



European Union Network for the Implementation  
and Enforcement of Environmental Law

# IMPEL Project “Waste Shipment Inspection Planning” (WSIP)

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*Guidance on*

*Effective Waste Shipment Inspection Planning*

***Date of report: 9 November 2016***

***Report number: 2015/04-2016/05***

## Introduction to IMPEL

The European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL) is 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. The association is registered in Belgium and its legal seat is in Brussels, Belgium.

IMPEL was set up in 1992 as an informal Network of European regulators and authorities concerned with the implementation and enforcement of environmental law. The Network's objective is to create the necessary impetus in the European Community to make progress on ensuring a more effective application of environmental legislation. The core of the IMPEL activities concerns awareness raising, capacity building and exchange of information and experiences on implementation, enforcement and international enforcement collaboration as well as promoting and supporting the practicability and enforceability of European environmental legislation.

During the previous years IMPEL has developed into a considerable, widely known organisation, being mentioned in a number of EU legislative and policy documents, e.g. the 7th Environment Action Programme and the Recommendation on Minimum Criteria for Environmental Inspections.

The expertise and experience of the participants within IMPEL make the network uniquely qualified to work on both technical and regulatory aspects of EU environmental legislation.

Information on the IMPEL Network is also available through its website at: [www.impel.eu](http://www.impel.eu)

<p><b>Title of the document:</b> Guidance on effective waste shipment inspection planning</p>	<p><b>Number report:</b> <i>2015/04-2016/05</i></p>
<p><b>Project manager:</b> Thomas Ormond (Germany)</p>	<p><b>Report adopted at IMPEL General Assembly:</b> <b>1-2 December 2016, Bratislava, Slovakia</b></p>
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<p><b>Executive summary:</b></p> <p>Under Regulation (EU) No 660/2014, EU Member States have to establish inspection plans for waste shipment inspections by 1<sup>st</sup> January 2017, in order to ensure the necessary capacity for inspections and effectively prevent illegal shipments. This guidance document, drafted by an IMPEL project team on the basis of national experiences, a survey and intensive discussions with regulators from participant countries and other experts, explains the essential elements of a waste shipment inspection plan and the underlying risk assessment, describes best practices and offers a range of tools that may be useful for the authorities that have to develop an inspection plan.</p>	
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## Foreword

IMPEL is a key player and strategic partner of the Commission in combatting illegal waste shipments. I welcome this new guidance document which will contribute to putting into place robust inspection plans for waste shipments in Member States.

Regular and consistent inspection planning is crucial to target and prevent high-risk illegal shipments. Adequate planning is also necessary to establish the capacity needed for inspections in terms of human, financial and other resources. The lack of inspection plans in many Member States has been considered as one of the main drivers of illegal shipments.

Under the Waste Shipment Regulation, Member States shall ensure that inspection plans for waste shipments are established by 1 January 2017. It is of fundamental importance that this new requirement is well implemented throughout the Union if we are to effectively prevent illegal waste shipments. This guidance will provide valuable support to Member States when carrying out the necessary risk assessments and establishing their inspection plans.

Cutting down on illegal waste shipments will have multiple benefits. This will prevent the disastrous consequences for the environment and health which we have observed much too often following dumping or substandard treatment of waste. It will also help to make our transition to a circular economy by channelling valuable materials that can be found in waste to proper recycling and back into the economy. Further, it will contribute to reduced greenhouse gas emissions, energy savings and cost savings for clean-up and repatriation of illegally shipped waste.

If the Waste Shipment Regulation's requirements to establish adequate inspection plans are properly implemented and lead to real action on-the-ground, this will contribute to ensuring a level playing field. We would then be able to avoid the current problems of "port-hopping" where waste exporters choose to send waste through Member States where controls are less stringent.

I believe that IMPEL's guidance will allow us to take a good step forward in our fight against illegal waste shipments. I strongly recommend that all authorities involved in waste shipment inspections make comprehensive use of this key instrument. I wish you the best of luck!



**Kęstutis Sadauskas**

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## 1. Introduction

Regulation (EU) No 660/2014 of the European Parliament and of the Council of 15 May 2014, which amended Regulation (EC) No 1013/2006 on shipments of waste, made it a binding obligation on EU Member States to ensure, in respect of their entire territory, that one or more inspection plans are established for waste shipment inspections by 1 January 2017. Such plans may be separate documents or a clearly defined part of other plans (e.g. an “Environmental Inspection Plan”). In any case, they must be based on a risk assessment covering specific waste streams and sources of illegal shipments and considering, if available and where appropriate, intelligence-based data. That assessment must aim, inter alia, to identify the minimum number of inspections required, including physical checks on establishments, undertakings, brokers, dealers and shipments of waste or on the related recovery or disposal. The new Article 50(2a) of the Waste Shipment Regulation also lists necessary elements of an inspection plan and provides for a review at least every three years in which it must be evaluated to which extent the objectives and other elements of that inspection plan have been implemented.

Due to the great practical relevance of the new rule, IMPEL’s General Assembly in December 2014 agreed on a two-year project for the elaboration of a guidance document on Waste Shipment Inspection Planning (WSIP). The WSIP project - led by Germany, with project team members from Belgium, the Netherlands, Norway, Slovenia and the United Kingdom (see page 3), and active participants from altogether 20 IMPEL member countries - started with a survey of existing inspection practices and the needs for guidance. A first draft of the present guideline was put forward in March 2016 and modified according to the results of an expert workshop in Frankfurt am Main on 12-13 April 2016. Subsequently, some waste shipment correspondents commented on the draft and Peter Wessman from the EU Commission provided advice to the project group. The final version was submitted for adoption to the IMPEL General Assembly in late 2016.

The guideline aims to help waste shipment inspection authorities with the drafting of inspection plans and with the necessary risk assessment, especially by presenting best practices and useful tools to achieve this task. It should also assist inspectors in the field and other relevant actors (e.g. Police and Customs) in understanding and applying inspection plans and in improving cooperation between the agencies involved in a waste shipment inspection. As all inspection authorities have limited resources, good cooperation in particular is the key to an effective inspection planning.

## 2. Legal and economic context

Waste shipment inspection plans are meant as an instrument to strengthen enforcement of Regulation (EC) No 1013/2006 (commonly called “Waste Shipment Regulation” or “WSR”), i.e. to make inspections more effective and, as the second recital of Regulation (EU) No 660/2014 phrases it, “effectively prevent illegal shipments”. This is based on the perception that there exist wide divergences and gaps in the enforcement and the inspections carried out by Member State authorities.

As the preparatory Impact Assessment for the WSR amendment which was undertaken by the European Commission in 2013<sup>1</sup> explains in detail, there is a high frequency of illegal waste shipments from the EU to certain destinations. Transports of hazardous waste from the EU to non-OECD countries or of waste for disposal to non-EU or non-EFTA countries, movements of waste without the necessary notification

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<sup>1</sup> Commission Staff Working Paper SWD(2013)268 final of 11.7.2013, published at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52013SC0268&from=EN> (see especially pp. 9 et seq.).

or without the necessary consent of competent authorities, and several other types of transboundary shipment are defined as violations of the Waste Shipment Regulation. The non-compliance rates, as established by the targeted joint inspections of IMPEL-TFS, are in the range of 20-32 %<sup>2</sup> In view of the ratio of inspected transports and companies to the waste traffic as a whole, this means thousands of illegal shipments every year. In many cases these shipments result in severe negative impacts on the environment and human health, an uneven playing field for the waste industry, a loss of raw materials and an inefficient use of resources.

Various studies over the last years have highlighted the routes, origins and destinations of illegal waste streams in and from Europe. A Europol “EU organised crime threat assessment” of 2011 e.g. pointed to uncontrolled collection, storage and sorting facilities in Member States from where waste is illegally shipped to developing countries, and to the important role of seaports in north-west Europe (Rotterdam, Antwerp, Hamburg, Le Havre) as well as Italian ports for the waste export to Africa and Asia.<sup>3</sup> E-waste, end-of-life vehicles, contaminated plastic and paper wastes, plus various types of hazardous wastes were identified as relevant waste types for this illegal traffic. The Europol report concluded that trafficking groups are usually small (between 5 and 10 people) and often characterized by ethnic links to the destination countries.

A more recent study by UNEP and GRID-Arendal<sup>4</sup> confirms that there are frequently connections between illegal waste shipment and other crimes, such as tax fraud and money laundering. The key driver for illegal trade is the profit that can be generated from various “business models”. In the case of toxic wastes this can be the difference between payments from industrial customers for environmentally sound waste management on the one hand, and the low costs of uncontrolled dumping or unsafe recycling on the other. In the case of e-waste, end-of-life vehicles or decommissioned ships, it is rather the difference between the low cost of acquisition and the relatively high value of the metal content that can be extracted and sold in the countries of destination where at the same time operators need not care about decent wages, occupational safety or environmental protection.

For waste electrical and electronic equipment in particular, the quantities, flows and actors involved have been researched in more detail by studies like “The Global E-waste Monitor 2014”<sup>5</sup> and in the context of the “CWIT” (“Countering WEEE Illegal Trade”) project.<sup>6</sup> This research found that in Europe, only 35% (3.3 million tonnes) of all the e-waste discarded in 2012 ended up in the officially reported amounts of collection and recycling systems and that about 16 % or 1.5 million tonnes were exported. Considering that the major part of such e-waste was destined for reuse and repair and estimating the

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<sup>2</sup> The inspections of 2008-2011 (IMPEL “Enforcement Actions II” project) showed a non-compliance rate of 21 %, the inspections of 2012-2013 (“Enforcement Actions III”) a rate of 32 %; IMPEL-TFS Enforcement Actions III project, Final Report, 2013, p. 17.

<sup>3</sup> Europol, OCTA 2011 - EU Organized Crime Threat Assessment (<https://www.europol.europa.eu/content/press/europol-organised-crime-threat-assessment-2011-429>, p. 40), quoted in the Commission’s Impact Assessment, SWD(2013) 268 final, at pp. 10-11.

<sup>4</sup> Waste Crime - Waste Risks. Gaps in meeting the global waste challenge, 2015, see <http://www.grida.no/publications/rr/waste-crime/>

<sup>5</sup> Authored by Baldé/Wang/Kuehr/Huisman for the United Nations University / UNU-IAS, 2015, see <http://i.unu.edu/media/unu.edu/news/52624/UNU-1stGlobal-E-Waste-Monitor-2014-small.pdf> .

<sup>6</sup> <http://www.cwitproject.eu/>

fraction of recycled or dumped waste at approximately 30 %, the CWIT project report calculated the volume of illegal e-waste export from the EU as between 250,000 and 700,000 tonnes per year.<sup>7</sup>

Similarly, a study for the European Parliament of 2010, based on data from IMPEL and others, concluded that considerable quantities of end-of-life vehicles are exported illegally from EU Member States, predominantly to Africa but also the Middle East, Russia and other former Soviet Union countries.<sup>8</sup> In Germany alone, the number of ELVs whose fate is unknown is estimated at 1.4 million per year, and a significant part of these may be exported illegally.<sup>9</sup>

Other illegal waste streams include mixed wastes or waste-derived fuels, e.g. from the UK to countries in southern and eastern Asia<sup>10</sup>, or blended agricultural wastes and bunker oils in Belgium and the Netherlands. In all these cases, the profits that may be derived from sub-standard practices as well as the low risk of detection and punishment make it attractive for market actors to organize illegal trans-boundary shipments of waste. More frequent, effective and harmonised inspections are thus a necessary instrument to reduce illegal trade.

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<sup>7</sup> CWIT Summary Report, 30.8.2015, <http://www.cwitproject.eu/wp-content/uploads/2015/09/CWIT-Final-Report.pdf>, at p. 6.

<sup>8</sup> End of life vehicles: Legal aspects, national practices and recommendations for future successful approach, 2010, <http://ec.europa.eu/environment/waste/pdf/study/elv.pdf>, at p. 42.

<sup>9</sup> Cf. the speeches of Hatzi-Hull and Kummer at the International Automobile Recycling Congress 2015, <https://www.recyclingtoday.com/article/icm-automobile-recycling-congress-berlin>.

<sup>10</sup> Cf. the inquiry report „Exporting Opportunity? Putting UK waste to work at home and abroad“, 2014, <http://www.sita.co.uk/downloads/APSRG-ExportingOpportunityReport-web.pdf>, at pp. 65-66.



## 3. Risk assessment

### 3.1 Introduction

In chapter 3.3.1 of the IMPEL guidance book 'Doing the right things for waste shipment inspections (DTRT-TFS)' of 2012 it is described how to come to a good risk-assessment for prioritization and inspection planning. This guidance book is the basis for the following explanations.

The aim of this chapter is to describe a simplified way to make a risk assessment in three essential steps. For a risk assessment three questions are important:

1. What are the most risky waste streams?
2. Which transport routes and logistic points are linked to shipments of such waste?
3. What companies/actors play an important role in logistics and waste treatment?

The term "Companies" in this context should include establishments, undertakings, brokers and dealers in the sense of Art. 34 of Directive 2008/98/EC (Waste Framework Directive). By "logistic points" are meant the sources and destinations of (illegal) waste streams but also intermediate collection, storage or treatment facilities. For more concrete descriptions see also the IMPEL 'Waste Sites Manual'.

*(Important note: questions 2 and 3 could also be part of the inspection plan instead of the risk assessment.)*

### 3.2 Information sources

Information is crucial when planning inspections. The risk assessment and inspection plan will be based on current information sources with the proviso that it is subject to change as and when the authority receives new information.

- For example, at the time when the inspection plan is drafted there may be no information available, as no inspections were conducted previously e.g. on this particular waste stream. The inspection plan will, to that extent, be limited in its objectives and priorities and most likely have a simple objective statement – 'to ensure compliance with Regulation (EC) No 1013/2006'.
- When inspections of waste shipments are carried out information on shipments of waste will increase, as will the experience of the inspectors. They may, from speaking to the various parties involved in the waste shipment chain, be able to gather information from further sources – for example port records of current stock kept on quay.
- As the information gathered becomes more extensive and more useful, it will enable a review of the waste inspection plan. The improved level of information may give a priority to a certain waste type or method of transport which has shown the most violations during the first round of inspections.
- The Inspection plan should also take into account the global conditions of recyclate markets, trends in waste flow, information exchanged during correspondence with other competent authorities.
- Also of vital use is the IMPEL Enforcement Actions project. Information and experience gained during exchange visits with other competent authorities are essential for inspection planner and inspectors.

### 3.3 Methodology for risk assessment

The following steps for working out a risk assessment are proposed.

#### Step 1. Determine the most relevant waste streams

To judge the risks of different kind of waste streams it is important to categorize them first. In order to come to a uniform approach it is suggested to use the following twenty waste streams for the risk assessment:

1. Waste oil	7. WEEE	13. Paper and cardboard waste
2. Chemical waste	8. Metal waste	14. Plastic waste
3. Waste used as or in animal food	9. Residues from ferrous and non-ferrous metallurgy	15. ELV and waste tyres
4. Sludge	10. Construction and demolition waste	16. Textile waste
5. Waste used as or in fertilizers	11. Residues from (waste) incineration	17. Glass waste
6. Wood waste	12. Mixed waste	18. Medical waste
		19. Ship waste
		20. Mining waste

These categories of waste, as well as other ways of categorizing waste streams, are further described in section 3.5 and Annex B.

#### Step 2. Prioritisation of waste streams based on risk criteria

Risks of transfrontier shipment of waste are on the one hand caused by the hazardous qualities of the specific waste types and on the other hand by the chance that these qualities will materialize during the shipment and waste treatment.

➔ **Risk = hazardous effect X probability**

##### Impact/effect criteria:

Most important hazardous criteria are:

- What are the real hazardous properties of the waste for humans, animals and ecosystems?
- Is the waste in daily practice used as a cover for illegal transport of other, hazardous wastes?

These effect criteria evolve from the intrinsic properties of the waste. This makes them general in nature and suitable for application in all countries. They will be further discussed in section 3.6.1.

##### Magnitude/probability criteria:

To determine if the risks of a waste type really occur in practice, at least the following chance criteria should be evaluated:

- What are the dimensions of the waste stream in the respective country:
  - How much waste is produced?
  - How much waste is imported?
  - How much waste is exported?

- Is there sufficient infrastructure for environmentally sound treatment of the imported waste stream available?
- Is the waste stream exported to a high-risk country without a sufficiently developed infrastructure for enforcement and waste treatment?

These probability criteria are further described in section 3.6.2. They are the *minimum level* for risk assessment.

In section 3.6.3 some more detailed criteria are described that can be used to refine the risk assessment.

The selection of risk criteria will influence to a high degree the outcomes of the risk assessment and therefore should be closely linked to the strategic goals of the authority.

### Evaluation, prioritisation and description

For each risk criterion the potential danger or chance should be scored on the assessment as a:

- high risk,
- medium risk or
- low risk.

Based on this overview, the total risk-interpretation should be described for all 20 waste streams. Because weighing risks is difficult and mostly subjective, a qualitative description might be sufficient.

Based on this description a TOP-X is chosen of waste-streams with the highest priority.

More possibilities for presentation and interpretation of risk-scores are described in section 3.7.

## Step 3 Logistic axes and companies of special interest

### *Logistic axes (routes) and crucial points*

For the top 5 of prioritized waste-streams it should be assessed:

- Along which traffic axes/routes does the waste shipment primarily take place?
- What crucial logistic points offer the best starting point for inspections?
- What degree of surveillance is desirable? More information about this aspect is to be found in section 3.7.

### *Companies / waste sites*

For the top 5 of prioritized waste-streams it should be assessed (based on chain and target group analysis):

- What companies are of main interest in import, export and waste treatment?
- How can the compliance and readiness to comply be assessed?

Ideally, the compliance and readiness to comply is assessed on the basis of real inspection results; if these are not available they should be based on professional judgment of inspectors.

Several ways to make a risk-assessment for companies is described in the IMPEL-guideline 'Easy tools Risk Assessment Guidance Book' (see <http://www.impel.eu/tools/easytools-risk-assessment/>). One example is the "Integrated Risk Assessment Method" (IRAM) used for waste sites inspections in Slovenia (see Box on page 20).

### **3.4 Uniform template for risk-assessment**

To compare risk assessments it is important that a uniform template for the risk-assessment is used. If every country uses the same template it is possible to figure out overlaps, gaps and international patterns and connections. This makes it possible to determine joint goals, priorities and approaches. A standard template is proposed in Annex B.

### **3.5 Relevant waste streams**

The scope of the risk assessment and the inspection plan highly depends on the statutory competencies of the agency that is responsible for drafting these documents. An authority which has wide legal powers to inspect both transports and all types of companies (waste sites) probably wants to focus its inspections on those actors (or bottlenecks) in the waste chain where the impact of the inspections is highest. This means that the risks will need to be assessed over the entire waste chain, and a good understanding of the functioning of the collection and treatment practices in this waste stream is therefore necessary. Such an authority will likely choose to look into waste streams as a whole. At a higher level, priorities will have to be set by comparing risks associated with different waste streams.

Another authority with legal powers limited to road inspections probably wants to focus its inspections on the traffic axes where most high risk waste transports pass. The selection of traffic inspection locations will depend on (a) the number of waste transports passing by, (b) the type of waste that is transported in significant quantities via this traffic axis. This means that even then it is necessary to know which type of waste poses a higher risk. For example, it is less useful to carry out traffic inspections in the framework of the WSR in a location where there are mainly local transports of non-hazardous waste.

The same goes for authorities whose competency is limited to company (waste site) inspections. Due to staff capacity limitations it is not possible to inspect all companies involved in waste collection and treatment. One might reduce the scope based on indicators such as compliance behaviour and emissions, but in the framework of WSR enforcement another limiting indicator is the type of waste that is being collected and treated, and the risks associated with it.

This means that even if an authority wants to limit the risk assessment to high priority traffic axes or companies, it is necessary to have at least an idea of which waste stream poses the highest risks. Hence the most important part of the WSR risk assessment is the comparison of different waste streams, starting from a list of streams that constitute the subject of the risk assessment.

Compiling this starting list is the first step in the risk assessment. One should be careful not to omit waste streams from the beginning, for example because at first sight they don't imply important risks, or because little is known about the waste stream. Limiting oneself to the usual WSR suspects such as ELV, plastic waste and WEEE is another approach that is not advisable, because in this way other waste streams that are less documented will be systematically overlooked. The following approaches for composing the starting list might be useful:

- a) High priority waste streams from a policy point of view. Every member state or region probably has a number of waste streams where policy making, legislation, sensitization and (sometimes) enforcement focus on. One could choose to limit the risk assessment and the inspection plan to these waste streams.

- Advantages: these waste streams are well documented, and there will be a synergy between enforcement and other policy initiatives
  - Disadvantages: these waste streams may be chosen from an entirely local point of view (regardless of the WSR aspects), for example for reasons of resource or energy efficiency, with a focus on domestic waste streams. Limiting oneself to such a starting list means omitting certain other waste streams with important risks associated to them.
- b) A starting list covering the entire EWC list. Of course it is impossible to compare 600+ waste types, many of them very exotic. Therefore it is necessary to group waste types with similar characteristics into waste streams, preferably less than 20 to keep it manageable. It is advisable to group waste types according to the collection and treatment scheme. Collection and particularly treatment of waste is based on the nature and the final application of the waste. This approach of combining EWC codes according to nature and application is quite similar to the Basel and OECD classification. For example: paper waste, originating from industrial packaging (EWC 15 xx xx) and from households (EWC 20 xx xx) will be handled for a great deal by the same actors (collectors, traders, recycling facilities ...).

During the grouping process it will turn out that certain waste types can be attributed to more than one waste stream, for example because one type of waste can be used in very different applications. This will result in an overlap between those waste streams. This may be problematic in the case of an individual hazardous waste type that is grouped together with a larger number of non-hazardous waste types. The high risks associated with this hazardous waste will be 'diluted' by the low risk scores for the other waste types in the same waste stream, resulting in an average or low general risk score. This problem can reveal itself during the risk assessment study itself. This could be solved by isolating the high risk waste type again, either from the start of the risk assessment or during the compilation of the results.

Waste streams should only be included in this study if they are covered by the WSR. For example, it is not useful to include animal by-products that are covered by another regulation.

An example of a list of relevant waste streams is given in Annex C.

## **3.6 Risk criteria**

### **3.6.1 Impact/effect criteria**

#### **1. Hazardous properties of waste**

The hazardous properties of waste largely determine whether there is an environmental risk in case of unauthorised or irresponsible treatment. These risks may reveal themselves in several ways:

- Dispersion to soil, water and air,
- Climate change,
- Damage to ecosystems,
- Damage to human health, such as negative effects on food quality or air quality,
- Safety effects, such as risk of fire or explosion.

One could opt to make different risk criteria for all of these aspects, but referring to the general hazardous properties as indicated by the EWC-code or the Basel/OECD code might be the easiest and the most objective way.

## **2. Cover opportunities**

For a number of waste streams (due to production methods, size and complex processing steps) shipments often are more polluted than could be expected from their classification under the EWC. In some cases this may be brought about not by criminal intentions but by lack of knowledge or inattention. On the other hand, the blending of hazardous waste streams into less/non-hazardous waste streams may also be deliberate in order to avoid the high costs of hazardous waste treatment. There are waste streams that are more likely to be contaminated than others.

### **3.6.2 Magnitude/probability criteria**

These criteria all relate to the probability that a waste stream will have a negative impact if manipulated in a wrong way. These criteria will influence to a high degree the continuation of the risk analysis. If a certain waste stream doesn't exist in significant quantities in a certain member state or region, and import and export are negligible, further analysis of its risks and the development of enforcement strategies are useless in the framework of the WSR.

#### **1. The amount of waste generated**

The size of the generated waste stream is an indicator for the total impact that the flow can have on the environment. The greater the flow the greater the likelihood that such an impact will occur. Besides, even if the theoretical impact of a certain type of waste is only average (for example for non-hazardous waste), the total impact of the waste stream may be high due to the large quantities that are generated.

#### **2. The amount of waste exported**

Similar to the volume of waste generated in the country, the exported quantity may be an indicator of the likelihood that environmental damage will occur. The ratio waste generated/exported gives a good indication of the extent of the transfrontier character of the waste stream. If a certain waste type is generated in large quantities, but only imported or exported to a small degree, enforcement based on the WSR is not the right option. In that case one might opt to discard this waste stream from the further steps in the risk analysis.

#### **3. The amount of waste imported**

This criterion is similar to the amount of waste exported.

#### **4. Notifications**

The number of notifications and/or notified transports is connected to the amount of waste imported and exported but it refers mainly to hazardous and non-listed waste types, plus exports of green-listed waste to certain destination countries. Nevertheless, this number points to potential problems associated with the complexity of the waste stream: An increase of notifications and/or notified transports means that the market is more diverse, with more possibilities of mixing and false declaration, and that probably more capacity is needed for enforcement.

## 5. Destination countries

Not only the exported waste itself is important, but also the treatment method in the country of destination. Countries can be distinguished by their standard of treatment. The risk of environmental damage is lowest when all the waste is exported to countries with a high standard of treatment. One can evaluate the general standard of treatment in another country using proxy indicators such as poverty index, corruption index and/or OECD-membership.

If a certain waste is exported in significant quantities to countries with a low treatment standard, the risk criterion 'destination countries' will get a high score. For example: WEEE is exported from most European states to African countries and will probably get a high score in most European member states. The export of demolition waste to countries with a low treatment standard (e.g. illegal dumping) may only occur in member states at the eastern border of the EU, and for that reason will only get a high score in those member states.

### **3.6.3 Criteria for fine tuning the risk assessment and for identifying the possible sources of illegal shipments**

The following criteria are all probability criteria. They are used to elaborate the risk analysis, after (i) assessing whether a waste stream poses a theoretical negative effect (impact criteria) and (ii) after assessing whether the waste stream exists in significant quantities and is being imported and/or exported.

Moreover, assessing these risk criteria in detail will reveal which actors in the waste chain are more responsible for illegal shipments than others. At this stage of the risk assessment the possible sources of illegal shipments are identified, as required by the WSR.

#### **1. Compliance record**

The compliance record can be seen at the level of the waste stream or at the level of an individual company. This record reflects the amount and the share of non-compliances that have been detected. It can also reflect, in a less objective way, the reputation of a certain waste type, trader, exporter or waste treatment plant and the overall experience that the inspection services have with them. The non-compliances should in the first place relate to the WSR, because after all, this risk assessment is made as a basis for a WSR inspection plan.

Distinction has to be made between more serious infringements (involving hazardous waste, substandard treatment, missing notifications ...) and less important infringements (missing pre-notifications, problems with Annex VII ...).

#### **2. Legislation**

The quality of European, national or regional legislation influences compliance behaviour to a higher or lesser degree. Legislation that is complex, inconsistent or not adapted to reality will raise the chance of incorrect application. The lack of legal standards, fragmentation of competencies and lack of collaboration between competent authorities will have the same negative effect.

### 3. Market complexity

The more complex the market for a specific waste stream, the higher the chance that certain actors will deviate from the collection and treatment track that is prescribed by law. The complexity of the market can be described using the following indicators:

- The number of actors (producers, treatment facilities, traders ...) involved;
- Price volatility: sudden rises or decreases of the collection and treatment prices will change the market in an abrupt way, bringing problems to policy making and enforcement. High caloric waste for example, which usually faces few problems regarding valuable treatment, might become interesting for illegal dumping when collection prices drop below zero due to dwindling oil prices.
- Collection and treatment prices: high treatment prices (including taxes) usually work as an incentive to deviate waste streams to illegal, low cost treatment techniques. In the scope of the WSR the price difference between the country of dispatch and of destination is more important.
- Don't forget to describe emerging waste issues such as the growing amount of electric car batteries, impending import or export bans, ... If it is yet not to be foreseen how these issues will develop, they will increase the total risk for the waste streams involved.

### 4. Collection and treatment techniques

Some waste treatment techniques are more likely to be used for illegal purposes than others. While waste incineration can only be used for final disposal of waste, some interim treatment techniques such as blending can be used to dilute hazardous waste. Interim treatment (R12) in general can be used as a black box to divert waste streams by mixing, fake sorting and changing waste codes. The existence of such treatment facilities in the member states, or the export of waste to such facilities on a regular basis therefore increases the risk of incidents.

The influence of the treatment technique is also highly connected to its controllability. Some treatment techniques cannot be monitored easily because of difficulties in sampling/testing the type of waste, or because of the simple fact that illegal operations do not happen in the open.

### 5. Criminal interference

Some waste collection and treatment schemes are known for having been penetrated by organized crime, and/or are regularly used for money laundering. These groups are not bothered with following the rules, which increases the risk of incidents. This factor will also increase the risk from an environmental point of view and is clearly a 'probability' and not an 'impact' criterion; it has to be borne in mind that environmental protection and not crime fighting is the purpose of the WSR inspection plan. A single high score on the risk criterion of 'criminal interference' cannot in itself justify the classification of that particular waste stream as 'high risk'.

### 6. Traffic axes

The existence of international roads and large seaports increases the number of waste transports, and therefore the risks associated with them: illegal transports, illegal interim storage or treatment, involvement of organised crime, unsafe vehicles etc.



### 3.7 Presentation and interpretation of results

There are several ways of calculating the total risks associated with waste streams:

- Simply adding all scores for the different risk criteria within a waste stream, generating an 'overall risk score' for this waste stream; the use of weighing factors is a possibility;
- Calculating the average risk score for impact criteria, for magnitude criteria and for fine-tuning criteria.

A number of calculating techniques are presented in the IMPEL DTRT-TFS Guidance Book (see <http://www.impel.eu/wp-content/uploads/2015/12/FR-2012-14-DTRT-TFS-Step-by-Step-Guidance-Book.pdf>, pp. 22 et seq., 46 et seq.).

The results of these calculations can be presented in several ways, using a table format or diagrams.

Example of a table presentation:

	Impact criteria		Magnitude criteria			Fine tuning criteria				Total risk score
	Hazardous properties	Cover possibilities	Amount generated	Amount exported	::	Compliance record	Legislation	Market complexity	::	
Waste stream 1	avg	high	low	low	...	low	high	high	...	avg
Waste stream 2	high	high	low	high	...	low	high	high	...	high
...	...	...	...	...	...	...	...	...	...	...

The scores can be represented in the table using (a combination of):

- Qualitative indications: average/high/medium, or +/+/, or A/B/C, or red/orange/green;
- Quantitative indications: the calculated score for every risk criterion, and the calculated score (including weighing factors) for the total risk score.

An example of a more detailed risk matrix can be found in Annex D.

The interpretation of the total risk scores should yield a limited number of waste streams that we want to focus on for the coming years. The outcome should allow us to give an answer to the following question, in an understandable and logical way (not merely by referring to the naked figure of an overall risk score): Why do we think this particular waste stream is high risk, and why did we choose to focus our inspections on this waste stream instead of other streams?

A very strict quantitative comparison of the total risk scores may not be advisable, because in these figures there is a lot of uncertainty and qualitative interpretation. The total risk scores are in fact highly influenced by:

- The way different waste types have been grouped into waste streams,
- The (non)availability of quantitative information,
- (Lack of) experience of the people involved in the risk assessment,
- Weighing factors (if used) because they are more or less chosen in an arbitrary way.

Probably the comparison of the risk scores will yield a set of waste streams that are (a) clearly high priority, or (b) clearly low priority, or (c) in between. The exact risk score of the different waste streams within the group of “high priority streams” is not so meaningful. The interpretation of the total risk scores has a considerable qualitative element to it. It is not because a waste stream has a slightly higher overall risk score than another (maybe for some artificial reason) that we have to select this waste stream as the priority for the next years.

Comparing waste streams will result in the following priority classification:

- High priority waste streams: Enforcing these waste streams needs considerable dedicated capacity (staff and means), enforcement guidelines, collaboration agreements (national and/or international) ...
- Medium priority waste streams: Enforcing these will need less dedicated capacity, rudimentary guidelines, and if necessary, collaboration agreements.
- Low priority waste streams: These will be dealt with only ad hoc, without developing dedicated guidelines or collaboration agreements. Capacity will be attributed to these streams as a group.

Grouping waste streams into priority classes can be done in the following ways:

Priority	Based on total risk score	Based on available knowledge	Based on impact vs. probability
High	Score > x	Waste streams with a high risk score (total risk or a number high scores on individual criteria), which are well documented and of which the real risk is known (e.g. WEEE)	High impact, high probability
Medium	x > score > y	Waste streams with a high theoretical risk score (e.g. chemical waste)	- High impact, low probability - Low impact, high probability
Low	Score < y	Waste streams which don't pose a real risk from a theoretical point of view, and where no big problems have been encountered in the past	Low impact, low probability

Eventually it is advisable to present the results of the risk analysis in short explanatory texts, translating the scores for the various risk criteria into easily readable and understandable language. These summarizing texts should also give a short overview of the possible sources of illegal shipments within a certain waste chain.

Example for 'metal waste': *“Metal waste is a voluminous waste stream that, for the bigger part, doesn't pose any problems related to treatment in our region or abroad. There are however problems with a small part of this waste stream, due to pollution with oil and/or PCBs. Another issue is the export of treated WEEE that is exported for metal recovery in conditions that do not meet European standards. The number of traders and competition among them is rather high, but the export market is controlled by a limited number of players. This waste stream can be supervised at two stages, namely using WSR inspections at the exit of the EU (major ports), and with respect to PCB-contamination, at the collection and/or first treatment phase. As a conclusion one can say that attention to shipments of treated WEEE*

*and PCB-polluted metal waste should get high priority, but the allocated capacity can remain within reasonable limits.”*

An important target group for these explanatory texts are the public prosecutors who will have to deal with the legal files that will derive from the enforcement actions. Ideally, prosecutors and enforcement agencies should have the same priorities when it comes to the enforcement of the WSR. The explanatory texts can assist them in understanding the importance of certain cases or even serve as an inspiration for building court cases. The best way is to involve prosecutors already at the stage of executing the risk assessment.

### **3.8 Enforcement based on the WSR**

According to Regulation (EU) No 660/2014, the WSR inspection plan has to be a distinct plan, or a distinct part of another plan. For this reason we can only include waste streams where an enforcement based on the WSR can make a major difference. The following points have to be taken into consideration:

- The “transboundary character” of a waste stream: Is this waste being transported across borders in important quantities or not? This factor has been dealt with by the ‘magnitude criteria’.
- In order to control the negative impact of a certain waste stream: Is it better to enforce according to the WSR, or should we consider other environmental legislation? E.g. problems with emissions might be due to the bad quality of the waste being imported from abroad, but it might also be due to technical problems related to the recovery facility. In the latter case, enforcement of the facility’s license is a better option, and therefore these inspections should not be included in the WSR inspection plan.

The decision to exclude a waste stream from the inspection plan, because WSR enforcement is not preferential, can be made at some point during the risk assessment:

- Just after assessing the magnitude criteria; further analysis of those waste streams for which enforcement tactics other than WSR inspections are desirable, won’t be necessary;
- At the end of the risk assessment: The risk assessment of the waste streams that are discarded in this final step might serve other purposes (for example: inspection plans for waste streams without a transboundary character).

## **Best practice: Risk assessment with IRAM in Slovenia**

IMPEL developed an Integrated Risk Assessment Method (IRAM) within the “Easy tools” project as an instrument to help Member States to fulfill inspection obligations under Art. 23 of the Industrial Emissions Directive (IED). This IT tool contains risk criteria for ranking sites that are to be inspected and it is not only used for IED installations but also for other facilities, e.g. waste sites.

The Environment and Nature Protection Inspectorate in Slovenia uses this IT tool for ranking IED installations and waste sites since 2013. The inspectors developed quite simple impact criteria and operator performance criteria for waste sites, such as recovery and storage facilities, collection points and facilities involved in transfrontier shipment of waste. The criteria are listed below:

### **IMPACT CRITERIA**

#### **- Waste management:**

- < 1,000 t/year
- > 1,000 t/year and < 50,000 t/year
- > 50,000 t/year

#### **- Status:**

- Recovery
- Disposal or co-incineration

#### **- TFS:**

- No activity
- non-hazardous waste < 1,000 t/year or hazardous waste < 100 t/year
- non-haz. waste 1000 - 10,000 t/a or hazardous waste 100 - 500 t/a
- non-haz. waste > 10,000 t/a or hazardous waste > 500 t/a

### **OPERATOR PERFORMANCE CRITERIA:**

#### **- Compliance with regulations:**

- Yes
- Partly
- No

#### **- Number of complaints:**

- No complaints
- 1 - 3 complaints or illegal shipments/year
- > 3 complaints or illegal shipments/year

Inspectors evaluate impact criteria and operator performance criteria in order to reach a risk profile sum. Depending on this sum, facilities are inspected each year, every two or three years. On this basis about 100 closing orders or other compliance measures are taken annually. In the last years IRAM was found by inspectors to be a very useful tool for preparing an inspection plan.

## **3.9 Minimum number of inspections**

### **3.9.1 Background**

According to the third sentence of the new Article 50(2a) WSR, the risk assessment shall aim, inter alia, to identify the minimum number of inspections required, including physical checks on establishments, undertakings, brokers, dealers and shipments of waste or on the related recovery or disposal.

Rules on minimum frequencies for inspections are contained in various EU directives where relatively high risks for environment and human health are at stake and regular controls are seen as particularly important for the implementation of the law. For instance, under the Industrial Emissions Directive (2010/75/EU) and the “Seveso III” Directive (2012/18/EU on the control of major-accident hazards involving dangerous substances), the period between two consecutive site visits shall not exceed one year for installations posing the highest risks (or “upper tier establishments” in Seveso terminology) and three years for installations posing the lowest risks. Under Directive 2010/63/EU on the protection of animals used for scientific purposes, inspections shall be carried out on at least one third of the users each year in accordance with a risk analysis, and breeders, suppliers and users of non-human primates shall be inspected at least once a year.

### **3.9.2 Information needed to calculate the minimum number of inspections**

For calculating the minimum number of inspections for a certain waste stream, we need to take into account the following information:

- The quantity of waste being generated or transported (across borders),
- The potential profit to be gained from illegal activity,
- The number of actors involved,
- The compliance behaviour (e.g. WEEE-actors respond to inspections by developing new methods to dodge them, whereas for large industrial streams a few cases can be enough to make the companies follow the rules, because their business depends on legal security);
- The (inherent) risks associated with the waste stream;
- The effectivity of the inspections (are the targets, the locations and the inspection technique well chosen?).

### **3.9.3 Minimum number of company and transport inspections**

Obviously, the required minimum of inspections will vary widely between recovery or disposal facilities, storage or loading sites, traders and collectors, waste transports on the road or in a port. Only the biggest waste management facilities can compare with an IED or Seveso establishment, and they are often not involved in any transboundary waste shipments. On the other hand, certain smaller storage and loading sites may be important hubs for illegal traffic of, for instance, end-of-life vehicles or electronic waste, and the activity there can change very quickly according to market conditions or business affiliations of the operator. Therefore, with these sites frequent inspections at least once a year may be highly recommendable for the waste authority in order to stay informed.

Waste transport checks on the road and port inspections again require very different quantitative calculations, according to the volume of traffic, the number of containers etc. The sheer mass of cargo transports in general and of waste transports in particular that move on European roads and leave the EU via major seaports makes it difficult to suggest any concrete minimum numbers of inspections. How-

ever, the experience of some competent authorities shows that a certain frequency of inspections can have a visible effect by considerably reducing or even temporarily eliminating illegal waste shipments in a defined area (cf. the best practice examples in this guideline from the Netherlands and Germany / Lower Bavaria). For major transit roads and seaports one may even formulate a “rule of thumb” that one inspection a day on average throughout the year, including weekends and carried out by any kind of inspection agency (waste authority, Customs, Police and others) will achieve a relevant reduction of illegal traffic.

### **3.9.4 Minimum number of inspections in the absence of sound information**

In some cases there is just not enough information to identify the right number of inspections, for example when starting to tackle a new waste stream which the inspection authority is not familiar with. A way to get around this problem may be the following:

- If there is very little information on the waste stream: start with a small number of inspections, and after some time evaluate whether there is a need to increase the number or even reduce it.
- If there is enough information and it is already clear that the staff employed is not enough to counter illegal traffic, a certain percentage needs to be added. One will have to evaluate the effect after a couple of years.
- If there is enough information on the waste stream, but it is unclear how much of it is illegal and how to develop an inspection strategy, one could start small and increase or reduce the number of inspections over the following years according to the outcomes of the inspections.

### **3.9.5 Distribution of capacity among waste streams of different priority**

The waste market can be very volatile, and new illegal circuits might emerge in short time. A risk analysis might guide planning authorities to focus the inspection capacity on the waste streams where the biggest problems are (or are to be expected).

A certain percentage of inspection time should be set aside for **ad hoc cases**: return shipments initiated by other authorities, investigation of observations during road checks, complaints, all urgent cases that pop up during the year and that are not included in the specific inspection campaigns. This group of inspections could also include all ad hoc inspections on waste streams that have not been selected as “high risk” during the risk assessment.

While calculating the necessary capacity, time for follow-up inspections should also be taken into account (for example 20% of the total inspection time). The time for follow-up inspections for a certain waste stream will – in theory – decrease with time.

The available capacity may be distributed as follows (for example!):

	Dedicated percentage of available capacity
Inspection of high priority waste streams	50%
Inspection of waste streams that present possible but unclear risks, due to missing information	10%
Inspection of low risk priority waste streams	20%
Ad hoc inspections, return shipments, responding to customs/police requests, ...	20%

### **3.10 Alternative approaches on risk assessment**

The method of comparing all waste streams as described above is just one possible way of going about the risk assessment. Other approaches can be the following:

- A region-based approach: One can focus on a certain region in the world with lower environmental standards, such as South-East Asia or West-Africa. All waste streams that are exported to that area are inventorized and compared in a similar way as in the standard approach. The advantage of the region-based approach is that the risk analysis is confined to a number of waste streams going to this specific area, in this way avoiding too much research on waste streams with a limited transboundary character.
- A problem-based approach: One can focus on finding a solution to a specific problem, such as 'the dumping of hazardous waste in West Africa' or 'the incineration of badly-sorted mixed waste'. Once again, all waste streams that contribute to this problem are inventorized and compared.
- An intelligence-based approach: Intelligence and information on the evolution of waste streams and the compliance behaviour of the actors involved are gathered in a database. The analysis of this information will yield a number of current or future risks that are discussed and compared (for example in a workshop) using a risk matrix.

### **Best practice: Co-ordinated seaport and other inspections in NL**

In the Netherlands, the Human Environment and Transport Inspectorate (ILenT) is responsible for the enforcement of waste shipment law. The Inspectorate works intensively together with Customs and the Police.

Every four years ILenT draws up a risk assessment for waste shipment compliance. This assessment determines the intrinsic risk of particular waste shipments, based on probability (scale of exports etc.) and effect factors (e.g. toxicity). Information from previous inspections and enforcement measures will be used in this process. Based on this risk assessment, the Inspectorate, Customs and Police establish priorities and make annual agreements about inspections in the large seaports and along the most important road traffic routes.

- For container-inspections in Dutch seaports (especially Rotterdam and Amsterdam) annual agreements are made concerning the number of containers that the Customs will inspect, and the priority waste streams and companies. For risk-based container selection the Customs and ILenT draw up special risk profiles. Within the scope of this cooperation Customs carries out 3500 container checks every year.
- For traffic inspections along the main Dutch roads, the Inspectorate makes annual agreements with the National Police on the number of inspections, priority waste streams and transport companies and most important transport routes. Within the scope of these annual agreements, both the Police and ILenT carry out 600 traffic inspections each (in total 1200 inspections per year). Partly these are done together.
- The total number of inspections by ILenT, Customs and Police with regard to waste shipments was approximately 5,000 in 2014. The Inspectorate alone found 157 illegal shipments in that year.

Outcomes, experiences and trends are evaluated every year. They are used to assess the priorities, inspection plans and cooperation agreements for the next year.

Customs and Police deal with violations of the waste shipment regime themselves as far as possible. Complex cases are handed over to the Inspectorate. ILenT also supports criminal enforcement for cases initially handled by Customs and the Police by using administrative sanctions (repatriating waste, administrative warnings or penalties). In normal years, there are approximately 275 complex cases.

In order to facilitate this way of working, the Inspectorate trains Customs and Police officers to become TFS specialists, so that they can in turn support their colleagues as necessary. Every year ILenT organises special events (so-called “network days”) to inform Customs and Police specialists about new developments in policy and regulation, trends and priorities.

In addition to these inspections, ILenT carries out 225 administrative inspections focusing on companies that deal with priority/high-risk waste streams, for example waste oil, organic bases like AEEA, mercury-containing waste, used cooking-oils and glycerin used for biogas production.

The experience with e-waste inspections in the years 2012-2014 showed that a high frequency of inspections led to increased compliance and considerably less violations of the Waste Shipment Regulation, and that it is necessary to stay vigilant if a relapse should be prevented.



## 4. Necessary Elements of an Inspection Plan

### 4.1 Objectives and priorities

At the beginning of the planning process it is necessary to identify and establish the objective(s) and priorities of the inspection plan.

- This could be a simple statement, highlighting the purpose of your inspection plan – for example ‘ensuring compliance with EC Regulation 1013/2006’.
- Or it could be a more targeted statement: Your country may have been subjected to repatriation requests which may concern similar waste streams. This could form the basis of including a Priority Waste Stream within your Objective statement.
  - For example, ‘We will seek to perform inspections on waste shipments to ensure compliance with the requirements of the Waste Shipment Regulation. We will prioritise waste shipment inspections on the following waste stream/s \_\_\_\_\_ as we have designated the shipment of these wastes into/out of our country/area as (a) problem waste stream/s.’
- The statement may include sub-objectives or measurable targets, such as:
  - Target 1: To ensure a minimum number of inspections of certain transport routes or logistic hubs .
  - Target 2: To carry out a minimum number of joint training and public relation activities over the year.
  - Target 3: To effectively stop apprehended illegal shipment organizers and site operators from continuing their activities.
  - Target 4: To reduce the quota of illegal traffic in relation to inspected waste shipments by a certain percentage - overall and/or for certain priority waste types.

### 4.2 Geographical area

The Inspection plan should clearly define the geographical area to which it applies, i.e. a state, region, county, municipal area etc. Limitations of competence for inspections in certain locations, e.g. in ports, on roads, railway tracks and waste sites are better specified under “Tasks” (4.4). For geographical mapping see below under “Information” (4.3).

### 4.3 Information on planned inspections

The “information on planned inspections, including on physical checks” mentioned in Art. 50(2a)(c) WSR may be seen as the core element of an inspection plan. However, it will be useful to distinguish here between the strategic part of the plan that should be published, and the operational part or annex for internal use (also possible as a separate document). The former part will describe the planned inspections in more general or qualitative terms, especially the strategic objectives and priorities, targeted waste streams, major traffic axes, types of inspections and other essential information of general interest. The more sensitive data about concrete objects, times and locations of planned inspections will typically be reserved for the operational planning which in many countries is called “inspection pro-

gramme” and which is not to be published (at least not before the inspection). The question if, when and in how far inspection plans can or should be published is further discussed below in Chapter 6.

For the efficient use of human, financial and other resources the planning of inspection activities over a defined period should be as detailed as possible. The aim is to achieve effective controls throughout the chain of waste shipments, from the origin of the waste to the final destination.

The preceding steps of risk assessment and definition of objectives and priorities should be completed and the resources needed should be available. At this point, instead of a theoretical approach, it is necessary in particular to take into account the already existing data and findings of the participating authorities in the control area as quite different specific regional priorities may arise.

In general, the following details about planned inspections should be provided in the inspection plan, at least in the operational section for internal use:

- Targeted waste streams,
- Types of inspections in the field (= physical checks, e.g. of road, waterway or railway transports, in seaports, inland harbours or airports, on-site inspections of storage and treatment facilities),
- Potentially any important technical equipment used for physical checks and influencing their depth and effectiveness (scanners, video surveillance, helicopters, drones etc),
- Office-based “desk controls” (document checks),
- Names of the authorities performing or leading the inspections, and of the participating authorities,
- Targeted waste producers, dealers, brokers, shipping companies, waste treatment or recovery/disposal facilities, suspected illegal sites,
- The number of inspections planned for the year in question.

The plan should detail specific inspection areas that have been assessed as suitable to perform inspections, such as port areas, roadside facilities and also the location of waste sites. Mapping of these areas would offer most benefit to inspectors planning their daily inspections. A useful mapping tool is available at this web address: <http://www.mapcustomizer.com/>

#### **4.4 Tasks assigned to different authorities**

The inspection plan should outline the respective responsibilities of each authority leading/performing the inspection or participating in it and may provide the detailed arrangements for how communication and co-operation should be organised. The reason for this is that co-operation between the relevant authorities is crucial if illegal waste shipments are to be prevented and detected which requires a clear understanding of roles, obligations and powers of different authorities.

An example of a data sheet setting out the roles and responsibilities of each authority can be found in Annex E. The plan should also provide the contact details of each authority (this could be in an annex to the plan).

Where there is no central body drafting an overarching inspection plan and plans are established only at regional level, it will not be applicable or necessary to include all the bodies listed below. With several regional plans in one country there will be a need for close cooperation, especially between neighbouring regions and those that are connected by major traffic axes. It is recommended to reach a minimum of coherence between inspection plans of those regions, for example through arranging a regular exchange of draft plans and other important information between inspection planners and/or establishing a joint working group. Such mechanisms would be useful to ensure consistency of approach to risk assessment, planning and reporting. See also below 4.5 - Arrangements for cooperation.

The authorities to include may be, but are not necessarily limited to, the following (depending on national arrangements):

- **National environmental authority / waste shipment authority.** - In many countries the national authority for the environment is called “Environmental Protection Agency” (EPA) and so that abbreviation will be used in the following. The EPA is often the competent authority for planning and conducting inspections and possibly handling notifications for waste shipments. The authority may also publish guidance and coordinate the national arrangements for supervision of cross-border waste shipments, including pilot projects. The EPA may also coordinate national arrangements for the supervision of cross-border waste shipments and may be responsible for conducting risk assessments with collaborating agencies and tracking any waste flows.

It is likely that the EPA will take the lead on training other agencies on waste shipment inspections. It is also likely to hold the National Contact Point for IMPEL-TFS and lead on “Enforcement Actions” work.

The EPA may have its own intelligence capabilities. Where this is not the case, the other authorities may feed in to the Police system.

It is likely that the EPA will have the responsibility as the competent authority of dispatch to ensure that any waste subject to repatriation is recovered in an environmentally sound manner.

- **Environmental Inspectorate.** In other countries there exists a national environmental inspectorate which conducts the inspections and is also responsible for inspection planning.
- **State / Provincial / Regional administration.** – In large Member States or those with a federal structure, the state or regional administrations or county administrative boards are often responsible, at least in part, for the supervision of waste shipments. They may also have responsibility for controlling certain environmentally hazardous activities or inspecting waste sites.
- **Customs Administration.** - Customs authorities have a key role in regulating waste shipments, primarily in the pre-selection of shipments for inspections and investigations. Article 13 of the Community Customs Code (Regulation (EEC) No 2913/92) provides for the right of Customs to carry out controls to ensure that customs but also non-customs legislation applicable to goods moved across the EU borders is correctly applied. There may be several different officials of the Customs Department working with cross-border waste shipments, for example those performing the physical checks or granting clearance, as well as risk analysts, investigators and specialists. Guidance for Customs officers can be found at [http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52015XC0512\(03\)](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52015XC0512(03)). Customs authorities will also take the lead on World Customs Organization projects such as Operation Demeter.
- **Police.** – The Police have the function to maintain public order and security and by that also a vital role in detecting and prosecuting illegal shipments. As part of their daily activities to patrol their area, inspect suspicious sites or vehicles, they may come upon violations of waste shipment law. Furthermore, in most countries it will be the Police, not the competent authorities, who have the power to stop vehicles on the road. The Police usually also have to prepare the cases for criminal prosecution where this is not done by Customs or the EPA or Inspectorate itself.

The Ports/Border Police may have a specific remit in terms of monitoring shipments at certain crossing points.

Several manuals are available for police inspections of waste shipments. Especially recommended is the “Waste Transport Checks Manual” of the Belgian Federal Police which was published as a result of the international “Augias” project (see [http://edu.igo-ifj.be/sites/default/files/D\\_KALUT\\_AUGIAS\\_Manual.pdf](http://edu.igo-ifj.be/sites/default/files/D_KALUT_AUGIAS_Manual.pdf)).

- **The Coast Guard.** - In countries where there exists a separate Coast Guard it may be responsible for the supervision of shipments of dangerous goods and waste in coastal waters. Their controls may be done in conjunction with the environmental authorities, Police, etc.
- **Municipalities.** – In some countries, the municipalities are the regulatory authority for inspecting internal waste transports or waste sites, and may take part in joint inspections.
- **Prosecutors.** – In most EU countries, it will be the Public Prosecutor who leads criminal investigations regarding illegal waste shipments. In some jurisdictions, e.g. in England, the EPA/Environment Agency has the competence to do this. Where an external body is responsible for prosecution, it may not be bound by formal agreements or an Inspection Plan, but close co-operation with the other authorities is recommended.
- **Non-regulatory bodies**  
Other authorities may be involved in monitoring waste shipments such as port authorities and railhead operators. It may not be appropriate to include these authorities in the Inspection Plan. However, it is important to develop good working relationships with these bodies.

#### 4.5 Arrangements for cooperation

Arrangements for co-operation with other regulatory bodies can be made on an ad-hoc basis. This may work very well ‘on the ground’ between inspecting officers. However, ideally, a common approach should be taken to implementing the Waste Shipment Regulation, and it is recommended that this is done through formal national agreements. Where regional plans are established, regional agreements may be appropriate.

In addition to such agreements and memoranda of understanding a ‘service level agreement’ may be used. A service level agreement (SLA) is more or less a contract between a service provider and the end user that defines the level of service expected from the service provider. SLAs are output-based in that their purpose is specifically to define what the customer will receive. An example of an SLA is that between the Dutch Inspectorate (ILenT) and Dutch Customs.

It is recommended to include the following elements in cooperation agreements:

- Contact list of the responsible team within each authority,
- Description of the roles and responsibilities of each authority, taking into account of the national structures, local situations and enforcement powers. This should include the Member State’s Waste Shipment Correspondent if that person is involved in inspections;
- Schedule of the workflow for each authority when they detect an illegal shipment;
- Indication of the method for establishing the lead in criminal investigations;
- List of methods for exchanging information and intelligence between authorities
- Details on the arrangements for regular meetings between the authorities at appropriate strategic, management and operational level. In case a national inspection plan is established, it may be practical to establish a national working group;

- Description of arrangements for training officers and building a knowledge base. The latter could be done via a secure online forum. It is suggested that the EPA / waste shipment authority be responsible for the drafting of operational guidance;
- Details on communication between the parties concerning forthcoming relevant legislative proposals;
- Information on responsibility for communication on multilateral basis, e.g. IMPEL-TFS;
- The provision of adequate resources by the authorities involved in the agreement for the inspections of waste shipments;
- Details on participation in national and international projects;
- Information on funding arrangements, where applicable, including how repatriated or seized shipments should be treated.

An annual schedule for joint operation work may be appended to the agreement with non-binding targets to ensure that the authorities involved are able to prioritise workload depending on available personnel. The work plan is an ongoing process, which means that it is important to update it. Collaborative work may be run as a 'project' or it may be more informal with the number and types of inspection, priority waste streams, etc. set out in annual targets. It is recommended to outline the measures that should be undertaken together at a national or regional level, and also highlight those that are to be implemented individually by the partner organisations.

A national working group (task force) should consist of people who have knowledge and expertise on transboundary shipments of waste in their authority. The chair of the meeting should rotate depending on operational priorities. It is suggested that the responsibility for the 'secretariat' function, i.e. administration lie with the EPA / Inspectorate / national waste shipment authority for consistency. This would mean that the EPA etc is responsible for updating the action plan. To save money, the project meetings and training sessions should primarily be held at the authorities' own premises. The use of video and telephone conferences also saves money and carbon dioxide.

To arrange the operational aspects involving more than one authority it is suggested that the following key points should be agreed prior to the inspections:

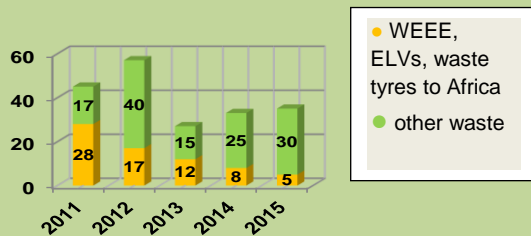
- Sharing of responsibilities (who?) –
  - Who will take the lead for specific operations, at specific locations, e.g. roads or border crossings?
  - Who will impose the penalty / instruct the waste carrier what to do with the waste, e.g. dispose of it at an appropriate facility?
- The appropriate time and place of intervention by the authorities concerned (when and where?),
- Selection of shipments for inspection (what and how?).

### **International co-operation**

Article 50(5) of the EU WSR provides the obligation of EU Member States to cooperate with each other. A good example of a formalised working arrangement between Member States can be found [here](#). Possible contents of such an arrangement are in principle the same as mentioned above for a service level agreement at national level. It may also be useful to co-ordinate inspection plans of neighbouring countries (especially the relevant operational sections) and ensure regular co-operation in relation to priority waste streams along a traffic axis that touches those countries. IMPEL joint inspections in the context of the "Enforcement Actions" project are a best practice example of such co-operation and should be mentioned in the information on planned inspections.

### **Best practice: Cooperation of WSR authority in Lower Bavaria with Customs and Police to stop illegal shipments to Africa**

**Chart:** 2011–2015 illegal shipments of waste from and through Lower Bavaria to Africa (via Hamburg or Antwerp harbour) reported by Police or Customs (road inspections or customs clearance)



Since 2010 road inspections on transboundary shipments of waste have been intensified along the Motorway A3 in Lower Bavaria. Customs reported at the TFS meeting in 2010 numerous trucks loaded with ELVs whose doors were sealed by insulating foam. The windows were blackened and boards indicating the destination (mostly Lagos) were fixed to the front door. The ELVS were packed with used EEE and vehicle spare parts which seemed to be waste.

The Competent Authority (CA) in Lower Bavaria defined these transports as a priority waste stream for road inspections. At the same time a network of interim storage facilities was built up and a guideline to classify waste / second hand goods with regard to EEE/WEEE and vehicles/ELVs was given to the inspectors in the field. As this kind of transports passed Lower Bavaria mostly in transit, the CA of the country of dispatch was contacted to develop a common classification of waste/non-waste.

The chart above shows that a considerable number of these illegal shipments were detected. From year to year the number of these transports decreased. As still a big amount of WEEE and ELVs is imported to Africa, this fact indicates a kind of "road-hopping". At the moment priority during inspections is given to trucks which are signed with an "A" (German: "Abfall" = waste). In sum the total number of illegal shipments per year did not drop (see chart: "other"). In this context it is observed that waste which should be notified is transported as "green listed" (demolition or mixed municipal or production waste, partly for disposal).

The conclusion of the inspections of the last years may be, in view of the persistent problem of illegal shipments, that the frequency of inspections should be further intensified and the number of staff in the field increased.

#### **4.6 Training of inspectors (and others)**

The following chapter will give examples of best practices for the training of inspectors and staff of other authorities relevant in the field of transboundary waste shipment inspections. However, this chapter does not deal with the training of inspectors carrying out company inspections. With regard to this complex topic the reader is referred to the results of the IMPEL Project "Best Practices Concerning

Training and Qualification for Environmental Inspectors” of 2003 and to the IMPEL Waste Sites Manual of 2012 (see <http://impel.eu/wp-content/uploads/2015/11/Waste-Sites-Manual-English-version.pdf>).

Potential addressees of the training are all authorities dealing with TFS issues, i.e. inspectors in the field (also of police and customs...), national competent authorities, police investigation departments and public prosecutors.

Inspectors in the field have to comply with a wide range of tasks.

Therefore it is recommended to contact the management level of Police and Customs with the request to delegate a core staff of responsible inspectors for training sessions which provide continuous instruction to specialists, including the health and safety aspects to opening containers and other cargo.

When planning training sessions one should always keep in mind that there may be beginners among the participants.

To provide efficient training it is proposed to organise

1. At least one annual meeting for waste shipment inspectors in the field and others (police investigators, prosecutors, instructors of police and customs training centers). It is useful to organise the meetings together with all concerned parties to optimise training via communication amongst all participants;
2. Smaller meetings (e.g. for an investigatory group ) on demand;
3. Several joint transport inspections (on the roadside, in a harbour or train station).

### **1. Annual meeting**

The following topics are recommended and should be updated yearly:

- **Introduction: Administrative framework TFS;**
- **New amendments** of national and international **legislation**; upcoming legislative proposals;
- **Guidelines on waste / used goods** (e.g. ELV, WEEE, waste tyres, textile waste, spare parts of ELV...);
- **Workshop: classification of transported waste** (power point presentation), **document check** (several small working groups should examine and discuss cases of transboundary waste shipments and present the results to the whole audience);





- **New technical findings and developments** (e.g. brominated flame retardants; waste hazardous property assessment....)
- **Health and safety** during transport and company inspections, i.e.:
  - Personal equipment (fluorescent and high visibility clothing, gloves, safety shoes, safety glasses);
  - Inspection procedure: administrative inspection first (pay attention to hazard warning stickers), afterwards load control in a safe environment (quiet road, storage facility, authorized examination area);
  - Load security: Is the cargo/waste loaded in a safe/unsafe manner? (Chain attached with hooks etc). A check strap should be used to open containers in the field;
  - Dangerous gases: fumigation, carbon monoxide, evaporation of empty gas cannisters?;
  - Radioactivity.
- **Cooperation agreement** between competent authority and police investigation department on preparing files for prosecution: **sharing tasks** in
  - Taking photos of the shipment; examination of trip recorder, securing of all documents (shipping documents, weight note, delivery order, journey documentation, Annex VII and notification documents);
  - Taking samples of the load and how to log them for use as evidence;
  - Checking the safe storage on the truck;
  - Opening containers/lorries and breaking Customs and company seals;
  - Interrogation of the driver on: employer–employee relationship, level of training (dangerous goods, TFS), details of the assignment (who, when, special instructions) and loading (type, amount, safety measures, knowledge of the load); how many of these transports took place already? Destination, time and place of border crossing?
  - Documentation of the take-back procedure;
  - Transmitting information to the public prosecutor.



- Discussion of illegal cases: further proceedings, outcome (see example below)

### WEEE and ELV from: to Africa

- **Date:** 14.05.2014
- **Place of Inspection:** Highway A 3
- **Inspection authority:** Customs
- **Waste Classification acc. Annex VII or Notification document:** (often: no documents)



Workshop Transboundary shipment of waste

### WEEE and ELV from: to Africa

- Further proceeding: On 14th May 2014 Customs sent fotos and a copy of the transport papers to the competent authority (CA) of transit
- => the CA of transit classified on 14th May the shipment as illegal, the driver was enjoined going on and the CA of dispatch was informed via e-mail
- On 15th May the CA of dispatch asked for more information, fotos
- On 16th May the truck was taken to a garage for further load inspection
- The load showed hazardous and not hazardous waste:  
Approximately 40 PCs, ELV, damaged engines, waste lead acid batteries and textile wastes
- => export ban and otherwise prior written notification and consent
- On 19th May the CA of dispatch confirmed the classification of the waste and sent documents for the take back
- the shipment was released on 21st May 2015
- the case (a detailed documentation of the load) was delivered to the prosecutor

Workshop Transboundary shipment of waste

## 2. Smaller meetings

(investigatory group) on demand, e.g. to prepare a file for prosecution, take samples or discuss classification of hazardous/non-hazardous waste in a **difficult case**.

## 3. Joint transport inspections: Several per year, on the road, in harbours or train stations;



they should be implemented by the national competent authorities with the inspectors in the field; objectives: Exchange of information, checking shipping documents (completed properly?) and loaded material (classification waste/non-waste, amber listed/green listed, not-listed?).

More information for self study and distant learning is provided by several national websites concerning TFS; see Annex J.

#### **4.7 Human, financial and other resources**

In order to draw up the inspection plan, it has to be ensured that the necessary resources for the various types of inspection will be provided.

Besides the usual outlay for wages and salaries of the personnel involved, carrying out waste related inspections „in the field“ generally means extra costs. So just like human resources, the financial and other resources in many cases can become a limiting factor for the planning of waste shipment inspections.

Therefore, it is necessary to determine which equipment for the inspections in the relevant territory (state or region) is required and which additional costs may occur. This very much depends on the geographical situation: Are there seaports or inland ports, national borders or strongly frequented international long-distance highways in the competent authority's area of jurisdiction? Does the territory contain relevant waste sites like disposal facilities?

Once the necessary resources have been determined, the existing resources should be assessed. The costs for filling the gaps as well as costs for maintenance and possible replacement of the existing stock must be identified. It should be checked if certain gaps can be filled with manpower or equipment from other authorities involved.

In order to enable swift and effective action, it is strongly recommended that authorities should reserve a fixed budget for operations beforehand. In this way, they do not have to apply for funding each time they want to act, or to carry out a prior legal assessment whether e.g. an illegal operator or waste producer can be made liable for the payment of inspection costs in the end.

##### **Human resources:**

In practice, the number of available personnel is limited and does not necessarily match the staff and time needed for carrying out all prioritised inspection activities. So the average amount of total staff

time required to perform all prioritised inspections has to be assessed. Times needed may differ depending on the type of inspections (road, seaport or railway inspections). Therefore it makes sense to enquire the average time needed for carrying out the above-mentioned different types of inspections. Such assessments must include all times needed like preparation, travelling, carrying out the actual inspection, documentation of results and reporting.

Additionally, the enforcement actions and further regulatory measures like repatriations or administratively imposed disposals in connection with illegal shipments can be very time-consuming and should not be neglected.

Finally, it has to be taken into consideration that in many cases the existing staff cannot be deployed completely for such inspections because the competent authority e.g. does not have separate full-time waste inspectors. As a result, the full-time equivalent number of staff should be estimated per organization.

Once the data for the human resources (working hours or full-time equivalent posts) are assessed and cross-matched with the personnel actually provided, the alignment with the priorities may lead to the result that emphasis has to be shifted or at least adapted. It is equally important that other authorities required for carrying out the inspections (e.g. Police or Customs authorities for stopping vehicles/vessels on the road or waterways) are fully available over the planned inspection period.

**Human resources should be outlined as working hours and/or full time equivalent posts per organization.**

### **Financial resources**

- **Personnel**
  - Wages and salaries,
  - Travel expenses,
  - Training costs.
- **Additional costs for regulatory measures**
  - Expenses for qualified personnel for e.g. opening welded cars or containers,
  - Handling of waste (unloading and reloading, transport),
  - Seizure of waste including interim storage and administratively imposed disposal,
  - Qualified sampling and lab analytics.
- **Other costs**
  - Maintenance costs and fuel for service cars,
  - Costs for replacement of equipment throughout the planned period,
  - Telephone call charges, batteries for torches etc.

### **Equipment**

Some of the below-mentioned equipment is not absolutely necessary for all kinds of inspections. Furthermore, in many cases some of the necessary equipment can be provided by other authorities involved. But for a reliable estimation of costs, most of the following items should be taken into account:

- **Obligatory safety equipment:**  
Safety clothing (hard hats, jackets, shoes or boots, gloves, goggles, ear protection...)
- **Checking or control-equipment**
  - Disposable suits,
  - Cameras, mobile phones,
  - GPS-devices (or even trackers),

- Sampling (and sample-storing) equipment,
- Rapid test-kits,
- Gas-detectors for container-inspections,
- Laptops or handhelds with internet access,
- Vehicles (e.g. regular office cars, all-terrain vehicles, mini buses with auxiliary heating, built-in table top, FAX, photocopier...),
- Miscellaneous (torches, binoculars, tools, metre/yardstick, business cards, maps, ground plans...).

### Health and safety

The health and safety of personnel is vital to the success of any plan. Waste shipment inspections are varied and occur in a number of different types of locations – roads, seaports, rail stations, waste sites and offices. Within these sites there are a variety of risks to the inspectors. Some may be obvious – collisions with vehicles, objects falling from vehicles/cranes, adverse terrain, inclement weather conditions – ranging from cold to heat/sunburn. However there may be hidden risks at what may be considered ‘safe’ inspections – e.g. aggressive behaviour from individuals.

These health and safety issues should already be addressed in the Health and Safety Manual of inspecting authorities and should be referred to in the inspection plan. Furthermore, it has to be taken into consideration that extra costs may occur, to ensure a safe working environment for the inspectors.

### 4.8 Follow-up on inspection findings

The Regulation does not set specific requirements on planning how to follow up on inspection findings. Although it is not a mandatory element of an inspection plan itself, it is nevertheless a recommended part of the planning process in order to achieve efficient and consistent enforcement.

#### Box 1

##### Examples of typical actions or sanctions:

- Prevent the export
- Warning letter
- Detain the shipment until details are clarified, or errors have been corrected
- Confiscation of illegally shipped waste
- Take-back of the waste
- Inspection report requiring documented corrections of error/ improved routines/changed courses of actions
- Withdrawal of the consent
- *Follow-up* inspections, or increased inspection frequency
- Administrative fine
- Penalty fine
- Prosecution/reporting the case to the po-

#### Possible courses of actions

As previously stated (section 4.5), waste shipment inspections are often arranged in cooperation with several authorities. It is advisable to set out which powers and duties each authority has (see examples in box 1). For instance in Norway, Customs has the power to confiscate or detain goods following an inspection until the competent authority (the EPA) has received sufficient information to decide on further actions. During an inspection, customs has the right to force open a container, while the EPA is the competent authority for the whole shipment inspection. It is important that the respective authorities are aware of these differences in order to be able to perform and follow up on inspections efficiently.

## Box 2

**Pre-planned actions**

It may be helpful to set out scenarios or ‘pre-planned courses of action’ before an inspection, in order to ensure that actors are treated in a uniform manner. One way to structure this might be by listing generalised scenarios of what might be found during typical inspections, and combining this with a guiding set of actions. These actions should be in line with, and based on, the risk analysis. See Annex E for an example of a simple list of pre-planned actions.

**Defining serious breaches**

It might be an advantage to define criteria for what constitutes serious breaches to the regulation (in contrast to minor breaches). Box 2 provides examples of such criteria.

- **Examples of serious breaches:**
- Systematic shipments of waste shipped as products.
- Systematic shipments of notifiable waste under guise of being green-listed waste.
- Large quantities of green-listed waste to countries that do not accept that type of waste.
- Notifiable waste sent without consent, e.g.:
- No notification consent,
- Gross exceedance of the number or quantity given in consent;
- The waste is inconsistent with what is given in the consent;
- Expired consent.
- Actors persistently flouting waste shipment rules (showing no improvement)

## 5. Reporting, documenting and sharing of inspection results

While not necessarily part of a documented inspection plan, documenting, reporting and sharing of information are integral parts of environmental inspections.

The following measures should be considered in the follow-up of an inspection, especially with regard to reporting<sup>1</sup>:

- Reporting should be done after every inspection and should be finalised as soon as possible (see further details in the text below).
- The findings of the inspection should be communicated to the inspected facility/ party. (This might not apply where the site is illegal and the findings are needed for further criminal investigation.)
- The findings of the inspection should be exchanged with partner authorities.
- Inspection data should be processed and evaluated for further actions (further dealt with in chapter 7).
- Inspection data/reports should be stored in a secure accessible database (further details below).
- Summarised inspection results must be reported to the Commission, and a selection of those results made available to the public. (This is further described in Chapter 6.)

## Inspection report

For measures not made during the actual control, the inspection report or advice letter is a commonly used tool to set out what remedial action is required. Some authorities use other tools, such as issuing fines directly.

Several factors of waste shipment inspections necessitate relatively quick reactions, and reporting. For instance some of the inspected actors operate in an informal and highly flexible way, and might find another solution before an inspection report can be issued to move the actor into compliance. Some controls are made at the dockside, in areas in which it is costly to store the shipment while awaiting the inspection report. Suggested measures in order to file quick inspection reports are:

- Standardised inspection report forms,
- Aggregated inspection reports, summarising to each exporter several individual inspections performed to their shipments during a defined inspection period. This period might for instance be one day, or one week of continuous inspections.

## Documentation of findings

In storing data from an inspection it is recommended to store all data in some kind of a database with possibilities to sort and aggregate the data easily. The database should be set up in such a way that one easily can extract summaries of different kinds. Besides, the data collected should be sufficient in order to:

- Base an inspection report on (when combined with copied documentation),
- *Review and evaluate*, as described in Chapter 7,
- Use in the next review of the risk assessment as described in Chapter 7,
- Share information between Member States as set out in Article 50 (5) WSR,
- Report to the EU Commission as stated in Article 51 WSR.

## 6. Publication of inspection plans

Although publication is not explicitly included in the obligations under Art. 50(2a) WSR, it is referred to in recital 4 of Regulation (EU) No 660/2014 which emphasizes that inspection plans are in principle covered by Directive 2003/4/EC on public access to environmental information. Under Art. 7(1)(b) of that directive, Member States are obliged to make available and disseminate “policies, plans and programmes relating to the environment”. On the other hand, the exceptions under Article 4 of the same

### Box 2

#### Suggested content of an inspection report:

- Location of the inspection,
- Exporter/responsible actor,
- Reference to the shipment,
- Content of the inspection, which regulation, problems, evaluations?
- All breaches to the regulation, including detailed reference to the articles in breach;
- If serious breaches to the regulation have been found, this should be addressed specifically in the report;
- Imposed sanctions and measures taken against the notifier/responsible party,
- Deadline for conformity,
- Information/warning/charging of inspection fee;
- Information on further actions;
- A list of the documents assessed during the inspection.

directive apply to the publication rule. One of these exceptions allows Member States to refuse disclosure of information if it would “adversely affect ... public security”.

What this means in the context of waste shipment inspection plans can be guessed relatively easily: The competent authority should not be forced to publish operational details, such as time and location of planned inspections, as this would make the control of illegal traffic ineffective. Other elements of the inspection plan, however, like the tasks and geographical jurisdiction of competent authorities, arrangements of cooperation or general objectives and priority waste streams are either known to the interested public anyway or not of such a sensitive nature that their disclosure could endanger public security. Even information about available resources and minimum number of inspections might be sensitive only if the figures are so low that illegal traders could deduce from them a very low risk of apprehension. It is not very likely, however, that criminals will need an inspection plan to obtain this kind of information; they will rather act from their own experience and from word of mouth.

As mentioned before (4.3), it will be advisable to separate the waste shipment inspection plan into a strategic part and an operational section with details on planned inspections. This latter part which is sometimes called “inspection programme” would stay confidential whereas the other part should be published on the internet. This is in fact already the practice in most countries that have developed inspection plans. Alternatively, as done in Norway, one might publish an abridged version of the inspection plan before the inspections and a full version afterwards.

## 7. Review and evaluation

### **Risk Assessment**

It will be necessary to renew the risk-assessment at least every three years or when there are significant changes to the basis of the assessment, such as a relevant amendment of legislation, major new developments in the waste market or new information on traffic axes, key actors and logistic points derived from inspections.

### **Inspection Plan**

According to Art. 50(2a) WSR, inspection plans must be reviewed at least every three years. In practice it is advisable to update inspection plans every year, as waste streams, relevant sites and actors can change very quickly. The following steps are recommended for the review process:

#### **Step 1: Review last year's results**

The planning cycle starts with a review and evaluation of the results of last year's inspection plans:

- Analysis of last year's inspections and granted TFS notifications;
- Analysis of trends in the market and enforcement practice;
- What are lessons learned from carrying out the inspections and chosen focus?

#### **Step 2: Take account of current developments**

For setting good priorities it is important to have a good overview of important developments, for example:

- Development of European and national policy and new legislation;
- Subjects of political interest and public opinion;
- Developments in crime as identified through intelligence evaluation and criminal investigations.

### Step 3: Set priorities

Based on the results of the review of last year's work and the developments identified in step 2, management should set priorities for the following year in terms of:

- Previous subjects (for example: waste-streams, specific problems, high risk companies, main transport routes and waste sites),
- Staff availability,
- Number of inspections.

### Step 4: Draft operational inspection plans for the next year

Based on these priorities, the operational inspection plans for the next year can be made, according to the model of this guideline.

The cycle for review and revision of the inspection plan can be depicted in the following way:





## 8. Annexes

### Annex A: Template for the structure of an inspection plan (UK example)

#### **Primary Authority Waste Shipment Inspection Plan**

***Insert name of authority/country***

***Date, (e.g. 2017-2019)***

This Inspection Plan relates to the following legislative requirements

1. EC Regulation 1013/2006
2. EC Regulation 660/2014
3. *Insert relevant Domestic regulations*

This is the Waste Shipment Inspection Plan of *(insert Member State)*

This Plan will be reviewed at least every 3 years from date of Issue or sooner as required by legislative changes or operational necessity

#### **Contacts:**

**Principal Contact at Primary authority is:**

Name:

Address:

Telephone No:

E Mail:

**Principal Contact for operational region/competent authority **XXXXXX** is:**

Name:

Address:

Telephone No:

E Mail:

***(add as many contacts as necessary for your country)***

1.0 Objective	<ul style="list-style-type: none"> <li>• <i>Set out the objectives of the plan</i></li> <li>• <i>You may list priority waste streams</i></li> <li>• <i>You can list sub-objectives/targets to meet i.e to lower the number of illegal shipments as a percentage of number of inspections over a period of time</i></li> </ul> <p><i>Objectives to be realistic, achievable and measurable</i></p>
2.0 Geographical area covered	<ul style="list-style-type: none"> <li>• <i>Full details of area covered</i></li> <li>• <i>Inclusion of a map</i></li> </ul>

	<ul style="list-style-type: none"> <li>• <i>Details of specific target areas can be left out and included in an operational plan for specific area.</i></li> </ul>
3.0 Information on planned inspections	<p><i>Who will conduct what inspections where and when?</i></p> <ul style="list-style-type: none"> <li>○ <i>Responsible inspection authority/authorities</i></li> <li>○ <i>Targeted waste streams, their sources + destinations</i></li> <li>○ <i>Types of inspections planned, such as:</i> <ul style="list-style-type: none"> <li>○ <i>Physical checks on road traffic, rail transport, seaports and interior ports</i></li> <li>○ <i>Inspections of waste sites / companies (producer, receiver, operator of storage or treatment facility, brokers, dealers etc)</i></li> <li>○ <i>Administrative checks on submitted documents</i></li> </ul> </li> <li>○ <i>Major technical equipment used (scanners, drones etc)</i></li> <li>○ <i>Number of inspections, times and locations: to be reserved for internal operational plan / inspection programme</i></li> </ul>
4.0 Tasks assigned to different authorities	<ul style="list-style-type: none"> <li>• <i>Who has responsibility for areas of waste shipment inspection e.g.</i> <ul style="list-style-type: none"> <li>○ <i>Police responsible for road inspections (with or without your presence)</i></li> <li>○ <i>Customs responsible at borders/ports (with or without your presence)</i></li> <li>○ <i>etc</i></li> </ul> </li> </ul>
5.0 Cooperation Arrangements	<ul style="list-style-type: none"> <li>• <i>Who do you have cooperation agreements with?</i> <ul style="list-style-type: none"> <li>○ <i>Agreements with Police</i></li> <li>○ <i>Agreements with Customs</i></li> <li>○ <i>Agreements with other statutory bodies e.g oil platform regulator</i></li> <li>○ <i>Agreements on an international arrangement</i></li> </ul> </li> </ul>
6.0 Training	<ul style="list-style-type: none"> <li>• <i>Training programme highlighting continual improvement of inspectors</i></li> <li>• <i>Sharing of practical information to assist other enforcing authorities in conducting inspections in your absence eg</i> <ul style="list-style-type: none"> <li>○ <i>Police may be conducting routine inspections on traffic violations and may detect waste shipments violations.</i></li> </ul> </li> </ul>
7.0 Resources, Human Financial Other	<ul style="list-style-type: none"> <li>• <i>Detail resources available –</i> <ul style="list-style-type: none"> <li>○ <i>Number of inspectors</i></li> <li>○ <i>Equipment available</i></li> <li>○ <i>Budgets available to recover illegal shipments if applicable</i></li> <li>○ <i>Budgets available for expert witnesses/engineers/lab analysis</i></li> <li>○ <i>Health and safety requirements</i></li> </ul> </li> </ul>
8.0 Follow up	<ul style="list-style-type: none"> <li>• <i>Not a mandatory element of the inspection plan</i></li> <li>• <i>It is useful to detail potential actions. To include</i> <ul style="list-style-type: none"> <li>○ <i>Follow up inspections – when required</i></li> <li>○ <i>Defining breaches – serious, minor.</i></li> <li>○ <i>Enforcement action – possibly in line with your agencies policy</i> <ul style="list-style-type: none"> <li>▪ <i>Warning</i></li> </ul> </li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>▪ <i>Monetary penalty</i></li> <li>▪ <i>Prosecution</i></li> <li>▪ <i>Etc.</i></li> <li>○ <i>Referral to another enforcing body</i></li> </ul>
9.0 Reporting	<ul style="list-style-type: none"> <li>• <i>Not a necessity of the inspection plan.</i></li> <li>• <i>Your organisation may wish to publish data on –</i> <ul style="list-style-type: none"> <li>○ <i>Number of inspections conducted</i></li> <li>○ <i>Number of violations</i></li> <li>○ <i>Number of enforcement actions</i> <ul style="list-style-type: none"> <li>▪ <i>Warning</i></li> <li>▪ <i>Financial penalty</i></li> <li>▪ <i>Prosecution</i></li> <li>▪ <i>Etc.</i></li> </ul> </li> </ul> </li> </ul> <p><i>Caution must be used in reporting any statistics – may lead to requests for information etc.</i></p>

## Annex B: Template for a risk assessment (general structure)

Chapter	Content	Ref.
1.	<p><b>Competent authority</b></p> <p>(b) Basic information on:</p> <ul style="list-style-type: none"> <li>- Name and address of the authority that is responsible for drafting the risk assessment and the inspection plan</li> <li>- Name of the owner and the editors of the risk assessment</li> </ul> <p>(c) Scope of the report:</p> <ul style="list-style-type: none"> <li>- Statutory tasks and competences of the inspecting authority, applicable EU, national and regional legislation</li> <li>- Mission and goals of the inspecting authority, e.g. environmental outcome that is to be achieved</li> <li>- Geographical area of competence and its characteristics (existence of EU borders, major ports, transit routes etc.)</li> <li>- Economic context and interests of stakeholders (traders, producers, recyclers, shipping lines, NGOs etc.)</li> <li>- Interests and competences of other authorities (Customs, Police, ...), degree of inter-agency and international cooperation.</li> </ul>	
2.	<p><b>Methodology</b></p> <p>(a) A theoretical description of the method of working, describing:</p> <ul style="list-style-type: none"> <li>- The emphasis on waste streams, on traffic axes or on individual companies</li> <li>- The background of the starting list of waste streams</li> <li>- The uses of risk criteria (which?) and, if any, weighing factors and/or threshold values</li> </ul> <p>(b) An account of the practical working method:</p> <ul style="list-style-type: none"> <li>- Timeframe of the study</li> <li>- Use of sources and/or expert judgment</li> <li>- Organization of workshops, consultation of other authorities</li> <li>- Decision-taking process</li> </ul>	
3.	<p><b>Starting list</b></p> <p>List the subjects that constitute the basis of the risk assessment, notably:</p> <ul style="list-style-type: none"> <li>- A list of waste streams,</li> <li>- A list of traffic axes,</li> <li>- A list of individual companies.</li> </ul>	

4.	<p><b>Analysis</b></p> <p>Describe every waste stream in order to estimate the value for every risk criterion. These waste stream descriptions can be added as annexes to the risk analysis. The results, notably the values for every risk criterion, will be summarized in the following chapter. The annexes can be separated from the body of the risk assessment study, for example if they contain sensitive information which cannot be made public.</p> <p>The same approach can be used for traffic axes and companies.</p>	
5.	<p><b>Results</b></p> <p>(a) Presentation of the results for all waste streams:</p> <ul style="list-style-type: none"> <li>- in a table format, listing the waste streams in rows and the different criteria in the columns. This table allows for decision makers to swiftly appreciate the risks and provides possibilities for a first ranking of waste streams, according to the overall risk scores or according to a specific risk criterion;</li> <li>- In a cluster diagram.</li> </ul> <p>(b) Identification of high, medium and low priorities: splitting up the different waste streams according to either:</p> <ul style="list-style-type: none"> <li>- Their overall risk score,</li> <li>- Specific risk criteria (for example: hazardous vs. non-hazardous),</li> <li>- Combinations of risk criteria (for example: high impact &amp; probability vs. high impact &amp; low probability),</li> <li>- Knowledge.</li> </ul> <p>(c) Explanatory texts for all waste streams: description of the waste stream, its organization, the risks associated with it, evolutions, ... in a short summary. This text explains in easily understandable wording why this waste stream has been categorized as high, medium or low priority.</p>	
Annex	<p><b>Annex per waste stream / traffic axis / company type</b></p> <p>(a) Delimitation and description</p> <ul style="list-style-type: none"> <li>- Which types of waste are considered part of this waste stream, and which are not?</li> <li>- EWC, Bazel, OECD codes</li> <li>- Legal and other definitions</li> </ul> <p>(b) Legal aspects: are there any legal dispositions that are very specific to this waste stream, hence influencing the risks associated with them. Lack of legislation or legal standards should also be mentioned.</p> <p>(c) Information on all criteria</p> <p>(d) General evaluation: which factors and characteristics of the waste stream will increase or decrease the risks associated with the waste stream? Are there any (legal or market) tendencies that will have an impact in the near future? Where should enforcement focus on?</p> <p>(e) Sources of information</p> <p>(f) Gaps in information</p>	

## Annex C: List of relevant waste streams

(Cf. section 3.4)

In order to identify high-risk waste streams, the following starting list may be used as an example.

Nr.	Waste stream	Includes
1.	Waste oil	Includes PCB oil, used oils (motor oil, hydraulic fluids, compressor oils, cutting, sanding and rolling oils), waste from oil refining, water/oil-mixes from shipping activities, waste from both mineral and synthetic oils. This also includes all waste streams that are used for blending in bunker fuels. For this reason there will be an overlap with the stream 'chemical waste'.
2.	Chemical waste	Acids/basis, laboratory waste, waste containing mercury, waste from paint, glue and ink, detergents, biocides, solvents, refrigerants, small hazardous waste, photochemicals, explosive waste and gas canisters, used catalysts. Both organic and inorganic.
3.	Waste that will be used as or in animal feed	From vegetable (food industry) as well as from animal sources (treatment of animal waste, milk products ...), including used cooking oils.
4.	Sludge	Waste from waste water treatment (including sludge from municipal WWT and industrial WWT), sewage system sludge, dredging sludge, waste waters that are treated externally, ... As a common characteristic these waste streams will be incinerated or landfilled, or they will be used in construction materials or as a soil substitute. Because some of these types of sludge meet the standards for uses in or as fertilizer, there is an overlap with the stream 'waste that will be used as or in fertilizer'.
5.	Waste that will be used as or in fertilizers	Both from vegetable sources (civic amenity sites, maintenance of municipal green, forestry and nature areas, food industry, ...) and from animal sources. Includes compost and anaerobic digestion. Includes certain types of sludge. There is an overlap with wood waste, especially with regard to wood that can be used for fertilizing purposes and for energy recovery.
6.	Wood waste	From different sources (civic amenity sites, railway sleepers, production residues from wood processing industry ...), including treated wood waste and non-polluted wood waste for both energy recovery and material recovery.
7.	WEEE	WEEE from household and from industrial origin, including treated WEEE, including appliances containing ozone depleting substances or fluorinated greenhouse gases. There is an overlap with the stream 'metal waste', especially regarding WEEE that has been treated.
8.	Metal waste	Metal scrap from different sources, including shredder residues, cable waste, end-of-life vehicles and ships, batteries and accumulators, used catalytic converters, WEEE that has been treated. As this is a very broad waste stream, one might choose to divide it, for example separating end-of-life vehicles or batteries.

9.	Residues from ferrous and non-ferrous metallurgy	<p>Metal slags, skimmings, drosses, filter cakes, waste from gas purification, molding sands, ... as well as waste resulting from the (surface) treatment of metals (physical and mechanical treatment of surfaces, processing of metal objects, and the electrolytic, chemical or thermic application of metal covering layers). Includes waste from the treatment of minerals.</p> <p>There might be an overlap with the stream 'construction and demolition waste' because of the use of certain slags for construction purposes, in more or less the same way recycled demolition waste is used.</p> <p>There is an overlap with the stream 'metal waste' because some of these residues are used for metal recovery.</p>
10.	Construction and demolition waste	All types of construction and demolition waste, especially the stony part, including asbestos, spent sandblast grit, tar-bound macadam, trammel fines, excavated soil.
11.	Residues from waste incineration	<p>Incineration and bottom ashes, fluidized bed sands, used activated coal, residue from gas purification.</p> <p>There might be an overlap with the stream 'construction and demolition waste' because of the use of certain ashes for construction purposes, in more or less the same way recycled demolition waste is used.</p>
12.	Mixed waste	Mixed industrial waste, municipal garbage, litter, large municipal waste, including sorting residues (e.g. RDF)
13.	Paper and cardboard waste	Packaging waste, printed matter, ... including sorting residues (e.g. RDF)
14.	Plastic waste	Packaging waste (including packaging of chemical substances), production residues, plastics from construction and demolition waste, agricultural foils, ... including sorting residues (e.g. RDF)
15.	Waste tyres	Originating from tire centers, depollution of end-of-life vehicles
16.	Textile waste	Originating from households, but also production residues from the clothing, leather and fur industry, cleaning rags, ...
17.	Glass waste	All types of glass waste, excluding fluorescent lamps
18.	Medical waste	Originating from health institutes, but also from household. Including expired medication.
19.	Ship waste	Liquid oily waste, wash waters, cargo residues, garbage, waste streams that can be sorted for recycling purposes. There is a large overlap with many other waste streams.
20.	Mining waste	Waste from mining activities, excluding waste from treatment of minerals, excluding excavated soil.

## Annex D: Example of a risk matrix

(Risk diagram presentation from risk assessment in NL - Important note: This diagram is summarized and does not contain all waste streams considered. Scores are based on the Dutch market situation.)

Nr	Waste stream (according to National Waste Management Plan - LAP)	Hazardous properties	Cover possibilities	Amount generated in NL (Kton)	Amount exported from NL (Kton)	Dynamics of internal Dutch waste market	Dynamics of waste export from NL	Interim waste treatment export	Amount of NL waste producers in NL	Costs of waste treatment in NL	Amount of waste exporting companies	Risks of destination	Total risk score
	WEEE	average risk	high risk	low risk	average risk	low risk	average risk	high risk	high risk	high risk	average risk	high risk	
	Wood	average risk	high risk	average risk	high risk	low risk	low risk	low risk	high risk	high risk	high risk	low risk	
	Metal waste contaminated with oil	high risk	low risk	low risk	average risk	high risk	high risk	low risk	low risk	average risk	low risk	high risk	
	Construction and demolition waste	average risk	high risk	high risk	high risk	average risk	low risk	low risk	high risk	high risk	high risk	low risk	
	Batteries and accus	high risk	low risk	low risk	average risk	low risk	low risk	low risk	high risk	high risk	average risk	average risk	
	Chemical waste	high risk	low risk	low risk	low risk	average risk	average risk	low risk	high risk	high risk	low risk	low risk	
	Oil waste	high risk	high risk	low risk	low risk	low risk	low risk	low risk	high risk	high risk	low risk	low risk	
	Plastic waste	low risk	high risk	average risk	high risk	low risk	low risk	average risk	average risk	high risk	high risk	high risk	
	Residues from waste incineration	high risk	low risk	low risk	average risk	low risk	average risk	low risk	low risk	high risk	average risk	low risk	
	Contaminated soil	average risk	high risk	high risk	average risk	low risk	high risk	low risk	high risk	average risk	low risk	low risk	
	PCB-containing waste	high risk	low risk	low risk	low risk	high risk	high risk	low risk	low risk	high risk	low risk	low risk	
	Metal waste	low risk	high risk	high risk	high risk	low risk	low risk	low risk	high risk	low risk	high risk	high risk	
	Halogenated solvents	high risk	low risk	low risk	low risk	average risk	average risk	low risk	low risk	high risk	low risk	low risk	
	Waste from metallurgic industry	high risk	low risk	low risk	average risk	low risk	low risk	low risk	low risk	average risk	high risk	low risk	
	Ship waste	high risk	low risk	low risk	average risk	low risk	low risk	low risk	low risk	average risk	low risk	low risk	
	Mercury-containing waste	high risk	low risk	low risk	low risk	average risk	average risk	low risk	low risk	high risk	average risk	low risk	
	Sludges	high risk	low risk	low risk	low risk	average risk	average risk	low risk	high risk	average risk	low risk	average risk	
	ELV	average risk	high risk	low risk	low risk	low risk	high risk	low risk	low risk	low risk	low risk	low risk	
	Medical waste	average risk	low risk	low risk	low risk	low risk	average risk	low risk	high risk	high risk	low risk	low risk	
	Glass waste	low risk	low risk	average risk	high risk	low risk	low risk	low risk	average risk	low risk	low risk	average risk	
	Textile waste	low risk	low risk	low risk	average risk	low risk	low risk	low risk	low risk	low risk	high risk	high risk	
	Paper and cardboard waste	low risk	high risk	average risk	low risk	low risk	low risk	low risk	average risk	low risk	low risk	low risk	



### Annex E: Example of a data sheet on national roles and responsibilities for controlling waste shipments

Regulator	Responsibility	Powers	Contact details	Availability
Environmental agency	Competent authority for waste shipments Responsible for: <ul style="list-style-type: none"> <li>○ Notifications</li> <li>○ Operational supervision at border crossings</li> <li>○ Expert advice</li> <li>○ Usually National IMPEL contact point</li> <li>○ Liaising with other EU competent authorities</li> </ul>	Powers to detain and direct shipments of waste Undertake criminal investigations	info@generic-competent-authority.eu	Monday to Friday 09:00 to 17:00 + 24 hour pollution hotline
Police	Access to Europol	Power to		
Customs				
Municipalities				
Prosecutor				
Coastguard				

## Annex F: Template for a Memorandum of Understanding (MoU)

(Example from UK / Northern Ireland)

# MEMORANDUM OF UNDERSTANDING

BETWEEN

COMPETENT AUTHORITY (insert full name)

AND

CUSTOMS AUTHORITY (insert full name)

## Contents

1. Background
2. Purpose
3. Disclosure
4. Joint working
5. Data Protection/Human rights legislation (specific to Member State)
6. Security and Assurance
7. Costs
8. Issues and Disputes
9. Review
10. SPOCS
11. Signatories

## 1. Background

- 1.1. The CA is responsible for implementing and enforcing a wide range of legislation covering **Insert your agencies responsibilities (Waste, water, planning etc)**
- 1.2. The C is responsible for all offences connected to matters assigned to Customs covering **Insert your customs responsibilities (Taxation, Fuel duty, alcohol duty, etc).**
- 1.3. The nature of this work means that there will be a substantial overlap in the interest of both enforcing authorities on certain individuals and companies – e.g. fuel laundering – tax evasion and toxic waste production.

- 1.4. Both the CA and C utilise an intelligence-led approach for pursuing criminal and financial investigations and information held by either organisation can benefit the other.
- 1.5. Senior Management with CA and C recognise the benefits of cooperation between the two organisations. This agreement lays out the procedures to be adopted by CA and C to share intelligence and to cooperate in order to proactively target criminals.
- 1.6. CA and C agree to assist each other in relation to areas of mutual interest and concern and in particular to exchange information and intelligence which may lead to the detection of offenders within legislative parameters.

## 2. Purpose

- 2.1. The recognise the benefits to both organisations derived through closer working relationships. The agreement in particular serves:
- 2.2. To put operational contingencies and policies in place to enable such cooperation to be effective and efficient;
- 2.3. To ensure information exchanges take place which will assist each organisation to carry out its duties efficiently;
- 2.4. To engender joint working between the Agencies as a Strategic Alliance to enhance operation effectiveness in Country;
- 2.5. To provide both organisations with an opportunity to increase their capability to gather intelligence;
- 2.6. To ensure that officers operate safely, legally and efficiently to maximise the benefits for both organisations.

## 3. Information Disclosure

- 3.1. C may disclose information to CA under (insert correct legislative power). Information will be provided on the national intelligence form (describe your preferred format (eg in UK a 5x5x5 is used)) and routed via the Centre for Exchange of Intelligence (or appropriate portal). C will only provide relevant, necessary and proportionate information for the purposes of criminal investigation and/or prosecution.
- 3.2. Where C identify something which appears to be a danger to public health or safety, C may disclose information using insert appropriate legislation, disclosure for the protection of public health or safety.
- 3.3. CA will disclose information to C using their legislative powers to disclose in the public interest. Information will be provided on the national Intelligence form (EG 5x5x5 in UK) and routed via the C National Co-Ordination Unit (NCU) and copied to the C Single Point of Contact (SPOC) as Detailed in Para 10 below.

## 4. Joint Operations

- 4.1. Where a joint operation is planned, and the Centre for Exchange of Information (CEI) or similar party are not handling the disclosure, CEI must be informed prior to the start of the exercise and their consent for disclosures to be secured.
- 4.2. All disclosures where such consent is obtained must be recorded and at the end of the exercise, CEI must be informed of the number of exchanges that took place.
- 4.3. CA and C will work together to compliment each other's activity, in the protection of the environment and the detection of criminal activity.

## 5. Data Protection (DP) and Human Rights (HR)

- 5.1. Both organisations undertake to comply with the requirements of the DP and HR in the operation of this agreement.
- 5.2. Both organisations will monitor closely the flow of information between both parties which will encompass the notification of detections. This monitoring will be undertaken on a periodic basis, and will be shared with each party.
- 5.3. The monitoring will be undertaken on a six monthly basis via the Intelligence Officer and will encompass an analysis of information provided, feedback against same, etc.

## 6. Security and Oversight

Both C and CA undertake to;

- 6.1. Hold any information securely;
- 6.2. Use the information solely for the purposes for which it was disclosed to them, unless they receive prior permission from the issuing party to use it for another purpose;
- 6.3. Only retain the information for as long as it is required and then to dispose of it in accordance with Government guidelines/legislative requirements;
- 6.4. Operate within the parameters of the intelligence exchange parameters and not disclose the information further without the prior consent of the issuing organisation;
- 6.5. Ensure that the information is only accessed by officers authorised to do so;
- 6.6. Report any data losses, security breaches or wrongful disclosures immediately to the SPOC's;
- 6.7. Provide assurance on requests that they have fully complied with the terms of this agreement.
- 6.8. Each organisation will have a documented operational retention/review/destruction policy and the designated officers from each agency should have up to date knowledge of it.
- 6.9. At the expiry of this period the relevant information will be appropriately disposed of in accordance with operational retention, disposal and destruction policy.

## 7. Costs

Due to the reciprocal nature of this agreement, no charges will be made by either organisation against the other. It is however recognised that there may be occasions in the future when this may need to be reviewed. Any instances where charging against either organisation may occur will be specified, agreed and recorded prior to any costs being incurred.

## 8. Resolving Issues

- 8.1. Any issue, problem or dispute which cannot be resolved at an operational level should be reported to the nominated contacts who will endeavour to resolve the issue within 3 working days.
- 8.2. If the issue cannot be resolved within that timescale it should be referred to the signatories under no. 11.

## 9. Review

- 9.1. This agreement will be reviewed annually.

9.2. Any agreed amendments required may be appended to this agreement and added to the annual update as appropriate

## 10. Single points of contact (SPOCs)

The nominated SPOCs are:

- CA Name Contact details
- C Name Contact details

## 11. Signatories

<p>On Behalf of CA</p> <p><i>Signature</i></p> <p>Printed Name, Position Date</p>	<p>On Behalf of C</p> <p><i>Signature</i></p> <p>Printed Name, Position Date</p>
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## Annex G: Example of guidance on violations and primary reactions/sanctions (from Norway)

- 1 - Primary action  
 2 - Secondary action (based on negative outcome of the primary action)  
 (..) - Alternative/additional action based on seriousness of violation  
 X - Documentation is especially important.. Take pictures, copy documents, take notes, take samples if necessary.  
**Yellow** - Require documentation/evidence that the shipment is returned. Need for further action. A request can be sent to Customs for the shipment to be withheld.

	Reactions			
	Refuse border crossing, and/or confiscate shipment	Ask for updated/ correct documentation/information	Allow border crossing	Reaction meeting (to discuss further action)
<b>Shipments declared as green-listed waste</b>				
Shipments of greenlisted waste without the Consignment document (Annex VII). - Also ask for a valid contract with the recovery facility	2	1	(2)	
Incomplete, incorrect or outdated consignment document (Annex VII). (Discretion should be exercised).	2	1	(2)	
Shipments of greenlisted waste to countries that do not accept such waste. The inspector should consult with the competent authorities' policy-/technical department.	1			x
Notifiable waste sent as green-listed waste.	1			x
<b>Shipments of notifiable waste</b>				
<b>Assessment of consent</b>				
Shipment lacking consent from the CA of the sending or recipient country	1			x
Expired consent	2	1		(x)
Shipment not accompanied by notification documents	2	1		
Shipment accompanied by copy of only one of the Notification documents (lacking consent from CA in recipient or sending country)		1	2 <sup>11</sup>	
Shipment accompanied only by movement document	2	1		
The waste does not correspond to the notification	1			x
Wrong border crossing point	1			
Notification documents without attached list of waste generator(s)	2	1	(2)	
The consent does not apply to the specified waste generator	1			x
<b>Assessment of the movement document:</b>				
The shipment is not accompanied by a movement document	2	1		
The notification number in the movement document does not correspond to the notification number in the notification	2	1		

<sup>11</sup> In these cases the actor will still receive an inspection report with information about the deviation. Our policy department explains that when the actors can show either one of the notification documents, it is 99% sure the other one is also correct.

tion document				
Incomplete movement document.	2	1		
The designation of the waste in the movement document has been altered and does not correspond with the description in the notification document	1			x
Exceeded total number or volume of shipments in the consent	1			x
<b>Used products (vs. waste):</b>				
The shipment or parts of it does not consist of used goods but waste	1			
Case of doubt product/waste	(2)	1	2	
CFCs	1			x
EE-products without proper packaging	1			
Second hand cars and/or car spare parts that do not leak	(2)	1	(2)	
Second hand cars and/or car spare parts with leakage	1			
Second hand cars registered as demolished and where the demolishing fee has been paid out (?) - Customs will follow this up	1			x
<b>Customs declaration</b>				
Waste not declared as waste specifically in customs declaration	2 (recommended action for customs)	1		

## Annex H: Examples of reporting templates

### 1) IMPEL-TFS Enforcement Actions “Total Results Transport Inspection Form”

Total Results Transport Inspection Form									
To be filled in for reporting on TFS inspections by the country coordinator									
Mail this document to: <a href="mailto:transfrontier@sepa.org.uk">transfrontier@sepa.org.uk</a>					<a href="#">Guidance on Completing the Form is available on Basecamp under "Files"\\"Guidance and Enforcement Tools"</a>				
Or post to Basecamp: <a href="#">IMPEL Basecamp</a>									
1. General Information									
Country:		Region:							
Authority:									
Location of Transport Inspection:								Type of Inspection:	
Inspection Date (dd/mm/yyyy):								Transport, Seaport	
Reference Number (country code/region code/month/number):								Transport, Road	
Contact person:								Transport, Barge Terminal	
E-mail:								Transport, Rail Terminal	
Fax:		Phone:							
Country Coordinator:									
2. Cooperation during transport inspection									
National Cooperation			Name of Organisation			Number of Experts		Number of Inspections	
Competent Authority									
Cooperation with Police									
Cooperation with Customs									
Others									
International Cooperation			Country & Name of Organisation			Number of Experts		Number of Inspections	
Cooperation with Inspectors									
Cooperation with Police									
Cooperation with Customs									
Others									
3. Selection of Inspected Transports									
		Selection Method (tick all that apply)						Number of Inspections	
		Pre-selection based on Intelligence (high risk transport only has been targeted).							
		On-site selection							
		At random							
		Total number of inspections						0	
4. Inspection Details									
4a. Administrative checks only (count 1 per vehicle)		Total number	Transboundary waste shipments	In violation to WSR	4b. Physical inspection (count 1 per vehicle)		Total number	Transboundary waste shipments	In violation to WSR
Road inspection					Road inspection				
Train inspection					Train inspection				
Waterway inspection					Waterway inspection				
Harbour inspection					Harbour inspection				
Storage/warehouse					Storage/warehouse				
Sum admin only inspection		0	0	0	Sum physical inspection		0	0	0
5. Details on waste shipment inspections results (only for WSR violations, growing list)									



Number (vehicles/loads)	Country of Dispatch	Country of Destination	Waste Description	EWC Code	Violation	Further Action

6. Additional Comments (e.g. further details of violations, national regulations or other relevant information)

## 2) Example of an inspection results form from the IMPEL Waste Sites Manual

<b>1.1 Date and time of inspection</b>	..... 20... from .....h until ..... h		
<b>1.2 Competent authority</b>			
<b>1.3 Inspector</b>	Name:	E-mail:	Phone:
<b>2 Reason for the inspection</b>	<input type="checkbox"/> Routine check <input type="checkbox"/> Complaint / information by .... <input type="checkbox"/> Follow-up inspection <input type="checkbox"/> Other <input type="checkbox"/> See enclosures		
<b>3 Controlled facility</b>			
Name			
Address			
Country			
Tel. / Fax			
E-mail			
Responsible manager			
<b>4 Type of facility</b>	<input type="checkbox"/> Collection point <input type="checkbox"/> Storage facility <input type="checkbox"/> Treatment facility <input type="checkbox"/> Other (specify)		
<b>5 Permit</b>	<input type="checkbox"/> Yes, issued ... <input type="checkbox"/> No		
<b>6 Type of waste</b>	<input type="checkbox"/> WEEE <input type="checkbox"/> End-of-life vehicles <input type="checkbox"/> Batteries <input type="checkbox"/> Mixed municipal waste <input type="checkbox"/> Other (specify)		
<b>7 Specific findings</b> (Quantity, origin and destination of waste, condition of facility, signs of pollution etc.)			
<b>8 Need for action</b>	<input type="checkbox"/> No deficits detected <input type="checkbox"/> Information / warning issued to operator on site <input type="checkbox"/> Order of technical improvements necessary <input type="checkbox"/> Prohibition of waste shipment <input type="checkbox"/> Closure of site <input type="checkbox"/> Report to police / other authorities <input type="checkbox"/> Other (specify)		
<b>Signature of inspector</b>	Date	Name	

### 3) Example of an inspection registration form (from Norway)

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T		
		Paragraph 46					Informed by reporter	Un-announced	Prior to loading	Non-waste	Secondhand electri	Notification	Yes (2)	20ft				No			
		Paragraph 47 and 48					Informed by intel		During loading		Waste types	Prohibited	Yes (3)	Custom side (record size in details column)							
		VfM					Informed by both		Other		Re-usable types	Non-waste	Yes (4)	Other							
		No exemption on VfM					Other				Cardboard / Paper		Yes (5)								
		Application underway									Plastics		Yes (6)								
		Other									Mixed recyclables		Yes (7)								
											Furniture		No								
											Car / car parts										
											Other										
	Organisation	Contact name	Exemption / licenced	Address	Date of visit	Lead officer	Other officer(s)	Reason for inspection	Announced	Inspection type	Waste / Non-waste	Material type	Export controls	Container(s) inspected	Container size	Shipping line	Booking agent	Carrier	Export destination	Documents checked	Vas

The figure above shows a print-screen of an example of a registration form made in order to register several controls quick and efficiently. The headings of each column read:

- Organisation
- Contact name
- Exemption / licenced
- Address
- Date of visit
- Lead officer
- Other officer(s)
- Reason for inspection
- Announced
- Inspection type
- Waste / non-waste
- Material type
- Export controls
- Container(s) inspected (no.)
- Container size
- Shipping line
- Booking agent
- Carrier
- Export destination
- Documents checked
- Waste / non-compliant material identified
- Details
- Action taken
- Enforcement action
- Local team informed
- Intel log submitted

(Choices are listed above the headings.)

The spreadsheet also includes several other helpful features, and may be obtained in a digital version from the Norwegian Environment Agency (Miljødirektoratet).

## Annex J: Useful links to TFS information and guidelines for self study and distant learning

- **IMPEL:** <http://www.impel.eu/>
- **European Commission:** <http://ec.europa.eu/environment/waste/shipments/index.htm>
- **Austria:** <http://www.bundesabfallwirtschaftsplan.at/>
- **Denmark:**  
<http://mst.dk/service/publikationer/publikationsarkiv/2015/feb/regulations-on-the-export-of-used-electronic/>
- **France:**  
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- **Ireland / Dublin City Council:**  
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