

**COOPERATION ON MULTI-MODE DATA COLLECTION (MMDC)**  
**MIXED MODE DESIGNS FOR SOCIAL SURVEYS - MIMOD**

GRANT AGREEMENT FOR AN ACTION WITH MULTIPLE BENEFICIARIES

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**WP3 - Deliverable 3:**

**Standardized survey on CMS**

**In-depth telephone interviews on data collection systems in practice**

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## WP3: *Case management in MMDC and related data logistics*

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## Introduction

In this intermediate report (deliverable 3/5 of workpackage 3), some first results of the in-depth telephone interviews on current data collection systems in practice are presented. The report focuses on the relationship of the NSI's organizational form and the architecture of the data collection system. Specific issues related to each of the data collection system's technical components will be presented in deliverable 4.

This report pictures the different possible forms of organizing the data collection within one NSI. It will show how the organization effects the design of the data collection system and vice versa. That IT strategies regarding the usage of external tools also effect the system's architecture is obvious. So, the report will give insights on the discussion about in-house versus external tools. All in all, a strong case for considering organizational change management before implementing a new system will be made.

As these following results stem from qualitative data of 8 NSIs, no claim of completeness can be made. Nevertheless, they help to give a general idea how the ideal data collection system could be designed in order to accommodate for the heterogeneity of organizational forms within the ESS.

## Methods

Based on the MIMOD survey data 14 NSIs were selected as gross sample for the in-depth telephone interviews on data collection systems. The NSIs were selected to represent each data collection system type<sup>1</sup> at least once. NSIs that are currently in the practical phase of implementing a new data collection system and NSIs that have recently finished their new system were oversampled. This was done because it was hoped, that the most insights could be gained from experienced NSIs, that just recently underwent the process of change towards one single integrated system.

Out of the contacted 16 NSIs, a completed telephone interview was accomplished for 8 NSIs. 2 NSIs answered our questions via email and sent documents. These 2 NSIs will be tried to re-contact within deliverable 4 again. Those 6 NSIs that did not answer will be treated as non-response. The main difficulty for establishing successful contacts was to find the right contact person for this subject in the given time of the field phase.

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<sup>1</sup> See WP3 - Deliverable 1: Desktop review exercise and draft typology. Pg. 12ff.

**Table 1: Net sample of interviewed NSIs**

<b>NSI</b>	<b>Data Collection System Type<sup>2</sup></b>				<b>Newly Developed System?</b>
Austria	I1	C1	S1	T2	Yes, currently developing
Czech Republic	I3	C1	S1	T3	Yes, currently developing
Finnland	I2	C1	S2	T1	Yes, currently developing
Hungary	I3	C2	S3	T3	In planning, currently concept phase
Latvia	I1	C1	S1	T1	No, old system well established
Luxembourg	Unknown (based on survey)				Yes, finished
Poland	I1	C1	S1	T1	Yes, currently developing
Portugal	I1	C1	S1	T1	No, old system well established

On average the telephone interviews lasted about 1 hour and 15 minutes. They were conducted with the help of a semi-open interview protocol<sup>3</sup>. The conversation was recorded. Based on the recordings, a summary per NSI about the main issues with the data collection system was made.

For analysis the summaries were loaded into the qualitative analysis software tool ATLAS.ti. With the help of the program, each relevant text segment was coded into themes. Altogether 24 themes were built this way, which were later collapsed into 18 themes. In a next step, the between case analysis, all segments within one theme were analyzed. That way analytical categories were generated, which are the data basis for this report. Each category represents a relevant issue about a certain aspect of the data collection system. For example: within the theme “Organisational aspects that a data collection system should accommodate for” it was noticed that the issue about business surveys was of relevance for different NSIs. For that reason an analytical category “Relationship of business surveys on the architecture of DCS” was generated. Within that category it was noticed that the NSIs differ in the amount of adaption effort they would need when trying to run business surveys with their new systems. For that reason, a chapter about business surveys was then integrated within this report.

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<sup>2</sup> See WP3 - Deliverable 1: Desktop review exercise and draft typology. Pg. 12ff.

<sup>3</sup> See Attachment 1 - Interview Protocol, pg. 16

## **The organization of data collection and its relation to the data collection system**

The architecture of current data collection systems is deeply rooted in the way data collection is organized within one specific NSI. The interviews showed, that most of the heterogeneity found in the data collection systems can be explained by some key aspects of the organization. Firstly, the systems differ due to the fact which modes the NSI has offered in the past and which mode is their dominant mode. Secondly, the systems may differ depending on the degree of separation within the NSI between the social surveys and business surveys. Thirdly, the survey organization as omnibus surveys seem to effect the design of the system. But most importantly the practical organization of field work, such as the degree of centralization, the roles of interviewers and the way respondent contact is handled explains differences in the architecture of the data collection systems.

### **Modes the NSI chooses to offer**

The evolvement of the data collection system(s) within one NSI starts in many cases with the very first modern surveys that had to be conducted. And very much depending on the modes that these surveys offered at that time, the data collection system was set up. Also, it seems that in many NSIs there has always been one dominant mode, a certain tradition for one mode. It was around that dominant mode the data collection system was then built.

For example, at certain NSIs there was PAPI as the dominant mode. So their data collection systems were developed to contain all the components needed to efficiently run PAPI surveys. And as new modes were introduced the growing of the data collection started to go different tracks. Some NSIs started to implement a whole new system for each new mode. Others tried to combine at least some tools between the modes. Regardless of the chosen track, with even more modes to offer, most systems resulted in a wild mixture of different tools and manual steps to transfer information in between them.

In all the interviewed NSIs a limit of “wilderness” was reached when it became clear that there is the need for even one more mode, namely CAWI. And that the future of data collection will not be in single mode surveys but in mixed-mode surveys. With these requirements it was foreseen, that the old system(s) simply will not be able to handle data collection in an efficient way anymore. At that point the decision for a redesign of the system was made. How far the redesign was taken – replacement by a totally new system on the one extreme or simply changing certain tools a little - then differs from NSI to NSI heavily, depending mostly on the kind of previous modes, their dominant mode and the modes they envisioned for the future.

It's worthwhile noting, that the differences in the current data collection systems are to a large extent because of the mode traditions in the NSIs. So if there would be a new data collection system that is designed for all possible modes CAPI/CATI/CAWI/PAPI and it would allow any combination of these modes within one survey the mode needs of any NSI would be fulfilled.

But it is important to keep in mind how different the usages of modes and the mixed-mode combinations still are between the NSIs (see WP1 – Deliverable 1). The mode flexibility is therefore deeply needed for some NSIs but it is not needed for other NSIs. For countries that do not have the tradition of using multiple modes, such flexibility would maybe be an unnecessary high investment. But at the same time, these countries will of course be always reluctant in offering new modes, because this would mean big changes to their current data collection system. One way out of this dilemma could be the provision of the above mentioned highly flexible data collection system, that is designed in a way to also run simple mode surveys in a very uncomplicated way.

The in-depth telephone interviews of this workpackage also brought to light two additional issues regarding the modes:

Firstly, in many NSIs seems to be a dominant mode<sup>4</sup>. From an organizational point of view, this dominant mode is the one to be pushed to the respondents. The NSIs tries to have high response numbers in the dominant mode and offers the other modes as supplements. Accordingly, even in mixed-mode designs of countries having a dominant mode, the dominant mode is given more attention also within the data collection system. Within the system, the degree of automatization and the completeness of components is higher for the dominant mode as for other modes. Therefore, the ideal data collection system must allow any mode to act as the dominant mode. As the kind of mode to be the dominant one differs between NSIs, technical measures for efficiency must be taken for every mode.

Secondly, the mode PAPI seems to be treated as a kind of special mode by the NSIs. Often it is left out when developing a new data collection system. Either by providing a second parallel data collection system for the mode PAPI. Or by not offering PAPI in the new mixed-mode designs (anymore). Both strategies can be seen as risky: Having two parallel systems is not cost efficient. Also, the technical developments will rather concentrate on one system, which will leave the other system sort of outdated. In the long run this will reduce the offer for PAPI. It is to be further investigated if a reduction of PAPI is methodologically reasonable. In a mixed-mode survey design the use of PAPI as a supplement mode to CAWI could be a very promising mode combination in terms of lower response errors. One of the interviewed countries has already made evidence in this regard. And there are the countries that still build on PAPI as their dominant mode of data collection for some of their surveys (see WP1 – Deliverable 1). The ideal data collection system therefore must also integrate the necessary components for PAPI. How

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<sup>4</sup> It is to be further investigated if the reason for one mode being the dominant one is more methodologically or organizationally driven.

many of the newly developed data collection systems are capable of this is unclear. But the number is assumed to be very low, maybe even zero.

### **Business Surveys the NSI chooses to offer**

The world of social statistics surveys and business surveys has been organizationally separated in the vast majority of NSIs. Accordingly, there are mostly two separated data collection systems for these survey types. But from the technical point of view it could be possible to both run business and household surveys within the same system. There are already countries within the ESS that have developed such systems. But there does not seem to be a lot of them.

Right now it seems that in many NSIs, the drive for a new data collection system stems from either the business survey sector or the social survey sector rather independently from one another. And being very busy to evaluate their own needs, the systematic evaluation of the needs of the other sector and the possibilities of providing one single system for both needs, is often laid aside for future tasks. In the interviews a widespread comment on this was: "In theory our system could handle also business surveys. Their implementation and the needed adaptations to the system is planned for the future. But it is not yet decided". Based on the given data it is not possible to evaluate this strategy. But the question arises if the development of one single integrated system could benefit when resources are joint between these sectors from the beginning.

### **Omnibus Surveys the NSI chooses to offer**

As one of the interviewed country suggested, the architecture of the data collection system might also depend on the fact if omnibus surveys are offered or not (for a definition of omnibus survey, see WP4 – Deliverable 1). Offering omnibus surveys might put slightly different demands on the data collection system such as: Question banks to promote the harmonization of questions, within questionnaire case management (mixed-mode within one questionnaire, incentives/reminders for progress within the questionnaire, etc.) or bigger sample sizes. The ideal data collection system therefore provides both the possibility to run a few big omnibus surveys and to run many smaller surveys at the same time. How many systems are currently capable of running both kind of surveys cannot be said with the database at hand.

## **The way the NSI chooses to organize field work**

The practical organization of field work is done in many different forms between the NSIs. To help overviewing the many different organizational forms, a theoretical typology was generated on the basis of the interview data. There seems to be five key aspects about the practical organization of field work:

### **(1) Data collection field unit**

- **Centralized:** There is only one unit responsible for management and supervision of data collection within the whole country. This unit is part of the NSI.
- **Decentralized:** There are multiple units responsible for management and supervision of data collection within the country. These units are mostly regionally gridded. At the NSI there is one master unit that coordinates the regional units. All of them are part of the NSI.
- **Outsourced:** The management and supervision of data collection is outsourced to another organization. Mostly the NSI is only responsible for transferring the draft questionnaire and the sample before the data collection phase and checking performance benchmarks when data collection is finished.
- **A Mix of the above, depending on mode or survey:** Some NSI have a data collection unit as part of their organization responsible for some surveys and have data collection outsourced for other surveys. This is often the case when the NSI itself has no system for a certain mode, for example only have CAWI in house and CATI external.

### **(2) CATI studio**

- **Centralized:** There is only one CATI studio responsible for conducting all telephone interviews within the whole country. This unit is part of the NSI.
- **Decentralized:** There are multiple CATI studios responsible for conducting the telephone interviews within the country. If this type exists in practice is unclear based on the given data.
- **Outsourced:** Conducting the telephone interviews is outsourced to another organization. Mostly the NSI is only responsible for transferring the draft questionnaire and the sample before the data collection phase and checking performance benchmarks when data collection is finished. But there are cases, where the outsourced organization is stronger connected to the NSI, for example by using the data collection systems and/or other infrastructure of the NSI.
- **No CATI studio:** NSIs that offer a CATI mode without any CATI studio do so, by letting the CATI agents work at their homes individually. They provide these agents with the necessary equipment and data collection systems. The agents are supervised by a centralized unit.



### (3) The role of CAPI and CATI interviewers

- CAPI and CATI are separate roles: One individual person is either a CATI or CAPI interviewer.
- CAPI and CATI are same roles: One individual person can act as an interviewer for mode CATI and also as an interviewer for mode CAPI. This type is often found in the organizational form of having no CATI Studio.

### (4) The handling of inbound contacts

Inbound contact is when a respondent contacts the person or organization responsible for data collection by any communication channel on their own initiative. For example when they need technical help, want to reschedule an appointment, wish for a mode switch, inquire further information about the survey, have a question about the questionnaire and alike.

- Only with data collection unit of NSI: Any proactive contact by the respondents is treated by the back office of the data collection unit.
- Only with CATI studio: If any proactive contact by the respondents is treated by the back office of the data collection unit.
- Only with outsourced data collection organization: If any proactive contact by the respondents is treated not by the NSI but by the outsourced data collection organization.
- Only with interviewer: If any proactive contact by the respondents is treated by the interviewer personally.
- Mix, depending on mode: Depending on the data collection mode or survey, a proactive contact by the respondent is treated by one or more of the above.

### (5) The handling of outbound contacts

Outbound contact is when the person or organization responsible for data collection contacts the respondent for other reasons than the interview itself. For example, sending informational letters, reminders, incentives and alike.

- Only by Data Collection Unit of NSI: Any non-interview contacts with the respondents are made by the back office of the data collection unit.
- Only by CATI studio: Non-interview contacts with the respondents are made by CATI studio.
- Only by outsourced data collection organization: Any non-interview contacts with the respondents are made by the outsourced data collection organization.
- Only by interviewer: Any non-interview contacts with the respondents are made by the interviewer personally.
- Mix, depending on mode or survey: Depending on the data collection mode or survey, a contact is made by one or more of the above.

- Mix, depending on info type: Depending on the type of information (reminder, incentive etc.) a contact is made by one or more of the above.

The organizational form of field work at one specific NSI can be a combination of any of the above types within each organizational aspect. For example one of the interviewed NSI has organized its field work in the following way:

The organization of field work at one of the interviewed NSI					
Data Collection Field Unit	Centralized	Decentralized	Outsourced		Mix, depending on mode or survey
CATI Studio	Centralized	Decentralized	Outsourced	None, each Interviewer independent	
CAPI and CATI separate	Separate Interviewers	Same Interviewers			
Inbound Contacts	with back office	with CATI Studio	with outsourced Institute	with Interviewer	Mix, depending on mode or survey
Outbound Contact	from back office	from CATI Studio	from outsourced Institute	from Interviewer	Mix, depending on mode or survey

The above NSI has a central data collection unit within the NSI. That unit is responsible for all data collection for all social surveys, offering CAWI/CATI/CAPI. At the same time, the CATI studio is outsourced, meaning that an external company is conducting the telephone interviews and supervising the CATI interviewers. The central data collection unit supervises the CAPI interviewers and supervises the supervisors of the external CATI company. That company works with the NSI's data collection system and within the building of the NSI. The roles of the CAPI and CATI interviewers are separated. The central data collection unit is responsible for the CAPI interviewers and the external company for the CATI interviewers. The CAPI interviewers are self-employed and are also using the NSI's data collection system. The CATI interviewers are employed at the external company. The handling of inbound contacts depends on the current mode. If mode CATI, the respondents are routed directly to the CATI studio. If mode CAPI,

mostly the respondents get in contact directly with the CAPI interviewer himself. Besides these inbound channels, a respondent may always contact the NSI's hotline/email. When doing so, they are handled by the staff of the central data collection unit. For outbound contacts all standard written communication is sent by the NSI, the central data collection unit, that is. But if mode is CAPI, the CAPI interviewers are allowed to additionally contact the respondents on their own initiative by the communication channel of their choice.

In the above example it should become clear, that due to that specific organizational form of field work very specific requirements are given to the data collection system. For example, the fact that the external company is supervised by the data collection unit means, that the component monitoring and reporting must allow for that. The fact, that if mode equals CAPI contacts with the respondents can be made freely by the CAPI interviewer demands for a specific way of protocolling the interviewer contacts. The fact, that many different people handle the inbound communication puts special needs to the flexibility of the case management system.

May it be possible to develop a data collection system that accommodates for all the different possible combinations of field work organization? We believe yes. But this will only be possible by thoroughly considering all the relevant organizational forms. The above typology could help to guide that process. Another way of achieving this, is to stronger harmonize the organization of field work. It seems that independent from the country there are some more and some less efficient ways of organizing the process. The next chapter will demonstrate how the NSIs that developed a whole new data collection system actually changed their organization along the way.

## **Change Management within the organization**

When it comes to the relation of the organization of data collection and the architecture of the data collection system the interviews showed, that this relation goes both ways. Of course, the system's architecture has to relate to the organization of data collection. But many NSIs told us, that during the process of developing their data collection system, the organization itself underwent a change process.

The organizational change was experienced in many different forms. Many times whole new units were created within the NSI:

- A new unit for designing and testing the questionnaires
- A new unit for centralized data collection
- A new unit designing and testing mixed-mode strategies, communication strategies
- A new unit for standardized and comparable quality assurance of field phase and questionnaire

Other times the responsibilities and processes within one unit were changed:

- Reorganizing data collection process: Change in the way the samples are drawn and tested, the way written communication is created and sent, the way inbound contact is handled, the payment scheme of the interviewers, how modes are put into practice and so on.
- Reorganization of questionnaire design process: Change in the way questionnaires are designed, evaluated, programmed and tested.
- Reorganization of statistical methods for mixed-mode surveys: Change in the way field data is evaluated and corrected.

In the interviews it became clear, that with the implementation of a certain data collection system also organizational change management is strongly needed. In many cases the change management happened rather spontaneous, along the way of developing the system. This sometimes burns resources as the system is developed for a process that then changes. Or the other way around: The system is developed for a process that is supposed to change, but the change in process comes delayed, slightly different than planned or even never at all. In an ideal world, so the opinion of some interview partners, a thorough evaluation and redesign of the current processes of data collection should be the starting point of any change in data collection system. It seems to be a misbelief to assume that with an efficient technical data collection system the process of data collection will automatically become more efficient. The data collection system is only a technical tool. And if the organizational processes are inefficient even the best data collection system will stay inefficient. Therefore, a systematic change management is necessary. The processes of organizational change and technical change should always be thought together.

## Developing in-house or using external tools? Maybe both!

Furthermore, the architecture of the data collection system is strongly influenced by the NSI's IT strategy regarding the usage of external tools. If one thinks about the architecture of a data collection system imagine a system of many different components<sup>5</sup> with links (interfaces) between these components to transfer information from one component to the other. As already seen in the MIMOD Survey many NSIs develop a system in-house, meaning that the majority of the components and their interfaces are developed in-house. But why do NSIs choose to do so? Wouldn't it be much less costly (also in terms of time, and in terms of the overall quality of the system) to use an external system? Or at least use as many external tools as possible?

Based on the interviews the top five arguments for in-house development are:

1. Based on our needs, no suitable external tool/systems can be found.

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<sup>5</sup> See WP3 - Deliverable 1: Desktop review exercise and draft typology. Pg. 4.

2. The survey data must be highly protected. And that protection can only be guaranteed with in-house tools.
3. The internal IT infrastructure is so special, external tools can only be integrated with high efforts.
4. Using external tools makes us dependent on other companies. If they stop their services we risk our data collection.
5. In the long run, in-house development is financially cheaper than paying for external tools.

But these arguments may call for a discussion. Their counter-arguments can be summarized as follows:

1. True, there might be not one perfect system suitable for our needs regarding data collection out there. But: If you not think about the whole system and rather start thinking about the different components, you might find some components that would fit the needs. And: If you would systematically invest more time for evaluation and research about the world of external tools, more opportunities would come into focus. Furthermore: If you would start stronger rethinking your data collection processes your needs might change a little in favor of compatibility with certain tools. And last but not least: External tools could be further programmed in-house, twitching them to exactly fit the needs.
2. True, without a doubt the survey data must be highly protected, and data is probably best protected on the internal servers. But: External tools could allow data storage on your own internal servers or the integration within the internal systems.
3. True, the internal IT infrastructure is probably unique. But: External tools could – with internal programming effort – be adapted to fit within the environment. Or: The IT infrastructure itself could be adapted to allow for easier integration for external tools. For example, there are quite a lot of countries, that now have an external questionnaire tool integrated in the internal IT Infrastructure. Another country has successfully integrated an external workflow tool in their case management system.
4. True, you are dependent on the external tool. But: Even for external tools it could be possible to prognose their functioning for medium-term. Trying to prognose long-term seems even for in-house tools nearly impossible, as the needs of data collection are changing over time. And: If the interfaces between internal and external tools are developed by having a future exchange of tools in mind, the effort of integrating a new tool when needed might not be so high. In fact: This could also be seen as an advantage. Such an approach might make the exchange of tools much easier, making it possible to adapt to new needs more quickly.
5. That the cost for external tools really is higher than the cost of developing in-house can be highly doubted. In one of the interviewed countries, the cost of the in-house development already sums up to about 60 person-years (approx. 7 million Euro). In

another not-interviewed country<sup>6</sup> the budget for redesign of data collection process and its systems is calculated with 42 million Euro. How many years could you pay licenses for external tools and internal developers to adapt and support these tools until you have reached that amount of money? And how many years will the in-house developed tool run, before you must start pouring new money in again for support and further development?

There is not enough data to judge which side of the arguments is right for a specific NSI. But regarding the most often named argument for in-house development, that the specific needs cannot be covered by external tools, the results of WP 3 hint towards a rejection of that argument. The above summary of arguments is therefore meant as a help in starting a fruitful discussion about the general approach of using internal or external tools.

## Conclusion

Differences in the current data collection systems are largely because of the specific mode traditions of a NSI. Depending which mode(s) they have offered in the past and which mode is treated as the dominant one, the data collection system component's focused around certain modes. These differences in the data collection systems would not be necessary if there were to be a data collection system designed for all possible modes CAPI/CATI/CAWI/PAPI and it would allow any combination of these modes. But such a flexible system must also allow for simple mode surveys in an uncomplicated way. Otherwise this system would be an overkill for countries that have a less versatile mode tradition. It is important to note that the mode PAPI seems to be paid less attention to in newly developed systems. This strategy bears the risk of not being efficiently able to offer the mixed-mode design CAWI/PAPI, which is newly promoted in the literature.

Another reason for differences in the data collection systems is the fact how separated the business surveys and household surveys are organized within the NSI. The system's components change a little if you also include business surveys. Mostly that is not being done but put aside for future tasks. If it wouldn't be more efficient to join the worlds already in the beginning of development remains an open question.

Also, the organization of surveys in rather large omnibus surveys is responsible for differences in the systems. The ideal data collection system therefore provides both the possibility to run a few big omnibus surveys and to run many smaller surveys at the same time.

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<sup>6</sup> As reported in UNECE Workshop on Statistical Data Collection, Conference of European Statisticians (10-12 October 2017). Phoenix: Redesign of the data collection process and systems.

Besides modes, the probably biggest effect on the architecture of the data collection system has the organization of field work. Here it depends on the degree of centralization of the data collection field unit and the CATI studio. The role of the interviewers, if a CATI interviewer may also be a CAPI interviewer at the same time, also has an effect. And finally, the organization of handling inbound and outbound contacts with the respondent alters the requirements of the data collection system. We believe, that it would still be possible to develop one system that accommodates for all the different possible field work organization forms. But more research is needed to find out if the here proposed typology of field work organization is complete and which combinations exist within the ESS.

Of course, the IT department and their proposed strategy regarding the use of external tools deeply effect the design of the data collection system. The discussion about in-house development versus external tool implementing seems to structure around the following questions: Are there suitable external tools available that fulfill our needs? How can data protection be guaranteed with external tools? How high will the effort in integrating the external tools into the unique IT-infrastructure be? What happens if the external tools stop their services? What is financially less expensive: paying for external tool licenses and having the effort of integrating these tools and supporting them versus paying for the in-house development, the ongoing support and further development? We hope by bringing to light these questions and possible answers to them, a fruitful discussion about the usage of external tools may be started.

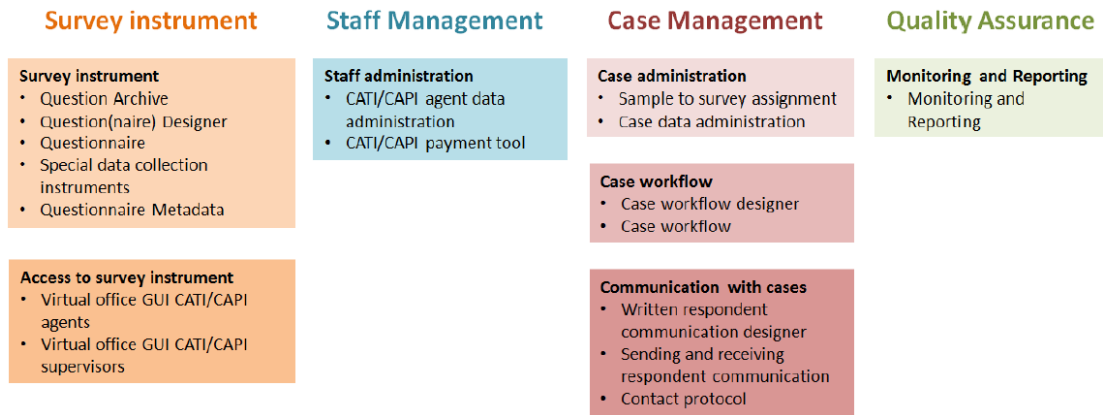
Regarding the relationship of the data collection system and the organizational forms of data collection within the NSI on more important note is to consider: Many countries experienced an organizational change because of the process of developing a new data collection system. A systematic change management of the organization is necessary before trying to implement a new system. The processes of organizational change and technical change should always be thought together.

# Attachments

## Attachment 1 - Interview Protocol

- Introduction personal
- Introduction MIMOD
  
- How many data collection systems are you using for all the social surveys conducted by your NSI? Why are you using more than one? How are these systems different?
- Are you also running other surveys (for example business surveys) within this data collection system? Which/Why not?
  
- Imagine you have to conduct a brand new mixed-mode survey with your data collection system. Please tell me in detail: What are the things that need to be set up (the technical ingredients that have to be prepared) to get the survey running in your data collection system?
- For each of these technical ingredients: How is process of preparing them? Who is involved? In which way are you assisted by the technology of your data collection system?
- If you think about this whole process of setting up a survey in your data collection system. Which are the tasks that you think very work-intensive or error-prone? (Can you imagine a way in which this could be improved?)
  
- Now imagine the survey has started and you are right in the middle of data collection. Which tools of the data collection system is fieldwork staff (the internal staff, supervisors, interviewers) using to conduct the data collection?
- If you think about the tools in use and the organisational process of using them: How satisfied are you with this in terms of work efficiency and error risks? Why/Why not?
  
- Now imagine the survey has just ended, all respondents were tried to contact. What are the things that have to be done to finish the survey within your data collection system and to export the data?
- If you think about the tools in use and the organisational process of using them: How satisfied are you with this in terms of work efficiency and error risks? Why/Why not?
  
- Now let's talk about the components of your data collection system in more detail. Earlier you named...





- What would you say are the main features of component?
- What are you missing in component?
- How much manual work is it to transfer information from component to another one or vice versa?
- How close to real-time can you access the information of component?
- Drawing from your knowledge and experiences, imagine you have to set up your component completely new. How would this component change, if at all?
- For component: Is it completely developed in house or are there any external tools in use? Why/Why not?