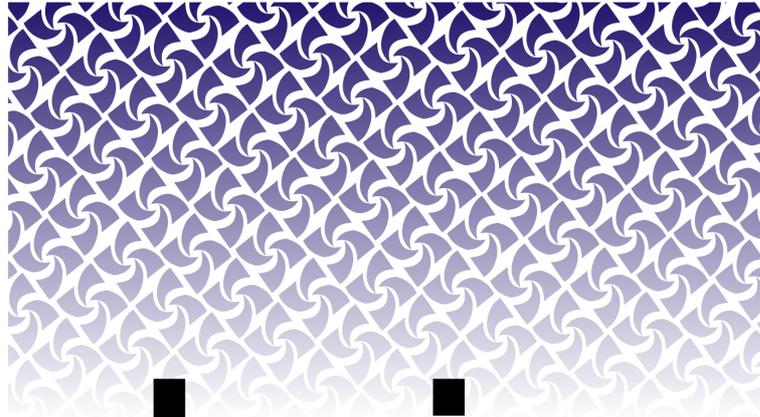


10th Users meeting



2006

blaise[®]

Programme and Abstracts

10th International Blaise Users Conference

Papendal Hotel and Conference Centre

Papendal, The Netherlands, 9-12 May 2006



Statistics Netherlands

Introduction

IBUC 2006

The 10th International Blaise Users Conference (IBUC 2006) is organised from 9 to 12 May 2006 in the Papendal Hotel and Conference Centre in Arnhem, The Netherlands.

IBUC 2006 is an international event around the use of Blaise and associated software. The conference includes 4 days of presentations with emphasis on the implementation and application of Blaise in a computer assisted interviewing (CAI) environment.

The last day of the conference also includes the International Blaise User Group (IBUG) meeting which will take place upon completion of the formal presentations.

The Blaise Corporate License Users Board (BCLUB) meeting will be held on Friday, May 12, 2006 on site at the Papendal Hotel and Conference Centre. Those holding corporate licenses will receive further information about this meeting directly from the BCLUB.

Local Organising Committee

IBUC 2006 was organised and hosted by Statistics Netherlands. The Local Organising Committee consisted of

- Lon Hofman
- Han Hölsgens
- Peter Sinkiewicz

Scientific Programme Committee

The Scientific Programme Committee, chaired by Vesa Kuusela, Statistics Finland, has reviewed abstract submissions for all papers, posters, and technical presentations and subsequently prepared the conference programme. Members of the committee included:

- Vesa Kuusela (Statistics Finland, Chair)
- Karen-Ann Bagwell (US Bureau of the Census)
- Jelke Bethlehem (Statistics Netherlands)
- Bill Connett (University of Michigan, USA)
- Rebecca Lui (Statistics Canada)
- Tony Manners (Office for National Statistics, UK)
- Mark Pierzchala (Mathematica Policy Research, USA)
- Fred Wensing (Australian Bureau of Statistics)

Day 1, Tuesday May 9, 2006

09:00-10:30	Arrival and registration
10:30-12:00	Opening Session
	Welcome <i>Vesa Kuusela (Chairman International Blaise Users Group)</i> <i>Gosse van der Veen (Director-General, Statistics Netherlands)</i>
	Keynote speech 1 <i>Wouter Keller (M&I / Argitek)</i>
	Keynote speech 2 <i>Jim Smith (Westat)</i>
12:00-13:00	Lunch
13:00-14:30	Session 1.1: Blaise in Practice <i>Chair: Karen-Ann Bagwell</i>
	Labour Force Survey: Handling Multiple-Household Dwellings in Blaise <i>Zipora Radian, Evgenia Luskin & Chaggit Breuer</i>
	Listing Part 2 - Using Blaise 4.7 for Coding Listing Instruments <i>Rob Wallace, Roberto Picha & Michael Mangiapane</i>
	The New, Adopted German Microcensus and the Integrated Labour Force Survey - User Specified Solutions with Blaise <i>Stephan Matthias</i>
	Training and Learning Opportunities using Blaise <i>Colin Setchfield</i>
14:30-15:00	Coffee / tea
15:00-16:30	Session 1.2: History of Blaise <i>Chair: Jelke Bethlehem</i>
	Blaise 20 years Alive and Kicking <i>Jelke Bethlehem & Lon Hofman</i>
	Experts Roundtable
17:00-18:00	Happy hour
18:00	Barbecue

Day 2, Wednesday May 10, 2006

08:30-10:00	Session 2.1: Standardising <i>Chair: Fred Wensing</i>
	In-house Support for Blaise Application Developers and Users <i>Janica Cajhen & Pavle Kozjek</i>
	Blaise Programming Techniques for Better Documentation <i>Peter Sparks & James Hagerman</i>
	Standardizing and Automating Blaise Output Test Data Delivery (TransSAS) <i>Latha Srinivasamohan</i>
	Developing an Integrated Household Survey (IHS) Blaise Questionnaire from Four Major Social Surveys <i>Tim Burrell</i>
10:00-10:30	Coffee / tea
10:30-12:00	Session 2.2: Cati Considerations <i>Chair: Vesa Kuusela</i>
	Can we Reach You by Telephone? <i>Fannie Cobben</i>
	Experiences of Usage of Blaise in CATI surveys <i>Stefania Macchia & Manuela Murgia</i>
	NASS CASIC Survey Administration Application <i>Everett Olbert & Roger Schou</i>
	A Multi-mode CATI-Web Survey Experience with Blaise <i>Craig Ray</i>
12:00-13:30	Lunch (including Poster sessions)
13:30-15:00	Session 2.3: Multi-mode <i>Chair: Bill Connett</i>
	Disparate Modes and their Effect on Instrument Design <i>Mark Pierzchala</i>
	Questionnaire Design in Blaise for a Multimode Survey <i>Hilde Degerdal & Jan Haslund</i>
	Distributed CAPI Interviewing with Blaise IS for the Web for the Adolescent Medicine Trials Network for HIV/AIDS Interventions <i>Rick Mitchell</i>
	Blaise IS and Accessibility for the Visually-impaired <i>Jim O'Reilly</i>
15:00-15:30	Coffee / tea
15:30-17:00	Session 2.4: Challenges at Statistics Netherlands <i>Chair: Lon Hofman</i>
	The Dutch Annual Business Inquiry: Developing and Testing an Electronic Form <i>Ger Snijkers, Evrim Onat, Rachel Vis & Robert 't Hart</i>
	CASI Questionnaires with Blaise 4.7 <i>Gerrit de Bolster</i>
	Basil. A New Tool for CASI in Blaise <i>Roger Linssen & Jo Tonglet</i>
	Data Contact Center. Back Office Data Handling <i>Paul van Venrooij</i>

Day 3, Thursday May 11, 2006

08:30-10:00	Session 3.1: Blaise Team Presents <i>Chair: Lon Hofman</i>
	Blaise 4.8
10:00-10:30	Coffee / tea
10:30-12:00	Session 3.2: Blaise Team Presents <i>Chair: Roger Linssen</i>
	Possible Future Directions
12:00-13:30	Lunch (including Poster sessions)
13:30-14:15	Session 3.3: Transformations <i>Chair: Jim O'Reilly</i>
	Computer Assisted Coding by Interviewers <i>Wim Hacking, John Michiels & Saskia Janssen-Jansen</i>
	MultiRelaX with BCP as a Replacement for Cameleon <i>Marien Lina & Richard Frey</i>
15:00-	Social program
	Visit to the Kröller-Müller museum Dinner at Burgers' Zoo

Day 4, Friday May 12, 2006

08:30-10:00	Session 4.1: Connecting <i>Chair: Rebecca Lui</i>
	Experiences with Dynamic Link Libraries <i>Youhong Liu & Gina-Qian Cheung</i>
	Methods of Integrating External Software into Blaise Surveys <i>Lilia Filippenko, Joseph Nofziger, Mai Nguyen & Roger Osborn</i>
	Using the Blaise Component Pack from within a .NET Framework To Develop Data Management Tools <i>Leonard Hart, Robert Thompson & John Mamer</i>
	Using Blaise to Apply Edits to Data held in an Input Data Warehouse <i>Fred Wensing</i>
10:00-10:30	Coffee / tea
10:30-12:00	Session 4.2: Alongside the Data (Paradata) <i>Chair: Mark Pierzchala</i>
	Blaise PlayBack And Recovery System <i>Youhong Liu & Gina-Qian Cheung</i>
	A Solution with the Aim of an Optimal Evaluation of the Time of Interview under CAPI: the Statistical Exploitation and Analysis of the Audit Trail File (.ADT) with the Software S.A.S <i>Georges Bourdallé</i>
	Active Management: A New Strategy for Managing Data Collection <i>Luc Tremblay</i>
	Work Flow for the Projection of the German Microcensus Data Using Blaise Bascula <i>Kirsten Iversen</i>
12:00-13:00	Lunch
13:00-13:45	IBUG Plenary Meeting <i>Chair: Vesa Kuusela</i>
13:45-14:00	Closing remarks
14:00-16:00	B-Club Meeting <i>Chair: Jocelyn Burgess</i>

Posters

User-friendly Web Surveys <i>Hayo Bethlehem</i>
Using the Blaise Component Pack in the .NET environment <i>Rob Groeneveld</i>
Calculator DLL <i>Roberto Picha</i>
Navigation in CAI Systems <i>Mark Pierzchala</i>
The Selection of Strata in Nonresponse Adjustment <i>Barry Schouten</i>
A CAPI System with Wireless Telecommunications <i>Norberts Talers & Palvels Onutrijevs</i>
Multiple Researchers working at the Blaise Benchmark Services for the Disabled Act (WVG) <i>Carlo Vreugde & Mark Gremmen</i>

Session 1.1. Blaise in Practice

Labour Force Survey: Handling Multiple-Household Dwellings in Blaise

Zipora Radian, Evgenia Luskin & Chaggit Breuer (Central Bureau of Statistics of Israel)

Israel's Labour Force Survey (LFS) introduced the use of Blaise to our Central Bureau of Statistics in 1999. The survey tracks changes to Israel's labour force, its size and characteristics, the extent of unemployment and other trends. It also provides demographic information on Israeli households.

The LFS is a continuous panel survey, returning to a sample of approximately 12,000 households four times over the course of a year and a half. Households are interviewed face-to-face in Panels A and D, and by phone in panels B and C. Data collection thus far has been achieved using CADI and CATI respectively, but as of next year we hope to begin using CAPI instead of CADI.

The survey is sampled from a framework of dwellings. One of the problems we encountered during development of the CAPI questionnaire was related to Multiple-Household Dwellings (MHDs). A household is defined as a group of persons living in one dwelling who have a common expense budget for food. A household usually consists of a family, but may also consist of only one person or include persons who have no family relationships. Approximately 3% of all dwellings have multiple households sharing their space. This configuration is most often found among immigrants, students and foreign workers. Surveyors are expected to interview a representative of each household in a dwelling. A separate questionnaire must therefore be used for each household.

This paper outlines the complexity of the issue and the solution provided for conducting MHD interviews. Using Blaise and Maniplus, we have developed a user-friendly questionnaire, able to identify multiple households and to generate a separate questionnaire for each such household.

Listing Part 2 - Using Blaise 4.7 for Coding Listing Instruments

Rob Wallace, Roberto Picha & Michael Mangiapane (U.S. Census Bureau)

At the 2004 IBUC conference, a paper was presented on the different listing operations conducted by the Census Bureau. That paper discussed the different listing surveys conducted by the Census Bureau, how Blaise was used to code some of current listing applications, and challenges that faced us with converting two of our larger, complex, listing instruments to Blaise - Permit Address Listing (PAL) and Survey of Construction (SOC).

For the 2006 IBUC conference, this paper will follow-up on the progress of converting these two listing surveys from Clipper to Blaise 4.7. Topics are:

- Discuss requirements gathering process
- Review some of the challenging functionality requested by the sponsors. This would include things such as:
 - Calling an external program from within the listing and passing data from that program into the listing table,
 - Creating look-up tables on the fly, based on what has already been listed,
 - Using different listing tables based on interviewer preference, and
 - Toggling between a "line view" of the listing and "full screen view" of a listing record.
- Discuss Blaise Free Form Navigation – can this work for listing?
- Discuss approach for handling some of this functionality
- Discuss issues encountered with using Blaise 4.7 for listing
- Demo the latest version of one or both instruments

The concept of creating a listing instrument seems relatively simple. One simply creates a table and list data. However, things are never that simple. There lots of special situations and circumstances that must be addressed and handled by the listing instrument and related programs. Things such as re-entering a completed listing to add more records, generating sample cases on the fly, re-starting listings that are not correct, and using different tables for different preferences. All of these requirements make programming a listing instrument an interesting challenge.

The New, Adopted German Microcensus and the Integrated Labour Force Survey - User Specified Solutions with Blaise

Stephan Matthias (Statistisches Bundesamt, Germany)

With about 820 000 surveyed persons microcensus is the largest official household survey in Germany. It integrates the Labour Force Survey of the European Union, which has to be accomplished in all member states.

Up to and including 2004 microcensus data were surveyed once a year on a specific week under review. Due to social changes, particularly with regard to individualisation and mobilisation of social circumstances, these one-times-a-year-surveyed data, lost more and more relevance. As these changes take place very fast these data are no longer appropriate to, reliably reflect the real circumstances.

Furthermore the Council regulation on "Labour Force Survey" of 1998 stipulates an equal distribution of interviews over all calendar weeks of the year as well as the announcement of quarterly and yearly average data. Therefore the heads of agencies decided in November 2001 that the microcensus has to be extended to the whole year with a constantly moving week. The new microcensus law implements this resolution. In 2005 survey has been realized for the first time in accordance with the new regulations. The new microcensus particularly aimed at a gain in topicality and quality of the data and at the implementation of the EU Council's regulation on Labour Force Survey.

The improvement in actuality will be achieved by analysis and publications of quarterly data (for some parts of the questionnaire monthly analysis are planned as well) as well as by a fast availability of the data. The improvement in quality will be achieved by the aid of an area-wide use of Laptops, an improvement of the professional quality for the honorary interviewers and their reduction. As a result of these comprehensive innovations, census and the process organization had to undergo a radical change.

This paper points out how we solved the problem of organizing the new microcensus by the help of user specified developed supporting programs in Blaise and Manipula. Due to the federal structure, we particularly had to take into account the organizational and technical differences like different operating systems and data processing software. I hope you will get a valuable insight into the new German Microcensus.

Training and Learning Opportunities using Blaise

Colin Setchfield (Office for National Statistics, UK)

Prior to 2005, at the Office for National Statistics [ONS], most survey instructions for interviewers continued to be provided in a paper format. These were supplemented by minimal on-screen instructions/advice provided only at certain specific questions.

The development of the IHS has required ONS to re-evaluate its dependence on non-interactive paper and electronic documentation. For the survey's Field Trials, ONS developed its first WinHelp Question-by-Question help facility and interactive interviewer training by means of Electronic Learning Questionnaires [ELQs].

These developments addressed the issues of administering the extensive and overlapping instructions that resulted from the merger of several large complex surveys into one Blaise instrument, and providing learning resources better suited to a new integrated interviewer fieldforce. (Previously, two exclusive fieldforces worked on separate surveys with different tailored training.)

The paper will look at the issues and challenges for an organisation implementing WinHelp on its Blaise questionnaires, particularly in terms of design and functionality. It will explore the options available in Blaise for achieving this, and explain what guided ONS's choice in its final selection including acknowledging negative impacts this has produced.

The paper will also describe the development of the ELQ from its early simple form to the final interactive version, demonstrate both the Q-by-Q help and ELQ, and conclude by outlining the intended future use of Blaise by ONS to create training/learning tools for use with its surveys.

Session 1.2. History of Blaise

Blaise 20 Years Alive and Kicking

Jelke Bethlehem & Lon Hofman (Statistics Netherlands)

The first version of the Blaise System for computer-assisted data collection was released in 1986. So the year 2006 marks the 20-th birthday of the system. Although operating systems may have changed over time, and new data collection techniques may have emerged, the basic ideas and concepts of Blaise have remained the same over the years. The heart of the system, the Blaise language, has proved to be a powerful means to define data collection instruments. Designed in a time where most statistical agencies still used mainframe computers, and the first MS-DOS computers came on the market, Blaise was able to keep up with rapid developments in information technology, and still plays a leading role in the world of data collection for official statistics. This paper gives an account of the 20 year long history of the Blaise System. It described why it was developed and how it evolved over time.

Session 2.1. Standardising

In-house support for Blaise Application Developers and Users

Pavle Kozjek and Jana Cajhen (Statistical Office of Slovenia, SORS)

At Statistical Office of Slovenia, Blaise is used as a standard tool for survey data collection and editing. In twelve years (from the beginning in 1993) it becomes one of the key tools at SORS, used by different profiles and levels of users (developers, interviewers, data editing staff, subject-matter specialists...) for different purposes: data collection and editing in CAI surveys, post collection data editing, high speed data entry, various kinds of data processing, web data collection etc. Such wide range of usage requires efficient and well organised support to each specific group of users.

With some other software tools and systems used at SORS (e.g. SAS, Oracle) support is mainly organised by external organizations that provide courses, knowledge and literature for SORS employees. In case of Blaise we decided to establish an in-house basis of knowledge, which is maintained and improved by a small number of "power Blaise users". They are responsible to follow the development of the Blaise system, take and study the SORS relevant modules and solutions from it, and spread the new knowledge to the other Blaise users at SORS. The main mode of spreading knowledge are internal courses and workshops on different Blaise topics, intended for different profiles of Blaise users.

The paper describes the general approach and organization of support for different Blaise users at SORS and stresses some most successful solutions like internal courses and training, on-line manuals and developer's guides, help desk etc. Through this support, the better understanding of software purposes and functionality is achieved, and it helps the Blaise system to be well integrated into the complete statistical process at SORS.

Blaise Programming Techniques for Better Documentation

Peter Sparks & Jim Hagerman (University of Michigan, USA)

The Blaise programming language is very versatile in order to implement complex surveys. However, this same feature can be a problem when documenting the questionnaire. Blocks, parameters, procedures, parallel blocks, complex logic, fills, external files and more can yield a bewildering jumble of code.

This paper examines methods that can be used by the programmers to aid in providing clear documentation for a variety of users: other programmers, non-technical survey managers, and automated documentation systems (i.e., BlaiseDoc). Overly complex code typically yields poor or no documentation, reduced performance, and is not robust. Programming for good documentation improves portability and maintainability of the program code, better output from automated documentation systems, and the ability to compare cross-wave instruments.

Standardizing and Automating Blaise Output Test Data Delivery (TransSAS)

Latha Srinivasamohan (U.S. Census Bureau)

The Technologies Management Office (TMO) has developed and supports a multi-user testing environment for instrument testing. For our CASES instruments we provided data output from this testing environment using the CASES Output utility. Until recently, however, we were not providing similar output from our Blaise instruments.

This paper will describe the importance of data verification by sponsors and data processors and will discuss how TransSAS was implemented in a multi-user testing environment. TransSAS is an application that allows instrument testers and data processors a way to retrieve and review SAS output from a Blaise instrument or module running on the TMO instrument testing environment, referred to as the TMOUsers system.

Topics:

- Overview of the multi-user testing environment at the Census Bureau;
- Common tools used to create TransSAS application and its usefulness;
- Importance of identifying data issues in early stages;
- Streamlining the extraction of data from Blaise to SAS datasets;
- Packaging and standardizing data delivery.

Providing this mechanism for instrument testers and data processors to retrieve test output from Blaise instruments provides the following benefits:

- The application is low maintenance and cost effective;
- It ensures better data quality;

- It improves time efficiency for programmers.
-

Developing an Integrated Household Survey (IHS) Blaise Questionnaire from four Major Social Surveys

Tim Burrell (Office for National Statistics, UK)

The Office for National Statistics (ONS) is undertaking a project to merge the 4 main ONS continuous household surveys into one Integrated Household Survey (previously known as the Continuous Population Survey).

The rationale behind combining these surveys is, amongst other things, to take advantage of common practices across these surveys including the types of questions asked and an increased sample size to provide better quality of information on key social and economic variables.

Although the four component surveys share some common practices, there are some important differences. These include different procedures for interviewing such as who within the households is interviewed, policies for which cases are re-issued and whether proxy interviews are allowed. There are also differences between surveys in terms of the subject matter and methods of data collection. One of the surveys has a diary element for collecting household expenditure while another well has a self completion questionnaire administered using CASI or on paper.

This paper will discuss the issues and solutions for how to programme a Blaise questionnaire which can handle all these different rules and structures with a view to producing coherent and consistent outputs with the original surveys.

Session 2.2. Cati Considerations

Can we Reach You by Telephone?

Fannie Cobben (Statistics Netherlands)

The sampling frame for a telephone survey is obtained by linking telephone numbers to the names/addresses from the Municipal Base Administration. This is achieved by handing over the names/addresses to the Dutch telephone company KPN. However, such links will only be established for individuals with a listed, fixed-line number. As a consequence, individuals with an unlisted fixed-line number, individuals with only a mobile phone, and individuals without a phone, will never be selected for a telephone survey. Currently, the percentage of individuals with a listed, fixed-line number is estimated to be between 60% and 70%. This means that there is a substantial undercoverage of 30% to 40%.

Statistics Netherlands faces the challenge to produce high quality statistics under severe budget cuts imposed by the government. One way of realising this is implementing more cost-effective modes of data collection. Statistics Netherlands has always favoured face-to-face interviewing for its social and demographic surveys. Due to the persuasive power and assistance of interviewers visiting selected individuals or households, nonresponse is relatively low and data quality is high. However, the costs of this mode of interviewing are relatively high. A large group of trained interviewers is required that is distributed all over the country. To reduce costs, Statistics Netherlands is now considering changing some of its face-to-face surveys into telephone surveys. By concentrating interviewers in one call centre, a smaller group is sufficient. No more time is spent on travel, and this also means no more travel costs are involved.

Although a possible change from face-to-face interviewing to telephone interviewing may substantially reduce the costs of the surveys, there is also a potential drawback: it may reduce the quality of the produced statistics. In this presentation we explore the possible effects of changing the mode of data collection in one of the Statistics Netherlands surveys: the Integrated Survey on Living Conditions, denoted by its Dutch acronym POLS; 'Permanent Onderzoek LeefSituatie'.

Experiences of Usage of Blaise in CATI surveys

Stefania Macchia & Manuela Murgia (ISTAT, Italy)

A lot of surveys in Istat are carried out with CATI technique and for a great number of them a strategy has been defined aimed at improving the quality of data. This strategy consists in relying on private companies only for the call centre and the selection of interviewers and in providing them with the entire software procedure to be used for the data capturing phase, which is based on the Blaise system.

Having adopted this strategy with success for more than three years made us cope with different requirements expressed by each survey that we solved either exploiting the potentialities of Blaise or integrating the software procedure with other software packages.

Some of these solutions turned to constitute standard tools in our procedures, some others needed to be used only for particular purposes, so we did not develop standard functions, but we identified the software packages to be used for them, while for other requirements, we would like to have at disposal some specific functions included in the Blaise system. The last ones are those requirements which, even if are not common to all the surveys, are typical of a well identified subset of them and would require a big programming effort to be integrated in a software procedure.

With the purpose of clarifying what will be widely described in the paper, we refer, for instance, to the requirements which are common to all the CATI surveys. For them, we standardised the solutions in order to be easily adapted to each situation. They concern:

- the production of a certain number of reports to monitor daily the interviewing phase both from the qualitative and the quantitative point of view,
- a standard procedure for the electronic transmission of data (interviews and reports) from the external companies to Istat, which guarantees all the security requirements,
- a function which allows the display on the screen, during all the interview, of the called telephone number and name of the person,
- etc.

Other requirements are proper of certain surveys. For this kind of subjects, as already said, we did not develop standard procedures, but we identified the software tools to be used. For instance, for two surveys on individuals we carried out with Blaise, the coding of Occupation during the interview was a particularly delicate activity, so we used the Blaise assisted coding function, building a very reach *coding dictionary* (list of descriptions with

correspondent codes) and we monitored the performances of interviewers on this subject through the usage of control charts developed with the SAS QC software.

Other needs are recurrent in a lot of surveys, even if not in all of them. For instance, the most important requirement is that in household surveys it is often necessary to contact more than one member of the household to get the interview and to assign a dial result to those members who are contacted but do not wish to co-operate or are not eligible. It has been really hard to implement this function, because it is in contrast with the logic of the Blaise scheduler, and the software solution developed is not immediately portable to other surveys, so we think it would be better to have this potentiality directly provided by Blaise.

Other particular aspects will be described in the paper, dwelling upon the problems encountered and the results obtained in the different surveys.

NASS CASIC Survey Administration Application

Everett Olbert and Roger Schou (National Agricultural Statistics Service, USA)

One of the highest priorities of NASS is to develop and improve survey administration capabilities in its 5 Data Collection Centers (DCC) concerning costs, response rates, case management, and enumerator performance. In response to that priority, the NASS CASIC Section is developing a Survey Administration Application that will tie data together from the Blaise CATI history file, survey response data, NASS Blaise Interviewer database, and National Association of State Departments of Agriculture (NASDA) cost data in order to give NASS DCC coordinators and NASDA supervisors the information they need on a daily basis to manage their data collection efforts. The objectives of the CASIC Survey Administration Application are:

1. To provide tools, such as cost and efficiency reports, that help DCC coordinators and NASDA supervisors manage BLAISE operations and NASDA interviewer staff efficiently and effectively.
2. To provide timely and objective measures of interviewer performance and behavior.
3. To indicate when, where, and for whom, additional training may be needed.
4. To improve tracking tools to help with better cost estimates for new data collection efforts.
5. To identify potential problem areas in instrument and questionnaire design.
6. To ensure high quality data and meet target response rates.

Currently, NASS DCC Coordinators calculate costs on a weekly basis by hand which is very inefficient and time consuming. DCC coordinators need the ability and tools to run cost reports on a daily basis to prevent cost overruns. The CASIC Survey Administration Application will retrieve data from NASS's electronic time sheet system and combine it with data from the interviewer database and survey response data to provide daily cost updates to DCC coordinators and NASDA supervisors.

Providing a quality data product to Serviced States is a priority of each DCC. Maintaining high response rates is a goal and objective of each DCC in order to ensure quality data is being delivered. The CASIC Survey Administration Application will provide reports such as the Office Interviewer Efficiency report, Daily Cost report, and Survey Response Rate report on a real time basis as well as post survey reports. The system will also have the ability to create an IGL file for any given survey.

This paper will discuss the functionality of the CASIC Survey Administration Application as well as several of the reports that can be generated from the system.

The presentation of this paper will include an explanation of the functionality of the system and a discussion of some of the reports available.

A Multi-mode CATI-Web Survey Experience with Blaise

Graig Ray (Westat, USA)

Multi-model surveys using the web and traditional CAPI or CATI methods are an increasingly important research approach. The Blaise system architecture offers a promising set of capabilities for integrating these modes in both development and implementation. This paper discusses Westat's first implementation of a production CATI-Web survey with Blaise for a nationally representative sample, collecting information on the public's need for, access to, and use of cancer-related information.

Session 2.3. Multi-mode Data Collection

Disparate Modes and Their Effect on Instrument Design

Mark Pierzchala (*Mathematica Policy Research, USA*)

Multimode surveys are increasingly common for a variety of reasons including attempts to increase response rates, lower costs, and accelerate data collection. As practitioners of multimode surveys, we concern ourselves with a variety of issues, but few are as important as the rendering of the electronic (e.g., Blaise) instrument. One concern is that in a multimode survey we may find ourselves with different question forms, for the same item, across the modes. This paper defines and elaborates on the concept of *disparate modes* and their impact on instrument design strategies. Two modes of data collection are defined as *disparate* if they differ in any one of three intrinsic aspects of data collection mode: presentation (aural vs visual), administration (self vs interviewer), and medium (dynamic vs passive). MPR has found that the greater the disparity between the modes, the harder it is to maintain consistency in instrument design between modes.

Questionnaire design in Blaise for a multimode survey

Hilde Degerdal & Jan Haslund (*Statistics Norway*)

In the paper we will discuss the design implications involved in collecting data via three different survey modes for the 3rd Continuous Vocational Training Survey 2006 in Norway (CVTS3). The survey objective is to implement the CVTS3 according to the specifications to be agreed between Eurostat and EU Member States, in the CVTS Commission Implementing Regulation.

In addition to CVTS3 objective itself, Statistics Norway will provide a pilot addressing enterprises with 1-9 employees and one addressing new NACE categories. Further, Statistics Norway will implement new methodologies for CVTS3 i.e. web questionnaires. The latter will be one of the key elements in our design.

So, in addition to our survey objects, we have two experimental objectives:

1. To study possible instrument effects of the combination of methods originally proposed in the project
2. To study how interviewers most efficiently can be used in business surveys

In the CVT3 survey we will have to designs, one for large and one for medium size enterprises. It is planned that enterprises with more than 250 employees should be contacted by telephone and then interviewed by personal interviews, while smaller companies will be contacted by post and offered to respond on web or a paper questionnaire. In the first design there is no separate reminding strategy. In the second design, however, those who have not responded before the deadline will receive a postal reminder. Schematic these two designs can be described like this:

- Design1: Telephone contact ▶ Computer Assisted Personal Interviewing (CAPI)
- Design2: Postal contact ▶ Paper and Pencil or Computer Assisted Self Completion (PAPI/CAWI) ▶ Postal reminder

In addition we would like to compare these two designs with a third one that we believe might be a more cost efficient way of using interviewers in business surveys. This design can be described like this:

- Design3: Telephone contact ▶ Pencil or Computer Assisted Self Completion (PAPI/CAWI) ▶ Telephone reminder

The telephone reminder may cause an interview, and then we need a CATI-instrument.

All data is going to be analysed in one joined data file. We want the data manipulation to be as straight forward as possible. For CVTS, it is extremely great demands on consistent of the data. Hence, it is also convenient that all data are collected with the same set of rules. That is one reason we decided to make one questionnaire for all methods. The tool we have for making different instruments out of on questionnaire is Blaise!

Of course the different modes require different level of how strict the checks are executed. We will also have to adjust the help-instructions after the mode of data collection; taking into consideration that some of the instruments are meant for professional data collectors (interviewers) and other are for amateurs.

In Statistics Norway we have clear guidelines for what a web questionnaire should look like. Gustav Haraldsen has made a manual on how to make good web questionnaires, and we need to follow those guidelines. It means very high focus on user-friendliness.

In our paper we will describe the process of making the different instruments. We will start the work with the questions as a word-document. By now (November 2005) we think we will start with authoring the instrument for CAPI. When writing the code we have to keep in mind that it shall be as easy as possible to convert it into a WEB-questionnaire. The paper will focus on what we did take into consideration, and what did we learn during the process, that we should have taken into consideration. It will also describe the challenges we met during the process, in following the guidelines for user-friendly web questionnaires.

Distributed CAPI Interviewing with Blaise IS for the Web for the Adolescent Medicine Trials Network for HIV/AIDS Interventions

Rick Mitchell (Westat, USA)

The Adolescent Medicine Trials Network for HIV/AIDS Interventions (ATN) has introduced its newest behavioral Computer Assisted Personal Interview (CAPI) via the Internet to multiple clinical sites throughout the United States. The CAPI has been administered by trained interviewers to HIV negative adolescents as part of an HIV/AIDS intervention study. This paper will discuss the ATN's distributed CAPI interviewing experience with Blaise IS for the web, which in its early stages has already been well received by developers, interviewers, and our clients. The wealth of experience that has been gained from the ATN project will undoubtedly be extremely beneficial to future web-based CAPIs.

Blaise IS and accessibility for the visually-impaired

Jim O'Reilly (Westat, USA)

Accessibility for the disabled, particularly the visually-impaired, is an emerging issue for internet surveys. Government and research requirements increasingly call for internet surveys to allow the disabled to participate fully. This paper discusses U.S. Federal requirements, accessibility testing tools and methods, datamodel design issues, Blaise IS capabilities and our experiences testing IS accessibility.

Session 2.4. Challenges at Statistics Netherlands

The Dutch Annual Business Inquiry: Developing and testing an electronic form

Ger Snijkers, Evrim Onat, Rachel Vis & Robert 't Hart (Statistics Netherlands)

A major issue in Dutch policy as to data reporting in general is reduction of response burden. As a consequence, Statistics Netherlands strives for reduction of data reporting for individual businesses, as well as making data reporting for individual businesses as efficient and easy as possible. One way to do that is providing electronic forms via the internet. This is also what businesses ask for.

In 2004, the paper for the Dutch Annual Business Inquiry was redesigned. First of all, the form was stripped to items necessary with regard to output demands. Secondly, the form was redesigned as to the structure (sections of items), instructions and wording. And thirdly, the form was restyled as to lay-out. This opened the road to developing an electronic version of this complex questionnaire.

In a number of steps this form was developed and tested. In a small usability test functional issues of the form were investigated, using a draft version that very much looked like the original paper form. This test also resulted in the identification of navigational issues, edit rules and design issues that make an e-form different from a paper form. The result of this test was a prototype of the e-form. In the second step the prototype is discussed with regard to programming issues, since for various branches of businesses the form has to be generated automatically.

Next a new electronic form based on the recommendations from the previous test was developed. In the summer of 2005 this electronic form was built and in the fall it was tested with a small number of businesses. The aim will be to send out a user friendly electronic form to 7000 businesses in 2006.

CASI Questionnaires with Blaise 4.7

Gerrit de Bolster (Statistics Netherlands)

With the introduction of Blaise 4.7 new powerful features came available. The possibility to define your own menu options and buttons and to invoke through these options new processes like Maniplus set-up's including data interchange allowed us at Statistics Netherlands to create "multi-layer" questionnaires. This paper describes the structure of these "multi-layer" questionnaires for the Production Price Index survey and for the Inland Shipping survey created for our CASI-tool EDR and will focus on the new features of Blaise 4.7 applied herein.

Basil, A New Tool for CASI in Blaise

Jo Tonglet, Roger Linssen and Lon Hofman (Statistics Netherlands)

In the past decade, computer assisted self interviewing has become more and more popular. Statistics Netherlands is experimenting with different types of CASI surveys. One of the experiments was the use of a downloadable program that handles the survey and sends the data back to Statistics Netherlands through the internet. For this purpose, a tool has been written: BASIL. This paper describes the challenges faced while developing this program.

MesDesk

Paul van Venrooij (Statistics Netherlands)

The MesDesk software handles all kinds of electronic data transport for primary and secondary data streams from the Dutch businesses and governments to the Central Bureau of Statistics Netherlands. MesDesk" that was custom build in Blaise

MesDesk handles primary data send from government to government. MesDesk collects files sent by the Government Transaction Gate to the Central Bureau of Statistics. GTG is the communication platform between governments.

The MesDesk system, at this moment, handles 480 000 files a year which transport about 300 million records a year. In 2006 the MesDesk system must be able to handle 800 000 files a year with plus minus one billion records a year.

The MesDesk system can handle the following file types: BlaiseIS, XML, XBRL, EDIFACT, ASCII, Compressed files, Microsoft Office files, and Blaise files.

The MesDesk tool is the electronic post office that collects all kinds of data files and delivers these to the statistical units of the Central Bureau of Statistics.

Session 3.3. Transformations

Computer Assisted Coding by Interviewers

Wim Hacking, John Michiels & Saskia Janssen-Jansen (Statistics Netherlands)

Coding activities play an important role in a statistical production process. These activities are usually associated with the assignment of responses from respondents to predefined codes in a classification, so that these responses become available for further data-editing operations. Coding can be done at various stages of statistical production: during data collection by respondents or interviewers or during the data-editing process by coding experts and/or automated systems. Examples of more difficult coding activities are the assignment of a respondent's educational background or occupation to a corresponding classification. In these examples usually more than one (open or closed) question is involved in gathering the information required to assign valid codes.

In previous years the approach adopted at Statistics Netherlands for coding (open text) responses from a number of related questions was the following. First, the answers to these questions are collected using CAPI or CATI modes of data collection. At the statistical office the collected and sometimes edited information is then fed to a 'batch' process for automated coding. The records that are not coded are classified interactively by coding experts in a second pass. The batch process can involve any technique of fully automated coding, but at Statistics Netherlands it relied on 'handmade' dictionaries. In this process open text answers are edited to remove misspellings, special signs and certain text strings. Then these answers are compared to words and word combinations in a dictionary. In the case that the answers match with text strings in the dictionary a unique classification is possible. Only a small percentage of cases (10-20%) were successfully coded in the 'batch' process.

We will discuss an alternative coding technique that has been developed at Statistics Netherlands: Computer Assisted Coding by Interviewers (CACI). The new technique is more cost effective than traditional approaches with comparable level of detail and reliability. Two different computer-assisted coding techniques have been implemented and are currently used for three different classifications: education, occupation and economic activity of businesses. The first strategy is based on an approach described in [1]; the other one is completely new developed, to our knowledge. The number of entities coded is 95% for economic activity of businesses, 75% for occupations and 82% for education. The quality of these codes can be expressed as the percentage correctly coded: these are 93%, 90% en 87% for economic activity of businesses, occupation and education, respectively.

MultiRelaX with BCP as a replacement for Cameleon

Marien Lina (Statistics Netherlands) & Richard Frey (Westat, USA)

This paper deals with the question whether the Blaise Component Pack (BCP) could be a replacement for Cameleon or not. Since Blaise 3, Cameleon is available in the Blaise system to retrieve meta descriptions from the Blaise meta file and translate them into meta-descriptions and formats for ASCII and ASCII-relational output, and for writing set-up files for SAS, SPSS, oracle and paradox. With the flexible Cameleon language you can control your output to create set ups for many other software applications. Blaise Data can be exported according to these formats with Manipula.

The more recently developed Blaise Component Pack gives an opportunity to address data and meta information in one run without using Cameleon or Manipula. The BCP enables you to create applications that prepare meta descriptions for many software packages and write data in the related format. It is possible that the retrieval of some information may be arranged differently in Cameleon and the BCP, or even, some information available in Cameleon may be absent in the BCP.

This presentation will show the outcome of an experiment in which a BCP application developed in VB which (like Manipula) writes data and (like Cameleon) writes the related meta information.

Session 4.1. Connecting

Experiences with Dynamic Link Libraries

Youhong Liu & Gina-Qian Cheung (University of Michigan, USA)

Blaise supports the use of Dynamic Link Libraries (DLLs) to perform a process or action that is not currently available in Blaise itself. A DLL can be considered as external subroutines that can be called by the Blaise Data Entry Program (DEP) or Manipula. The Blaise instrument passes information to the DLL, and the DLL acts on the information and passes the modified or new information back to the instrument. The Blaise instrument then stores or acts on the modified information. There are two types of alien references. Those that perform calculations are called alien procedures and those that ask questions are called alien routers.

Previously, DLLs can only be developed by using Borland Delphi. The Delphi DLL itself can then communicate with DLLs that are developed using different development environment, such as C++, VB. From Blaise version 4.6, Alien procedures and alien routers in data models and Manipula setups now also support the use of ActiveX. The alien is implemented by using a COM object method.

One of the projects conducted by the Institute for Social Research is Dioxin Exposure Study. In this project, respondents were asked about several events during their life time. It requires special grids to achieve this interface - we called them Event History Calendar (EHC). The normally Blaise simply can not provide the interfaces and functionalities that the EHC required. We decided to implement the EHCs with alien router technique. In this paper we will discuss how the EHCs were implemented via alien router and what are the advantages of using alien router.

Methods of integrating external software into Blaise surveys

Lilia Filippenko, Joseph Nofziger, Mai Nguyen & Roger Osborn (RTI International, USA)

For surveys that require call to external application, there are a few ways to do the implementation. At RTI International we have projects that:

- use Manipula setups to manage switching between part of interview and calls to external application,
- use "Action" from a Blaise instrument and BOI file to pass data between Blaise database and Access database,
- use Alien routers from a Blaise instrument to call external application and collect data from them.

Each method has advantages and disadvantages. Although the alien routers look like the best solution, their development and testing take more time than the first two approaches. We will present our experience with Alien routers in our recent project. Our Blaise instrument calls a variety of external applications through alien routers written in Visual Basic.Net, and C#.

The paper will discuss the following aspects of the integration:

- application invocation,
- data management,
- graphical presentation,
- complex randomization of questions.

Using the Blaise Component Pack From Within the .NET Framework To Develop Data Management Tools

Leonard Hart, Robert Thompson & John Mamer (Mathematica Policy Research, USA)

This paper describes the use of the Microsoft .NET technology combine with the Blaise Component Pack which MPR is using to build very dynamic Blaise tools. Two different data management tools that uses this approach will be described in this paper include a data viewer that allows for easy management of cases and a custom export tool that allows end users to select data from a Blaise database to various outputs without getting programmers involved. This paper will touch on some of the theory that should work but doesn't and how we over came these problems.

Using Blaise to Apply Edits to Data Held in an Input Data Warehouse

Fred Wensing (Australian Bureau of Statistics)

Business survey and administrative data collected by the Australian Bureau of Statistics (ABS) is delivered to an Input Data Warehouse (IDW), which provides a single uniform database structure (using a star schema) to support the various processes that need to be applied before final statistics are obtained. Through a system of status codes, the data in the IDW for all collections and all providers can be tracked from raw value through to final collected, imputed or estimated result.

An important process to be applied to all data is that of "editing" to detect inconsistencies and gaps in the collected data. Blaise has particular strengths in being able to check for anomalies and deliver the results of its checking to the operator. Blaise components can also be used to deliver the results of its checking to a system, thereby enabling edits to be effectively applied in a "batch" mode.

This paper describes a system that has been developed to apply edits to data held in an IDW to support both on-line and batch editing. The paper discusses the issues associated with transforming the data from IDW into a file structure that can be acted on by Blaise (using the Blaise OLE DB interface), and the way that edit results can be extracted (using the Blaise API) and delivered to a management system for scrutiny and possible resolution.

Session 4.2. Alongside the data (paradata)

Blaise PlayBack And Recovery System

Youhong Liu & Gina-Qian Cheung (University of Michigan, USA)

Previously, at the University of Michigan, we developed a Blaise playback system. The technique utilized was to transmit each new keystroke read from an Audit Trail file to the Blaise Data Entry Program (DEP). This technique requires that the Playback program (developed with VB 6) interacts with the DEP constantly. The problem with the previous system is that two systems are sometimes out of sync with the DEP executes rules itself while the VB program feeds the data to the DEP. To resolve this problem, we have developed a new interface to mimic the Blaise DEP under the new system. Since everything is integrated under one system, synchronization is no longer an issue. This paper presents the system functionalities as well as techniques utilized for the system.

A solution with the aim of an optimal evaluation of the time of interview under CAPI: the statistical exploitation and analysis of the audit trail file (.ADT) with the software S.A.S

Georges Bourdallé (INSEE, France)

Objective: To allow the designer of household survey to optimize at the same time the rates of payment of the household interviews under CAPI and the household number to be investigated

Description: In the preparatory phase of implementation of a household survey, the designer of it is confronted with two ambitions, at the same time to reward most exactly possible the work of the household survey interviewers and to investigate most possible households. The payment of questionnaires represents to him only 60 % of the budget of a household survey. It is thus necessary to optimize the budget assigned to a household survey.

For that purpose, several levels of payment or rate of payment are set up. Of the weakest in the most mattering there is a rate for the waste (impossible to join, long-term absentee, refusal,...), a rate for the partially performed questionnaires and a rate for the totally performed questionnaires. This last rate being the most expensive because supposed to reflect a relatively important duration of interview, it is thus extremely important that it reflects most exactly possible the reality.

The time of interview is estimated during the field test.

The exploitation of the audit trail files (.ADT) of the household survey interviewers at the end of the test data collection allows us to create various indicators indispensable in the statistical analysis with the aim of the evaluation of a duration of interview either for the totality of the questions of a given survey, or for a set of questions or for only one question. These indicators are to know the identifier of the household, the information relative to the household interviewer (investigator's number, the regional direction of the INSEE where is connected the investigator), the number of passage (opening and lock) in the questionnaire, set of questions or for only one question, the time for every passage, the time of the longest passage and the total time defined as the sum of the time of all the passages.

The statistical analysis allows us to have quickly an estimation of a duration of interview for a complete questionnaire independently of an effect investigator. According to the budget, we can so simulate various durations of interview by the deletion of questions.

So the most just possible estimation of a duration of interview can be quickly made.

The statistical analysis of audit trail files (.ADT) and shaping of files results are made with the software S.A.S (Statistical Analysis System) by the implementation of macro S.A.S.

Active Management: A New Strategy for Managing Data Collection

Luc Tremblay (Statistics Canada)

Managing collection activities has, for a long time, been limited to verifying the response rate of a survey throughout the course of collection. However, a new concept has recently emerged called Active Management which takes managing collection to a whole new level.

Active management goes way beyond controlling the response rate. Rather, it looks at controlling the whole production process dynamically as it unfolds. It starts at the conception of the survey by specifying, the different reports which will be made available to the operations staff to view the progress, but goes beyond reports to full

control over various operational parameters which can be changed in the field quickly in reaction to collection issues.

For example, the clients ensure that all stratum are identifiable on the sample, and stratum reports are given to collection staff who use different groups to help them ensure that the different strata evolve proportionally. Time slice definitions are now used to control different types of respondents to ensure maximum pay off of every call.

Managers look at production data to identify best practices such as best time to call, maximum number of tries, refusal conversion rates per try after initial refusal, the most efficient number of busy dials to use and their best repartition, etc...

This presentation will review where we are in terms of Active Management, and how we used different tools from Blaise software to support this concept at Statistics Canada.

Work Flow for the Weighting of the German Microcensus Data Using Blaise Bascula

Kirsten Iversen (Federal Statistical Office of Germany, DESTATIS)

The German Microcensus originally focussed on a specified reference week in spring. In January 2005 it started as a continuous survey in order to obtain estimates of quarterly and annual means. The levy of the data is carried out decentral, that means the statistical offices of the 16 regions in Germany are doing the field work. The survey is compulsory.

For every quarter the data is weighted in two steps: First there is compensation that adjusts the known non-responses. In the second step the sample distribution of some auxiliary variables (for example age, sex and nationality) is adjusted to the known population totals. The intention of this bounded second step weighting is to reduce the bias of estimates due to unrecognised non-responses. The variance for variables which are high correlated with the auxiliary variables is also minimised. Once a year the data of the four quarters are put together for a deep regionalised weighting.

The compensation model and the weighting model are implemented as batch processes in Blaise Bascula. Besides this some Blaise programs are preparing the data sets going into the different batch processes (for example samples corresponding to households or individuals). The statistical offices of the 16 regions are applying the program; the programming work is done by the federal statistical office.

This paper will demonstrate how the data is manipulated in the different steps on the way to calculate the final weights for the quarterly and the yearly results of the German Microcensus.

Posters

User-friendly Web Surveys

Hayo Bethlehem (The Netherlands)

Web surveys become an increasingly important tool for collecting data in our digital society. Unfortunately, many people dislike filling out forms on the web. This poster discusses ways of making forms more attractive and user-friendly, which may reduce measurement errors and increase response rates. Web standards play an important role in this. The use of a framework based on XHTML and CSS is advocated making it easier to build and to maintain effective web applications.

Using the Blaise Component Pack in the .NET environment

Rob Groeneveld (Statistics Netherlands)

The Blaise Component Pack (BCP) was designed and programmed as a series of COM (Component Object Model) components. Now that the .NET environment has arrived, it is desirable to be able to use the BCP in the new environment. At the outset, there is no major problem because there are tools in Visual Studio .NET which enable us to work with COM objects as they are, so-called interoperability tools or Interop. These tools ensure COM objects can be reached from the .NET environment. In essence, they put a wrapper around a COM object to make it into an assembly. Assemblies are the building blocks of .NET applications.

The other way to use the BCP is to convert the components to .NET assemblies using the Type Library Import program. It is shown how this is done and how the converted BCP assemblies can be used from the .NET development environment. Some demos and examples shipped with Blaise 4.7 Enterprise are shown and run. All of the .NET programming languages can use the BCP assemblies we created. In Blaise 4.7 Enterprise the examples are in Microsoft Visual Basic 6.0 (VB6). We present examples in both VB.NET and C#. It is shown how certain examples can be programmed more elegantly in the .NET environment because of the availability of new methods, in particular the ToString method, the absence of which previously made a lot of extra programming in VB6 necessary. The BCP.NET components and the examples in C# and VB.NET are available from the author.

Calculator DLL

Roberto Picha (U.S. Census Bureau)

One of the frustrating tasks during data collection is the use of the windows calculator. In order for an interviewer to accomplish this task satisfactorily, it would require them to perform several keystrokes in order to transfer the value from the calculator to the DEP (answer field). They would have to use CTRL-C (to copy) inside the calculator textbox, close the calculator, and then finally CTRL-V (to paste) in the textbox of the DEP. Some of our interviewers suggested that it would be useful if the contents of the calculator could be transferred into the data entry program automatically. At that time the only answer was - "It's not possible". This was mainly because the calculator is an external application outside of the Data Entry Program.

Some possible solutions were presented that could have been available to satisfy our interviewers. One of them was to create a procedure for items where calculation could be performed. However, the use of recursive calls inside a procedure is not possible in Blaise. Another possible solution was the creation of an alien router. However, this would imply some work around the variables in need of this functionality – you would have to define up-front all variables that may require this functionality. One more alternative was the use of BCP. This would allow us to use Visual Basic to build a customized calculator. This was the approach that was taken.

One of the BCP examples shipped in the early versions of Blaise in 4.6 was for the use of an ActiveX DLL that would allow the user to select a color from a pick list and dump the text content into the DEP. The code for this seemed relatively easy to follow. The ActiveX would permit us to display a form. This form could actually be a simple application (i.e., calculator) and the content from the form could be sent to the DEP via the DLL. This approach was used for the Calculator application and the same approach can be utilized for other applications as well.

In order for this DLL to work within our environment we must consider the following:

1. We must register (system32 directory) the new DLL so that the DEP can access it.
2. We also need the run time Blaise B4API.DLL (required file to interact with our DLL)

Navigation in CAI Systems

Mark Pierzchala (Mathematica Policy Research, USA)

This poster session describes all the elements of instrument design and organizational practices that come together to allow interviewers or self respondents to successfully navigate in a CAI instrument. It reviews various kinds of navigation as well as enabling CAI system attributes. It reviews three screen layout paradigms and summarizes how each enhances or takes away from user navigational capability. Further it discusses ways in which the survey organization can motivate users to navigate where it is appropriate, either to review previous answers or to correct errors. The session is based in large part on experience with the Blaise system over 15 years and its application to a wide variety of applications.

The Selection of Strata in Nonresponse Adjustment

Barry Schouten (Statistics Netherlands)

Nonresponse in household surveys can be a threat to the quality of statistics. Research shows that often the response to these surveys is selective with respect to demographic characteristics like age and household composition. For this reason estimators are usually adjusted to account for nonresponse. The Bascula tool is added to Blaise in order to support nonresponse adjustment.

Nonresponse adjustment methods make use of covariates that are available for both respondents and non-respondents. A problem is the selection of covariates that relate both to the key survey questions and to the response behaviour. Therefore, often the process of selection is performed in two steps. First, candidate covariates are selected that relate either to the nonresponse mechanism or to the key survey topics. Second, adjustment is performed using these candidate covariates using for instance Bascula.

We present a classification tree method that allows for the construction of weighting strata that simultaneously account for the relation between response behaviour, survey questions and covariates. The method is computationally intensive but it facilitates nonresponse adjustment in a single step. The method may be included in Blaise to combine selection of strata and weighting in one tool.

A CAPI system with wireless telecommunications

Norberts Talers & Palvels Onutrijevs (Central Statistical Bureau of Latvia)

The CSB of Latvia established a CAPI system in 2005 and the first data collection will be Labour force survey starting in January 2006. The arrangements of the telecommunications were very difficult to design because of the lack of fixed telephone lines with some interviewers and varying telephone technology in different parts of the country.

Wireless telecommunications system utilizing the GPRS / EDGE –technology appeared to be the easiest and most inexpensive solution. The GPRS coverage is good in all parts of Latvia. In the current system data to and from interviewer is sent as an FTP-transfer via a GPRS connection. Connection times are few minutes at most and the cost is by the amount of transferred data.

The poster will present the technical solution of the system and demonstrate the system (provided there is functioning GPRS available). By the time of the conference there will be also available some statistics on how the system has worked.

Multiple Researchers working at the Blaise Benchmark Services for the Disabled Act (WVG)

Carlo Vreugde & Mark Gremmen (VNG/SGBO, The Netherlands)

The VNG is the national organization for Dutch municipalities. It contains the nonprofit agency StimulantsZ that advises all the municipalities about handling the welfare grants from the government for its welfare recipients. With the help of SGBO (research department of the VNG) it has made a Benchmark Services for the Disabled Act (WVG) for the Dutch municipalities. The Ministry of Health, Welfare and Sport that is responsible for the Services for the Disabled Act (WVG) which consists of various rules and regulations for handicapped people and the elderly.

Within SGBO more researchers work together in a benchmark project. Many specialties are combined for the Services for the Disabled Act (WVG). The various rules and regulations are split up in special chapters for the Benchmark. Before the final benchmark has been put together a lot of survey revisions have been adopted.

The base for the Data collection of the Benchmark Services for the Disabled Act (WVG) is Blaise. Not all the researchers at SGBO can program Blaise and with so many survey revisions a different approach towards working

with Blaise was constructed. The first component is Excel for writing and reediting the survey text. The second component is the Excel Blaise Generator & Blaise Survey Generator in building the Blaise Benchmark for data collection.

The choice for Excel was made up quickly because it is easy usable for all the researchers in different departments. Blaise program knowledge was limitable and therefore adapted in one large Excel spreadsheet with multiple tabs sheets. It was setup in a very easy way, so that any person can create a survey. The researcher can enter as many questions as possible in his/her chapter. It doesn't matter in what order he enters the questions. Once questions are entered they can be changed and copied at all times.

The Benchmark Services for the Disabled Act (WVG) consists of many chapters and Blaise was therefore setup with a variety of Include files. This made the manageability of the Benchmark much more comprehensive. The Excel spreadsheet consists of Visual Basic code which generates the Blaise Syntax for each different include file. Only the table functionality from VB to Blaise did not work smoothly and therefore the SGB0 Blaise Survey Generator was used. This created a separate Table include file for the Blaise Benchmark. All these components made up an efficient Blaise Benchmark that could be easily changed at any moment.

The SGB0/ StimulansZ Benchmark Services for the Disabled Act (WVG) will serve as outcome measures for the Municipalities results-driven approach to problem solving. The citizens of the Municipalities will benefit from these results. Blaise is the main engine behind Data collection of the Benchmark. Through these benchmark results, SGB0/StimulansZ progress in achieving the Government strategic plan goals: municipal cooperation, collaboration, and a result-driven approach to problem solving have been put into visible results.
