

**COOPERATION ON MULTI-MODE DATA COLLECTION (MMDC)**

**MIXED MODE DESIGNS FOR SOCIAL SURVEYS - MIMOD**

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Survey communication in mixed-mode ESS surveys

WP4 – Deliverable 2

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WP4: Mixed-mode designs

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## Summary and introduction

One of the topics for WP4 is to assess the suitability of ESS surveys for mixed-mode surveys with a web component, and to make suggestions for changes to the existing questionnaires that would make them more suitable for web. These suggestions will be presented in WP4's upcoming deliverable 3, and changes to individual questions, questionnaire structure and questionnaire length will be discussed. To fully discuss this, however, it is necessary to go beyond the questionnaire, and also look at the bigger picture of how the mixed-mode *survey* is communicated to the respondents. This includes pre-notifications, invitations and reminders in different contact modes. Insight into which survey communication strategies are efficient could possibly boost web response rates and give indications of a maximum length of web surveys. This deliverable looks at European NSI experiences in survey communication based on the MIMOD survey, as well as two case studies and recent literature on the topic.

### 1. The “extended” mode concept in survey literature

In their chapter on mixed-mode surveys in the 2008 International Handbook of Survey Methodology, de Leeuw, Hox and Dillman differentiate between contact phase, response phase, and follow-up phase mode changes. Thus, the authors extend the mode concept beyond the mode of questionnaire response, and mixing data collection modes, to mixing means of communication. In this deliverable, we will look closer at mode-mixing in the contact and follow-up phases.

#### Contact phase mode change

In the contact phase mode change, de Leeuw et al. differentiate between *advance notifications* in a different mode than data collection on the one hand, and *recruitment/screening/selection* in a different mode on the other. The rationale for implementing this strategy is summarised as such:

- [Ensure] correct sampling frame
- Raise response
- Enhance credibility/trust
- Reduce cost
- Enhance efficiency
- Update/expand contact information for main mode

Sending an advance letter before a CATI or CAPI interview is a classic example of trying to enhance the credibility or trust experienced before an interviewer makes contact, and thereby raise response. This strategy, however, requires correct address register information for gross sample. If this is not available, the much more expensive strategy of using interviewers to locate respondents at addresses may be necessary to ensure a correct sampling frame, but on the positive side the face-to-face interviewers may be good at recruiting and establishing trust between the survey organisation and the respondent.

#### 1.1. Follow-up phase mode change

By follow-up phase mode change, de Leeuw et al. mean reminders in different modes than the one(s) that all respondents are asked to complete the questionnaire, with the rationale of raising response. This is done to reduce nonresponse error, but the authors differentiate between designs with the use of a “pure” reminder, and instances where data is also collected in a different mode unique to the follow-up population.

## 1.2. Push-to-web and communication mode variation

In a modern context with CAWI, the so-called “push-to-web” strategy has been the subject of several articles. Originally referring to using paper letter invitations with urls, and not offering any alternative mode, the initial motivation being to save money. Text messages, e-mails and CATI/CAPI efforts have also been used to encourage response in CAWI mode.

In a 2017 article, Don Dillman (who coined the phrase) discusses the promises and challenges of “push-to-web”, in effect arguing for a system where a multitude of modes of communication are used for reaching respondents, combined mixed-mode in the response phase. Citing recent studies from both North America, Europe and Asia, Dillman observes that with well-constructed procedures and techniques.

“the ability to approach people with repeated requests to respond – and to do so in different modes – improves survey response more than any single mode of contact and/or response”.

Still, Dillman does see challenges to the web-push strategy:

“One is the risk to surveys and respondents from malware, phishing, and server attacks. Another is the increased reliance on smartphones that may require significant changes in how questions are structured and presented to respondents. In addition, the reluctance of organizations and individuals to accept and master the greater complexity associated with shifting from single mode to mixed-mode surveys is a significant challenge”.

## 1.3. The art of pushing to web

In a 2017 presentation methodology seminar, Gerry Nicolaas and Patten Smith of Ipsos Public Affairs describe the development of push-to-web surveys in the UK, both within the commercial and the governmental sector. Focussing on the motivational aspects, part of the presentation concerns the use of postal invitations and reminders, and the transition to web questionnaire completion. They first focus on three motivational factor of contact phase paper mailings, which are relevant regardless of response phase mode.

- 1) Motivation to open the mailing
  - a. Personalisation
  - b. Type of mailing – enveloped, postcard etc.
  - c. Appearance before opening – logo etc.
- 2) Motivation to read the mailing
  - a. Personalisation
  - b. Easy to read – length, font, vocabulary
  - c. Appearance – e.g. important, professional
- 3) Motivation to take part in the survey
  - a. Clarity about purpose of mailing
  - b. Clarity about survey request
  - c. Use of persuasive reasons for taking part – including incentives

The authors then go on to describe the motivational factors in the transition from contact mode to response mode:

- 4) Motivation to go online
  - a. Clear instructions for logging into the questionnaire
  - b. Minimal effort needed to enter login details
  - c. Multiple access methods; e.g. any internet-enabled device
- 5) Motivation to complete questionnaire
  - a. Authentic looking landing page with clear instructions
  - b. Designed for mobile: short, reduction of clutter and text
  - c. Avoidance of question types prone to breakoff, such as complex question formats and cognitively difficult questions

For the four motivation-related to the contact phase mode, Nicolaas and Smith have a general advice of using multiple mailings, and find an optimum number of mailings, an optimum length of time between mailings, and finally offer a diverse yet coherent package of multiple mailings. Here, they quote Dillman: “Too often surveyors [...] ignore the operational connectivity among [the contact attempts] that is essential” but conclude that further research is needed.

The motivational aspects of postal communication are also relevant for digital means of communication in the contact phase, but aspects of authenticity and security should perhaps be added, with regard to Dillman’s concerns quoted above. Phishing and other Internet fraud is far more common via e-mails and other digital means of communication, than through postal mail, because it is far cheaper for fraudsters.

Especially if the questionnaire asks about sensitive and personally identifiable information and/or is combined with register information, assurance of data protection and General Data Protection Regulation (GDPR) compliance is important for the motivation to respond.

## 2. ESS NSI experiences according to the MIMOD survey

The MIMOD survey among ESS National Statistical Institutes (NSIs) gathered information on communication strategies and use of different contact phase modes, as well as the sequencing of response modes in the data collection phases. In this chapter, we will first look at the contact phase modes employed and discuss the use of digital versus “traditional” contact modes – primarily postal but also use of interviewers. We will then go on to look at whether the contact phase modes are used in “push-to-web” strategies, or with web as follow-up modes. Lastly, we will discuss how easy or difficult it is to offer advice or point to best practices based on the available information.

### 2.1. Communication strategies

MIMOD WP1’s deliverable 1 showed an even distribution between countries in terms of survey communication strategies: 15 of the countries use uniform communication strategies, and 15 use different communication strategies for each survey (WP1 deliverable 1, table 15).

The survey asked more detailed questions about what kinds of communication channels were used in which kind of respondent communication. For the 14<sup>1</sup> countries that reported uniform communication strategies, the distribution of means and types of communication is presented in table 1.

**Table 1. Summary of responses to MIMOD survey question 19 “Which communication means do you use for your uniform communication strategy?”**

Mean of communication	Type of communication		
	Advance notification/invitation	Reminders to non-respondents	Reminders to break-off respondents
E-mail	2	4	1
SMS	1	2	0
Paper letter	14	8	1
Card	0	1	0
Flyer	6	1	0
Other	1	1	0

The table shows that paper letters are used by all countries for advance notifications/invitation. Eight of the countries combine the paper letter with one or more other means in the notification/invitation phase. The “other” type of communication reported was a free delivery of a publication with survey results offered to EU-SILC respondents, along with a reminder of the upcoming wave (Czech Republic).

In the follow-up phase, there is more use of digital channels of communication. Five countries use E-mail and/or SMS, but only one reports using only a digital channel for non-response reminders (Hungary, E-mail). The “other” type of communication reported here is a telephone reminder for self-completion survey nonrespondents (Spain).

Of the 14 countries employing uniform contact strategies, only Malta reports sending reminders to break-off respondents, combining paper with digital communication: paper letters and e-mails.

### *2.1.1. NSIs with different communication strategies*

The 15 countries that reported using different communication strategies for different surveys were asked which communication types and means they used for each of the 9 ESS surveys and survey waves that the MIMOD project concentrates on<sup>2</sup>, as well as up to three national surveys. In table 2, all the different means used for all phases of all these surveys are added up.

<sup>1</sup> There was one case of item nonresponse on this question.

<sup>2</sup> Labour Force Survey (LFS) 1<sup>st</sup> wave, LFS 2<sup>nd</sup> and later waves, EU Standards of Income and Living Conditions (EU-SILC) 1<sup>st</sup> wave, EU-SILC 2<sup>nd</sup> and later waves, Adult Education Survey (AES), Community survey on Information and Communication Technology (ICT), European Health Interview Survey (EHIS), Harmonized European Time Use Survey (HETUS), Household Budget Survey (HBS)

**Table 2. Summary of responses to MIMOD survey question 21 “Please indicate which communication means you use for tailor-made communication strategies”**

Mean of communication	Advance notification/invitation	Reminders to non-respondents	Reminders to break-off respondents
E-mail	11	25	19
SMS	5	8	4
Paper letter	68	26	8
Card	0	4	5
Flyer	27	1	0
Other	4	6	1

Compared to the NSI using uniform communication strategies, the figures are very similar in the advance notification/invitation phase. The paper letter is the most used means of communication, and the percentage of digital communication reported (E-mail and SMS) is 12% for the uniform strategy NSIs, and 14% for the group using tailor-made strategies. In the reminder phase, however, there is greater use of digital communication among NSIs using tailor-made strategies. Not surprisingly, there is a correlation between digital communication and use of web mode.

The EHIS, AES and ICT surveys are the ESS surveys with the most use of digital communication. These are also the surveys where web is most widely used in mixed-mode designs, as shown in WP4’s deliverable 1 (Table 1, page 4). In the case of the national surveys, the digital communication/web questionnaire connection is even clearer, although paper letters are still the most used means of advance notification. This is perhaps an indication that there is greater room for experimentation and development in non-Eurostat surveys. Table 3 shows the use of the different means of communication for both types of surveys.

**Table 3. Types of communication used in surveys with CAWI mode**

<b>EHIS: 7 NSIs using CAWI</b>			
Type of communication			
Mean of communication	Advance notification/invitation	Reminders to non-respondents	Reminders to break-off respondents
E-mail	1	3	3
SMS			
Paper letter	6	2	
Card			1
Flyer	2	1	
Other		1	
<b>AES: 10 NSIs using CAWI</b>			
Type of communication			
Mean of communication	Advance notification/invitation	Reminders to non-respondents	Reminders to break-off respondents
E-mail	2	2	2
SMS	1	2	1
Paper letter	6	3	1
Card		1	
Flyer	2		
Other	2		
<b>ICT: 10 NSIs using CAWI</b>			
Type of communication			
Mean of communication	Advance notification/invitation	Reminders to non-respondents	Reminders to break-off respondents
E-mail	1	4	3
SMS	1	1	
Paper letter	11	6	2
Card		1	1
Flyer	5		
Other	1		
<b>National surveys combined</b>			
Type of communication			
Mean of communication	Advance notification/invitation	Reminders to non-respondents	Reminders to break-off respondents
E-mail	5	9	6
SMS	3	4	2
Paper letter	13	6	1
Card			
Flyer	4		
Other	1	2	1

## 2.2. Reasons for (limited) use of digital communication

Question 23 of the MIMOD survey was an open question on why different communication means were or were not used. The question also asked for general experiences and good practices with any of the communication means.

The results indicate that the main impediment for not using digital means of communication (more), is the lack of e-mail addresses fully or partly, reported by 10 NSIs, and the lack of mobile numbers, reported by 11 NSIs. Other impediments reported by one or two NSIs were: questionnaire not adapted to smartphones, case administration system limitations, data protection reasons, household survey design, general

inexperience with web data collection, and negative experiences with use of SMS notifications before CATI call-backs.

Some NSIs have access to quality register information on e-mail addresses and mobile phone numbers for the majority of the population, such as Statistics Norway. The Norwegian Digital Contact Information Register has made digital communication much easier and contributed to improving response rates in recent years (see case study). Statistics Denmark also has access to such information through the government E-boks system, and Statistics Finland reports expecting to have access to a similar Finish register in a few years' time.

The only NSI providing a best practice description in question 23, is Statistics Austria, who recommend "a mix of different communication channels and the use of pre-incentives". The mix of communication channels is in line with Dillman's advice from the 2017 article (see above).

The survey also included open questions on the details of the information/communication strategies. NSIs with a uniform communication strategy were asked this in one question (question 19), whereas NSIs with different communication strategies were asked for each survey separately, including national surveys.

The responses to these questions reflect the differences in modes used, as well as differences in the availability and quality of contact information (physical addresses, phone numbers and e-mail addresses), and whether the information is on an individual or a household level. Panel surveys offer the opportunity to collect such information at first participation for use in later waves. The descriptions are presented in their entirety in appendix 1.

### 2.3. Push-to-web among ESS NSIs

The MIMOD survey reveals that for surveys where NSIs are using a sequential mixed-mode design, there practically always is a web first design followed up with interviewer-administered modes, as seen in table 4. (One exception is the HBS, where both NSIs using CAWI start with CAPI.) This is in line with the responses to question 6 in the MIMOD survey, where all 20 NSIs who had experienced an increase in the use of web modes the last five years report *to reduce field costs* as a main reason for the CAWI expansion (Murgia et al. 2018).

Web first is the most common sequential mixed-mode design, in addition to this come the concurrent designs where web is offered with another mode. An efficient survey communication, with smart use of all contact modes available, is therefore essential to ensure a high level of web response while balancing the cost savings of web first with quality aspects. The recommendations from Nicolaas et al. quoted above would therefore be of high relevance for the NSIs and the MIMOD project.

**Table 4. Mode sequences in sequential mixed-mode designs**

	LFS wave 1	LFS later waves	EU-SILC wave 1	EU-SILC later waves	EHIS	AES	ICT	HBS
Lithuania	CAWI-> CATI-> CAPI		CAWI-> CATI -> CAPI	CAWI-> CATI-> CAPI	CAWI -> CAPI	CAWI -> CATI -> CAPI	CAWI-> CATI -> CAPI	CAPI -> CAWI
Netherlands	CAWI-> CATI/CAPI			CAWI-> CATI		CAWI -> CATI		
Latvia		CAWI -> CATI/CAPI			CAWI-> CATI/CAPI	CAWI-> CATI/CAPI	CAWI-> CATI/CAPI	
Denmark		CAWI-> CATI	CAWI -> CATI	CAWI-> CATI				
Estonia				CAWI-> CATI-> CAPI				
Slovenia					CAWI-> CAPI	CAWI-> CATI -> CAPI	CAWI -> CAPI	
Germany					CAWI-> CAPI			
Austria						CAPI -> CAWI		
Sweden							CAWI-> CATI	
Spain						CAWI/CATI-> CAPI		CATI-> CAPI /CAWI
Finland						CAWI->CAPI	CAWI -> CATI	
Croatia							CAPI-> CAWI-> CATI	
France							CAWI/CATI-> PAPI	
Italy							CAWI->PAPI	
Poland							CAWI-> CAPI-> CATI	

The descriptions of contact modes and protocols collected through the MIMOD survey on the other hand shed light on the heterogeneity of conditions the ESS NSIs are working under. Offering more concrete recommendations is therefore difficult other than encouraging NSIs to use all contact and response modes available, and design and experiment with information campaigns and that communicate efficiently. In the following chapter, case studies from Istat and Statistics Norway give some examples of this.

## 3. National case studies

### 3.1. ISTAT communication strategy

#### 3.1.1. *From a communication oriented to the surveys to one oriented to respondents*

The modernization process undertaken by the Italian National Statistics Institute since 2016 and the centralization of data collection, pillar of the new organization, have meant the transition from an old model based on a silo structure to one oriented on the standardization and integration of the processes.

In this context, the innovative review that characterized the communication activity of the Institute with survey respondents is very important. This operation derived from the need to standardize the communication and information flows managed by ISTAT, which were quite different from one another in the previous system carried on from different organizational structures.

The letters to the respondents participating in the sample used to inform of the beginning of surveys have undergone extensive changes.

In the past, the letter was used to communicate the importance of the survey to the respondent. It consisted of just one page, it was written in a very small typeface, and emphasized the regulatory and legal aspects of the data collection activity.

The new letter, however, puts the respondent at the centre, highlighting how important their participation is to the survey and the great value of their contribution in enriching the knowledge of the country. The document is divided into five parts: two on the front and three on the back. The front contains the central body of the letter dedicated to general information and to the thematic information, as well as a collaboration invitation aimed personally at the respondent. In the lower part of the letter, beneath the President's signature, there is a box containing information relating to the method by which the respondent will be interviewed (survey technique, telephone numbers of any third-party companies, customer service number for any clarifications, link to the website page dedicated to respondents). The reverse side of the letter contains the sections referring to the treatment of personal data, the obligation to respond and sanctions, if provided, with regulatory references (regulations, directives, laws).

The document, aimed at those participating in the sample survey, has also been improved from the graphics and editing points of view. The location of the information to be provided on two pages (front/back) rather than one has allowed enlargement of the typeface and a better distribution of the text, making it more readable. The practical information relating to the interviews has been enclosed in a box with a grey background, making it easily recognisable. Consistent with the new communications strategies of the Institute, a new graphic logo has been identified and inserted that suggests the theme addressed in the survey. Finally, the language which has been used is clear and essential, therefore, easy to understand and free of technical terms.

The letter addressed to respondents is produced in a paper version and it's sent by mail to the households 10-15 days before the beginning of the survey. The shipment of the letter is scheduled for each survey.

### 3.1.2. *The new information letter to respondents: an example of synergy between structures*

The drafting of the new information letter, directed to respondents to ISTAT surveys, is, differently from the past, fruit of the synergetic collaboration between various structures and the result of a procedure that envisages the interaction and responsibility of various subjects. The process begins with the sending of the invitation by the division charged of the organization of data collection, aimed at the production structures, to complete a form provided on Lime Survey which requests the thematic information pertinent to the survey referent. This information is filled in a file available on a shared and integrated work platform with other general information and other details by the sector responsible for the data collection and the data collection design.

Before the President's signature, the document goes through legal and regulatory verifications by the competent sector.

The final result, therefore, is a conceived, drafted and finalized document to which thematic, technical and legal-administrative structures of the entire Institute have contributed to, with different levels of involvement and responsibility.

### 3.1.3. *The respondents' page on Istat website*

In order to ensure transparency and support the respondents in participating to statistical surveys, Istat has developed an *ad hoc* page on its institutional website.

The respondents' page has been recently revised for what concerns its content with the aim of harmonising the descriptions provided by different surveys. The respondents' page provides a standard description which covers: *the survey purposes and underlying regulations (if any); who is supposed to answer; how data are being collected; the data collection period; where the survey results and other metadata are available; the mandatory statement (and fines if foreseen); the confidentiality statement; contacts and free-toll number*. Three templates accompanied by examples and instructions were developed according to the type of respondent unit: i) households or individuals; ii) businesses and iii) institutions; to guide Istat personnel in preparing the descriptions.

On the webpage, the description is complemented by all relevant material for the respondents such as the questionnaire, the advance letter, instructions or guidelines. Documentation is in word or pdf or excel, and can be downloaded by the respondents for their convenience.

With the centralisation of data collection, a new procedure has been launched that allows the preparation of the respondents' webpage by exploiting Istat information system for quality and metadata documentation (named SIDI-SIQual). The new procedure allows for the reuse of metadata already available in the SIDI-SIQual system thus simplifying the documentation tasks and ensuring coherence in disseminated metadata. It also ensures that the documentation does not get lost and can be reused for the next survey occasion. The new procedure recognises the different actors involved in producing the webpages (i.e. the thematic, the data collection and the dissemination experts) and assigns them clear roles and responsibilities based on a validation

system. Only the documentation validated by the data collection expert can be published on the website.

At present, the respondents' page is available only in Italian.

### 3.2. Statistics Norway's use of digital contact communication

Statistics Norway currently uses digital contact communication for all surveys. Most of our surveys are digital communication *only*; no paper is used in the contact mode phases. Although we have been doing this for some years already, the system used for *respondent and questionnaire administration* (response phase) and the system used for *digital contact communication* (contact and reminders) are not yet properly integrated.

This corresponds to what is called contact protocol in MIMOD WP3's deliverable 1 on case management systems (Plate 2018): the interviewers' contact protocol, with paradata on each dialing of each respondent during CATI is integrated in Statistics Norway's case administration system (SIV), but digital contact communication via e-mails and SMSs are managed and recorded by a different system (DIGIKORR).

#### 3.2.1. Logging in: direct links versus two-factor authentication

Statistics Norway in most cases include a direct link to the CAWI questionnaire in all e-mails and text messages: invitations, reminders and refusal letters. In the case of breakoff reminders, the respondent can continue from where (s)he left off the last time. The main invitation letters, that most often are e-mails, are quite standardized, and include updated legal information in line with the GDPR. It is longer than the subsequent communications. The content of reminders is more varied.

In a pilot survey for the Labour Force Survey that is running throughout 2018, we are obliged to use two-factor authentication for logging in, because the questionnaire is prefilled with register information. We were concerned that the extra effort this requires from the respondent would have a negative effect on the motivation to take part. On the other hand, it could also serve to reassure respondents regarding the information security and authenticity of Statistics Norway as the true originator of the survey invitation. At present, we do not have enough observations to evaluate the effects of two-factor authentication login.

#### 3.2.2. Towards a system for responsive digital communication

During hectic workdays, easy access to the information needed during the data collecting process is paramount. Although several experiments on communication strategies have been performed, documentation and analysis of experiments is often lacking. This is due in part to the lack of case management integration, but also to a high turnover and workload. What *does* work, is having a dedicated project manager monitoring the data collection process, deciding when and how to communicate with the different respondents.

Before we can recommend best practises on digital communication, more work needs to be done. On the positive side, we do have all the data we need on contact attempts, and programmers are

working on integrating the SIV and DIGIKORR systems. When this is in place, and experience has been built up, we can also start automating communication decisions currently made by project managers, in an adaptive-responsive system.

Figure 1 describes a digital communication dashboard under development. Because the direct web links have unique identifiers (“Id.”) linking them to the exact type (invitation, reminder, etc.) and means (e-mail, SMS) of communication, as well as the time they are sent, we can systemize the information on how many and which subgroup of respondents reacted to each digital contact correspondence. In the last column, we can see how many responses each digital communication directly resulted in.

**Figure 1. Statistics Norway’s digital communication dashboard under development**

Group	Time	Channel	Type of sending	Status	Malnavn	Id.	Sent	OK	Obs.	Failure	Completed questionnaire
<b>All groups</b>							4736	4608	123	7	2703
immigrants	30.07.2018 17:00	SMS	REMINDER	SENDTMXA	/person/ROF/3. kvartal/ROS 3kv_SMS3.odt	21642869	194	190	4	0	114
immigrants	24.07.2018 16:00	SMS	REFUSAL LETTER	SENDTMXA	/person/ROF/3. kvartal/ROS 3kv_sms_nektere.odt	22094492	59	58	1	0	12
immigrants	24.07.2018 15:30	E-MAIL	REFUSAL LETTER	SENDTMXA	/person/ROF/3. kvartal/ROS 3kv_epost_nektere.odt	22093664	210	200	10	0	80
immigrants	10.07.2018 17:00	SMS	REMINDER	SENDTMXA	/person/ROF/3. kvartal/ROS 3kv_SMS2.odt	21617881	328	322	5	1	193
immigrants	05.07.2018 17:00	SMS	REMINDER	SENDTMXA	/person/ROF/3. kvartal/ROS 3kv_SMS1.odt	21451911	389	383	3	3	230
immigrants	02.07.2018 17:00	SMS	REMINDER	SENDTMXA	/person/ROF/3. kvartal/ROS 3kv_SMS dag1.odt	21444177	661	656	5	0	394
immigrants	29.06.2018 15:00	E-MAIL	MAIN_JO	SENDTMXA	/person/ROF/3. kvartal/ROS 3kv_epost1.odt	21426689	671	631	40	0	378
<b>Sum group</b>							2512	2440	68	4	1401
non-immigrants	07.08.2018 17:00	SMS	REMINDER	SENDTMXA	/person/ROF/3. kvartal/ROS 3kv_SMS3.odt	21642865	184	184	0	0	114
non-immigrants	06.08.2018 16:00	SMS	REFUSAL LETTER	SENDTMXA	/person/ROF/3. kvartal/ROS 3kv_sms_nektere.odt	22279486	73	73	0	0	20
non-immigrants	06.08.2018 15:30	E-MAIL	REFUSAL LETTER	SENDTMXA	/person/ROF/3. kvartal/ROS 3kv_epost_nektere.odt	22275696	73	68	5	0	19
non-immigrants	24.07.2018 17:00	SMS	REMINDER	SENDTMXA	/person/ROF/3. kvartal/ROS 3kv_SMS2.odt	21634421	269	269	0	0	167
non-immigrants	19.07.2018 17:00	SMS	REMINDER	SENDTMXA	/person/ROF/3. kvartal/ROS 3kv_SMS1.odt	21634417	378	378	0	0	234
non-immigrants	16.07.2018 17:00	SMS	REMINDER	SENDTMXA	/person/ROF/3. kvartal/ROS 3kv_SMS dag1.odt	21634413	616	613	3	0	380
non-immigrants	13.07.2018 15:00	E-MAIL	MAIN_JO	SENDTMXA	/person/ROF/3. kvartal/ROS 3kv_epost1.odt	21634409	631	583	47	1	368
<b>Sum group</b>							2224	2168	55	1	1302

The yet-to-come “More”-button is for comparing the respondents that reacted to the different digital communications to the gross sample. We often get education bias, in addition, gender and age is often of interest. This will give us the possibility to systematically compare different communication modes and their effect on under- and overrepresented groups. Clicking the button for the main e-mail invitation, would e.g. give access to the choices and graphs presented in figure 2.

**Figure 2. Functionality behind the envisioned “More” button**

Main letter 29.06. E-mail		
education	<a href="#">diagram</a>	<a href="#">figures</a>
gender	<a href="#">diagram</a>	<a href="#">figures</a>
age	<a href="#">diagram</a>	<a href="#">figures</a>



Doing this systematically over time would mean easy access to more accurate information about how our digital communication appeal to different respondents, different surveys and different modes. These ideas will continue to be discussed and developed at Statistics Norway.

## 4. Tentative conclusions

As shown by the MIMOD survey, the “web first” strategy is currently dominant among European NSIs using mixed-mode data collection. There is great variation in terms of available contact modes and contact information, and the constantly changing (albeit at different paces) technological, social, economic, legal and other conditions make it difficult to offer very concrete recommendations regarding survey communication strategies.

Clearly, access to quality register information on addresses, mobile phone numbers and e-mail addresses is of great benefit for the contact and follow-up phases. But building up and maintaining such databases should not be the responsibility of national statistical institutions. NSIs could however encourage national and EU authorities to take on such projects, to respond to growing demands for rationalization in more fields than national statistics.

Judging from the results of MIMOD’s WP3 deliverable 1, what many NSIs should do is integrate information on each contact attempt in each contact mode in the case administration systems (Plate 2018 p. 13: “The least developed domain in many countries seems to be communications with cases.”), to be better able to evaluate and make evidence-based decisions during the data collection process.

Summing up, we believe five tentative recommendations can be made based on the above findings and discussions:

1. Consider using all available contact and response modes.
2. Use proper and coherent design principles in information materials and questionnaires

3. Be prepared to experiment and continuously develop contact strategies for initial contact, and follow-up phases
4. Design questions and questionnaires for mixed-mode data collection; do not constrain them to one mode or type of communication. For mixed-mode involving web, consider shortening questionnaires and avoid formats that are not mobile or web friendly.
5. Integrate communication with respondents for all contact modes in case administration systems.

It is the hope of the authors that the analysis of the MIMOD survey, along with the case studies and materials in the appendix of this deliverable may serve as an inspiration and source of knowledge on the three first points above. The last point will be the main topic of deliverable 3 of MIMOD's WP4, as well as deliverables from WP5.

## Literature

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## Appendix 1. Descriptions of survey communication strategies from the MIMOD survey

### NSIs using a uniform strategy for all surveys (question 20)

**Slovenia:** General strategy for WEB surveys is that advance letter is sent along with the information brochure, where there is detailed information how to log in the survey and some interesting results from previously conducted surveys. The in-house recommendation is that advance letter and reminders are sent in the beginning of the week (Monday or Tuesday). Selected persons who did not respond to the survey (also break-offs) receive reminder. In the first or second reminder (depends on the duration of the fieldwork and which combination of modes survey has) selected person is informed on the forthcoming second mode.

ICT: Advance letter + 2 reminders (in 7 days intervals). In the second reminder selected persons who have not yet responded are informed about the forthcoming visit of the interviewer (CAPI mode).

AES: Advance letter + 2 reminders (in 7 days intervals). In the second reminder selected persons who have not yet responded (and break-offs) are informed about the forthcoming telephone interview (if telephone number was assigned) and the visit of the interviewer (if the telephone number was not assigned, or selected person was not contacted during the telephone interview).

CONSUMER SURVEY: Advance letter and one reminder for non-respondents and break offs after 7 days and information about the forthcoming telephone interview (for persons with assigned telephone numbers).

**Luxembourg:** For LFS, if a phone number is found in the phone register, the respondent falls into CATI group and receives a letter that he will get a phone call.

If no phone number is found, the respondent is allocated to the CAWI group and receives a letter as well, with an invitation for the survey. If there is no feedback (interview realised) the respondent will receive a reminder letter after two weeks.

**Hungary:** Advance letters are sent a few days before data collection period. For those surveys where we have web data collection reminders are sent via email to non-respondents a few days before the close of the web survey period.

**Netherlands:** for all surveys the advance letter is sent to arrive on Friday. respondents can start filling in the questionnaire right away. Depending on the length of the fieldwork period, a reminder is sent one or two weeks later, and a second reminder again one or two weeks later. Sometimes, in web only or web/paper questionnaires, when response targets are not met, we may send a third reminder. The reminders are letters as well.

**Spain:** Advance letter is sent 1 day before CAWI is open. First reminder is sent after 8-10 days. Break-offs are followed up by CATI 10 days after the last access to the questionnaire

**Latvia:** Advanced letters are sent one week before field work starts. In case of CAWI reminders (cards) are sent one week after field work has been started.

**Iceland:** Advance letter is sent out a few days before data collection starts. SMS is sent specially to difficult cases.

**Denmark:** Letter of invitation to participate in the LFS is sent to respondents using e-boks (national mailing system where authorities can contact citizens). Invitation is sent on the first day of participation (one week after the reference week).  
SMS reminder is sent on Thursday in the same week.  
Postal letter is in the week following the reference week to the respondents that are not connected to the national mailing system (appr. 7 percent of population 15-74).

## NSIs using different strategies for each survey, sorted by survey

### *LFS2*

**Estonia:** We send a notification letter to all our Sample persons. If we have their email adress, then we`ll send it as an email, if not, we`ll send it by post/mail.

### *EU-SILC1*

**Lithuania:** Invitation one week before fieldwork. Card reminder after one week. Two e-mail reminders during fieldwork period of 3 weeks dedicated for web interwiev

### *EU-SILC2*

**Lithuania:** Invitation one week before fieldwork. Card reminder after one week. Two e-mail reminders during fieldwork period of 3 weeks dedicated for web interview

**Estonia:** We send a notification letter to all our Sample persons. If we have their email adress, then we`ll send it as an email, if not, we`ll send it by post/mail. During the CAWI period, we send reminder letters twice a week to sample persons emails.

### *EHIS*

**Portugal:** The CAWI subsample respondents receive an invitation letter with the login/password. After that, those who didn't respond receive reminders by email and by telephone (for those with valid email or telephone numbers).

**Sweden:** In EHIS 2014 the strategy was;

- i. A prenotice letter (short "teaser") was sent to the respondents
- ii. two weeks later a paper questionnaire was sent, together with an information letter that includes log-in for the web.
- iii. After another two weeks a reminder was sent (with no new questionnaire or log-in opportunities).
- iv. Two weeks after that a new reminder was sent, this time including a new paper questionnaire and log-in for the web.
- v. Ten days later the Telephone interviews started.

**Lithuania:** Invitation one week before fieldwork. e-mail reminder 1 week after fieldwork started.

- Germany:** Reference week (RW): invitation letter with information how to access Web-questionnaire (including URL and PIN),  
RW+2: Reminder letter with Paper-Questionnaire (online participation still possible),  
RW+2: Reminder letter
- Estonia:** We send a notification letter to all our Sample persons. If we have their email address, then we'll send it as an email, if not, we'll send it by post/mail. During the CAWI period, we send reminder letters twice a week to sample persons emails.

### *AES*

- Austria:** Reminder letter: Only a special group of CAPI nonRespondents (young males) got invitation letter for CAWI.  
Reminder card: Those people who did not finish CAWI received a post card reminder 2 to 3 weeks after the CAWI invitation letter.
- Lithuania:** Invitation one week before fieldwork. e-mail reminder 1 week after fieldwork started
- Norway:** Very complex sendout plan with embedded experiments. Half the sample was web->cati, the other cati->web. One invitation, simultaneous SMS, then reminder. At mode switch e-mail/sms. Also own refusal conversion e-mail/sms messages.
- Estonia:** We send a notification letter to all our Sample persons. If we have their email address, then we'll send it as an email, if not, we'll send it by post/mail.
- Finland:** The original strategy was to have a CAWI period of three weeks for all respondents and then continue with CAPI for all non-respondents. During this 3 weeks two advance letters and an SMS reminder was sent. However, after this we experienced some technical problems with our interview system which caused a delay in the data collection. Therefore, the strategy was modified and web was offered as an alternative mode all the way to the end of the data collection period. This means that the interviewers could use this possibility to motivate respondents who were reluctant to CAPI.

### *ICT*

- Portugal:** Invitation letters are sent to the first wave respondents (in CAPI). For the subsequent interviews, the reminders are sent by email and by paper (for those who don't have email).
- Sweden:**
- 1) An information letter with log-in for the webb is sent.
  - 2) Two weeks later a reminder with new log-in is sent.
  - 3) After further 10 Days the Telephone interviewing starts
  - 4) After another 10 Days a new reminder with log in for the webb is sent.
- Lithuania:** Invitation one week before fieldwork. Card reminder after one week. Two e-mail reminders during fieldwork period of 3 weeks dedicated for web interview

**France:** CAWI-PAPI :

1. April 1 : Advance letter with ID + Password to connect to the website
2. Three weeks later : Reminder letter (reminder of ID + Password) with PAPI Questionnaire + prepaid envelope
3. Three weeks later : Reminder letter

CATI : 1. April 1 : Advance letter + Flyer  
2. APRIL-MAY : Extra letter for refusal or household we cannot contact

**Switzerland:** People receive an invitation letter with link, username and password. After the second reminder letter, they are called by phone to make the survey. In case of break off, we send an email / phone to ask people to fill the questionnaire.

**Estonia:** We send a notification letter to all our Sample persons. If we have their email address, then we'll send it as an email, if not, we'll send it by post/mail. During the CAWI period, we send reminder letters twice a week to sample persons emails.

**Finland:** In this survey we have experimented with a lot of new advance strategies and communication means to different respondent groups, so the process is too complicated to describe here. The strategy for each respondent is decided based on the following facts: age, language, education level and whether or not the telephone number is known.

**Italy:**

- Advance letter (one week before the start of the fieldwork)
- Two reminders to non-respondents (10 days after the start and 25 days after the start of the fieldwork)
- Four reminders to break-off after the closing of the Cawi mode

#### *HBS*

**Poland:** There is an advance letter to households. During the first visit in household interviewer presents paper and on-line diary and respondents can choose more convenient method. Communication with respondent based on contact with interviewer (personal, telephone, e-mail)

#### *HETUS*

**Estonia:** We send a notification letter to all our Sample persons. If we have their email address, then we'll send it as an email, if not, we'll send it by post/mail.

#### *National surveys*

**Portugal 1:** Invitation letters are sent to the CAPI sample respondents. For the subsequent interviews (in CATI), the reminders are only sent by email.

**Portugal 2:** Invitation letters are sent to all CAWI sample respondents (with login/passwords) and reminders by email (segmentation by respondent profile and geographic location). Also, reminders by email are sent to break-offs. Some contacts were made by telephone to respondents that showed more difficulties.

**Sweden 1:**

- An information letter to those who participated before and choosed mode, by email or postal.
- An invitation with log-in for the web is sent by postal (all in first wave) or e-mail.
- Reminders are sent out by e-mail and postal the first 10 days and about one week before the data Collection ends.

**Sweden 2:**

- 1) An information letter with log-in for the web is sent.
- 2) 1 week later a reminder with new log-in is sent.
- 3) After further 5 Days the Telephone interviewing starts

**Lithuania 1:**

Invitation one week before fieldwork. e-mail reminder 3 days after fieldwork started

**France 1:**

- 1) CAWI
  - 28/02 : Advance letter, without PAPI questionnaire
  - 02/03 : Email with ID + Password to connect to the website
  - 14/03 : Reminder email
  - 20/03 : Recovery email
  - 06/04 : Reminder email
- 2) PAPI:
  - 26/03 : Advance letter with PAPI questionnaire + prepaid envelope
- 3) CATI:
  - 27/04 : Advance letter announcing the phone call

**Norway 1:**

The Norwegian housing panel is sequential mix-mode with two weeks of data collection. The first is a web week and the second CATI. Friday before the web week a pre-invitation sms is sent to the respondents with a link to the questionnaire at 09.30. Respondents that participated last month and last month's non-respondents are targeted with different information. On Monday an invitation email and an invitation sms is sent at 09.50. In Tuesday a reminder email and a reminder sms is sent to non-respondents at 09.50. Wednesday a second wave of reminders are sent at 09.50. On Monday week two CATI-mode starts, but the web questionnaire is still available to the respondents during the whole data collection. On Tuesday the second week a sms reminder with link to the web questionnaire is sent at 18.30 trying to reach people at different times. In total; 1 pre-invitation sms, 1 invitation email, 1 invitation sms, 3 sms reminders, 2 email reminders.

**Norway 2:**

Split sample experiment. Half cati->cawi, other half cawi->cati. Pre-invitation E-mail, invitation SMS. For CATI, reminder SMS every monday in consecutive weeks. For CAWI, reminders 1-2 times a week, switching between e-mail and SMS. Less frequent towards end of data collection.

**Norway 3:**

Two weeks of web, then switch to three weeks of CATI, with the web questionnaire still available. CATI follow-up of breakoff as well, from breakoff point. E-mail and SMS invitation at CAWI startup. Weekly reminders SMS/CATI reminders. New e-mail and SMS at CATI startup informing of this. Weekly SMS and CATI reminders.

**Finland 1:**

For the mixed mode (CAWI-PAPI) respondents: 4 waves of advance letters with about 2 weeks in between. First two letters offer web only, the ones after that include the PAPI questionnaire with return envelope. One sms reminder to respondents under 50 years between the 2nd and 3rd waves, including a link to the motivation video.

**Italy 1:**

Advance letter (one week before the start of the fieldwork)

Reminders to non-respondents every week during the Cawi mode

Reminders to break-off are sent every week until the closing of the survey