Choosing appropriate interventions alongside inspections to ensure compliance and achieve environmental outcomes

Final report: September 2014



**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 Bruxelles, 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 6th 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](file:///C:\dgiddens\AppData\Local\Microsoft\Windows\AppData\Local\Temp\Temp1_IMPEL-project-management-templates-2014.zip\www.impel.eu)

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| **Title report:**  Choosing appropriate interventions alongside inspections to ensure compliance and achieve environmental outcomes.  Phase 3 - to implement and communicate a practitioner toolkit for choosing appropriate interventions | **Number report:**  2014/12 |
| **Project manager:**  Duncan Giddens | **Report adopted at IMPEL General Assembly:**  11-12 December 2014, Rome, Italy |
| **Authors:**  Chris Booth | **Number of pages: 22**  Report: 18  Annexes: 4 |
| **Project team:**  Duncan Giddens Environment Agency, England  Lena Ericsson Sundsvalls Kommun, Sweden  Marinus Jordaan DCMR Environment Protection Agency, Rotterdam, Netherlands  Henning Hansen Aarhus Municipality, Denmark  Robin Ferguson Scottish Environmental Protection Agency, Scotland  Daniella Sammut Maltese EPA, Malta  Chris Booth Consultant, Environment Regulation | |
| **Executive summary:**  Inspections have traditionally been used as the tool to ensure compliance with (EU) environmental legislation. Increasingly regulators are using a range of different complementary approaches in addition to inspection to help drive compliance and delivery of desired outcomes. However, this still leaves an unanswered question: E*ven if we know about different types of intervention, how can we choose the right ones according to circumstances and what might we use to help us make those decisions?* This project aimed to answer that question. It was organised into 3 phases as follows:   * Phase 1: Developing principles and features of a model for choosing interventions. * Phase 2: Developing and testing a toolkit. * Phase 3: Implementing and Communicating a practitioner toolkit for choosing appropriate interventions   Phase 1 concluded that choice of interventions requires that users consider their particular circumstance, what goals they wish to achieve, what are the factors (dependencies) affecting those goals and then what are the best interventions to apply and by whom. It produced a model to describe this process and recommended that a dependency modelling tool be tested in phase 2 to see if and how it could be used to help IMPEL members choose interventions.  In phase 2 the dependency modelling tool called *iDEPEND* was examined for its usefulness to help IMPEL members choose interventions. This was done through a workshop and subsequent user testing by IMPEL members. A draft “quick start guide” was developed to support the user testing. The user testing showed that draft guide was mostly clear and the tool was easy to use although it needed several improvements to make it of specific use for the purposes of choosing interventions. The draft guide would also need amending to reflect these improvements.  In phase 3, the following products were produced:   * An improved *iDEPEND* tool, including all the improvements recommended in phase 2; * A webinar to demonstrate the *iDEPEND* Dependency Analysis tool; * A revised *iDEPEND* guide for IMPEL users ; and * Use of the Regulatory Evidence Network[[1]](#footnote-1) as a means to allow co-operation and sharing best practice on choosing interventions   As result of this project, IMPEL users are now able to use the *iDEPEND* tool and guidance to model their own particular circumstances and to help them in their decision making over which interventions are most likely to be appropriate to achieve their goals within their particular circumstances. This should help support the main aims of IMPEL to support the implementation of EU environmental law and of the EU to meet the requirements of the 7th Environmental Action Programme. | |
| **Disclaimer:**  This report is the result of a project within the IMPEL network. The content does not necessarily represent the view of the national administrations or the European Commission. | |

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# Chapter 0. Summary

Inspections have traditionally been used as the tool to ensure compliance with (EU) environmental legislation. Increasingly regulators are using a range of different complementary approaches in addition to inspection to help drive compliance and delivery of desired outcomes. Previous IMPEL projects and other recent research has provided evidence of numerous interventions that can be used to those ends.

However, this work by IMPEL and others still leaves an unanswered question: E*ven if we know about different types of intervention, how can we choose the right ones according to circumstances and what might we use to help us make those decisions?* This project aimed to answer that question. It was organised into 3 phases as follows:

* Phase 1: Developing principles and features of a model for choosing interventions.[[2]](#footnote-2)
* Phase 2: Developing and testing a toolkit.[[3]](#footnote-3)
* Phase 3: Implementing and Communicating a practitioner toolkit for choosing appropriate interventions[[4]](#footnote-4)

Phase 1 concluded that choice of interventions requires that users consider their particular circumstance, what goals they wish to achieve, what are the factors (dependencies) affecting those goals and then what are the best interventions to apply and by whom. It produced a model (summarised in figure 1) to describe this process and recommended that a dependency modelling tool be tested in phase 2 to see if and how it could be used to help IMPEL members choose interventions.

In phase 2 the dependency modelling tool called *iDEPEND* was examined for its usefulness to help IMPEL members choose interventions. This was done through a workshop and subsequent user testing by IMPEL members. A draft “quick start guide” was developed to support the user testing. The user testing showed that draft guide was mostly clear and the tool was easy to use although it needed several improvements to make it of specific use for the purposes of choosing interventions. The draft guide would also need amending to reflect these improvements.

In phase 3, the following products were produced:

* An improved *iDEPEND* tool, including all the improvements recommended in phase 2;
* A webinar to demonstrate the *iDEPEND* dependency analysis tool;
* A revised *iDEPEND* guide for IMPEL users ; and
* Use of the Regulatory Evidence Network as a means to allow co-operation and sharing best practice on choosing interventions, in particular
  + a mechanism for IMPEL members to access a list of interventions and evidence on each ;
  + a means to share their *iDEPEND* models; and
  + a forum to allow discussions on the choice and use of interventions and on *iDEPEND* model building.

As result, IMPEL users are now able to use the *iDEPEND* tool and guidance to model their own particular circumstances and to help them in their decision making over which interventions are most likely to be appropriate to achieve their goals within their particular circumstances. This should help support the main aims of IMPEL to support the implementation of EU environmental law and of the EU to meet the requirements of the 7th Environmental Action Programme.

# Chapter 1. Introduction

In 2011, an IMPEL Project was carried out on “Exploring the use and effectiveness of complementary approaches to inspection for ensuring compliance” [[5]](#footnote-5). That project identified a number of interventions that are being used by member states, but recognised that there was a need to develop concepts, models, tools, guidance and so forth to help IMPEL members choose appropriate interventions. It recommended a further project to look at what such a toolkit might contain and to develop and test such a toolkit to help IMPEL members choose appropriate interventions alongside inspections to ensure compliance and achieve environmental outcomes.

The aim of the project is to develop and test a model approach for choosing appropriate interventions, including and alongside inspections. The project is divided into three phases:

* Phase 1 in 2012 to agree the principles for the model approach. Phase 1 was completed in 2012 and the report adopted by IMPEL in 2013[[6]](#footnote-6).
* Phase 2 in 2013 to develop and test a working tool and guidance. Phase 2 was completed and the report adopted by IMPEL in 2013[[7]](#footnote-7).
* Phase 3 in 2014 to implement and communicate a practitioner toolkit for choosing appropriate interventions[[8]](#footnote-8)

This report summarises phases 1 and 2 and describes the activities and outputs of phase 3. The full terms of reference for phase 3 are included at annex 1.

Phase 1 concluded that choice of intervention is dependent on a number of factors which can be summarised as shown in figure 1. It recommended that a tool be developed and tested to help support IMPEL members assimilate information regarding such aspects (and any others relevant aspects that users felt appropriate) and make decisions over choosing interventions.

Since phase 1 was completed a number of evidence sources have been published regarding interventions and on factors that affect the circumstances in which each intervention works best. Particularly useful evidence sources are a report “choosing and designing interventions”[[9]](#footnote-9) and a paper by Cranfield University[[10]](#footnote-10). This and other relevant reports are available on the Regulatory Evidence Network[[11]](#footnote-11) (REN).

**Figure 1. Factors to Consider in Choosing Interventions**

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A useful typology of interventions is shown in box 1

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| **Box 1. A typology of interventions**   * Direct regulation: relatively certain outcome but potentially costly, need to be targeted according to risk e.g. Environmental Permitting regime, REACH * Economic instruments: less certainty of outcome but greater flexibility for businesses to choose least cost options, may provide long-term certainty e.g. Landfill Tax * Information based approaches: uptake dependent on customer/supply chain interest e.g. EU Ecolabel * Co-regulation: can encourage rapid action, flexible to changing circumstances, but may struggle to capture small businesses e.g. Courtauld Commitment * Self-regulation: action motivated by financial, customer/supply-chain or reputational influences e.g. ISO14001 * Support and capacity building: impact may depend on credibility and trust.   Source: Taylor CM, Pollard SJT, Angus AJ & Rocks SA. (2013)[[12]](#footnote-12) |

This evidence forms part of a tool kit that regulators need in order to support their decision making over choice of intervention for any particular circumstance. The other part of the tool kit is a decision support tool that the project team selected. It is based upon “dependency analysis” and is called *iDEPEND*. The project team selected *iDEPEND* to develop and test for the purpose of choosing interventions.

Phase 2 of the project[[13]](#footnote-13) involved user testing, commencing at a workshop in June 2013 and then by IMPEL users over the next 2 months or so. The user testing showed that the guidance was mostly clear and the tool was easy to use although it needs a few improvements. The phase 2 project concluded that:

* “*once the above issues are addressed, IMPEL users will be able to use the tool and guidance to help them in their decision making over which interventions are most likely to be appropriate to achieve their goals within their particular circumstances*"; and
* “*The way in which the model is made available and the outputs communicated could be the subject of a future IMPEL project. This could explore if the IMPEL web-site could host such a facility, or link to another site such as the Regulatory Evidence Network, and what the features of such a site might be, for example how material can be kept confidential within the IMPEL community, how such a site can made more interactive and how it could be used to communicate the results and benefits of dependency modelling to members within the IMPEL community.”*

A terms of reference was developed and approved for a phase 3 of the project to address the matters mentioned above, in particular it proposed a new release of the ***iDEPEND*** tool which would include improvements, identified in phase 2, the hosting of a webinar to demonstrate the model and an user guide for IMPEL users to demonstrate how to use the ***iDEPEND*** tool to choose appropriate interventions alongside inspections to ensure compliance and achieve environmental outcomes.

The terms of reference was approved at the IMPEL General Assembly in December 2013

This report describes the phase 3 of the project, in particular it briefly describes and provides links to the specific products produced, namely:

* the ***iDEPEND*** tool;
* the user guide for IMPEL users to demonstrate how to use the ***iDEPEND*** tool;
* the webinar which demonstrates how to use the ***iDEPEND*** tool; and
* A means to allow co-operation and sharing best practice on choosing interventions, in particular
  + a mechanism for IMPEL members to access a list of interventions and evidence on each ;
  + a means to share their *iDEPEND* models; and
  + a forum to allow discussions on the choice and use of interventions and on *iDEPEND* model building.

# Chapter 2. Improvements to the *iDEPEND* decision support tool

Phase 2 of the project recommended a list of improvements needed to the iDEPEND tool. These are shown in box 2.

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| **Box 2**  **Suggested Improvements to the iDEPEND tool itself:**   * An ability to save a model after amendment with a different name while leaving earlier drafts unaltered * An ability to export the model, list of entities and reports as a jpeg or into word, or to print out. * Better guidance on the “states” and the custom options and how to use them * Probabilities should be picked from a set range and you should be allowed to choose 0.5. (This is the “default” status and reports cannot be run until you change it). * There needs to be an explanation for what the failure mode report is telling us. * Needs to be available on Internet Explorer because many government bodies use that and do not allow other browsers * Clarity needed over the list of entities (It would be clearer if they were labelled “dependencies”) and perhaps some better way that they are “managed” and displayed –maybe find some means of just displaying those relevant to the model in question. * Interventions (“Countermeasures”) are a different type of dependency and perhaps they could be stored and displayed as a distinct sub set of the “entities” with a facility to apply these as countermeasures in a different way to the way in which you add other dependencies. |

Phase 2 also recommended improvements to the way in which the tool can be used for choosing interventions. These are shown in box 3

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| **Box 3**  **Suggested Improvements to the way in which the tool can be used for choosing interventions.**   * More template models (and therefore entities) would be useful * Need to demonstrate more specifically in the quick start guide how the tool can be of help in choosing interventions- maybe by linking to the lists of interventions mentioned in the quick start guide. These interventions could be provided as a sub set of the “entities” with a facility to apply these as countermeasures in a different way to the way in which you add other dependencies. * We need a way in which users can share their models, view the models of others and copy and paste others to amend and use themselves, while ensuring that users can keep some information entirely confidential to themselves, yet share some with just IMPEL members and restrict non-IMPEL members from access to the developing “bank” of models. |

All these improvements were delivered in phase 3. The new updated *iDEPEND* tool is now available on the web for IMPEL members. IMPEL members with an up to date web browser[[14]](#footnote-14) can access it by clicking [here](http://idependeu.herokuapp.com/)[[15]](#footnote-15) and signing in for an account. This IMPEL project has paid for a licence for up to 100 IMPEL members to use *iDEPEND up* to the end of 2014 but it will continue to be available for a little longer for anyone who has an *iDEPEND* account and started a model. The project team recommends that IMPEL extends the licence for future years.

# Chapter 3. The webinar

On 26 June a webinar was organised on the use of the iDEPEND Tool.  The purpose of the webinar is shown in box 4.

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| **Box 4**  **Webinar Purpose**  To inform and engage IMPEL Members and stakeholders about:   * the variety of interventions that can be used to achieve environmental objectives and where to find evidence on these. * choosing appropriate interventions to achieve environmental objectives according to circumstances and what this is dependent upon (dependencies). * A decision support tool (*iDEPEND*) and how this can help people think through particular objectives and dependencies in a systematic way that can be shared with others.   To demonstrate the *iDEPEND* tool and show how it can help IMPEL members to:   * understand the chances of achieving particular environmental objectives. * select appropriate interventions * forecast how interventions affect the chances of achieving an objective   To provide the experience and confidence to IMPEL members to use:   * the *iDEPEND* tool * the evidence about interventions * the members area on the Regulatory Evidence Network to share their *iDEPEND* modelling work |

Excellent presentations on using dependency modelling to support environmental regulation were given including a demonstration on how to use the *iDEPEND* tool to build a dependency model and produce reports to assess where and how interventions can be applied to achieve environmental objectives.

Nearly 100 environmental practitioners registered and attended the webinar including from Europe, Australia and the United States.

Polls conducted during the webinar indicated that the majority of practitioners:

1. used or considered using a range of interventions alongside inspections;
2. did not have a consistent means of choosing the most appropriate interventions;
3. thought that iDepend was a tool that would help them to make the right choice of intervention;
4. would welcome a means of sharing experience of using and best practice in choosing interventions.

For those people that couldn’t join the webinar (or if anyone would like to view it again!) it is available for downloading and viewing [[16]](#footnote-16)

# Chapter 4. The revised guide

An *iDEPEND* guide has been prepared for the updated *iDEPEND* tool. Like the tool, the guide has been specifically developed for IMPEL for the purpose of choosing interventions.

The guide sets out how to use *iDEPEND* to help choose the right types of intervention to improve the environmental compliance and performance of business and other organisations. It provides step by step instructions with examples and diagrams to help IMPEL members use each aspect of the *iDEPEND* tool and to share their models and interventions with each other.

The guide is appended to this report as a separate file. (It will be included as an appendix in the final published pdf report and made available on-line from the project page[[17]](#footnote-17) on the IMPEL website).

# Chapter 5. A means to allow co-operation and sharing best practice on choosing interventions

The usefulness of any models and decision support tools is limited by the knowledge and experience of the user and *iDEPEND* is no different. So far as choosing interventions is concerned such knowledge and experience is needed over a wide range of factors related to economic, social, environmental and other factors related to the specific circumstances in which the user finds themselves. Even though some evidence is available via the Regulatory Evidence Network[[18]](#footnote-18) (REN) it is by no means complete, it is often circumstantial rather than scientific proof and it is usually relevant to specific contexts which might not apply in all circumstances. Not surprisingly therefore, some of the test users were uncertain about the accuracy of the results from *iDEPEND* because they were often only able to estimate the inputs rather than use robust evidence to do so.

There needs to be a way, therefore, for people to communicate their model inputs and outputs and to build a virtual “user group” of IMPEL *iDEPEND* users who can exchange experiences, share each other’s models and share how well chosen interventions worked in practice.

As well as the tool the user needs “evidence” about what are the key dependencies for particular circumstances and what interventions are available and how effective they might be. Much of this is available through the Regulatory Evidence Network (REN) and this can be further improved via the *iDEPEND* portal[[19]](#footnote-19) that has been created on the REN for users to share models. A forum has also been set up to allow IMPEL *iDEPEND* users to exchange views and ask questions about the tool and about the models they produce.

By this means the expertise in choosing and applying interventions should increase across the IMPEL community, thereby improving the implementation of EU Environmental Law.

# Chapter 6 Arrangements for using *iDEPEND* after the end of 2014

From September 2014 the new release of *iDEPEND* with all the features described in this guide will be available to the IMPEL community.

IMPEL has paid for a licence for up to 100 IMPEL members to use *iDEPEND up* to the end of 2014 but it will continue to be available for a little longer for anyone who has an *iDEPEND* account and started a model.

A Terms of Reference has been prepared for 2015 setting out the potential benefits of using iDepend for the IMPEL community and options for licensing the tool from the software developers/owners, Cambrensis. These options will be considered by IMPEL between September and December 2014.

During development and testing of the ‘IMPEL Bundle’ of iDepend in 2013-4, a nominal fee of €1,000 was agreed with Cambrensis to cover the use of iDepend by the project team and testing by up to 100 users (see table 3.1 in annex 1). This was not a licence for general use by IMPEL members and therefore should not be viewed as comparable with the proposals set out in the ToR for use of iDepend in 2015 and beyond.

Annex 1.

Terms of Reference

Terms of Reference for IMPEL project

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| **No** | **Name of project** |
| *2014-12* | **Choosing appropriate interventions alongside inspections to ensure compliance and achieve environmental outcomes**  **Phase 3 - to implement and communicate a practitioner toolkit for choosing appropriate interventions** |

**1. Scope**

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| **1.1. Background** | The European Commission is currently developing the 7th Environmental Action Programme (7 EAP) in which a key strand is effective implementation of environmental legislation.  In 2012, the EC issued a communication on improving the delivery of environment measures (COM (2012) 95) which highlights the use of complementary approaches to inspections.  The first phase of this project (2012) introduced the concept of a model, or road map, to help choose complementary approaches. The second phase of this project (2013) developed and tested a toolkit to enable practitioners and policy makers to choose the right mix of interventions, according to circumstances, to achieve environmental outcomes or goals. This included use of a dependency modelling tool called *iDEPEND. iDEPEND* allows users to set objectives (or outcomes) and assemble, map and test the factors on which the objectives (or outcome) depend (dependencies). The project produced guidance on how to use dependency modelling to help choose appropriate interventions.  The key findings of phase 2 were:   * ***The iDEPEND tool and guidance were easy to use although some improvements were identified.***  ***Much of this is now available through the Regulatory Evidence Network and this could be further improved if IMPEL members can share their experiences.*** * ***It would be possible to build a virtual “user group” of IMPEL iDEPEND users who can exchange experiences, share each other’s models and share how well the chosen interventions work in practice.*** * ***IMPEL members are already making use of the iDEPEND tool and communicating/ promoting the dependency modelling approach within their organisations.*** * **iDEPEND developers are considering how to make the tool more widely available for IMPEL members, making improvements and any necessary licences and support for the tool.** * ***IMPEL members identified improvements to the idepend tool that would improve their ability to share and co-operate on the construction of models.*** * ***The recommendations above (in italics) could be the subject of a future IMPEL project.***   More information on phase 2 can be found in the project report to Cluster I. |
| **1.2. Link to IMPEL’s role and scope** | This project is closely linked to the following IMPEL strategic goals:  Development of good practices  Learning from each other and identify good practices in implementing EU law.  New instruments in environmental protection  Identify new and/or complementary approaches to deliver environmental protection.  Providing feedback to policy makers  Assist in the aim to “continue the activity of providing feedback to the Commission or EU Institutions on better legislation issues, gathering information on experience of implementing EU legislation”.  Defining objectives and strategies within the Environmental Inspections Cycle  The EIC project has described this work as: “much more than deciding about site visits - it includes what outcomes you want and the approaches you use to reach the objectives”. The Choosing Appropriate Interventions approach is based on that premise. |
| **1.3. Objective (s)** | To improve the effectiveness of Environmental Inspectorates’ implementation of the environmental acquis by providing IMPEL members with a toolkit for choosing interventions, according to circumstances. |
| **1.4. Definition** | The project will:   * Make improvements to the *iDEPEND* modelling tool including links to other resources * Establish an access site for *iDEPEND* and other parts of the toolkit on the Regulatory Evidence Network (REN).Note that the idepend tool is already hosted on the software developer’s server. * Communicate the benefits of dependency modelling and the toolkit to IMPEL members and other interested parties. |
| **1.5. Product(s)** | 1. **A toolkit** to help practitioners to choose interventions including: 2. *iDEPEND* **"dependency modeling" tool**; 3. **User guidance** on (a) what you have to think about to choose interventions and (b) how to use *iDEPEND* 4. **Library of interventions**, with examples of where used and evidence of how well they worked provided by the Regulatory Evidence Network (REN) developed by a *SNIFFER project;* 5. **Evidence on external "drivers" and "internal factors"** that affect business environmental performance, and evidence of the **success of interventions** selected. 6. **A portal** that: 7. provides access to *iDEPEND* , 8. allows models generated on *iDEPEND* to be shared, 9. makes available lists of interventions, 10. provides access to evidence, including influencing factors and use of interventions. 11. **Communications ‘package’** to promote the toolkit and disseminate results/case studies following its use. The IMPEL communications group/project will oversee communications, which will include:  * a ‘webinar’ for the user community to be carried out in the first quarter 2014; * A discussion forum for sharing information on the choice and use of interventions (a means of co-operating and sharing best practice). * A discussion forum for sharing information on the use of the idepend modelling tool, including recommending improvements to the software developers.  1. **Phase3 project report** |

**2. Structure of the project**

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| **2.1 Activities** | The main activities of this phase (3) of the project will be to:   1. Provide a dependency modelling tool based on *iDEPEND* and reflecting user testing carried out in Phase 2. 2. Provide guidance on how to choose interventions using *iDEPEND* developed during phase 2. 3. Establish a portal to access *iDEPEND*; a library of interventions; and information / evidence on using interventions. 4. Communicate and promote the toolkit to IMPEL and other users 5. Report on progress to IMPEL |
| **2.2. Project team**  **Other Participants** | The existing project manager (Duncan Giddens) will manage the work, using the phase 2 project team members as a ‘sounding board’.  IMPEL members will be engaged via the user community established in Phase 2. This community can be expanded and involved in the implementation of the tool via web-based discussion fora and webinars.  Communication and promotion of the toolkit will be carried out by the IMPEL communication group.  All of the software improvements will be carried out by consultants from Cambrensis/Intradependency – the owners and developers of the iDEPEND concept and software. |
| **2.3. Manager**  **Executor** | Duncan Giddens, Environment Agency for England |
| **2.4. Reporting arrangements** | * TOR (this document)for Phase3 activities submitted to Cluster I in October 2013 and GA in December 2013 * Draft report on will be submitted to Cluster I in October 2014 and Final Report to General Assembly in December 2014’ |
| **2.5 Dissemination of results/main target groups** | IMPEL members and agencies, European Commission, Network of Heads of EU EPAs, OECD, INECE. A communications plan will be produced as part of the project to ensure that the project findings are disseminated in the most appropriate ways to key stakeholders. |

**3. Resources required**

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| **3.1 Project costs and budget plan** |  | **2014** |
| No meeting costs. All correspondence via email |  |
| *EA to fund project manager* | 26 FTE days |
| *Other Costs* |  |
| Consultants (23 days at €500/day) : | 11,500 |
| IT licence fee (100 users) for 2014 | 1,000 |
| VAT (21%) | 2,625 |
| **TOTAL cost per year €** | 15,125 |
| **Project meeting costs and consultancy costs** | 15,125 |
| **3.2. Fin. from IMPEL budget** |  | 15,125 |
| **3.3. Co-financing by MS/Others)** | None |  |
| **3.4 Human Resources from IMPEL MS** | Project management (EA England) | 26 FTE days |

**4. Quality review mechanisms**

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| The quality of the final product will be reviewed by Cluster I |

**5. Legal base**

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| **5.1. Directive/Regulation/**  **Decision** | A. 1996 Commission Communication on Implementing Community Environmental Law in which IMPEL’s role was recognised.  B. Recommendation on Minimum Criteria for Inspections (2001/331/EC)  6th EAP (in particular the reasons identified for poor implementation and 7th EAP  7th EAP, in particular the focus on improving the implementation of EU Environmental legislation across the acquis. |
| **5.2. Article and description** | Not specifically one article. |
| **5.3 Link to the 6th EAP** | Improving Implementation |

**6. Project planning**

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| **6.1. Approval** | Draft ToR in Joint Cluster meeting - October 2013  Tor in General Assembly – December 2013 |
| **6.2 Milestones** | **1. January.** Commence project activities.  **2. March. Report on progress to** Cluster I  **3. June.**  Complete project activities.  **4. Autumn –** Report to Cluster and GA. |
| **6.3 Adoption** | General Assembly Autumn 2014 |

1. The Regulatory Evidence Network aims to bring together environmental policy makers, advisors and regulators, with academics, consultants, and other researchers who have an interest in better regulation. The network is administered by the Environment Agency and Defra to support evidence-based approaches to regulation. Membership is open to anyone in the UK or internationally with a professional interest in the theory and practice of better regulation for the environment. The network can be found at: <https://connect.innovateuk.org/web/evidence>. [↑](#footnote-ref-1)
2. The Phase 1 Project is described on The IMPEL website and the final phase report is available here: <http://impel.eu/projects/choosing-appropriate-interventions-alongside-inspections-to-ensure-compliance-and-achieve-environmental-outcomes/> [↑](#footnote-ref-2)
3. The Phase 2 Project is described on The IMPEL website and the final phase report is available here: <http://impel.eu/projects/choosing-appropriate-interventions-phase-2/> [↑](#footnote-ref-3)
4. This final project report encompasses phase 3. The terms of Reference for Phase 3 are attached at Annex 1. [↑](#footnote-ref-4)
5. IMPEL 2012 Exploring the use and effectiveness of complementary approaches to inspection for ensuring compliance. <http://impel.eu/projects/exploring-the-use-and-effectiveness-of-complementary-approaches-to-inspection-for-ensuring-compliance/> [↑](#footnote-ref-5)
6. IMPEL 2013. Choosing appropriate interventions alongside inspections to ensure compliance and achieve environmental outcomes. Phase 1 – Developing principles and features of a Model for choosing interventions. <http://impel.eu/projects/choosing-appropriate-interventions-alongside-inspections-to-ensure-compliance-and-achieve-environmental-outcomes/> [↑](#footnote-ref-6)
7. IMPEL 2013. Choosing appropriate interventions alongside inspections to ensure compliance and achieve environmental outcomes. Phase 2: Developing and Testing a Toolkit. <http://impel.eu/projects/choosing-appropriate-interventions-phase-2/> [↑](#footnote-ref-7)
8. This final project report encompasses phase 3. The terms of Reference for Phase 3 are attached at Annex 1. [↑](#footnote-ref-8)
9. SNIFFER (2013). Towards *a regulatory evidence portal*.  Six topic area summaries on principles of better environmental regulation. <http://www.sniffer.org.uk/knowledge-hubs/environmental-regulation/better-regulation/towards-regulatory-evidence-portal/>. Follow the link on this web-page to “Topic Area 2” (Choose and Design Interventions). [↑](#footnote-ref-9)
10. Taylor CM, Pollard SJT, Angus AJ & Rocks SA. (2013) Better by design: rethinking interventions for better environmental regulation, *Science of the Total Environment*, 447 488-499. <http://www.sciencedirect.com/science/article/pii/S0048969712016300>. [↑](#footnote-ref-10)
11. Regulatory evidence network: <https://connect.innovateuk.org/web/evidence/overview> [↑](#footnote-ref-11)
12. Taylor CM, Pollard SJT, Angus AJ & Rocks SA. (2013) Better by design: rethinking interventions for better environmental regulation, *Science of the Total Environment*, 447 488-499. <http://www.sciencedirect.com/science/article/pii/S0048969712016300>. [↑](#footnote-ref-12)
13. IMPEL 2013. Choosing appropriate interventions alongside inspections to ensure compliance and achieve environmental outcomes. Phase 2: Developing and Testing a Toolkit.: <http://impel.eu/projects/choosing-appropriate-interventions-phase-2/> [↑](#footnote-ref-13)
14. Suitable Web Browsers are Mozilla Firefox, Google Chrome or Internet Explorer 10 or higher. [↑](#footnote-ref-14)
15. The web address for the *iDEPEND tool* is <http://idependeu.herokuapp.com/> [↑](#footnote-ref-15)
16. To access the webinar [please click here to view the recording](https://connect.innovateuk.org/web/evidence/documents?p_p_auth=l79awC4I&p_p_id=20&p_p_lifecycle=0&p_p_state=normal&p_p_mode=view&p_p_col_id=column-2&p_p_col_count=1&_20_struts_action=%2Fdocument_library%2Fview_file_entry&_20_redirect=https%3A%2F%2Fconnect.innovateuk.org%2Fweb%2Fevidence%2Fdocuments%3Fp_p_auth%3Dl79awC4I%26p_p_id%3D20%26p_p_lifecycle%3D0%26p_p_state%3Dnormal%26p_p_mode%3Dview%26p_p_col_id%3Dcolumn-2%26p_p_col_count%3D1%26_20_entryEnd%3D20%26_20_displayStyle%3Dicon%26_20_viewEntries%3D1%26_20_viewFolders%3D1%26_20_expandFolder%3D0%26_20_folderStart%3D0%26_20_action%3DbrowseFolder%26_20_struts_action%3D%252Fdocument_library%252Fview%26_20_folderEnd%3D20%26_20_entryStart%3D0%26_20_folderId%3D3815331&_20_fileEntryId=16154307). [↑](#footnote-ref-16)
17. IMPEL 2014 Choosing Appropriate Interventions Phase 3. <http://impel.eu/projects/choosing-appropriate-interventions-phase-3/> [↑](#footnote-ref-17)
18. The Regulatory Evidence Network can be found here: <https://connect.innovateuk.org/web/evidence> [↑](#footnote-ref-18)
19. The portal on the REN for *iDEPEND* users is available here: <https://connect.innovateuk.org/web/evidence/idepend> [↑](#footnote-ref-19)