



## Application writing Example proposals

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## LIFE + Environment Policy and Governance

### **TECHNICAL APPLICATION FORMS**

## **Part A – Administrative information**

NOTES:

There are 4 sets of LIFE+ "Environment Policy and Governance" application forms: A, B, C (technical forms) and F (financial forms). The financial forms are in a separate Excel file.

While filling in the technical forms A – C, please respect the standard A4 format.

Whenever several copies of one form 2010-XY needs to be produced, please use the following naming convention per page: 2010-XY/1; 2010-XY/2 etc.

#### LIFE+ Environment Policy and Governance 2010- A1

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#### PROJECT

Project title (max. 120 characters):

E-qual Qual - Ensuring Quality of waste-derived products to achieve resource efficiency

Project acronym (max. 25 characters): EQual

The project will be implemented in the following:

Country(ies) UK, NL

Administrative region(s) England and Wales, Northern Ireland, The Netherlands

Expected start date: 12/09/2011 Expected end date: 24/10/2014

#### **BENEFICIARIES**

Name of the coordinating beneficiary (1): Environment Agency (EA)

Name of the associated beneficiary (2): Environmental Services Association (ESA)

Name of the associated beneficiary (3): Agentschap NL (NL Agency)

Name of the associated beneficiary (4): Association for Organics Recycling (AfOR)

Name of the associated beneficiary (5): Northern Ireland Environment Agency (NIEA)

Name of the associated beneficiary (6): Chartered Institution of Waste Management (CIWM)

Name of the associated beneficiary (7): Association of Electricity Producers (AEP)

(Continue as necessary)

#### PROJECT BUDGET AND REQUESTED EC FUNDING

Total project budget:

€3,002,265 €3,002,265

Total eligible project budget:

 $\in$ 1,501,132 (= 50% of total eligible budget)

EC financial contribution requested:

#### **PROJECT POLICY AREA**

You can only tick one of the following options:

Climate Change	Urban environment	<ul> <li>Waste and natural resources</li> </ul>
□ Water	□ Noise	□ Forests
□ Air □ Soil	<ul> <li>Chemicals</li> <li>Environment and Health</li> </ul>	<ul> <li>Innovation</li> <li>Strategic approaches</li> </ul>

#### OTHER PROPOSALS SUBMITTED FOR EUROPEAN UNION FUNDING

#### Please answer each of the following questions :

• Have you or any of your associated beneficiaries already benefited from previous LIFE cofinancing? (please cite LIFE project reference number, title, year, amount of the cofinancing, duration, name(s) of coordinating beneficiary and/or partners involved):

					-		
LIFE	Short	Long title	Year	Co-	Dura	СВ	Partners
project	title			financing	tion		
ref. no.				/€			
LIFE09/	EDOC	Electronic Duty of Care	2009	2.088.25	Jan-11	EA	CIWEM, WRAP, CRL, NIEA,
FNV/UK/		····		0,00	- Dec14		WAG
000023				0.00	- Deci-		
	IGREE	Improving Guidance on	2009	2 507 03	Nov 11	FΔ	SEPA NIEA
	N	Regulations for	2000	2,007,00	Oct	L/(	OEI / , ME/
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	EFOW	Zere Master	2000	1,927,793		EA	South East England
		demonstrating the route			Dec 12		Development Agency (SEEDA)
000208		to zero weste to lendfill					
		to zero waste to landilli					
		via end of waste					
		protocols and building a					
115500	MD	recycling society	0000	447.000	0.100		
LIFE06	MR	Managed Realignment	2006	417,232	Oct 06 -	EA	-
ENV/UK/	MOTO	Moving Towards Water			Sep 09		
000401	VVFO	Framework Objectives	0005	740.057	D 05	Outend	Our and the base of the Delfant
LIFE05	NITRA	Remediation of	2005	740,957	Dec 05 -	Oxford	Queen's University Beirast,
ENV/UK/	BAR	agricultural diffuse			Mar 09	Univer	UKEA, UKECOMesh, UKPRGW -
000137		hitrate polluted waters				Sity	Przedsiebiorstwo Robot
		though the					Geologiczno wiertniczycn,
		implementation of a					Poland, GreenSan, Belgium,
		permeable reactive					APCO, Malta, CLAIRE, UK
115505	A) (O)	barrier	0005	740.057		<b>F 1 1</b>	
LIFE05	AVON	River Avon SAC:	2005	740,957	Aug 05 –	English	EA, Hampshire and Isle of Wight
ENV/UK/		demonstrating strategic			Sep 09	Nature	
00013		restoration and					Trust (VV VV T)
		management	0005	040 407	1		
LIFE05	LEIS	LIFE Environment	2005	312,497	Jun 05 –	EA	Umweitbundesamt GmbH-UBA-
PREP/U		Preparatory Project for			Jun 06		A, Austria, Danish
K/00001		the EU emissions					Environmental Protection
2		trading scheme update					Agency, Agenzia per la
							Protezione dell'Ambiente e per i
							Servici Tecnici, Italy, (DEHSt) in
	1147	Demonstrations	2004	705 0 44	Dec 04		Unweitbundesamt, Germany
LIFE04	HAZ	Demonstrating a	2004	725,641	Dec 04 -	EA	Envirowise, Groundwork, Weish
ENF/GB/	RED	European Method for			NOV 07		Assembly Government, IEPA,
000803		Haz waste Mgt					SEPA, waste Recycling Group,
		Including Targets for					Safety-Kleen
		Prevention and					
		Reduction of Waste	2004	1 000 100	Nov 04	000	Liverneel Liniversity Couthers
	SUK	Sustainable Kiver	2004	1,090,138	NOV 04 -	SEE	Liverpool University, Southern
ENV/GB	CASE	Catchments for the			Oct 08	DA	water, South East water,
/000807		South East					VVestCountry Rivers Trust,
		Destanation of the set 1	0000	004 754	Max 00	En alla h	INatural England, EA
		Restoration of the mid	2003	921,751	Iviar 03 –	English	EA, Highways Agency, Butterfly
NA1/UK/					Jun 09	nature	Conservation, Cornwall Wildlife
000042		Euphyuryas aurinia	2002	1 0 27 44 4	Nov 00		Institute of Environmental
	S	I Itilising EMAS II in the	2002	1,037,414	Apr 06	EA	Management and Assessment
	0			1			manayement and Assessmell,

000143		regulation of industry					Scottish Environmental
							Protection Agency, Irish Environmental Protection
LIFE02 NAT/UK/ 008544	New Forest	Sustainable Wetland Restoration in the New Forest	2002	1,833,705	Jul 02 – Dec 06	Hants CC	EA, English Nature, Forestry Commission, National Trust, RSPB
LIFE02 ENV/UK /000144	SMUR F	Sustainable Mgt of Urban Rivers & Floodplains	2002	1,010,346	Aug 02 – Jul 05	EA	H R Wallingford, Severn Trent Water, Staatliches Umweltamt Herten, Germany
LIFE99 ENV/UK/ 000177		A demonstration model which integrates environmental considerations in sustainable land use planning and management through the use of ecological networks	1999	2,362,583	Sep 99 – Sep 03	Cheshi re CC	Vale Royal Borough Council, UK, The University of Salford, UK, The University of Reading, UK, Liverpool, John Moore University, UK, United Utilities, UK, English Nature, UK, The Environment Agency, UK Sustainability Northwest, UK Regione Emilia-Romagna, Bologna, IT, The Province of Bologna, IT, The Province of Modena, IT, The Province of Modena, IT, The Region Abruzzo, IT, The Alterra, Green World Research Institute, NL Wageningen University, NL Province of Gelderland, NL
LIFE99 ENV/UK/ 000203		Wise use of floodplains - a demonstration of techniques to evaluate and plan floodplain restoration	1999	1,049,127	Apr 99 – Apr 02	RSPB	WWF International, English and Welsh Environment Agency Ministre de l'Amenagement du territoire et de l'Environnement La Ligue pour la Protection des Oiseaux, (LPO), France, Agence de l'Eau, France, Centre for Ecology and Hydrology,UK Scotland and Northern Ireland Forum for Environmental Research (SNIFFER) Environment and Heritage Service, Northern Ireland Scottish Environmental Protection Agency (SEPA) Birdwatch Ireland, Rivers Agency, UK, Thames Water Utilities Ltd, UK, Institution Fleuve Charente, France Region Poitou Charentse, France
LIFE99 NAT/UK/ 006081		Living with the sea : Managing Natura 2000 sites on dynamic coastlines	1999	632,881	Aug 99 – Jul 03	English Nature	Environment Agency Natural Environment Research Council, Defra
LIFE99 NAT/UK/ 006088		Safeguarding Natura 2000 Rivers in the UK	1999	1,087,706	Aug 99 – Dec 03	English Nature	Scottish Natural Heritage, Environment Agency Countryside Council for Wales Scottish Environment Protection Agency, Scotland and Northern Ireland Forum for Environmental Research
LIFE96 ENV/UK/ 000401		Coastal zone management : development of a strategy for an open coast	1996	119,616	Mar 97 – Mar 00	Dorset CC	Environment Agency, Bournemouth County Council, Poole Borough Council, West Dorset District Council, British Petroleum, Amoco (UK) Exploration, Wessex Water English Nature, Dorset Wildlife Trust
LIFE96 NAT/UK/ 003057		Urgent action for the Bittern (Botaurus stellaris) in the UK	1996	1,126,821	Jul 96 – Mar 00	RSPB	Broads Authority, English Nature, Environment Agency National Trust, Norfolk Wildlife Trust, Suffolk Wildlife Trust
LIFE93 ENV/UK/ 003046		A constructed Wetland Treatment System for the Rehabilitation of Sites Contaminated by Coal Mine Water Discharges	1993	129,456	Jan 94 – Dec 98	Neath Port Talbot CC	EA,

• Have you or any of the associated beneficiaries submitted any actions related directly or indirectly to this project to other European Union financial instruments? To whom? When and with what results, and how are these related to the present proposal?

The Environment Agency has submitted a number of bids for EU funding as listed above. The only project directly related to EQual, is the European Pathway to Zero Waste (EPOW) project (LIFE08 ENV/UK/000208), which will deliver 3 end of waste Quality Protocols of relevance to the southeast of England by 31 December 2012. The EQual Project will build upon that learning and the learning from the UK Government funded Waste Protocols Project to empower industry to make their own end of waste decisions independently of the regulator.

 For those actions which fall within the eligibility criteria for financing through other European Union financial instruments, please explain in detail why you consider that those actions nevertheless do not fall within the main scope of the instrument(s) in question and are therefore included in the current project.

We have considered the applicability of EQual to other EU funding instruments and do not consider any of them suitable for funding EQual or its actions aside from LIFE+ Policy & Governance.

EQual is at the pre-industrial-scale application stage so is not applicable to FP7. The research which FP7 funds has effectively been undertaken via the Waste Protocols Project (WPP). This has proved to us that waste quality protocols work and industry is ready to apply them through the new tools and techniques EQual intends to demonstrate.

Nor could EQual be undertaken using Cohesion Funds such as ERDF or ESF as it relates purely to environmental legislation at a national and Europe-wide scale rather jobs and growth or local, regional or regional seas transboundary issues.

EQual does not relate to specifically to fisheries and does not fall under the criteria of EFF in England or Wales. We do not feel it is relevant to CIP as the focus in not on eco-innovation for business competitiveness.

We have experience of many EU funds and are confident that LIFE+ is the correct choice. In addition, to achieve its objectives it is vitally important EQual retains its coherence as a project. To try to fund separate actions via separate EU funding instruments would risk jeopardising this.

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LIFE + Environment Policy and Governance

## **TECHNICAL APPLICATION FORMS**

Part B – Objectives and expected results

#### SUMMARY DESCRIPTION OF THE PROJECT (Max. 3 pages; to be completed in English)

Project title: EQual: Ensuring Quality of waste-derived products to achieve resource efficiency.

#### Project purpose

EQual is an innovative, demonstration project. Its aim is to demonstrate to businesses and stakeholders a new method which will make it possible to derive quality waste products without the need for waste controls in order to raise consumer confidence in using waste-derived products. This will help address the environmental problem of waste and resource efficiency.

#### Background

Uncertainty over the point at which waste has been fully recovered and ceases to be waste within the meaning of Article 1(1)(a) of the EU Waste Framework Directive (2006/12/EC) inhibits the development and marketing of materials produced from waste which could be used beneficially without damaging human health and the environment. This also inhibits the recovery and recycling of some waste and its diversion from landfill. Over time we have built up sufficient knowledge to identify the point at which certain wastes cease to be waste and thus when the Waste Framework Directive's waste management controls no longer apply. The use of waste quality protocols have become key to identifying when waste controls don't apply.

What is a Quality Protocol? They set out end of waste criteria for the production and use of a product from a specific waste type. Compliance with these criteria is considered sufficient to ensure that the fully recovered product may be used without undermining the effectiveness of the Waste Framework Directive and therefore without the need for waste management controls. In addition, a Quality Protocol indicates how compliance may be demonstrated and points to good practice for the use of the fully recovered product. A Quality Protocol further aims to provide increased market confidence in the quality of products made from waste and so encourage greater recovery and recycling.

The Environment Agency has established the value of Quality Protocols to waste and resource efficiency through its award winning Waste Protocols Project (WPP) which began in 2006 and will finish March 2011. This Environment Agency led partnership project has delivered 9 end of waste Quality Protocols and has another 9 under development, 6 of which should be completed in full during 2010/11. The protocols cover source-segregated biodegradable waste compost and anaerobic digestates; blast furnace slag; wood waste; non packaging plastics; flat glass; cooking oil and tallow; pulverised fuel ash; paper sludge ash; contaminated soils; topsoil; incinerator bottom ash; steel slag; gypsum; tyre derived rubber material; cathode ray tubes; poultry litter ash; tyre bales, waste lubricating oil; marine dredged materials and recycled aggregates. The wastes are recycled to produce products for use in 4 key sectors – agriculture, construction, energy and manufacturing. By applying the waste protocols method industry gains confidence that the waste-derived product they create has ceased to be waste and can be sold, supplied and used without waste regulatory controls.

The benefits from the Waste Protocols Project are an estimated £1 billion in business savings and increased sales of waste-derived products by 2020 – through the first 12 materials alone across England and Wales. Simultaneously it should divert 17 million tonnes of waste from landfill, preserve 14 million tonnes of raw materials and avert 2.1 million tonnes of carbon dioxide equivalent emissions (CO2)<sup>1</sup>. The impressive benefits of the WPP have given us good reason to believe much more could be achieved were we able to help industry apply the waste protocols method for themselves, considerably multiplying the benefits from it.

With EQual we aim to demonstrate the waste Quality Protocols approach delivers real environmental benefits, empower industry to evaluate their own compliance, and develop and trial a system that allows industry to make their own end of waste decisions at a domestic and European level. If our trials prove successful the results could potentially increase the range and volume of materials Europe recycles, create new waste markets, and save environmental regulators thousands of euros by more efficient regulation. By increasing industry ability to produce, and consumer confidence to use, quality waste-derived products EQual will support the aim of a 'resource efficient Europe' and help deliver the EU Waste Thematic Strategy.

#### EQual project objectives:

1. <u>To demonstrate the environmental impacts of waste-derived products on the environment</u> through a series of field trials on 4 Quality Protocol compliant materials, by August 2014. The evidence gathered will be used to feedback into Quality Protocol reviews and the findings shared with European Partners as case studies where appropriate;

<sup>&</sup>lt;sup>1</sup> These figures originate from analysis of financial impact assessments, prepared by the Waste Protocols Project, for the first 12 materials.

- 2. <u>To empower industry to self-assess their compliance with Waste Quality Protocols</u> with the aid of a Quality Protocol compliance e-tool and guide to be developed and supplied following a trial of it with the industries concerned, by December 2012. (Actions 3 & 5). This will build on our experience in aggregates, where we trialled a self-assessment tool and found significant improvements in compliance and uptake of the quality protocol over a 9 month period;
- 3. <u>To give customers greater confidence in waste-derived products produced to Quality Protocol</u> <u>standards</u> by developing check lists for customers to confirm the product they are purchasing is no longer waste, by December 2012. (Action 3). Reinforced by 3<sup>rd</sup> party certification, customers will be confident that the company has the right systems in place to demonstrate that their product is no longer waste and is of a sufficient quality to be used as a substitute for primary raw material;
- 4. <u>To demonstrate a successful methodology for making end-of-waste decisions</u> by developing an End of Waste e-tool, and implementation guide designed to enable businesses to make their own end of waste decisions and create their own bespoke end of waste Quality Protocols, by August 2014. (Action 4 & 6). This will set out the process of environmental and human health risk assessment; financial impact assessment; and demonstrating full recovery. It will remove the need for case by case decision making by the Environment Agency by empowering industry to make its own decisions.
- 5. <u>To effectively communicate and disseminate</u> the EQual\_project findings to its stakeholders and relevant audiences in Europe so that others can learn and benefit from it. (Action 7,8, 9)

By producing a system which industry can adopt, EQual will empower industry to make investment decisions around waste treatment technologies, and increase customer confidence in the quality and safety of the waste-derived products they produce. This project will effectively put ownership for reducing the regulatory burden associated with the recovery of raw materials from waste for productive use into the hands of Industry.

The finished system will be beneficial to producers, carriers, operators and regulators of waste and should complete the modernisation of end of waste decision making in the UK. It will be an exemplar project in the European Union (EU), demonstrating how Member States can develop a decision making system to contribute to the implementation of EU policy and legislation on waste – taking forward the ability of members states to make end of waste decisions in accordance with the revised Waste Framework Directive.

#### Actions and means involved:

The project will achieve its objectives through a series of linked and focused actions:

#### Preparatory Actions (Action 1) and Project management (Action 10) – supports all Objectives

The project team and governance framework will be set up and take advantage of stakeholder relationships developed from the earlier Waste Protocols Project (WPP). Stakeholder analysis will inform us of the size and range of interests of the stakeholder group so that an appropriate national framework can be set up. This will facilitate the recruiting of industry partners and other stakeholders for the field trials and other areas of stakeholder input (fully described in Section C).

#### Develop the field trials and evaluation methods (Action 2) – supports Objectives 1, 2 & 4

The trials to assess how the EQual method, tools and techniques perform in the field will be developed along with a methodology for monitoring and evaluation. We will focus these trials on materials which are used in agriculture and construction. The trials are essential to demonstrating that EQual's methods produce safe results for certain waste materials where doubts over their environmental impact may exist. This will give industry confidence in using waste derived products processed using EQual's techniques.

## Develop the Quality Protocol compliance e-tool (Action 3) and the End of Waste e-tool (Action 4) – supports Objectives 2 & 3

A Quality Protocol compliance e-tool will be developed (Action 3) and tested to make sure it is suitable to be trialled in the field (Action 5). It will be designed to a specification that enables producers and regulators to audit a production process, and identify improvements to ensure their products are compliant with a specific waste Quality Protocol. It will be targeted on four waste sectors (agriculture, construction, energy and manufacturing) that have successfully used waste Quality Protocols (as part of the WPP) to produce Quality Protocol compliant materials.

The QP e-tool will be hosted on a partner website (accessible to all UK businesses) and will be accompanied by 'purchaser checklists'. These will enable purchasers of recycled materials to check that the materials meet the relevant quality protocol, giving them confidence the material is compliant with recognised regulations and standards.

An 'end of waste e-tool' will be developed (Action 4) and tested to make sure it is suitable for trialling (Action 6). This e-tool will be designed to help companies work out if a waste derived product they have manufactured is safe to use and that waste controls no longer apply. It will be of particular value for those wastes where an end of waste decision has not been made by the UK or at a European level.

This e-tool will guide industry on what they need to do to demonstrate that their material has become a marketable product that has lost its waste characteristics (including advice on the significance of product standards and certification), and will be a particular benefit to eco-innovators. It will also enable business to determine end of waste without sharing commercially confidential information with the regulator.

The end of waste tool would be developed as a set of modules, so any European state could use any or all of the modules to develop their own bespoke end of waste tool.

## Trial and evaluate the Quality Protocol compliance tool (Action 5) and End of Waste tool (Action 6) – supports Objectives 2 & 4

The tools will be fully tested to understand how they perform in a 'real world' environment. Target industries recruited under in Action 2 will be trained in how to use the tools.

For the Quality Protocol compliance e-tool we will conduct a survey to identify which materials the tool will offer most benefit, and work with those industries to trial the tool.

For the end of waste e-tool we will work with an industry which produces a waste-derived product for use in a high volume waste steam such as construction, to gather the data and conduct the necessary assessments to work through the tool. We will then disseminate and communicate our findings in the UK and across Europe through a series of workshops, conferences and training events.

#### Communication, networking & dissemination (Actions 7, 8 & 9) – supports Objectives 4 & 5

The findings, conclusions and recommendations of the project will be made public and communicated and disseminated in the UK and in Europe. The communications strategy and tools for this and for carrying out the project will be developed under these actions.

#### Expected results (outputs and quantified achievements):

By the end of the project we expect:

#### General

- To have comprehensively established how industry can be empowered to use waste derived products without the need to apply waste controls, by using the waste protocols concept, method and tools.
- To have shared and promoted our findings in Europe and the UK
- To have produced, tried, tested and evaluated:
  - 1 x Communication and dissemination programme including website hosted on Business Link supersite
  - o 1 x End of waste e-tool and accompanying guidance
  - o 1 x Quality Protocol compliance e-tool and checklists for industry
  - o 1 x field trial collated report
- To have achieved the project objectives.

#### Task specific

- <u>Field Trials</u> Maximise the uptake of Quality Protocol materials through building market confidence in their safety and suitability in place of virgin materials. If any potential risks are identified we can amend the existing Quality Protocol to ensure that required reductions in potential pollutants acted upon.
- <u>Audit tool</u> This tool will encourage the correct use of existing Quality Protocols, either through industrial compliance or improved regulation, increasing the quality and quantity of recycled materials. Through providing this support the work will reinforce the current and predicted uptake of Quality Protocols over the next 10 years. The quantified results that the current Protocols are set to achieve in this period are £1bn savings to business, 17 m tonnes of waste diverted from landfill and 2.1m tonnes of CO<sub>2</sub> savings by 2020.
- End-of-Waste tool The end-of-waste tool will enable businesses to make their own end of

waste decisions and create their own bespoke end-of-waste Quality Protocols. This will enable innovation and encourage the reuse of waste materials by removing the regulatory burden. It will remove the need for case by case decision making by the Environment Agency by empowering industry to make its own decisions. The reduced burden is well documented throughout the many Financial Impact Assessments undertaken by the current Waste Protocols Programme. The reduction in burden for the regulator is less understood, the Environment Agency receives approximately five end-of-waste applications per month, each taking around three months to complete.

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Can the	project be	considered to be	a climate change	auaplalion pro		INO	V

#### ENVIRONMENTAL PROBLEM TARGETED

This proposal identifies a number of environmental problems and targets them with innovative and novel approaches. The primary high level issues tackled are resource efficiency, landfill avoidance and reducing CO2 emissions. The project also proposes to create a strong evidence base associated with the perceived risks from using recycled materials such as pollution to groundwater, surface water and the soil environment. By building the evidence base associated with all of the environmental issues listed above we aim to increase the uptake of waste derived products over their virgin equivalents.

Since its formation the current Quality Protocols project, which the EQual programme looks to build upon, has delivered the following benefits to the environment<sup>2</sup>:

- 65,006 tonnes of avoided landfill to date;
- 63,381 tonnes of virgin material use avoided to date;
- 19,080 tonnes of carbon (e) saved to date.

Current projections suggest that by 2020 the Quality Protocols project will support the diversion of over 17m tonnes of waste from landfill and prevent the release of over 2.1m tonnes in England and Wales. The EQual programme, through the 2 e-tools and field trials will help further end of waste decisions to be taken and build market confidence in the existing QP materials which will ensure that these metrics are achievable in the UK and ensure that their success is shared widely throughout Europe.

Waste puts enormous pressure on the environment as a result of the impacts of extracting and processing new materials, and the manufacturing and distribution of new goods. And waste generated by the EU is expected to rise by 45% between 1995 and 2020. The EC want to reduce the amount of waste generated and recover and recycle as much as possible. This would save precious land from being used for landfill, help to reduce environmental problems from waste such as pollution and greenhouse gasses, and support the recycling sector, so benefiting domestic economies.

A significant problem for Europe is that the amount of waste generated far exceeds the quantity recycled. The European Environment Agency reports, that although the data on waste across the European Union (EU) is inconsistent, a wide range of different waste streams are actually increasing in volume (e.g. household and packaging waste) and that many waste disposal methods are not coping with the increased loads.

In addition, resource depletion means some materials are becoming rare at source. The recent EU Raw Materials Initiative<sup>2</sup> recognises that certain critical raw materials such as lithium and cobalt need to be protected by resource recovery, amongst other ways, for instance.

The Sixth Environment Action Programme calls for measures aimed at ensuring the source separation, collection and recycling of priority waste streams. This is recognised within the Waste Framework Directive by laying out a five-step waste hierarchy (with waste prevention as the preferred option, followed by reuse, recycling, recovery and safe disposal), and the thematic strategies on the Sustainable Use of Natural Resources and on Prevention and Recycling of Waste. We understand the EU position to be "If waste cannot be prevented, as many of the materials as possible should be recovered, preferably by recycling." (DG Environment - Waste web page).

EQual is highly relevant to other EU Member States, particularly those that:

- Have high levels of landfill (such as regions in Greece and several of the East European Member States)
- Have high levels of total waste generation (such as those in the countries of north western Europe)
- Have poor national recycling rates (such as the UK, Portugal and Greece)

EQual will help to increase the type and volume of materials industry recovers from waste, including materials which are rare at source. This promises to yield a net increase in the amount recycled from

<sup>&</sup>lt;sup>2</sup> The figures have yet to be peer reviewed but provide an indication of the initial success of the first 7 Quality Protocols released in England and Wales.

waste and decrease the quantity of waste going to landfill. It will also enable eco-innovators to determine whether their new recycling technologies produce waste or non-waste – a critical issue when securing investment from funders such as venture capitalists or competing with virgin alternatives. EQual will promote sustainable use of natural resources by communicating its results more widely in Europe.

The need to regulate waste is a problem for both regulator and waste industry alike. This project will encourage the waste industry to become more au fait and self-sufficient with waste regulation. The savings in regulation will be passed on the to taxpayer. Cost savings to industry from having fewer enquiries to make (to meet waste regulations) would potentially be passed onto the consumer.

<sup>2</sup> The Raw Materials Initiative – Ensuring our Critical Needs for Growth and Jobs in Europe, Communication from the Commission to the Council and the European Parliament, COM2008 (699)

#### STATE OF THE ART AND INNOVATIVE ASPECTS OF THE PROJECT

Whilst other LIFE+ projects such as OSAMAT and WOODRUB have considered recycling processes for certain wastes EQual takes this one step further in increasing consumer confidence in recycled products. EQual is totally original in trialling new concepts that are complementary to the LIFE+ projects looking at recycling recovered waste materials. We intend to network with these existing projects as well as those promoting innovative methods of interaction and co-creation such as GREECIT.

A number of facets of the EQual project point towards its state of the art and innovative aspects:

- EQual is a completely innovative project in Europe. It will develop an original methodology and toolkit and demonstrate it as a holistic, fully integrated, system for the first time. Only the waste protocols from the Waste Protocols Project will have been developed before (uniquely by the Environment Agency and our partners). This provide an important informational resource on which to develop the tools. The methods and techniques EQual proposes to develop, trial and demonstrate are new in the sense that target waste industry users have never before had the opportunity to arrive at their own end of waste decisions. The tools to do this have not existed before.
- The Quality Protocol and End of Waste Compliance e-tools will be bespoke products. They will be designed to achieve the needs identified during development that will include a thorough survey of the industry sectors who will be using them. Members of the target industries will sit on the advisory board and be party to the development. The tools will be carefully designed and developed according to best practice and stringent quality and procurement standards.
- EQual is based on the sound underpinnings of the Waste Protocols Project, 2009 winner in the "better regulation" category of the UK's premier cross-industry accolades, the National Business Awards. This project has demonstrated the worthiness of the waste protocols concept and its potential to be expanded and extended through EQual. We have evidence of demand for this work, both from feedback from the WPP partners and letters of support received for EQual from inside and outside the UK (see 'Stakeholders involved and main target audience...' for the full list).

This proposal will have a direct impact on solving the environmental problems targeted, as detailed below:

<u>Field trials</u> - This exercise is being undertaken to ensure that the use of Quality Protocol materials is not having an adverse impact on the environment. By conducing independent scientific trials on four materials, we aim to demonstrate their safe performance, and through this evidence support existing markets and help producers to build confidence in their products.

<u>Audit tool</u> - This tool will encourage the correct use of existing Quality Protocols, either through industrial compliance or improved regulation, increasing the quality and quantity of recycled materials. Through providing this support the tool will reinforce the current and predicted uptake of Quality Protocols over the next 10 years. The quantified results that the current Protocols are set to achieve in this period are £1bn savings to business, 17 m tonnes of waste diverted from landfill and 2.1m tonnes of CO<sub>2</sub> savings by 2020.

<u>End-of-Waste tool</u> – The end-of-waste tool will enable businesses to make their own end of waste decisions, enabling innovation and encouraging the reuse of waste materials by removing the regulatory burden. The environmental benefits provided through the increased use of waste materials will primarily focused around the sustainable use of resources and the diversion of waste from landfill sites.

The CBI reinforces and promotes making the waste hierarchy the 'central pillar' in waste strategy and goes on to say; "The work of WRAP and the Environment Agency on end-of-waste protocols should continue to be sufficiently resourced, to improve confidence in the recycled materials market." (CBI, 2011) This statement reinforces the increased need to find uses for former waste materials, helping to ensure resource efficiency, reduce carbon emissions and help divert waste material from landfill.

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#### **DEMONSTRATION CHARACTER**

Provide a description of the technical scale of the project (pilot scale, pre-industrial scale, first full-scale application). Describe activities for monitoring/measurements (which, how?) and/or evaluation of the project.

#### Technical scale:

EQual will put into practice, test, evaluate and disseminate a complete new package of technologies and techniques based on the proven concept of waste quality protocols. The means of enabling business to generate and use protocols under licence and without close supervision of the regulator has not been tried or tested before. This must be proven and demonstrated. It's a completely new development which EQual aims to develop and pioneer with the help of EU LIFE+ funding.

As a demonstration project it therefore stands approximate to a pilot or pre-industrial scale with the initial research stage effectively constituted by the Waste Protocols Project (WPP). This is the reason why EQual is not suitable for FP7 funding (A7 gives more explanation).

Through its field trials (Action 2) EQual will produce a strong evidence base to support the use of wastederived products in agriculture and construction by demonstrating levels of risk to the environment and human health. These aim to demonstrate that the theorised risk assessments used to support end of waste decisions are providing adequate protection for the environment and human health.

Trials of the Quality Protocol and End of Waste e-tool will demonstrate their functionality, performance and real world applicability since they will be conducted with businesses expected to use the finished products. The tools will be designed to meet the needs clarified during development. Involvement of the Netherlands partner and other European stakeholders (from networking) will ensure wider European compatibility issues are taken into account as befits an exemplar demonstration project.

#### Monitoring:

Understanding how the EQual package performs and could be replicated elsewhere is crucial to demonstrating its effectiveness and wider applicability. EQual will monitor the techniques and e-tools from the point of view of how they perform in different environments and for different waste streams, and by different businesses and types of user (Actions 5 & 6). As this project seeks to develop a decision support tool, trials implementing the e-tools will be carried out for real waste materials (based on our experience of the Waste Protocols Project) and compared against baseline data gathered during development. Field trials for the four materials will monitor the risk posed and data applicability to other environments (Action 2).

The Project Manager will monitor and evaluate progress in accord with the agreed project plan and agreed deliverables (Action 10).

#### Evaluation:

Evaluation is a key activity within EQual as it is trialling new techniques and e-tools for the purpose of demonstrating them to stakeholders and wider audiences to bring environmental and economic benefits. Key actions and outputs EQual will evaluate include: the environmental behaviour of recycled waste materials following their use (Action 2); the performance and results of using the Quality Protocol e-tool and the End of Waste e-tool (Actions 5 & 6); the training courses and materials used to raise awareness and uptake of the new e-tools given to businesses (Action 8); the overall success of the project in achieving its objectives (Action 10).

#### Suitability for LIFE+ funding:

We are confident that LIFE+ is the correct fund for this demonstration project and have explained why in our answer to A7.

#### **Complementarity:**

Equal will be complementary to other EU LIFE+ funded projects GREECIT or WOODRUB. Though as EQual is concerned with trialling an new concept it is totally original. We will offer to share information with the other Waste themed project, through direct contact or via the IMPEL network.

#### Stakeholder involvement:

Stakeholders will be actively involved in the project throughout and be expected to assist in its communication and dissemination in the UK and Europe. All the stakeholders involved in the project will be encouraged to take active, participatory roles and a number will be invited to join the project board and steering group. In fact, this will be essential for the project to be successful. As a number of the partners from the Better Regulation award winning Waste Protocols Project have signed up as Associated Beneficiaries to this project we have reason to be confident of gaining their enthusiastic input.

In addition EQual will:

- Enable member states to overcome two of the biggest problems to recycling: understanding what materials can be recovered and recycled and how to adhere to the strict administrative and legislative conditions which govern their recovery and use.
- Enable members states and their waste industries to recover many more waste materials efficiently and effectively than was possible before the EQual method.
- Empower industry to assess their own performance and make their own decisions in relation to the creation of waste-derived products (by applying the principles of better regulation which objectives 3 and 4 focus on). The production of e-tools, hosted on a centralised business-facing website will ensure access is available to all.
- Lead directly to higher rates of waste materials recovered, more waste recycled and less sent to landfill contributing to EU and national targets.
- Save members states, their waste industries, and the EC considerable sums of money from investment in studies to achieve the same goals. This project benefits from being strongly founded on the proven waste protocols methodology of the UK funded Waste Quality Protocols project preceding it. The trials will only need to be conducted once should EQual prove that the e-tools and method work and have potential to be reproduced elsewhere. Furthermore the full EQual 'toolkit' will be made freely available to others under licence from the Environment Agency.
- Enhance the EUs knowledge base on techniques to improve waste recovery and recycling. Results will be actively shared by communication and dissemination, through networking with UK and European stakeholders, through the IMPEL network and through the project being logged on the EU LIFE+ web site
- Contribute to many of the priorities of action under Policy & Governance Principle 9 "Waste and natural resources". If successful it will help policy makers to refine, develop and implement improved waste recovery and recycling policies. It will contribute to the EU Waste Thematic Strategy and Article 6 'end of waste status' of the Waste Framework Directive by allowing members states to make their own end of waste decisions. It will help the UK to meet EU statutory obligations, requirements and targets including:
  - Persistent Organic Pollutants regulations (by helping minimise the formation of unintentional persistent organic by-products.
  - Restriction of the Use of Certain hazardous Substances (RoHS).
- The project will contribute to developing and demonstrating innovative technologies, methods and instruments as may assist in he implementation of the Environmental Technologies Action Plan ETAP.
- Ease the burden of regulation on businesses that adopt the techniques in the EU, because they will consistently be able to achieve compliance having the tools to make their own decisions. They will also have fewer enquiries to make to their respective regulator.
- Ease the burden on the regulator, by the reduction in enquiries to them concerning compliance, enabling regulators to shift their attention to dealing with the highest priorities. The quality protocol e-tool can also be used to help the regulator conduct investigations into noncompliance with waste legislation whereby they can use it to assess whether waste management controls should have been followed by the company under investigation.
- Have reinforced relevance to EU members states because the project includes an EU partner the Netherlands (among the top Member States for recycling rates) and has a broad range of stakeholders from inside and outside the UK which represent a cross-section of similar

industries in the rest of Europe.

 Be lead by the Environment Agency, the leading authority and government body responsible for regulating waste, backed up with strong links to the applicable UK ministry for environment – Defra.

#### EFFORTS FOR REDUCING THE PROJECT'S "CARBON FOOTPRINT"

The EA is registered to both ISO14001 and the more demanding EMAS, and has a very active programme of managing its own environmental impacts.

The EQual Programme Executive will ensure that the Environment Agency and applicable external participants comply with the Environment Agency's internal environmental policies. The EQual Project Manager will complete an environmental audit of the team's operations during the project.

In particular the impacts of travel will be minimised, including travelling by public transport instead of private cars as much as possible in the UK, and by using surface transport instead of air travel when travelling to other EU countries unless the travel time would be prohibitive. The potential waste of printed publications will be minimised by keeping the number of printed publications produced to a minimum and, instead, exploiting electronic communication to the full.

## STAKEHOLDERS INVOLVED AND MAIN TARGET AUDIENCE OF THE PROJECT (OTHER THAN PROJECT PARTICIPANTS)

#### Stakeholders involved

The stakeholders involved and main target audience for the project include:

- **UK Government:** DEFRA (Department for Environment, Food and Rural Affairs), WAG (Welsh Assembly Government), NIEA (Northern Ireland Environment Agency), SEPA (Scottish Environment Protection Agency), LGA (Local Government Association).
- **UK Business organisations:** EEF (Engineering Employers Federation), CIWM (Chartered Institution of Waste Management), CBI (Confederation of British Industry), IMechE (Institute of Mechanical Engineers), IoD (Institute of Directors), CIA (Chemicals Industries Association), Federation of Small Business, AEP (Association of Electrical Producers, UK Steel.
- UK Regulators: Environment Agency
- Other relevant UK groups: WRAP (Waste and Resources Action Programme), NFU (National Farmers Union), NISP (National Industrial Symbiosis Programme), AfOR (Association of Organics Recycling), ESA (Environmental Services Association),
- Non-Government Organisations (UK): SEEDA (South East England Development Agency), EIC (Environmental Industries Commission),
- EU organisations: Agentschap NL (Netherlands Environment Agency)
- **EU Business organisation:** Euroslag; Association of European Gypsum Industries; European Federation of Waste Management & Environmental Services; European Coal Combustion Products Association (ECOBA); Council of European Producers of Materials for Construction (CEPMC); Committee of Professional Agricultural Organisations (COPA) and General Confederation of Agricultural Cooperatives (COGECA).

#### Demand for EQual

There is real demand for EQual, particularly from members of the UK waste industry that have seen for themselves what waste protocols offer through the Waste Protocols Project (WPP). We expect to receive more support for EQual from other Member States and trade federations interested in applying the EQual methods in their own countries in the course of us demonstrating its benefits. We have already received letters of support for the project from:

**UK:** Ballast Pheonix Ltd; Confederation of Paper Industries; EEF (Engineering Employers Federation), Intowaste Ltd; Local Government Association (LGA); Rock4C Ltd; UK Quality Ash Association (QAA); Veolia Environmental Services Ltd; WRAP (Waste and Resource Action Group)

**EU:** Environment, Heritage & Local Government (Republic of Ireland); Malta Environment & Planning Authority (MEPA); Netherlands Ministry of Environment (VROM). We expect to receive further letters of support from Ministério do Ambiente, Portugal and the Ministry of Environmental Protection, Serbia.

#### Transnational character of EQual

The partnership with Agentschap of the Netherlands is by no means arbitrary. We have identified a common interest with Agentschap to encourage the increase in sustainable use of resources by determining 'end of waste' for a number of common waste streams - in particular the high volume, high tonnage aggregate arising from processing of incinerator bottom ash. The Netherlands agency is keen to work collaboratively with us on development of the end of waste e-tool - hence their role in delivering Action 4 and 6. We plan to share our experience from developing regulator-led end of waste decisions, and build upon the experience of the Netherlands Agency.

This relationship will give us an opportunity to share this learning with Belgium, who have close links with the Netherlands Agency and Northern and Southern Ireland, who have close links with the Environment Agency.

#### Stakeholder input

Stakeholders will be actively involved in the project with their input planned into communication and dissemination actions in the UK and Europe. Some of the stakeholders are Associated Beneficiaries and contributing to key project actions and deliverables: The Netherlands will lead on the End of Waste e-tool (as above); CIWM will lead on liaising with the waste industry; AEP will be a member of the Advisory Board; Northern Ireland will provide funding for the QP Compliance tool. AfOR will contribute a staff member to develop and run the field trials; CIWM and Northern Ireland have offered 0.25 FTE towards Communications actions respectively.

Other stakeholders will be expected to actively participate and a number will be invited to join the project board and steering group. As a number of the partners from the Better Regulation Waste Protocols Project have signed up as Associated Beneficiaries to this project we have reason to be confident of gaining their enthusiastic input.

To reach target audiences and communicate and disseminate information effectively about the project, including its results, EQual will make good use of ICT, networking and other means including:

- Its communication strategy. This will be developed to support the EQual project objectives. As well as defining stakeholders, target audiences and completing effective research and analysis, it will define the overall programme of UK and EU communication and dissemination activities.
- Development of an interactive web site (an important early action since the project is about developing e-tools and we want to ensure the experience of using them is shared by the waste companies involved in their trial and networked out to other interested parties inside and outside the UK)(Action 7).
- Use of the IMPEL network, other partners networks and contacts identified from other LIFE funded waste projects
- A campaign to the five key industry sectors, and presentations at events in the UK (Action 8)
- Seminars at six EU conferences (Action 9)
- Direct engagement with the European Commissions Joint Research Centre (JRC) which is conducting studies into end of waste for a number of priority waste streams.
- An information pack that will be made available as well as presentations and workshops arranged in the UK and in Europe to promote the concept and feedback drawn from the project.

All communications, dissemination and networking activities will be enshrined in a Communication Strategy, to be drafted in the first quarter of the project (Action 7).

#### EXPECTED CONSTRAINTS AND RISKS RELATED TO THE PROJECT IMPLEMENTATION AND HOW THEY WILL BE DEALT WITH (CONTINGENCY PLANNING)

Risk/Constraint	Level of Risk	Mitigating Actions	Residual Level of Risk
Project management delays	High	The beneficiary will appoint a suitably qualified Project Manager and apportion staff resources for technical support, communications, administration and finance. These staff resources will be identified and arrangements put in place to release these staff to the project in advance of the start date. The beneficiary will establish banking, financial control and audit mechanisms.	Low
Delay in appointment of Project Manager/project team members	High	Ensure early recruitment process for direct appointment or back-fill of an existing post. The recruitment programme will be identified once funding has been conditionally approved.	Low
Internal technical staff not available.	High	Ensure early recruitment process for direct appointment or back-fill of an existing post. The recruitment programme will be identified once funding has been conditionally approved.	Low
External technical support not available.	High	Ensure early tendering/quotation process for appointment of specialist external technical support in accordance with agreed procurement protocols. The process will be identified and commence once funding has been conditionally approved. Specification for external support will be agreed by the project team. Tenders will be thoroughly evaluated to ensure they meet the required specification. Performance will be monitored on a regular basis.	Low
Stakeholders suffer consultation fatigue from other projects	High	Direct target groups will be fully appraised of the project, its outcomes and their role in the project to retain interest.	Low
Language barriers	High	It is anticipated that the core project work will be conducted in English and reports will be prepared and published in English. Translation of materials to ensure stakeholder engagement has been factored into project costs.	Low
Pilot trials reveal negative/less favourable results, making dissemination of less interest to stakeholders	High	A programme of review of project outcomes will be agreed should give early warning of negative/less favourable results. This should give time to seek to rectify and/or modify project deliverables. If this is not achieved, creative ways to disseminate information of value, including the negative result would be explored.	Medium
The £ strengthens against the € resulting in the co-financing being worth less to the beneficiaries.	High	The project team would look at the possibility of scaling down the scope of actions without reducing the deliverables. Further savings would be investigated, for example reducing the number of staff or staff hours. Any actions would be discussed and agreed with the Commission.	Medium
Non compliance with external audit recommendations re: project finance/project activities by EA or partners leads to claw back by funding body.	High	Roles and responsibilities clearly defined for Project Manager and project finance officer, including monitoring and finance procedures. Claims made and externally audited to minimise financial exposure. Partners will be paid in Euros. Project Manager will maintain regular contact with project partners finance staff. Audit costs included within	Low

		project finances. Partnership Agreements will define project financial procedures and expectations from partners.	
Development of either of the e- tools goes over-budget	Medium	Quotes for the work will be carefully vetted; the contractors will be threatened with legal action to deliver the products to the correct specification	Medium
Change of project team key personnel	Medium	Every effort will be made to ensure the core project group remains constant throughout the project delivery period. A change control procedure will be identified and in the event of staff changes, an appropriate hand-over period and induction will be implemented. Where possible project actions will be delivered by more than one person to ensure project knowledge is spread, mitigating the risk of personnel changes.	Low
One or more stakeholders are unable to fulfil the role envisaged for them	Medium	Substitute stakeholders would be approached or the project team would attempt to fulfil the role internally. Alternative means to achieve the same outcomes would be explored. In the worst case potential changes to the programme or outcomes would be discussed and agreed with the Commission.	Low
One or more stakeholders may have an expectation or interest that conflicts with the others	Medium	The project team will apply the appropriate remedy from the risk management plan. If this fails the Project Manager will attempt to reconcile the problem through the Project and/or Advisory Board	Low
Non-attendance by partners at Project Board meetings.	Medium	Risk will be minimised by the early agreement of dates for meetings for the project duration. Risk will be further minimised by the fact that costs of attendance are covered by the project and all partners benefit from access to the expertise of those attending meetings.	Low
Working Groups/Sub-interest Groups not attended.	Medium	The project management team will establish and support the working groups/subgroups. They will agree a clear definition of the roles and expectations of each group, with meeting and reporting dates agreed as an early action point. Risk is further minimised due to the commitment of the project supporters to the project outcomes and access to the expertise of those attending.	Low
Financial reporting/Audit delays	Medium	The project team will ensure that all partners are aware of their financial reporting obligations, with dates agreed at project commencement. The beneficiary Project Manager will issues protocols to all project beneficiary partners with regard to financial records, appointment of subcontractors in accordance with procurement rules and internal/external auditing procedures. Internal and external project auditors will be appointed early to meet the agreed project timescales.	Low
Stakeholder conferences/workshops are not adequately attended.	Medium	Key stakeholders/partners are already engaged in the project outcomes. Wider stakeholders will be appraised of the benefits of attendance/technical aspects with any invitations to attend, for example by issuing briefing notes.	Low

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#### CONTINUATION AND VALORISATION OF THE PROJECT RESULTS AFTER THE END OF THE PROJECT

• Which actions will have to be carried out or continued after the end of the project?

There are aspect of the actions that we expect to continue for their benefit to the Environment Agency, UK partners, Government and EU regions. This we consider good practice and in alignment with our strategic goal to 'be the best we can' (Creating a Better Place corporate strategy 2010-2015):

Action 6: Trail and evaluate the End of Waste tool: Under 6.1 we will gather data through sampling and analysis of a high volume waste stream. Though not mandatory we expect to continue this for the waste stream in question as well as for a number of other sites in order to continually improve our knowledge about the tool's performance.

Action 7: Communication actions (7.1 design and develop web site) and Action 9: European dissemination actions. We will continue to host and maintain the web site which will be the permanent home for waste protocols and the EQual methodology in the UK. We will also promote our offer of making the tools and techniques available for free under licence through the web site and commit to keep the tool up to date. And we will continue to promote the benefits of the project (assuming it is successful) through our networks and networks developed with other European partners including those from the other waste themed LIFE+ projects. These actions will ensure that as many people and organisations benefit from the project after it has come to an end.

We will pass our findings in relation to Action 4 and 6 to the Joint Research Committee (JRC) on end of waste to help inform the end of waste debate in Europe and encourage other Member States to adopt the same approach.

• How will this be achieved, what resources will be necessary to carry out these actions?

The sampling and analysis will be embedded into the Environment Agency's routine sampling and monitoring programme. Routine sampling and analysis will be conducted at 6 monthly intervals until 2022.

The end of waste e-tool and quality protocol e-tool will be reviewed on an annual basis to identify whether any changes / revisions are required.

The communications and dissemination activities will be resourced from core budgets as part of the outward facing work of our Waste and Resources Management Function.

• To what extent will the results and lessons of the project be actively disseminated after the end of the project to those persons and/or organisations that could best make use of them (please identify these persons/organisations)?

In addition to the actions described above the Environment Agency will publish the results of the longterm monitoring of the demonstration trials 10 years after the commencement of the project. This will be available on the Environment Agency's website and shared with the relevant industries. The findings will be fed back into the two yearly reviews of the relevant Quality Protocols to ensure they remain fully protective of the environment and human health.

We will communicate the findings to the lead organisations for each of the applicable waste streams.

Companies will be actively encouraged by front line staff to assess their own compliance using the quality protocol e-tool.

The Environment Agency currently receive approximately 80 end of waste enquiries a year through formal channels (not including discussions with area officers). Companies making end of waste enquiries will be referred to the end of waste e-tool in the first instance.

*LIFE* + *Environment Policy and Governance* 

**TECHNICAL APPLICATION FORMS** 

# Part C – detailed technical description of the proposed actions

Important note:

- All calculations and detailed cost breakdowns necessary to justify the cost of each action should be included in the financial forms F. In order to avoid repeating the financial information (with the risk of introducing incoherencies), Part C should only contain financial information not contained in the financial forms.
- > All forms in this section may be duplicated, so as to include all essential information.
- Any action that is sub-contracted should be just <u>as clearly</u> described as an action that will be directly carried out by the beneficiaries.

#### DETAILS OF PROPOSED ACTIONS

#### For each action or set of actions specify the following:

The EQual project will achieve its objectives through a series of linked and focused actions. Ten main strands of activity are proposed:

- 1. Preparatory Actions
- 2. Develop field trials and evaluation methodology
- 3. Develop a Quality Protocol e-tool
- 4. Develop an End of Waste e-tool
- 5. Trial and evaluate the Quality Protocol e-tool
- 6. Trial and evaluate the End of Waste e-tool
- 7. Communication and networking actions
- 8. UK dissemination actions
- 9. European dissemination actions
- 10. Project Management Actions

#### ACTION 1: Preparatory Actions

#### Description (what, how, where and when):

The first strand of activity in the project relates to preparatory actions that will produce practical recommendations and information to be implemented during the project. These include:

1.1 Stakeholder analysis

Establish criteria and plan to define which stakeholders need be involved in each of the primary objectives (field trials, and development, testing and communication of the EoW e-tools).

1.1.1 Stakeholder baseline definition (desk research)

Carry out desk research to gather information and obtain a baseline of key stakeholders that are needed to participate in the delivery of the project objectives.

1.1.2 Stakeholder profile mapping and target audience definition

Map out current stakeholder awareness in UK and EU. Identify where information needs to be communicated.

- 1.1.3 Conduct 5 stakeholder workshops in the UK and EU to benchmark awareness and engagement levels.
- 1.2 National Framework

Develop a national framework to promote participation by the waste and recycling, agricultural, construction, energy and manufacturing sectors with incentives to attract participation.

These preparatory actions will be led by the EQual project team (based in Bristol) with stakeholders across the UK and EU from September 2011 to March 2012, with support from external assistance as described (below).

#### Methods employed:

#### **Stakeholder Analysis**

The EQual project management team will use expertise held within the project partners to undertake the stakeholder analysis research. This will involve producing a report detailing key stakeholders needed to participate in delivery of the EQual objectives, establishing stakeholder baseline information and developing a communication strategy. The stakeholder analysis action will provide baseline data and

information about the UK and EU stakeholders and assess their willingness to participate and their information needs. It will clarify key stakeholder roles and define as much as possible who participates when. It will identify which stakeholders will need to be involved in which aspects of the EQual project at which life cycle phases. The analysis report will help to identify potential groupings of stakeholders. Similar stakeholders may have similar project information needs.

#### National Framework

The EQual project management team will use suitable existing national stakeholder groups, and where necessary set up new ones, to help establish a national framework to promote participation of the waste and recycling, agricultural, construction, energy and manufacturing sectors. This framework will help ensure the strong development and use of the field trials and e-tools, in addition to a nationally consistent approach through an agreed set of objectives, principles and strategies to strongly encourage participation by the these sectors.

The EQual project management team will:

- Establish Technical Advisory Groups and a Project Advisory Board to ensure that industry partners are formally engaged and take an active role in the development of the programme from the start;
- Develop a memorandum of agreement specifying the role, responsibilities and data and information that will be available to each participant

The National Framework will enhance participation by the waste and recycling, agricultural, construction, energy and manufacturing sectors through improved facilities and procedures that ensure each sector is encouraged and able to participate.

#### Constraints and assumptions:

#### Stakeholder Analysis

Project success will depend on the validity of key assumptions and risks. In relation to stakeholders, risks will manifest when there are conflicting needs and expectations. For example, the interests of a stakeholder with high influence may not be in line with the EQual project's objectives and may cause a blockage to project progress. To highlight these risks, the EQual project management team will need to clarify stakeholder roles and responsibilities, and confirm the plausibility of assumptions made. This information will provide a critical portion of the EQUAL project's risk management plan. Using classical risk management methods, the EQual project management team will identify pertinent risk mitigation strategies and action plans.

#### National Framework

It is assumed there will be constraints to participation from perceptual biases including those of cost and time commitments. By developing a national framework in consultation with key stakeholders from the waste and recycling, agricultural, construction, energy and manufacturing sectors, an understanding of the profile of each sector can be developed to help identify what might encourage their participation.

#### Beneficiary responsible for implementation:

Environment Agency

#### Expected results (quantitative information when possible):

#### Stakeholder Analysis

By April 2012 the stakeholders to be involved in each aspect of the EQual project will have been determined, to include:

- Those that we need to work with in the UK;
- Those we need to communicate with across Europe;
- Those that will need to be kept informed and engaged with the project;
- Those that will be the desired end users of the new e-tools.

#### National Framework

By April 2012 a national framework will be established which identifies and facilitates the involvement of producers and users in the waste and recycling, agriculture, construction, energy and manufacturing sectors.

#### Indicators of progress:

#### Stakeholder Analysis

Stakeholder analysis progress will be measured by an assessment of each stakeholder's level of importance and influence. This level of understanding will be reached by assessing:

Influence

A stakeholder's relative power over and within a project. A stakeholder with high influence would control key decisions within the project and have strong ability to facilitate implementation of project tasks and cause others to take action. Other indicators include: expert knowledge, negotiation and consensus building skills and holder of strategic resources.

Importance

The degree to which the project cannot be considered successful if stakeholder needs, expectations and issues are not addressed in the project's goals and purposes.

The combination of these measures will provide insight into how stakeholders interact and will help identify additional assumptions and risks. A map of these relationships will help the EQual project management team to understand potential risks and highlight groups of stakeholders whose needs can be addressed in a common manner.

Evaluation of the stakeholder analysis will involve establishing stakeholder baselines to identify and distinguish:

- Current understanding of waste legislation compliance, awareness of technology and willingness to participate;
- Where this information needs to be communicated.

#### National Framework

Evaluation of the national framework will be measured by monitoring levels of involvement and representation from:

- Technical Advisory Groups;
- Project Advisory Board;
- Waste producers;
- Waste processors;
- Waste-derived product users in the agriculture, construction, energy and manufacturing sectors.

#### ACTION 2: Develop field trial and evaluation methodology

#### Description (what, how, where and when):

The second strand of activity relates to field trials of waste materials that would potentially make up waste derived products as a result of the waste industry applying the EQual method and techniques. The Government still has doubts over the environment and health impact of some waste recovered materials, particularly those with an impact on soils. The trials will seek to allay these doubts and give industry confidence in using waste derived products. The trials will focus on four waste materials - two from construction waste and two from agricultural waste. These actions include:

- 2. Design and develop 4 sets of pot and field trials to monitor the environmental behaviour of recycled waste materials following their use:
  - 2.1 Agree methodology and trial site locations with industry / project partners, ratified by the steering group.
  - 2.2 Design and develop a 3 year field trial programme for four materials at the agreed sites.

- 2.3 Baseline study of the environmental conditions at each of the proposed field study sites.
- 2.4 With industry partners conduct up to 4 sets of pot and field trials on recycled construction / agricultural products.
- 2.5 Produce detailed report of findings and conclusions.

These actions will be led by the EQual project team in Bristol with support from AfOR and other stakeholders across the UK and EU from September 2011 to August 2014 with external assistance as detailed below.

#### Methods employed:

The field trials will conducted under the supervision of soil and water quality specialists at the Environment Agency and ADAS to ensure that it is possible to determine the level of risk posed and the data applicability to other environments. Pot trials will be conducted, where suitable, for materials being spread to land, prior to the associated field trials, to refine the methodology and help ensure the most efficient use of resources. The assessment will consider the potential impacts from a full range of elements, but are likely to focus on dioxins and poly-aromatic hydrocarbons (PAH), data for which at present is lacking, not only in the UK, but globally. The trials will examine a range of organic matter concentrations, different soil types and a range of compounds at differing concentrations (to enable some form of dose response to be determined).

#### Constraints and assumptions:

There are number of constraints upon implementation that will need to be addressed to ensure success of the EQual project. These include:

- *Commitment* to ensure technical advisory group involvement. A strong and dedicated involvement by the technical advisory group will be required to scope, set up and conduct the field trials;
- Empowerment of the project team. The project team (or one or more of its members) must possess the power and possibility to make important decisions regarding the project without having to write formal proposals to higher management, which can be very time-consuming. For the project team to run a successful project, they also need the right technology to conduct the project. This means a development environment, project management tools, etc;
- Supportive relationship between stakeholders and the EQual project team is required.

General assumptions include:

- Project delivery should be on time, on budget and with good quality;
- Established project management techniques are incorporated.

#### Beneficiary responsible for implementation:

Environment Agency.

Association for Organics Recycling (AfOR).

#### Expected results (quantitative information when possible):

By March 2012 the methodology and programme for 4 field trials of recycled construction / agricultural products will have been planned and agreed. This will comprise of the following:

- Agree field trial materials, locations and industry partners (December 2011);
- Design methodology and programme for field trails (March 2012);
- Baseline study of environmental conditions complete (August 2012);
- Field trials conducted (May 2014);
- Report summarising findings produced (August 2014).

#### Indicators of progress:

Indicators of EQual project deliverables being delivered on time and ready for use by the end users will include:

• Technical Advisory Group scope trials and set objectives prior to the start of each trial;

- The field trials will provide quantified results associated with the levels of contaminants identified within the soil, groundwater and surface water environments. Sampling frameworks will be developed for each of the 4 materials as the context will differ for each. Sample type and frequency will be site and material specific, but as a minimum will included upstream, on site and down stream samples to ensure accurate quantification of contribution from recovered material (taking into account background contaminant loading). The analysis techniques will also be material specific and will be linked to the type of contaminants that are being tested for. These contaminants are listed in material specific standards produced for each Quality Protocol (or associated publicly available standard) published. Such standards, which will normally be covered through a standard metals analytical suite, will be used to guide the scope and type of analysis undertaken. For materials spread to land, it is likely that analysis will be undertaken for Persistent Organic Pollutants as well.
- For the construction material field trials, the volume of material is expected to be significant. A test plot for pulverised fuel ash in a road base would be expected to use approximately 2500m3 (500mx10mx0.5m). For an agricultural trial it would be anticipated that application rates would be run at the maximum permitted under the standard. This would equate to approximately 2 tonnes per acre for Poultry Litter Ash. The specific materials to be tested will be selected on a risk basis, as well as on the availability of suitable trial sites (which will be of particular relevance to the construction material trials). Access to good field trial sites will be facilitated through the projects associated beneficiaries.
- Outputs from the trials will be assessed by the programme and used to inform the subsequent reviews of the related Quality Protocols. Outputs that demonstrate the quality of the recycled materials and their value will be shared with the relevant industry groups to help strengthen customer confidence in the materials.

#### ACTION 3: Develop Quality Protocol compliance e-tool

#### Description (what, how, where and when):

- 3. Design and develop a Quality Protocol compliance e-tool, an electronic assessment tool which can be adapted to fit any Protocol and which can be used for training and audit purposes:
  - 3.1 Tender for tool development and assistance
  - 3.2 Conduct sector survey to ensure e-tool development is targeted at those sectors where maximum benefits can be obtained.
  - 3.3 Design a multipurpose training tool in consultation with industry / project partners.
  - 3.4 User test in partnership with industry.
  - 3.5 Develop a detailed implementation guide with task lists on how to complete and progress through the e-tool.

These actions will be led by the EQual project team from September 2011 to December 2012, with support from external assistance as described (below).

#### Methods employed:

A dynamic systems development method will be used during progression and delivery of the EQual objectives. This will be an iterative and incremental approach that emphasises continuous user involvement. It is an approach that focuses on people, rather than tools. It is about understanding stakeholder needs, delivering solutions that work and delivering them as efficiently and as effectively as possible. The following principles will underpin the methodology that will be followed during the EQual project:

- Active user involvement;
- Using fitness for stakeholder purpose as the essential criterion for acceptance of deliverables;
- Iterative and incremental development to ensure convergence on accurate stakeholder solutions;
- Requirements baselined at a high level;
- Integrated testing throughout the life cycle;

- Collaboration and cooperation between all stakeholders;
- Low carbon communication solutions used wherever possible i.e. video conferencing.

#### Constraints and assumptions:

A dynamic systems development approach includes the following assumptions:

- No system is built perfectly in the first attempt. In short, 80% of the business benefit comes from 20% of the design requirements. This approach will start by implementing the critical 20% first; this may produce a system that provides enough functionality to satisfy the end-users and the remaining 80% can be added in later iterations. This will mitigate the risk of the project going over deadline and over budget.
- Project delivery should be on time, on budget and with good quality.
- Each step of the development only need be completed far enough for the next step to begin. This allows a new iteration of the project to commence without unnecessary delay. Changes in design can coincide with the changes in demand from the end-users since every iteration of the system is improved incrementally.
- Established project management techniques are incorporated.
- Risk assessment should focus on the business functionality being delivered, not on the development process or its artefacts (such as requirements and design documents).
- Management will reward product delivery rather than task completion.

There are specific constraints that will need to be addressed for this approach to be a success, including:

Interactivity

There needs to be interactivity between the project team, future end users and higher management. This will help to address well known failures of IT development projects due to lack of top management motivation and/or user involvement.

Elements

The project must be decomposed into its smaller constituent parts to promote the use of an iterative approach.

By providing a framework of controls this approach will promote delivery of the EQual e-tools and field trials on time and on budget, while adjusting for changing requirements along the development process.

#### Beneficiary responsible for implementation:

**Environment Agency** 

Association for Organics Recycling (AfoR)

#### Expected results (quantitative information when possible):

By December 2012 the requirements and specifications for a QP e-tool will be defined and developed. This will comprise the following:

- E-tool requirements defined through sector surveys by March 2012;
- First-fix user interface and software solution designed by July 2012;
- Data system performance specifications refined through iterative user testing between April and September 2012.
- Implementation guide produced by December 2012.

#### Indicators of progress:

The deliverables for this stage will be a Quality Protocol compliance e-tool ready for testing by users. This will be measured by assessing stakeholder approval for:

- System requirement specifications;
- Interface requirements;
- Performance specification.

#### ACTION 4: Develop an End of Waste e-tool

#### Description (what, how, where and when):

- 4. Design and develop an End of Waste e-tool which will enable decision-making by Industry:
  - 4.1 Tender for tool developers.
  - 4.2 Develop design and build a tier 1 end of waste tool which focuses on one aspect of end of waste (is it a distinct, marketable product) which directs users to an end of waste panel. In support of this a risk assessment methodology and framework will also be developed.
  - 4.3 User test in partnership with industry.
  - 4.4 Develop a detailed implementation guide (with task lists) on how to complete and progress through the end-of-waste procedure tool.
  - 4.5 Develop a logic-based assessment tool of free text forms and templates that will generate a comprehensive end-of-waste document, which covers four distinct end uses (agriculture, construction, energy and manufacturing) to allow tailoring of requirements, characterisation and testing.
  - 4.6 Develop, design and build a tier 2 end of waste tool that allows business to work towards their own end of waste criteria.

These actions will be led by the EQual project team with stakeholders from across the UK and EU, from September 2011 to June 2013. Agentschap NL will play a key role in developing the e-tool, building on our existing approach and experience to maximise synergies for end-of-waste in the UK and Netherlands and acting as a conduit to industry stakeholders in the Netherlands and other member states. This high profile work must necessarily be undertaken by individuals with appropriate seniority and experience – hence the higher day rates for the Agentschap Project Manager and Executive (see Finance forms).

#### Methods employed:

A dynamic systems development method will be used during progression and delivery of the EQual objectives. This will be an iterative and incremental approach that emphasises continuous user involvement. It is an approach that focuses on people, rather than tools. It is about understanding stakeholder needs, delivering solutions that work and delivering them as efficiently and as effectively as possible. The following principles will underpin the methodology that will be followed during the EQual project:

- Active user involvement.;
- Using fitness for stakeholder purpose as the essential criterion for acceptance of deliverables;
- Iterative and incremental development to ensure convergence on accurate stakeholder solutions;
- Requirements are base-lined at a high level;
- Integrated testing throughout the life cycle;
- Collaboration and cooperation between all stakeholders.

#### Constraints and assumptions:

The same as for Action 3 'Develop Quality Protocol compliance e-tool' (above, p6).

#### Beneficiary responsible for implementation:

Environment Agency

Agentschap NL

#### Expected results (quantitative information when possible):

By June 2013 the requirements and specifications for a QP e-tool will be defined and developed. This will comprise the following:

- E-tool requirements defined by July 2012;
- Online interface and software solution designed by October 2012;
- Data system performance specifications designed by April 2013.

#### Indicators of progress:

The deliverables for this stage will be a Quality Protocol compliance e-tool ready for testing by users. This will be measured by assessing stakeholder approval for:

- System requirement specifications;
- Interface requirements;
- Performance specification.

#### ACTION 5: Trial and evaluate the Quality Protocol compliance e-tool

#### Description (what, how, where and when):

The strand of activity in the project will occur between January 2012 to January 2015. It will involve the trial implementation and refinement of the Quality Protocol compliance e-tool to ensure that the functional components satisfy user needs.

#### 5. **QP e-tool testing (April 2014)**

- 5.1 A trial version of the QP e-tool would be used on one Quality Protocol material, selected in partnership with industry and ratified by the Steering Group, to assess the e-tools functionality.
- 5.2 Lessons learnt would be integrated into a revised tool. This process will be repeated until a satisfactory version of the tool is ready for wider testing by industry partners.
- 5.3 Further experience gained would be used to develop and launch the final version of the tool.

These actions will be led by the EQual project team with stakeholders across the UK and EU involved in the decision making process from January 2013 to February 2014.

#### Methods employed:

Testing and reviewing will be the main techniques used in the implementation phase to help develop the e-tool and the user documentation. The e-tool will be reviewed by one or two key stakeholders who will undertake a full trial. This will include a review of the impact of the implemented system on both the user, the regulator and the environment.

#### Constraints and assumptions:

There are number of constraints upon implementation that will need to be addressed to ensure success of the EQual project. These include:

- *Commitment* to ensure end user involvement. A strong and dedicated involvement by the end users will be required to test and review the e-tool functionality.
- Empowerment of the project team. The project team (or one or more of its members) must possess the power and possibility to make important decisions regarding the project without having to write formal proposals to higher management, which can be very time-consuming. For the project

team to run a successful project, they also need the right technology to conduct the project. This means a development environment, project management tools, etc.

• Supportive – relationship between stakeholders and the EQual project team is required.

#### Beneficiary responsible for implementation:

Environment Agency

#### Expected results (quantitative information when possible):

By February 2014 the QP e-tool which meets user needs will be launched. This will comprise the following:

- QP e-tool trialled as both a training aid and audit tool between January 2013 and August 2013;
- QP e-tool refined to incorporate trial findings by December 2013;
- Final version ready for dissemination February 2014.

#### Indicators of progress:

Indicators of EQual project deliverables being delivered on time and ready for use by the end users will include:

- Representative users from each stakeholder category involved in acceptability testing and evaluation, with user approval of tested system for implementation secured from the Technical Advisory Group for the QP e-tool.
- Wider stakeholder approval that QP e-tool system meets their operational requirements.

#### ACTION 6: Trial and evaluate the End of Waste e-tool

#### Description (what, how, where and when):

This strand of activity in the project will occur between Sept 2011 to July 2014. It will involve the trial implementation of the end of waste e-tool to ensure that the functional components satisfy user needs.

#### 6. End of Waste e-tool testing (April 2014)

- 6.1 Working with an industry partner, we will gather data through sampling and analysis of a high volume waste stream such as construction in order to characterise a material which is relevant to the project partners. This material will be of mutual interest to Agentschap NL, Environmental Services Association and Environment Agency.
- 6.2 Trial the tool through industry partners. This will involve risk assessment of one waste stream;
- 6.3 Refine the tool with feedback from the industry trial and finalise prior to launch.

These actions will be led by the EQual project team with key input by Agentschap NL, the ESA and other stakeholders. This action necessitates the involvement of an ESA Director – hence the €454 day rate (see Finance forms).

#### Methods employed:

Testing and reviewing will be the main techniques used in the implementation phase to help develop the e-tools and the user documentation. The e-tools will be reviewed by one or two key stakeholders who will undertake a full trial. This will include a review of the impact of the implemented system on both the user, the regulator and the environment.

#### Constraints and assumptions:

There are number of constraints upon implementation that will need to be addressed to ensure success of the EQual project. These include:

- Information the industry must have the right information available to follow the e-tool. The earlier stage of data gathering will reduce risk of there being insufficient information to run the tool.
- *Commitment* to ensure end user involvement. A strong and dedicated involvement by the end users will be required to test and review the e-tool functionality.
- Empowerment of the project team. The project team (or one or more of its members) must
  possess the power and possibility to make important decisions regarding the project without having
  to write formal proposals to higher management, which can be very time-consuming. For the project
  team to run a successful project, they also need the right technology to conduct the project. This
  means a development environment, project management tools, etc.
- Supportive relationship between stakeholders and the EQual project team is required.

#### Beneficiary responsible for implementation:

Environment Agency.

Agentschap NL.

Environmental Services Association (ESA).

#### Expected results (quantitative information when possible):

The requirements and specifications for the End of Waste e-tool will be refined and amended post usertesting. The End of Waste e-tool will be used to fully assess at least 2 end of waste applications, with feedback being incorporated into the final version, and ready for dissemination by July 2014.

#### Indicators of progress:

Indicators of EQual project deliverables being delivered on time and ready for use by the end users will include:

- Representative users from each stakeholder category involved in acceptability testing and evaluation, with user approval of tested system for implementation secured from the Technical Advisory Group for the End of Waste e-tool.
- Wider stakeholder approval that End of Waste e-tool system meets their operational requirements

#### **ACTION 7: Communication and networking actions**

#### Description (what, how, where and when):

#### 7. Communication and Networking Actions

This project activity relates to the development of a suite of demonstration materials, resources and training tools. It is a cross cutting activity which extends across the life of the project. This will involve:

- 7.1 Develop and manage delivery of a communications strategy which will:
  - 7.1.1 Define target audiences;
  - 7.1.2 Develop awareness plan;
  - 7.1.3 Determine communication methods;
  - 7.1.4 Communicate responsibilities; and
  - 7.1.5 Communicate monitoring and evaluation requirements.
- 7.2 Design and develop EQual webpages.
- 7.3 Develop and test key communication messages.
- 7.4 Design and develop promotional materials (e.g. direct mail, briefing notes, brochures, newsletters, fact sheets, and press releases).
- 7.5 Produce promotional signs and displays.
- 7.6 Producing 1 x layman's report and an After-LIFE Communication Plan.

This action will be managed mainly by the Engagement Officer in Bristol in liaison with the Project Manager and other Comms Officers from CIWM and involving other stakeholders as appropriate.

#### Methods employed

#### **Communications and Networking Strategy**

We will build upon the preparatory activity - stakeholder analysis to ensure all interested and relevant parties are suitably informed and engaged in the project. The strategy will ensure there is full, fair and reasonable opportunity for the various sectors to participate by:

- Ensuring the communication needs of each sector are defined;
- Identifying constraints on potential participation by each sector;
- Formulating strategies to address the constraints.

Project communications staff will produce and manage media communications for the EQual project as a whole, such as the preparation of general press releases.

Conferences, workshops, seminars and similar events will be organised by EA and CIWM to:

- Raise awareness about EQual activities, resources, etc;
- Act as training venues (e.g. for disseminating instructional material as required by a particular stakeholders);
- Facilitate more public discussion of research, development, standards, or other strategic and substantive issues of relevance to the EQual project and the wider stakeholder community.

#### Beneficiary responsible for implementation:

**Environment Agency** 

Chartered Institute of Waste Management

#### **Expected results**

Communication Strategy

- 1 project website established by February 2012;
- Contacted at least 8 other member states to pursue networking with them
- By May 2012 key communication messages will be developed and tested;
- By December 2012 promotional materials (e.g. direct mail, briefing notes, brochures, newsletter, fact sheets and press releases) will be designed and developed.
- 1 notice board acknowledging LIFE+ funding erected. Promotional signs and displays will be produced at two stages in the project life-span.
- 1 layman's report and After-LIFE communications plan will be produced by August 2014.

#### Indicators of progress

**Communication Strategy** 

Evaluation of the communication strategy progress will be measured by monitoring:

- Awareness and knowledge of the EQual project both in the UK and EU against the initial stakeholder analysis baselines - Contact up to 8 member states regarding the project, 4 of whom become actively involved with the project by year 3
- 500 visitors per month to the EQual project website by the end of year 2;
- Media exposure (e.g. press releases, interviews etc) 3 press releases per year and at least one academic publication.

#### ACTION 8: UK dissemination actions

#### Description (what, how, where and when):

This is a supporting action that cuts across the main project implementation actions and will take place throughout most of the EQual project. It covers the cost of staff travel and subsistence for best practice information exchange and dissemination visits, events and activities in England, Wales and Northern Ireland, the costs of staff time arranging and attending these visits, events and activities, and the catering costs for dissemination events.

The dissemination programme of action will include the following activities:

- 8.1 Campaign to the 5 key sectors using direct mail, trade press adverts.
- 8.2 Presentations at 6 UK seminars, conferences and trade events to ensure target sectors are aware of the outcomes of the field trials and new e-tools with both national and regional focus.
- 8.3 Develop and deliver 10 UK sector-based training courses to raise awareness and uptake of the new e-tools available to business.

This action will be managed mainly by the Engagement Officer (see Action 10 ' Project management..') in Bristol, working closely with the CIWM Comms Officer (CIWM Senior Technical Manager in Finance forms), who will act as an important conduit to the waste industry and its wider networks. The more senior position of the CIWM manager is the reason their day rate is €500.

#### Methods employed:

The plan for the EQual dissemination programme of activity is to hold a series of stakeholder dissemination events specifically aimed at the waste and recycling, agricultural, construction, energy and manufacturing sectors towards the end of the project. The programme of activity will identify those stakeholders that have a crucial stake in its activities. For each stakeholder community identified, the project will:

- Assess its communication needs (contributions and uses) with the EQual project;
- Identify the information and materials/resources necessary to maximise its use of and/or contribution to EQual activities;
- Evaluate where and into what EQual activities, input may be most appropriately solicited from the sector's members.

#### Constraints and assumptions:

- Stakeholders: Limited user readiness to change; widely divergent format and level of information needed; multiple levels of contextual information needed; less than clear relevance to own needs; variety of dissemination media preferred; limited number of information sources trusted
- Project Team: Suspicion regarding motive; lack of sensitivity to user concerns; limited relationships to other sources trusted by users
- Context: Competing knowledge or products; general economic climate and circumstances; lack of relationship between outcomes and existing personal knowledge or products

#### Beneficiary responsible for implementation:

Environment Agency with assistance from CIWM.

#### Expected results (quantitative information when possible):

Throughout the project a suite of demonstration materials, resources and training tools will be rolled out to encourage participation within the UK by the 5 key stakeholder groups. These will include:

- Produce quality protocol e-tool. Fully interactive online tool developed by February 2014;
- Produce end of waste e-tool. Tier 1 interactive online tool developed by January 2013;
- *Produce a case study on the application of the end of waste tool.* A written report on the application of the decision making tool by a major industry sector to its waste-derived product by July 2014;

- Develop and deliver UK sector-based training courses to demonstrate and promote the quality protocol e-tool targeting the 5 major sectors for agricultural, construction, energy, manufacturing and waste and recycling 10 demonstration / training workshops, (i.e. 2 for each of the key stakeholder sector groups) delivered across the UK by August 2014;
- Deliver presentations at UK seminars, conferences and trade events 6 conferences, seminars and trade fairs across the UK to demonstrate and promote the end of waste e-tool, delivered by August 2014.

#### Indicators of progress:

Progress of the EQual communication and dissemination programme of activity will be measured by monitoring the following indicators:

- 300 hits per month to the quality protocol e-tool;
- 300 hits per month to the end of waste e-tool;
- 250 participants to EQual training courses in the UK;
- 180 participants to EQual project seminars and conferences in the UK;

#### ACTION 9: European dissemination actions

#### Description (what, how, where and when):

This is a supporting action that cuts across the main project implementation actions and will take place throughout most of the EQual project. It covers the costs of staff travel and subsistence for best practice information exchange and dissemination in EU countries outside the UK, the costs of staff time arranging and organising these visits, and the translation costs for posters, leaflets and technical articles for display and publication in other EU countries.

This will involve:

- 9.1 Developing and deliver communication and dissemination activities targeting 3 main EU regions:
- 9.2 Dissemination, monitoring and evaluation through attending 6 EU conferences and running 6 EU seminars.

This action will be managed mainly by the Engagement Officer (see Action 10 ' Project management..') in Bristol, liaising with the Comms Officer from the Northern Ireland Environment Agency (NIEA) and other key stakeholders, such as Agentschap NL, as appropriate.

#### Methods employed:

The objective of the EQual dissemination programme of activity is organise the activities necessary to:

- Demonstrate the EQual project's results;
- Raise awareness of existing quality protocols; the compliance e-tool and the end of waste e-tool;
- Provide e-tool end user training;
- Ensure the widest dissemination of knowledge from the project across the EU.

#### Constraints and assumptions:

Same as for Action 8 'UK dissemination actions' with additional constraints posed by possible cultural and language barriers.

#### Beneficiary responsible for implementation:

Environment Agency with assistance from Northern Ireland Environment Agency (NIEA).

#### Expected results (quantitative information when possible):

 Deliver presentations at EU seminars, conferences and trade events – 6 conferences, seminars and trade fairs across the EU to demonstrate and promote the end of waste e-tool, organised by December 2014.

#### Indicators of progress:

Progress of the EQual dissemination programme of activity will be measured by monitoring the number of:

- 6 presentations at EU seminars, conferences and trade events;
- 180 participants to EQual project seminars and conferences in the EU.

#### <u>ACTION 10</u>: Project management by the Environment Agency

#### Description (what, how, where and when):

This is a supporting action that cuts across the main project implementation actions and will last for the full duration of the EQual project.

It will include the following activities:

- 10.1 Recruit project management team;
- 10.2 General management of the project;
- 10.3 Monitoring and reporting;
- 10.4 Finance support;
- 10.5 Legal support;
- 10.6 Procurement support; and
- 10.7 External audit.

It accounts for the project management undertake by the following team roles:

- The Project Executive.
- The EA Project Manager;
- EA Senior advisor 1 (team leader)
- EA Senior advisor 2
- EA Senior advisor 3
- EA Engagement Officer (communications)
- EA Adviser 1
- AfOR Adviser 2
- EA Project support Officer
- EA Administrator

#### **Reporting** (see Figure 1)

The reporting structure of the EA team is that the EA Project Manager reports to the EA Project Executive and the Project Board; the Senior advisers 1, 2 and 3, and the Engagement Officer, report to the Project Manager; The two Advisors and the Project Support Officer report to Senior Adviser 1 who is also their Team Leader; the Project Manager and team is supported by an administrator.

#### Governance

#### Project Board

Senior governance for the project will be provided by a Project Board, supported by an Advisory Board. The Project Executive will chair the Project Board and report to the EA sponsor (outside scope of the LIFE+ bid). The Project Board will comprise invited representatives from the key stakeholder organisations. It will meet bimonthly throughout the project (18 meetings in total). The Project Board meetings will add essential value to delivery of all actions throughout the duration of the proposed work and are an integral part of the general project management

#### Advisory Board

The Advisory Board will be comprise a wider body of stakeholders whose role will be to help steer the project and supply specific ad hoc advice, as needed. They provide vital high level guidance on the general direction of the project and help ensure that outputs are fit for purpose and meet the needs of key industry groups. This group will meet 12 times in total during the project, 6 of these meetings will be virtual meetings using teleconferencing. The Advisory Board will add significant value to delivery of all actions as part of their contribution to General Management.

The Advisory Board will greatly enhance effective early stakeholder engagement in action 1.1 and disseminating the outputs in actions 8 and 9. Each of the beneficiaries have a different group of networks, partners and customers whom we will engage with.

We believe the benefits of the Advisory Board in linking to these stakeholder groups are two fold:

- firstly, the interests the Advisory Board members represent will inform how actions are implemented and how outputs are developed; and
- secondly, increase dissemination through Advisory Board members links to key stakeholder groups and increase up-take of the EQual approach to implementing EU environmental legislation.



Figure 1 (Structure & reporting chart)

#### Project Team

Environment Agency EQual project staff will be recruited in line with role specifications and the Environment Agency's HR policy and standards (including Investor in People). The staff will be devoted to general management of the EQual project, the running of the field trials, development of the e-tools and to the communications and dissemination activities.

Project management duties will include supervision, quality checking outputs, human resources management including recruitment, overall representation of the programme, financial management, overall reporting (inception, mid-term and final reports).

The core team will be located at the Environment Agency and have the support from the Environment Agency's Legal, Finance and Communications departments (as well as those of key partners such as Netherlands EAA).

For team members not employed at the EA procedures for decision-making and the authorisation levels of their respective organisations will apply.

#### Methods employed:

See description.

#### Constraints and assumptions:

There will be constraints around project board. These include:

- Terms of Reference and its fitness for purpose
- Retention of board members

There will be constraints around project team recruitment. These include:

- People with suitable skills
- Retention of staff
- Team-working and co-ordination

#### Beneficiary responsible for implementation:

Environment Agency with assistance from: Northern Ireland Environment Agency Chartered Institute of Waste Management Association for Organic Recycling Netherlands Agency Environmental Services Association

#### Expected results (quantitative information when possible):

- Project management and direction.
- Overall reports.
- Maintaining the resourcing and reputation of the EQual project.

#### Indicators of progress:

Indicators of project management progress include:

- Project progresses to schedule
- Project board meetings held
- Project team retention

Name of the Deliverable	Code of the associated action	Deadline
EQual project website	7.2	Feb 2012
Communications strategy	7.1	Mar 2012
Draft End of Waste screening tool (tier 1)	4.2	Jul 2012
Promotional signs and displays complete (2 stages)	7.5	Jul 2012 / Oct 2013
Quality Protocol implementation guide	3.5	Dec 2012
Promotional materials designed	7.4	Dec 2012
End of Waste e-tool system implementation guides	4.4	Dec 2012
Draft End of Waste e-tool (tier 2)	4.6	Jun 2013
Risk assessment of 1 large volume waste stream	6.2	Jan 2014
Draft Quality Protocol compliance e-tool	3.0	Mar 2014
Final user-tested Quality Protocol compliance e-tool	5.3/8	Mar 2014
Final End of waste e-tool	6.3 / 8	Jul 2014
Case study on the application of the end of waste tool	8	Jul 2014
Detailed field trial report.	2.5	Aug 2014
Presentations at 6 UK seminars, conferences & trade events	8.2	Aug 2014
10 UK sector-based training courses developed and delivered	8.3	Aug 2014
European dissemination actions	9	Aug 2014
After-LIFE Communication Plan	7.6	Dec 2014
Laymans report	7.6	Dec 2014

#### DELIVERABLE PRODUCTS OF THE PROJECT

#### MILESTONES OF THE PROJECT

Name of the Milestone	Code of the associated action	Deadline
Equal project team recruited	10.1	Dec 2011
Tender for end of waste e-tool developers	4.1	Jan 2012
EQual web pages developed	7.2	Feb 2012
Stakeholder baseline and profiles complete	1.1	Mar 2012
National framework established	1.2	Mar 2012

Name of the Milestone	Code of the associated action	Deadline
Field trial methodology agreed and programme designed	2.1 / 2.2	Mar 2012
Communications strategy developed	7.1	Mar 2012
Key communication messages developed and tested	7.3	May 2012
Promotional signs and displays complete (2 stages)	7.5	Jul 2012 / Oct 2013
End of Waste screening tool produced (tier 1)	4.2	Jul 2012
Baseline study of environmental conditions completed	2.3	Aug 2012
End of Waste e-tool user testing complete	4.3	Sept 2012
Promotional materials designed	7.4	Dec 2012
End of Waste e-tool system implementation guides produced	4.4	Dec 2012
Equal project website launched	7.2	Dec 2012
Data gathering, sampling, analysis and characterisation of 1 waste.	6.1	Mar 2013
Free form logic tool for 4 end uses developed	4.5	Mar 2013
End of waste e-tool produced (tier 2)	4.6	Jun 2013
Quality Protocol compliance e-tool user testing	5.1	Aug 2013
Trial end of waste (tier 2) e-tool and conduct risk assessment	6.2	Jan 2014
Final user-tested Quality Protocol compliance e-tool	5.3	Feb 2014
Pot and field trials complete	2.4	May 2014
Launch end of waste e-tool	6.3	Jul 2014
Detailed field trial report produced.	2.5	Aug 2014
Laymans report produced	7.6	Aug 2014
AFTER-LIFE communications plan produced	7.6	Aug 2014
Presentations at 6 UK seminars, conferences & trade events	8.2	Aug 2014
10 UK sector-based training courses developed and delivered	8.3	Aug 2014
European dissemination actions	9	Aug 2014

#### ACTIVITY REPORTS FORESEEN

Please indicate the deadlines for the following reports:

- Inception Report (to be delivered within 9 months after the project start);
- Progress Reports n°1, n°2 etc. (if any; to ensure that the delay between consecutive reports does not exceed 18 months);
- Mid-term Report with payment request (only for project longer than 24 months)
- Final Report with payment request

Type of report	Deadline
Inception Report	Jun 2012
Progress Report 1	Dec 2012
Mid-term Report with payment request	April 2013
Progress Report 2	Jan 2014
Final Report with payment request	Feb 2015

TIME	LABL	ш													
Action	20	11		20	12			20	13			2	014		2015
Number/name of action	≡	≥	-	=	≡	2	-	=	≡	≥	-	=	≡	≥	-
1.0 Preparatory actions															
1.1 Stakeholder analysis	>	>	>												
1.2 National framework development	>	>	>												
2.0 Develop field trial and evaluation methodology															
2.1 Develop and agree methodology and site locations	>	>													
2.2 Field trial programme design and development	>	>	>												
2.3 Baseline study of environmental conditions			>	>	>										
2.4 Conduct pot and field trials				>	>	>	>	>	>	>	>	>	>	>	
2.5 Report of findings and conclusions															>
3.0 Develop Quality Protocol Compliance e-tool															
3.1 Tender for tool development assistance (linked with action 4.1)	>	>													
3.2 Conduct sector survey	>	>	>												
3.3 Design a multipurpose training tool			>	>	>										
3.4 User test in partnership with industry and review tool				>	>										
3.5 Develop an implementation guide					>	>									
4.0 Develop an end of waste e-tool															
4.1 Tender for tool developers*	>	>													
4.2 Develop, design and build a tier 1 e-tool *		>	>	>											
4.3 User test in partnership with industry*				>	>										
4.4 Develop detailed implementation guide					>	>									
4.5 Develop a logic based assessment tool						>	>								
4.6 Design and build a tier 2 e-tool							>	>							
5.0 Trial and evaluate the QP compliance e-tool															
5.1 Trial QP e-tool to assess functionality.							>	>	>						

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Action	20	11		20,	12			50	13				2014		2015	-
Number/name of action	≡	2	-	=	≡	2	-	=	≡	≥	-	=	≡	≥	-	
5.2 Incorporate lessons learnt into e-tool									>	>						1
5.3 Develop and launch final e-tool											>					-
6.0 Trial and evaluate the end of waste e-tool											I					
6.1 Data gathering, sampling, analysis and characterisation of 1 waste*	>	>	>	>	>	>	>									1
6.2 Trial the tool through industry partners. This will involve a risk assessment of one waste stream.*							>	>	>	>	>					1
6.3 Refine the tool with feedback from industry trial and finalise prior to launch.											>		Ń			<b></b>
7.0 Communication actions											ı					
7.1 Develop and deliver communications strategy	>	>	>													-
7.2 Design and develop end of waste website		>	>													1
7.3 Develop and test key communication messages			>	>												-
7.4 Tender for, design and develop promotional materials				>	>	>										-
7.5 Produce promotional signs and displays.					>					>						-
7.6 Produce 1 layman's report and AFTER-LIFE communications plan.														Ń	~	
8.0 UK dissemination actions																
8.1 Campaign to the 5 key sectors*		~	~	~	>	>	Ń	>	>	>	>			>	~	-
8.2 Presentations at UK seminar, conference and trade events			~		>		Ń		>		>				>	
8.3 Develop and deliver training courses									>	>	>			>	>	
9.0 European dissemination actions																
9.1 Develop and deliver communications activities targeting 3 EU regions							>		>							-
9.2 Dissemination monitoring and evaluation through attending 6 EU conferences and running 6 seminars		~			>				>		>		Ń	>	>	
10.0 Project Management (EA)																
10.1 Recruitment	>	>														-
10.2 General management*	<	<	~	<	~	>	٧	>	>	>	>			Ń	~	-
10.3 Monitoring and reporting*	<	<	>	<	>	>	۲	>	>	>	>			>	>	-
10.4 Finance support*		<														

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Action	20	11		201	2			201	ო			20	4	2015	
Number/name of action	≡	١٧	_	=	≡	2	_	=	≡	≥	_	=	≤ 	-	
10.5 Legal support*		~			~										
10.6 Procurement support*		Ń													
10.7 External audit							•	/							



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Nature and Biodiversity Environmental Policy and Governance Information and Communication

**2010 FINANCIAL APPLICATION FORMS** 

Proposal acronym: EQual

NOTES: Please refer to guidelines for applicants when filling in this form

FORM FA		Proposal a	acronym: EQual
Budget breakdown categories	Total cost in €	Eligible Cost in €	% of total eligible costs
1. Personnel		1,520,585	51.58%
2. Travel and subsistence		84,215	2.86%
3. External assistance		1,074,900	36.46%
4. Durable goods			
Infrastructure	0	0	0.00%
Equipment	0	0	0.00%
Prototype	0	0	0.00%
5. Land purchase / long-term lease		0	0.00%
6. Consumables		54,925	1.86%
7. Other Costs		21,190	0.72%
8. Overheads		192,000	6.51%
TOTAL	2,947,815	2,947,815	100%

Contribution breakdown	In €	% of TOTAL	% total eligible costs
Requested European Union contribution	1,473,907	50.00%	50.00%
Coordinating Beneficiary's contribution	995,918	33.78%	
Associated Beneficiaries' contribution	477,990	16.22%	
Co-financers contribution	0	0.00%	
TOTAL	2,947,815	100.00%	

Please fill in the forms FC to F7 first. In these forms you are allowed to add lines but you cannot alter the formulae. In this form you are only requested to fill in the amount of the overheads

Please refer to the relevant instructions given in the explanatory notes for filling in these forms

Important note: If the overheads cell appears in red, this means that the budgeted amount is above the maximum permited 7% of the total eligible direct costs excluding land purchase and the overhead costs themselves.

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acronym:	
Proposal	

Breako	own of costs for Actions in Euro (excluding overhea	id costs)									
Action number	Short name of action	1. Personnel	2. Travel and subsistence	3. External assistance	4.a Infrastructure	4.b Equipment	4.c Prototype	5. Purchase or lease of land	6. Consumables	7. Other costs	TOTAL
1.1	Stakeholder Analysis	36,270	2,025	2,250							40,545
1.2	Develop a National Framework	33,433	2,025	2,250							37,708
2.1	Agree methodology & trial site location	42,600	732	240							43,572
2.2	Design & develop a 3 year trial for four materials	50,215	732	240							51,187
2.3	Baseline study of environmental conditions	60,603	732	133,573					17,333		212,242
2.4	Conduct 4 sets of pot & field trials on recycled contruction /	86,644	732	133,573					17,333		238,283
2.5	Detailed report of findings & conclusions	50,215	732	133,573					17,333		201,854
3.2	render for tool de velopment & assistance Conduct sector survey	28,778		10,000							28,778
3.3	Design multipurpose training tool	32,313	1,958	2,700							36,971
3.4	User test in partnership with industry	28,778									28,778
3.5	Develop implementation guide	28,778									28,778
4.1	Tender for tool developers	29,226		32,500							61,726
4.2	Develop & build a tier 1 end of waste tool	67,721									67,721
4.3	User test in partnership with industry	29,226									29,226
4.4	Develop implementation guide on end of waste procedure tool	25,268									25,268
4.5	Develop logic based assessment tool	25,268									25,268
4.6	Develop & build a tier 2 end of waste tool	22,126		227,500							249,626
5.1	Trial version of QP e-tool	31,287	512	900							32,699
5.2	Lessons learnt integrated into revised tool	31,287	512	006							32,699
5.3	Experience gained used to develop & launch final version Gather data through sampling & analysis of high volume waste	23,962									23,962
6.1	כמודפו מממ הוד כעשו המווףווויט מ מומוץ איז כו וושר אכונווים אמזני stream	19,584	5,710	197,067							222,361
6.2	Trial the tool through industry partners	19,584	5,710	132,067							157,361
6.3	Refine tool with feedback from industry trial	13,734	5,710	1,200							20,644
7.1	Develop & manage delivery of communications strategy	24,067		867							24,934
7.2	Design & Develop End of Waste website	24,067		21,000							45,067
7.3	Develop & test key communication messages	24,067									24,067
7.4	Design & develop promotional materials	24,067		3,250						4,550	31,867
7.5	Produce signs & displays	24,067							2,925		26,992
7.6	Produce After-LIFE Communication Plan	24,067		500						4,550	29,117
8.1	Campaign to the 5 key sectors	29,397		1,950							31,347
8.2	Presentations at UK seminars, conferecens & trade events	19,289	2,001							3,120	24,410
8.3	Develop & deliver UK sector-based training courses	55,344	6,702	9,000							71,046
9.1	Develop dissemination activities targeting 3 main EU regions	19,907		800						5,850	26,557
9.2	Dissemination through attending 6 EU conferences & running	12,807	15,274	5,400						3,120	36,601
10.1	Recruit project management team	12,003		2,600							14,603
10.2	General management of the project	289,865	32,417	6,000							328,282
10.3	Monitoring & reporting	45,070									45,070
10.4	Finance Support	22,958									22,958
10.5	Legal support	16,111									16,111
10.6	Procurement support	9,248									9,248
10.7	External audit	10,007		13,000			ſ	ſ	1000	007 70	23,007
	TOTAL	1,520,585	84,215	1,074,900	0	0	0	0	54,925	21,190	2,755,815

Please refer to the relevant instructions given in the explanatory notes for filling in these forms