objectives

This research aims to explore how cross-border Waste Management within Europe under the Notification Procedure of the Waste Shipment Regulation (WSR) can be enhanced to support the European Circular Economy Strategy. The objective of this research is six-fold:

- The first objective is to provide an overview of the main drivers and barriers to the European Circular Economy Strategy.
- The second objective is to study the legal framework that is applicable to cross-border Waste Management within Europe. It aims to provide a brief history of environmental policy in Europe and a review of the current legislative framework in place, including recent developments.
- The third objective is to explain the functioning of the Notification Procedure of the WSR in daily practice. It will include a flow overview and description of the main compliance requirements.
- The fourth objective is to determine how enforcement of cross-border Waste Management under the Notification Procedure of the WSR is arranged within Europe and particularly in the Netherlands.
- The fifth objective is to detect which main issues stakeholders are confronted with in daily practice when the Notification Procedure of the WSR is applicable. Purpose is to gain insight in the current problems from various stakeholders' perspectives.
- The sixth objective is to establish means by which cross-border Waste Management within Europe under the Notification Procedure of the WSR could and should be enhanced. As the Notification Procedure is complex in itself, a multi-fold of means which can enhance its functioning will be explored.

1.4. Research questions

This research study will answer the following **main research question**:

How can cross-border Waste Management within Europe under the Notification Procedure of the Waste Shipment Regulation (WSR) be enhanced to support the European Circular Economy Strategy?

To provide an answer to the main research question, the following **six sub-questions** are established:

1. *What are the main drivers and barriers of the European Circular Economy Strategy?*
2. *What legal framework is applicable to cross-border Waste Management within Europe?*
3. *How is enforcement of the Notification Procedure of the WSR arranged within the EU?*
4. *How does the Notification Procedure of the WSR function in practice?*
5. *Which main issues are stakeholders confronted with when the Notification Procedure of the WSR is applicable?*
6. *By what means could cross border Waste Management within Europe under the Notification Procedure of the WSR be enhanced?*

1.5. Research scope

This research study contains Customs, Supply Chain Compliance and Information Technology related aspects. It will explore how cross-border Waste Management within Europe under the Notification Procedure of the WSR can be enhanced in order to support the European Circular Economy Strategy. The European Circular Economy Strategy goals related to waste management will be briefly outlined. A high-level overview of the functioning of the Notification procedure will be presented. Out of scope is to provide an explanation of the functioning of the Notification Procedure under the WSR on a detailed level, which is too complex and dependent on the waste material being shipped. Focus is put on the main issues stakeholders are experiencing when waste is shipped under the Notification Procedure of the WSR within the EU. Single case studies will be used in this research study to illustrate the main bottlenecks encountered in practice by stakeholders, which will explain why supply chain compliance to the WSR is not a straightforward process in daily practice. With regard to enforcement of the WSR, only the execution of and supervision of the WSR by the Dutch authorities - ILT and Customs - will be explored in-depth, including IT related aspects. How the other EU Member States have arranged enforcement of the WSR is out of scope of this research study.

1.6. Main stakeholders

With regard to this research study – focusing on the Notification procedure of the WSR - many stakeholders are involved. The most important ones to consider are the following:

- *European Commission*: It is the EU that is responsible for the implementation of the European Action Plan – together with the 28 EU Member States - to realize a Circular Economy. Waste legislation is developed on an EU level, so hence the EC is a major stakeholder.
- *EU Member States' governments*: Any of the 28 EU member states governmental institutions (customs, inspection offices, courts) involved in the Waste Shipment Regulation process and Circular Economy.
- *IMPEL*: This organization's aim is to promote compliance with the WSR and Waste Management Directives through enforcement, to carry out joint enforcement projects, to promote exchange of knowledge, best practices and experience with enforcement of the Regulations and Directives and to stimulate a uniform enforcement regime.²²
- *Businesses and NGOs*: The businesses – and their representing NGOs - involved in waste shipments under the Notification procedure, are an important stakeholder, as a good functioning system contributes to the successful execution of this circular economy business processes and avoids non-compliance to the WSR.
- *ILT*: The Human Environment and Transport Inspectorate is mandated by the Ministry of Infrastructure and Water Management in the Netherlands for enforcement of the WSR.
- *Society in general*: All those people in the EU who are affected by cross-border management of waste, as protection of the environment concerns us all.

²² IMPEL 2014b, Waste and TFS, retrieved May 24, 2018 from <https://www.impel.eu/topics/waste-and-tfs/>.

1.7. Report structure

In this first chapter the research study was introduced by presenting background information, the problem statement, the research aim & objectives, scope of the research and main stakeholders involved. Chapter 2 describes the Research Methodology of this research study, explaining the use of the research methods applied. In chapter 3 the literature review is presented, with focus on the Circular Economy and the Waste Management legislation. A theoretical framework of the Notification Procedure under the WSR and enforcement of it is presented in Chapter 4. In chapter 5, stakeholders perspectives are outlined of their issues encountered with the Notification Procedure of the WSR. A design change proposal is described in Chapter 6. The conclusions of this research study and recommendations are presented in Chapter 7. This thesis report ends with a reference list and appendixes.

CHAPTER 2: RESEARCH METHODOLOGY

2.1. Qualitative and quantitative research

This research study is explorative and practice-oriented in nature, as it is aiming to contribute to the enhancement of cross-border Waste Management within Europe under the Notification procedure of the WSR to support the European Circular Economy Strategy. Both qualitative and quantitative research is performed for this research study.

Qualitative research is required to (1) gather well-founded theory, (2) develop a broader understanding on the research subject, (3) describe multiple realities of stakeholders involved and (4) develop sensitizing concepts for improvement.²³ Literature review, semi-structured interviews and single case studies are used as qualitative research methods. Methodologic triangulation is used to decrease the deficiencies and biases that stem from any single method, creating the potential for counterbalancing the flaws or the weaknesses of one method with the strength of another.²⁴

Quantitative research is performed to establish facts in order to explain phenomena by collecting numeric data.²⁵ For this research, secondary numeric data is collected through external desk research and used for descriptive purposes only.

2.2. Research methods applied

2.2.1. Literature review

Literature review is performed to gather information on several subjects, such as the circular economy, waste shipment legislative framework, the functioning of the Notification procedure and enforcement strategies on EU and Dutch level. It is used to provide input for the interview guides and to build a conceptual framework to steer the analysis.

The sources referred to mainly stem from the EU, Dutch governmental institutions, scientific articles and reports published by renown organizations and institutions such as the Ellen MacArther Foundation, IMPEL, Deloitte, the European Commission and the Council for the Environment and Infrastructure. The sources are enclosed in the references list. The literature review will answer sub-questions 1 and 2 in total and sub-question 3, 4, 5 and 6 partly.

²³ Bowen, G.A. 2006, Grounded theory and Sensitizing Concepts, *International Journal of Qualitative Methods* 5 (3) September 2006, 12-23.

²⁴ Mitchell, E.S. 1986, Multiple triangulation: A methodology for nursing science, *Advances in Nursing Science*, 8 (3), 18-26.

²⁵ Trefry R.G. 2018, What is quantitative research?, retrieved May 24, 2018 from https://apus.libguides.com/research_methods_guide/research_methods_quantitative.

2.2.2. Semi-structured interviews

Semi-structured interviews are well suited for the exploration of attitudes, values, beliefs and motives.²⁶ A limited number of semi-structured interviews (seven in total) were carried out with key stakeholders in order to supplement the literature review findings and gather knowledge of stakeholders' perspectives. The interviewees were selected on basis of their knowledge, expertise and role they play in cross-border Waste Management within Europe. The interview guides were sent in advance to the interviewees for preparation. Interview questions were focused on the functioning of the Notification procedure in practice, issues encountered by businesses, NGO's and enforcement institutions in the Netherlands and means to improve the actual situation. The interviews were recorded, ensuring that an identical replication of the contents of each interview was available, facilitating the analysis. The interviews were written-out and presented to the interviewees for approval. A list of interviewees and the interview guides are enclosed in Appendix I and II. The semi-structured interviews provide partly answers to the sub-questions 4, 5 and 6 of this research study.

2.2.3. Single case studies

A case study design should be considered when the focus of the study is to answer "how" questions and when the research study wants to cover contextual conditions that are relevant to the phenomenon under study.²⁷ It can also be used to render description.²⁸ To illustrate the complexity of the WSR and the Notification procedure in practice, small single case studies (examples) are presented in this thesis, such as relevant Court Judgments and practical business cases. The single case studies will contribute to partly answering sub-question 4 and 5.

2.2.4. External desk research

Quantitative research involves the collection of data so that information can be quantified and subjected to statistical treatment in order to support or refute "alternate knowledge claims".²⁹ External desk research is used in this research study to collect numerical governmental data with regard to WSR compliance for analytic purposes. It concerns secondary data only. It is recognized that the secondary data analysis is done on a summarized version of the original data, made available in the publications of the IMPEL. In spite of this limitation, the data is still considered to be useful for illustration purposes. This research method will provide partly an answer to sub-question 5 of this research study.

²⁶ Richardson SA., Dohrenwend B.S. & Klein D. 1965, *Interviewing: its forms and functions*, Basic Books, New York; Smith, H.W. 1975, *Strategies of Social Research: methodological imagination*, Prentice Hall International, London.

²⁷ Yin, R.K. 2003, *Case study research: Design and methods* (3rd ed.), Thousand Oaks, CA: Sage, 13.

²⁸ Kidder, T. 1982, *Soul of a new machine*, New York: Avon.

²⁹ Creswell, J. 2003, *Research design: Qualitative, quantitative and mixed methods approaches* (2nd ed.), Thousand Oaks, CA: SAGE publications, 153.

CHAPTER 3: LITERATURE REVIEW

3.1. The European Circular Economy Strategy: main drivers and barriers

3.1.1. The European Circular Economy Strategy

The European Circular Economy Strategy is reflected in The Seventh Environment Action Programme (EAP) of the EC (Decision No 1386/2013/EU).³⁰ The 7th EAP covers the time period 2013-2020, but also sets out a vision beyond that, as cited in the Annex of this Decision:

In 2050, we live well, within the planet's ecological limits. Our prosperity and healthy environment stem from an innovative, circular economy where nothing is wasted and where natural resources are managed sustainably, and biodiversity is protected, valued and restored in ways that enhance our society's resilience.

*Our low-carbon growth has long been decoupled from resource use, setting the pace for a safe and sustainable global society.*³¹ Nine priority objectives are stated in the Article 2 of the Decision: (1) protect,

conserve and enhance the Union's natural capital, (2) turn the Union into a resource-efficient, green and competitive low-carbon economy, (3) safeguard the Union's citizens from environment-related pressures and risks to health and well-being, (4) maximize the benefits of Union environment legislation by improving implementation, (5) improve the knowledge of and evidence base for Union environment policy, (6), secure investment for environment and climate policy and address environmental externalities, (7) improve environmental integration and policy coherence, (8) enhance the sustainability of the Union's cities and (9) increase the Union's effectiveness in addressing international environmental and climate-related challenges.³²

Following the 7th EAP, the EC adopted an ambitious Circular Economy Package in 2015, entitled "Closing the loop – an EU Action plan for the Circular Economy", which includes measures that will help stimulate Europe's transition towards a circular economy, boost global competitiveness, foster sustainable economic growth and generate new jobs.³³ The Package consists of an EU Action Plan for the Circular Economy that establishes a concrete and ambitious programme of action, with measures covering the whole cycle: from production and consumption to waste management and the market for secondary raw materials and a revised legislative proposal on waste.³⁴ The annex to the action plan sets out the timeline when the proposed actions will be completed.³⁵ A European Implementation Assessment (mid-term review of the 7th EAP) was carried out in 2016 and 2017, which concluded that the 7th EAP scope remains relevant to current needs and adds value to EU and national policy-making efforts.³⁶

³⁰ Decision No 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme to 2020 "Living well, within the limits of our planet", 28.12.2013, Official Journal of the European Union, L 354/171, 171-200.

³¹ Ibid, ANNEX, 176.

³² Ibid, Article 2, 174.

³³ EC 2015b, Communication from the Commission to the European Parliament, the Council, the European Economic and Societal Committee and the Committee of the Regions, Closing the loop – an EU action plan for the Circular Economy, European Commission. Brussels, 2.12.2015 COM(2015) 614 FINAL, 2.

³⁴ Ibid, 3.

³⁵ Ibid, Annex 1.

³⁶ European Parliament 2017b, Implementation of the 7th Environment Action Programme, Mid-term review, European Implementation Assessment, EPRS | European Parliament Research Service, November 2017, 3.

However, the mid-term review report stated that (a) the 7th EAP's objectives are unlikely to be fully met by 2020, despite sporadic progress in some areas, and (b) environmental and climate-related concerns are insufficiently integrated into a number of EU policies.³⁷ Although the plans could be considered to be ambitious, with some of them already running behind schedule, the 7th EAP – in combination with the Circular Economy Package – it is a positive step forward into the right direction to achieve a Circular Economy within Europe.

3.1.2. Main drivers of the European Circular Economy Strategy

The Circular Economy approach is receiving increased attention worldwide as a way to overcome the current production and consumption model based on continuous growth and increasing resource output³⁸, as the current “take-make-dispose” model entails significant resource losses.³⁹ The necessity to strive for a circular economy – as cited in the English version of the report “A Circular Economy in the Netherlands by 2050” - comes from a concurrence of three developments⁴⁰:

1. Explosive demand for raw materials: the demand for raw materials will further increase as a result of global population growth, the rapidly growing middle class in emerging economies and the application of new technologies that require specific raw materials.
2. Dependency on other countries: the Netherlands and Europe are dependent on third countries to a high degree for raw materials. Of the 54 materials that are critical for Europe, 90% must be imported, primarily from China. The Netherlands imports 68% of its raw materials from abroad.
3. Interconnectivity with the climate (CO₂ emissions): extraction and use of raw materials has not only a negative effect on the environment and natural capital, but it also makes a considerable contribution to the consumption of energy and the emission of CO₂, causing global warming.

The circular economy will boost the EU's competitiveness by protecting businesses against scarcity of resources and volatile prices, helping to create new business opportunities and innovative, more efficient ways of producing and consuming.⁴¹ It will create local jobs at all skills levels and opportunities for social integration and cohesion.⁴² At the same time, the circular economy will save energy and help avoid the irreversible damages caused by using up resources at a rate that exceeds the Earth's capacity to renew them in terms of climate and biodiversity, air, soil and water pollution.⁴³

³⁷ Ibid, 3.

³⁸ Ghisellini, P., Cialani, C., Ulgiati, S. 2016, A review on circular economy: the expected transition to a balanced interplay of environmental and economic systems, *Journal of Cleaner Production* 114 (2016), 11.

³⁹ Ellen MacArthur Foundation 2013, *Towards the Circular Economy*, Economic and business rationale for an accelerated transition, Ellen MacArthur Foundation, Rethink the future, 15.

⁴⁰ Ministry of Infrastructure and the Environment 2016, *A Circular Economy in the Netherlands by 2050*, Government-wide Programme for a Circular Economy, September 2016, 9-10.

⁴¹ EC 2015b, Communication from the Commission to the European Parliament, the Council, the European Economic and Societal Committee and the Committee of the Regions, *Closing the loop – an EU action plan for the Circular Economy*, European Commission, Brussels, 2.12.2015 COM(2015) 614 FINAL, 2.

⁴² Ibid, 2.

⁴³ Ibid, 2.

3.1.3. Barriers to the European Circular Economy Strategy

A transition towards a more circular economy would face a number of barriers and challenges for the European Union. Potential challenges are the following⁴⁴:

- **Financing:** the transition to a circular economy would involve considerable transition costs, such as R&D, asset investments, subsidy payments to promote new business models, and public investment in waste management and digital infrastructure. For businesses, in particular for small and medium-sized enterprises (SMEs), the cost of “green” innovation and business models are considered as major barriers to the adoption of more sustainable practices.
- **Key economic enablers:** a series of key economic enablers are lacking, inter alia, pricing systems encouraging efficient resource reuse and reflecting full environmental costs, incentives for producers and recyclers to work together in order to improve performance within and across specific value chains and markets for secondary raw materials.
- **Skills:** a circular economy would require technical skills which are currently not present in the workforce. Skills would for instance enable businesses to redesign products with circularity in mind, and to engage in reuse, refurbishment and recycling. Missing technical skills could be particularly problematic for SMEs.
- **Consumer behavior and business models:** a circular economy would require systemic shifts in consumer behavior and business models. Many industries are currently based on a turn-around driven by fashion. Businesses and consumers have little knowledge about the potential benefits of a circular economy and tend to be reluctant to adopt new business models.
- **Multi-level governance:** a transition to a circular economy would require action at many levels (e.g. international, European, national, local, business and individual) and in many policy areas (e.g. waste management, professional training, packaging and product design, research and development and finance). External trade aspects and existing EU policies such as the internal market would have to be taken into account.

From research⁴⁵ conducted in 2015, identified barriers to the implementation of the Circular Economy in Europe were considered to be related to untapped technology, waste regulations, non-collusive collaboration between businesses, unpriced externalities (such as CO₂) and customs & habits of businesses and consumers.⁴⁶ From research conducted in 2017⁴⁷, the identified main barriers to the Circular Economy in Europe (see figure 2) were considered to be either cultural, regulatory, market or technological related.⁴⁸ The regulatory barriers relate to lacking policies that support a circular economy transition.⁴⁹

⁴⁴ European Parliament 2016, Briefing January 2016, Closing the loop, New Circular Economy Package, EPRS | European Parliament Research Service, 4-5.

⁴⁵ Joint research – subject being the circular economy vision for a competitive Europe - was performed and reported in 2015 by the Ellen MacArthur Foundation, SUN and McKinsey Center for Business and Environment.

⁴⁶ Ellen MacArthur Foundation, SUN, and McKinsey Center for Business and Environment, 2015, Growth within: a circular economy vision for a competitive Europe. June 2015, 22.

⁴⁷ The Copernicus Institute of Sustainable Development and Deloitte have jointly carried out in 2017 research on barriers to the Circular Economy in the European Union. For this research, a survey with 153 businesses, 55 government officials and expert interviews with 47 thought leaders on the circular economy from businesses, governments, academia and NGOs have been carried out.

⁴⁸ Kirchherr, J., Hekkert, M., Bour, B., Huijbrechtse-Truijens, A., Kostense-Smit, E., Muller, J. 2017, Breaking the Barriers to the Circular Economy, Deloitte The Netherlands and University of Utrecht, October 2017, 6.

⁴⁹ Ibid, 6.

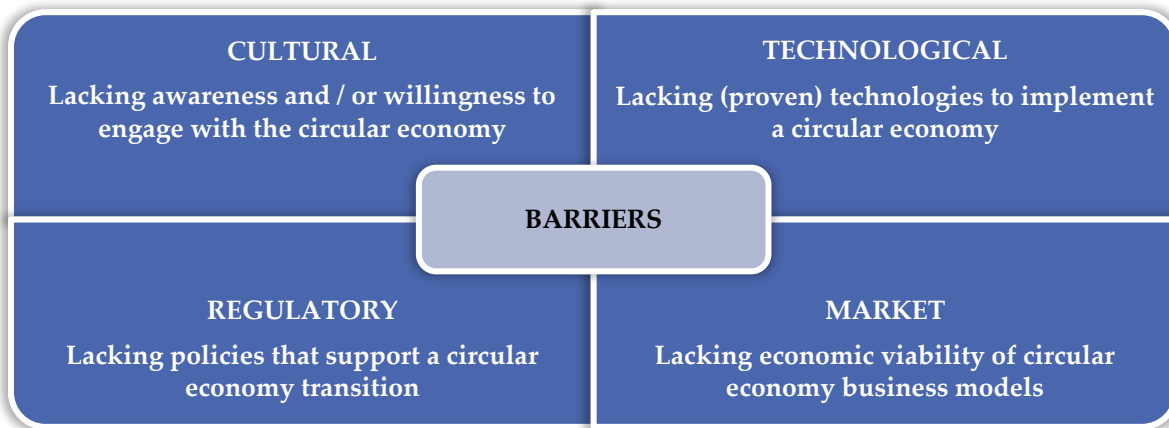


Figure 2: Categories of Circular Economy Barriers⁵⁰

3.2. Legal Framework Waste Management in Europe

3.2.1. The beginning of environmental policies in the EU in the 20th century

Since the 1970s the need within the EU for some form of policy on the protection of the environment was acknowledged. There were two main reasons for this: (1) the acceptance of the interrelationship between economic growth and environmental degradation and (2) the environment emerging as a significant political issue.⁵¹ The first Environment Action Programme (EAP) of the European Communities was established in 1973, stating the imperative need to preserve the natural environment, with the objectives to ensure sound management and avoid exploitation of resources or of nature which cause signification damage to the ecological balance.⁵² Another important objective concerned the seek for common solutions to environment problems with States outside the Community, particularly in international organizations.⁵³ Following this first EAP, Council Directive 75/442/EEC was adopted by the European Communities in 1975, aiming at the protection of human health and the environment against harmful effects caused by the collection, transport, treatment, storage and tipping of waste.⁵⁴

A triggering example for the need to even better regulate Waste Management within Europe was the Seveso Waste Shipment scandal, where in 1983 forty-one barrels of dioxin waste turned up in an abandoned abattoir in Northern France. These barrels contained heavily contaminated waste materials, resulting from a chemical accident in 1976 in Italy.⁵⁵

⁵⁰ Ibid, 6.

⁵¹ Bell et al. 2017, 196.

⁵² Declaration of the Council of the European Communities and of the Representatives of the Governments of the Member States meeting in the Council of 22 November 1973 on the Programme of Action of the European Communities on the Environment, 20.12.73, Official Journal of the European Communities, No C 112/1, 5.

⁵³ Ibid, 5.

⁵⁴ Council Directive of 15 July 1975 on waste (75/442/EEC), 25.7.75, Official Journal of the European Communities, No L 194/39, 2.

⁵⁵ EC 2005, EU Waste Policy, The story behind the strategy, European Commission, 8.

The toxic waste had been transported from Italy to the French border safely, but then had disappeared. The barrels had been “lost” in France for eight months before they were found back.⁵⁶ Tighter environmental regulations in industrialized countries also led in the late 1980s to a dramatic rise in the costs of hazardous waste disposal. Searching for cheaper ways to get rid of the wastes, “toxic traders” began shipping hazardous waste to developing countries and to Eastern Europe. When this activity was revealed, international outrage led to the drafting and adoption in 1989 of a multilateral environmental agreement, The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.⁵⁷ The provisions of the Basel Convention were integrated into Council Regulation (EEC) No 259/93 of 1 February 1993 on the supervision and control of shipments of waste within, into and out of the European Community.⁵⁸

A vast number of European Directives were adopted in the last decades of the 20th century in order to control and better manage waste streams within Europe, for example with regard to waste oils, titanium dioxide, sewage sludge, packing and packaging waste, batteries and accumulators and PCBs.⁵⁹ This demonstrates the importance the EU is giving to protection of the environment and human health.

3.2.2. The Basel Convention (1989) and Ban Amendment (1995)

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal came into force on 5 May 1992 and is ratified by 186 Parties.⁶⁰ Central goal of the Basel Convention is, as defined in Article 2 (8), “environmentally sound management” (ESM), the aim of which is to protect human health and the environment by minimizing hazardous waste production whenever possible. Transboundary movement of hazardous waste or other wastes between Parties is regulated in Article 6 of the Basel Convention, which makes reference to Notification requirements.

According to Article 9 (1) of the Basel Convention, the transboundary movement of hazardous wastes or other wastes is considered to be illegal traffic (a) without prior Notification pursuant to the provisions of this Convention to all States concerned, (b) without prior consent pursuant to the provisions of this Convention of a State concerned; (c) with prior consent obtained from States concerned through falsification, misrepresentation or fraud (d) if it does not conform in a material way with the documents or (e) if it results in deliberate disposal (e.g. dumping) of hazardous wastes or other wastes in contravention of this Convention and of general principles of law.

⁵⁶ Ibid, 8.

⁵⁷ Basel Convention, 1989, The Basel Convention on the control of transboundary movements of hazardous wastes and their disposal, Adopted by the Conference of the Plenipotentiaries on 22 March 1989.

⁵⁸ Council Regulation (EEC) No 259/93 of 1 February 1993 on the supervision and control of shipments of waste within, into and out of the European Community, Official Journal of the European Communities, No L 30/1, 1-28.

⁵⁹ EC 2005, EU Waste Policy, The story behind the strategy, European Commission, 10.

⁶⁰ Secretariat of the Basel Convention 2018b, Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal retrieved May 24, 2018 from <http://www.basel.int/Countries/StatusofRatifications/PartiesSignatories/tabid/4499/Default.aspx>.

With the United Nations Environment Programme (UNEP)⁶¹ Decision II/12⁶² and III/1⁶³, the Ban Amendment was adopted, prohibiting all transboundary movements of hazardous wastes which are destined for final disposal or for recycling or recovery operations from OECD to non-OECD States. The Ban Amendment has not yet entered into force, due to differing views among Parties about the interpretation of the provision on amendments to the Convention, with many considering it to be ambiguous.⁶⁴ However, early 2018 already 93 Parties to the Basel Convention have ratified the Ban Amendment, amongst them the European Union,⁶⁵ the latter having integrated the Basel Convention and the Ban Amendment into the WSR, as stated in the preamble of the Regulation.⁶⁶

3.2.3. The OECD Council Decision of 2001

With regard to cross-border management of waste, the Organization for Economic Co-operation and Development (OECD) took a notable Decision in 2001, by recognizing the value of transboundary movements of waste destined for recovery operations in an environmentally sound and economically efficient manner.⁶⁷ It introduced a two-tier system to delineate controls to be applied to transboundary movements of waste⁶⁸:

- Green Control Procedure: for wastes that present low risk for human health and the environment and, therefore, are not subject to any other controls than those normally applied in commercial transactions. No permission of authorities is required prior to transport of the waste.
- Amber Control Procedure: for wastes presenting sufficient risk to justify their control. Permission of all relevant authorities (countries of shipping, transit and receipt) is required prior to transport of the waste.

The purpose of the Notification Procedure set out by the OECD Decision is to provide the competent authorities concerned with detailed, accurate and complete information on the parties involved in the movement(s), the waste itself, the type of recovery operation to which the waste is destined, and other details relating to the proposed movement. This information will allow these competent authorities to be sufficiently informed to make a judgement on whether to object or consent to the movement, in accordance with the OECD Decision and relevant national legislation.⁶⁹

⁶¹ UNEP is the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system and serves as an authoritative advocate for the global environment.

⁶² UNEP 1994, Decision II/12, Amendment to the Basel Convention, UNEP / CHW.2/30.

⁶³ UNEP 1995, Decision III/1, Amendment to the Basel Convention, UNEP/CHW.3/35.

⁶⁴ Secretariat of the Basel Convention 2018c, The Basel Convention Ban Amendment, retrieved May 24, 2018 from <http://www.basel.int/Implementation/LegalMatters/BanAmendment/tabid/1484/Default.aspx>.

⁶⁵ Secretariat of the Basel Convention 2018a, Amendment to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, retrieved May 24, 2018 from <http://www.basel.int/Countries/StatusofRatifications/BanAmendment/tabid/1344/Default.aspx>.

⁶⁶ Regulation (EC) No 1013/2006, preamble, point 1.

⁶⁷ OECD 2001, Decision of the Council concerning the Control of Transboundary Movements of Waste Destined for Recovery Operations, OECD Decision C(2001)107/Final, Unclassified, retrieved on May 24, 2018 from www.oecd.org/env/waste/30654501.pdf.

⁶⁸ Ibid, 7.

⁶⁹ Ibid, 11.

The OECD Decision of 2001 has been fully incorporated into the WSR.⁷⁰ A flowchart for the identification of wastes subject to the OECD Decision of 2001 is presented in Appendix III.⁷¹

3.2.4. European Waste Shipment Regulation (WSR)

The European Waste Shipment Regulation entered into force on 12 July 2007, replacing Council Regulation (EEC) No 259/93 of 1 February 1993. As stated in the preamble, the main and predominant objective and component of this Regulation is protection of the environment, its effects on international trade being only incidental.⁷² According to Article 1 WSR, the Regulation establishes procedures and control regimes for the shipment of waste, depending on the origin, destination and route of the shipment, the type of waste shipped and the type of treatment to be applied to the waste at its destination.

Under the WSR, there are two control procedures for the shipments of waste:

1. General information requirements of Article 18 WSR, which is normally applicable to shipments for recovery of wastes, listed in Annex III (“green” listed wastes – non-hazardous) or IIIa.
2. The procedure of prior written notification and consent for other types of shipments of wastes of Article 3 WSR, including shipments of wastes listed in Annex IV (“amber” listed wastes containing both hazardous and non-hazardous parts) or in Part 2 of Annex V (European list of wastes, e.g. wastes from mining, quarrying and physical and chemical treatment of minerals) and shipments for disposal of wastes listed in Annex III (“green” listed wastes).

The WSR has been subject to amendments in Acts (4) and Annexes (7) since its entry into force on the 12th of July 2007.⁷³ In view of this research study, Regulation (EU) No 660/2014 of 15 May 2014 is of importance, as divergences and gaps have been identified in the enforcement and inspections carried out by authorities involved in inspections in Member States.⁷⁴ As mentioned in the preamble of this Regulation, adequate planning of inspections of shipments of waste is necessary to establish the capacity needed for inspections and to effectively prevent illegal shipments. Inspection plans – based on risk assessment – should be carried out, including a number of key elements such as objectives, priorities, the geographical area covered, information on planned inspections, the tasks assigned to authorities involved in inspections, and arrangements for cooperation between those authorities involved in inspections in a Member State.⁷⁵

⁷⁰ Regulation (EC) No 1013/2006, preamble, point 5.

⁷¹ OECD 2009, Guidance Manual for the control of Transboundary Movements of Recoverable Wastes. Guidance manual for the implementation of Council Decision C(2001)107/Final, as amended, on the control of transboundary movements of wastes destined for recovery operations, OECD, 16.

⁷² Regulation (EC) No 1013/2006, preamble, point 1.

⁷³ EUR-Lex 2015, Safe waste shipments within the EU and with non-EU countries, last updated: 20.04.2015, retrieved May 24, 2018 from <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM%3A11022>.

⁷⁴ Regulation (EU) No 660/2014 of the European Parliament and the Council of 15 May 2014 amending Regulation (EC) No 1013/2006 on shipments of waste, 27.06.2014, Official Journal of the European Union, L189/135, preamble point 1.

⁷⁵ Ibid, preamble point 2.

Another noteworthy amendment to the WSR is the Commission Implementing Regulation (EU) 2016/1245 of 28 July 2016.⁷⁶ This Implementing act sets out a preliminary correlation table between customs and waste codes. This correlation table is intended to step up the enforcement of the Waste Shipment Regulation whereby customs officials will be able to identify potential waste streams more easily. The table will thus serve as a tool to assist in curbing illegal exports of waste out of the EU. This regulation is in line with the further measures foreseen by the Commission in its Circular Economy Action Plan adopted on 2 December 2015 to help ensure that the Waste Shipment Regulation is properly implemented and that illegal shipments causing raw materials leakage are addressed more effectively.⁷⁷

As mentioned in paragraph 1.2, the WSR causes quite some problems. The FHG⁷⁸ stated in their letter to the Ministry of Infrastructure and the Environment in 2016 that the actual text and interpretation of the European WSR is causing unnecessary obstruction for high-quality recycling flows, as the WSR is an unclear European Regulation. The FHG stated – freely translated - the following: the lack of clarity creates different interpretations in the Member States, which lead to problems and disputes in the cross-border movement of recycling flows. Within the Netherlands too, the unclear rules provide a permanent breeding ground for disputes between government and businesses with uncertain outcome. This costs both businesses and the government a lot of money and time.⁷⁹ With the protection of the environment playing a key role in today's way of doing business, potential liabilities for non-compliance are also increasing. These liabilities fall into six categories: (1) criminal liabilities, (2) administrative sanctions, (3) other administrative penalties, (4) clean-up costs, (5) civil liability and last but not least (6) adverse publicity.⁸⁰

The EC is currently carrying out an evaluation to assess whether the WRS meets its objectives, using the criteria of effectiveness, efficiency, coherence, relevance and EU added value. In assessing coherence, the evaluation will take into consideration EU waste legislation, the general objectives of EU environmental policy including circular economy, as well as other EU policies such as industrial/raw materials and trade policies and the internal market.⁸¹ It will include an investigation of costs and benefits associated with the implementation of the WSR for stakeholders at local, national and EU level.⁸² The results of the evaluation will be used to assess the performance of the WSR and for creation of proposals to amend the Regulation in due time.

⁷⁶ Commission Implementing Regulation (EU) 2016/1245 of 28 July 2016 setting out a preliminary correlation table between codes of the Combined Nomenclature provided for in Council Regulation (EEC) No 2658/87 and entries of waste listed in Annexes III, IV and V to Regulation (EC) No 1013/2006 of the European Parliament and of the Council on shipments of waste, 29.07.2016, Official Journal of the European Union, L 204/11, 11-69.

⁷⁷ EC 2016f, Waste shipments, EU Legislation, last updated 29/07/2016, retrieved March 3, 2018 from <http://ec.europa.eu/environment/waste/shipments/legis.htm>.

⁷⁸ The FHG is a Recycling Raw Materials Federation, based in the Netherlands, see <http://www.fhg-recycling.nl/>.

⁷⁹ FHG 2016, *Concrete belemmeringen voor de Circulaire Economie* [Concrete obstacles to the Circular Economy], *brief aan het Ministerie van Infrastructuur en Milieu, t.a.v. drs. C.B.F. Kuijpers* [Letter to the Ministry of Infrastructure & Environment, to the attention of drs. C.B.F. Kuijpers,], 18 February 2016.

⁸⁰ Bell et al. 2017, 38-39.

⁸¹ EC 2017a, Evaluation Roadmap, Evaluation of Regulation (EC) No 1013/2006 on shipments of waste (Waste Shipment Regulation – WSR), 27/01/2017, DG ENV B3, 1.

⁸² Ibid, 1.

3.2.5. The Waste Framework Directive (WFD)

The Waste Framework Directive (WFD)⁸³ is another important waste management source of law, which explains when waste ceases to be waste and becomes a secondary raw material (end-of-waste criteria) and how to distinguish between waste and by-products.⁸⁴ Some basic waste management principles are laid down in Article 13 WFD: waste should be managed without endangering human health and harming the environment, and in particular without risk to water, air, soil, plants or animals, without causing a nuisance through noise or odors, and without adversely affecting the countryside or places of special interest. The key principles of Europe's waste management approach are the Waste Management Hierarchy, the polluter pays principle, the proximity principle and self-sufficiency, the incorporation of provisions on hazardous waste and the extended producer responsibility.⁸⁵

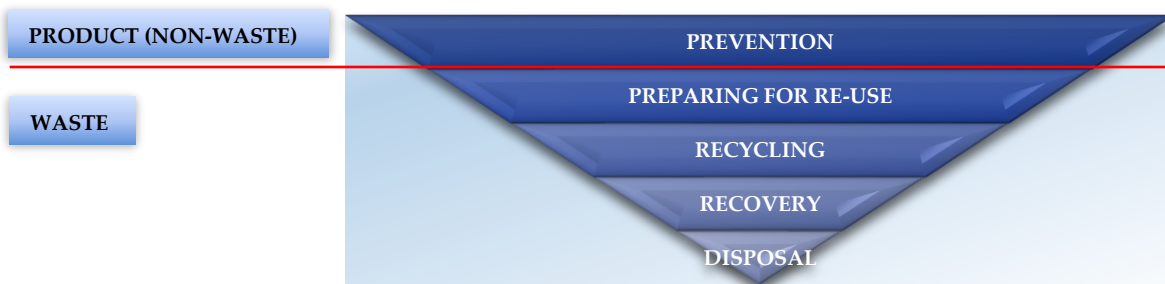


Figure 3: The EU's Waste Management Hierarchy⁸⁶

Article 3 (1) WFD defines “waste” as any substance or object which the holder discards or intends or is required to discard. This definition stems back from 1975, where the linear economy approach was applicable. In Directive 75/442/EEC⁸⁷ waste is defined as “any substance or object in the categories set out in Annex I which the holder discards or intends or is required to discard”. It is arguable whether this definition of waste still suits the circular economy approach, especially since companies often prefer not to deal with waste products in practice. Not only because of the negative associations that the term waste usually still has, but also because of the extra administrative burdens that waste laws entail.⁸⁸ With a view to stimulating recovery instead of disposal of waste, waste laws do provide for all sorts of exceptions and facilitations, but practice shows that these are by no means always sufficient to actually stimulate the transition to a more circular economy.⁸⁹

⁸³ Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives, 22.11.2008, Official Journal of the European Union, L 312/3, 3-30.

⁸⁴ Ibid, preamble point 22.

⁸⁵ Ibid, Article 4, 14, 16, 17, 18 WFD and Annex III WFD.

⁸⁶ EC 2016c, Directive 2008/98/EC on waste (Waste Framework Directive), Last updated: 09/06/2016, retrieved May 24, 2018 from <http://ec.europa.eu/environment/waste/framework/>.

⁸⁷ Council Directive of 15 July 1975, Article 1 (a).

⁸⁸ Freely translated from: Tieman, J. 2017, 2. *Afwal of grondstof in een circulaire economie – op zoek naar meer rechtszekerheid* [Waste or raw material in a circular economy – searching for more legal certainty], in *Met Recht naar een circulaire economie* [With law to a circular economy], Vereniging voor Milieurecht [Association for Environmental law], Boom Legal, The Hague, 2017, 18.

⁸⁹ Ibid, 18.

3.3. Enforcement of the European Waste Shipment Regulation

3.3.1. Enforcement of the WSR on a European level

It is the EC's responsibility under Article 17 (1) of the Treaty on European Union to ensure the application of the Treaties and of measures adopted by the institutions pursuant to them. It shall oversee the application of Union law under the control of the Court of Justice of the European Union.⁹⁰ The Commission is therefore often referred to as the "Guardian of the treaties". With over 200 legal acts to monitor in 28 Member States, this is a major task in the environmental field.⁹¹ Disputes between Member States of classification of products (is it waste or not) still occur, as illustrated by the following example: *The European Commission is referring the Czech Republic to the Court of Justice of the EU for its failure to take back 20,000 tons of hazardous waste, which was shipped to Katowice, Poland, by a Czech operator in late 2010 and in early 2011. The Polish authorities refused to accept the shipment on the grounds that it was shipped in breach of the WSR. The waste shipped should have been subject to the procedure of prior written notification and consent. As it had taken place without this notification, the shipment in question is considered to be an "illegal shipment", and the Czech authorities should take the necessary measures to repatriate the shipment. The Czech Republic would have breached EU rules by not taking the required measures. The Czech authorities, however, refused to take the shipment back by arguing that the material in question was not waste but a product registered in accordance with the REACH Regulation (Regulation (EC) No 1907/2006). Following a complaint, the Commission has stepped in to resolve the dispute between the two Member States. A reasoned opinion was sent to the Czech Republic in November 2015, rejecting the Czech arguments for classifying the shipment as a product and urging it to take it back. As the Czech authorities still refuse to take the waste back, the Commission referred the case to the Court of Justice of the EU.*⁹²

The binding interpretation of Community law is the exclusive competence of the CJEU, the European Court of Justice. The CJEU interprets EU law – such as the WSR - to make sure it is applied in the same way in all EU countries and it settles legal disputes between national governments and EU institutions. It can also, in certain circumstances, be used by individuals, companies or organizations to take action against an EU institution, if they feel it has somehow infringed their rights.⁹³ On European level, IMPEL plays a significant role too. This network aims to promote compliance with the WSR and Waste Management Directives through enforcement, to carry out joint enforcement projects, to promote exchange of knowledge, best practices and experience with the enforcement of the regulations and directives and to stimulate a uniform enforcement regime. Members of the cluster represent environmental authorities, but also customs and police services and other authorities that play a role in the enforcement of the trans-frontier shipments and management of waste.⁹⁴

⁹⁰ Consolidated version of the Treaty on European Union, 26.10.2012, Official Journal of the European Union, C326-13, 13-45.

⁹¹ EC 2016d, Legal Enforcement, last updated 08/06/2016, retrieved May 24, 2018 from <http://ec.europa.eu/environment/legal/law/index.htm>.

⁹² EC 2016e, Press release 2016, Commission refers the Czech Republic to Court over a shipment of toxic waste to Poland, Brussels, 22 July 2016.

⁹³ European Union 2018, Court of Justice of the European Union, Overview, Last update: 29/04/2018, retrieved on May 24, 2018 from https://europa.eu/european-union/about-eu/institutions-bodies/court-justice_en#overview.

⁹⁴ IMPEL 2017, Waste and TFS, retrieved on May 24, 2018 from <https://www.impel.eu/topics/waste-and-tfs/>.

3.3.2. Enforcement of the WSR on Member State level

Enforcement of the WSR is in the hands of the individual EU Member States, who shall lay down the rules on penalties applicable for infringement of the provisions of the WSR and shall take all measures necessary to ensure that they are implemented.⁹⁵ They shall notify the Commission of their national legislation relating to prevention and detection of illegal shipments and penalties for such shipments. The penalties provided for must be effective, proportionate and dissuasive. In the EA IV period (2014-2015)⁹⁶, IMPEL reported that in case of violation of the WSR, penalties were mostly issued by Member States. Whereas differentiations in administrative fine and criminal penalty is established in the majority of countries, also the details and the amount of applicable fines and penalties vary considerably among Member States, as reported by ETAGIW, the Expert Team for Assessing and Guidance for the Implementation of Waste Legislation of the EC.⁹⁷ A coordinated audit on the enforcement of the WSR, carried out by the supreme audit institutions of Bulgaria, Greece, Hungary, Ireland, Poland, the Netherlands, Norway and Slovenia, came to the same conclusion.⁹⁸

EU Member States have to perform inspections on waste shipments⁹⁹, which may take place in particular (a) at the point of origin, carried out with the producer, holder or notifier, (b) at the destination, carried out with the consignee or the facility, (c) at the frontiers of the Community and / or during the shipment within the Community.¹⁰⁰ Checks on shipments shall include the inspection of documents, the confirmation of identity and, where appropriate, physical checking of the waste.¹⁰¹ Member States shall cooperate, bilaterally or multilaterally, with one another in order to facilitate the prevention and detection of illegal shipments. Multiple organizations are involved in the enforcement of the WSR, consisting of the competent authority, customs and police, but also public prosecution services, inspectorates, border agencies and agencies for administrative policy implementation. Customs play a key role in inspecting waste shipments at the European borders, while police forces in many countries check inland shipments by waterways, road and rail.¹⁰² In 2015, the EC issued guidelines for customs controls on transboundary shipments of waste. These guidelines – not to be considered mandatory - are intended as an instrument to support Customs in carrying out controls on waste shipments and to assist Customs and NCAs in improving cooperation methods and developing good administrative practice.¹⁰³

⁹⁵ Regulation (EC) No 1013/2006, Article 50 (1) WSR.

⁹⁶ IMPEL 2016, IMPEL-TFS Enforcement Actions, Project Report 2014-2015, Enforcement of the European Waste Shipment Regulation, IMPEL, 2016, 29.

⁹⁷ EC 2011, Assessment and Guidance for the Implementation of EU Waste Legislation in Member States, Reference: ENV.G.4/SER/2009/0027, Report on analysis of the implementation / enforcement of Annex VII and article 18 and 49-50 of the Waste Shipment Regulation in all Member States, including a summary report of National Provisions, 12 April 2011, Expert Team for Assessing and Guidance for the Implementation of Waste Legislation, Brussels, 35.

⁹⁸ EUROSAT 2013, Report of the audit on the enforcement of EU regulations on waste shipment, Audit ID 1453976251177, The Hague, October 2013, 41.

⁹⁹ Regulation (EC) No 1013/2006, Article 50 (2) WSR.

¹⁰⁰ Ibid, Article 50 (5) WSR.

¹⁰¹ Ibid, Article 50 (3) WSR.

¹⁰² EUROSAT 2013, Report of the audit on the enforcement of EU regulations on waste shipment, Audit ID 1453976251177, The Hague, October 2013, 28.

¹⁰³ Notices from European Union institutions, bodies, offices and agencies, European Commission, Guidelines for customs controls on transboundary shipments of waste, public summary, 12.05.2015, Official Journal of the European Union, C157/1, 1-1.

3.3.3. Enforcement of the WSR in the Netherlands

Although the WSR has direct effect and is binding in its entirety, there is still a necessity to arrange certain matters nationally. Penalty provisions, for example, are not regulated at EU level. The WSR has been transposed into Dutch law into the Environmental Management Act (EMA) in Chapter 10, Waste Substances¹⁰⁴ and the Economic Offences Act (EOA).¹⁰⁵ Violation of the WSR is regarded as an economic offense on the basis of the provisions of Article 1A EOA.

The Ministry of Infrastructure and Water Management is responsible for enforcement of the WSR.¹⁰⁶ This task is mandated to the inspectors of the Human Environment and Transport Inspectorate (ILT).¹⁰⁷ The ILT cooperates with a number of other organizations, the so-called network partners, for the supervision and enforcement of the WSR. Dutch Customs is one of these network partners. The cooperation with regard to legislation on waste between Customs and ILT is arranged in a framework agreement.¹⁰⁸ Detection of economic offences of the WSR is regulated through Article 17.1 EOA.¹⁰⁹

Enforcement of the WSR can take place through administrative or criminal law. Both enforcement instruments can be used simultaneously for the same violation when enforcing the WSR in the Netherlands.¹¹⁰ Administrative enforcement of the WSR can be effected in three ways: (1) impose an order under administrative coercion, (2) impose an order subject to penalty payment and (3) revoke the authorization for the shipment of waste.¹¹¹ Criminal law enforcement of the WSR is regulated through Article 6 EOA. However, in the Netherlands it is also possible in some cases to offer the suspect a transaction instead of bringing the case to court.¹¹² Looking at the level playing field of the WSR within Europe, the Council for the Environment and Infrastructure (Rli) stated in their report “Circular Economy, from wish to practice” that enforcement of the WSR in the Netherlands is allegedly more stringent than in other EU Member States.¹¹³

¹⁰⁴ *Wet Milieubeheer* [Environmental Management Act], *Wet van 13 juni 1979, houdende regelen met betrekking tot een aantal algemene onderwerpen op het gebied van de milieuhygiëne* [Act of 13 June 1979, containing rules with regard to a number of general topics in the field of environmental hygiene].

¹⁰⁵ *Wet op de Economische Delicten* [Economic Offences Act], *Wet van 22 juni 1950, houdende vaststelling van regelen voor de opsporing, de vervolging en de berechting van economische delicten* [Act of 22 June 1950, containing rules for the investigation, prosecution and trial of economic offences].

¹⁰⁶ *Wet Milieubeheer* [Environmental Management Act], Article 10.58.

¹⁰⁷ *Kaderovereenkomst inzake de samenwerking tussen het Ministerie van Infrastructuur en Milieu en (het directoraat-generaal Belastingdienst van het (Ministerie van Financien)* [Framework agreement on cooperation between the Ministry of Infrastructure and the Environment and the (Directorate-General Tax Authorities of the) Ministry of Finance, 27 januari 2012 [27 January 2012].

¹⁰⁸ *Bijlage 1, behorende bij de Kaderovereenkomst tussen de VROM-inspectie en de Belastingdienst van 1 april 2004* [Appendix 1, pertaining to the Framework Agreement between the VROM Inspectorate and the Tax Authorities of 1 April 2004].

¹⁰⁹ *Wet op de Economische Delicten* [Economic Offences Act], Article 17.1.

¹¹⁰ *Handboek VGEM, 40.04.00 (EVOA) Overbrenging Afvalstoffen, 11.2. Strafrechtelijke en bestuursrechtelijke handhaving* [Handbook SHEA, 40.04.00 (WSR)], Waste Shipments, 11.2 Criminal and administrative law enforcement], retrieved May 24, 2018 from https://www.belastingdienst.nl/bibliotheek/handboeken/html/boeken/HVGEM/_evoa_overbrenging_afvalstoffen_evoa-de_handhaving_van_de_afvalstoffenwetgeving.html.

¹¹¹ *Tweede Kamer der Staten Generaal* [House of Representatives], *vergaderjaar 2012-2013* [session year 2012-2013], 33 418, nr. 2, *handhaving Europese regels voor afvaltransport* [enforcement European rules for waste shipments], 35.

¹¹² *Besluit van 4 juli 2007, houdende regels aangaande de buitengerechtelijke afdoening van strafbare feiten (Besluit OM-afdoening)* [Decision of 4 July 2007, containing rules concerning the out-of-court settlement of criminal offences (Public Prosecutor ruling decision)]

¹¹³ Rli 2015, Circular Economy: From Wish to Practice, June 2015, Rli, Council for the Environment and Infrastructure, 77.

3.4. Latest developments: Green Deal Approach

The Netherlands has opted for green growth: economic growth that takes into account environment and sustainable development. Through its Green Deal approach, the Dutch Government has created space for innovative initiatives from society aimed at accelerating the transition to a sustainable economy.¹¹⁴ In implementing sustainable initiatives, businesses, NGO's and citizens' groups sometimes face obstacles. The Green Deal approach is aiming to remove those barriers, where government can play an active role by, for example, removing obstacles in legislation.¹¹⁵ The Government-wide Programme for a Circular Economy in the Netherlands acknowledges the problems encountered with regard to the definition of "waste". The following was stated in this report (issued in English) "A Circular Economy in the Netherlands by 2050": *Because residual flows that were seen as waste in the past are more and more being used as raw material, we need a more targeted and coherent conceptual framework for waste: when is it waste or not, when is it a by-product and when is it end-of-waste? A more critical assessment of the label "waste" is therefore necessary not only for residual waste flows, but also for returned products (such as products bound for repair, disassembly, or recycling).*¹¹⁶

Worthwhile noting is The International Green Deal North Sea Resources Roundabout (NSRR)¹¹⁷, established in 2016, involving stakeholders from France, Belgium, Great-Britain and the Netherlands. Key elements of this Green Deal are integral cooperation (multiple value chain partners, public-private, cross silo, policy makers, inspection and enforcement) and a practical case-by case approach.¹¹⁸ Specific considerations of the NSRR are related to circular economy, use of waste material as a secondary resource and perceived barriers in trans-border shipments of waste and secondary resources.¹¹⁹ The NSRR's objectives are in line with the circular economy approach and aspiration for sustainable growth¹²⁰:

1. Increase industry take up of secondary resources by facilitating cross-border use of secondary resources.
2. Cooperation between Private Initiators and Governmental participants to identify barriers and consider solutions for a limited number of specific secondary resource cases between countries. These barriers are amongst others related to the "waste or resource" status and hamper cross border secondary resource optimization.
3. Intended increase of investments by Private Initiators related to secondary resource use in the case of solid solutions.
4. Share the lessons learnt in the cases with All Participants and Observers and even more widely with the objective of facilitating the movement of secondary resources within and eventually beyond the North Sea Region in Europe.

¹¹⁴ Ministries of Economic Affairs, Infrastructure and the Environment and the Internal Affairs and Kingdom Relations 2015, The Green Deal Approach, August 2015, 1.

¹¹⁵ Ibid, 1.

¹¹⁶ Ministry of Infrastructure and the Environment 2016, A Circular Economy in the Netherlands by 2050, Government-wide Programme for a Circular Economy, September 2016, 23.

¹¹⁷ NSRR 2016, International Green Deal on the North Sea Resources Roundabout, March 2016, 1-19.

¹¹⁸ Ibid, 1.

¹¹⁹ Ibid, 3.

¹²⁰ Ibid, 3.

CHAPTER 4: FUNCTIONING OF THE NOTIFICATION PROCEDURE OF THE WSR

4.1. Purpose of the Notification Procedure of the WSR

The Notification Procedure concerns a control procedure for all waste shipments intended for disposal and hazardous and semi-hazardous waste intended for recovery for which prior written notification and consent is required.¹²¹ The purpose of the Notification Procedure – as explained in the WSR in the preamble, point 13 and 14 – is to ensure a high level of protection of the environment and human health. In order to ensure optimum supervision and control of particular waste, prior written consent is required by the competent authorities involved. This will enable these authorities to be duly informed prior to the waste shipment taking place, so that all necessary measures can be taken upfront to protect human health and the environment. In case an involved EU Member State has reasoned objections against such a waste shipment taking place, it can stop the shipment from taking place by not granting the required prior written consent.

4.2. The Notification Procedure of the WSR briefly explained

4.2.1. Four key stages involved in the shipment of waste under the Notification Procedure

In line with the Basel Convention (1989), in cross-border shipments of waste there are four key stages involved: (a) submittal of an Application / Notification, (b) assessment and transmission of the Notification, (c) movement of the waste and (d) waste processing.¹²²

The main 7 steps to take into account for waste shipments to be effected under a Notification Procedure process are the following:

1. Set-up of a contract between Notifier and Consignee.
2. Establishment of a financial guarantee or equivalent insurance.
3. Application of the Notifier to the competent authority of dispatch.
4. Assessment and transmission of the Notification by the competent authority.
5. Prior Notification of movement 3 days before shipment.
6. Actual movement of the waste.
7. Confirmation of disposal, recovery, re-use or recycling of the waste.

In order to explain how the Notification Procedure works in daily practice (see also Appendix IV, presenting a high-level overview of the Notification Procedure process), a basic (simple) process will be described on high-level in the next paragraphs, starting with the key stakeholders involved, followed by a lead-time explanation of the Notification Procedure process. The last chapter will explain the required documentation and information flows – to be exchanged per post mainly as the process is not digitalized yet - for waste shipments subject a Notification Procedure.

¹²¹ Regulation (EC) No 1013/2006, Article 4 WSR.

¹²² National TFS Office 2007, Trans-frontier Shipment of Waste, Guidelines for Exporting Waste from, and Importing waste to, the Republic of Ireland, 5 July 2007, 4.

4.2.2. Key stakeholders involved in a Notification Procedure

The key stakeholders involved in a basic (simple) Notification Procedure are the following:

- **The Notifier:** Who can act as Notifier is either the original producer, a licensed new producer, a registered dealer, a registered broker or the holder of the waste. It is the Notifier who intends to carry out a shipment of waste or intends to have a shipment of waste carried out and to whom the duty to notify is assigned.¹²³
- **The Consignee:** This is the person or undertaking under the jurisdiction of the country of destination to whom or to which the waste is shipped for recovery or disposal.¹²⁴ It is Consignee who has to provide written information of receipt of the waste and recovery or disposal of it.¹²⁵
- **The competent authority of dispatch:** This means the competent authority for the area from which the shipment is planned to be initiated or is initiated.¹²⁶
- **The competent authority of destination:** This concerns the competent authority for the area to which the shipment is planned or takes place, or in which waste is loaded prior to recovery or disposal in an area not under the national jurisdiction of any country.¹²⁷
- **Customs office of exit and entry:** As the shipments of waste involve cross-border activities, a customs office of exit¹²⁸ and customs office of entry¹²⁹ are involved in a Notification Procedure. Customs carry out risk targeting and analysis, data and intelligence sharing, enforcement and participation in joint enforcement operations (requiring inter-agency cooperation, bilateral or multilateral customs cooperation).¹³⁰

In case waste has to be shipped through another country to reach its final destination, also a competent authority of transit is involved in a Notification procedure, which increases for all parties involved the administrative burden and can make the approval process more complex.¹³¹

4.2.3. Lead-time explanation of the Notification approval process

The lead-time of the Notification approval process (from submittal of Notification by a Notifier to approval by all competent authorities involved) can take considerable time and varies per Notification. The lead-time can be weeks, but in common practice also several months. Factors influencing the lead time are various, some of them related to the type of waste involved, the required additional documentation / information to be provided by the Notifier to the competent authorities or resource availability of the competent authorities involved to process a Notification.

¹²³ Regulation (EC) No 1013/2006, Article 2 (15) WSR.

¹²⁴ Ibid, Article 2 (14) WSR.

¹²⁵ Ibid, Article 16 (e) WSR.

¹²⁶ Ibid, Article 2 (19) WSR.

¹²⁷ Ibid, Article 2 (20) WSR.

¹²⁸ Ibid, Article 2 (28) WSR.

¹²⁹ Ibid, Article 2 (29) WSR.

¹³⁰ Guidelines for customs controls on transboundary shipments of waste, 12.05.2015, Official Journal of the European Union, C 157/1-14.

¹³¹ Regulation (EC) No 1013/2006, Article 2 (24) WSR and Article 9 (1) WSR.

The ILT has developed a process flow¹³², providing information on the lead-time of the Notification approval process in working days, which is attached in Appendix V. The process flow describes a perfect flow without any delays in time for the approval process. A simplified lead-time flow for a standard Notification procedure is the following:

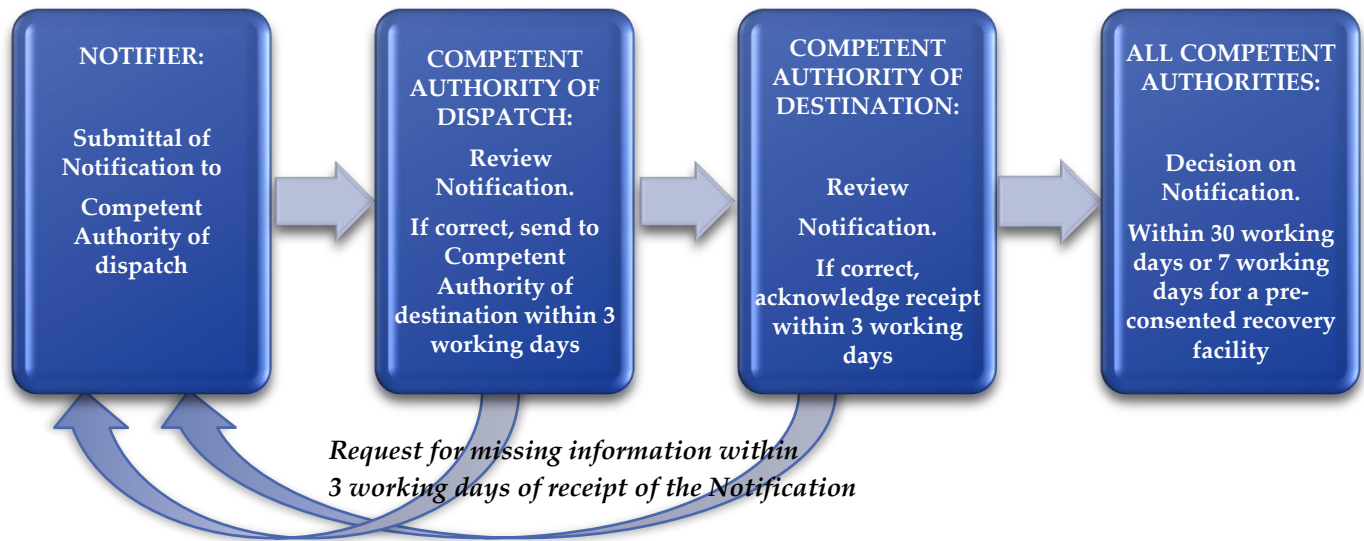


Figure 4: Overview lead-time flow of the Notification Procedure approval process

A Notifier has to submit a correct and complete Notification package to the competent authority of dispatch. Only when all information is correct and available, the competent authority of dispatch will forward it to the competent authority of destination. This will need to be done *within three working days of receipt of the Notification*.¹³³ It is important to note that if the Notification is improperly carried out or any information is missing, the Notifier is asked – within 3 working days of receipt of the Notification - to provide additional information to the competent authority of dispatch.¹³⁴

When a properly carried out Notification has been sent to a competent authority of destination, it will review the Notification Package in total. When the competent authority of destination considers that the Notification has been properly completed, it shall send an acknowledgement to the Notifier and copies to the other competent authorities concerned *within three working days of receipt of the properly completed notification*.¹³⁵ If the Notification is improperly carried out or any information is missing, the Notifier is asked – within three working days of receipt of the Notification - to provide additional information to the competent authority of destination.¹³⁶

¹³² ILT 2017, *Overzicht van kennisgevingsprocedure* [Overview Notification Procedure], publication 19-01-2017, retrieved May 24, 2018 from <https://www.ilent.nl/documenten/publicaties/2017/01/19/overzicht-van-kennisgevingsprocedure>.

¹³³ Regulation (EC) No 1013/2006, Article 7 (1) WSR.

¹³⁴ Ibid, Article 7 (2) WSR.

¹³⁵ Ibid, Article 8 (2) WSR.

¹³⁶ Ibid, Article 8 (1) WSR.

The competent authorities of destination, dispatch (and transit, if applicable) shall *have 30 days following the date of transmission of the acknowledgement by the competent authorities of destination to take one of the following three duly reasoned decisions in writing as regards the notified shipment*¹³⁷: (1) consent without conditions, (2) consent with conditions in accordance with Article 10 WSR or (3) objections in accordance with Articles 11 and 12 WSR. Note: tacit consent by the competent authority of transit may be assumed if no objection is lodged within the said 30-day time limit.¹³⁸ As shown in figure 4, there is an exception on the above described 30-day time limit for the competent authorities involved to provide their duly reasoned decisions in writing with regard to a notified shipment. *In case the Notification Procedure involves pre-consented recovery facilities*¹³⁹, the decision to be provided by the competent authorities involved requires to be made in writing within 7 working days.¹⁴⁰

In a perfect situation the total lead-time of a Notification approval process - from submittal by the Notifier to decisions from the competent authorities involved - takes *36 working days* or *13 working days* in case it involves a pre-consented recovery facility.

A critical analysis of the lead-time flow described above reveals the existence of a *lacuna of law* in case additional information is requested from the Notifier by a competent authority. As a matter of fact, the WSR does neither specify a time period within which this additional information must have been received from the Notifier nor does it specify the time period that the competent authority needs to respond to the additional information supplied by the Notifier. Regardless of lacunas of law, general principles of good governance and proper administration count in administrative law for governmental bodies, which may overcome this lacuna of law of the WSR. In the Netherlands, for example, the General Administrative Law Act¹⁴¹ states that an administrative authority shall gather the necessary information concerning the relevant facts and the interests to be weighed when preparing an order.¹⁴² The provision of Article 4:5 of this Act encloses the granting of an opportunity to complete an incomplete application.¹⁴³ In daily practice this means that the Notifier is allowed in the Netherlands a period of 4 weeks to complete all necessary documents to deliver under the WSR. If the Notifier has not complied with it after 4 weeks, the entire Notification is returned to the Notifier and he has to submit it again to ILT in the Netherlands.¹⁴⁴ However, in Scotland, for example, the Scottish Environment Protection Agency (SEPA) does not apply a response time of 4 weeks for the Notifier to provide additional information. As a consequence, procedures in practice might take several months.¹⁴⁵

¹³⁷ Ibid, Article 9 (1) WSR.

¹³⁸ Ibid, Article 9 (1) WSR.

¹³⁹ Ibid, Article 14 (1) WSR.

¹⁴⁰ Ibid, Art. 14 (4) WSR.

¹⁴¹ Algemene Wet Bestuursrecht (AWB), [General Administrative Law Act], Wet van 4 juni 1992, houdende algemene regels van bestuursrecht [Act of 4 June 1992, containing general rules of administrative law].

¹⁴² Ibid, Article 3:2 AWB.

¹⁴³ Ibid, Article 4:4 AWB.

¹⁴⁴ Tweede Kamer der Staten Generaal [House of Representatives], Vergaderjaar 2007-2008 [session year 2007-2008], Handhaving milieuwetgeving [Enforcement environmental law], 22 343, Nr. 180, 8.

¹⁴⁵ Interview with SEPA - Scotland, Appendix 5.

4.2.4. Required documentation for the Notification Procedure: the administrative flow

The administrative flow of information and documentation under the Notification Procedure of the WSR can be split into four main parts: (1) submittal of a Notification Package, (2) prior Notification of movement 3 days before shipment, (3) actual movement of the waste and (4) confirmation of recovery or disposal of the waste.

Part 1: Submittal of a Notification Package

Depending on the type of waste and materials handling process after the waste shipment (recovery or disposal), documentation to be issued to the competent authorities involved in the process may vary, even between Member States. The main documents to be provided upon Notification by the Notifier to the competent authorities are the following:

- *Notification document*: The Notification document¹⁴⁶ needs to be submitted by the Notifier, filled in to the fullest extent possible at the time of the Notification submittal. It provides the competent authorities involved with basic information on the Notifier, Consignee, waste type, waste generator, intended quantity of shipments or disposal/recovery process or expiry date. Additional information to be supplied on, or annexed to the Notification document – such as designation of waste or intended routing and intended route - is stated in Annex II, Part 1 WSR.
- *Movement document*: The Movement document¹⁴⁷ needs to be submitted by the Notifier, filled in to the fullest extent possible at the time of the Notification submittal. It provides information on the Notifier, Consignee, carriers of the consignment, means of transport etc. and allows track & trace of the waste shipment from cradle to grave. Additional information to be supplied on, or annexed to the Movement document is stated in Annex II, Part 2 WSR. An example of additional information is a description of the route and routing of the waste shipment, which is obliged to be followed, as was confirmed by the CJEU in 2015.¹⁴⁸
- *Copy of a contract between Notifier and Consignee*: A contract between Notifier and Consignee for the recovery or disposal of the waste needs to be concluded and submitted with the Notification.¹⁴⁹ It shall be effective at the time of Notification and for the duration of the waste shipment, until a certificate is issued, stating that the recovery or disposal has been completed.¹⁵⁰ It shall include certain obligations, such as (a) the obligation of the notifier to take back the waste if the shipment has not been completed or is in breach of the WSR¹⁵¹ and (b) the obligation of the consignee to provide the notifier with a “certificate of disposal” to confirm that the waste has been disposed of or recovered in an environmentally sound manner¹⁵². This contract is conditional: if no prior written consent is given by the competent authorities involved and no waste shipment takes place, the contractual agreement is terminated. Within Europe, authorities responsible for the execution of the WSR provide examples of contract templates, which can be used for waste shipments for recovery, disposal or interim operations.

¹⁴⁶ Regulation (EC) No 1013/2006, Annex IA, Notification document form.

¹⁴⁷ Ibid, Annex IB, Movement document form.

¹⁴⁸ CJEU 2015, Case C-487/14, SC Total Waste Recycling SRL v Országos Környezetvédelmi és Természetvédelmi Főfelügyelőség, Judgment of the Court (Seventh Chamber) of 26 November 2015, ECLI:EU:C:2015:780.

¹⁴⁹ Regulation (EC) No 1013/2006, Article 5 WSR.

¹⁵⁰ Ibid, Article 15 (e) WSR, Article 16 (e) WSR or, where appropriate, Article 15 (d) WSR.

¹⁵¹ Ibid, Article 5 (3a) WSR.

¹⁵² Ibid, Article 5 (3c) WSR.

- *Financial guarantee or equivalent insurance:* The Notifier has to establish a financial guarantee or equivalent insurance. This guarantee is inextricably linked with the polluter-pays principle¹⁵³, as its purpose is to cover costs of transport, costs of recovery or disposal, including any necessary interim operations and costs of storage for 90 days.¹⁵⁴ It is also intended to cover costs arising in the context of cases where a shipment or the recovery or disposal cannot be completed as intended¹⁵⁵ and cases where a shipment or the recovery or disposal is illegal.¹⁵⁶ A declaration to this effect shall be made by the notifier through completion of the appropriate part of the notification document set out in Annex IA.
- *Additional information:* Competent authorities may request additional information – for example – on measures to be taken to ensure transport safety, a chemical analysis of the composition of the waste or a description of the production process of the waste. A list of additional information or documentation that may be requested is provided in Annex II part 3 WSR.

Submittal of Notification				
main documents to be provided to competent authorities				
Notification Document	Movement Document	Copy of Contract between Notifier & Consignee	Financial Guarantee or equivalent insurance	Additional Information
Annex IA WSR Annex II part 1 WSR	Annex IB WSR Annex II part 2 WSR	Article 5, 15 (e) and 16 (e) WSR	Article 6, 22, 23, 24 and 25 WSR	Annex II part 3 WSR

Figure 5: Overview Submittal of Notification, main documents to be provided to competent authorities

Part 2: Prior notification of movement 3 days before shipment

Prior to shipment of the waste, the Notifier shall insert the actual date of shipment and complete the Movement document to the fullest extent possible.¹⁵⁷ The Notifier shall send signed copies of the completed movement document to the competent authorities and the Consignee at least 3 working days before the shipment starts.¹⁵⁸ However, if any essential change is made to the details and/or conditions of the consented shipment, including changes in the intended quantity, route, routing, date of shipment or carrier, the notifier shall inform the competent authorities concerned and the consignee immediately and where possible, before the shipment starts.¹⁵⁹ In such cases a new notification shall be submitted, unless all the competent authorities concerned consider that the proposed changes do not require a new notification.¹⁶⁰

¹⁵³ Directive 2008/98/EC, Article 14 WFD.

¹⁵⁴ Ibid, Article 6 (1) WSR.

¹⁵⁵ Ibid, Article 22 and 23 WSR.

¹⁵⁶ Ibid, Article 24 and 25 WSR.

¹⁵⁷ Ibid, Article 16 (a) WSR.

¹⁵⁸ Ibid, Article 16 (b) WSR.

¹⁵⁹ Ibid, Article 17 (1) WSR.

¹⁶⁰ Ibid, Article 17 (2) WSR.

Part 3: Actual movement of the waste

The movement document and copies of the notification document (plus annexes) and the written consents and conditions of the competent authorities concerned shall accompany each transport.¹⁶¹ The movement document shall be retained by the facility which receives the waste.¹⁶² Within three days of receipt of the waste, the facility shall provide confirmation in writing that the waste has been received and shall send signed copies of the movement document containing this confirmation to the notifier and to the competent authorities concerned.¹⁶³

Part 4: Confirmation of recovery or disposal of the waste

As soon as possible, but not later than 30 days after completion of the recovery or disposal operation, and no later than one calendar year, or a shorter period in accordance with Article 9 (7) WSR, following receipt of the waste, the facility carrying out the operation (of recovery or disposal) shall, under its responsibility, certify that the waste processing has been completed. This certificate shall be contained in, or annexed to, the movement document. The facility shall send signed copies of the movement document containing this certificate to the notifier and to the competent authorities concerned.¹⁶⁴

With regard to the administrative flow described above, it is worthwhile mentioning that within the EU, Member States authorities are requesting the Notifier to send all documentation for the Notification in paper to them, as the administrative process flows are yet undigitized. In addition, all documentation and information sent to or by the competent authorities in relation to a notified shipment shall be kept in the Community by all parties involved for at least 3 years from the date when the shipment started.¹⁶⁵

4.3. Main issues of the Notification Procedure of the WSR

4.3.1. Classification of waste

Before a Notification approval process is started, businesses have to ask themselves the question whether goods have to be classified as waste or not. With waste shipments being subject to strict legislation, the impact on businesses can be huge if the question is answered wrongly. Businesses might assume that a product is not to be classified as waste, but the interpretation of authorities might be the opposite. As a consequence, there has been and is a lot of discussion (and case law) with regard to classification of waste. It is worthwhile noting that under the WSR it has been determined that if the competent authorities of dispatch and of destination cannot agree on the classification between waste and non-waste, the goods shall be treated as if it were waste.¹⁶⁶

¹⁶¹ Ibid, Article 16 (c) WSR.

¹⁶² Ibid, Article 16 (c) WSR.

¹⁶³ Ibid, Article 16 (d) WSR.

¹⁶⁴ Ibid, Article 16 (e) WSR.

¹⁶⁵ Ibid, Article 20 WSR.

¹⁶⁶ Ibid, Article 28 (1) WSR.

In daily practice, this rule works to the detriment of businesses, with the only (costly) route left for parties involved to dispute this decision before a court of law or tribunal.¹⁶⁷

An explanatory and important case law example with regard to classification of waste is the Shell-decision of 2013, where the CJEU ruled as follows¹⁶⁸: *“A consignment of diesel accidentally mixed with another substance is not covered by the concept of ‘waste’, within the meaning of that provision, provided that the holder of that consignment does actually intend to place that consignment, mixed with another product, back on the market. With regard to the vendor which delivered the contaminated diesel, it is not decisive that the consignment at issue could be sold on the market without being processed, in the condition in which it was when it was returned by the client, that the commercial value of the consignment at issue corresponds largely to that of a product which meets the agreed specifications or that the trade in products analogous to the consignment at issue is not, as a general rule, regarded as a trade in waste. However, the fact that the vendor took back the consignment at issue with the intention of blending it and placing it back on the market is of decisive importance”*. When assessing the question “waste or not?” space has been created with this Shell decision for the assessment of what actually happens with objects or substances in the market and whether this is associated with environmental risks that justify the application of waste law.¹⁶⁹

From a coordinated audit on the enforcement of the WSR it was concluded that there are indeed differences in the interpretation in identifying and categorizing waste shipments between Member States. The fact that environmental agencies have to deal with two legal frameworks (the international statutory framework for customs and the BASEL / WSR framework) makes classification even more complicated.¹⁷⁰ Classification issues will remain subject to discussion on EU level and between Member States, which might lead to changes in the European list of waste. Lithium batteries, for example, are classified by ADR Regulations as class 9 (other dangerous goods) and must be packed in a UN container.¹⁷¹ However, when these batteries are subject to recycling activities (EURAL code 20.01.34 or 16.06.05), strange enough these batteries are currently on EU level considered to be non-hazardous¹⁷² and are therefore subject to the green list procedure of the WSR in case of cross-border waste shipments.¹⁷³ Austria disagrees with this approach: in their opinion - considering the risks entailed by shipments of lithium batteries - they argue that these shipments should preferably be subjected to a Notification procedure. But until no agreement has been reached between EU Member States on this subject, EU Member States are left to apply their own rules, in line with applicable EU and national legislation.¹⁷⁴ Further harmonization on the classification of waste will have to continue to be a point of focus with regard to cross-border waste shipments under the Notification Procedure in order to support environmentally sound management practices and the Circular Economy Strategy within Europe.

¹⁶⁷ Ibid, Article 28 (4) WSR.

¹⁶⁸ CJEU 2013, Joined Cases C-241/12 and C-242/12, Shell Nederland Verkoopmaatschappij BV and Belgian Shell NV, Judgment of the Court (First Chamber), 12 December 2013, ECLI:EU:C:2013:821.

¹⁶⁹ Freely translated from: Laan, R.G.J, 2017, Actualiteiten afvalstoffenrecht 2017 [News waste law 2017], in M&R 2017/89, 634-637.

¹⁷⁰ EUROSAI 2013, Report of the audit on the enforcement of EU regulations on waste shipment, Audit ID 1453976251177, The Hague, October 2013, 22.

¹⁷¹ Recharge 2018, Transport information, retrieved May 24, 2018 from <http://www.rechargebatteries.org/knowledge-base/transport/>

¹⁷² EC 2017b, Minutes Meeting of the Waste Shipment Correspondents, Regulation (EC) no 1013/2006 on shipments of waste, 12 September 2017, Brussels, GK/JN env.b.3.(2017)5871998, 5.

¹⁷³ Regulation (EC) No 1013/2006, Article 18 WSR and Annex VII.

¹⁷⁴ EC 2017b, Minutes Meeting of the Waste Shipment Correspondents, Regulation (EC) no 1013/2006 on shipments of waste, 12 September 2017, Brussels, GK/JN env.b.3.(2017)5871998, 5.

4.3.2. Administrative differences

The undigitized Notification procedure process creates an administrative burden for stakeholders. In addition to this, the notable differences with regard to administrative requirements of the Notification Procedure between EU Member States lead to an uneven level playing field. A few of the differences are mentioned below.

- In some countries, the Notifier has to pay a fee (charge) to the competent authority of dispatch (for example the UK and Germany) for the Notification Procedure, in other countries this is not required (for example in the Netherlands).
- The lack of standardization within the EU with regard to calculations of financial guarantees or equivalent insurances are burdensome for businesses.¹⁷⁵ Especially for SMEs the requested financial guarantees can have considerable impact on their liquid assets, creating an unwanted financial state of business for a certain period of time. With SMEs forming the backbone of the European Economy - thereby having to play an important role in the future establishment of the European Circular Economy – elimination of this barrier should be a point of attention.
- The additional information to be annexed to a Notification depends on the individual judgment of a competent authority. A research performed by EURinSPECT and SIRA Consulting in 2010 even noted the existence of differences between departments in France, territories in Belgium (Flanders, Wallonia and the Brussels region) and States in Germany, for example with regard to information to be supplied about the origin of the waste, the recovery of the waste and the owner of the waste.¹⁷⁶ Although the differences are small, it does not make the nuisance any less, as it can lead to a delay of the waste shipment to occur.¹⁷⁷ This illustrates the importance of clear guidelines and agreements to be in place between competent authorities involved in cross-border waste management, in order to avoid unnecessary delays for the Notifier.
- The lead-time for competent authorities to make a Notification decision in case it involves a pre-consented waste treatment facility is short (7 working days)¹⁷⁸ compared to the normal decision time (30 days)¹⁷⁹, which might in daily practice be a challenge to meet. Stakeholders applying for a pre-consented waste treatment facility permit perceive the application procedure as a bureaucratic burden,¹⁸⁰ only leading to a permit which a maximum validity of 3 years.¹⁸¹ Pre-consented waste treatment facilities that have obtained a permit are registered in a database, accessible on the website of the OECD.¹⁸² A European central database does not exist yet, nor are their harmonized criteria for the permit granting of a pre-consented recovery facility.

¹⁷⁵ EC 2010, Assessment and guidance for the Implementation of EU Waste Legislation in Member States. REFERENCE: ENV.G.4/SER/2009/0027, Current implementation of financial guarantees and equivalent insurance in all Member States, including an impact analysis (D 2.1.4), Expert Team for Assessing and Guidance for the Implementation of Waste Legislation. European Commission, Brussels, 17 November 2010, 1-43.

¹⁷⁶ Vos, J.M. (EURinSPECT), Bex, P.M.H.H. (SIRA Consulting), Van der Poll, P.A.M. 2010, *Cross-border afvaltransport: Op weg naar onbelemmerd transport in Europa?* [Cross-border waste transport: On the way to unobstructed transport in Europe?], The Hague, 2 September 2010, 15.

¹⁷⁷ Ibid, 15.

¹⁷⁸ Regulation (EC) No 1013/2016, Article 14 (4) WSR.

¹⁷⁹ Ibid, Article 9 (1) WSR.

¹⁸⁰ EC 2018f, Workshop Report, Verifying the scope and key issues for the Waste Shipment Regulation (WSR) Evaluation, 11th of January 2018, 3.

¹⁸¹ Regulation (EC) No 1013/2006, Article 14 (2) WSR.

¹⁸² OECD 2018, The OECD Control System for waste recovery, retrieved May 24, 2018 from <http://www.oecd.org/environment/waste/theoecdcontrolsystemforwasterecovery.htm>.

4.3.3. Differences in enforcement of the WSR

Enforcement of waste shipments under the Notification Procedure of the WSR varies between EU Member States, with some countries having the reputation (such as the Netherlands) to be stricter than others in applying the rules, resulting in an uneven level playing field for businesses.¹⁸³ The differentiations in administrative fine and criminal penalty - also with regard to the amount of fines and penalties between Member States¹⁸⁴ indicate that harmonization – therewith providing more certainty for businesses when dealing with cross-border waste shipments under the Notification Procedure of the WSR – of cross-border Waste Management within Europe is still far way, if ever achievable within the EU.

4.3.4. Constraints imposed by International Law

Certain aspects of the WSR are defined by overarching International Law: the Basel Convention of 1989 and the OECD Decision from 2001.¹⁸⁵ For intra-EU shipments it can be argued whether these internationally agreed “rules” are not too strict to apply to intra-EU shipments. Taking into consideration the Single Market approach of the EU (the EU as one territory without any internal borders or other regulatory obstacles to the free movement of goods and services)¹⁸⁶, certain WSR provisions stemming from the Basel Convention of 1989 and OECD Decision of 2001 are actually hampering the efficiency of the WSR and the path forward to achieve a European Circular Economy. If, for example, an intra-EU waste shipment needs to move from the Netherlands to Spain by road, also consent of the Belgium and French authorities is required. If the two latter-mentioned competent authorities should only be informed about the waste shipment, the administrative burden for parties involved would decrease significantly. The EU actually also has no possibility to administratively “move” waste subject to an amber list procedure (Notification) to a green listed procedure (less cumbersome) within the EU Single Market due to the existing link with the Basel waste lists. However, Article 11 of the Basel Convention could offer a solution to Europe - if wanted - as parties may enter into regional agreements or arrangements regarding transboundary movement of hazardous waste of other wastes, as long as they do not derogate from the environmentally sound management of hazardous wastes and other wastes.¹⁸⁷ Creation of a European Waste Union, in line with the European Single Market approach and European Circular Economy Strategy - is to be explored further in chapter 5, where a design change is presented.

¹⁸³ Rli 2015, Circular Economy: From Wish to Practice, June 2015, Rli, Council for the Environment and Infrastructure, 78.

¹⁸⁴ EC 2011, Assessment and Guidance for the Implementation of EU Waste Legislation in Member States, Reference: ENV.G.4/SER/2009/0027, Report on analysis of the implementation / enforcement of Annex VII and article 18 and 49-50 of the Waste Shipment Regulation in all Member States, including a summary report of National Provisions. 12 April 2011, Expert Team for Assessing and Guidance for the Implementation of Waste Legislation, European Commission, Brussels, 35.

¹⁸⁵ EC 2018f, Workshop Report, Verifying the scope and key issues for the Waste Shipment Regulation (WSR) Evaluation, 11th of January 2018, 3.

¹⁸⁶ EC 2018e, The European Single Market, retrieved May 24, 2018 from https://ec.europa.eu/growth/single-market_en.

¹⁸⁷ Basel Convention 1989, Article 11.

CHAPTER 5: STAKEHOLDERS PERSPECTIVES, ISSUES ENCOUNTERED

5.1. Stakeholders consultation, an introduction

In the previous chapters, a theoretical framework with regard to the WSR and the functioning of the Notification Procedure on a high level in daily practice was presented. This chapter will provide perspectives of stakeholders involved in the Notification Procedure process under the WSR, based on interviews and literature study (IMPEL and EC). A few stakeholders – not all included – were interviewed: ILT, SEPA, Dutch Customs, FHG (branch organization), a waste collector, a waste advisory company and an environmental law lawyer.¹⁸⁸ In paragraph 5.2. the stakeholder's perspectives with regard to the WSR and in particular the Notification Procedure process will be outlined, providing an indication of the different views.

Two of the main objectives of the WSR are the protection of the environment and the combat against illegal shipments of waste.¹⁸⁹ The stakeholders interviewed were asked to what extent they believed that the WSR has been effective in achieving these two main objectives. All interviewees confirmed the WSR to be effective – completely or to a large extent – in achieving these objectives. Whether the WSR is still effective in meeting its objectives will become clear from the evaluation of the WSR, which the EC is currently carrying out.¹⁹⁰

5.2. Main stakeholder's perspectives on the Notification Procedure of the WSR

5.2.1. EC and IMPEL

EC (European Commission)

With the adoption of the ambitious Circular Economy Package of the EC in 2015, it was recognized that it would require revised legislative proposals on waste in the near future ahead to stimulate Europe's transition towards a circular economy.¹⁹¹ With the European WSR closely interlinked with the BASEL Convention of 1989 and OECD Decision of 2001, major and significant changes to the WSR – and particularly with regard to the Notification Procedure - are not expected to take place at short notice. However, if the evaluation of the WSR concludes that amendments may be beneficial, any amendments would be developed and assessed via an Impact Assessment (IA) of the WSR. This would occur in 2018, followed, if justified by the IA and if appropriate, by a legislative proposal to revise the WSR by 31/12/2020.¹⁹²

¹⁸⁸ Appendix 1, list of interviewees and Appendix II, interview guides, questions & answers.

¹⁸⁹ Regulation (EC) No 1013/2017, preamble point 1 and

¹⁹⁰ EC 2018f, Workshop Report, Verifying the scope and key issues for the Waste Shipment Regulation (WSR) Evaluation, 11th of January 2018, 2.

¹⁹¹ EC 2015b, Communication from the Commission to the European Parliament, the Council, the European Economic and Societal Committee and the Committee of the Regions. Closing the loop – an EU action plan for the Circular Economy. European Commission. Brussels, 2.12.2015 COM(2015) 614 FINAL, 2.

¹⁹² EC 2018f, Workshop Report, Verifying the scope and key issues for the Waste Shipment Regulation (WSR) Evaluation, 11th of January 2018, 2.

The protection of the environment and the combat against illegal shipments of waste are cornerstones of the WSR. A Commission Report of 2015 mentioned an increase in the number of illegal shipments that were reported under the IMPEL's Enforcement Action Project that took place in 2014 and 2015 (EA IV). However, it also mentioned that this increase in the number of illegal shipments could be due to better reporting by Member States or more effective control measures, e.g. increase of the number of spot checks.¹⁹³ Differences in reporting systems and enforcement strategies of EU Member States influence the statistical data available on non-compliance to the WSR, making monitoring & control more difficult. In addition to the above, the Notification procedure under the WSR involves paper-form information and document flows, creating administrative burden for parties involved. The EC recognizes that a change towards digitization is key for future success. The EU eGovernment Action Plan 2016-2020 refers to it as follows: *eGovernment supports administrative processes, improves the quality of the services and increases internal public sector efficiency. Digital public services reduce administrative burden on businesses and citizens by making their interactions with public administrations faster and efficient, more convenient and transparent, and less costly. By joining efforts at European Union level, the availability and take up of eGovernment services can be increased, resulting in faster, cheaper, more user-oriented digital public services.*¹⁹⁴

ICT standards play an important role in achieving interoperability between various IT systems. In 2016 the ABAROA Consortium carried out a study for the EC, DG Environment, which resulted in a reporting package, defining the technical and organizational requirements for the practical implementation of Electronic Data Interchange (EDI) for the submission of documents and information in accordance with the WSR. The report of this study describes the protocol of data exchange, which could form the basis for the Commission to adopt an implementing act in future, establishing the technical and organizational requirements for the practical implementation of EDI for the submission of documents and information.¹⁹⁵

IMPEL (European Network for the Implementation and Enforcement of Environmental Law)

The aim of the IMPEL – TFS network is to promote compliance with the WSR and Waste Management Directives through enforcement, to carry out joint enforcement projects, to promote exchange of knowledge, best practices and experience with the enforcement of the regulations and directives and to stimulate a uniform enforcement regime.¹⁹⁶ This is done by awareness raising and capacity building activities, facilitating inter-agency and cross-border collaboration and operational enforcement activities.¹⁹⁷ Members of the cluster represent environmental authorities, but also customs and police services and other authorities that play a role in the enforcement of the trans-frontier shipments and management of waste.¹⁹⁸

¹⁹³ EC 2015b, Report from the Commission to the European Parliament and the Council on the implementation of Regulation (EC) No 1013/2006 of 14 June 2006 on shipments of waste, Brussels, 17.12.2015, COM (2015) 660 final, 8.

¹⁹⁴ EC 2016a, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, EU eGovernment Action Plan 2016 – 2020, Brussels, 19.04.2016, COM (2016) 179 final.

¹⁹⁵ ABAROA Consortium 2016, Electronic Data Exchange for Waste Shipment Regulation, Main document that sets out the reporting package of the Electronic Data Exchange for the Waste Shipment Regulation study, Spain, 30/11/2016, 1 – 382.

¹⁹⁶ IMPEL 2018b, Waste and TFS, retrieved May 24, 2018 from <https://www.impel.eu/topics/waste-and-tfs/>.

¹⁹⁷ Ibid.

¹⁹⁸ Ibid.

IMPEL set up the Enforcement Actions project, with one of the objectives being the detection of illegal shipments and the deference of future ones through effective communication and guidance. Another objective concerned demonstration that the EU Member States take the enforcement of the WSR seriously. The project also aims at providing an easily accessible European enforcement project for all to co-operate with each other, and also with other regulatory authorities, such as the Police and Customs.¹⁹⁹ Up till 2016 four IMPEL-TFS Enforcement Actions have taken place. In the first issued report (action period September 2006 to June 2008), the conclusion was drawn that enforcement of the WSR was not yet institutionalized equally in the European countries and that a “level playing field” within Europe was still a goal to be reached.²⁰⁰ To establish a more level playing field, it was recommended by IMPEL to (a) organize more education and training for all national enforcement partners, (b) develop “tailor-made” national enforcement action plans, (c) start bilateral collaboration with neighboring countries and (d) identify the gaps and needs on the enforcement level.²⁰¹ With regard to the “level playing field”, the last issued report in 2016 (action period March 2014 to December 2015) states the following: *The sustained level of inspections, plus the participation of customs officers, police officers and port authorities indicate that enforcement of the EU waste shipment regulation remains a priority in many Member States. The violations captured in this project also clearly demonstrate that there is still effort needed to move towards a level playing field of enforcement.*²⁰²

Data collection for IMPEL is an issue, as not all EU Member States are providing input or provide it in the same way. The reported figures do not reflect the overall number of inspections and violations in Europe, as the project only provides a “snapshot” of the inspection activity within the participant countries.²⁰³ However, the non-compliance rate to the WSR, as reported by IMPEL, can be considered to be quite high. IMPEL’s EA II findings showed a violation rate of 21% of the WSR, whereas EA IV findings reported a violation rate of 16.6% of waste shipments within Europe. These violations consisted of administrative violations (36.5%), more serious offences such as missing, incomplete or incorrect notifications (52.1%), shipments subject to export bans (9.3%) and other or non-specified offences (2.1%).²⁰⁴

In 2017, an IMPEL study showed that lack of resources and qualified staff are considered to be the main barriers for an effective implementation of environmental regulations.²⁰⁵ Main challenges in applying the waste and trans-frontier shipments of waste legislation were considered to be the complexity and diversity of the legislation, the ability to distinguish between waste and non-waste and between hazardous and non-hazardous waste (definition and classification of waste).²⁰⁶ Based on the EA IV project results, IMPEL formulated 10 recommendations for future joint actions and follow-up projects, such as continuous improvement on cooperation with customs, police and other regulatory authorities (for example via formal agreements) and clarity of data reporting.²⁰⁷

¹⁹⁹ IMPEL 2018a, Enforcement Actions, retrieved May 24, 2018 from <https://www.impel.eu/projects/enforcement-actions/>.

²⁰⁰ IMPEL 2008, IMPEL-TFS Actions I, Enforcement of EU Waste Shipment Regulation, “Learning by Doing”, June 2008, Final Report, 13.

²⁰¹ Ibid, 13.

²⁰² IMPEL 2016, IMPEL-TFS Actions, Project Report 2014-2015, Enforcement of the European Waste Shipment Regulation, 2016, 6.

²⁰³ Ibid, 6.

²⁰⁴ Ibid, 68.

²⁰⁵ IMPEL 2017, A survey on practitioners’ views about the implementation challenges with EU environmental legislation, their underlying reasons and ways to improvement: 2017, 13 November 2017, report number 2017/27, 4.

²⁰⁶ Ibid, 17, 20.

²⁰⁷ IMPEL 2016, IMPEL-TFS Actions, Project Report 2014-2015, Enforcement of the European Waste Shipment Regulation, 2016, 69, 70.

5.2.2. ILT and SEPA

ILT (Human Environment and Transport Inspectorate, the Netherlands)

The ILT is mandated by the Ministry of Infrastructure and Water Management in the Netherlands to enforce the WSR.²⁰⁸ ILT provides decisions on import, export and transit of waste under the WSR and is responsible for its mainly risk-based enforcement.²⁰⁹

According to two Senior Inspectors of ILT²¹⁰, *main issues* ILT is confronted with in a Notification procedure request as a competent authority of dispatch, transit or destination is that a Notification package is submitted incomplete or the financial bank guarantee is not properly arranged. Another issue is that the contract set-up between Notifier and Consignee appears not to be in line with standard WSR requirements. ILT notices also in daily practice that there is sometimes a lack of description of the composition of the waste. Often product analyses are not included in the Notification or are insufficiently specified.

The *main violations and offences* resulting in non-compliance to the WSR for shipments subject to the Notification Procedure are related - according to the ILT - to the following²¹¹:

- although the Notification forms are filled in correctly, the transport quantities and packaging mentioned on the movement document is incorrectly stated;
- required paperwork that needs to accompany waste shipments under the Notification Procedure are not or incompletely present;
- classification issues appear: goods are sometimes shipped as non-waste, but should have been classified as waste, subject to WSR requirements;
- packaging of waste is insufficient, especially noticed in the Netherlands as transit country;
- waste treatment centers sometimes receive other waste than expected and cannot treat it.

The *improvement measures* suggested by ILT to enhance cross-border Waste Management within Europe under the Notification Procedure of the WSR are manifold.²¹² Application of modern (digital) techniques is one. Digital document flows to exchange information between parties for the application of a Notification, the issuance of written consent and required documentation to accompany the physical flows of waste shipments would be beneficial. Another recommendation is to simplify the waste procedures for waste flows within the EU. Approximately 90-95% of the waste shipments under the WSR concern intra-EU waste streams. A simplified procedure for these waste flows within the EU only should be developed, with shorter decision times and without having to take into account the BASEL and OECD requirements of consent from competent authorities of transit. Last but not least, smarter handling of repetitive Notifications would enhance cross-border Waste Management within Europe, by lengthening the validation period of repetitive Notifications, which could reduce the administrative burden for all parties involved.

²⁰⁸ Paragraph 3.3.3. Enforcement of the WSR in the Netherlands.

²⁰⁹ Interview ILT, Appendix II, 4.

²¹⁰ Ibid.

²¹¹ Ibid.

²¹² Ibid.

SEPA (Scottish Environment Protection Agency)

The Scottish Environment Protection Agency (SEPA) is a non-departmental public body of the Scottish Government. Its role is to ensure that the environment and human health are protected, to ensure that Scotland's natural resources and services are used as sustainably as possible in order to contribute to sustainable economic growth.²¹³ With regard to the regulation of the trans-frontier shipments of waste, SEPA provides decisions on import and export of notified waste. It carries out enforcement of the WSR by performing administrative and physical inspections of waste shipment flows. It also provides guidance to stakeholders involved.²¹⁴ SEPA carries out risk-profiled enforcement and works closely together with third parties, such as the police and the UK Border Agency.²¹⁵

A Senior Policy Advisor of SEPA – also Project Manager for IMPEL – indicated a number of *main issues* SEPA is confronted with in Notification Procedure requests as competent authority of dispatch, transit or destination.²¹⁶ The most common causes of non-compliance are related to incorrect or incomplete filled in Notification and Movement documents, financial guarantees that are legally not correctly established, the contract drawn up between the Notifier and Consignee is incorrectly phrased, the waste carrier is not officially registered as a waste carrier (no permit) and the use of multiple Basel codes for the same type of waste.²¹⁷ Transport inspections performed in 2014 and 2015 in Scotland indicated on average a non-compliance rate of 32.7%. For company inspection results in the same period, a violation rate of 52.1% was noted.²¹⁸

The *improvement measures* that could be taken according to SEPA to enhance cross-border Waste Management within Europe under the Notification Procedure of the WSR are manifold²¹⁹:

- to establish one unique IT system for WSR administrative flows, to speed up the information exchange between stakeholders involved, so that a move away from paperwork exchange of information and documentation can be realized;
- the use one template contract for Europe (to be provided in all languages) with regard to the contract to be established between the Notifier and the Consignee;
- the use a template for the financial guarantee, which would facilitate harmonization;
- to extend the time period for decision making for a pre-consented facility, which would enable better decision making;
- the issuance of clear guidance manuals for industry that are readily available;
- to organize conference participation, events and information sessions for stakeholders involved;
- an update of Annex 1C – specific instructions for completing the notification and movement documents – in clear language.

²¹³ SEPA 2018, Our Role, retrieved May 24, 2018 from <https://www.sepa.org.uk/about-us/our-role/>.

²¹⁴ Interview SEPA, Appendix II, 5.

²¹⁵ Ibid.

²¹⁶ Ibid.

²¹⁷ Ibid.

²¹⁸ Ibid.

²¹⁹ Ibid.

5.2.3. Dutch Customs

The Dutch Customs performs both fiscal and non-fiscal Customs tasks and plays an important role in the WSR in the Netherlands.²²⁰ It carries out risk-based physical checks and inspections (approximately 3200 on a yearly basis) in close cooperation with ILT, with a focus on controls of the paperwork accompanying waste shipments on borders.²²¹

One of the *main issues* Dutch Customs is confronted with during the performance of enforcement tasks for waste shipments subject to the Notification Procedure under the WSR is – according to two interviewees – the differences in the implementation and execution of the WSR and enforcement. How this is done is the choice of each Member State, but it can lead to unclarity in rules to apply for businesses.²²²

The two interviewees of Dutch Customs indicated that only a small percentage of *violations or offences* are noticed for waste shipments subject to a Notification Procedure. This percentage is small, as review of all requirements for the Notification itself already took place by the competent authorities involved. The *main violations and offences* noted during inspections in 2015, 2016 and 2017 were related to the use of wrong waste codes and violations of export bans.²²³ To enhance cross-border Waste Management within Europe, Dutch Customs proposes to take the following *improvement measures*:²²⁴

- to create more alignment between the Customs organizations in the different EU Member States;
- to arrange a uniform reliable execution of the WSR by all EU Member States;
- the use of a uniform system for classification of waste, instead of use of several systems (Basel and EURAL code system), which would make it easier to recognize waste in customs declarations.

5.2.4. Businesses and branch organizations

As stated by the OECD, *regulations are indispensable for the proper functioning of economies and the society. They create the “rules of the game” for citizens, business, government and civil society. The objective of regulatory policy is to ensure that the regulatory lever works effectively, so that regulations and regulatory frameworks are in the public interest.*²²⁵ However, one of the identified barriers to the European Circular Economy for businesses is the waste regulation within Europe: the lack of policies that support a circular economy transition.²²⁶ On the other hand, environmental regulatory standards are getting stricter and are being enforced more rigorously, resulting in the cost of compliance with the law rising sharply, both for polluters and for society in general.²²⁷

²²⁰ Paragraph 3.3.3. Enforcement of the WSR in the Netherlands.

²²¹ Interview Dutch Customs, Appendix II, 2.

²²² Ibid.

²²³ Ibid.

²²⁴ Ibid.

²²⁵ OECD 2014, Regulatory Enforcement and Inspections, OECD Best Practice Principles for Regulatory Policy, OECD Publishing, 4.

²²⁶ Paragraph 3.1.3. Barriers to the European Circular Economy Strategy.

²²⁷ Bell et al. 2017, 37.

Apart from the direct costs to business of complying with stricter environmental regulatory controls, the potential liabilities for non-compliance are also increasing. These liabilities involve criminal liabilities, administrative sanctions, other administrative penalties, clean-up costs, civil liability and adverse publicity.²²⁸ The aforementioned is also applicable for businesses dealing with waste shipments under the WSR. The differences in interpretation and enforcement of the WSR within Europe by EU Member States can increase the risk of non-compliance for businesses. With low prices for raw materials and still sufficient supply of it, in combination with the risk of non-compliance to WSR, many companies are still lacking incentives to engage in waste shipments.

As part of the evaluation of the WSR, the EC has collected feedback from various stakeholders on its roadmap.²²⁹ A few published comments - worthwhile to take into account – are the following:

- A. The WSR is perceived as an administrative burden. The European Recycling Industries' Confederation (EuRIC) stated the following with regard to this: *The WSR is causing substantial administrative burdens for recycling companies, many of them SMEs, resulting among other things in delays and additional cost for shipment of raw materials from recycling.*²³⁰ This opinion is shared by the Finnish Environmental Industries YTP, an organization set up by Finnish environmental companies, who stated that the shipments of non-hazardous waste and repetitive shipments of waste at this moment face unnecessary administrative burdens.²³¹
- B. Stakeholders support an internationally coordinated electronic Notification Procedure. The Bundesverband der Deutschen Entsorgungs-, Wasser- und Rohstoffwirtschaft e.V. (BDE) - a German association representing mainly private companies active in the German waste and waste water management industries – stated the following: *There are currently too many separate national approaches and every Member State tries to promote their own national system as the best. BDE believes it was best if such system would be developed at EU level instead.*²³²
- C. EU certification and pooling of waste treatment facility permits at EU level could enhance cross-border Waste Management within Europe. BDE suggests with regard to this the following: *All national waste treatment facility licenses would be pooled at an EU office (agency or other) at European level. This office would collect them, check them and provide them with an additional EU certificate or stamp that would confirm the environmentally sound treatment within the meaning of Article 49 WSR for every waste treatment facility. This would save a lot of time in the review of licenses by competent authorities in the country of origin in the framework of notification procedures.*²³³

²²⁸ Ibid, 38 & 39.

²²⁹ EC 2018c, Feedback on the Roadmap Evaluation of Regulation (EC) No 1013/2006 on shipments of waste (Waste Shipment Regulation – WSR), retrieved on May 24, 2018 from http://ec.europa.eu/environment/feedback_en.htm#roadmaps.

²³⁰ EuRIC 2018, Your Voice In Europe: ROADMAP feedback for Evaluation of Regulation (EC) No 1013/2006 on shipments of waste (Waste Shipment Regulation -WSR), retrieved May 24, 2018 from <http://ec.europa.eu/environment/consultations/feedbacks/shipment%20of%20waste/euric.pdf>.

²³¹ Finnish Environmental Industries YTP 2018, Your Voice In Europe: ROADMAP feedback for Evaluation of Regulation (EC) No 1013/2006 on shipments of waste (Waste Shipment Regulation -WSR), retrieved May 24, 2018 from <http://ec.europa.eu/environment/consultations/feedbacks/shipment%20of%20waste/yp.pdf>.

²³² BDE 2018, Your Voice In Europe: ROADMAP feedback for Evaluation of Regulation (EC) No 1013/2006 on shipments of waste (Waste Shipment Regulation -WSR), retrieved May 24, 2018 from <http://ec.europa.eu/environment/consultations/feedbacks/shipment%20of%20waste/BDE.pdf>.

²³³ Ibid.

D. Further guidance to EU Member States to harmonize Waste Management within Europe is required. The European Federation of Waste and Environmental Services (FEAD) stated with regard to this the following: *Guidance to Member States should be developed on several topics in order to be able to reach the objectives of the WSR. Guidance could include the development of simple and harmonized criteria to assess the classification of waste (e.g. contamination levels and limits for non-targeted waste materials), and the distinction between waste/non-waste, recovery/disposal, hazardous/non-hazardous waste, as well as a correlation table between OECD, Basel Convention and EU waste lists.*²³⁴

Stakeholders from businesses were interviewed for this research to obtain their perspective: Chemogas N.V. (waste treatment center), FHG (branch organization), Wastepoint Afvalbeheer B.V. (waste advisor) and Van Diepen Van der Kroef Lawyers (a law firm specialized in environmental law).²³⁵ Although these views are limited to only a few - and can therefore not be considered to be representative for all stakeholders involved - it provides sufficient indications for this specific research. A summary of the perspectives from businesses is presented in figure 6, with a focus on the main issues / bottlenecks of the Notification Procedure under the WSR and the proposed improvement measures to enhance cross-border Waste Management within Europe under the Notification Procedure of the WSR.

The Federatie Herwinning Grondstoffen (FHG) - a Dutch Recycling Raw Materials Federation representing nine recycling branches for metal, old paper, textile, car dismantling, tin cardboard, wood and glass packaging - has been hammering on four main points of attention to make the transition towards the Circular Economy successful: (1) design for use and recycling, (2) high quality collection of waste leading to high quality of reuse / recycling, (3) removal of obstacles to cross-border shipments of high quality recycling flows and (4) removal of obstacles for recycling for chemical products subject to the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Directive.²³⁶ FHG stated during the interview that when waste is shipped across borders, the WSR is not always an unbridled pleasure, especially due to the differences in interpretation of the WSR. It mentioned that a lot of issues arise from the discussion whether something is classified as waste or not and that the definition of waste is outdated and forms a huge stumbling block for the realization of the circular economy.²³⁷ From an environmental law perspective, lawyer Ron Laan noted that enforcement of the WSR has been tightened up, especially in the area of criminal enforcement.²³⁸ His statement that interpretation differences in the WSR can get businesses in unwanted trouble and leads to the lack of a level playing field within Europe itself²³⁹ is in line with the perceptions of other stakeholders. With regard to the Circular Economy thought, lawyer Ron Laan noted that a principal change in the waste definition itself needs to take place. This definition is quite old (1975) and does not support the circular economy approach, nor does it fit the world as it is in 2018, where environmental awareness in our society is well advanced.

²³⁴ FEAD 2018, Your Voice In Europe: ROADMAP feedback for Evaluation of Regulation (EC) No 1013/2006 on shipments of waste (Waste Shipment Regulation -WSR), retrieved May 24, 2018 from <http://ec.europa.eu/environment/consultations/feedbacks/shipment%20of%20waste/auvray.pdf>.

²³⁵ Appendix II, 1, 3, 6 and 7.

²³⁶ Interview FHG, Appendix II, 3.

²³⁷ Ibid.

²³⁸ Interview Lawyer Ron Laan, Appendix II, 6.

²³⁹ Paragraph 1.2. Problem statement and 3.2.4. European Waste Shipment Regulation (WSR).

Whereas the definition of waste still focuses on the “intention of the holder”, it would be better to put a focus on what is possible with the goods. If it concerns proven useful applications, the goods might be considered not to fall anymore under the definition of waste and WSR.²⁴⁰ Lawyer Ron Laan also pointed out that the actual definition is so broad, that it is not possible to move forward into this direction yet. But in the future it should, in order to remove the obstacles to advance towards a Circular Economy in Europe.²⁴¹

Business	Main issues / bottlenecks Notification Procedure	Proposed improvement measures Notification Procedure
Chemogas	<ul style="list-style-type: none"> • Differences in additional information requested. • Differences in implementation and execution of the WSR of EU Member States. • Paperwork process. Digitization is lacking. • Lack of coordination / transparency internally at authorities. 	<ul style="list-style-type: none"> ➤ Better alignment and optimization of procedures / administration between the competent authorities involved in the N. to speed up the lead-time. ➤ Digitization. ➤ For stable waste flows, longer validation times of permits (decisions).
FHG	<ul style="list-style-type: none"> • Interpretation and enforcement differences of the WSR in the EU Member States. • Paper documents, old-fashioned way of working. It symbolizes the lack of current waste management law to social and environmental hygienic developments. 	<ul style="list-style-type: none"> ➤ Same interpretation of the WSR and its requirements / conditions by all EU Member States. ➤ More alignment and agreements between competent authorities involved. Harmonization in interpretation of WSR requirements, for example with regard to fees and financial guarantees, which could lead to an even level playing field. ➤ Digitization of document flows.
Wastepoint	<ul style="list-style-type: none"> • Administrative flows of the Notification Procedure are mostly paperwork flows. Digitization is still lacking. • No fixed contact point with ILT. • There is no legal time-period defined in the WSR for the competent authorities involved requesting missing information, which leads to delays in the Notification Procedure process. 	<ul style="list-style-type: none"> ➤ Digitization, so that administrative information exchange flows can take place electronically. ➤ More alignment in the execution of the WSR by the EU Member States. ➤ One uniform system of classification of waste. ➤ Use of shared databases, subject to appropriate data cleansing techniques.
Van Diepen Van der Kroef – Lawyer Ron Laan	<ul style="list-style-type: none"> • Legal certainty with regard to the implementation of the WSR – which differs in EU Member States – is low. • Incomplete filled in movement documents. • Disputes with regard to choice of waste code, qualification of waste streams or the recovery process. 	<ul style="list-style-type: none"> ➤ Digitization: investment in IT systems. ➤ Building good relationships between businesses and governmental bodies, based on trust instead of distrust. ➤ Shorter lead-times for obtaining a permit under the Notification Procedure. ➤ In case of pre-consented facilities, prolong the validity period of consent to 3 or 5 years, which will reduce the administrative burden.

Figure 6: A business perspective on main issues and proposed improvement measures for shipments of waste subject to the Notification Procedure under the WSR

²⁴⁰ Interview Lawyer Ron Laan, Appendix II, 6.

²⁴¹ Ibid.

5.3. Main issues concluded from the stakeholders' perspectives

The stakeholders' perspectives revealed the main issues parties involved in the WSR are confronted with, indicating there is sufficient room for improvement in order to support the European Circular Economy Strategy. Some main issues are the following:

- Classification of waste is key to start with, as it will determine how the physical flow of goods needs to take place: normal shipment, green list procedure (Annex VII procedure) or amber list procedure (Notification Procedure). In practice, this causes problems for stakeholders, such as businesses or governmental institutions involved in enforcement of the WSR. The various classification systems (such as the Basel or EURAL code system) make enforcement even more complicated.
- The Notification Procedure is perceived as a burdensome administrative process, lacking digitization, leading to additional costs for shipments and delays in shipments. Although EU Member States on their own are making steps forwards towards digitization, a common European approach is still lacking, but preferred by stakeholders.
- There is lack of clear and harmonized criteria for pre-consented recovery facilities permits. Lack of standardization and short validity times of these permits (only 3 years) lead to administrative burdens for parties involved.
- Differences in implementation, execution and enforcement of the WSR have created an unlevel playing field in Europe. These differences can get businesses in unwanted trouble and can lead to legal uncertainty. More guidance and harmonization are required within Europe to enhance the WSR and to create a level playing field.
- The current waste definition stems back from more than 4 decennia ago (1975) and was introduced in a linear economy. This definition still focuses on "the intention of the holder", instead of on what is possible with the goods ("a second life approach"). In order to support the circular economy approach, a principle change in the waste definition itself is required.

In spite of the issues outlined above, the interviewed stakeholders – representatives of Chemogas NV, Dutch Customs, FHG, ILT, SEPA, Van Diepen Van der Kroef Lawyers and Wastepoint Afvalbeheer B.V. - were asked whether the WSR had to be abolished or reformed in order to stimulate the European Circular Economy Strategy. All interviewees answered in favor of revision of the WSR²⁴², as abolishment of it could have too many adverse effects on the environment and protection of it in favor of human kind.

Enhancement of cross-border Waste Management within Europe of waste shipments subject to the Notification Procedure of the WSR is a necessity in order to overcome all issues and bottlenecks stakeholders are actually experiencing and to move towards a European Circular Economy. In the next chapter a design change proposal will be presented, to enable a move towards a well-functioning European Waste Union.

²⁴² Appendix II: interview guides, questions and answers.

CHAPTER 6: A DESIGN CHANGE TOWARDS AN EUROPEAN WASTE UNION

6.1. A brief look at the AS-IS situation

Central question of this research is how cross-border Waste Management within Europe under the Notification Procedure of the Waste Shipment Regulation (WSR) could be enhanced, in order to support the European Circular Economy Strategy. The previous chapters provided information on the European Circular Economy approach and its barriers, the legislative Waste Management framework applicable to EU Member States, the functioning of the Notification Procedure in daily practice and the stakeholders' viewpoints on the Notification Procedure of the WSR.

With reference to paragraph 4.3 (outlining main issues of the Notification Procedure of the WSR) and paragraph 5.3 (outlining main issues concluded from the stakeholders' perspectives), for intra-EU waste shipments subject to a Notification Procedure it can be argued that the WSR is in fact a regulatory barrier to reach the Circular Economy goals of the EU. Especially since strict provisions of the Basel Convention of 1989 and the OECD Decision of 2001 are integrated in the WSR²⁴³, such as the introduction of the concept of transboundary movements²⁴⁴, which are subject to prior written consent by competent authorities involved.²⁴⁵ As a consequence, also for certain intra-EU shipments of waste, prior written consent is required of involved EU Member States (either being a competent authority of dispatch, destination or transit) before shipments are allowed to move across borders within the EU itself. One can argue that in the 21st century this legal approach - stemming from international law agreements to which the EU committed itself - does not fit with the world we are living in today. It does not match with the Single Market Approach, where the EU is seen as one territory without any internal borders or other regulatory obstacles to the free movement of goods and services.²⁴⁶ Neither does it match with the EU Circular Economy Strategy, where movements of waste are expected to increase significantly in the years to come.

The Notification Procedure is perceived by stakeholders as an administrative burden, especially since this process is undigitized yet. Also the reported non-compliance to the WSR can be an indication that in daily practice the WSR is not a straightforward EU Regulation to conform to by stakeholders involved. This might even lead to risk-adverse companies avoiding to engage in intra-EU waste shipment activities, which hampers the move towards a European Circular Economy. The differences in interpretation, execution and enforcement of the WSR by individual EU Member States reveal the existence of an unlevel playing field. Also the lack of harmonization in key areas (for example with regard to the classification of waste, the criteria to apply for pre-consented recovery facility permits or the enforcement of the WSR) and the fact that the definition of waste is more than four decennia old are factors blocking a more rapid move towards a European Circular Economy. Therefore, a design change how to enhance cross-border Waste Management within Europe under the Notification Procedure of the WSR will be outlined in the next paragraphs.

²⁴³ Regulation (EC) No 1013/2006, preamble point 3 and 5, WSR.

²⁴⁴ Basel Convention 1989, Article 2(3): transboundary movement meaning any movement of hazardous wastes or other wastes from an area under the national jurisdiction of one State to or through an area under the national jurisdiction of another State or to or through an area not under the national jurisdiction of any State, provided at least two States are involved in the movement.

²⁴⁵ Ibid, Article 4 (c); OECD 2001, Chapter 2, Section B (2).

²⁴⁶ EC 2018e, The European Single Market, retrieved May 24, 2018 from https://ec.europa.eu/growth/single-market_en.

6.2. Move towards a European Waste Union for intra-EU waste shipments

6.2.1. A conceptual framework to establish a European Waste Union

In order to move towards a European Circular Economy, it is of crucial importance to establish an European Waste Union, in which intra-EU waste shipments subject to a Notification Procedure process can flow easier from one EU Member State to another, without violating the Basel Convention concept of “environmentally sound management”.²⁴⁷ Taking into account the EU Single Market approach, there are steps that can be taken in order to establish a better functioning Notification Procedure process, which will undoubtedly stimulate the European Economy to become more circular. If intra-EU shipments subject to a Notification Procedure process within the EU border itself can flow easier through the use of a proper functioning control & monitoring system - with less administrative burden for all stakeholders involved and less risk of non-compliance for businesses to applicable rules - an impactable change with a valuable contribution to mankind and protection of the earth can be realized within Europe.



Figure 7: Building blocks towards the founding of a European Waste Union

The focus of the design change for this research study purpose – as presented in figure 7 above - will be put on the following four correlating elements, which will be described in more detail in the next four paragraphs:

1. Establishment of an EU regional agreement on cross-border Waste Management, by the application of the exemption ruling Article 11 of the Basel Convention.
2. Simplification of the Notification Procedure process for intra-EU waste shipments.
3. The set-up of a European Waste Management Certification for stakeholders involved in intra-EU waste shipments, based on the experienced gained with the Authorised Economic Operator (AEO) concept and Eco-Management and Audit Scheme (EMAS) Certification.
4. Digitization of cross-border Waste Management streams to enable intra-EU waste shipments within the EU Single Market.

²⁴⁷ Basel Convention 1989, Article 2 (8).

6.2.2. Establishment of an EU regional agreement for intra-EU shipments of waste

Awakening environmental awareness and corresponding tightening of environmental regulations in the industrialized world in the 1970s and 1980s led to increasing public resistance to the disposal of hazardous wastes (and other type of wastes) to less developed countries in the world.²⁴⁸ This resulted in the adoption of the Basel Convention in 1989, trusting that international convention would help to combat against those malpractices. But since then the world has changed significantly and at a rapid speed. The realization that with climate change and a growing world population raw material scarcity will be a future challenge, the focus in the world is nowadays more and more on sustainable growth by applying circular economy practices. This requires a shift from thinking in terms of waste towards acting in terms of valuable resources.

The strict provisions of the Basel Convention, stemming back from 1989 under a linear economy, can be perceived by countries or regions in the world as an obstacle, blocking a move towards a circular economy. In order to overcome this obstacle, Article 11 of the Basel Convention offers a way out to Parties of the Convention by providing an exemption ruling: *Parties may enter into bilateral, multilateral or regional agreements or arrangements regarding transboundary movement of hazardous wastes or other wastes with Parties or non-Parties provided that such agreements or arrangements do not derogate from the environmentally sound management of hazardous wastes and other wastes as required by this Convention. These agreements or arrangements shall stipulate provisions which are not less environmentally sound than those provided for by this Convention in particular taking into account the interests of developing countries.*²⁴⁹

An early example of the invocation of Article 11 is the Bamako Convention of 1991, which entered into force in 1998. Actually 25 Parties in Africa have joined the Bamako Convention.²⁵⁰ The “Koko” incident in Nigeria in 1988 formed the trigger for 12 African countries to conclude a regional agreement that would enforce stricter rules to waste shipments then established under the Basel Convention. Italian businessmen had dumped in 1988 over 200 drums, sacks and containers full of hazardous wastes in the small fishing village Koko in southern Nigeria²⁵¹. The waste was claimed by the dealer to be fertilizers that would help poor farmers, but after a few months containers started leaking causing stomach upset, headache, failing sight and death to the local community. The area around the dumpsite was rendered inhabitable and 500 residents were evacuated.²⁵² So in this particular case, the Bamako Convention overcomes the failure of the Basel Convention to prohibit all trade of hazardous waste to less developed countries. The Bamako Convention does not only include more wastes than covered by the Basel Convention, but it also uses national definitions of hazardous waste.²⁵³

²⁴⁸ Basel Convention 1989, Overview, retrieved May 24, 2018 from <http://www.basel.int/TheConvention/Overview/tabid/1271/Default.aspx>.

²⁴⁹ Ibid, Article 11 (1).

²⁵⁰ Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa (1991).

²⁵¹ UNEP 2018, Bamako Convention: Preventing Africa from becoming a dumping ground for toxic wastes, retrieved May 24, 2018 from <https://www.unenvironment.org/news-and-stories/press-release/bamako-convention-preventing-africa-becoming-dumping-ground-toxic>.

²⁵² Ibid.

²⁵³ Ibid.

In some situations, however, the Basel Convention can be considered too strict to apply, for example in case of cross-border waste shipments subject to a Notification Procedure within the EU itself, no matter what type of waste it concerns. Although the current applicable WSR is under evaluation, the EU ought to consider the invocation of Article 11 of the Basel Convention to facilitate and speed up the move towards a European Circular Economy. A WSR - and therewith a Notification Procedure process - that is adapted to the current and future needs of the EU Single Market can benefit from it significantly. The invocation of Article 11 was also briefly discussed during a workshop organized by the EU with stakeholders to verify the scope and key issues for the WSR evaluation in January 2018²⁵⁴, where it was correctly pointed out by stakeholders that overarching international law is hard to change.

Taking into account the outcomes of the evaluation of the WSR, the EU should start to negotiate and conclude a European regional agreement between its EU Member States to overcome the major issues it is nowadays confronted with in daily practice when dealing with intra-EU shipments of waste, in particular those ones subject to prior written consent (Notification Procedure process). Especially since research has indicated that classification of waste is complicated and that stakeholders perceive the Notification Procedure under the WSR as an administrative burden, with a high risk of non-compliance in execution, also caused by the differences in interpretation of the WSR between EU Member States.

Without jeopardizing the “environmentally sound management” (ESM) concept of the Basel Convention, the Single Market approach of the EU will undoubtedly benefit from an EU regional agreement for intra-EU shipments of waste. If Europe – with all its’ EU Member States – is going to function as one European Waste Union, the proximity principle and self-sufficiency principle will be easier to realize and can contribute to achieving the European Circular Economy goals. An EU regional agreement offers the opportunity to the EU to redefine the definition of waste and adjust classification of wastes, which will better fit the 21st century. A simplification of the Notification Procedure can also be realized and brought into practice, enabling intra-EU waste shipment to flow more easily through the European Waste Union, with less administrative burden for stakeholders involved.

The simplification of the Notification Procedure and the issuance of EU waste certification are practical improvement measures, which will be explored in the next two paragraphs. A redefinition of waste and the adjustment of the current European Waste List are major legal topics, which will be left out of scope for this research purpose. As digitization of cross-border Waste Management is a complex subject in itself - with harmonization in this area between EU Member States hard to realize yet – it will only be briefly discussed, but it will undoubtedly be subject to future research.

²⁵⁴ EC 2018f, Workshop Report, Verifying the scope and key issues for the Waste Shipment Regulation (WSR) Evaluation, 11th of January 2018, 3 and 4.

6.2.3. Simplification of the Notification Procedure process for intra-EU waste shipments

This research study identified the major issues stakeholders within Europe are confronted with when dealing with waste shipments subject to the Notification Procedure of the WSR.²⁵⁵ As a matter of fact, the Notification Procedure leads to administrative burden and extra costs for stakeholders. If the EU invokes in future Article 11 of the Basel Convention by the establishment of an EU regional agreement, a better functioning European Waste Union - in which waste can move freer between EU Member States for treatment - can be achieved. It will allow the simplification of the Notification Procedure for intra-EU waste shipments, in order to stimulate the European Circular Economy Strategy of the EU.

To implement changes to the Notification Procedure process – and therewith the WSR and interlinked Regulations and Directives - will require time and consent of all EU Member States. It should, however, include at least changes in the following areas:

1. *Abolishment of Notification requirements for intra-EU shipments for transit countries.*

To significantly decrease administrative burden for all stakeholders involved and to speed up the lead-time of the Notification Procedure process, in case of intra EU-shipments of waste, there should be only Notification obligations towards a competent authority of dispatch and competent authority of destination. The competent authorities of transit will receive all documentation and information, but will not be included in the decision-making process.

2. *Increase of validity time of permits for regular waste shipments / streams.*

The validity of permits for regular – and considered stable - waste shipments and waste streams within the EU should be extended (to 2 to 5 years) in order to significantly decrease administrative burdens.

3. *Allowance of extension of permits for regular and stable waste flows.*

After a permit has expired, competent authorities should have the possibility to extend a permit, instead of the Notifier having to submit a full Notification package again. Simple adjustments - such as change of carrier or route - should be allowed to be made.

4. *Harmonization of Notification requirements (additional information requests).*

Further harmonization of Notification requirements (especially with regard to additional information requests) is required on an EU level. Agreements between countries of dispatch and countries of destination should be made and on an EU level more guidance is to be provided.

5. *A general acceptance of documents in English language.*

The general acceptance of documents and information to be submitted under a Notification Procedure process in English language will avoid administrative burden for companies (translation costs).

6. *Exemption of the financial guarantee or equivalent insurance requirement.*

The competent authority of dispatch and destination should have the ability to exempt companies from the financial guarantee or equivalent insurance requirement. Especially for SMEs this can be a stimulating factor to further engage in circular economy activities and therewith waste shipments within the EU, avoiding the financial impact on their businesses.

²⁵⁵ Paragraph 4.3 and 5.3.

7. *Include response time to additional information requests in the process.*

In addition to the above proposed amendments to simplify the Notification Procedure for intra-EU shipments of waste, also the lacuna in law - which was described in paragraph 4.3.2. - needs to be resolved. When missing information is requested from the Notifier, a response time of four weeks (such as applied in the Netherlands) is an acceptable time frame. When the missing information is received, a period of one week should be sufficient for competent authorities to evaluate the additional supplied information.

A simplification of the Notification Procedure process can be hugely facilitated by an EU Waste Management Certification control & monitoring system put in place, which is explored in the next paragraph as a solution to enhance cross-border Waste Management within Europe.

6.2.4. Set-up of an EU Waste Management Certification system

EU Waste Management Certification system

In order to create a European Waste Union and to simplify the administrative processes of the Notification Procedure subject to the WSR, the EU should set-up an EU Waste Management Certification system for stakeholders involved in intra-EU waste shipments. An EU Certification – to be issued by an independent organization within the EU - can indicate that a stakeholder fulfils the legislative common criteria required under the WSR and in particular under the Notification Procedure for intra EU-waste shipments. It can help to strengthen public image too, as the holder of the EU Waste Management Certification can show to other stakeholders that it is a responsible operator with whom it is safe to do business with in the field of intra-EU waste shipments. For the establishment of an EU Waste Management Certification control & monitoring system, the EU should elaborate on and benefit from past-experience gained from EU Certification systems that are already functioning successfully. The Eco-Management and Audit Scheme (EMAS) Certification and the Authorised Economic Operator (AEO) Concept should function as a reference point. However, the costs for certification and registration of an EU Waste Management Certification should be limited, especially for SMEs²⁵⁶, in order to stimulate their active engagement in circular economy activities in the near future.

Past experience: The Eco-Management and Audit Scheme (EMAS) Certification

The EU already made steps in the past with regard to environmental performance and certification, for example with the Eco-Management and Audit Scheme (EMAS) Regulation.²⁵⁷ The three major aspects of EMAS are performance, credibility and transparency.²⁵⁸ EMAS supports organizations in finding the right tools to improve their environmental performance. Participating organizations voluntarily commit to both evaluating and reducing their environmental impact.²⁵⁹

²⁵⁶ Paragraph 3.1.3.

²⁵⁷ Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), 22.12.2009, Official Journal of the European Union, L342/1-45.

²⁵⁸ EC 2018a, Environment, Eco-Management and Audit Scheme, What is EMAS?, retrieved May 24, 2018 from http://ec.europa.eu/environment/emas/index_en.htm.

²⁵⁹ Ibid.

Third party verification guarantees the external and independent nature of the EMAS registration process, contribution to the credibility of the certification holder.²⁶⁰ Providing publicly available information on an organization's environmental performance is another important aspect of EMAS: organizations achieve greater transparency both externally through the environmental statement and internally through employee's active involvement.²⁶¹ Competitive advantages for an EMAS certification holder are related to increased customer satisfaction, improved image and increased market access.²⁶² In addition, the EMAS Certification can serve as proof of environmentally sound management (EMS). Point of attention with regard to EU Certification is the costs involved for businesses to obtain a Certification and Registration. A study on the costs and benefits of EMAS indicated the costs being a key barrier to EMAS Registration, especially for SMEs.²⁶³

Past experience: The Authorised Economic Operator (AEO) concept

The Authorised Economic Operator (AEO) concept is based on the Customs-to-Business partnership that was introduced by the World Customs Organisation (WCO): traders who voluntarily meet a wide range of criteria work in close cooperation with customs authorities to assure the common objective of supply chain security and are entitled to enjoy benefits throughout the EU.²⁶⁴ The AEO Concept positively contributes to the establishment of Trusted Trade Lanes with trusted traders. On the basis of Article 29 of the Union Customs Code (UCC)²⁶⁵, the AEO status can be granted to any economic operator meeting the conditions and common criteria mentioned in figure 8 below, for AEOC (customs simplification) and AEOS (security and safety) or a combination of the aforementioned (AEOF, customs simplification & security and safety). If an AEO status is granted by one Member State, it is recognized by the customs authorities in all EU Member States.²⁶⁶

Conditions and common criteria	AEOC	AEOS
Compliance with customs legislation and taxation rules and absence of criminal offenses related to the economic activity.	X	X
Appropriate record keeping.	X	X
Financial solvency	X	X
Proven practical standards of competence or professional qualifications	X	X
Appropriate security and safety measures		X

Figure 8: Conditions and common criteria applicable for the granting of an AEO-status²⁶⁷

²⁶⁰ Ibid.

²⁶¹ Ibid.

²⁶² Milieu Ltd and Risk and Policy Analysis Ltd for DG Environment of the European Commission 2009, Final Report, Study on the Costs and Benefits of EMAS to Registered Organisations, Study Contract No. 07.0307/2008/517800/ETU/G.2, October, 2009, 37.

²⁶³ Ibid, 42; Paragraph 3.1.3.

²⁶⁴ EC 2018d, Taxation and Customs Union, Authorised Economic Operator (AEO), retrieved May 24, 2018 from https://ec.europa.eu/taxation_customs/general-information-customs/customs-security/authorised-economic-operator-aeo/authorised-economic-operator-aeo_en#what_is.

²⁶⁵ Regulation (EU) No 952/2013 of the European Parliament and of the Council of 9 October 2013 laying down the Union Customs Code, 10.10.2013, Official Journal of the European Union, L269-1-101, Article 29 (UCC).

²⁶⁶ Regulation (EU) No 952/2013, Article 38(4) UCC.

²⁶⁷ EC 2018d, Taxation and Customs Union, Authorised Economic Operator (AEO), retrieved May 24, 2018 from https://ec.europa.eu/taxation_customs/general-information-customs/customs-security/authorised-economic-operator-aeo/authorised-economic-operator-aeo_en#what_is.

When a company is preparing for an AEO status, it requires taking an end-to-end look at the business, connecting otherwise disparate departments to integrate supply chain processes and identify strengths and weaknesses with the ultimate goal to streamline workflows and increase efficiency, introduce best practice procedures and solutions, and achieve comprehensive supply chain transparency, security and compliance.²⁶⁸ Benefits of mutual recognition on EU level of an AEO-status are multiple: fewer security and safety related controls (both physical and administrative), recognition of business partners during the application process, priority treatment at customs clearance and business continuity mechanism.²⁶⁹ The creation of a EU centralized database (containing information of Authorised Economic Operators (AEO) and AEO Competent Customs authorities) and the established AEO guidelines²⁷⁰ are supporting the functioning of the AEO concept for all stakeholders involved in an effective way.

The principles of an EU Waste Management Certification control & monitoring system

The EU Waste Management Certification system should be based upon the following practical principles, in order to ensure a successful control & monitoring system:

- Environmentally Sound Management (ESM) and risk mitigation - in order to protect the environment and human health - are to be the cornerstones of an EU Waste Management Certification system for intra-EU shipments of waste. In order to function well, this type of Certification has to use the best practices and experiences already gained from the EMAS and AEO Certification systems, which are functioning well within the EU.
- Conditions and common criteria for granting EU Waste Management Certificates are to be established (following the AEO concept). Criteria are to be established for different actors in the intra-EU waste shipments streams looking at the type of activity they are performing. With regard to waste treatment facilities, for example, a distinction should be made between disposal facilities on the one hand and recovery or recycling facilities on the other hand.
- EU Waste Management Certificates issued by a competent authority in one Member State are to be mutually recognized by other EU Member States.
- The use of guidelines in order to guarantee a harmonized and standardized way of implementation and execution of the EU Waste Management Certification system within the EU for intra-EU shipments of waste is to be established. It will ensure a common way of working, creating a level playing field for stakeholders involved.
- A centralized EU database is to be put in place for EU Waste Management Certification holders, enabling verification by stakeholders (such as competent authorities of dispatch and destination), which can speed up Notification Procedure processes in case of intra-EU shipments of waste.

²⁶⁸ AEB n.d., What's the benefit? Taking a closer look at AEO in light of the latest Union Customs Code news, retrieved May 24, 2018 from <https://www.aeb.com/multi-media/intl/docs/articles/itm-03-14-aeo-ucc.pdf>.

²⁶⁹ EC 2018d, Taxation and Customs Union, Authorised Economic Operator (AEO), retrieved May 24, 2018 from https://ec.europa.eu/taxation_customs/general-information-customs/customs-security/authorised-economic-operator-aeo/authorised-economic-operator-aeo_en#what_is.

²⁷⁰ EC 2016a, Authorised Economic Operators Guidelines, Approved by the CCC-GEN (AEO Subsection) on 11 March 2016, TAXUD/B2/047/2011 – Rev.6, Brussels, 11 March 2016.

With regard to costs, the EU should ensure that obtaining and maintaining an EU Waste Management Certification for intra-EU waste shipments should not be too costly for SMEs, especially as they are future drivers of circular economy activities too. The introduction of an EU Waste Management Certification – in combination with a simplified Notification Procedure and further digitization of waste streams - will contribute to the EU Circular Economy Strategy, by creating visibility, transparency and credibility. It will be a helpful tool to establish self-regulatory Trusted Waste Trade Lanes within the EU itself, which can be controlled & monitored in a reliable and safe way, able to handle the increasing number of intra-EU waste shipments in an efficient way.

6.2.5. Digitization of European Waste Management streams

To enhance cross-border Waste Management within Europe under the Notification Procedure of the Waste Shipment Regulation (WSR) in order to support the EU Circular Economy Strategy, digitization of European Waste Management streams is an inevitable requirement in the 21st century. Especially since the actual Notification Procedure is mainly a paper-based procedure, not fitting in with the spirit of time. For the purpose of this research study, it goes too far to extensively elaborate on the way how digitization should take place to improve the functioning of the Notification Procedure of the WSR for intra-EU waste shipments. On individual EU Member States levels, like in the Netherlands²⁷¹, steps are already taken towards digitization of the Notification Procedure process, which can take away a lot of the administrative burden of stakeholders. However, it needs to be noted that this is again a non-harmonized process actually taking place, where each individual EU Member State is leading its own dance. Although at this stage not feasible within the EU, the IT solution to further support the Notification Procedure process under the WSR for certain waste shipments (especially the intra-EU ones) will have to come from modern technologies, such as the application of a data-pipeline concept or blockchain technology.

The data-pipeline concept is based on the use of Service-Oriented Architectures (SOA) to enable access to the existing information systems that are used and operated by the various parties in global supply chains to capture data at the source.²⁷² This concept can enhance visibility in international supply chains.²⁷³ For governments, the main benefit is that the data-pipeline enables piggy-backing, which - especially when combined with a system-based approach - can greatly enhance the government's ability to gather information on global flows of goods and to assess all kinds or risks on these goods and flows.²⁷⁴ For businesses, piggybacking can reduce the administrative burden. With opening up their information systems for authorities, benefits may also include trade facilitation and coordinated border management.²⁷⁵

²⁷¹ Interview ILT, Appendix II, 4.

²⁷² Overbeek, S., Klievink, B., Hesketh, D., Heijmann, F., & Tan, Y. H. 2011, A web-based data pipeline for compliance in international trade. Paper presented at the WITNESS Workshop, Delft, The Netherlands.

²⁷³ Klievink B., Van Stijn, E., Hesketh, D., Aldewerd H., Overbeek S., Heijmann, F. and Tan, Y.H.. 2012, Enhancing Visibility in International Supply Chains: The Data Pipeline Concept, International Journal of Electronic Government Research, 8(4), 14-33, October-December 2012.

²⁷⁴ Ibid, 23.

²⁷⁵ Ibid, 23.

Last but definitely not least, the application of block-chain technology, also for e-governance activities like the Notification Procedure of the WSR, is going to change the world drastically in the future. Blockchain-based applications have the potential to improve supply chains by providing infrastructure for registering, certifying and tracking at a low cost goods being transferred between often distant parties, who are connected via a supply chain but do not necessarily trust each other.²⁷⁶ All goods are uniquely identified via 'tokens' and can then be transferred via the blockchain, with each transaction verified and time-stamped in an encrypted but transparent process, which gives the relevant parties access whether they are suppliers, vendors, transporters or buyers.²⁷⁷ The terms of every transaction remain irrevocable and immutable, open to inspection to everyone or to authorized auditors.²⁷⁸

Blockchain is technology for promoting user trust, which makes it possible to share on-line information, agree on and record transactions in a verifiable, secure and permanent way.²⁷⁹ As the EC aims to develop a common approach on blockchain technology for the EU, in 2018 a Declaration on the establishment of a European Blockchain Partnership was signed by 22 European countries.²⁸⁰ This Partnership will be a vehicle for cooperation amongst EU Member States to exchange experience and expertise in technical and regulatory fields and prepare for the launch of EU-wide blockchain applications across the Digital Single Market for the benefit of the public and private sectors.²⁸¹ It should ensure the EU continues to play a leading role in the development and roll-out of blockchain technologies.²⁸²

The use of modern IT technologies - such as the data-pipeline concept and block chain technology - will have a huge impact on the Notification Procedure of the WSR in the future and will undoubtedly contribute to the facilitation of the EU Circular Economy Strategy, especially since it will decrease administrative burden and costs for all stakeholders involved. The application of modern IT technologies will fully support a further simplification of the Notification Procedure process for intra-EU shipments of waste, as information sharing can be done at a faster speed than ever before, in a more reliable and safer way. It will create more transparency and greater visibility for all stakeholders involved in intra-EU shipments of waste.

²⁷⁶ European Parliament 2017a, How block chain technology could change our lives, In-depth Analysis, EPRS | European Parliamentary Research Service, Author: Philip Boucher, Scientific Foresight Unit (STOA), PE 581.948, February 2017, 18.

²⁷⁷ Ibid.

²⁷⁸ Ibid.

²⁷⁹ EC 2018b, European Countries join Blockchain Partnership, retrieved May 24, 2018 from <https://ec.europa.eu/digital-single-market/en/news/european-countries-join-blockchain-partnership>.

²⁸⁰ Ibid.

²⁸¹ Ibid.

²⁸² Ibid.

CHAPTER 7: CONCLUSIONS AND RECOMMENDATIONS

7.1. CONCLUSIONS FROM RESEARCH

This research aims to explore how cross-border Waste Management within Europe under the Notification Procedure of the Waste Shipment Regulation (WSR) can be enhanced, in order to support the European Circular Economy Strategy. To answer the main question of this research study, six sub-questions were defined.

Main drivers and barriers of the European Circular Economy

The European Circular Economy Strategy is mainly reflected in the 7th Environmental Action Programme (EAP) of 2013 and the Circular Economy Package, adopted in 2015. Priority objectives of the EU are – amongst others - the protection, conservation and enhancement of the Union's natural capital and turning the Union into a resource-efficient, green and competitive low-carbon economy. Also the improvement of environmental integration and policy coherence (which includes the implementation, execution and enforcement of the WSR) is seen as a priority objective. The main drivers for Europe to move away from a linear economy to a circular economy are threefold: (1) with continued world-wide economic growth, there is also since decades an explosive demand for raw materials, (2) Europe has a strong dependency on other countries, due to its high imports of raw materials and goods and (3) climate change and Co² emissions are interconnected with the extraction and use of raw materials, having a negative effect on the environment and natural capital. Main barriers to achieve a Circular Economy state in Europe are considered to be either cultural, regulatory, market or technological related.

Legal framework applicable to cross-border Waste Management within Europe

The Basel Convention of 1989 and OECD Decision of 2001 are overarching international legislation, integrated in the European Waste Shipment Regulation (WSR). The Basel Convention established the requirement of “prior written consent” before shipments of certain types of wastes are allowed to take place. With the OECD Decision in 2001, a two-tier system to delineate controls to be applied to transboundary movements of waste was established: the Green Control and the Amber Control procedure. The WSR and the Waste Framework Directive (WFD) form the basis of law with regard to cross-border Waste Management in Europe. Since the WSR entered into force in 2007 it has been subject to amendments in Acts and Annexes in order to improve its functioning. In 2017, the EC started an evaluation of the WSR, with the intent to assess whether it meets its objectives and whether it is coherent with the general objectives of EU environmental policy, the Circular Economy and the internal market. The results of this evaluation will be used to further identify measures to improve the implementation of the WSR.

Enforcement of the Notification Procedure of the WSR within the EU

EU Member States are individually responsible for the enforcement of the WSR, with the possibility to escalate cases to the European Court of Justice (CJEU). In the Netherlands – for example - the ILT (Human Environment and Transport Inspectorate) is mandated by the Ministry of Infrastructure and Water Management to enforce the WSR.

It cooperates with network partners for the supervision and enforcement of the WSR. Dutch Customs performs – in close cooperation with ILT - its non-fiscal tasks in the field of supervision and enforcement of the WSR. From research it could be concluded that there are differences in the enforcement between EU Member States, leading to an uneven level playing field.

Functioning of the Notification Procedure of the WSR within Europe

The purpose of the Notification Procedure is to ensure a high level of protection of the environment and human health. In order to ensure optimum supervision and control of particular waste movements, prior written consent is required by the competent authorities involved. The main seven steps of a Notification Procedure process are (1) the set-up of a contract between Notifier and Consignee, (2) the establishment of a financial guarantee or equivalent insurance, (3) the application of the Notifier to the competent authority of dispatch, (4) the assessment and transmission of the Notification by the competent authority, (5) a prior notification of movement of the waste 3 days before shipment, (6) the actual movement of the waste and (7) the confirmation of disposal or recovery of the waste. The factors that are influencing the lead-time of a Notification Procedure process are various, some of them related to the type of waste involved and the classification of it, the required additional / documentation or information to be provided by the Notifier to the competent authorities involved or resource availability of the competent authorities involved in a Notification Procedure. There is also a lacuna of law in the WSR: in case a competent authority requests additional information from the Notifier, the WSR does not specify a time period within which this additional information must have been received from the Notifier, nor does it specify a time period that the competent authority must respond to the additional information supplied by the Notifier. In practice, differences in the interpretation in the implementation, execution and enforcement of the WSR exist between EU Member States, creating an unlevel playing field. This also counts for the criteria to be applied for the permits for pre-consented recovery facilities. And if the permit is there, the validity of it is rather short (maximum of 3 years) compared to the effort done to obtain the permit. Last but not least, the fact that a Notification Procedure is still a paper-form non-digital process, explains the administrative burden it puts on all stakeholders involved.

Main issues Notification Procedure concluded from stakeholders' perspectives

Most of the stakeholders are of the opinion that the WSR is effective (or to a large extent) in achieving its two main objectives: the protection of the environment and the combat against illegal shipments of waste. The interviewed stakeholders are supporting revision of the WSR, as abolishment could have too many adverse effects on the environment and protection of it in favor of human kind. The stakeholders' perspectives analysis revealed that the main issues stakeholders are confronted with are (a) the classification of waste (b) the Notification Procedure process being an burdensome administrative process, lacking digitization, (c) the lack of clear and harmonized criteria for pre-consented facility permits, (d) the differences in the implementation, the execution and the enforcement of the WSR between EU Member States, creating an unlevel playing field in Europe and (e) the old waste definition of 1975, stemming back from a linear economy situation.

Means to enhance cross-border Waste Management within Europe under the Notification Procedure of the WSR to support the European Circular Economy Strategy

A change of the waste definition, which stems back from 1975, and the adjustment of the green and amber listed wastes itself (classification) could make a huge impact on the functioning of the Notification Procedure. But as these are heavy legal topics to deal with, requiring further in-depth investigation, they were left out of scope for this research. However, cross-border Waste Management within Europe under the Notification Procedure of the WSR can be enhanced to support the European Circular Economy Strategy by four considered means.

- Firstly, the EU should establish *a European regional agreement on cross-border Waste Management for intra-EU Shipments*. With overarching international law difficult to change, the EU should invoke Article 11 of the Basel Convention, by the establishment of a European regional agreement, covering intra-EU shipments of waste. It will enable the EU Single Market in the 21st century to change the definition of waste, the classification of waste and the Notification Procedure, which will help the transition towards the EU Circular Economy.
- Secondly, *the Notification Procedure should be simplified for intra-EU waste shipments*. The actual Notification Procedure of the WSR is rather strict as a consequence of overarching international legislation, especially for intra-EU shipments taking place within the EU Single Market. Seven areas of changes were identified, which could simplify the actual Notification Procedure process: (1) the abolishment of Notification requirements for intra-EU shipments for transit countries, (2) an increase of validity time of permits for regular waste shipments / streams, (3) the allowance of extension of Notification permits for regular and stable waste flows, (4) further harmonization of Notification requirements, (5) the general acceptance of documents in the English language, (6) the exemption of the financial guarantee or equivalent insurance requirement and (7) the inclusion of legal clauses defining the response time to additional information requests in the Notification Procedure process for Notifier and competent authorities involved.
- Thirdly, the EU should *set-up an EU Waste Management Certification system*. The cornerstones of this Certification control & monitoring system should consist of environmentally sound management (ESM) and risk mitigation. Common conditions, criteria and guidelines should be established to ensure harmonization between EU Member States. Mutual recognition of issued Certificates by EU Member States is to be applied. And a central database should be put in place for EU Waste Management Certification holders for verification purposes by authorities, which can speed-up Notification Procedure processes for intra-EU shipments of waste.
- Last but not least, *digitization of cross-border Waste Management streams* should take place, which will have a huge positive impact on administrative processes of intra-EU waste shipments within the EU Single Market. The use of modern IT technologies such as the data-pipeline concept or block chain technology will make stakeholders' lives involved in cross-border Waste Management within Europe under the Notification Procedure of the WSR easier, as it will significantly reduce the administrative burden and costs.

If the above correlating means are implemented within Europe – in combination with a future change of the current waste definition and classification of waste – cross-border Waste Management within Europe under the Notification Procedure of the Waste Shipment Regulation can be significantly enhanced to support the European Circular Economy Strategy.

7.2. RECOMMENDATIONS FOR FURTHER RESEARCH

Enhancing cross-border Waste Management within Europe under the Notification Procedure of the Waste Shipment Regulation to support the European Circular Economy Strategy will require an integral approach on EU level. Much will depend on the outcome of the evaluation process of the WSR, which the EC started in 2017. The WSR evaluation report - expected in 2019 - will undoubtedly also reveal the weaknesses stakeholders encounter in daily practice when having to deal with the Notification Procedure process. This knowledge will add to what is already stated in the past by stakeholders during workshops and meetings at EU or national levels.

The transition towards a European Circular Economy is an ambitious path to walk on for all stakeholders involved within the EU, whether they are businesses, branch organizations, governmental institutions, non-governmental institutions or citizens. It requires huge changes in thinking and acting of us all in Europe. Although steps are being made into the right direction, international and European environmental legislation - such as the Basel Convention and the WSR - are rightly perceived as regulatory roadblocks, that simply have to be changed or removed, in order for Europe to progress at a more rapid speed.

Europe is a strong trade region, which shows leadership in many areas, for example in the field of climate change, to which Waste Management is strongly interlinked. With waste streams going to increase significantly under a Circular Economy approach the coming years, supported by fast technological developments to treat waste, it is strongly recommended that Europe stands up by initiating a plan to establish a European regional agreement for intra-EU shipments of waste. In addition to this, Europe should focus more on conducting legal research with regard to change of the waste definition, change of the waste classification lists and simplification of the Notification Procedure for intra-EU waste shipments. In addition to this, not only governments should put research into the use of data-pipeline concepts or block chain technology with regard to cross-border Waste Management. Also businesses and branch organizations have to explore how to implement at lower costs IT systems that can support them with fulfilling the obligations under the Notification Procedure of the WSR in a compliant and efficient way. Last but not least, the set-up of a European Waste Management Certification system has to be explored in more detail, as such a control and monitoring system can positively contribute to the creation of trusted waste stream trade lanes.

The European Circular Economy Strategy will benefit from enhancement of cross-border Waste Management within Europe of shipments subject to the Notification Procedure of the WSR. The conclusions drawn from this research and the recommendations made may contribute to a further move of the European Union towards “closing the loop”, which is of importance in order to reach the European Circular Economy goals. There is no time to waste!

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APPENDIX I: LIST OF INTERVIEWEES

NO.	DATE	ORGANISATION	NAME	POSITION	STAKEHOLDER
1	14-03-2018	Chemogas N.V.	Mr. A. Pia	Quality Manager	Business - Waste Treatment Center
2	13-03-2018	Dutch Customs	Anonym Anonym	National Coordinator Customs Covenants Senior Advisor, Enforcement Officer Environment and Culture	Government
3	14-02-2018	FHG	Mr. T. Holtkamp Mr. H. Koning	Chairman Director	Branch organization
4	23-02-2018	ILT	Mr. E. Christan Mr. J. Koreman	Senior Inspectors	Government
5	19-03-2018	SEPA	Mrs. K. Olley	Senior Environment Protection Officer (Project Manager IMPEL)	Government
6	27-03-2018	Van Diepen Van der Kroef Advocaten	Mr. R. Laan	Lawyer – Environmental Law	Business – Legal
7	09-02-2018 15-03-2018	WastePoint Afvalbeheer B.V.	Mr. J. Koopman Mr. G. Rang	Managing Director ADR specialist	Business – Waste advisor

Figure 9: List of interviewees

APPENDIX II: INTERVIEW GUIDES, QUESTIONS & ANSWERS

1. INTERVIEW WITH CHEMOGAS NV

Interviewer:

Jacqueline Daalmans

Master in Customs & Supply Chain Compliance thesis subject:

Enhancing Cross-Border Waste Management in Europe under the Notification Procedure of the Waste Shipment Regulation to support the European Circular Economy Strategy

Date and time of interview:

14th of March 2018, 10.00h, teleconference

Interviewee:

Mr. Adamo Pia, SHEQ Manager at Chemogas Holding NV and Daily Manager SHEQ Chemogas NV

INTERVIEW QUESTIONS & ANSWERS

❖ **Question 1: What is the business approach of Chemogas NV to support the European Circular Economy Strategy?**

Chemogas NV is a global leader in the filling, blending, worldwide distribution and waste treatment of chemical gases. Where applicable and possible, gases are recycled by Chemogas. E.g. refrigerants can achieve an end-of-waste status after proper treatment. Our company is a licensed Belgian waste treatment company. It is also a registered waste collector in the three different Belgian regions: Flemish Region (OVAM), Wallonia Region (DGRNE) and Brussels Region (BIM). Chemogas operates own waste treatment facilities on site in Grimbergen (Belgium) where activities are performed such as thermal oxidation, wet scrubbing and regeneration of off-spec product. For example, ammonia can be scrubbed to an aqueous solution, which can then be re-used in the chemical industry. Chemogas is actively supporting with its business activities the European Circular Economy Strategy in the field of chemical gases.

❖ **Question 2: What are the main activities of Chemogas NV in relation to the Waste Shipment Regulation?**

Chemogas engages in waste treatment of inert, flammable, toxic and corrosive gases in an international context. This is part of the Total Care approach of Chemogas, where we offer all kind of gas related services to customers. In principle, all types of gases are accepted and inventoried. As previously mentioned, Chemogas has several techniques in house to treat a large scale of gases. In case we cannot do an activity ourselves, Chemogas has liaisons with specific outlets in Belgium and surrounding countries, who have possibilities and capacities to handle waste. All our activities are performed in the safest and environmental friendliest way, respecting applicable legislation, such as the WSR. As a waste treatment center, we have a reporting obligation (in Belgium to the 3 regional competent authorities).

❖ **Question 3: Two of the main objectives of the Waste Shipment Regulation are the protection of the environment and the combat against illegal shipments of waste. To what extent has the WSR according to Chemogas NV been effective in achieving these objectives?**

To a large extent the WSR is effective in achieving those two objectives, but there is a high grade of administration involved under the WSR with movements of shipments under the WSR, with notable differences in execution between countries. Under this complexity, compliance to the WSR might become more difficult for companies and it might facilitate illegal shipments and, consequently, possible environment unfriendly waste treatment.

❖ **Question 4: What are the main obstacles or issues Chemogas NV is confronted with in daily practice when having to deal with the Notification Procedure of the Waste Shipment Regulation?**

- With waste transports, often borders have to be crossed. Chemogas established a good working relationship with OVAM. When dealing with authorities in other countries, we notice that there is a difference in additional information requested. Communication can even be more complicated, as the country is split up in States. These States also have their differences in implementation and execution of the WSR, which makes it even more complicated.
- Another flaw in the WSR process is the administrative side. In most countries it is still a “paperwork” process. Digitization – and therewith direct transparency for all parties involved - is unfortunately mostly lacking, which sometimes leads to longer process times for the Notification Procedure than desired. In the meantime, e.g. OVAM started with digitization of the process (webapplication).
- Sometimes Chemogas issues several Notification requests at the same time, but not all are handled with the same speed. Sometimes we see the same questions being posed by different employees, because sometimes different dossiers are handled by different employees. It looks like there is lack of coordination / transparency internally at authorities dealing with Notification requests.

❖ **Question 5: What is the opinion of Chemogas NV about the way enforcement of the Waste Shipment Regulation is carried out in Belgium, the Netherlands and the rest of Europe?**

Chemogas in particular has experience with the Belgian / Flemish, Dutch, French and German authorities. We are of the opinion that they are all maintaining a high level of risk-based enforcement with regard to the WSR. It needs to be noted that in Belgium, waste management (and enforcement) is regulated regionally (3 regions), where environmental inspection services are involved. For the Flanders region, Chemogas has to deal with OVAM as competent authority, which is easily accessible in terms of communication. The handling of shipments under the Notification Procedure is well organized. A specific waste database (see digitization in question 4) allows Chemogas to manage electronically in an easy and fast way all these particular waste movements.

❖ **Question 6: What could be done according to Chemogas NV to increase the level of cooperation between the main stakeholders (competent authorities, customs and businesses) involved in the Notification Procedure of the WSR?**

Better alignment and optimization of procedures / administration between the competent authorities involved in the Notification Procedure would facilitate and speed up Notification processes. Especially when several borders are involved for the waste shipments.

❖ **Question 7: By what means should and could according to Chemogas NV the Notification Procedure under the Waste Shipment Regulation be simplified or improved in order to function better?**

- Digitalization would facilitate the Notification Procedure process enormously and would create greater transparency between all parties (including competent authorities) involved.
- For regular stable waste flows, it would be good to have permits which last longer than 1 year, for example which will be valid for a 3-year period. This will reduce administrative burden for all parties involved.

❖ **Question 8: Reform or abolish the Waste Shipment Regulation? What would be the best to do according to Chemogas NV in order to support the European Circular Economy Strategy?**

Reform. Make it easier to issue and obtain the Notifications through digitization, by using portals and up-to-date databases. Make Notification permits for regular stable flows last for three years instead of one year. From a safety and environmental point of view, waste per definition involves risk. To protect the environment and combat against illegal shipments of waste, there always needs to be a certain degree of control and monitoring from a social point of view. Waste legislation, such as the WSR, will always be necessary, also in a circular economy.

2. INTERVIEW WITH THE DUTCH CUSTOMS

Interviewer:

Mrs. Jacqueline Daalmans

Master in Customs & Supply Chain Compliance thesis subject:

Enhancing Cross-Border Waste Management in Europe under the Notification Procedure of the Waste Shipment Regulation to support the European Circular Economy Strategy

Date and location of interview:

Tuesday, the 13th of March 2018 at 11.00h, location Dutch Customs Office Rotterdam

Interviewees:

National Coordinator Customs Covenants

Senior Advisor, Enforcement Officer Environment and Culture

INTERVIEW QUESTIONS & ANSWERS

- ❖ **Question 1: Two of the main objectives of the Waste Shipment Regulation (WSR) are the protection of the environment and the combat against illegal shipments of waste. To what extent has the WSR according to the Dutch Customs been effective in achieving these objectives?**

The Dutch Customs performs certain enforcement tasks with regard to the WSR on behalf of the ILT, for the Ministry of Infrastructure and Water Management. To what extent the WSR has been effective to achieve its objectives, is up to them to determine. Actually, a review of the WSR is being executed; the results from this review will answer this question. The Dutch Customs recognizes the social importance of the WSR and is willing to make a constructive contribution – in cooperation with the Ministry and in an international context - by performing its non-fiscal tasks in this particular area.

- ❖ **Question 2: Early 2012 a framework agreement (covenant) was established between the Ministry of Infrastructure and the Environment and (the directorate-general of the Tax Department of the) Ministry of Finance. What are the core activities defined in this framework agreement for the Dutch Customs with regard to the WSR enforcement?**

The cooperation between Customs and other Ministries in the field of waste started in the beginning of the nineties of the 20th century (more than 25 years ago). There is a framework agreement of 1 April 2004 for the cooperation between the VROM-inspectorate of the Ministry of Housing, Spatial Planning and the Environment and the Directorate-General for Taxation of the Ministry of Finance, with Appendix I of this framework agreement referring to the cooperation on waste legislation. The Dutch Customs performs both fiscal and non-fiscal Customs tasks. Customs has traditionally a primary focus on fiscal tasks, but because of its logistical role and information position it has, non-fiscal tasks were appointed to the Dutch Customs too.

Customs performs these non-fiscal tasks - in close cooperation with other Ministries and in an international context - to provide the best possible enforcement and the best trade facilitation. These non-fiscal customs tasks are related to four policy areas: safety, health, economy and environment. Both at an European and national level, The Dutch Customs has an important role in the enforcement of these non-fiscal tasks. Regulation of these non-fiscal customs tasks fall largely under the policy responsibilities of other Ministries than Finance. Customs often fulfills a role as “general practitioner” who, where necessary, transfers a case to the specialist (for example ILT in the case of WSR).

The non-fiscal tasks of Dutch Customs with regard to waste are laid down in Appendix I of the framework agreement between the (today's) Ministry of Infrastructure and Water Management, and the Dutch Tax Authorities, signed end of 2006. This Framework Agreement and its Appendixes are actually being revised by the Ministry of Infrastructure and Water Management, ILT and Customs (expected to be ready in 2018). On a yearly basis, the number of document checks and physical inspections to be performed by Customs are included in an inspection scheme.

Core activities of the Dutch Customs with regard to the WSR - are the following:

- Establish and evaluate – together with ILT - risk-profiles and policies for enforcement of waste shipments, taking into account risk information of the ILT as well as market developments.
- Physical inspection of waste shipments (based on risk-profiles). Focus is on paperwork checks, accompanying the waste. But also physical checks take place, when irregularities are detected or suspected.
- Issuance of warnings and penalties in case of detected irregularities. Complex cases are re-directed to the ILT.
- Establish and evaluate enforcement plan with the Ministry of Infrastructure and Water Management.

❖ **Question 3: How is in daily practice the risk-oriented enforcement of the WSR – in close cooperation with and under supervision of ILT - arranged by the Dutch Customs Organization?**

Customs, ILT and NVWA have been working closely together for decades to implement the supervision of cross-border goods movement. The concept of “coordinated border management” is used to coordinate this (government) cooperation. Each regulator has its own statutory tasks and must perform these tasks as well as possible. The for the Customs applicable legislation is mentioned in Appendix I, part of the framework agreement, signed end of 2006. Risk profiles are build based on risk information of the ILT and Customs and are regularly being evaluated with ILT. Commission Regulation (EC) No 1418/2007 is used as a guideline.

The Dutch Customs organization mostly carries out risk-based physical checks and inspections – in close cooperation with ILT. Focus is put on control of the paperwork accompanying the waste shipment on borders. But also, non-risk-based physical checks of waste shipments take place. It also happens that an inspection takes place where waste is found, but the goods are not as such shipped. The priority areas are defined in LAP3, the Dutch National Waste Management Plan; for now, focus is put on waste streams of plastics and electronics. Risk-profiles are build and evaluated together with ILT. The Dutch Customs uses the so-called ILT “intervention ladder”, which provides frameworks for the handling of irregularities. Simple offences are taken care of by the Customs organization via the Public Prosecutor’s Office. More complex cases are redirected to the ILT.

❖ **Question 4: How many times has the Dutch Customs in its enforcement role performed inspections with regard to shipments subject to the WSR in the last three years (2015, 2016 and 2017)?**

The last few years on average 3.200 object inspections took place on a yearly basis by the Dutch Customs organization. ILT mentions in its multi-year plan 2018-2022 that the Dutch Customs organization is to perform approximately 3.500 object inspections for the coming years. Yearly the planning of customs enforcement is being coordinated by both parties and laid down in a mutual understanding.

❖ **Question 5: What are the main violations and offences resulting in non-compliance to the WSR of shipments under the Notification Procedure detected by Dutch Customs during inspections in the last 3 years (2015, 2016 and 2017)?**

- Annex VII of the WSR for green listed shipments is not-completely or wrongly filled in or is not accompanying the waste shipment. However, this will not always stop a shipment or will lead to a penalty.
- Wrong waste code is used (error), requiring adjustment of the declaration.
- Only a small percentage of violations or offences are noticed for shipments subject to a Notification Procedure. This percentage is small, as review of all requirements for the Notification itself already took place by the competent authorities involved.
- Violations of export bans (smuggling of waste). For example, export ban violations occurred on (H)CFC containing refrigeration- and freezing equipment.

❖ **Question 6: What are the main issues / bottlenecks Dutch Customs itself is confronted with during the performance of enforcement duties for shipments subject to the Notification Procedure under the WSR?**

- Differences in the implementation and execution of the WSR and enforcement. But how this is done, is a choice of each EU Member State.
- Clarity of rules to apply to for businesses, not subject to frequent change.
- Potentially, reorganization at ILT, but this has no impact on the cooperation with Customs.

- ❖ **Question 7: In 2015 “Guidelines for customs control on transboundary shipments of waste” were issued by the European Commission. What other measures are taken by Dutch Customs itself, to ensure that the required knowledge level of inspectors for enforcement actions of shipments subject to the Notification Procedure of the WSR is kept up to date?**
- Every new employee gets a basic Customs education, which emphasizes the non-fiscal tasks of the Dutch Customs organization, including the WSR.
 - Online trainings are available covering waste as subject.
 - Regular internal and external trainings.
 - Information exchange sessions with ILT, Ministries, etc.
 - Specialists (vraagbaken Afvalstoffen) are deployed to provide information to Customs officers in the field.
- ❖ **Question 8: The Council for the Environment and Infrastructure (Rli) stated in their report “Circular Economy: From Wish to Practice” the following (Rli, 2015) with regard to the Waste Shipment Regulation: *In the discussion on the circular economy, this directive is cited as a barrier to the international trade of valuable secondary raw materials. Apart from the high administrative burden for companies, which might result in companies not offering flows up for recycling, this directive has also been the subject of criticism due to differences in interpretation and enforcement in the various European countries. These differences result in an unlevel playing field: the Netherlands for instance is allegedly more stringent in this respect. In a letter to parliament, the State Secretary for Infrastructure and the Environment has stated that the Netherlands, in its capacity as a major transit country for waste, is being negatively impacted by the insufficient enforcement of the European Waste Shipment Regulation in other member states and by the fact that the so-called ‘green list’, which lists waste materials that are governed by a relatively lighter regime, is interpreted differently from country to country.* What is the reflection of Dutch Customs with regard to the statement made by Rli in their report “Circular Economy: From Wish to Practice”?**
- In most EU Member States, Customs organizations are not authorized (due to legal restrictions) to act against illegal shipments of waste, other than for customs reasons. Enforcement of the WSR is appointed to other services. Also the volume of waste shipments has an impact on the degree of control, noting that the main-port Rotterdam plays an important role with regard to import and export of waste. There are no studies nor research results known on this question which acknowledge that the authorities in the Netherlands involved in the WSR are stricter in enforcement than other EU Member States.
- ❖ **Question 9: By what means should and could cross border Waste Management in Europe under the Notification Procedure of the WSR (and its requirements) - according to Dutch Customs - be enhanced, so that it would function better?**
- More alignment between the Customs organizations in the different EU Member States.
 - A uniform reliable execution of the WSR by all EU Member States.
 - One uniform system for classification of waste. Nowadays there are several systems in use to classify waste, such as the Basel system and the EURAL code system. Customs authorities around the world work with the same basic commodity codes to classify goods for tax purposes. However, the BASEL and EURAL codes are not included in this Harmonized System (HS) nomenclature. This makes it difficult to recognize waste in customs declarations.
- ❖ **Question 10: What could and should be done pro-actively according to Dutch Customs to improve the relationships and cooperation between the various stakeholders (competent authorities, customs and businesses) involved in the Notification Procedure of the WSR?**
- In the Netherlands we already have regular meetings (every two months) between the Dutch Customs, businesses and branch organizations (Overleg Douane Bedrijfsleven – ODB). WSR issues are and can be discussed when applicable / relevant.
- ❖ **Question 11: Reform or abolish the WSR? What would be the best European approach according to Dutch Customs in order to support the European Circular Economy Strategy and facilitate cross-border waste management of shipments subject to the Notification Procedure within Europe?**
- Reform. It would be good to simplify the WSR, but this is difficult to realize with so many different types of waste and waste streams. However, legislation will always be necessary to avoid illegal shipments of waste in order to protect the environment. As part of trade facilitation, one could argue a simpler WSR and a more EU harmonized approach.

3. INTERVIEW WITH FHG

Interviewer:

Jacqueline Daalmans

Master in Customs & Supply Chain Compliance thesis subject:

Enhancing Cross-Border Waste Management in Europe under the Notification Procedure of the Waste Shipment Regulation to support the European Circular Economy Strategy

Date and time of interview:

Wednesday, the 14th of February 2018 at 14.00h

Interviewees:

Mr. Hans Koning – Director FHG

Mr. Ton Holtkamp – Chairman FHG

INTERVIEW QUESTIONS & ANSWERS

❖ **Question 1: What are the main objectives of FHG?**

Since 1955, the FHG has been an overarching platform for the Dutch recycling chain, representing nine recycling branches for metal, old paper, textile, car dismantling, tin, cardboard, plastic, wood and glass packaging. It represents approximately 500 companies, with a turn-over over 8 billion euro and approximately 3000 employees. Within the platform, exchange of experiences and expertise is key. FHG is a serious discussion party for authorities, mainly for the Ministries, where governmental policy is made. It is part of the Guidance Committee of the National Waste Management Plan (LAP 3), in which policies and implications are discussed. LAP 3 can be considered as the most important document in the field of waste policy, with the aim to move from a linear economy model to the circular economy approach. So, the main objectives of FHG are to:

1. implement environmental and recycling policy on bases of Lansink's Ladder: reduce, reuse, recycling, energy, incineration and landfill;
2. stimulate the reuse of waste products as product and / or material;
3. encourage recycling above the use of lower-value applications such as incineration and landfilling;
4. ensure recognition of recycling materials as an important secondary raw material instead of waste materials.

❖ **Question 2: What are the most important drivers according to FHG for a European Circular Economy Strategy?**

With the actual population growth, it becomes more and more important to remain materials in the chain. So, reduction of CO₂ emission and anticipation on the shortage of materials are important drivers for a European Circular Economy Strategy. FHG's central message since years is in line with these drivers, encouraging the reuse of waste products as a product and / or high quality secondary raw materials. The recycling chain represented in FHG has been taking care of the recycling of materials for years, ensuring a significant reduction in CO₂ emissions. FHG is supporting the National Agreement on the Circular Economy (Raw Materials Agreement) in 2017 - a letter of intent to develop transition agendas for the Circular Economy together – with the aim to reduce the dependency on non-renewable, critical raw material and bring a halt to wastage and pollution.

❖ **Question 3: What are the main obstacles the 9 trade associations represented in FHG are confronted with when performing their activities, which hampers the European Circular Economy approach?**

In recent years, the FHG has been hammering on four main points of attention to make the transition towards the Circular Economy successful: (1) design for reuse and recycling, (2) high quality collection of waste leading to high quality reuse / recycling, (3) removal of obstacles to cross-border shipments of high quality recycling flows and (4) removal of obstacles for recycling for products of the chemicals Directive REACH. With regard to design for reuse and recycling, there is lack of initiatives and attention, both by governments and businesses. If you realize that the largest part of environmental effects of a product are determined in the development phase, there is a lot more that can be done in this field. FHG is in favor of high quality collection of waste which leads to high quality reuse or recycling. It is the quality of the material collected that determines whether and how it can be reused as raw material.

Source separation is of crucial importance to guarantee a high quality raw material after recycling or reuse took place. Also the need to move from a push to a pull economy is needed, where companies are asking for secondary raw materials which they can use in their production processes. When waste is shipped across borders the Waste Shipment Regulation is applicable, which is not always an unbridled pleasure, especially due to the difference in interpretation of the WSR. A lot of issues arise from the discussion whether something is classified as waste or not, which is a classical discussion item. The definition of “waste” is outdated and forms a huge stumbling block for the realization of the circular economy.

Also the obstacles for recycling waste of chemicals falling under the REACH Directive requires improvement. REACH makes for some recycling flows the production of high quality raw materials from waste difficult and uneconomic due to the information obligation about components. This is hampering reuse and recycling flows now and in the future, if we do not take action.

- ❖ **Question 4: Two of the main objectives of the Waste Shipment Regulation are the protection of the environment and the combat against illegal shipments of waste. To what extent has the WSR according to FHG been effective in achieving these objectives?**

The WSR is effective in achieving its objectives, especially for avoiding waste to be dumped in Third World Countries. In its core it is an excellent Regulation and it is good it exists. But reform is necessary. Free traffic of high quality recycling flows and enforcement on quality should be the starting point.

- ❖ **Question 5: What are the main issues the 9 trade associations represented in FHG are confronted with in daily practice when having to deal with the Notification Procedure of the Waste Shipment Regulation?**

Having to deal with the Notification Procedure, the interpretation and enforcement differences of the WSR in the 28 EU Member states - for example with regard to fees, financial guarantees and enforcement between the 28 EU countries- lead to a lot of legal uncertainty for businesses, extra administrative work (red tape), costs and an uneven level playing field. Most of the trade associations FHG represents are recycling products subject to the “green list” requirements of the WSR. Those recycling companies who want to export their waste to a country outside of the EU, may have to follow the “amber list” requirements of the WSR, if the competent authority of destination has classified their waste under the amber listing instead of under the green listing.

An area that requires modernization is the WSR movement document. This paper document (including all its required annexes with confidential information), needs to be stuck to containers. In the digital era we are living, this is an old-fashioned way of working. It symbolizes the lack of current waste management law to social and environmental hygienic developments.

- ❖ **Question 6: What is the non-conformance level to the Notification Procedure of the Waste Shipment Regulation – reflected in administrative and criminal enforcement - of the 8 trade associations represented in FHG?**

Question unanswered.

- ❖ **Question 7: What is the opinion of FHG about the way enforcement of the Waste Shipment Regulation is carried out in the Netherlands and the rest of Europe?**

The interpretation and enforcement of the WSR varies in the 28 EU Member States. Even within a country, for example in Germany, the interpretation and enforcement may vary. This makes compliance to the WSR difficult, it leads to uncertainty for businesses and it brings with it extra costs. Due to the differences in interpretation of the WSR, in daily practice quite a lot of violation reports are issued. Some of them are considered to be “illegal shipments”, when in fact in many times it just concerns a small administrative error or difference in interpretation between the competent authority of dispatch and destination. Looking at the Netherlands compared to other countries in cases of enforcement of the green list procedure under the WSR, the ILT had the reputation of being stricter in enforcement than other countries, but in the meantime this is no longer the case. Re-organization of the ILT has led in the recent past to delays in the Notification Procedures, but issues have been solved. In the end, enforcement is required to avoid illegal shipments of waste and criminal activities. It is however questionable whether strict monitoring, registration and reporting – which leads to extra costs - is necessary for waste that has a positive economic value and will therefore definitely not “disappear” anyway or be a danger to the environment.

- ❖ **Question 8: What could be done according to FHG to increase the level of cooperation between the main stakeholders (competent authorities, customs and businesses) involved in the Notification Procedure of the WSR?**
 - Same interpretation of the WSR and its requirements / conditions.
 - More alignment and agreements between authorities involved.
 - Digitization of document flows.

- ❖ **Question 9: By what means should and could according to FHG the Notification Procedure under the Waste Shipment Regulation be simplified in order to function better?**

Harmonization in interpretation of the WSR requirements, for example with regard to fees and financial guarantees. This will lead to an even level playing field. See also answers to question 8.

- ❖ **Question 10: A letter was sent to the Ministry of Infrastructure & Environment by FHG on the 18th of February 2016. Also, in the round-table consultation, held in the House of Representatives on the 14th of June 2017, FHG made a passionate plea to remove the obstacles to the Circular Economy. What has been the outcome of these two initiatives?**

FHG remains an important party for policy makers on national and international level. Although for many years the WSR is subject to discussion, change will take much more time. Actually the European Commission is evaluation the functioning of the WSR. Also FHG will – together with its trade associations – provide its input to the European Commission.

- ❖ **Question 11: Reform or abolish the Waste Shipment Regulation? What would be the best to do according to the FHG in order to support the European Circular Economy Strategy?**

Abolishment of the WSR: definitely not. In itself the WSR is a good Regulation, but the way it is executed is not. Reform is the best option, going for harmonization between EU Member. In itself the WSR's objectives are defensible and good, but some procedures could be simplified, to reduce administrative costs and risks, create an even level playing field and speed up the process time for waste shipments. Making requirements and conditions uniform will create transparency and certainty for businesses and it will reduce administrative costs. It will speed up the Notification Procedure processes and will definitely tackle the main obstacles of the current WSR.

4. INTERVIEW WITH ILT - NETHERLANDS

Interviewer:

Mrs. Jacqueline Daalmans

Master in Customs & Supply Chain Compliance thesis subject:

Enhancing Cross-Border Waste Management in Europe under the Notification Procedure of the Waste Shipment Regulation to support the European Circular Economy Strategy

Date and location of interview:

Friday, the 23rd of February 2018 at 10.30h, location ILT Utrecht

Interviewee:

Mr. Enno Christan – Senior Inspector ILT, Unit Waste Enforcement

Mr. Jaap Koreman – Senior Inspector ILT, Unit Waste Enforcement

INTERVIEW QUESTIONS & ANSWERS

❖ Question 1: What are the core activities of ILT with regard to the execution of the Waste Shipment Regulation (WSR) in the Netherlands?

For the export, import or transit of waste through an EU Member State, one must adhere to the European Waste Shipment Regulation (WSR). The ILT is mandated by the Ministry of Infrastructure and Water Management in the Netherlands for enforcement of the WSR. Core activities in the execution of the WSR in the Netherlands by ILT are:

- Provide decisions on import, export and transit of waste. The ILT tests Notifications against the formal requirements of the WSR and the policy set out in the National Waste Management Plan (LAP 3). On this basis, the ILT takes a formal decision.
- Enforcement of the WSR by performing administrative and physical inspections of waste shipment flows, in close cooperation with Customs, police, and other authorities.
- Create risk profiles, in close cooperation with Customs and other authorities.
- IT supporting activities, such as big data analysis of waste management flows.

❖ Question 2: Two of the main objectives of the WSR are the protection of the environment and the combat against illegal shipments of waste. To what extent has the WSR according to ILT been effective in achieving these objectives?

The main purpose of the WSR is to avoid illegal shipments of waste and dumping. The WSR offers the tools to properly supervise this.

❖ Question 3: How many Notification Procedure requests has ILT been involved in - as competent authority of dispatch, transit or destination - in the last 3 years (2015, 2016 and 2017)?

The numbers for 2017 are not yet published. For the last 4 years, the number of decisions made were:

- 2013: 2.702. - 2014: 3.006.
- 2015: 2.954. - 2016: 3.195.

Prognose for 2018 is around 3.200 decisions, but this is depending on the market, on how many businesses will issue a Notification.

❖ Question 4: What are the main (administrative) issues ILT is confronted with in a Notification Procedure request as competent authority of dispatch, transit or destination?

- Notification is submitted incomplete and the bank guarantee is not properly arranged.
- Contract set-up between Notifier and Consignee is not in line with WSR requirements.
- Lack of clear composition of the waste. Often product analyses are not included in the Notification or are not sufficiently specified (too much bandwidth).
- Lack of a clear description of the origin of waste and / or the way recycling will take place.

❖ **Question 5: How is the risk-oriented enforcement of the WSR arranged by ILT, including the liaison and cooperation with Customs and other enforcement parties?**

In 2016, the ILT announced a changed strategy, based on four pillars. ILT operates risk-based, it is open about its results, it reflects and signals and it improves the efficiency and service. ILT works closely with other authorities, the Dutch Customs & Tax Organization and the Dutch Police. With regard to the risk-based approach, covenants are concluded with the Dutch Customs & Tax Organization, in which is agreed that they have to perform inspections as much as possible - about 80% - on the basis of risk (and risk profiles). The other 20% of inspections could be made by Customs at random. With regard to the inspections carried out by ILT, about 50% is based on signals of Customs, police or others, who detected and reported something suspicious to ILT. The rest of the inspections – either administrative or physical - are carried out risk-based, with a minor number of at random inspections. Inspection programs – in line with EU legislation – are set up, which include the cooperation with other main parties, such as the Dutch Customs & Tax Organization and the Dutch Police force. As stated in the ILT multi-year plan 2014-2018, in the context of the joint inspection program WSR it is agreed that Customs will perform 3.500 object inspections and the Police 1.200 object inspections. ILT wants to maintain a certain level of enforcement pressure.

❖ **Question 6: What is done by ILT to ensure that the required knowledge level for the Notification procedure requests / requirements and enforcement of the WSR by ILT or third parties is kept up to date?**

ILT is divided in clusters, each having their own specialism and handling certain type of waste flows. ILT inspectors are participating in-house and external courses / educations / information sessions. In addition, newsletters are issued, meetings with experts are organized and employees participate in professional groups, in which they share substantive knowledge and supervisory experiences.

❖ **Question 7: What has been the non-conformance level to the Notification Procedure under the WSR in the Netherlands - reflected in administrative and criminal enforcement after inspections - in the last 3 years (2015, 2016 and 2017)?**

It is difficult to provide exact information on this, as available data is not always accurate and reliable due to reporting differences between EU Member States. ILT will send you the report of BlockWaste, published in October 2017, which relates to this subject:

An exploratory estimate of the extent of illicit waste trafficking in the EU. IITL reported in the yearly report of 2015 a non-compliance rate of < 70%.

At global level, IMPEL has estimated that approximately 1.5 million of waste-loaded containers are shipped illegally every year. The EC reported in 2014 that inspections at ports, on roads and in companies showed around 25% non-compliance with the WSR. This does not all relate to the Notification procedure, but gives an indication of the overall non-compliance to the WSR.

❖ **Question 8: What are the main violations and offences resulting in non-compliance to the WSR detected by the ILT (or third parties assisting in the enforcement) during inspections in the last 3 years (2015, 2016 and 2017)?**

- Annex VII of the WSR for green listed shipments is not-completely or wrongly filled in or is not accompanying the waste shipment.
- In general, the Notification forms are filled in correctly, but this is logically, as prior review of the forms are done by the competent authorities involved. However, for the transport exact quantities and packaging needs to be correctly filled in, which is not always happening correctly.
- Required paperwork that needs to accompany waste shipments under the Notification Procedure are not or incompletely present.
- Classification issues: goods are shipped as non-waste, but should have been transported as waste, applicable to WSR requirements.
- Packaging of waste is not sufficient, especially noticed in Netherlands as transit country.
- Waste treatment centers receive other waste than expected and cannot treat it.

❖ **Question 9: In the yearly report of 2016, a change in strategy – based on four pillars - was announced by ILT. One of the pillars relates to improved efficiency and service. What could and should be done pro-actively to improve the relationship and cooperation between ILT and the various stakeholders (competent authorities, customs and businesses) involved in the Notification Procedure of the WSR?**

- As mentioned in ILT's multi-year plan 2018-2022 focus of ILT will indeed be on improving efficiency and service. In the near future it will apply modern (digital) techniques, with more focus on digital services. For example, ILT will be testing this year the set-up of user accounts with some major notifiers. Through these accounts users can apply for notifications, see online relevant information with regard to their account and notifications and can communicate with ILT. Starting point for this future development of service is that the user experiences clarity and simplicity. It should make flows more easier and create more insight and overview for the user. ILT is supporting the move away from a paper-oriented way of working to a digital one as authority.
- Speed-up the process time for Notification procedures, by providing digital services in the future should be possible and making better agreements between competent authorities involved so that unnecessary double checking of stable matters can be avoided.
- Organizing information sessions for businesses, a practice that is already done. ILT organized info sessions for the major Notifiers, covering approximately 80% of the Notifications.

❖ **Question 10: From an organizational point of view, is the ILT sufficiently manned and equipped (human capacity and competencies plus supported IT systems) to face the challenges of moving from a linear economy model to a circular economy approach with an increase in recycling flows?**

The last few years, a re-organization took place within ILT with a change in strategy, based on four pillars. ILT is sufficiently manned, but the age of the inspectors is rather high, which will automatically lead to a high outflow of employees in the near future and a required new inflow of employees.

Competencies of ILT inspectors are at bachelor level at least, with many years of practical work experience. ILT is moving in to the direction of more digital systems. More and more focus of enforcement is aimed at protection of the environment.

❖ **Question 11: By what means should and could - according to ILT - cross border Waste Management in Europe under the Notification Procedure of the WSR (and its requirements) be enhanced, so that it would function better?**

Currently the European Commission is reviewing the working of the WSR. First workshop with stakeholders took place in January 2018, with only 1/3 of the EU Member States being present. Actually, a Public Consultation is running; stakeholders can fill in an online survey. The consultancy firms which are involved by the EC in this process will held interviews with key stakeholders (authorities and NGOs). All the input will be evaluated and presented to and discussed with the stakeholders in September 2018. Goal is to present a new concept WSR by the Commission in the spring of 2019, on which EU Member States can respond. Earliest 2020 a new WSR text is expected. However, no revolutionary changes to this EU legislation should be expected. Small steps forward could be made, but it is evolution, no revolution, as consensus between 28 EU Member States is required for change of laws. There are a few practical things that could enhance the functioning of the WSR:

- *Digital document flows*, also for the Notification Procedure, whether it concerns the exchange of information between parties for the application of a Notification, the issuance of written consent, required documentation to accompany the physical flows of waste shipments.
- *Simplified waste procedures for waste flows within the European Union*. Approximately 90-95% of the waste shipments under the WSR concerns internal waste streams between EU Member States. A procedure for these flows within the EU only should be developed, with shorter decision times and which does not have to take into account the BASEL and OECD requirements (export).
- *Smarter handling of repetitive Notifications*. Nowadays prior written consents are only valid for a certain period of time. Even for regular unchanged flows of waste, the Notifier is required to apply time after time for a new Notification. Extending the Notification is not possible under the current WSR, but if allowed it would reduce the administrative burden. For this of course the cooperation of all competent authorities involved is required.

- ❖ **Question 12: In the multi-year plan 2018-2022, ILT published production figures, including the prognosed number of expected permits for transport and inspections to be held. How many administrative and physical inspections with regard to the enforcement of the WSR are scheduled for this time period 2018-2022?**

The four tools ILT uses for risk-based enforcement of the WSR are (1) object-oriented inspections, (2) administration checks, (3) system-oriented inspections and (4) theme inspections. **Question unanswered.**

- ❖ **Question 13: The Council for the Environment and Infrastructure (Rli) stated in their report “Circular Economy: From Wish to Practice” the following (Rli, 2015) with regard to the Waste Shipment Regulation: *In the discussion on the circular economy, this directive is cited as a barrier to the international trade of valuable secondary raw materials. Apart from the high administrative burden for companies, which might result in companies not offering flows up for recycling, this directive has also been the subject of criticism due to differences in interpretation and enforcement in the various European countries. These differences result in an unlevel playing field: the Netherlands for instance is allegedly more stringent in this respect. In a letter to parliament, the State Secretary for Infrastructure and the Environment has stated that the Netherlands, in its capacity as a major transit country for waste, is being negatively impacted by the insufficient enforcement of the European Waste Shipment Regulation in other member states and by the fact that the so-called ‘green list’, which lists waste materials that are governed by a relatively lighter regime, is interpreted differently from country to country.***

What is the reflection of the ILT with regard to the statement made by Rli in their report “Circular Economy: From Wish to Practice”?

It is not per se that ILT is more stringent in enforcement of the WSR than other EU Member States, but in the Netherlands we have sufficient capacity - also due to the fact that ILT works closely together with Customs and the Police - to carry out enforcement activities. With our ports and millions of containers passing our country, it is logical that regular inspections are carried out. The Dutch Court of Audit concluded in 2012, for example, that controls (through inspections) on international waste transports are well carried out in the Netherlands.

- ❖ **Question 14: Reform or abolish the Waste Shipment Regulation? What would be the best European approach according to the ILT in order to support the European Circular Economy Strategy and facilitate cross-border waste management within Europe?**

Reform. Abolishment itself of the WSR is too difficult, seen the link with the BASEL Convention and OECD Decision of 2001. The WSR in itself serves its purpose and is a good steering instrument. The WSR should not be seen as an obstacle, but as a tool to guarantee movements of waste towards high-quality recycling processes in order to support the circular economy approach. Waste should not be given such a negative value. If someone cannot do anything anymore with a product, you can easily call it “waste”. Actually, the demand for waste for recovery or recycling is still low (push market) and primary raw materials are in many circumstances cheaper than recycled material. More demand for secondary raw materials will stimulate the transition from a linear economy model towards a circular economy approach. In this transition period, the WSR is a good steering and control instrument.

5. INTERVIEW WITH SEPA - SCOTLAND

Interviewer:

Mrs. Jacqueline Daalmans

Master in Customs & Supply Chain Compliance thesis subject:

Enhancing Cross-Border Waste Management in Europe under the Notification Procedure of the Waste Shipment Regulation to support the European Circular Economy Strategy

Date and location of interview:

Teleconference, 18th of March 2018 at 11.00h.

Interviewee:

Mrs. Katie Olley – Senior Environment Protection Officer, Producer Compliance and Waste Shipment Unit at the Scottish Environment Protection Agency (SEPA) and Project Manager for IMPEL's Enforcement Actions.

INTERVIEW QUESTIONS & ANSWERS

❖ Question 1: What are the core activities of the Scottish Environment Protection Agency (SEPA) with regard to the execution of the Waste Shipment Regulation (WSR) in Scotland?

Scotland has already begun its journey towards a more sustainable approach to waste and resources. However, there is still a long way to go before Scotland has a truly sustainable approach to the management of waste. SEPA plays a key role in protection of the environment and human health from its effects of waste management and disposal.

Activities of SEPA in this area are:

- licensing and monitoring waste management facilities such as landfills and incinerators;
- regulating waste carriers and brokers and others involved in the chain leading to import and exports;
- administering producer compliance schemes for particular waste streams;
- regulating the trans-frontier shipment of wastes (WSR);
- responding to pollution incidents and fly-tipping.

Tackling illegal waste management activities – which can cause significant environmental harm and loss of business for responsible operators – is one of our major priorities. With regard to the regulation of the trans-frontier shipments of waste, SEPA provides decisions on import and export of notified waste, carries out enforcement of the WSR by performing administrative and physical inspections of waste shipment flows and provides guidance to stakeholders involved.

❖ Question 2: Two of the main objectives of the WSR are the protection of the environment and the combat against illegal shipments of waste. To what extent has the WSR according to SEPA been effective in achieving these objectives?

The WSR is partly effective, realizing there are only limited resources available for inspection and enforcement.

However, the preamble of the WSR is clear on this, with the main aim defined as protection of the environment. With this in mind, SEPA carries out its activities in line with these two main objectives. There are problems in the WSR with some definitions and procedures but it implements international obligations and provides a structure for co-operation between authorities.

❖ Question 3: How many Notification Procedure requests under the WSR has SEPA been involved in, as competent authority of dispatch, transit or destination, in the years 2014, 2015 and 2016?

Scotland receives on average 50 Notification requests per year. SEPA receives approximately 10 import Notification requests, the rest is export-related. Sometimes SEPA is consulted for transit shipments but the competent authority in the UK for transits is the Environment Agency in England.

❖ **Question 4: What are the main (administrative) issues SEPA is confronted with in Notification Procedure requests as competent authority of dispatch, transit or destination?**

The most common causes for non-compliance are:

- incorrect/ incomplete notification and movement documents;
- tonnages and the number of shipments do not correlate;
- mismatch between notification and movement document;
- financial guarantee are legally not correct and can be provided by the wrong party (e.g. notifiers may try to 'guarantee' themselves). The calculations are often not based on the true costs of disposing of waste (e.g. landfill tax may not be factored in where appropriate);
- contract drawn up between the notifier and the consignee for the recovery or disposal of waste is not correctly phrased;
- multiple Basel codes are used for the same type of waste;
- the waste carrier is not officially registered as a waste carrier (has no license);
- recovery/ disposal proportions are not correctly assessed;
- no insurance in place to cover damage to third parties;
- different routes are mentioned in the notification application (not allowed).

❖ **Question 5: How is the risk-oriented enforcement of the WSR arranged by SEPA, including the liaison and cooperation with Customs and other enforcement parties?**

SEPA carries out risk-profiled enforcement. In addition, through the IMPEL projects, EU countries are asked to put focus to particular areas, with actual focus of waste streams related to electronics, end-of-life vehicles and household recyclates (export-oriented shipments). For poor quality waste streams being shipped to non-OECD countries, SEPA also carries out upstream inspections at sites, checking facilities and procedures.

SEPA closely work together with third parties:

- the police on specific operations (not with Customs, such as is the case in the Netherlands);
- the UK Border Agency, who helps to train SEPA staff and scan containers for SEPA when requested;
- other EU authorities involved in waste shipment. SEPA has signed an MoU with regulators in The Netherlands, Belgium, England, Wales, Ireland and Northern Ireland to undertake joint operations each year and share intelligence on daily basis.

❖ **In case the Notifier is asked to supply "missing information", within which time period does the Notifier has to respond to this request?**

In Scotland SEPA would request any additional information required from the Notifier within three days of receiving the Notification package (as per Article 7 of the WSR). SEPA do not specify any time period for the Notifier to supply this information. Essentially, the "clock stops ticking" until SEPA receives it. Unfortunately, this means in practice that there are Notifications that drag on for months because of this.

❖ **Question 6: How many administrative and physical inspections with regard to the enforcement of the WSR are scheduled by SEPA for the time period 2018-2022?**

SEPA has drawn up a Waste Shipment Inspection Plan in line with EU Regulation (EU) No 660/2014. SEPA aims to carry out around 200 physical inspections per year but is expecting that this number will be slightly higher. Annex VII forms must be submitted to SEPA prior to export. This means that together with shipping information, the number of administrative checks is in the thousands.

❖ **Question 7: What is done by SEPA to ensure that the required knowledge level for the Notification procedure requests / requirements and enforcement of the WSR by SEPA - or third parties in Scotland - is kept up to date?**

- Training by the UK Border Agency/ senior staff for safe opening of containers.
- Joint operations with Police and UK Border Agency
- On-the job notification and waste streams trainings.
- End-of-life vehicles (EVL) training is provided to SEPA inspectors regulating ELV sites and waste shipments by Police Scotland to understand the depollution process and aid to interpreting whether a vehicle that may be destined for export is waste or not.
- SEPA's waste shipment officers are trained in Portable appliance (PAT) testing, so to be able to differentiate whether an item is EEE or WEEE.
- Officers exchanges with other EU countries and internally within the UK.

❖ **Question 8: What has been the non-conformance level to the Notification Procedure under the WSR in Scotland - reflected in administrative and criminal enforcement after inspections - in the years 2014, 2015 and 2016?**

For Scotland, 2016 data is not yet published. However, the IMPEL 2014-2015 report also shows statistical information of Scotland:

- Combined 2014 and 2015 transport inspection results: of 55 waste inspections reported, there were 18 waste violations (physical), a total of 32,7% in this period.
- Combined 2014 and 2015 company inspection results: of 75 physical inspections carried out, 73 were waste inspections. In 38 inspections, physical violations were noticed, resulting in a violation rate of 52.1%.

The majority of illegal shipments detected relate to waste moving as 'non-waste' and hazardous waste moving under green list procedures. The level of non-conformance for notified shipments has risen in recent years with the increase in shipments of refuse-derived fuel.

❖ **Question 9: What are the main violations and offences resulting in non-compliance to the WSR detected by the SEPA (or third parties assisting in the enforcement) during inspections in the last few years?**

- Missing or incomplete Annex VII forms.
- Electrical and electronic items being exported without correct declarations and safety testing information.
- Export of household waste masquerading as clean plastic or paper waste
- Waste storage too long or done incorrectly.

Note: warning letters are often sent or a shipment is stopped, so that the situation can be corrected. In Scotland there is only a very low level of administrative sanctions or financial penalties given (compared to – for example – the Netherlands). SEPA puts extra effort in stopping illegal shipments from happening (disruption) compared to prosecution.

❖ **Question 10: What could and should be done pro-actively to improve the relationship and cooperation between SEPA and the various stakeholders (competent authorities, customs and businesses) involved in the Notification Procedure of the WSR?**

The notification procedure generally works well if industry consults the guidance available. The relationship with other European competent authorities is very good due to open and constructive dialogue that takes place through IMPEL. With the notification procedure it is generally a 'willful ignorance' of the WSR that leads to difficulties. With this in mind, the following could help:

- Issuance of clear guidance manuals for industry that are readily available.
- Events / information sessions for stakeholders involved. We are starting to engage more with port authorities and the Maritime Coastguard Agency. We host industry events when funds allow for specific sectors.
- Conference participation, e.g. for the offshore industry.

❖ **Question 11: By what means should and could - according to SEPA - cross border Waste Management in Europe under the Notification Procedure of the WSR (and its requirements) be enhanced, so that it would function better?**

- Have one unique IT system for the WSR administrative flows with self-verifications build-in. This will speed-up information exchange between all stakeholders involved, so that we can move away from the paperwork exchange of information and documentation.
- One of the Notification application requirements is the issuance of a contract, drawn up between the notifier and the consignee for the recovery or disposal of waste. It would be helpful to have one template contract for Europe, in all languages. Also, a template to be used for the financial guarantee would facilitate harmonization.
- After acknowledgment of receipt of a Notification, the competent authorities involved need to prepare a decision (permit or not). In case of pre-consented recovery facilities, decisions have to be given within a maximum of 7 days. Extending this time period would enable better decision-making.
- Annex 1C – specific instructions for completing the notification and movement documents – needs to be updated in clear language.

❖ **Question 12: Reform or abolish the Waste Shipment Regulation? What would be the best European approach according to SEPA in order to support the European Circular Economy Strategy and facilitate cross-border waste management within Europe?**

Reform, as abolishment would lead to unwanted dangerous situations. The principle reason why the WSR came into existence was to protect human health and the environment, especially in countries where standards are lower than in Europe. You don't want to open the door of exports of wastes to non-OECD or less developed countries. With regard to geographical proximity, regional waste management plans and better cooperation between neighbor EU countries for treatment of certain types of waste (like is happening between North-Ireland and Ireland) would be beneficial to stimulate the circular economy goals. Producers should think ahead what waste will create their products and packaging and how these return flows can be treated to flow back into the economy. Increasing producer's responsibility would be helpful too to support the European Circular Economy Strategy

6. INTERVIEW WITH MR. RON LAAN - LAWYER VAN DIEPEN VAN DER KROEF

Interviewer:

Jacqueline Daalmans

Master in Customs & Supply Chain Compliance thesis subject:

Enhancing Cross-Border Waste Management in Europe under the Notification Procedure of the Waste Shipment Regulation to support the European Circular Economy Strategy

Date and time of interview:

Teleconference, Friday, the 27th of March 2018

Interviewee:

Mr. Ron Laan – Environmental Lawyer at Van Diepen Van der Kroef Lawyers, specialist in administrative and environmental law, with focus on (European) waste law and environmental criminal law

INTERVIEW QUESTIONS & ANSWERS

❖ Question 1: What are the main developments in environmental law with regard to cross-border management of waste on a European and national level?

- The attention for the environment has increased compared to the first Waste Shipment Regulation, because there are a number of provisions (such as Article 49 WSR on the protection of the environment) which shows the importance that is given to environmental interest when a decision has to be made whether import or export is allowed. Article 11 and 12 WSR contain objections to shipments of waste destined for disposal and recovery. Although these objections are conclusive, space has been created within these objections for environmental importance. Free movement of “goods” has lost some ground compared to the environmental protection interest when it concerns waste shipments.
- An important development is that enforcement of the WSR has been tightened up, especially in the area of criminal enforcement. An increase in the number of warnings, penalties and criminal lawsuits is noticeable. Previously the emphasis was more on administrative law enforcement, but nowadays the role of the Public Prosecution Service seems to become more important.
- On national level, the Raad van State (Council of State) took a clear decision on Article 12 WSR (see [201507839, ECLI:NL:RVS:2017:750](#)). It decided in its ruling that a Member State of dispatch may raise no objection on the grounds that treatment in the Member State of destination would be contrary to waste management plans, laws or regulations in force in the Member State of dispatch.

❖ Question 2: Two of the main objectives of the Waste Shipment Regulation are the protection of the environment and the combat against illegal shipments of waste. To what extent has the WSR according to you been effective in achieving these objectives?

The WSR is meant to protect the environment, with the purpose to ensure that cross-border shipments of waste take place in the most transparent possible way (traceability of the transports). In this area the WSR has succeeded very well and demonstrates its importance.

❖ Question 3: What are the most important preliminary rulings of the CJEU with regard to the Waste Shipment Regulation?

- Case C-203/96, *Chemische Afvalstoffen Düsseldorf B.V. and others* [1998], ECR I-4075.
The cross-border transport of waste within the EU is, in principle, covered by the EU Treaty provisions on the free movement of “goods” (actually covered in Article 28 and 29 TFEU). National restrictions on the export of waste for recovery from the territory of a Member State to another have been held to contravene the free movement principles of the Treaty. In that period of time, this was an important ruling, which implied that the regimen for waste for recovery should be much freer than in case of waste for disposal.

- Shell Decision: CJEU, 12 December 2013, ECLI:EU:C:2013:821.
This case concerned the interpretation of the concept of 'waste'. The requests were made in the course of two sets of criminal proceedings brought against Shell Nederland Verkoopmaatschappij BV and Belgian Shell NV respectively (jointly 'Shell'), concerning the transport of a consignment of ultra-light Sulphur diesel unintentionally mixed with methyl tertiary butyl ether ('the consignment at issue') from Belgium to the Netherlands. Article 2(a) of Council Regulation (EEC) No 259/93 of 1 February 1993 on the supervision and control of shipments of waste within, into and out of the European Community, as amended by Commission Regulation (EC) No 2557/2001, must be interpreted as meaning that, in a situation such as that at issue in the main proceedings, a consignment of diesel accidentally mixed with another substance is not covered by the concept of 'waste', provided that the holder of that consignment does actually intend to place that consignment, mixed with another product, back on the market, which it is for the referring court to ascertain.
- Arco Decision: Joined Cases C-418/97 and C-419/97, ARCO Chemie Nederland Ltd and Minister van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer (C-418/97) and between Vereniging Dorpsbelang Hees, Stichting Werkgroep Weurt+, Vereniging Stedelijk Leefmilieu Nijmegen and Directeur van de dienst Milieu en Water van de provincie Gelderland, Elektriciteitsproductiemaatschappij Oost- en Noord-Nederland NV (Epon) (C-419/97), ECR I-4512. This preliminary ruling also concerned the interpretation of the concept of 'waste', but involves a slight change of course on the Shell preliminary ruling. The CJEU ruled that an equivalent substance obtained from recovery could still be waste. In addition, it formulated a number of positive demarcation criteria, a sort of shopping list with criteria that Member States can use, to determine whether a good should be classified as waste or not. The CJEU emphasized that the question of whether goods are waste must always be answered case by case on the basis of all the facts and circumstances of the specific case. The environmental objectives of the WSR cannot be negatively affected by this.

❖ **Question 4: What are the main obstacles / issues businesses are confronted with in case of cross-border shipments of waste under the Notification Procedure of the Waste Shipment Regulation, leading to legal disputes and court cases?**

All kinds of issues appear and occur in daily practice. A few of them are, for example:

- Legal certainty with regard to the implementation of the WSR – which differs in the EU Member States – is low. Interpretation differences of the WSR by the 28 EU Member States can get businesses in unwanted trouble and leads to lack of a level playing field within Europe itself.
- Incomplete filled-in movement documents. An important problem, particularly in case of non-hazardous waste (green listed products), is that Annex VII – which needs to accompany the transport – is filled in incompletely.
- Disputes between businesses and competent authorities involved in the Notification process with regard to the choice of waste code, qualification of the waste stream or the recovery process. Also disputes whether it concerns waste for recovery or waste for disposal arise. When there are disagreements on classification issues between the competent authorities of dispatch and of destination (waste or non-waste goods), the subject matter shall be treated as if it were waste. So Article 28 of WSR has a negative effect on businesses, as the heaviest regime always applies.

❖ **Question 5: What measures should businesses take in order to improve the compliance – and therewith reduce the risk of non-compliance - to the Waste Shipment Regulation from a legal perspective?**

Looking specifically at the situation in the Netherlands, the government institutions are well advanced in the implementation practice of the EVOA compared to other EU Member States or countries outside of the EU. Companies should try to build good working relationships with governmental bodies, based on trust instead of distrust. Mutual understanding of the role each stakeholder plays in the WSR is of crucial importance. However, companies should invest in IT systems / software which can help them with the Notification Procedure, so that all required documents are filled in correctly and completely. Systematical use of IT support can increase administrative compliance and awareness, not only for the Notification procedure process, but also for the green listed waste administrative obligations (Annex VII requirements).

❖ **Question 6: What definition changes are legally possible to make to the Waste Shipment Regulation within the boundaries it has to operate (BASEL, OECD), in order to support the Circular Economy Strategy in Europe?**

Definition changes with regard to “waste” under the WSR are not expected to take place. Although it is not going to happen, it could help - for example - if a smoother policy would be applied to unquestionable, proven useful applications. Or to let these streams of goods out of the scope of the WSR in the future.

With regard to the Circular Economy thought, a principle change in the waste definition itself needs to take place. This waste definition is quite old (1975) and does not support the circular economy approach, nor does it fit the world as is in 2018, where environmental awareness in our society is well advanced. The actual waste definition still focuses on “the intention of the holder”. It would be better to focus on what is possible with the goods. If it concerns proven useful applications, the goods might be considered not to fall anymore under the definition of waste and WSR. The actual definition is, however, so broad, that it is not possible to move forward into this direction yet. But in the future ahead it should in order to remove the obstacles to move forward to a Circular Economy in Europe.

❖ **Question 7: The Council for the Environment and Infrastructure (Rli) stated in their report “Circular Economy: From Wish to Practice” the following (Rli, 2015) with regard to the Waste Shipment Regulation: *“In the discussion on the circular economy, this directive is cited as a barrier to the international trade of valuable secondary raw materials. Apart from the high administrative burden for companies, which might result in companies not offering flows up for recycling, this directive has also been the subject of criticism due to differences in interpretation and enforcement in the various European countries. These differences result in an unlevel playing field: the Netherlands for instance is allegedly more stringent in this respect. In a letter to parliament, the State Secretary for Infrastructure and the Environment has stated that the Netherlands, in its capacity as a major transit country for waste, is being negatively impacted by the insufficient enforcement of the European Waste Shipment Regulation in other member states and by the fact that the so-called ‘green list’, which lists waste materials that are governed by a relatively lighter regime, is interpreted differently from country to country”.***

What is the opinion of the Dutch Association of Environmental Law about the way enforcement of the Waste Shipment Regulation is carried out in the Netherlands by ILT (and other third parties such as customs) and the rest of Europe?

Looking at preliminary rulings from the CJEU, also in the field of WSR, it is noticeable that there have been a lot of requests from the Netherlands. However, a fact-based substantiation of this statement of the Rli is not known by me, but what I experience in daily work practice (what is only a “tip of the iceberg” of what is happening in this specific area) matches with this view. It is a matter of fact that there are currently differences between EU Member States in the way the WSR is implemented and executed, leading to an uneven level playing field for businesses involved in waste shipments.

❖ **Question 8: What could be done to increase the level of cooperation between the main stakeholders (competent authorities, customs and businesses) involved in the Notification Procedure of the Waste Shipment Regulation?**

To increase the level of cooperation between main stakeholders, already quite a few initiatives are undertaken, like knowledge sharing meetings and workshop. There are also regular meetings between governments, customs, trade organization and businesses, where lectures and explanations are given about the WSR practice. This is going well.

❖ **Question 9: The Association for Environmental Law published in 2017 a book, titled “With law to a circular economy”. Chapter 3 of this book is titled “Circular economy benefits from non-circular justice”. What is meant by this and how could this be realized from a legal point of view under the Waste Shipment Regulation?**

The circular economy represents a closed-loop system. If law itself goes back to its original starting point - in that sense it also acts circular - then no progression will be made. Law must not be circular, but must always develop. There must be renewal, instead of coming back to former points of view. An example is the old definition of waste. Judges should be more open to take challenging perspectives in solving disputes under the WSR, instead of strongly sticking to the waste definition. Although their maneuvering space is rather limited, this is in some cases possible due to open standards (which give room for interpretation), which could be beneficial for businesses engaged in circular economy activities.

❖ **Question 10: By what means should and could the Notification Procedure under the Waste Shipment Regulation be improved or simplified in order to function better within Europe?**

- In case of pre-consented facility, it would help to automatically prolong the validity period of the consent to three or five years, which will reduce the administrative burden.
- Shorter time-period for obtaining a Notification permit. Nowadays it is often a too slow process (average 3 to 4 months process time) from the time the Notification was submitted until the decision from the competent authorities involved is taken.
- Digitization. It is in progress and will continue to develop itself in the near future.

❖ **Question 11: Reform or abolish the Waste Shipment Regulation? What would be the best to do in order to support the European Circular Economy Strategy?**

Definitely reform. In a circular economy, the aim is to prevent waste from occurring, through reuse of products and materials. However, existing legal definitions and standards in waste law could impede this endeavor. But judges can positively contribute to the development of the circular economy, as the interpretation of open standards provides some – although rather limited - space for interpretation.

Abolishing the WSR is definitely not in favor of businesses and other stakeholders. The WSR offers protection against those who want to do harm or engage in criminal activities. Looking at it from a broader perspective, the WSR helps countries in the EU and outside of the EU where still major steps have to be taken in the field of the environment. Environmental protection and protection of human health against the adverse effects associated with waste is and remains one of the most important objectives of environmental law – such as the WSR - also in a circular economy.

7. INTERVIEW WITH WASTEPOINT AFVALBEHEER B.V. - NETHERLANDS

Interviewer:

Jacqueline Daalmans

Master in Customs & Supply Chain Compliance thesis subject:

Enhancing Cross-Border Waste Management in Europe under the Notification Procedure of the Waste Shipment Regulation to support the European Circular Economy Strategy

Date and time of interview:

9th of February 2018, location Amersfoort

15th of March 2018, teleconference

Interviewee:

Mr. Jan-Jaap Koopman – owner WastePoint Afvalbeheer B.V.

INTERVIEW QUESTIONS

❖ Question 1: What is the business approach of WastePoint to support the European Circular Economy Strategy?

WastePoint takes care of companies that produce waste during their production processes. We can manage waste streams, can assist companies in obtaining exemptions and permits and we advise on management and processing of waste. We have experience in many sectors, such as the pharmaceutical industry, the IT sector, the food industry and the graphic industry. WastePoint believes in the cradle-to-cradle principle and supports sustainability. Our vision on sustainability is a straightforward one: you do not engage in sustainability to be expensive, but because it pays off. WastePoint supports the European Circular Economy Strategy by the activities it performs.

❖ Question 2: What are the main activities of WastePoint in relation to the Waste Shipment Regulation?

The two core activities of Waste Point with regard to the WSR are the following:

- Provide advice to companies with regard to waste management and processing of waste.
- Guidance of Notification Procedures from A to Z (administration) as authorized representative for customers.

❖ Question 3: Two of the main objectives of the WSR are the protection of the environment and the combat against illegal shipments of waste. To what extent has the WSR according to WastePoint been effective in achieving these objectives?

The WSR is to a large extent effective in the combat against illegal shipments of waste and protection of the environment. Waste streams require legislation and enforcement, so that it is visible what is shipped from who, when and to where. The Notification Procedure is a useful tool to create this visibility for competent authorities (dispatch, transit and destination) involved in these waste shipments.

❖ Question 4: What are the main obstacles or issues WastePoint is confronted with in daily practice when having to deal with the Notification Procedure of the Waste Shipment Regulation?

The movement of the waste under the Notification Procedure in such is not problematic. The main obstacles and issues encountered have to do with the administrative process of the Notification Procedure.

- The administrative flows involved in the Notification Procedure are mostly paperwork flows. Digitization is still lacking. The fact that it is still not possible in 2018 to exchange digital information between stakeholders (such as the Notifier and the competent authorities) involved in a Notification Procedure can be seen as a bottleneck.
- In the Netherlands, there is no fixed point of contact of the ILT for companies with regard to the issued Notifications. In Germany, the UK and Belgium WastePoint has fixed contact persons, which facilitates the communication.

- When the Notification is submitted, the WSR has not determined a legal time-period for the competent authority of dispatch to request missing information. This can take weeks. When the Notification is forwarded by the competent authority of dispatch to the competent authority of destination, the competent authority of destination may request also missing information, for which no legal time-period is defined in the WSR. This leads to considerable delays in the Notification Procedure process, the reasons why a Notification takes approximately 3 to 4 months in daily practice.

❖ **Question 5: What is the opinion of WastePoint about the way enforcement of the Waste Shipment Regulation is carried out in the Netherlands and the rest of Europe?**

WastePoint has sporadically to do with inspectors of waste streams. It has the impression that Dutch authorities such as ILT and Customs have a pragmatic attitude with regard to enforcement of the WSR. In Germany, controls / inspections are perceived to be more transport related, where inspections are carried out by the Federal Agency for Traffic of Goods (Bundesamt für Güterverkehr).

❖ **Question 6: What could be done according to WastePoint to increase the level of cooperation between the main stakeholders (competent authorities, customs and businesses) involved in the Notification Procedure of the WSR?**

- In general, WastePoint is satisfied with the cooperation with ILT, respecting the choice the organization (and Dutch authorities) made in the way Notifications are dealt with (no personal contact, a more formal way of working). To increase the level of cooperation, it would be profitable if ILT would provide to customers fixed point of contacts. Direct communication would be preferred.
- Better responses to questions raised by businesses. The customer service desks in charge of WSR matters in many EU countries often provide only basic standard answers, which do not answer particular questions raised by businesses. What could help is authorities making use of certified advisory businesses in the field of WSR, which are published on their websites. Businesses can then address themselves to these certified businesses with their specific WSR questions.

❖ **Question 7: By what means should and could according to WastePoint the Notification Procedure under the Waste Shipment Regulation be simplified or improved in order to function better?**

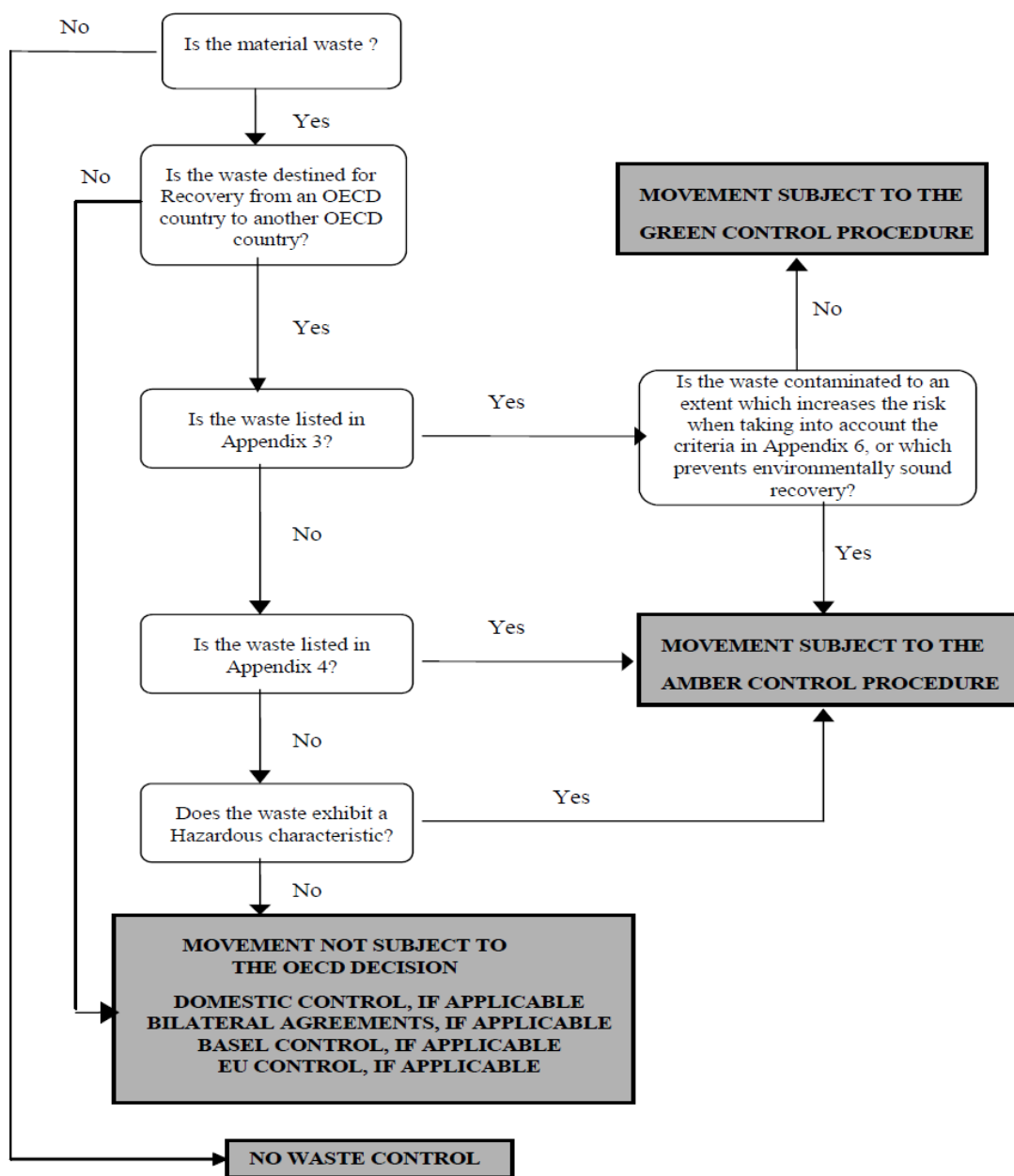
- Digitization, so that administrative information exchange flows can take place electronically instead of in the old-fashioned way (paperwork). Make use of web-portals and customer accounts and make these accessible to parties involved (competent authorities) to exchange and share information.
- The execution of the WSR varies between EU Member States. Create more alignment in this.
- One uniform system for classification of waste. Nowadays there are several systems in use to classify waste, such as the Basel system and the EURAL code system.
- Make use of shared databases, which are subject to appropriate data cleansing techniques.

❖ **Question 8: Reform or abolish the Waste Shipment Regulation? What would be the best to do according to WastePoint in order to support the European Circular Economy Strategy?**

Reform. With waste streams, the flow of goods (waste with a negative value) and the flow of money often go into the same direction. This can provoke people or organizations who have bad intentions. Therefore, with certain types of waste, you will always need strict regulations to protect the environment and to prevent illegal shipments of waste, even in a circular economy. The WSR in itself is a good monitoring and steering tool, which can be used to support the European Circular Economy Strategy, especially when the administrative flows are made easier by use of digitization.

APPENDIX III: FLOW CHART – IDENTIFICATION OF WASTE (OECD)

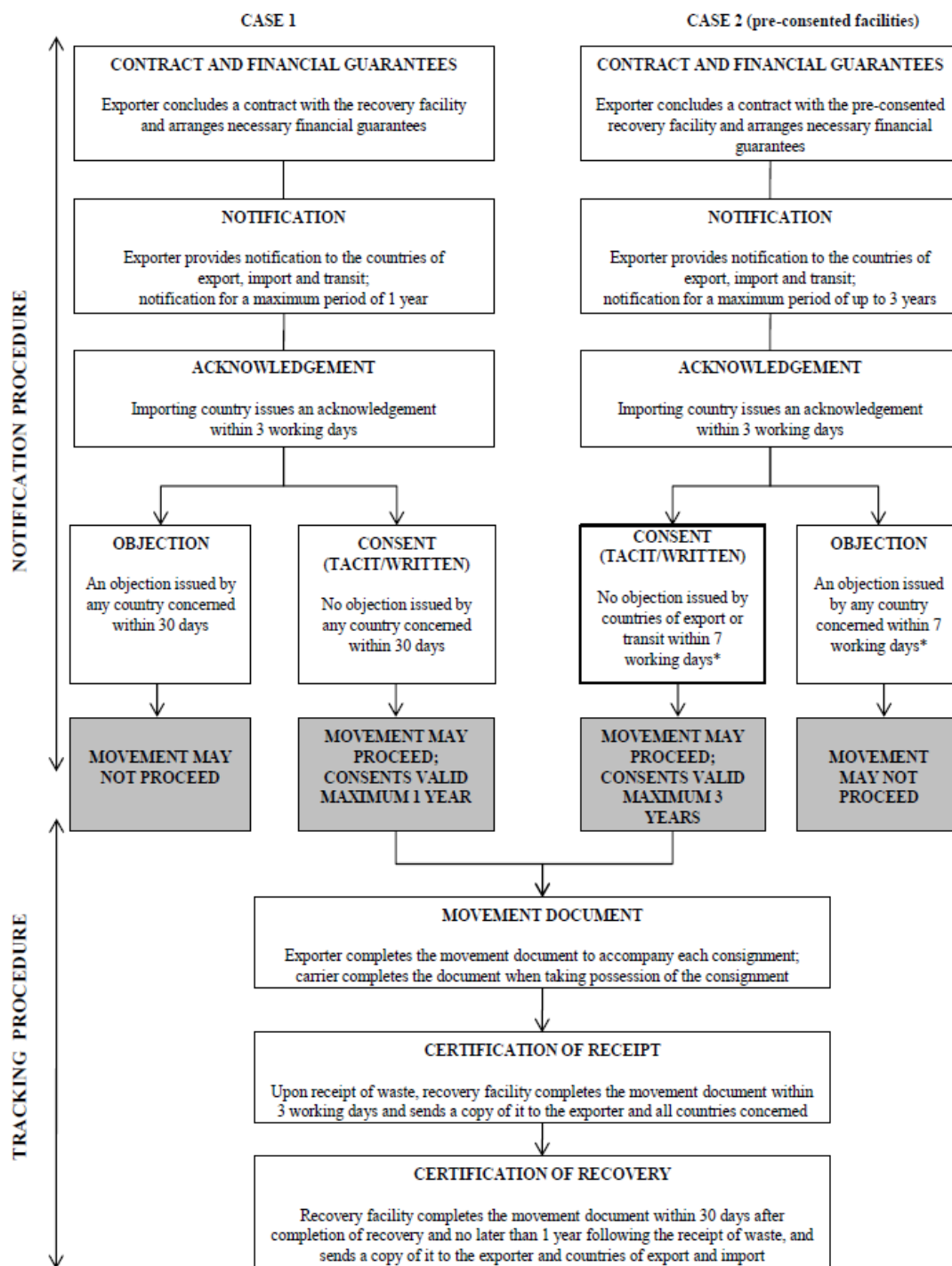
Figure 10: Identification of wastes subject to the OECD Decision



Note: Flow diagram retrieved from the OECD (2009), Guidance Manual for the control of Transboundary Movements of Recoverable Wastes.

APPENDIX IV: HIGH-LEVEL OVERVIEW NOTIFICATION PROCEDURE WSR

Figure 11: Notification Procedure on highlights

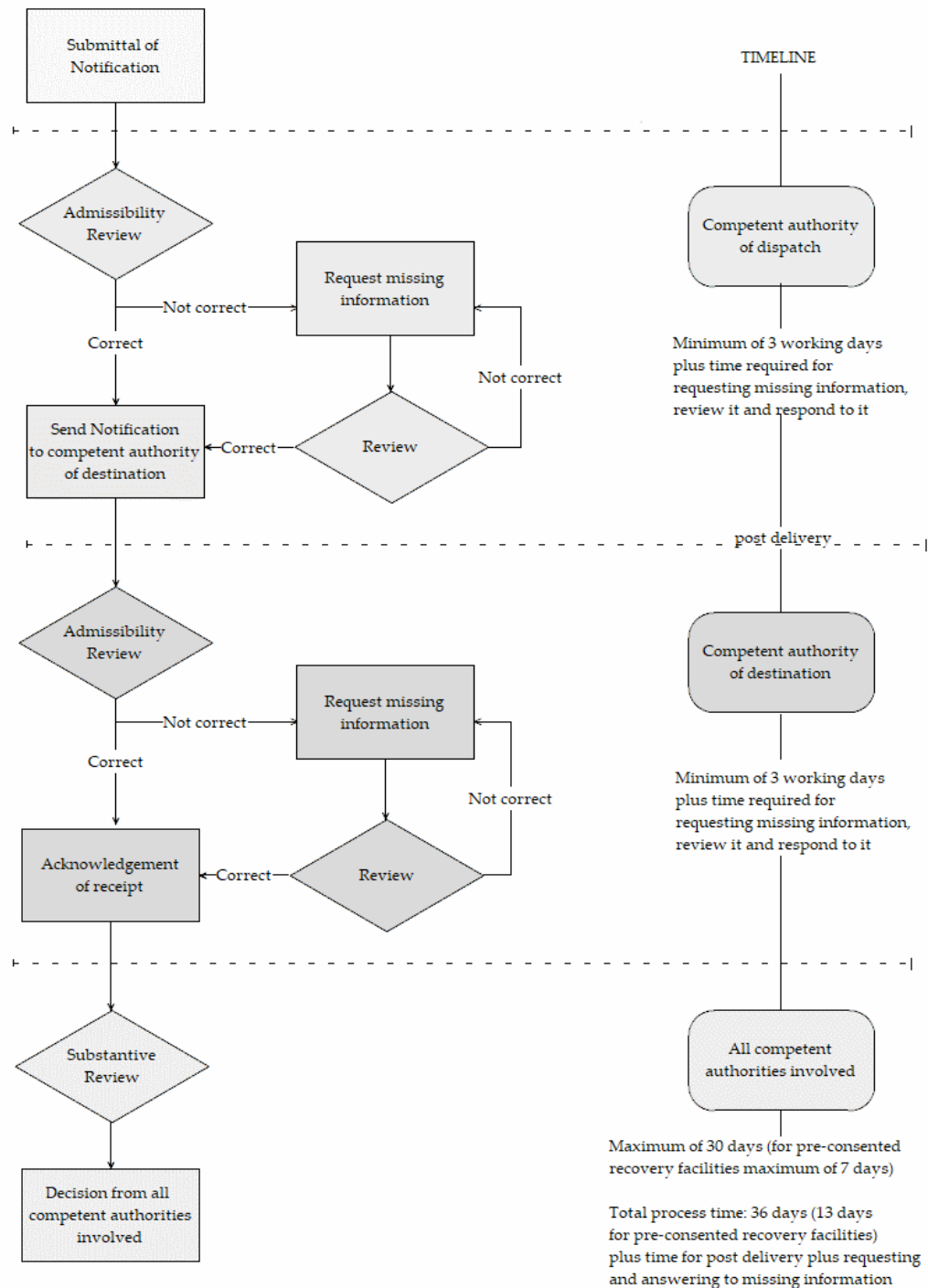


* This period may be extended to 30 days by the country of export.

Note: Flow diagram retrieved from the OECD (2009), Guidance Manual for the control of Transboundary Movements of Recoverable Wastes.

APPENDIX V: OVERVIEW TIMELINE NOTIFICATION PROCEDURE

Figure 12: Simplified overview of the timeline of the Notification Procedure - WSR



Note: Flow diagram from ILT (freely translated in English), retrieved May 24, 2018 from <https://www.ilent.nl/documenten/publicaties/2017/01/19/overzicht-van-kennisgevingsprocedure>