

Linking Impact Assessment Instruments to Sustainability Expertise

Methodological framework for WP2 activities

--- living document (April 2011) ---



Deliverable no.: D 2.1 15 April 2011



Project no. 243826 Network of Excellence FP7 Environment (Including Climate Change)



Linking Impact Assessment Instruments to Sustainability Expertise

Deliverable Title	Methodological framework for WP2 activities
Filename	LIAISE_D2.1.doc
Authors	Aranka Podhora, Katharina Helming (ZALF)
	with contributions from Thomas Heckelei (UBO)
	Jacques Jansen (ALTERRA)
	Petrus Kautto (SYKE)
	Pytrik Reidsma (WUR)
	Klaus Rennings (ZEW)
	John Turnpenny (UEA)
Date	15 April 2011

Prepared under contract from the European Commission Contract n° 243826 Network of Excellence FP7 Environment (including Climate Change)

Start of the project:	01/11/2009
Duration:	54 months
Project coordinator organisation:	ALTERRA
Deliverable title: Deliverable no. :	Methodological framework for WP2 activities D 2.1
Due date of deliverable:	Month 12 (October 2010)
Actual submission date:	15 April 2011

Dissemination level

	PU	Public
	PP	Restricted to other programme participants (including the Commission Services)
Х	RE	Restricted to a group specified by the consortium (including the Commission Services)
	CO	Confidential, only for members of the consortium (including the Commission Services)

Deliverable status version control

Version	data	Author
1.0	April 2011	Aranka Podhora, Katharina Helming (ZALF)





Preamble

The present document describes Deliverable 2.1 'Methodological framework for WP2 activities'. It provides the roadmap for LIAISE work package 2 (WP2) 'Science for impact assessment tools and procedures' addressing its methodological approaches and working concept. WP2 is divided into six tasks with corresponding deliverables:

- Task 2.1: Coordination of WP2 and framework development ("Coordination")
- Task 2.2: Synthesising emerging knowledge to better analyse policy impacts ("Knowledge Synthesis")
- Task 2.3: Research for IA Tools; translation of knowledge gaps into research questions ("Research needs")
- Task 2.4: Roadmap for continuous interaction between IA community and other research communities beyond project lifetime ("Roadmap")
- Task 2.5: Knowledge use in different assessment venues ("Venue analysis")
- Task 2.6: Development of IA modules for design of research ("Design")

The document presents a general introduction including the planned methods for each task, their intended results as well as a interaction of WP2 with other LIAISE work packages. Thereby, D2.1 is set out as a living document and will continuously be updated in an iterative process. The new results will be included as annexes in the forthcoming deliverables D2.3 to D2.6 in months 30, 42 and 54. These updates will allow us to adapt the WP2 concept, take up lessons learnt, and reach the objectives of the tasks 2.3 to 2.6.

The deliverable also specifies the objectives and the planned methods for the forthcoming deliverables D2.2 to D2.6. In all tasks, close interaction with activities in other WPs is mandatory to reach respective objectives.

WP2 mainly focuses on two areas of knowledge:

1) the 'narrow knowledge pool' includes expertise from impact assessment experts and projects that are directly related to ex-ante policy impact assessment (IA), and

2) the 'wide knowledge pool' comprises research communities and science-policy interface projects that focus on the policy process in general or its elements. These communities and projects do not focus on ex-ante policy IA explicitly, but produce knowledge of relevancy for the IA process.

The first content-related activity of WP2 is task 2.2. It is specified in its scope and objective to allow subsequent tasks 2.3, 2.4 and partly 2.5 to build upon. In contrast, tasks 2.4 and 2.6 will be implemented towards the end of LIAISE: They are further elaborated in the annexes of the forthcoming deliverables.

Aranka Podhora. Katharina Helming Coordinators of work package 2 LIAISE project April 2011



Executive Summary

LIAISE Work package 2 "Science for impact assessment tools and procedures" has two central objectives (impact). First, it aims to trigger and better target excellent research related to policy IA tools. Second, WP2 aims to overcome the fragmentation of IA related research by consolidating an international and interdisciplinary research community on IA. To reach these key objectives, WP2 develops a shared research agenda (outcome) building upon the continuous identification of research needs (output). The latter will involve researchers, research users (policy makers) and research funders.

WP2 reviews existing literature to identify the status quo of impact assessment tools, future research needs and research agenda setting. These results are complemented by mapping and close cooperation with research projects, research institutes and research societies to extend the scientific network. Further, expert workshops will discuss research needs in order to identify options for future scientific activities and roadmaps. WP2 closely builds on the cooperation with other LIAISE work packages to integrate their research requests into its work. The results are frequently disseminated in training courses, conferences and publications.

This deliverable 2.1 'Methodological framework for WP2 activities' presents the context of research in WP2 and describes in detail the methodological approach for each of its tasks (a general introduction including the planned methods, the intended results and a general relation of WP2 to further work packages).

Task 2.2 establishes an extensive data base on research related to impact assessment tools. It includes a mapping of projects funded in the European Framework Programmes 6 and 7 and of associations that have a focus on policy impact assessment in their work.

Task 2.3 takes up the mapping results and identifies research peaks and especially research needs in relation to policy impact assessment. The results focus on central elements of the policy process such as impact areas and policy fields. They are to be discussed in expert workshops at conferences and in cooperation with projects identified in the mapping.

Task 2.4 then transfers the results of the research needs into a shared research agenda to contribute to the development of an impact assessment research alliance. The main objective here is to provide a profound basis for new scientific activities in order to create a coherent and consolidated research structure for IA.

Task 2.5 jointly with task 1.3 will shed light into other venues in the policy process in which various forms of evidence-utilisation take place. A joint publication workshop will produce a state of the art book on the supply of and demand for tools in different policy making venues. It will also establish a mechanism to encourage proposal writing in this important but underresearched area of policy analysis.

Task 2.6 is central in WP2 to disseminate the research results through conference participation, workshops as well as publications and to build capacity via trainings and the instalment of LIAISEoffspring as a network for early career scientists.



It will be an essential part of our work to relate the concept set out in D2.1 to the experiences made in the other tasks, to the challenges faced and to the requirements set by these tasks.



Overview

Preamble	III
Executive Summary	
1. Methodological framework for WP2 activities	1
2. Spheres of networking and outreach (D2.1 Coordination, I	02.2 Knowledge synthesis)10
3. Identification of research needs and design of research ag	endas (D2.3 Research needs)15
4. IA Research Alliance - Concept for an durable science pol and use of research based IA tools in policy making (D2.4 Ro.	· · · · · ·
5. A literature review of assessment venues and tools (D2.5	Venue analysis)22
6. Modules for research designers to make research program	
knowledge needs (D2.6 Training Dissemination)	
7. WP2 time schedule and responsibilities	
8. References	
Annex I: Selected results of societies for possibly mutual affilia	ation with LIAISE31
Annex II: National and international networks established/ join	ed by WP2 partners33
Annex III: Dissemination of WP2 results	
Annex IV: Contributors to the report	



Table of Contents

Pr	eamble	iii
Еx	ecutive Summary	iv
1.	Methodological framework for WP2 activities	1
	Introduction and WP2 Objectives	1
	Planned methods and intended results of WP2 activities	5
	WP2 interests for interaction with other LIAISE work packages	9
2.	Spheres of networking and outreach (D2.1 Coordination, D2.2 Knowledge synthesis)	10
	Introduction/ objectives	10
	Planned methods	10
	The mapping of FP6 and 7 projects and FP8 initiatives to address aspects of the 'narrow' and 'wide knowledge pool	
	The mapping of societies to establish a mutual affiliation	13
	The mapping of training courses for early career researchers	14
3.	Identification of research needs and design of research agendas (D2.3 Research needs)	15
	Introduction/ objectives	15
	Planned methods and intended results	16
	Research needs collected from other WPs	17
	Research needs from mapping	17
	Research needs from research community	
	Research needs from user community	18
	IA Research Alliance - Concept for an durable science policy interface for improving the usability d use of research based IA tools in policy making (D2.4 Roadmap)	19
	Introduction/ objectives	
	Planned methods and intended results	19
5.	A literature review of assessment venues and tools (D2.5 Venue analysis)	22
	Introduction/ objectives	22
	Planned methods	
	Modules for research designers to make research programmes and projects compatible with IA owledge needs (D2.6 Training Dissemination)	25
	Introduction/ objectives	
	Planned methods and intended results	
	Establishment of LIAISEoffspring as a forum for early career researcher	
	Establishment of national and international networks of WP2 partners	
	Interaction with funding bodies	
	Dissemination of WP2 results	
7	WP2 time schedule and responsibilities	
	References	
	nex I: Selected results of societies for possibly mutual affiliation with LIAISE	
	inex II: National and international networks established/ joined by WP2 partners	
	inex III: Dissemination of WP2 results	
<i>i</i> u	Sessions	
	Presentations at conferences	
	Publications	
		0



ex IV: Contributors to the report



D 2.1 - Methodological framework for WP2 activities

1. Methodological framework for WP2 activities

Introduction and WP2 Objectives

The LIAISE project addresses the science policy interface with respect to impact assessment (IA). Work package 2 (WP2) thereby specifically focuses on research related to IA tools and procedures (see Figure 1). First, it aims to trigger and better target excellent research related to policy IA tools. The central element is to consolidate the IA research communities as open, interdisciplinary community with strong ties to user (impact). Second, WP2 aims to overcome the fragmentation of IA related research by consolidating an international and interdisciplinary research community on IA. To reach these key objectives, WP2 develops a shared research agenda for impact assessment tools to develop a research alliance (outcome). WP2 thereby builds upon the continuous identification of research needs and user needs to build research excellence (output). The latter will involve researchers, research users (IA makers) and research funders.

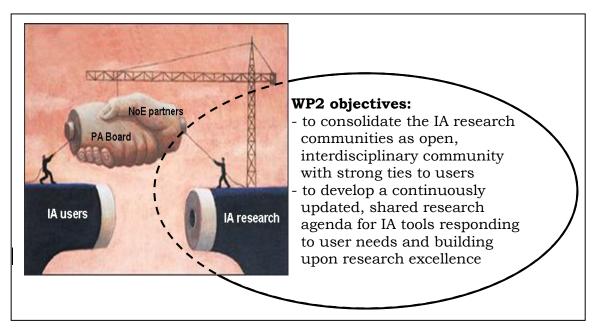


Figure 1: Bridging the gap between IA users and IA researchers – WP2 scope of action

Overall, WP2 is to improve the diffusion of scientific advances into IA tools and procedures:

• WP2 will contribute to further consolidate the IA research community as an open network within an interdisciplinary community. It will comprise strong relations to other research platforms and initiatives that do not yet focus on ex-ante policy IA in order to incorporate knowledge provided by research communities that do not yet see exante policy IA as their central task (implicit projects that belongs to the 'wider knowledge pool' as will be described later).



- WP2 will link research needs for IA with other sustainable development research programmes. It will focus on programmes that do not yet regard policy IA as a central means to reach their objectives in order to support the application of policy IA in a sustainability context.
- WP2 will elaborate a procedural concept for safeguarding the above beyond the lifetime of LIAISE. It thereby develops a shared research agenda to assure the addressing of main knowledge needs in policy IA research.
- WP2 will develop modules for designing research projects relevant for policy IA. Close interaction with research funding bodies and with users of research based knowledge will be seeked to ensure maximisation of impacts of IA research. WP2 will also participate in calls and tenders for impact assessment research to spread knowledge on policy IA to new research partners.

WP2 thereby builds on the knowledge linkages of the scientific and policymaking communities to improve the IA process and the results of the analysis: Information provided by scientists contributes to the knowledge of the IA users in the policy-making process and vice versa (see Figure 1). Concerning the scientific knowledge, the WP2 scope of action builds on the interaction of a 'narrow' and a 'wide knowledge pool' with respect to IA in a nested system. The 'narrow knowledge pool' chiefly consists of expertise of the LIAISE NoE partners and the community of policy IA research, namely researchers who work with ex-ante policy impact assessment and similar approaches such as foresight. The 'wide knowledge pool' comprises expertise from a wide variety of disciplines. Here, scientists work with methods and tools that are not explicitly related to ex-ante policy IA. Their research could contribute to policy IA in various ways, e.g. their tools could support the development of policies, could conduct ex-post policy IA, could aim to mainstream specific topics into the policy making process (as set out in the Impact Assessment Guidelines of the European Commission), and could provide expertise from domestic as well as international policy IA in non-European countries. This knowledge is currently not directly linked to IA research, for example because the respective research does not consider IA as the key instrument to link its results up with or policy makers are not regarded the key target group to take up the conclusions. However, these research results could valuably contribute to amplifying the IA knowledge pool in general, though they are not integrated into IA activities by policymaking communities yet.

Thus increasing the 'narrow knowledge pool' with expertise from the 'wide pool' will amplify the IA knowledge available to the policy-makers for the IA process. In a second step, this extension of achievable knowledge will improve the quality of the IA results and their contribution to sustainability. Thereby, we strive to focus on specific impact themes and policy areas selected jointly with the LIAISE consortium in order to provide a detailed package for these topics.



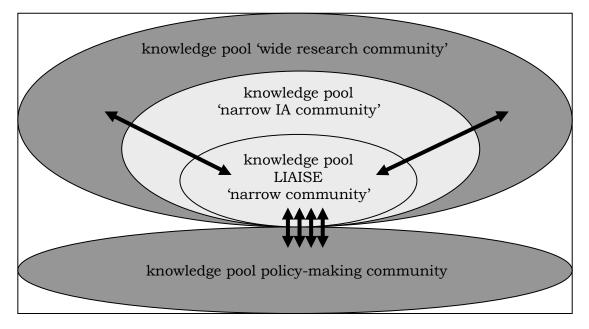


Figure 2: Role of WP2 as door to research communities

In its research, WP2 focuses on (a) tools that are to contribute to (b) IA policy proposals. In their application, these tools are (c) policy-relevant (see Figure 3). The intersection of these three requirements is marked as shaded area in Figure 3. WP2 focuses on the policy-relevancy of the tools. To define what policy relevancy of a tool means, WP2 follows as a starting point the approach of De Smedt (2010) partly jointly with Thiel (2009) and Nilsson et al. (2008). De Smedt mainly used three criteria for assessing policy relevancy of IA tools, namely accuracy, relevancy, and legitimacy as explained in Box 1.

Box 1: definition of policy relevant tools (De Smedt, 2011, Thiel, 2009, Nilsson et al. 2008)

Accuracy is inherent in scientific models but it often goes on the cost of transparency. Scientific tools often remain so complex that they appear as black boxes rather than as transparent analytical tools. When tools are to be used for policy information, trade-offs between transparency on the one side, and scientific complexity on the other is therefore required (Thiel 2009; Nilsson et al. 2008). Relevancy to the policy context requires sensitivity of the tool to the dynamics that the policy is going to affect. For research based tools relevancy is often hindered by the fact that they are generic and not specific enough to be of direct use in a political decision process. Legitimacy can best be achieved if policy-makers are involved at an early stage in the tool development and, vice versa, researchers are involved at an early stage in the policy making process.

(De Smedt 2011)



Since the improvement of the use of tools for IA is the core of LIAISE activities, and since policy relevancy is one foremost criterion for usability, the question of what policy relevance actually means is also subject to research in LIAISE across all WPs. Consequently, the definitions of policy relevancy of a tool is subject to continuous revision in LIAISE and will be included in the forthcoming version of the WP2 deliverables. The definition presented in Box 1 will thereby be further specified, adapted and extended, respectively. Further, the similarities and differences of the concepts of these authors will be linked or dissociated from each other, if appropriate.

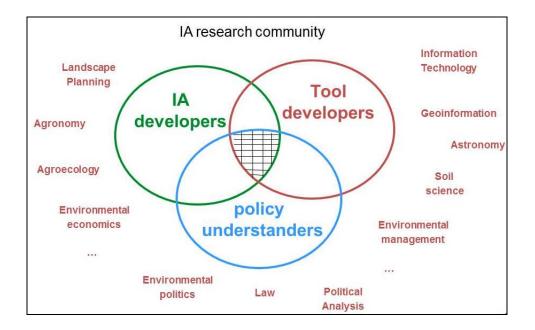


Figure 3: Objectives of WP2: Increase of the shaded area

Thus the central objective of WP2 is to increase the shaded area by:

- identifying tools that are currently not used for policy IA but could contribute to this process, assuring that these tools are policy-relevant, and
- increasing the policy-relevance of tools that are currently available to the IA process, but lack accuracy, relevancy or legitimacy.

WP2 research builds on the following working definitions. As WP2 proceeds we will update the definition of our central topics in an iterative process through annexes to the forthcoming deliverables. Jointly with other WPs, we refine our definitions make them shared knowledge throughout LIAISE.

In WP2, the term <u>impact assessment</u> is defined as the procedure for ex-ante policy impact assessment in relation to sustainable development. It is not necessarily limited to the IA procedure applied by the European Commission (Impact Assessment Guidelines, 2009). It also includes ex-ante policy IA



conducted in the EU member states and other domestic, international as well as less institutionalized initiatives.

The term \underline{tool} is defined as an instrument to gather knowledge for the purposes of policy IA with a focus on sustainable development. Tools may comprise

(a) ex-ante tools themselves (e.g. models, databases, participatory tools),

(b) conceptual frameworks and tool components such as parameters and indicators that may be fed into existing, adapted or newly established ex-ante tools as well as

(c) a mix or combination of tools in evaluation frameworks.

These characteristics are set out in the LIAISE description of work and are amended based on first discussions of WP2. They will be further defined during the progress of WP2.

The definition of the term <u>sustainable development</u> follows the three-pillarapproach combining economic, social and environmental aspects. It based on the understanding that all three dimensions are equally crucial, interconnected, and urgent. This approach is widely considered as one of the core issues in mainstream sustainability thinking (UN 2003). Thereby, sustainable development is to be understood as a discursive process combining normative and positivist elements rather than a fixed, expert defined target (World Commission on Environment and Development 1987).

Planned methods and intended results of WP2 activities

The activities of WP2 can be grouped into three sets:

- <u>short term activities</u> with a focus on networking, e.g. workshops and affiliations,
- <u>long term activities</u> focussing on capacity building, e.g. trainings and support of early career scientists, and
- <u>ongoing activities</u> that support continuous elements of WP2 such as the shared research agenda

The interactions of the WP2 tasks are illustrated in Figure 4.



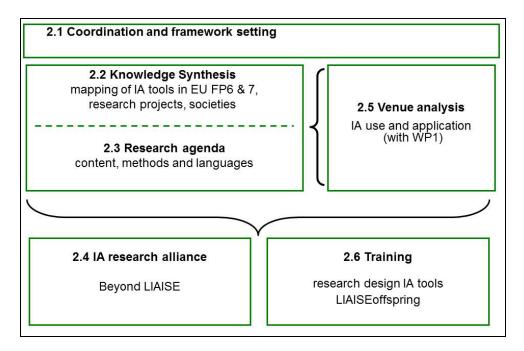


Figure 4: Interaction of WP2 tasks

D2.1 Methodological framework for WP2 activities intended result:

- to provide a basis for the joint identification of research activities and needs as well as research groups related to IA,
- to gear WP2 activities towards stimulating excellent research on policy IA, towards consolidating the research community and towards developing a shared research agenda,

methods:

- to develop a <u>template to map research activities</u> which are relevant for IA and which may be part of the 'narrow' as well as the 'wider IA knowledge pool',
- to develop a <u>template to map training courses</u> esp. for early career researchers to promote IA tools and to build specific capacity in the 'narrow and the wide knowledge pool',
- to develop a template to gather societies relevant for extending the 'narrow knowledge pool' by new partners,

D2.2 Overview of research groups/networks producing knowledge of relevancy for IA tools and processes <u>intended result:</u>

• to gather extensive and profound information on the status quo of IA research and the IA research groups that are related to the 'narrow and wide knowledge pool', thereby to identify IA research needs,

<u>methods:</u>

• in a first phase to <u>map projects</u> funded by the EC FP6 and 7 to identify IA tools provided by the 'narrow and wide knowledge pool' and the respective research institutes,



- to start to <u>conduct a literature review on IA tools</u> with a specific focus on selected impact themes that will be identified jointly with other work packages (to be continued during the lifetime of LIAISE, mainly in task 2.3),
- to <u>select key projects</u> for a short list as door openers to reach out to specific communities, share knowledge and jointly identify research challenges to improve policy IA tools,
- to <u>map training courses</u>, esp. for early career researchers to link them to the LIAISE training courses,

intended result:

• to <u>improve the policy-relevancy of IA tools</u> in terms of accuracy, relevancy and legitimacy,

method:

• to <u>define criteria</u> how to create a <u>policy-relevant IA tool</u> based on the state of research and in close relation to user needs,

intended result:

- to <u>establish networking mechanisms</u> to stabilise and extend the narrow IA community ('narrow knowledge pool') by partners of the 'wide knowledge pool'
- to <u>build capacity</u> among these partners in terms of IA tools and their policy relevance

method:

- to <u>establish mutual affiliations with relevant research societies</u> to promote IA in a variety of disciplines (mainly the 'wide knowledge pool') in order to make new tools available to the IA process,
- to <u>establish mutual cooperation with relevant research projects</u> based on mapping results to join forces in conference presentations on policy IA as well as calls and tenders,
- to <u>organise special sessions at relevant conferences</u> with the aim to spread knowledge on IA tools and to interact with the wider research community
- to install <u>LIAISEoffspring</u> as a <u>forum for early career researchers</u> to support the stabilisation of research related to IA tools beyond the lifetime of LIAISE,

D2.3 Synthesis of research needs for IA tools in research programmes inside and beyond the IA research community

intended results:

- to identify research needs in terms of IA in (a) a broad context and (b) in relation to specific impact themes agreed upon in the LIAISE project,
- to transfer the research needs into research questions,
- to develop a shared research agenda for future IA science,



<u>methods:</u>

- to <u>analyse the distribution of tools</u> for policy IA in relation to policy fields on one side, and to the different sustainability impact areas (European Commission Impact Assessment Guidelines) on the other side,
- to <u>organise expert workshops</u> with the project coordinators, further experts of key projects as well as expert members in societies in order to discuss WP2 results such as research needs and the shared research agenda and to gather additional information on WP2 objectives, steps and intermediate results,
- to benefit from the results of the <u>venue analysis for IA</u> (task2.5).

We will adapt the methods during the progress of D2.3 based on the first results.

D2.4 Procedural concept to facilitate a continuous uptake of emerging scientific and social scientific knowledge in IA tool and process improvement, beyond the lifetime of the LIAISE project (product will be implemented in IA tools front office of WP4)

intended results:

- to develop a concept for an ongoing research uptake,
- to install the shared research agenda with view to activities related to the 'narrow and wider knowledge pool' (communities) in order to turn D2.2 and D2.3 into a self-sustaining continuous process,

methods:

The methods will be further specified during the progress of WP2.

D2.5 A literature review on the politics and policy of evidence-based policymaking in different assessment venues, with particular reference to assessment tools

intended result:

• to compile information on appraisal types in a literature review, thereby paying special attention to literature available from the 'wider knowledge pool',

methods:

• to organise a publication workshop in close cooperation with WP1 (D1.3) to scientifically identify research needs by integrating user needs with information on IA tool availabilities,

D2.6 Modules for research designers to make research programmes and projects compatible with IA knowledge needs (will be tested in WP7) intended result:

• to promote research in support of policy-relevant IA tools in order to make new tools available to the IA process, especially from the 'wider knowledge pool',



• to install networks with the individual partner institutes with view to promoting the objectives of WP2, thereby also integrating partners from the 'wider knowledge pool',

methods:

- to offer joint LIAISE sessions during conferences from other research communities,
- to <u>build capacity</u> in terms of trainings for IA tools and procedures in WP7 training courses and further non-LIAISE training courses,
- to <u>disseminate the WP2 results</u> also with a special focus on journals of the 'wide knowledge pool'.

The methods will be further specified during the progress of WP2.

WP2 interests for interaction with other LIAISE work packages

From the view of WP2, the interaction with the other LIAISE work packages is divided into two parts. First, the research of the other work packages contributes to the work of WP2. Key options for support will be the contributions to the research needs including the discussion of the research questions and the shared research agenda (D2.4), the participation in the publication workshop (D2.5) and in the promotion/ dissemination of IA in the scientific communities through joint conference presentations and articles (D2.6).

Second, there exists one to two individual key topic of cooperation with each WP:

- WP1: (a) conceptualization and realization of the publication workshop to shed light into the supply of and demand for tools in different policy making venues; (b) developing the concept of policy relevancy (in relation to user needs) and (c) development of guidelines for development of policy-relevant tools (in relation to researcher needs)
- WP3: (a) identification and definition of the policy-relevancy of tools, and (b) development of guidelines for the development of policy-relevant tools (in relation to researcher needs)
- WP4: definition of the role of scientists in the front office/ help desk
- WP5: conceptualization of the scientific options beyond the lifetime of LIAISE with a focus on establishing the IA Research Alliance
- WP6: (a) integration of tools identified during the mapping into the test cases, and (b) feedback on the design and quality improvement of policy-relevant tools
- WP7: development and promotion of (a) training curricula for scientists and (b) LIAISEoffspring as specific support for early career scientists.

These topics will be discussed and specified in joint meetings with the individual work packages to explore the complete scope of opportunities.



2. Spheres of networking and outreach (D2.1 Coordination, D2.2 Knowledge synthesis)

Introduction/ objectives

In tasks 2.1 and 2.2 WP2 will identify relevant research communities. In a second step, WP2 will link LIAISE to them in order pick up emerging knowledge relevant to IA tools and procedures. The key objective of this task is to raise the awareness for the need of evidence in policy support in research on IA/ IA tools. Thereby, it is regarded as essential to balance, strengthen and increase the IA community by mapping existing and possible future research communities related to IA and thereby to create a shared research agenda for policy-relevance of IA/IA tools.

Planned methods

The mapping of FP6 and 7 projects and FP8 initiatives to address aspects of the 'narrow' and 'wide' knowledge pool

The mapping of projects sets the central basis for the success of WP2 activities, because all further tasks and deliverables build on the mapping results and its analysis. Thus D2.1 developed a template as a common basis to illustrate various criteria of the project and to relate it to the work of LIAISE.

(a) general project information		
project title/ acronym		
discipline		
(b) LIAISE relevancy		
impact area/ area of sustainability		
tools related to the project		
policy relation: present/ possibly future		
(c) project data		
key words of the project		
homepage		
project summary/ content of the project		
(d) project partners/ point of contact		
project coordinator/ research institute		
partners (LIAISE partners marked)		
(e) administrative information		
funding agency		
funding sum		
contract type		
duration (end of project)		
(f) recommendation, comments		
short list recommendation		
additional comments		
(g) access data		
theme		
research area		
date (Name of researcher)		

Table 1: Template structure for the mapping of research projects that are related to IA



The mapping is the central contribution to consolidate and to extend the IA knowledge pool by identifying how a project could contribute to improving the IA analysis.

In the mapping the projects will be selected for two categories:

- a) projects that directly refer to ex-ante policy IA,
- b) projects that refer to the policy process, e.g. their tools could support the development of policies, could conduct ex-post policy IA, could aim to mainstream specific topics into the policy making process, and could provide expertise from domestic as well as international policy IA in non-European countries.

The mapping is based on a template with seven central aspects as illustrated in Table 1. It compiles the tools developed in the project and the policy relevance of the research results (aspect b) to link to the science-policyinterface as a central element of LIAISE.

The projects are identified based on the executive summary provided on the EU Cordis server (aspect c). Here, the following key reference – either explicitly mentioned or referred to as general topic – is central:

- tool (qualitative and quantitative)
- policy/ policy-relevance, governance, policy-makers,
- assessment, evaluation, appraisal,
- research coordination/ scientific networking,
- mapping, research gaps, roadmaps (key words WP2 tasks),
- sustainability in relation to LIAISE topics.

The template also asks for a first categorization of the project, especially in terms of impact areas according to the Impact Assessment Guidelines of the European Commission (aspect b). Together with the discipline of the project and the categorization of the IA areas we will establish a map to illustrate the distribution of tools and thus to identify research gaps. Further, the LIAISE relevancy identifies the policy-relevancy of the project (aspect b) and thus exposes if there is a need to increase the policy-relevancy of research activities.

Following the recommendation of the WP2 researchers, several projects and institutes will be selected for a short list for further cooperation with LIAISE and multiplication (aspect d, g). The explicit cooperation concept will be elaborated for D2.3. The interaction with scientists and projects could include, among others, the participation in expert workshops and joint project meetings with view to specific topics to benefit from their research expertise as well to offer the LIAISE experience.

Additional information, e.g. on the funding sum and the duration of the project, might point at the scientific relevance that the project is assigned to by the Commission.

In sum, the mapping identifies aspects and information that could contribute to the improvement of IA tools and procedures. Furthermore, projects are identified that address topics which are related to the key aspects of WP2, mainly research coordination/ scientific networking, mapping, research needs, roadmaps and shared research agenda.



As LIAISE addresses IA procedures on the level of the European Commission, the mapping starts with research projects funded by the 6th and 7th EU Framework Programme and aims to continue with the mapping of FP8 initiatives during the lifetime of LIAISE.

We map projects from the following 25 sectors of FP6 and FP7:

FP6:		FP7:	
-	Coordination of research	-	Coordination,
	activities,	_	Energy,
_	Citizens and governance,	_	Environment,
_	Food quality and safety,	_	European Knowledge Based
_	Life sciences, genomics,		Bio-Economy,
	biotechnology for health,	_	Health,
_	Information Society	-	Information and
	Technologies,		Communication Technologies,
_	Nanotechnologies, Materials,	-	Infrastructures,
	New Processes,	-	Joint Technology Initiatives,
_	Research and innovation,	-	Nanosciences,
-	Research for policy support,		Nanotechnologies, Materials
-	Research Infrastructures,		and new Production
-	Science and Society,		Technologies,
-	Sustainable development,	-	Regions of Knowledge,
	global change and	-	Science in Society,
	ecosystems.	_	Security,
		_	Social Sciences and
			Humanities,
		-	Transport.

Thus the mapping results will summarize recent and future trends on IArelated research, thereby identifying the IA expertise from the 'narrow and wide knowledge pool'.

During the progress of LIAISE it will be discussed how and to what extend an analysis of national activities can contribute to WP2 tasks and objectives.

Countries that could be addressed are, for example Germany, Mexico and China, thereby building on and extending existing research cooperation of the WP2 partners. When selecting the partners for the short list, we will pay careful attention also to integrate partners from the 'wide knowledge pool' and thus to include knowledge that might not yet be available to the IA process.

These selection criteria will be re-defined based on the final results of the mapping as these criteria may not be applicable to projects from all funding sectors.

With these projects, LIAISE will strive for a strong interaction and affiliation as LIAISE proceeds. The project coordinators and partners can contribute their expertise to the LIAISE knowledge pool. This concept may include opportunities for the researchers to form part of the expert workshops planned in WP2 (D2.3), to the LIAISE expert pool for individual work packages or for the help desk (WP4).

In addition to the mapping of projects, we will start to review literature with a focus on tools related to policy-making in general and IA tools in specific relation to certain policy fields and impact areas (to be continued as LIAISE proceeds, mainly in task 2.3). Policy fields and impact areas will be identified



in close cooperation with the areas covered by the WP6 test cases as a result for D2.2.

The mapping of societies to establish a mutual affiliation

LIAISE aims to amplify the knowledge pool by promoting IA in research communities that have not intensively focused on the IA process so far. Research associations are regarded as a valuable entry point into these research communities.

Here, a mutual affiliation between LIAISE and research societies / societies with a research focus will become a supporting element to reach these new scientific circles. It is a central task in WP2 to identify key societies and to establish individual affiliation concepts to foster the cooperation. WP2 thereby builds on the existing networks of the LIAISE researchers by gathering the societies the scientists are / were members of (April, May 2010).

(a) Association		
(name, web address)		
(b) Sector (discipline) of the association (c) Are there any "EU Policy IA/ Policy IA tool activities"		
in this association?		
- I know there are		
- I know there are none		
- I dont know		
- others (e.g. in preparation)		
(d) Is this purely a research association?		
Is there an explicit research section?		
- The association is purely research		
- The association is mixed and has a research focus		
- The association is mixed and has no research focus.		
- It is mixed and I do not know if there is a research focus.		
(e) offers of the association		
- conferences		
- journals		
- sections		
(f) your membership (present/former)		
- present		
- former		
(g) function/ explicit participation		
(at present/ former)		
- chair.		
- board (present/ former)		
- section (present/former)		
- others (specified by the researcher)		

Table 2: Template structure for the mapping of research projects that are indirectly related to IA

This first questionnaire included the sector of the society (aspect b), the offers (such as journal and conferences) (aspect d) and the scope of activity of the LIAISE researcher (aspect f, g) to learn about the opportunities of benefiting from the scientists as a door opener to the society. With view to the LIAISE focus, information was requested on the presumed IA expertise in



this society (aspect c) to identify if there is existing knowledge / activities to build on in the affiliation process.

As a result, WP2 will select 5-10 societies as key affiliates. In sum, they will cover all impact areas (according to the EC IA Guidelines), are purely research societies or have a very clear focus to reach the WP2 target group, and cover different intensities of and experiences with IA research. Here, the societies that can be linked with the 'narrow knowledge pool' and to all impact areas serve as a starting point and are then extended by societies that rather belong to the wide research knowledge pool.

For the cooperation with these societies, three objectives are central. First, LIAISE aims to establish a mutual cooperation in order to stabilise the step of promoting IA in other research communities. Second, joint expert workshops serve as opportunity to receive comments on the WP2 results as research gaps, to gather information on selected WP2 tasks such as supplier needs, to benefit from the previous IA experience and to offer joint or individual trainings to the researchers in these societies.

For the first steps towards establishing affiliations, see Annex I.

The mapping of training courses for early career researchers

In addition to the mutual affiliations with societies and research projects as well as to joint LIAISE conference presentations and sessions, dissemination of LIAISE and WP2 objectives and results will also take place through trainings. Here, training courses (summer schools, winter schools, online and onsite training) with an explicit focus on researchers, especially early career scientists play a relevant role.

(a) Title
(b) Topic
(c) Organiser
(d) funding agent
(e) method
(f) frequency of course
(g) duration of course
(h) discipline
(i) target group
(j) IA relation
(k) link

Table 3: Template structure for the mapping of research projects that are indirectly related to IA

The mapping again follows a template. It identifies, among other aspects, the topic and discipline of the course (aspect a, h), its organisers and target groups to learn about possible cooperation partners (aspect c, d) and the focus on IA (aspect j). The key words for the first search were *summer school, *winter school, *online training, *training course, and *training.

The results of this mapping aim to promote the needs for IA tools to the wide research community. Further, the trainings that focus on early career researchers can serve as a link to LIAISEoffspring and support interaction activities.

The mapping results will be combined with institutional activities with a focus on early stage researchers from the LIAISE partners. Jointly, these courses will form the basis for building capacity of the next generation of impact assessment researchers.



3. Identification of research needs and design of research agendas (D2.3 Research needs)

Introduction/ objectives

It is an essential element of LIAISE to identify knowledge and research needs related to IA and to transfer them into explicit research questions. Results from this task 2.3 convey the knowledge gaps and obstacles for tool operation to support the policy-relevance of tools developed by the research community in the area of sustainable development. Thus D2.2 and D2.3 are closely linked and frequently interact. WP2 will check if the gathered research needs are addressed outside the IA community, e.g. they will be discussed in workshops at conferences from affiliated societies and in international expert workshops organized by WP2 during conferences and in close cooperation with research projects identified in the mapping. These discussion focus on research needs, research questions, roadmaps and the shared research agenda.

The research needs are gathered in four different ways: information provided

- by other WPs based on their LIAISE research results,
- through the WP2 mapping,
- based on information by the 'narrow and wider IA research community', and
- by extracting information needs from the user community.

The mapping of past EU projects and IA reports develops a lot of material which must be condensed in some way. This will be done by using the expertise of WP partners, who write two pages on the research needs in their respective fields of research. The starting points for the structuring of research needs will be policy topics. These topics will link up directly to potential users and should also be linked to the test cases. From this it would follow that the test cases cover a variety of policy areas. For the final decision we also need input from other WPs, but a start for a list of policy themes could include the following (non-exhaustive and not mutually exclusive):

- Common Agricultural Policy (CAP) of the EU
- Agri-environmental policies at different administrative levels
- Policies to support sustainable climate change adaptation
- Climate change mitigation
- Policies targeted at reducing nutrient emissions
- Water quality
- Efficient and sustainable water use
- Biofuel support policies
- Biodiversity
- ...



Within the themes, a more detailed look at different types of research needs could consider the following categories (to be completed and perhaps further structured/simplified with developing experience):

- Models, modelling techniques
- Indicators
- Data availability, data quality (incl. Monitoring)
- Thresholds, tipping points
- Valuation techniques
- Scenarios, Systems boundary conditions and dynamics
- Process knowledge, causal chain relationships of human-environment interactions
- Scaling issues, process dynamics
- Normative components of assessment
- Participatory methods
- Integration of quantitative and qualitative knowledge
- Integration of positive and normative information
- Interdisciplinary interaction, integration
- Knowledge integration methods
- Knowledge transfer methods.

Regarding the consequences of identified research needs we can distinguish into

- needs that require further research,
- needs that require further dissemination (knowledge that is available but not yet well-known to the users),
- needs that will be addressed by relating them to the science policy interface,
- needs that jointly require two to three of these activities.

Planned methods and intended results

Apart from the approaches describes below, the processes of setting research agendas that are used by larger funding agencies relevant for our themes shall be reviewed and described in a structured way in order to learn for our process of identifying research needs. This provides also information for dialogues with these funding agencies to later disseminate the research agenda identified and explore opportunities for the funding of relevant research beyond the lifetime of LIAISE.



Research needs collected from other WPs

Each WP has specialised information on research needs according to the scope of its work and its general professional experience. For the extraction of the information, WP2 intends to hold small structured workshops at future annual LIAISE meetings. The WP partners also ask appropriate contact persons from each WP to identify the three main research needs from the WPs point of view. The results will be structured and summarised. Updates – perhaps modified based on the experiences made – will be done in the course of the project. The idea of developing a more formal questionnaire will be considered again as task 2.3 proceeds and if needed for the course of D2.3.

Detached from these activities, first comments on research needs could already be gathered from WP4 and WP6, mainly as a result of synergy from researchers working in more than one WP or of specific "research need responsibilities" in each WP.

Research needs from mapping

WP2 provides results based on two types of mapping. First, WP2 partners map 25 sectors of European Commission's FP6 and 7. Second, ZEW mapped examples of good practice from EI IA reports including the recent ones from 2009 and 2010. Research needs can be drawn from the holes/ weak parts in the IA research landscape analysed from both mappings. In the context of collecting the results, a substantiation and final structuring of the list of categories above is foreseen.

Research needs from research community

Each WP2 partner assumes responsibility for a certain policy theme. Main tasks are to identify and discuss research needs, provides recommendations for activities related to the short list of the project mapping and the wider research community related to this sector or discipline.

Example:

WP2 partner UBO is active in the community for modelling impacts of agroenvironmental policies. Some of the related economic modelling tools are regularly used in the outlook and policy preparation process in the European Commission. Interdisciplinary tools or model chains targeting analysis of economic and environmental impacts simultaneously (Van Ittersum et al. 2008; Britz et al. 2010) have been or are currently developed. Their inclusion in a formal IA seems to not have occurred at this point.

UBO will focus on the identification of research needs in the interdisciplinary modelling of agri-environmental policy impacts and consider the following issues (to be possibly expanded with newly developing policy debates):

- Concepts for interdisciplinary model linkage targeting at integrated sustainability assessment
- Capability of IA tools / community to flexibly adapt to ever ongoing policy changes
- Capability of IA tools in addressing volatility and uncertainty related challenges of agricultural markets

Further areas of responsibility will be defined for each WP2 partner.



Finally, a brainstorming workshop could be held ("sand pit") for research proposals with partners from various disciplines to generate ideas. This type of process has been used by the UK Research Council.

Research needs from user community

Based on the same responsibilities for policy themes as employed for identifying research needs from the research community, WP2 partners give a brief, structured overview on research topics considered relevant by users or potential users of IA tools in the respective field. This will be achieved by extracting information from recent (2010/2011) research tenders issued by the relevant directorates and agencies of the European Commission. This may be complemented in some cases by drawing on selected calls from national governments. Additionally, some (uncertain) information on upcoming themes and calls in the context of DG Research's Framework Programme 8 is likely available in the LIAISE partnership through interactions with national contact points or users influencing the process.

In order to avoid a backward orientation in identifying user needs, the analysis of tenders must be restricted to very recent ones or to information available on upcoming ones. Whenever possible, the overview will include information from more informal interactions with users in other contexts allowing for the extraction of forward looking research needs.

In a less theme-oriented exercise, the already mentioned analysis of bestpractice examples of IA will serve the identification of user needs associated with the IA process.



IA Research Alliance - Concept for an durable science policy interface for improving the usability and use of research based IA tools in policy making (D2.4 Roadmap)

--- living document (April 2011) ---

Introduction/ objectives

D2.4 builds on the activities of the previous tasks and deliverables, e.g. a structured overview of research competences and gaps as identified in the mappings of research projects, research groups and societies (D2.2 and D2.3). This deliverable is set out to install the research agenda with view to the research community, thereby offering research activities for both, the 'narrow and wide knowledge pool'. As a main objective it provides the basis to turn D2.2 and D2.3 into a self-sustaining continuous process.

A general content of D2.4 can be found in the Description of Work, which sets out the following objectives and activities for this task and deliverable: "Methods and procedure will be developed for safeguarding the activities described above beyond the lifetime of the project. A structured overview of research competences within the network and abroad (e.g. through development of a yellow pages) and a series of workshops on sustainability priority areas will be the basis for the development of a continuously updated roadmap for a joint research programme. This activity will include the interaction with funding agencies and research programming bodies at national, European and international levels. The established infrastructures will be integrated into the front office of WP4."

In specific, this task aims to create a "European Impact Assessment Research Alliance". It will create a "one-stop agency" for impact assessment research with mainly three objectives:

- To build an interface between researchers and funding organisations (at the European, national, international level),
- To build an interface between research suppliers and users,
- To establish a joint agenda setting between research suppliers, users and funders.

Thereby, a shared research agenda based on the results of D2.2 and 2.3 on knowledge synthesis and research needs will be central output of this deliverable.

In this task, we will cooperate closely with WP5 and WP0 to establish a profound basis for the scientific durability of LIAISE.

Planned methods and intended results

We plan to divide this task into two sections. First we will develop a shared research agenda based on on four main methods:

• A literature review (key topics: roadmap, research strategy, research agenda),



- Review of existing institutional roadmaps/ research strategies/ research agendas (bet practise, IA focus), e.g. the Dutch "Knowledge for Climate Change" initiative, International Council for Science (ICSU) Research Visioning Excercise, International Social Science Council (ISSC), the European Biodiversity Strategy 2010-2020 and European Platform for Biodiversity Research Strategy 2010-2020 (EPBRS),
- Interview with responsibles from national/ European funding institutions,
- Interaction with programming institutions and monitoring of institutional developments of research agenda setting.

The agenda will summarize seven central topics that research for policy IA should focus on in the years to come. The topics of the agenda will be identified in relation to the knowledge gaps. Examples for specific elements that could be taken account in the agenda are:

Content (which kind knowledge is missing to address grand challenges), e.g.

- climate change mitigation and adaptation
- environment and health issues
- resource efficiency
- land use

Methods and processes

• Tools, scales, uncertainties, nonlinearities, quantitative-qualitative interaction, interdicsiplinarities etc.

Transfer and leverage

• Science policy interface – organising venues, finding a common language

Thereby, the shared research agenda will also take different research spheres into account, such as

- Short and long term research aspects (to be addressed partly during LIAISE as well as beyond the lifetime of the project)
- Different disciplines in relation to the disciplinarey focus of the WPs
- A demand analysis for research in relation to the science policy interface
- Different user levels (funding organisations as well as tool users).

As a second step, we implement the shared research agenda. Here, we will focus on two specific activities:

- To develop a joint position of specific disciplines through expert workshops to contribute in the agenda setting of funding agents
- To address specific sections of the shared research agenda in joint sessions with researchers, users, and funding bodies to trigger research in this field.

We will thereby combine the practical expertise identified through the best practise examples of roadmaps, the experience programming institutions



and the interviews with practitioners with the scientific knowledge identified in the literature review. The specific objectives of this research step will be defined based on the results of the mapping and the research needs.



5. A literature review of assessment venues and tools (D2.5 Venue analysis)

--- living document (April 2011) ---

Introduction/ objectives

IA is supposed to provide a 'venue' (or a 'place') in which tools are applied to policy problems and the resulting assessment evidence/knowledge fed into the policy process. IA is quite a formalised and institutionalised activity, which follows well-defined time schedules. There are many different types of policy level assessment (e.g. RIA, IA, SIA) and many different purposes to which they are put (ranging from Better Regulation to sustainable development). There are also many other venues in the policy process in which various forms of evidence-utilisation takes place. These include task forces, scientific commissions, and reviews (e.g. the Stern review). Assessment tools are, of course, also deployed in less routinised forms in these other venues. These venues can be linked to the 'wider knowledge pool'.

There is a need to understand different purposes of evidence use, including IA tools, and the governance contexts in which they are pursued, as well as the needs of different stakeholders, especially policy makers. There is a particularly pressing need to understand both in relation to wider systems of governance for sustainable development, including sustainable development strategies, thematic strategies, indicators and other administrative coordination systems.

Drawing on the knowledge utilisation, evidence based policy and social learning literature, we seek to put the work on IA in a wider research context, as well as better understand the matching of tools and evidence-use venues. This will address issues such as scaling between different levels as well as the relationship (both current and future) between actors at particular levels (e.g. the European Commission and the European Parliament).

The table shows a typology of different types of evidence use (rows) in different venues (columns). The original description of task 1.3 covered A and, especially, B; the original task 2.5 covered C and D. The combined task will examine A, B, C and D:

Types of evidence Venues	individual policy assessment level	other venues (e.g. strategic agenda-setting level)
policy-specific IA tools	Α	В
wider range of evidence	С	D

Planned methods

In order to successfully address these issues, both WP1 and 2 will join forces on their tasks 1.3 and 2.5. A common workshop will bring together scholars



working in these and other disciplines – from the 'narrow' as well as the 'wide knowledge pool' – to produce a state of the art book on the supply of and demand for tools in different policy making venues. It will also establish a mechanism to encourage proposal writing in this important but underresearched area of policy analysis.

Within the task 2.5, new research on the use of IA beyond the scope of LIAISE will be stimulated by contributing to the development of the IA research agenda. The aim is to understand better what factors affect the matching of particular assessment systems and tools in particular jurisdictions and problem areas. This will address issues such as scaling between different levels as well as the relationship (both current and future) between actors at particular levels (e.g. the European Commission and the European Parliament).

- Initial proposal will set out key research areas for discussion at the workshop and propose tasks for the workshop: Discussing and refining papers towards a book; inc. revising the book structure; mutual learning; synthesis of key points. Creating a strategy for future research proposals; setting out a research agenda. This task has already been completed.
- 2) before month18: Write call for book chapters with an open invite. This will essentially be a literature review on the politics and policy of evidence-based policy-making in different assessment venues, with particular reference to IA and assessment tools. This is based on the old D2.5, and will be presented at WS1. We will receive preliminary papers and select ones most appropriate for book. Then invite about 15 participants.
- 3) workshop 1(around month 22) 15-20 selected people from across disciplines
- 4) workshop 2 (around month 30-36) funded by flexible WP1 budget: authors present selected papers/comments/refine format
- 5) workshop 3 (around month 48) launch book to wider group of researchers and policy-makers (based on old D1.4: A review of the links between evidence and wider systems of governance for sustainable development in a representative sample of jurisdictions and/or policy areas)

Intended Results

D2.5 will contribute to addressing the research needs identified in D2.2 and D2.3 and turn them into research questions, including the relevant spatial and temporal scales and the interdisciplinary expertise required.

To summarise, this task will:

- Document the various purposes to which IA and IA tools are put at different levels of governance (EU, member states, local);
- Review the existing literature on tool and other evidence use in different venues and compare them with those used in IA.
- Identify what different stakeholders perceive as 'best practice' and/or 'satisfactory' examples of matching tools with IA procedures;



- Explore how well IA links to wider systems of governance for sustainable development in a selection of different jurisdictions;
- Develop a research agenda on the use of IA tools and other knowledge beyond the scope of LIAISE, and develop appropriate multi-partner research proposals.



6. Modules for research designers to make research programmes and projects compatible with IA knowledge needs (D2.6 Training Dissemination)

--- living document (April 2011) ---

Introduction/ objectives

D2.6 is the central deliverable in WP2 to disseminate the research results through conference participation, workshops as well as publications and to build capacity via trainings. Thus similar to D2.4 it very much builds on the activities of the previous tasks and deliverables, e.g. the mutual affiliation with societies and further scientific networks. First results are therefore needed to develop a convincing concept to spread the WP2 word to the wide and narrow expert pools.

A general content of D2.6 can be found in the Description of Work, which sets out the following objectives and activities for this task and deliverable: "Based on the experiences drawn from the activities above, criteria for research design will be elaborated to increase the exploitability of expected results in IAs. Identified criteria will be compiled in a roadmap to be implemented directly in the early phases of the project design. Thereby, funding bodies and project coordinators will be supported to increase policy relevance and the application of their research. Developed IA modules will be handed over to WP7 for testing in the training for scientist." Therefore, WP7 will develop a superior guiding concept for the training courses. Within their concept, WP2 will contribute to developing trainings for researchers.

Planned methods and intended results

The detailed content, methodology and procedure of D2.6 will be set out jointly with WP7 as WP2 proceeds. First steps have been taken through the following activities. Thereby, the explicit requirements for researcher trainings will be elaborated jointly with WP7 interests and will take into account the different focus groups within the research community (master students, Ph.D. candidates/ graduate schools, post-docs).

Establishment of LIAISEoffspring as a forum for early career researcher

One aim of the LIAISE project and especially of WP2 is to further stabilize the existing IA research community and to extend it to new scientific circles. Early career researchers (Ph.D. candidates, post-docs) will effectively contribute to reaching this objective. Two aims are thus central in the WP2 work:

- to effectively link early career researchers within LIAISE
- to reach out to the early career research community outside of LIAISE through specific trainings, events, offers etc.

The early Career Scientist Support Forum LIAISEoffspring is an initiative to favour expertise and career development opportunities in an interdisciplinary project. Careful attention is given to the support of PhD



students and Post-docs by improving skills that are essential for both the personal career and the progress in the respective discipline. It will also provide a concept for support mechanisms for master students.

In this way, early career scientists should get support for developing their academic career through the following options (to be continued):

Academic exchange: LIAISE encourages and facilitates exchange internships of early career scientists at LIAISE partner institutes. Individual arrangements should be made unbureaucratically by the senior scientists in their institutions.

- Frequent meetings: During the annual meeting an informal gettogether, a poster presentation and a general section for presentation will be scheduled to get to know each other, to discuss LIAISEoffspring ideas and to present the scientific work to the LIAISE consortium. It will thereby extend the PEER activities which provides exchange opportunities for early career researchers.
- Trainings: Senior LIAISE researchers and WP7 are asked to provide options for offering sessions at joint trainings on methods and work in and around LIAISE. These trainings could be an extension to the LIAISE annual meeting, related to WP7 trainings but also at further early researcher training courses (for example the courses mapped by WP2). Early career scientists are asked to suggest ideas for training topics.
- Mentoring: Senior scientists may take up their role as mentors offering a short-term or mid-term bilateral personal individual exchange to early career researchers.
- Extension: Linking with external early career researchers who are not yet connected with LIAISE is a central element of extending IA to further scientific circles (e.g. through a common Ph.D. conference on IA tools, joint training courses).
- Award: In 2012, 2013 and 2014, LIAISE will award a prize for highlevel dissertation results at its annual meeting.
- Further activities: Additional activities can be organised depending on the interests of the LIAISEoffspring participants (e.g. research exchange, Ph.D. trainings with a specific focus, visits of LIAISE partners, joint paper submissions/ joint sessions at conferences, taking the lead in an forthcoming LIAISE Innovation Report).

Early career scientists but also seniors are asked to articulate their wishes for academic exchange to develop a frist concept. WP2 and WP7 jointly act as facilitator for LIAISEoffspring during the lifetime of the project. Following an annual rotation, a senior researcher from WP1, 3, 4, 5 and 6 will supervise the group.

Establishment of national and international networks of WP2 partners

Following the idea of the letter of commitment, the WP2 partner institutes establish and promote national and international networks. These networks will focus on sustainability impact assessment and will continue with their activities during the lifetime of LIAISE and beyond. For a first list, see Annex II.



Interaction with funding bodies

In addition to the focus on researchers, WP2 may seek additional support through a profound and strategic cooperation with funding agencies. A concept for this interaction will be developed as LIAISE proceeds and will be presented in the forthcoming deliverables.

Dissemination of WP2 results

As part of its dissemination activities, WP2 aims to promote the need for IA research at national and international conferences in order to stabilise the existing narrow IA community and to reach out to the wide community. First steps have been taken through the submission of joint LIAISE sessions and will be continued during the lifetime of LIAISE.

Following the first steps of disseminating WP2 results, publications and single paper conference presentations play an important role when stabilising and reaching out to the different community. First steps have been taken in joint publications and paper presentations and will be continued during the lifetime of LIAISE.

For a list see Annex III.



7. WP2 time schedule and responsibilities

	2009	2010	2011	2012	2013	2014	
	11121	2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	2 1 2 3 4	
	1 2 3			27 28 29 30 31 32 33 34 35 36 37 38	39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54	
D2.	D2. Methodological framework for WP2 activities						
1							
		LTERRA, SYKE, UBO, UEA, WU,					
	1 2 3	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54					
D2.	. Overview of research groups/networks producing knowledge of relevancy for IA tools and processes						
2							
		LTERRA, SYKE, UBO, UEA, WU,					
					39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54	
D2. 3	Synthesis of research needs for IA tools in research programmes inside and beyond the IA research community						
-	ZEW UI	BO, ZALF, WU, ALTERRA					
			151617181920212223242526	27 28 29 30 31 32 33 34 35 36 37 38	39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54	
D2.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 Procedural concept to facilitate a continuous uptake of emerging scientific and social scientific knowledge in IA tool and process improvement, beyond the						
	lifetime of the NoE						
	ZALF, S	YKE, ALTERRA					
	1 2 3	4 5 6 7 8 9 10 11 12 13 14	15 16 17 18 19 20 21 22 23 24 25 26	27 28 29 30 31 32 33 34 35 36 37 38	39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54	
	D2. A literature review on the politics and policy of evidence-based policy-making in different assessment venues, with particular reference to assessment tools						
5							
	<u> </u>	KE, ZEW, ZALF	151617181000010002040506	07/08/00/20/21/20/22/24/25/26/27/28	20/40/41/40/42/44/45/46/47/48/40/50	51505254	
50					394041 42 4344454647484950	515255	
	D2. Modules for research designers to make research programmes and projects compatible with IA knowledge needs (will be tested in WP7) 6 "living document" with "5 golden rules"						
0	ZALF, WU, UEA						
	1 2 3		151617181920212223242526	2728293031 32 33 34 35 36 37 38	394041 42 43 44 45 46 47 48 49 50	51 52 53 54	
DO	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 D0 periodic reporting LIAISE project						
20			15 16 17 18 19 20 21 22 23 24 25 26	27 28 29 30 31 32 33 34 35 36 37 38	39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54	



8. References

--- living document ---

The references serve as starting point for the development process of D2.1. The research is extended and specified in each deliverable.

- Britz, W., Pèrez Dominguez, I. and T. Heckelei (2010), 'A Comparison of CAPRI and SEAMLESS-IF as Integrated Modelling Systems', Brouwer, F.M., van Ittersum, M. (Eds.), *Environmental and Agricultural Modelling: Integrated Approaches for Policy Impact Assessment*, Dordrecht: Springer, 257-274.
- Cappellin, R. (2004), 'International knowledge and innovation networks for European integration, cohesion, and enlargement', UNESCO 2004, 180, 207-226.
- Carden, F. (2004), 'Issues in assessing the policy influence of research', UNESCO 2004, 179, 135-151.
- De Smedt, P. (2010), 'The use of impact assessment tools to support sustainable policy objectives in Europe', *Ecology and Society 15(4)*, 30. URL: <u>http://www.ecologyandsociety.org/vol15/iss4/art30</u>.
- Enders, J.C. (2008), *Wissensnetzwerke in der Klimapolitik*. Frankfurt am Main, Peter Lang.
- European Commission (2011): Seventh Framework Programme. URL: <u>http://cordis.europa.eu/fp7/projects_en.html</u> + theme + project.
- European Commission (2009): Impact Assessment Guidelines. Sec (2009) 92. URL:

http://ec.europa.eu/governance/impact/commission_guidelines/docs/ iag_2009_en.pdf.

- European Commission (2008): *Cordis 6th Framework Programme*. URL: http://cordis.europa.eu/fp6/projects.htm + activity area + project.
- Forbes, I. and D. Abrams (2004), 'International social science research: craft industry or baby behemoth', *UNESCO 2004*, 180, 227-244.
- Helming, K., de la Flor, I. and K. Diehl (2010; 2011/2012 forthcoming),
 'Integrated Approaches for ex-ante Impact Assessment Tools the
 Example of Land Use', IOEW, Ecologic (Eds.): Sustainability Evaluation and Policy Making, Edgar Elgar.
- Hubner, B. (2003), 'The concept of social integration: a policy-research agenda', UNESCO 2003, 177, 432-440.
- Kassam, A. (2003), 'An overview of social science research in the Consultativfe Group on International Agricultural Research', *UNESCO* 2003, 177, 441-462.
- Kazancigil, A. (2003), 'Strengthening the role of the social sciences in society: the World Social Science Initiative', *UNESCO 2003*, 177, 377-380.
- Nilsson, M., Jordan, A., Turnpenny, J., Hertin, J., Nykvist, B. and D. Russel (2008): 'The use and non-use of policy appraisal tools in public policy making: an analysis of three European countries and the European Union', *Policy Sciences 2008*, 41:335–355.
- Pereira, T.S. (2004), 'Science policy-making, democracy and changing knowledge institutions', *UNESCO 2004*, 180, 245-256.
- Scheuch, E.K. (2003), 'History and vision in the development of data services for the social sciences', *UNESCO 2003*, 177, 385-399.



- Thiel, A. (2009), 'The use of ex-ante modelling tools in European Impact Assessment: What role does land use play?', *Journal of Land Use Policy* (26),1138-1148.
- UN (2003), 'Integrated Environmental and Economic Accounting', New York: United Nations, European Commission, International Monetary Fund, OECD and World Bank.
- Van Ittersum, M., Ewert, F., Heckelei, T., Wery, J., Alkan Olsson, J.,
 Andersen, E., Bezlepkina, I., Brouwer, F., Donatelli, M., Flichmann, G.,
 Olsson, L., Emilio Rizzoli, A., Van der Wal, T., Wien, J.E. and J. Wolf
 (2008): Integrated assessment of agricultural systems A componentbased framework for the European Union (SEAMLESS), *Agricultural Systems*, 96 (1-3), 150-165.
- World Commission on Environment and Development (WCED) 1987, Our Common Future, New York: Oxford University Press.



Annex I: Selected results of societies for possibly mutual affiliation with LIAISE

--- living document to be continued in D2.3 to 2.6 ---

Recent activities of mutual affiliation (Dec 2010) International Association for Impact Assessment (IAIA)

- **What:** participation at the annual Conference Geneva/ Switzerland (April 2010) and the IAIA Special Symposium "IA and Climate Change" for
 - personal contacts and meetings with Board members, Executives etc. to establish a mutual affiliation between LIAISE and the IAIA (e.g. with IA sessions at IAIA conferences, a special IA issue in the IAIA journal Impact Assessment and Policy Appraisal)
 - presentation of LIAISE in a research networking session to present it internationally and to link with further interested researchers who focus on policy impact assessment

Objective WP2:

- to establish a mutual affiliation with the IAIA as one of the leading societies related to impact assessment as part of the "LIAISE affiliation concept"
- to promote research on policy IA within a well-established organization with a clear focus on IA through e.g. sessions at the annual conference, training courses prior to the annual conference, a special issue on research on policy IA in the Impact Assessment and Policy Appraisal journal, a joint conference on policy IA

Who: Katharina Helming, Aranka Podhora (ZALF, WP2)

Results: the Board members are reluctant concerning an official affiliation of LIAISE; options for a joint project (LIAISE – IAIA sections/ members) will be discussed at the forthcoming LIAISE MB meetings and IAIA conferences.

The Impact Assessment Society (TIAS)

What: To establish a mutual affiliation (e.g. with common workshops on IA)

Objective WP2:

- to establish a mutual affiliation with the TIAS as one of the leading societies related to impact assessment as part of the "LIAISE affiliation concept"
- to promote research on policy IA within a well-established organization with a clear focus on IA through e.g. sessions at the conferences, training courses prior to the conferences, to create a common workshop on policy IA for the TIAS members to get their comments on LIAISE results and to learn from their IA experience in their discipline

Who: Katharina Helming, Aranka Podhora (ZALF, WP2)



Results: the TIAS Board favours the cooperation with LIAISE; WP2 developed suggestions for interaction and joint activities; final decision for the next steps pending

German Association for Evaluation (DeGEval Deutsche Gesellschaft für Evaluation)

What: To establish a mutual affiliation (e.g. with common workshops on IA)

Objective WP2:

- to establish a mutual affiliation with the DeGEval as one of the German leading societies related to impact assessment and evaluation
- to promote research on policy IA within a well-established organization with a clear focus on IA through e.g. sessions at the conferences, training courses prior to the annual conference, to create a common workshop on policy IA for the DeGEval members to get their comments on LIAISE results and to learn from their IA experience in their discipline
- **Who:** Katharina Helming, Aranka Podhora (ZALF, WP2), Klaus Jacob (WP0, 4)
- **Results:** The leaders of the working group Environment are interested in establishing a contact with LIAISE; WP2 developed suggestions for interaction and joint activities that will be discussed with the working group in the forthcoming months.

These three societies were selected as a starting point because first they may contribute to the consolidation of existing IA research activities and communities due to their clear focus on IA. All societies are regarded as multipliers in the existing IA community. Their members may valuably contribute to a critical discussion of the WP2 and LIAISE results from expert views (e.g. in expert workshops). Further, the international dimension of the societies facilitates an international exchange, especially with view to future cooperation with non-European partners. The membership of LIAISE scientists in these societies facilitated the first steps towards a mutual affiliation.



Annex II: National and international networks established/ joined by WP2 partners

--- living document to be continued in D2.3 to 2.6---

UBO, European Network on Agro-Economic modelling (ENgAGE) (core partner)

- **What:** Consolidation and Extension on Modelling platform for the assessment of agricultural policies at the JRC-IPTS (Seville). Follow-up project on the integrated modelling platform for agricultural policies (IMAP) completed July 2010.
- **Objective:** Organisation of research related workshops and conferences; support to model maintenance; support to model development; evaluation and assessment on the impacts of policies; training on assessment models; scientific advice on IPTS products and on further development of modelling platform.

Who: Thomas Heckelei (UBO, WP2), Wolfgang Britz (UBO, WP3)

Status quo: proposal deadline for framework contract October 2010

Next steps:

Completion of framework proposal

Ongoing update of modelling tools for EU-wide and global impacts of EU agricultural policies

UBO, small-scale study for DEFRA (sub-contractor)

- **What:** Contribution to an impact assessment analysing the removal of CAP pillar I and/or a WTO compromise according to the Falconer proposal on the agricultural sector by applying CAPRI (<u>www.capri-model.org</u>) by delivering key quantitative results (crop shares, herd sizes, farm income, land abandonments, env. indicators at NUTS2 and farm types inside NUTS 2)
- **Objective:** Provide main contractor responsible for drafting the report to DEFRA with quantitative results
- Who: Wolfgang Britz (UBO, WP3)
- Status quo: study is finished
- **Next steps:** it can be expected that similar scenarios will be analyzed for DG-AGRI in the context of the CAPRI-RD project (http://www.ilr1.uni-bonn.de/Agpo/rsrch/caprird/caprird_e.htm)

ZALF, ZEW (leading/ participating partners) as members of the German Leibniz Association

What: Establishment of the Leibniz-Centre for Sustainability Impact Assessment (CeSIA) with institutes of the Leibniz Association with currently 25 interested institutes



- **Objective:** to link scientific expertise and to improve research cooperation within the Leibniz Association as an element to contribute to the LIAISE Consortium Agreement
- Who: Katharina Helming, Aranka Podhora, Stefan Sieber (ZALF), Klaus Rennings (ZEW)
- Status quo: official CeSIA inauguration planned for 2011

Next steps:

- Session "Sustainability Impact Assessment in China, Europe and Latin America" at the annual conference "Research for Sustainability" of the Federal Ministry of Education and Research including the presentation of the LIAISE project
- Identify research activities related to sustainability impact assessment of the Leibniz Association in a mapping

ZALF, Freie Universität Berlin (joint lead)

- **What:** Establishment of the working group "Impact Assessment/ Sustainability Impact Assessment" in the German Society for Environmental Impact Assessment (UVP-Gesellschaft)
- **Objective:** to promote sustainability impact assessment of policies on the national level in Germany and to contribute politically and scientifically to its development through the working group of the association (mainly with an environmental focus)
- Who: Aranka Podhora (ZALF), Johanna Ferretti (FU Berlin)

Status quo:

- Foundation of the working group September 2010 at the annual conference of the society, followed by frequent meetings of the working group
- Coordination of a special issue "Sustainability Impact Assessment/ Impact Assessment" in the quarterly journal of the society (forthcoming winter 2011) with contributions from ZALF and FFU as LIAISE researchers

Next steps:

- Presentation and workshop on sustainability impact assessment at the annual meeting of the Society (Sept 2010)
- Organisation of a symposium on Impact Assessment with contributions from ZALF and FFU as LIAISE researchers

ZALF, Geographic Sciences and Natural Resources Research (IGSNRR) (joint lead)

- **What:** Establishment of the Chinese German Centre for Impact Assessment (CGCIA)
- **Objective:** seven key areas of cooperation (1) Sustainability impact assessment of multifunctional land use, (2) Impact of land use changes on key ecosystem services, (3) Interactions between ecosystem change and human well-being, (4) Collaboration and coordination among existing programs, (5) Information dissemination through joint publications, (6) Development of research projects and identification of potential sponsorship, (6) Capacity building, including technical training and



international information communication on impact assessment, ecosystem research and sustainable management.

Who: Katharina Helming (ZALF, WP2), Lin Zhen (IGSNRR)

Status quo: foundation in March 2010, followed by meetings in Beijing (August 2010) and Müncheberg (January 2011)

Next steps:

Specify research on policy IA in terms of land use

Amplify linkages with the LIAISE project (e.g. joint summer school, expert and training workshops with Chinese experts)



Annex III: Dissemination of WP2 results

--- living document to be continued in D2.3 to 2.6 ---

Sessions

International Association for Impact Assessment (IAIA) – Annual Conference

Puebla/ Mexico (June 2011)

What: Submission of a session on tools for policy impact assessment to attract research from the Americas (regional vicinity to Mexico) in order to foster the LIAISE transatlantic dialogue

Objectives WP2:

To establish contacts especially with scientists from the Americas who work on policy IA

to improve proposed mutual affiliation between LIAISE and the IAIA

Focus – presenters: (mainly Latin American) scientists who focus on policy IA in Brazil and other Latin American countries

Who: Aranka Podhora (ZALF, WP2), Katharina Helming

Status quo: session approved

Results: 5 papers to be presented

Next steps: to specifically promote the session to researchers in North and Latin America to link up with these research communities

7th BMBF Forum for Sustainability – Research for Sustainability

Berlin/ Germany (November 2010)

- **What:** Sustainability Impact Assessment in China, Europe and Latin America
- **Objectives WP2:** to discuss the international dimension of sustainability impact assessment by comparing the EU, China and Brazil
- **Focus discussants:** Nicole Dewandre (EC DG Research), Saulo Rodrigues Filho (Centre for Sustainable Development, University of Brasilia, Brazil), Hubert Wiggering (Director ZALF), Lin Zhen (Institute for Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, China)
- **Results:** moderated interviews/ discussion covering the need for an IA tool box, domestic challenges and specific needs in Brazil and China. the state of the art and opportunities in Europe, international cooperation

Next steps:

To participate frequently with sessions at the BMBF Forum

IAIA Special Symposium: IA and Climate Change – Conference Aalborg/ Denmark (October 2010)



- **What:** joint session "Landscapes and Ecosystem Services" IUCN, ZALF (<u>http://www.iaia.org/iaia-climate-symposium-denmark/biodiversity-landscape-ecosystem-services.aspx</u>)
- **Objectives WP2:** to present policy IA as a relevant topic to for landscapes and ecosystem services in relation to climate change
- **Focus presenters:** researchers who focus on types of IA with a focus on climate change in relation to landscapes and ecosystem services
- **Who:** Andrea Athanas (IUCN), Orlando Venn (Treweek Environmental Consultants), Katharina Helming, Aranka Podhora (ZALF, WP2) (joint lead)
- **Results:** development of the session concept
- **Next steps:** to frequently submit sessions to further IAIA special symposia during the lifetime of LIAISE

Global Land Project – Annual Conference

Phoenix/ Arizona (October 2010)

- **What:** submission of a session on tools for Impact Assessment with respect to agriculture/ land use
- **Objectives WP2:** to present IA as a relevant research topic to researchers from soil and agricultural sciences
- **Focus presenters:** researchers who focus on types of IA with a soil and land use
- Who: Katharina Helming (ZALF, WP2)
- **Results:** session approved
- **Next steps:** to frequently submit sessions to the GLP Conference during the lifetime of LIAISE

Presentations at conferences

International Association for Impact Assessment (IAIA) – Annual Conference

Puebla/ Mexico (June 2011)

What: "Gender and diversity in policy impact assessment" - presentation of the mapping results with view to gender assessment

Objectives WP2:

- To present the WP2 mapping results with by example on selected impact areas
- To contribute to the objectives of the LIAISE Gender Action Plan
- **Focus presenters:** IA researchers and policy makers interested in policy IA in general and in gender and diversity aspects in specific
- **Who:** Aranka Podhora (ZALF, WP2), Katharina Helming, Thomas Heckelei (UBO), Jacques Jansen (Alterra), Petrus Kautto (SYKE), Pytrik Reidsma (WU), Klaus Rennings (ZEW), John Turnpenny (UEA)
- **Status quo:** presentation accepted

Next steps: ---



Earth System Governance Conference – Annual Conference

- Fort Collins/ USA (May 2011)
 - **What:** "The policy relevance of impact assessment tools: Examples from European research projects" presentation of the mapping results

Objectives WP2:

- To present the WP2 mapping results in a LIAISE session (lead Sabine Weiland, FU Berlin, with contributions from Sabine Weiland, Camilla Adelle, UEA, and Sanna-Riikka Saarela, SYKE)
- **Focus presenters:** IA researchers and policy makers interested in policy IA in general
- **Who:** Aranka Podhora (ZALF, WP2), Katharina Helming, Thomas Heckelei (UBO), Jacques Jansen (Alterra), Petrus Kautto (SYKE), Pytrik Reidsma (WU), Klaus Rennings (ZEW), John Turnpenny (UEA)

Status quo: presentation accepted, paper will be submitted in May 2011 **Next steps:** ---

Easy Eco (Evaluation of Sustainability) - Conference

Brussels/ Belgium (November 2010)

What:

submission of a LIAISE session on IA tools including papers from LIAISE early career researchers

participation in a semi-plenary of LIAISE senior scientists

- **Objectives WP2:** to link early career scientists within LIAISE and to attract early career researchers in the field of IA to LIAISE
- **Focus presenters:** early career researchers (Ph.D. candidates, post docs)

Who:

- Early career researchers: Camilla Adelle (UEA, WP1/6), Matthew Cashmore (UEA), Aranka Podhora (ZALF, WP2), Arn Sauer (associated LIAISE Ph.D. candidate)
- Klaus Jacob (FFU, WP0, WP4): session chair, semi-plenary speaker

Andrew Jordan (WP1): key note speaker

Results: all papers approved

Next steps: building on the Easy Eco network to link with early career researchers who focus on IA tools

International Association for Impact Assessment (IAIA) – Annual Conference

- Aalborg/ Denmark (October 2010)
 - **What:** "Process and tools for impact assessment for land use management" presentation of the impact assessment and the use of tools by examples of land use

Objectives WP2:

To illustrate the relevancy of tools in policy IA by example of land use To consolidate the cooperation with the IAIA

Focus – presenters: IA researchers and policy makers interested in IA in general and in trade assessment in specific



Who: Aranka Podhora, Katharina Helming (ZALF, WP2)

Status quo: presentation accepted

Next steps: ---

Berlin Conference on the Human Dimension of Global Environmental Change

Berlin/ Germany (October 2010)

- **What:** submission of papers by LIAISE researchers for a specific IA session related to LIAISE
- **Objectives WP2:** to present IA as a relevant research topic to researchers from political sciences and sustainability research in a joint IA LIAISE session
- **Focus presenters:** LIAISE researchers/ associated researchers Aranka Podhora (ZALF, WP2), Anneke von Ragamby (Ecologic), Arn Sauer (Ph.D. candidate, associated with LIAISE)
- **Results:** all three papers approved; as further IA papers with IA relevance were submitted, LIAISE researchers participate in individual session instead of the LIAISE IA session (though the session was thematically approved)

Next steps:

- to frequently submit sessions to the Berlin/ Amsterdam Conference during the lifetime of LIAISE
- to include/ focus on non-LIAISE researchers as presenters in the next conferences in order to reach out to further research communities and link them with IA
- to set an explicit focus on results related to LIAISE in the presentations

German Association for Environmental Impact Assessment (UVP-Gesellschaft) – Annual Conference

Schwäbisch Hall/ Germany (September 2010)

What: From environmental to sustainability impact assessment (Von der Umwelt- zur Nachhaltigkeitsprüfung)

Objectives WP2:

to present IA as a relevant topic to the German community for environmental impact assessment

to set the basis for the instalment of the working group on sustainability impact assessment

Focus – presenters: German community for environmental impact assessment

Who: Aranka Podhora (ZALF, WP2), Johanna Ferretti (FU Berlin, WP4) **Results:** presentation with proceeding (2011 forthcoming)

Next steps: to frequently submit sessions and presentations to the conference of the socieity

International Association for Impact Assessment (IAIA) – Annual Conference

Geneva/ Switzerland (April 2010)



What: "Different Approaches to Environmental Assessment in the Context of Trade Liberalisation" - presentation of the early career research results

Objectives WP2:

To link different types of impact assessment by example of trade liberalization

To consolidate the cooperation with the IAIA

Focus – presenters: IA researchers and policy makers interested in IA in general and in trade assessment in specific

Who: Aranka Podhora (ZALF, WP2)

Status quo: presentation accepted

Next steps: ---

Publications

Publications (peer review)



Annex IV: Contributors to the report

This report is the result of discussions between all partners in the LIAISE consortium. It has been edited by Katharina Helming and Aranka Podhora (both ZALF). The different chapters were written by the following persons:

Chapter 1: Aranka Podhora, Katharina Helming / ZALF Chapter 2: Aranka Podhora, Katharina Helming / ZALF Chapter 3: Klaus Rennings / ZEW, Thomas Heckelei / UBO, Markus Kempen / UBO, Aranka Podhora, Katharina Helming / ZALF Chapter 4: Aranka Podhora, Katharina Helming / ZALF, John Turnpenny/ UEA Chapter 5: John Turnpenny / UEA, Aranka Podhora, Katharina Helming / ZALF Chapter 6: Aranka Podhora, Katharina Helming / ZALF Chapter 7: Aranka Podhora, Katharina Helming / ZALF Chapter 8: Aranka Podhora, Katharina Helming / ZALF, Thomas Heckelei / UBO, Annexes: Aranka Podhora, Katharina Helming / ZALF