

Research guideline for the in-depth

case studies

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LIAISON research guideline for in-depth case study research

Introduction

In the following documents, you will find the "research guideline" and the "reporting template" for the in-depth case studies of the H2020 LIAISON project. In the "research guideline", we describe the process that we expect the case study deputies to follow for the implementation of the in-depth case studies in order to deliver their final "reporting template". Figure 1 below illustrates the "In-depth Case Study Research Pathway". This pathway consists of five distinct phases through which each of the case study deputies will move during the implementation of the LIAISON in-depth case study research between January and June 2020. This document consists of the "research guideline" which explains and elaborates this process. The second document you have received is the "reporting template" which is the final result of each in-depth case study.

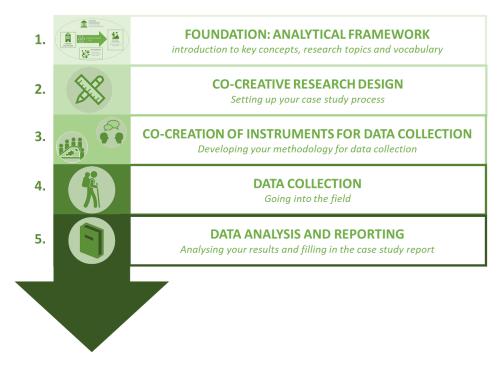


Figure 1. The In-depth Case Study Research Pathway

In the following sections, we will explain each of these five phases of the in-depth case studies. Each phase, consists of a few key documents you will need in order to bring it to a good end. The description of each phase will start with a table giving an overview of the documents you need to be able to complete that phase successfully.

The most important document for you as the case study deputy is the **"reporting template"**. This is the final result of the in-depth case studies and will be used as a basis for the cross-case comparison to be made by the WP 4 team and the Case Study Portraits. We would like to emphasize the importance of a high quality report of your case study, both in terms of the quality of information provided as in the level of English used in these reports.



Phase 1. Foundation: Analytical framework for the in-depth case studies

The basis or the foundation of the case study work is the analytical framework. This analytical framework structures the research and helps us to collect and analyze empirical data. Using this framework should streamline the data collection and should allow us to compare cases in order to draw conclusions.

On the one hand the analytical framework is a continuation of the earlier work done in LIAISON. It incorporates the theoretical framework (D1.3), the findings of the Light Touch Reviews (D3.2) and the output of several workshops in different LIAISON meetings. On the other hand it is grounded in the literature on agricultural innovation systems (AIS).

Theory on agricultural innovation has witnessed a major evolution from the linear transfer of innovation model towards the widely accepted idea of knowledge sharing in Agricultural Innovation Systems (AIS) (Klerkx et al. 2012). As described in Lamprinopoulou et al. (2014), innovation is understood as the outcome of an interactive and co-evolutionary process engaging multiple types of actors while being influenced by and interacting with the institutional environment. In many parts of the world, strategies to encourage knowledge sharing between actors in order to foster innovation have been developed and implemented.

In Europe, the European Innovation Partnership on Agricultural Productivity and Sustainability (EIP-AGRI) was set up by the European Union (EU) as a tool to speed up innovation in agriculture, forestry and rural development and to create synergies between different policy programmes both at the EU and Member State level (DG AGRI, 2018). Central to the EIP-AGRI approach is the 'interactive innovation model'. Interactive innovation is defined as: "the collaboration between various actors to make best use of complementary types of knowledge (scientific, practical, organisational etc.) in view of co-creation and diffusion of solutions/opportunities ready to implement in practice." (EIP AGRI Service Point, 2017, p. 3).

As described in our project proposal, the overarching objective of our case-study research is to "deepen the analysis and gain a <u>profound understanding</u> of the functioning of interactive innovation processes. We want to better understand <u>why certain interactive innovation approaches are more successful than others</u> in targeting, interlinking and 'speeding up innovation'." (DoA). We can distinguish four objectives within this overarching goal, namely to gain:

- a profound understanding of the functioning of interactive innovation processes;
- a better understanding why certain interactive innovation (project) approaches are more successful than others in targeting, interlinking and 'speeding up' innovation;
- deeper insight into the administrative and institutional factors at EU, national and sub-national level influencing the functioning and effectiveness of the interactive innovation project approaches;
- unravelling systemic problems and challenges and searching for systemic solutions to existing disconnections and inefficiencies.

In order to study this, LIAISON has the ambition to build on a strong empirical base. This empirical base is made up of two major components. First of all, a light-touch analysis of 200 interactive innovation

¹ https://ec.europa.eu/eip/agriculture/en/eip-agri-concept





cases (See D3.2). Secondly, an in-depth analysis of 32 interactive innovation cases. The reasoning behind the selection of these 32 cases can be found in MS13 & 14.

A major challenge in the analysis of these 32 cases is to deliver on the one hand information-rich, meaningful and context-dependent knowledge, but on the other hand we must ensure sufficient comparability to be able to draw conclusions that exceed the particularities of the individual cases.

In order to achieve maximal comparability, we developed an analytical framework and an accompanying research guideline. The analytical framework consists of two major building blocks:

- The concept of 'five key interactions' that seem to characterise interactive innovation processes; and
- Under each key interaction we have made a division between a structural, functional and good practices/failure analysis to structure the different types of information to be collected.

In the following paragraphs, we will briefly explain both building blocks. For further reading we refer to the relevant Nextcloud folder (WP 4 > Case study deputies platform > Background information).

Object of study

The RUR-16-2017 call text has set the scope of the LIAISON project's research clearly: our activities should 'investigate how co-creation and co-ownership of project results can be improved and quantified/qualified in order to speed up their use in practice'. As D3.2 stated clearly, the focus of our research is thus on the process of the co-creation of innovation in multi-actor settings. Furthermore, literature has indicated (see e.g. Klerkx et al. (2012) or Hartwich (2013) in D3.2) that several additional factors in addition to the internal dynamics of the multi-actor partnerships play a role. These additional factors have been covered by introducing the analytical structure of five key interactions which could have an influence on the co-creative innovation process.

Five key interactions

Interactive innovation cases do not operate in a vacuum. They are embedded in a certain funding or market environment and a local (policy) context while also interacting with other relevant actors, interactive innovation cases and networks. Because of this complexity, it is difficult to obtain a common understanding of the concept. Different people are often referring to different aspects of interactive innovation. To create a common understanding and to obtain a holistic view over the concept, we propose to distinguish five separate characteristics of interactive innovation. We have structured these characteristics according to five types of interactions (Fig. 1.).



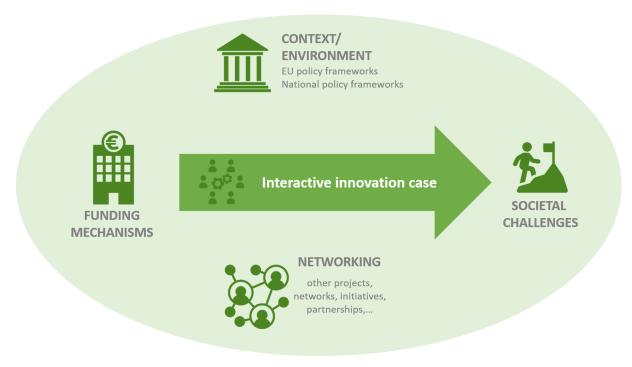


Figure 2. Representation of the five interactions of interactive innovation

- 1. Interaction with a funding mechanism: when interactive innovation projects want to gain funding/financing, they need to develop strategies. When they are looking for private financing they need to set up a strategy, investigate the market opportunities and assess risks. When they are aiming for public financing they have to go through a selection process that is implemented by a public body and decided upon by the policy-or programme-makers. Therefore, our first analytical focus is on the interaction between the interactive innovation project and the funding mechanism (both private and public).
- 2. **Interaction within the interactive innovation case:** here we focus on the relationships and cooperation within the partnership of the interactive innovation case itself. This interaction focuses on the analysis of the internal dynamics and mechanisms of the interactive innovation processes.
- 3. Interaction with other actors/stakeholders not formally² involved in the interactive innovation project: these are the links the interactive innovation cases make with all actors not formally part of the consortium or partnership of the project. Examples are interactions with governmental or non-governmental organisations, other projects, networks, clusters or other types of stakeholders.
- 4. Interaction with the context/environment: European Union member states, although all working largely with the same 'policy menu' in terms of the CAP and the research and innovation policy, are highly diversified in terms of territory, population, society, economy, structure of agriculture, institutional structure, administrative capacity, political history, etc. The impact this highly diverse context or environment has on the interactive innovation case could be quite

² Formally involved partners means that they are either beneficiaries of the innovation project or privately contracted partners such as supplying business, members of the cooperative, association etc.



- significant. Therefore, a fourth type of interaction we study is that between the interactive innovation cases and their formal regulatory or policy environment as well as their more informal social environment consisting of norms, values and culture.
- 5. **Interaction with the societal challenges**: in this interaction we make a critical reflection on how these interactive innovation cases perceive their contribution to societal or socio-technical change and whether or not this feeds back into policy frameworks. This interaction will only be briefly touched upon within the in-depth case studies as this is studied more in-depth under WP 5.

In table 1 the research topics for exploration in the in-depth case studies are presented for each interaction. Based on the hypotheses we discussed during the Evora-meeting, we reformulated research topics and questions and included them in the "reporting template". These questions are however to abstract to pose during interviews of focus groups. In the "research guideline" and additional documents, we will together operationalise and tailor these research questions into concrete interview questions you can use during your fieldwork.

As figure 1 shows, the five interactions are very much interrelated and interwoven. We distinguished these 5 interactions for analytical purposes; to ensure we are talking about the same aspects of interactive innovation and to structure data gathering. Interactions can overlap or influence each other as this is the case in the real-life situation. This might also imply that questions in the "reporting template" may partly overlap. This does not have to pose a problem. If you are not sure which answer fits under which interactions you can just indicate this in your "reporting template".

Table 1. Research topics for each interaction

Interactions	Research Topics to explore
1. Interaction with the funding mechanism	 To explore the different strategies of a multi-actor partnership in the search for the search for funding (private or public) and how they take into account economic considerations, the market and risk. To identify the (public or private) funding mechanisms and to explore the role they play in the interactive innovation cases. To examine to which extent and how the capacity of a (public or private) funding mechanism affects the functioning of the interactive innovation case. To understand the links between different funding mechanisms and higher level strategies and programmes.
2.Interaction within the interactive innovation project or partnership	 To identify the actors within the case and to understand their relationships with each other; To understand what motivates and convinces actors to participate in a multi-actor partnership; To understand how actors formed and maintained their partnership and formed boundaries around it (i.e. who is in and who is out); To understand how differences in capacities, knowledge, power and agency influences the dynamics of interaction in the case; To identify good practices in interactive innovation partnerships.
3.Interaction with other actors/stakeholders not formally involved in the interactive innovation project	 To identify the type, timing and objective of the involvement of external stakeholders in interactive innovation cases and how this affects the case; To learn how networks and networking between interactive innovation cases influences their interactive innovation process. To learn about the motivations of external stakeholders in engaging in interactive innovation cases.



Interactions	Research Topics to explore
4.Interaction with the context/environment	 To identify which influence the broader environment ("the bigger picture") has on interactive innovation cases and vice versa; To learn where interactive innovation cases perceive themselves to fit in the broader environment or context; To understand which challenges interactive innovation cases are faced with in terms of rules and regulations, norms and social values and how they deal with them.
5.Interaction with the societal challenges	 To identify which type of societal/technological/economical/social/ecological challenges the case study actors aim to tackle or contribute to and how they think they are doing this; To understand how the actors of an interactive innovation case perceive their contribution to future of agriculture, forestry or rural development and how they aim to disseminate their knowledge.

Structural, functional and good practices/failure analysis

These five types of interactions are still wide-ranging and the research topics and questions are still quite abstract. To translate these broad topics into usable interview questions we added an additional layer or building block to our analytical framework. We introduce the idea of a structural, functional and good practices/failures analysis. We elaborated this additional layer based on two existing frameworks within innovations systems literature (Lamprinopoulou et al., 2014 and Van Lancker et al., 2016). For further reading on the rationale behind these frameworks and how we integrated them in our approach we refer to the relevant Nextcloud folder (WP 4 > Case study deputies platform > Background information). The general idea is that we include three similar lines of questioning for each of the five interactions.

- We start with a **structural analysis** in which the different components of the interactive innovation case are mapped. Who are the actors, how are they interconnected and which are the main formal and informal institutions. Institutions are here interpreted as 'rules of the game' or 'code of conduct' (Woolthuis, 2005).
- A second step is to engage in a **functional analysis** in which we try to unravel the functioning of the different aspects of the case. By asking questions around several crucial functions we try to comprehend how the interactive innovation case works. Examples are: how is funding obtained, how is the learning and knowledge transfer organised, how are strategies developed and targets set, how are markets accessed, how did they organise their networking, how is entrepreneurship nurtured and how are end-users involved?
- In a last step we reflect on success and failure factors in a **good practices/failure analysis.**Screening the presence of potential hindering factors can help us understand why a certain interactive innovation project is working or not. Based on different types of structural failures that have been described in literature, questions were developed. Examples are: Were necessary financial or human resources available, were formal arrangements suitable, is their room for new entrants, etc.

For each of the five interactions we have developed a separate set of questions to shape the structural, functional and good practices/failure analysis. After analysing all five interactions a fourth step can be taken. In this step, we question the overall **potential for transformational change**. This step does not include interview questions which can be posed during the field work. It is rather a reflective step that can be taken at the end of the case-study work. It is inspired by the framework of Lamprinopoulou et



al. (2014) and mostly relates to questions at the macro-level. It enables the drawing of conclusions on the potential of a policy framework to contribute to reaching and directing transformational change in Innovation Systems. Including this part of the analysis in the framework is relevant as the aim of the EIP-AGRI is to support a more sustainable and competitive agriculture and forestry sector. Table 2 visualises the combination of the five interactions and the different data gathering steps.

Table 2. Overview of the structure of the analytical steps within each of the five interactions

Interaction 1 with funding mechanism	Interaction 2 within partnership	Interaction 3 with others	Interaction 4 with context	with societal challenges
Step 1 Structural analysis	Step 1 Structural analysis	Step 1 Structural analysis	Step 1 Structural analysis	Reflexive questions feeding into step 4.
Step 2 Functional analysis	Step 2 Functional analysis	Step 2 Functional analysis	Step 2 Functional analysis	
Step 3 System	Step 3 System	Step 3 System	Step 3 System	
failure/merit	failure/merit	failure/merit	failure/merit	
analysis	analysis	analysis	analysis	
Step 4 Potential for transformational change				



Phase 2. Co-creative research design

Phase no.	Key information source(s)	Where can I find this?
2.	Selecting the right questions	Excel file "Your case study process", Nextcloud folder
	 Selecting your respondents 	
	• Timelines	

In the previous sections, the analytical framework has been elaborated. This framework paints the bigger picture of the fieldwork, it's the pair of glasses we are using to look at interactive innovation in our in-depth case studies. While implementing the case studies, this information is good to have in the back of your mind as it forms our common understanding of key concepts and processes. It was the basis on which the "reporting template" was developed. In this section, we will explain the second phase of the Case Study Research Pathway.

The objectives of this phase are for you to:

- 1. Gain a thorough understanding of which questions you will need to answer in the "reporting template" at the end of your in-depth case study;
- 2. Reflect on the relevance and applicability of the different questions in your case study;
- 3. Reflect on which actors/persons you need to interview to formulate an answer to these questions;
- 4. Set up a draft list of possible respondents for your case study.

In order to reach these objectives, we would like you to go through the following process:

- 1. You thoroughly read the **entire "reporting template"** as these are the questions you will have to answer based on your field work (interviews and focus groups).
- 2. You open the Excel file called "Your case study process". Under the first worksheet ("Listing the relevant questions"), you will find the complete list of questions of the reporting template. Now you evaluate and indicate for each individual question whether is relevant/applicable for your case or not. In case it is not, we ask you to draft a short argumentation.
- 3. When you have completed the above task, you move to the **next two columns in the same Excel file** and the same worksheet. In these two columns, we would like to identify per question which type of respondent/who you would need to speak to in order to answer the question. In the first column, we give our advice. Nevertheless, we do not know the specificities of your case study and it is up to you to make this choice for your own case study in its own particular context.
- 4. In the Excel file "Your case study process", under the worksheet "List of respondents", you can start to fill in the names of the different respondents you would need/like to consult based upon the exercise of the point 3.
- 5. It is possible that during this process, you might reconsider the questions that are relevant or applicable in your case study. This iterative process is essential and of course you can still change your mind on the list of relevant questions and make changes.

Once this phase is finalised, you can move to phase 3.



Phase 3. Co-creation of instruments for data collection

Phase no.	Key information source(s)	Where can I find this?
3.	 Explanation of the instruments 	 Nextcloud folder "Data collection instruments"
	 Selecting your methodology for data collection 	Excel file "Your case study process", Nextcloud folder
	 Developing guides, questionnaires and protocols 	Nextcloud folder "Examples"

Now that you know which questions you want to answer and who might hold an answer to these questions, we will think about how we will gain an answer to these questions. This is a crucial step in ensuring that we will collect all data that we need to fill in the "reporting template". We advise that you work together with the larger LIAISON team in your organisation to prepare this. If you are able to practice beforehand with colleagues, this would help you to a great extent.

The <u>objectives</u> of this step are for you to:

- 1. Critically think about and decide upon which data collection methods (in-depth interview, desk research, focus group, workshop) are most suitable and feasible to collect the data;
- 2. Decide which methodology (e.g. the use of a timeline) you will use during data collection;
- 3. Draft interview guides, workshop or focus group protocols, questionnaires, etc. which translate the different questions from the **"reporting template"** into questions you will ask the different respondents.

In order to reach these objectives, we would like you to go through the following process:

1. Open the Excel file "Your case study process" and the worksheet "Listing the relevant questions". In the last two columns of the table, there is the WP 4 advice on the data collection method. We would like you to now think about what is suitable and feasible for your case study in terms of method and go through the questions once more to fill in this last column. This process should help you to get a clear picture of which persons/respondents you are still missing in your respondent list

2. For the interview guidelines:

- a. Per individual respondent, you can adapt the questions to the specific respondent type. For example, an interview with the coordinator will be much more elaborate than an interview with a stakeholder or someone from the funding body. For more advice on how to draft interview guidelines and how you can work with topic lists or rather a more semi-structured format, we refer you to the **Nextcloud folder "Data collection instruments"**.
- b. For each of the questions from the "reporting template", we have drafted more operationalised or concrete versions which you can use as inspiration. You can find these in the Excel file "Your case study process" under the worksheet "Subsequent questions"
- 3. For the focus group protocols: Per focus group, depending on the amount of respondents and the type of respondents, you can adapt your focus group protocol and the topic list or list of questions. Please be informed that when implementing a focus group, we advise you to be with at least two persons to facilitate and take notes. For more information and advice on how to best prepare this, we refer you to the Nextcloud folder "Data collection instruments". Also in the preparation of the focus groups, you can use the "Subsequent questions" from the Excel file.





4. <u>For desk research:</u> Please keep a good reference list on all sources used, make sure you refer to these when you fill in the "reporting template" and attach a full reference list to the "reporting template".

5.

When you have prepared all these instruments for data collection together with your team, or while you are in the process of preparation, we can exchange on your process and any difficulties you are/have been faced with. We will also organise the opportunity to gather inputs on your preparatory material from other case study deputies in order to support or collective learning process.

Once you have successfully finalised this phase, you can move to phase 4 and start interviewing.



Phase 4. Data collection

Phase Key information source(s)		Where can I find this?		
4.	Informed consent forms;Anonymization key	Nextcloud folder "Informed consent forms"		
	 Presentations on interviews, focus groups Methodology 	Nextcloud folder "Data collection instruments & methods"		

You are now fully ready and prepared to start your data collection process! Now you need to get your practicalities in order. There are a few things that you need to prepare before starting interviews and/or focus groups/workshops. These are explained in the paragraphs below.

Informed consent forms

In order to be in line with the GDPR requirements, we need to gain "informed consent" from each respondent or workshop/focus group participant. This implies that the respondents:

- a) are informed on the subject and objective of the research implemented under the LIAISON project;
- b) give their explicit consent by signing and dating the "informed consent form".

In terms of process, you as case study deputy will have to:

- 1. Translate the informed consent form from LIAISON D9.1 into the language(s) relevant for your case study;
- 2. Ensure that before you start an interview, focus group or workshop, the respondents read and sign the informed consent forms in twofold and deliver one of the forms back to you. The other one are for their own administration;
- 3. Store the informed consent forms in a safe place under the respondent codes (see the next paragraphs of this section). We ask you to make digital copies and store them in a folder or server which is password protected and has limited accessibility (only relevant persons), the paper forms you destroy (e.g. paper shredder).

For more information, please see the presentation from the Case Study Deputy training under the Nextcloud folder "informed consent forms" or contact the Data & Ethics Committee with the WP 4 team in CC.

Conducting your interviews, focus groups and workshops

Once you have your informed consent forms in order, you can start your interviews, focus groups and workshops. We advise you to always go well-prepared and make a good checklist for yourself before you leave. Please record all your interviews, focus groups and workshops so that you can ensure that you have captured all relevant information. Make sure that your recording device works properly by checking it beforehand. In the case of focus groups and workshops, it is best that you organise it with at least one additional person to help you out with both notes, collecting pictures and practical/logistical issues.

For more information, we have collected the presentations from the case study deputy training and some extra information sources under the Nextcloud folder "Data collection instruments & methods". If you have additional questions or concerns, you can contact the WP 4 team.





Storing the audio-visual files and coding your respondents

After your interviews, focus groups or workshops, you will have to store your audiofiles. This needs to be done in an anonymised way and all information needs to be stored in a secured folder (please also read the <u>LIAISON Data Management Plan</u> for more information). <u>Please do not store any privacy sensitive</u> data on the Nextcloud folders!

The following process is an example of how you can manage your data:

- 1. List your respondents in the "anonymization key" excel file, you store this file locally in a secure folder (i.e. password protected and with overview of who has access to this folder);
- 2. For each respondent you create a "code" based upon the following format and you include it in the "anonymization key":
 - "LTR CODE_data collection method_No. of respondent or workshop". For example for the ILVO team case, this would mean "BE_08_interview_01" for an in-depth interview, or "BE 08 workshop 01".
- 3. All information collected from each respondent or workshop is stored with this code. For example: In the ILVO case, we have an audiofile, written interview summary and a picture from a timeline we drew together with our first respondent in an in-depth interview, all these files are stored under the "BE_08_interview_01" name. We do the same for the other respondents.

Transcriptions or interview/focus group/workshop summaries

In order for you to start preparing and analysing the data with the objective to fill in the "reporting template", we ask you to make extended summaries of interviews, focus groups and workshops. You can include pictures, videos or time lapses, etc. You are not required to make word-for-word transcriptions. It is up to you to decide in which language you make the extended summaries to start your analysis on. Only the final version of the "reporting template" is required to be fully in English (see phase 5 for further explanation).

These summaries you will also save under the coded names as explained in the previous paragraph.

Once you have successfully finalised this phase, you can move to phase 5 and start reporting



Phase 5. Data analysis and reporting

Phase no.	Key information source(s)	Where can I find this?
5.	Explanation of the process for analysis and reportingExplanation of coding	 Reporting template, Annex 1 to this document, in your Nextcloud folder Nextcloud folder "Data analysis" + webinar in March/April 2020

In this last step, you will fill in the "reporting template" (see the other document and the digital version in your dedicated Nextcloud folder) based upon the data you have been collecting. You will have to move from your individual interviews, focus groups and workshops into a higher level of analysis in order to answer all the questions of the "reporting template".

For more information on how to move from the interview/focus group/workshop summaries to the questions in the reporting template, please find the information from the case study deputy training in the Nextcloud folder "Data analysis".

The WP 4 team will give a **more applied exercise session** on how to move towards the filling in of the reporting template via a **Webinar in March/April 2020**. You will be contacted with more information on this in the course of February/March 2020.

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