

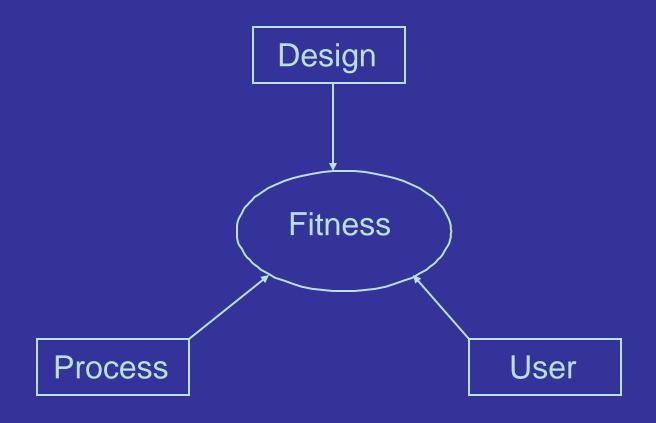
# The use of paradata in the Eurobarometer Standard Survey Series

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TNS

### **Overview**

- Fitness for purpose requires control of all aspects of survey management, including timeliness and cost
- Paper illustrates primary use of paradata to control Eurobarometer timely delivery and data quality
- Describes current system and evolution
- Majority of data is unpublished, and based on real waves

## The Quality Triangle



# Eurobarometer: Geographical coverage



## The Eurobarometer in figures

- Number of F2F interviews = approx. 160 000 per year
- Number of questions asked = approx. 1 000 per year
- Number of countries = up to 34
- Regional and national languages covered = 46
- Number of topics = 25 per year
- Processing = close to 50 000 tables per wave
- Printouts = 90 000 A4 pages per wave
- Reporting = 30 to 40 reports per year

### Design & process implications

- Consistency, validity, timeliness and cost-effectiveness inexorably result in standardisation and centralisation
- Increased workload and shorter timelines have a similar effect
  - 1973- two waves a year in 6 Countries
  - 2010- eight-ten waves a year in 27+ countries
- Standardisation and centralisation yield improved control of a wide range of error and bias sources
- These in turn identify opportunities for further innovation and improvement

### EB centralisation and standardisation

2005 2011

Central questionnaire Central

Local translation Central

Local scripting Central

Local sample design/sampling Central/Local

Local data collection Local

Local editing Central

Local weighting Central

Central processing Central

Local quality control Central/Local

### Paradata sourcing

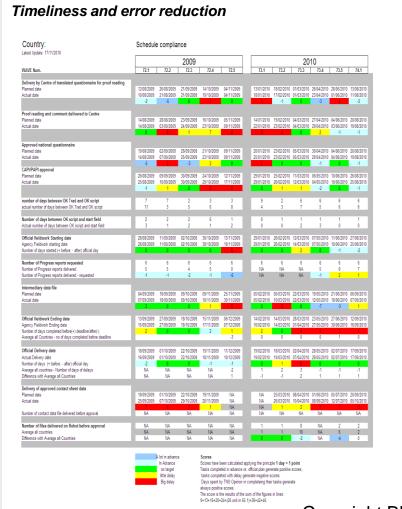
- Centralisation enables standardisation
- Centralisation drives provision, consistency, timeliness
- Centralisation enables calibration and benchmarking
- Centralisation results in utilisation
- Centralisation results in improvementtimeliness, data quality error reduction, cost, 'Fitness'

# Timeliness and error reduction: top line wave reports

- Report example- talk/walk through
- Single wave
- Across waves



## Report Examples



	cito (nic	L=197	7) <b>6</b> Waiting							
Country				Last notification	Errors	Warnings	Interviews		Last file description	Last
AT	3402	fin	CONFIRMED	28/01/2008 10:32:26	0	0	1728 kit	10		
AT	4202	fin	CONFIRMED	21/02/2008 11:27:58	0	0	1043 kit	12	₩	
AT	0692	fin	CONFIRMED	24/04/2008 16:44:37	0	0	1000 kit	10		
BE	4202	fin	ACCEPTED (W)	21/02/2008 14:22:03	0	3	1010 kit	27		
BE	0692	fin	CONFIRMED	05/05/2008 17:34:01	0	0	1003 kit	9	₩	
BG	4202	fin	CONFIRMED (W)	07/12/2007 10:12:49	0	1	1030 kit	19		
BG	0692	fin	CONFIRMED (W)	24/04/2008 14:31:49	0	22	1000 kit	5	₩	
CY	4202	fin	CONFIRMED (W)	21/02/2008 08:40:40	0	43	1003 kit	12	₩	
CY	0692	fin	CONFIRMED (W)	08/05/2008 12:03:37	0	5	504 kit	7		
cz	4202	fin	ACCEPTED (W)	11/12/2007 09:34:45	0	97	1227 kit	21		
cz	3402	fin	REFUSED (F)	29/01/2008 09:40:27	217	3	1726 kit	13		
cz	0692	fin	CONFIRMED	28/04/2008 16:34:14	0	0	1014 kit	9		
DE	4202	fin	CONFIRMED (W)	10/01/2008 12:10:52	0	153	2008	27		

Country: Latest Update: 01/02/2011		S	ample	Profile	•										
ACTUAL minus TARGET	EB 1 De	sign							2 Design						
Weighting criteria Male Female	71.2 0 -0	71.3 2 -2	72.1 -2 2	72.2 -0 0	72.3 -3 3	72.4 -1 1	72.5 2 -2	73.1 0 -0	73.2 1	73.3 -0 0	73.4 1 -1	73.5 -2 2	74.1 2 -2	74.2 -1 1	74.3 -2 2
Weighting criteria 15-24 years old 25-39 years old 40-84 years old 55-64 years old old than 65	71.2 -2 0 0 3 -1	71.3 -1 -2 3 1	72.1 -0 -3 3 3 -3	72.2 1 -4 -0 3 0	72.3 -4 -0 1 2	72.4 -2 -2 2 4 -2	72.5 -3 -1 -0 3 2	73.1 -2 -2 2 2 3 -2	73.2 -4 -3 3 3	73.3 -3 -2 2 4 -1	73.4 -4 -3 3 3	73.5 -2 -2 1 0 3	74.1 -0 -3 3 1	74.2 -5 -4 3 5 0	74.3 4 4 4 4 0
Weighting criteria Man 15-24 years old Man 15-24 years old Man 40-54 years old Man 40-64 years old Man 60-64 years old Man oldet than 65 Woman 15-24 years old Woman 25-39 years old Woman 40-64 years old Woman 40-64 years old Woman 40-65 years old Woman 40-65 years old Woman 65-64 years old Woman 65-64 years old	71.2 -1 -0 -1 2 1 -1 0 0 2 1 1 -2	71.3 1 -2 2 1 0 -1 -0 2 -0	72.1 -0 -3 0 1 -0 -0 -0 3 2 -2	72.2 2 -3 -1 1 1 -1 -1 1 2	72.3 -3 -1 -1 0 2 -1 1 2 2	72.4 -2 -2 1 2 1 -0 0 2 1 -3	72.5 -2 -1 -0 2 3 -1 -0 0 1 1	73.1 -1 -2 0 3 0 -1 1 2	73.2 -2 -1 1 2 2 -2 -1 2 1	73.3 -2 -2 -1 3 1 -1 -0 2 1	73.4 -2 -2 1 2 -2 -1 2 0 -0	73.5 -1 -2 1 -1 -1 -1 -0 0 1 2	74.1 -1 -3 3 1 0 0 0 1 1 1	74.2 -3 -3 1 3 1 -2 -1 2 2	74.3 -2 -3 0 1 2 -2 -1 4 3 -1
Weighting criteria Employed Not Employed Males Employed Males Employed Females Text Employed Females Employed Females Text Employed	71.2 0 -0 -5 5	71.3 -3 3 -7 7 0	72.1 -2 2 -3 3 -0 0	72.2 -6 5 -7 7 -4	72.3 -2 2 -6 6 2	72.4 1 -1 0 -0 2	72.5 -4 4 -6 5 -2 2	73.1 1 -1 -2 2 3	73.2 -2 2 -2 2 -1	73.3 -2 2 -4 4 -1	73.4 -2 2 -7 7 3	73.5 -1 1 0 -0 -1	74.1 -4 -5 -5 -2 2	74.2 -2 2 -4 -4 -1	74.3 -4 -5 -5 -2 2

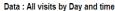
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# Interviewer Quintile Reports

#### Interviewer Effectiveness

on contact rate

#### Country:



on Succ Visits Rate											
		N.A.									
		NOT:	SUCC			NOT	succ			(Least Succ)	(Most Succ)
								Succ			
Day of		Ineli	No	Succ	Total	Inoli	No	Visits		Ints -	
Week	TIME	gible									Ints - Quintile 5
vreek	TIME	gible	reply	VISIUS	VISIUS	gible	reply	nate		Quintile 1	ilits - Quilitile 3
Sunday	before 10:00	0	6	4	10	0%	60%	40%		33%	
Juliudy	10:00 - 13:59	5	31	55	91	5%	34%	60%		48%	100%
	14:00 - 16:59	5	61	77	143	3%	43%	54%		40%	100%
	17:00 - 19:59	3	19	36	58	5%	33%	62%		39%	83%
	20:00 and after	Ö	8	13	21	0%	38%	62%			100%
	Total	13	125	185	323	4%	39%	57%		42%	97%
Monday	before 10:00	2	19	27	48	4%	40%	56%		69%	100%
Monday	10:00 - 13:59	2	88	98	188	196	47%	52%		39%	100%
	14:00 - 16:59	8	130	170	308	3%	42%	55%		34%	94%
	17:00 - 19:59	4	87	152	243	2%	36%	63%		53%	89%
	20:00 and after	Ó	2	11	13	0%	15%	85%			
	Total	16	326	458	800	2%	41%	57%		40%	94%
Tuesday	before 10:00	1	14	26	41	2%	34%	63%		57%	100%
100000	10:00 - 13:59	6	163	165	334	2%	49%	49%		34%	88%
	14:00 - 16:59	9	115	178	302	3%	38%	59%		41%	100%
	17:00 - 19:59	4	87	146	237	2%	37%	62%		38%	93%
	20:00 and after	Ó	6	12	18	0%	33%	67%			
	Total	20	385	527	932	2%	41%	57%		38%	94%
Wednesday	before 10:00	0	10	21	31	0%	32%	68%		50%	100%
	10:00 - 13:59	7	124	103	234	3%	53%	44%		33%	92%
	14:00 - 16:59	11	126	128	265	4%	48%	48%		38%	86%
	17:00 - 19:59	3	89	116	208	1%	43%	56%		31%	100%
	20:00 and after	0	6	5	11	0%	55%	45%			100%
	Total	21	355	373	749	3%	47%	50%		35%	94%
Thursday	before 10:00	0	5	20	25	0%	20%	80%		75%	
	10:00 - 13:59	2	81	86	169	1%	48%	51%	_	32%	100%
	14:00 - 16:59	6	112	131	249	2%	45%	53%		33%	100%
	17:00 - 19:59	6	55	84	145	4%	38%	58%		50%	100%
	20:00 and after	0	1	8	9	0%	11%	89%			
	Total	14	254	329	597	2%	43%	55%		36%	100%
Friday	before 10:00	1	6	16	23	4%	26%	70%		50%	
	10:00 - 13:59	12	103	116	231	5%	45%	50%		40%	83%
	14:00 - 16:59	13	147	182	342	4%	43%	53%		42%	100%
	17:00 - 19:59	7	108	110	225	3%	48%	49%		20%	100%
	20:00 and after	0	5	4	9	0%	56%	44%			
	Total	33	369	428	830	4%	44%	52%		38%	92%
Saturday	before 10:00	0	9	6	15	0%	60%	40%		0%	
	10:00 - 13:59	4	92	116	212	2%	43%	55%		43%	88%
	14:00 - 16:59	4	111	160	275	1%	40%	58%		38%	96%
	17:00 - 19:59	3	44	47	94	3%	47%	50%		29%	82%
	20:00 and after	0	3	3	6	0%	50%	50%			
	Total	- 11	259	332	602	2%	43%	55%		39%	91%
Grand Total		128	2073	2632	4833	3%	43%	54%		_	

#### Country:

#### Data: Successful interview By Day & Time

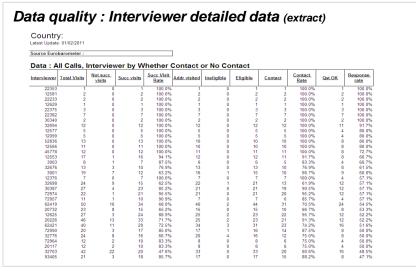
					(Least Successful)	
Day of Week	TIME	Eligible	Contact	Contact Rate	Ints - Quintile 1	Ints - Quintile 5
Sunday	before 10:00	5				
	10:00 - 13:59	70			40%	869
	14:00 - 16:59	95			13%	759
	17:00 - 19:59	37			0%	09
	20:00 and after	13				1009
	Total	220			14%	779
Monday	before 10:00	27			22%	67%
	10:00 - 13:59	124			35%	56%
	14:00 - 16:59	215			19%	75%
	17:00 - 19:59	154			12%	62%
	20:00 and after	11			100%	
	Total	531	208	39%	20%	64%
Tuesday	before 10:00	30			44%	50%
	10:00 - 13:59	231	56	24%	13%	70%
	14:00 - 16:59	222	87	39%	20%	94%
	17:00 - 19:59	169	57	34%	20%	86%
	20:00 and after	12	5	42%	50%	
	Total	664			19%	83%
Wednesday	before 10:00	22	12	55%	50%	43%
	10:00 - 13:59	136	36	26%	5%	75%
	14:00 - 16:59	169	55	33%	18%	100%
	17:00 - 19:59	129	42	33%	11%	100%
	20:00 and after	9	3	33%		100%
	Total	465	148	32%	13%	75%
Thursday	before 10:00	18	12	67%	100%	
	10:00 - 13:59	116	40	34%	28%	
	14:00 - 16:59	169	51	30%	19%	67%
	17:00 - 19:59	102	23	23%	7%	50%
	20:00 and after	4	. 2	50%		
	Total	409	128	31%	18%	569
Friday	before 10:00	14			0%	
	10:00 - 13:59	150	39	26%	15%	509
	14:00 - 16:59	220	68	31%	12%	509
	17:00 - 19:59	115	28	24%	9%	
	20:00 and after	4	. 3	75%	100%	
	Total	503	146		13%	50%
Saturday	before 10:00	7	4	57%	50%	
	10:00 - 13:59	137	37	27%	20%	0%
	14:00 - 16:59	182	50	27%	14%	100%
	17:00 - 19:59	52	11	21%	4%	
	20:00 and after	3	1	33%		
	Total	381	103	27%	15%	86%

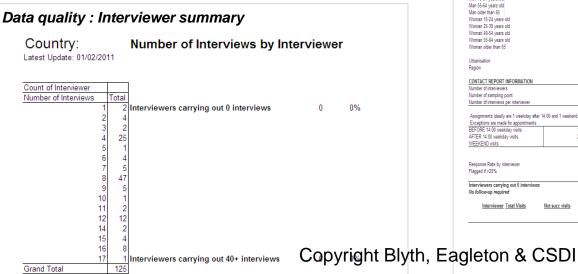
#### Country:

#### Data: Successful contact By Day & Time

					on contact rate (Least Successful) (Most Successful)			
				C	(Least Successiui)	(Most Successiui)		
Day of Week	TIME	<u>Eligible</u>	Contact	Contact Rate	Ints - Quintile 1	Ints - Quintile 5		
Sunday	before 10:00	5	3	60%				
	10:00 - 13:59	70	53	76%	56%	1009		
	14:00 - 16:59	95	65	68%	33%	949		
	17:00 - 19:59	37	27	73%	83%	889		
	20:00 and after	13	9	69%	67%			
	Total	220	157	71%	47%	96%		
Monday	before 10:00	27	22	81%	100%	100%		
	10:00 - 13:59	124	74	60%	41%	100%		
	14:00 - 16:59	215	143	67%	38%	95%		
	17:00 - 19:59	154	123	80%	81%	100%		
	20:00 and after	11	11	100%	100%			
	Total	531	373	70%	47%	97%		
Tuesday	before 10:00	30	22	73%	43%	100%		
	10:00 - 13:59	231	129	56%	29%	90%		
	14:00 - 16:59	222	161	73%	48%	100%		
	17:00 - 19:59	169	119	70%	59%	92%		
	20:00 and after	12	10	83%				
	Total	664	441		42%	96%		
Wednesday	before 10:00	22	18	82%	100%	100%		
	10:00 - 13:59	136	83	61%	33%	100%		
	14:00 - 16:59	169	107	63%	39%	93%		
	17:00 - 19:59	129	89	69%	31%	100%		
	20:00 and after	9	4	44%		100%		
	Total	465			36%	98%		
Thursday	before 10:00	18	17	94%	100%			
	10:00 - 13:59	116	72	62%	38%	100%		
	14:00 - 16:59	169	108	64%	50%	100%		
	17:00 - 19:59	102	70	69%	54%	92%		
	20:00 and after	4						
	Total	409			49%	97%		
Friday	before 10:00	14			0%			
	10:00 - 13:59	150			55%	100%		
	14:00 - 16:59	220	153		47%	100%		
	17:00 - 19:59	115			25%	100%		
	20:00 and after	4						
	Total	503			46%	100%		
Saturday	before 10:00	7			100%			
	10:00 - 13:59	137			36%	100%		
	14:00 - 16:59	182			41%	1009		
	17:00 - 19:59	52			50%	679		
	20:00 and after	3						
	Total	381	269		39%	95%		
Grand Total		3173	2154	68%	44%	979		

# Wave Specific Action Reports





Country: A		
CONTACT SHEET SUMI	MARY REPORT	
SAMPLE PROFILE		
Sample profiles are flagged if they excee	d the average % difference across all countries.	
Averages are set at:		
Gender +/- 3 % Age +/- 5 %		
Working Status +/- 5 %		
Age x Gender +/- 3 %		
Urbanisation +/- 2 %		
Region +/- 2 %		
	% difference from target Exceed Average?	Recommended Actions
Male	-2	neconninenced Acados
15-24 years old	4	
25-39 years old 40-54 years old	4	
55-64 years old	<del>+</del> Δ	
old than 65	0	
Employed	4	
Males Employed	-5 Yes	Investigate interviewer sample profiles and time of day to make improvements
Females Employed	-2	
Man 15-24 years old	-2	
Man 25-39 years old	-3	
Man 40-54 years old	0	
Man 55-64 years old	1	
Man older than 65 Woman 15-24 years old	2 -2	
Woman 25-39 years old	-1	
Woman 40-54 years old	4 Yes	Investigate interviewer sample profiles and time of day to make improvements
Woman 55-64 years old	3	, , , ,
Woman older than 65	4	
Urbanisation		
Region		
CONTACT REPORT INFORMATION  Number of interviewers	104 target 63-125 (each interviewer to do 1 or 2 assignment	Recommended Actions
Number of sampling point	298 target 250 (125 spts x 2 clusters)	····
Number of interviews per interviewer	0% Interviewers carrying out 0 interviews	
Assistant dealers and an extreme	a 11.00 and 1 constant days	
Assignments ideally are 1 weekday after Exceptions are made for appointments	r 14.00 and 1 weekend day	Recommended Actions
BEFORE 14:00 weekday visits	1324 27%	
AFTER 14:00 weekday visits	2584 53%	
WEEKEND visits	925 19%	
		Recommended Actions
Response Rate by inteniewer	7 7% interviewers have 100% response r	
Flagged if >25%		
Interviewers carrying out 0 interview		
No follow-up required	e .	
	Succ Visit	Contact Response
Interviewer Total Visits	Not succ visits Succ visits Rate Addr visited	Ineligible Eligible Contact Rate Qst OK rate

# Management Reports

and work more weekends target 50% (currently 25%)

#### Wave specific management action report Actions resulting from EB Contact Sheet Analysis Target number of sample points 250 (currently 249) Country A Incorrect numbering of sample points or too few sample points 5% of interviewers had 100% response rate Possible interviewer retraining required for contact sheets Possible interviewer retraining required for doorstep 6 interviewers carrying out 0 interviews technique for some interviewers Sample weighting on urbanisation and region Check sample points correctly issued and worked by region Country B Sample weighting on urbanisation Check sample points correctly issued and worked by region and urbanisation Sample profile high on 55-64 year olds Work less weekdays before 2pm, target 0% (currently 21%)

Country C No Actions Required

Red	cent wave	e managen	nent report	<b>!</b>			
	Wave 1	Wave 1	Wave 2	Wave 2	Wave 3	Wave 3	
Country	Comments	Actions	Comments	Actions	Comments	Actions	Progress
	Incorrect numbering of sample points or too few sample points being used	Target number of sample points 250 (currently 249)	Incorrect numbering of sample points or too few sample points being used	Target number of sample points 250 (currently 243)			<b>V</b>
	Sample weighting on urbanisation	Check sample points correctly issued and worked by region and urbanisation	Sample weighting on urbanisation	Check sample points correctly issued and worked by region and urbanisation			<b>V</b>
	Sample profile high women >65 and low men 16-24	Work less weekdays before 2pm, target 0% (currently 24%)	Sample profile high >65 and low men 16-24	Work less weekdays before 2pm, target 0% (currently 31%)	Sample profile high >65 and low men 16-24 2 interviewers carrying out 0 interviews	Work less weekdays before 2pm, target 0% (currently 30%) Possible interviewer retraining required for doorstep technique for some interviewers	1
Country B	Sample weighting on urbanisation Sample profile low on employed men	Check sample points correctly issued and worked by region and urbanisation Work more weekends, target 50% (currently 18%)	Sample weighting on urbanisation Sample profile low on employed men	Check sample points correctly issued and worked by region and urbanisation Work more weekends, target 50% (currently 35%)	Sample weighting on urbanisation and region	Check sample points correctly issued and worked by region and urbanisation	_

#### Final management report





#### Contact Sheet Report Status - Progress to Date (EXAMPLE last three waves)

Progress	Code description	All Countries	All Countrie	es
✓	Issue solved		35	33%
<b>1</b>	Improvements seen		19	18%
_	No improvements seen		32	30%
1	Decline or new problems seen		16	15%
Input Requested	Input Requested		3	3%

Total Issues identified on contact sheet reports 105

### Summary

- Management system and paradata must reflect the user priorities
- Timeliness is key reduce the risk of not delivering on time
- Reduce errors get reports accurate first time
- Believable trends & data credibility are the quality focus
- Responsive design to respond to this
- Comparative studies benefit from standardisation and centralisation
- Reduce process errors..... costs will follow