



UNECE Workshop on
Statistical Data Collection 'Resourceful Data Acquisition'
10-12 October 2018
Geneva, Switzerland

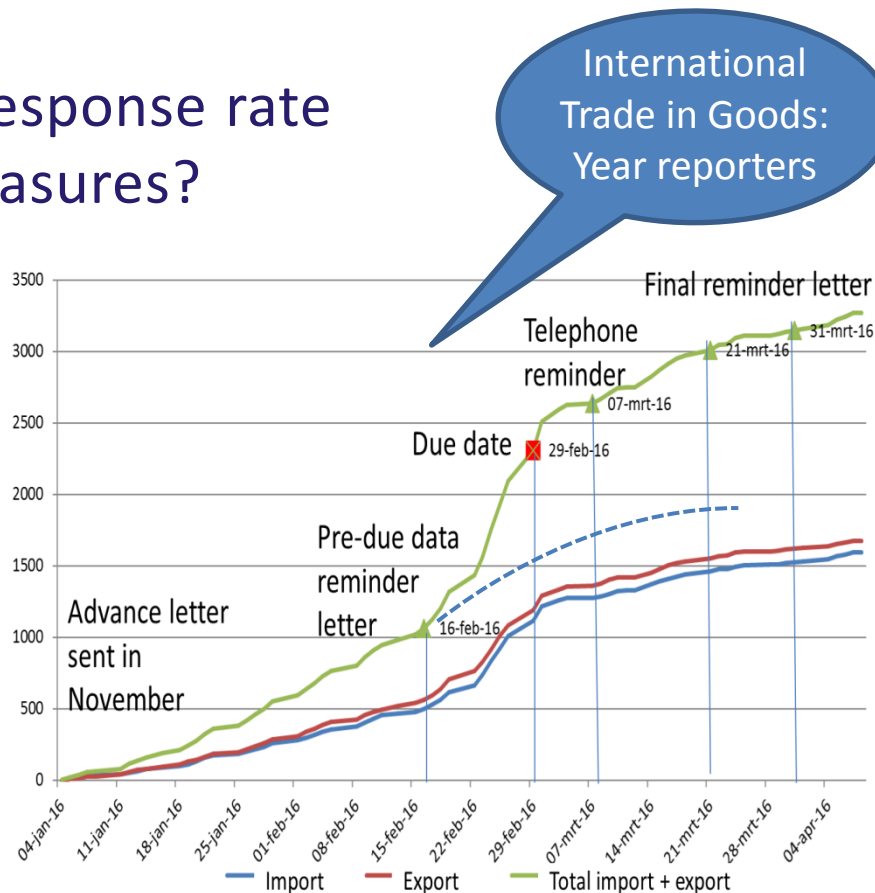
The effect of response measures in business surveys

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Geneva, 10 October 2018

Research questions

- What will be the increase in response rate if we apply such-and-such measures?
- What are the effects of:
 - Pre-due date reminder
 - telephone reminding
- What will be the costs?
- What would be a good timing for these measures?



Overview of business surveys

Survey	Name	Sector of the economy	Frequency	Mandatory by law?	Telephone reminding	Total sample size	Total unit RR (%)	Costs per Unit R (€)	Year analysed
SBS	Structural Business Survey	All sectors	Annual	Yes	No	71,719	74 (56)	2.22 (2.57)	2015
						75,518	74 (53)	2.27 (2.71)	2016
						78,605	(58)	(2.63)	2017
INV	Survey on Investments	All sectors	Annual	Yes	Yes	46,824	86	1.36	2018
ICTB	Survey on ICT Usage by Businesses	All sectors	Annual	No	No	12,114	74	1.93	2017
ITG	International Trade in Goods	All sectors	Annual	Yes	Yes	8,457	72	3.29	2016
ISGVC	Survey on International Sourcing and Global Value Chains	All sectors	Tri-annual	No	Yes	3,156	79	2.03	2017
HarvEst	Agricultural Survey on Harvest Estimates	Agriculture	Annual	Yes	Yes	4,443	72	2.12	2017
GrassU	Survey on Grassland Usage	Agriculture	Annual	No	Yes	2,528	40	5.01	2017
VegOS	Agricultural Survey on Harvest Estimates: vegetables open soil	Agriculture	Annual	Yes	Yes	2,453	71	2.38	2017


Overview of business surveys analysed

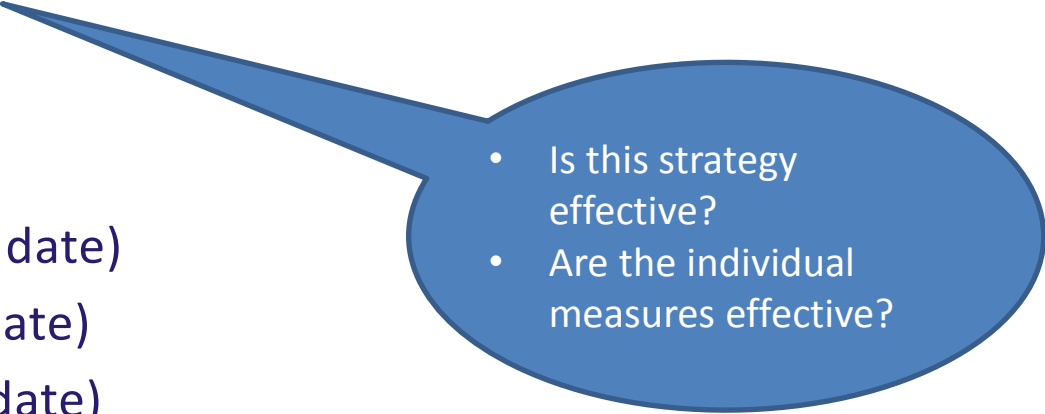
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- Comparable contact strategies
- Variability:
 - Sector economy
 - Mandatory
 - Telephone reminding

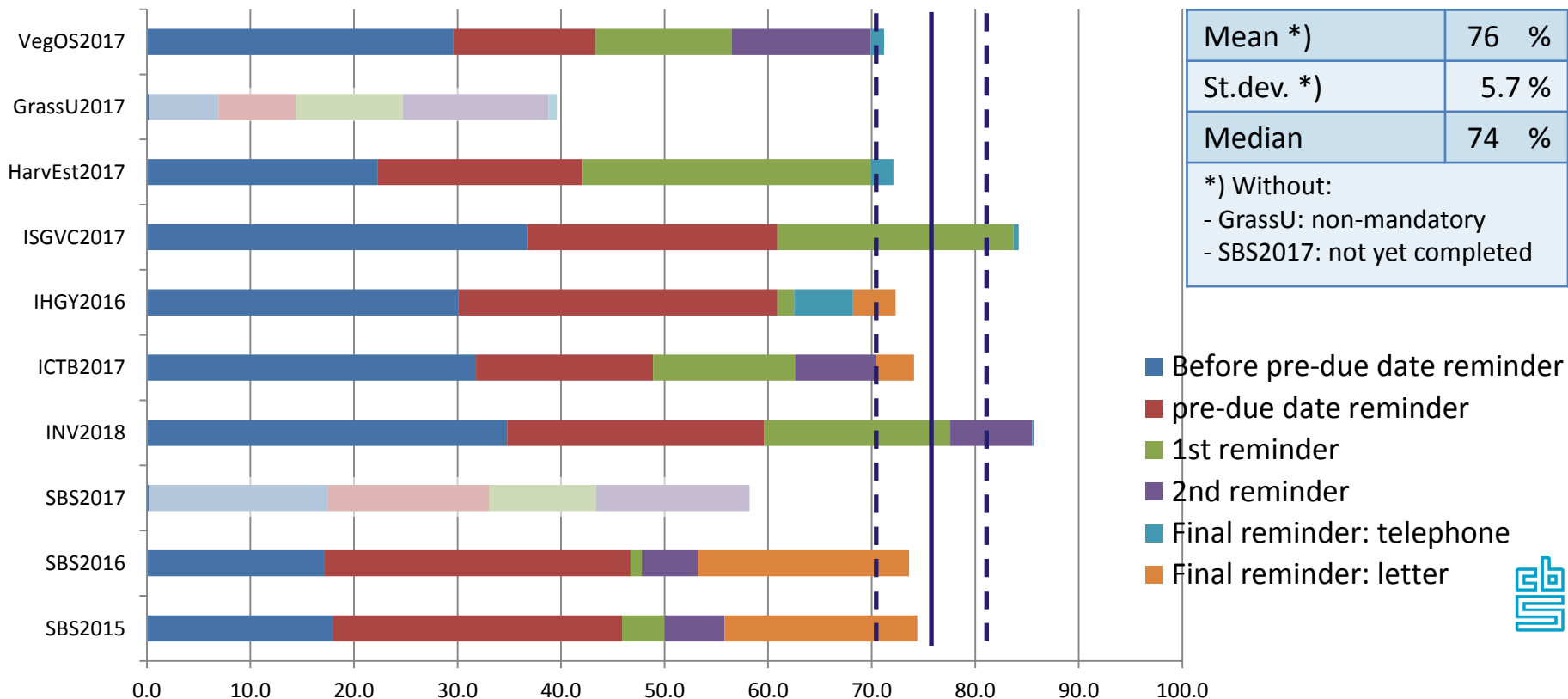
How are these achieved?

Contact strategy

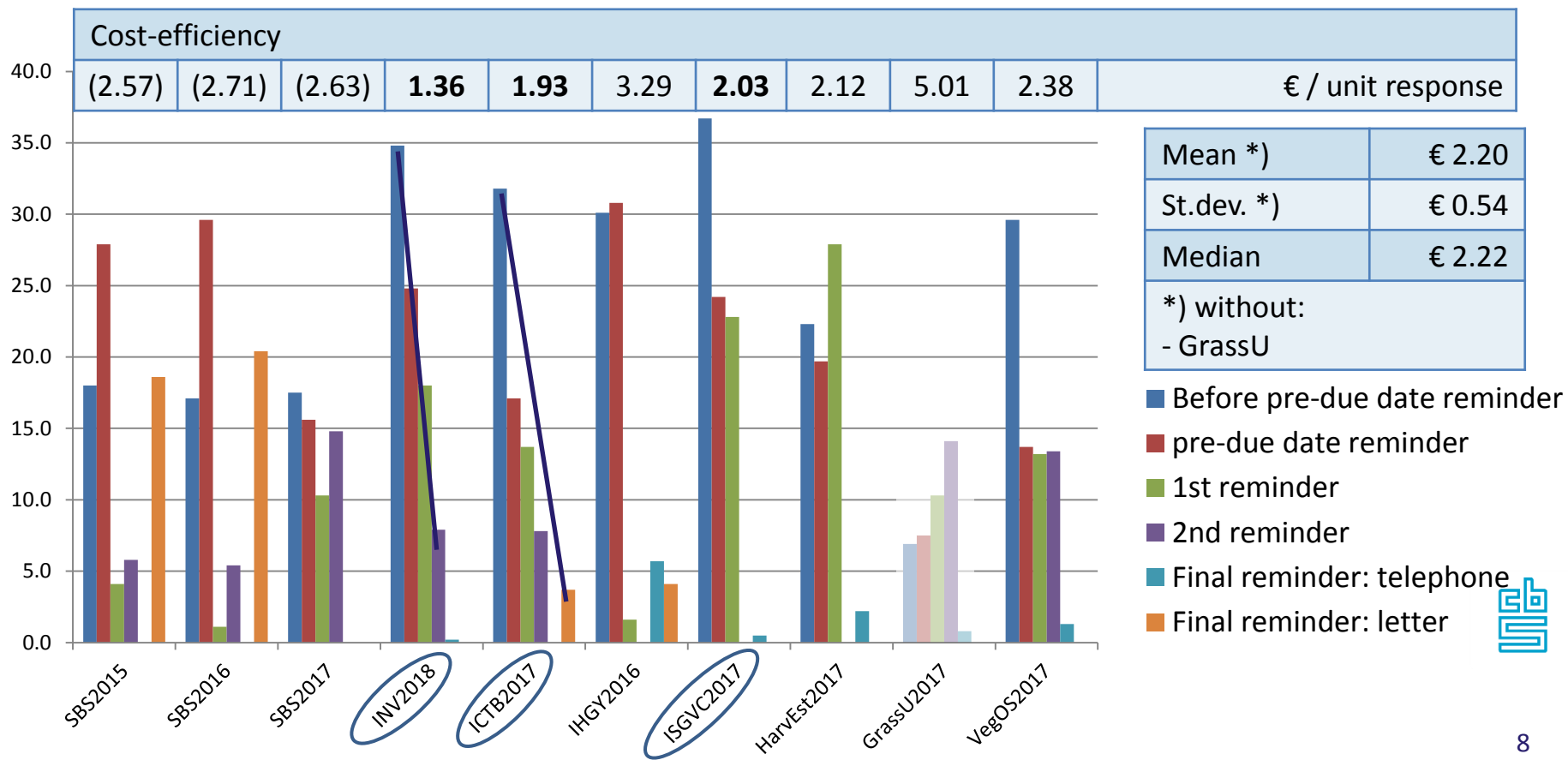
1. Advance letter 
2. Pre-due date reminder
(two weeks prior to due date)
3. 1st reminder (post-due date)
4. 2nd reminder (post-due date)
5. Final reminder:
 - Letter
 - Telephone reminding (small selected group of businesses)
ITG: step 3, motivation call to respondend

- 
- Is this strategy effective?
 - Are the individual measures effective?

Total response rates per survey (r/n)

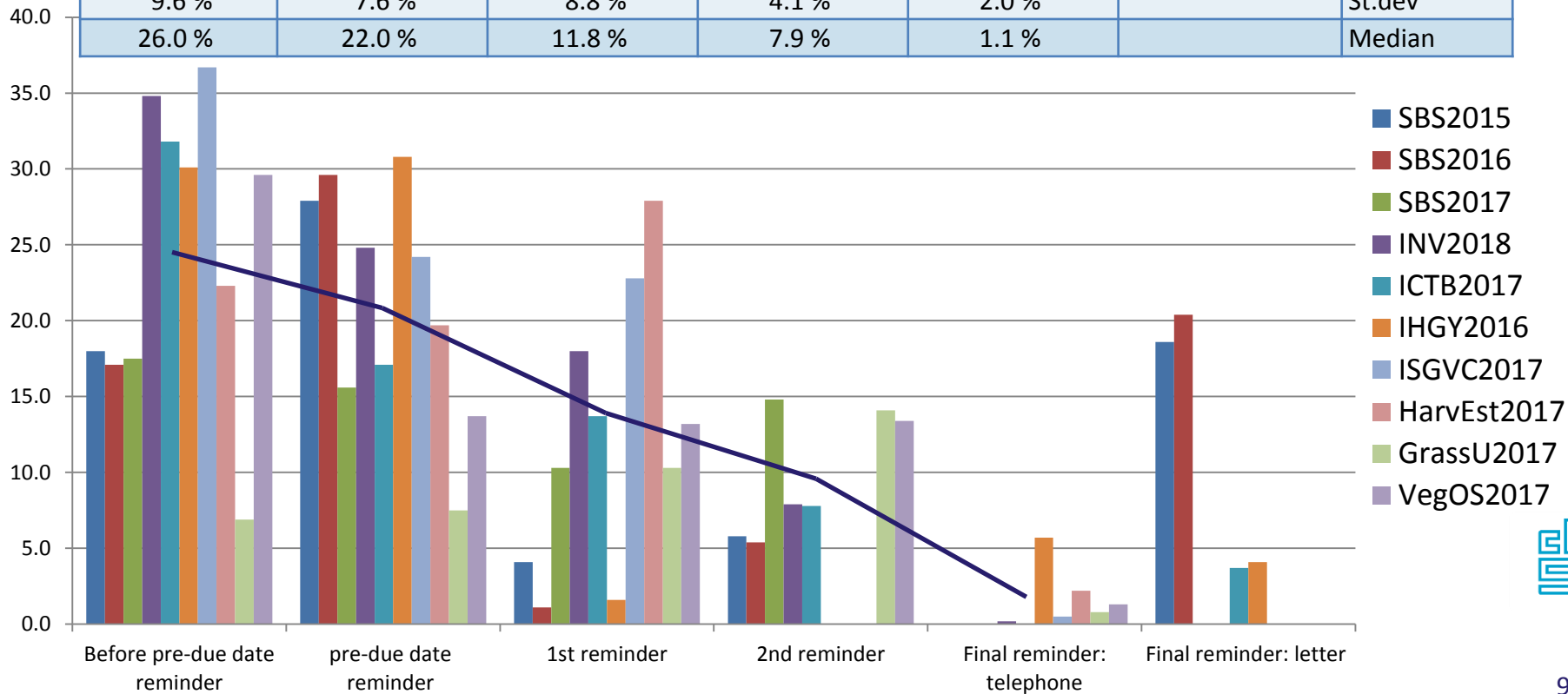


Response rates per measures (r_s/n)



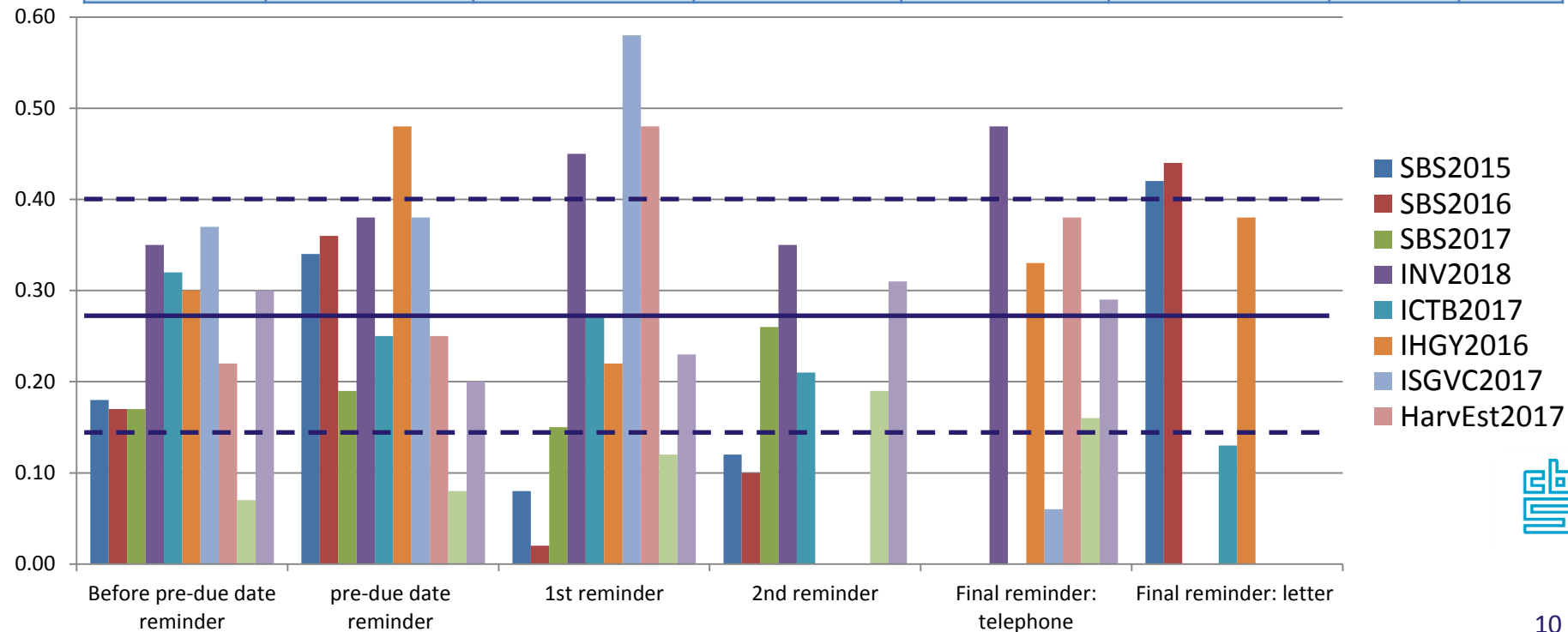
Response rates per measure (r_s/n)

24.5 %	21.1 %	12.3 %	9.9 %	1.8 %		Mean
9.6 %	7.6 %	8.8 %	4.1 %	2.0 %		St.dev
26.0 %	22.0 %	11.8 %	7.9 %	1.1 %		Median



Response probability per measure (r_s/n_s)

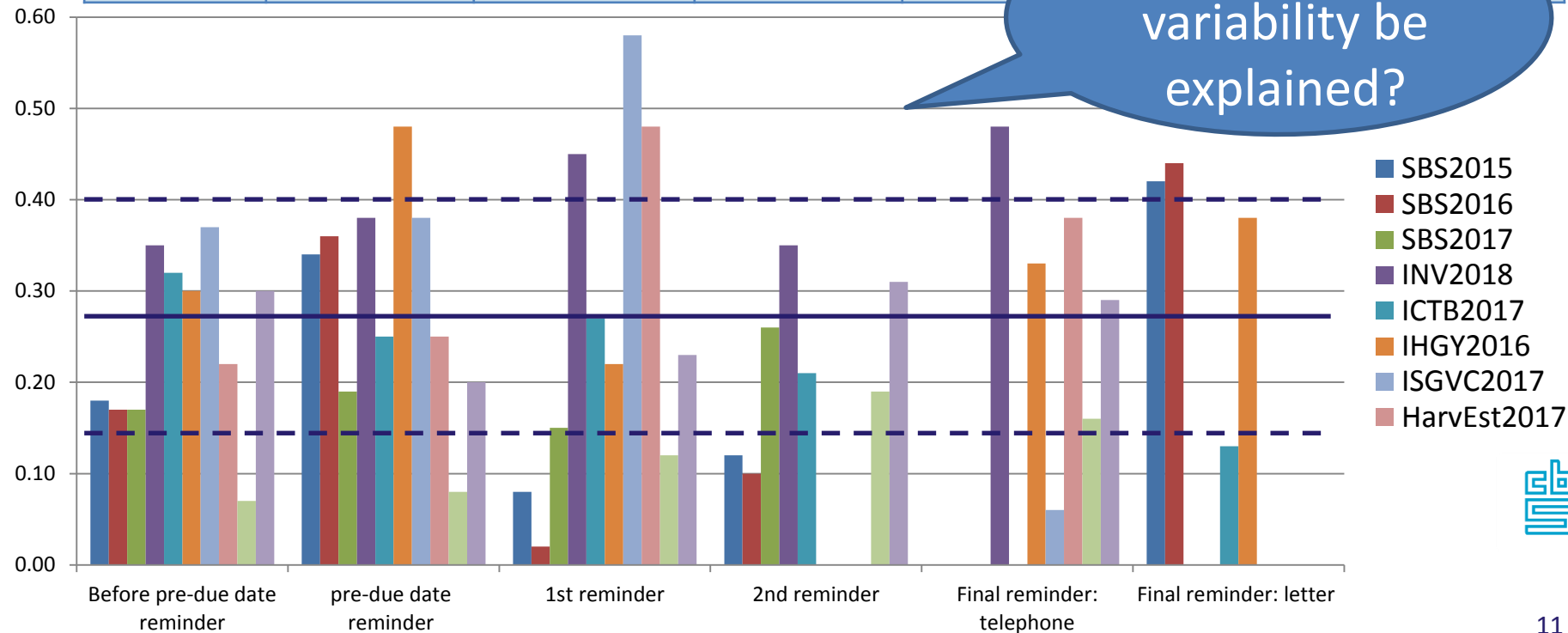
.25	.29	.26	.22	.28	.34	Mean	.27
.10	.12	.19	.09	.15	.44	St.dev	.13
.26	.30	.23	.21	.31	.40	Median	.26



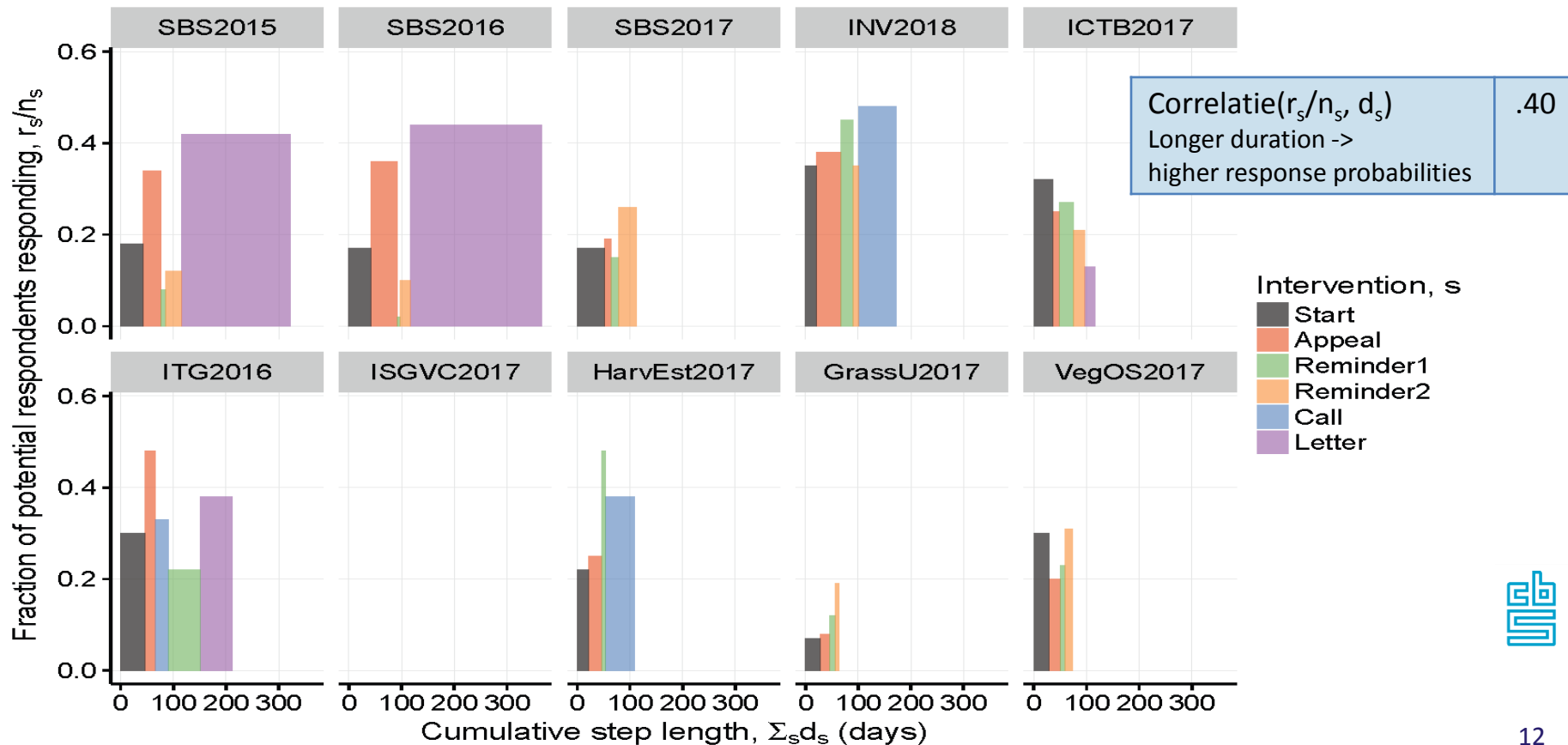
Response probability per measure (r_s/n_s)

.25	.29	.26	.22	.28	.27
.10	.12	.19	.09	.15	.13
.26	.30	.23	.21	.31	

How can this variability be explained?



Duration: Response probability per measure (r_s/n_s) and duration of a measure (d_s)



Business characteristics, internal response process

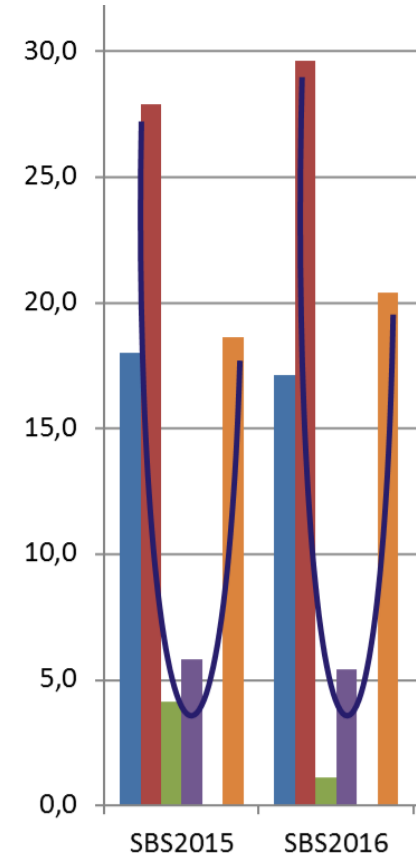
Structural Business Survey:

Two groups of businesses:

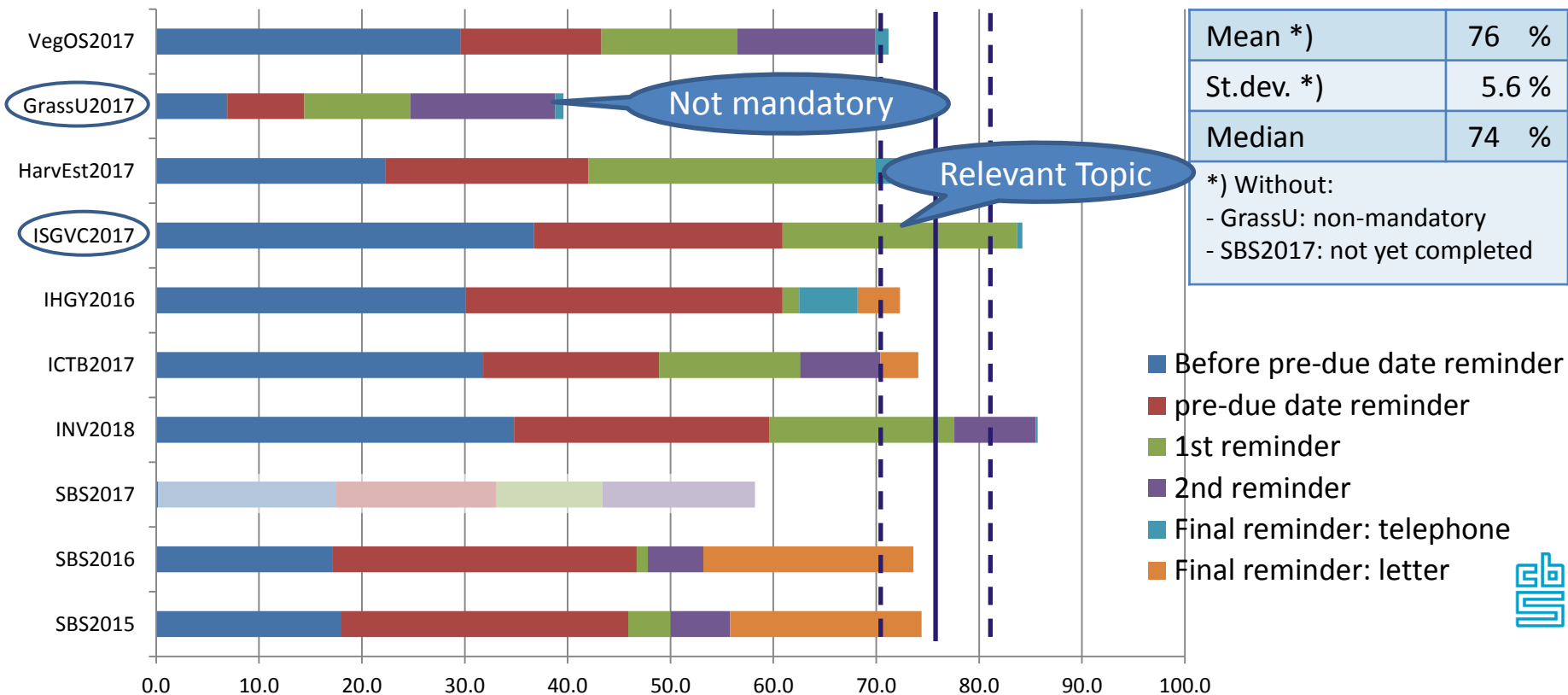
- Early respondents
- Late respondents

Why?

- Identify these businesses:
 - availability of data
 - time and priority
- Tailoring of strategy:
 - Timing of contacts



Survey characteristics



Effects of measures are influenced by

- Duration (but it is not a linear relation):
2 weeks seems to be a good duration
- Business characteristics and internal response process
- Survey characteristics:
 - Topic of the Survey (ISGVC)
 - Mandatory surveys (agricultural surveys)
- Internal processes within a survey organisation:
flaws in the process



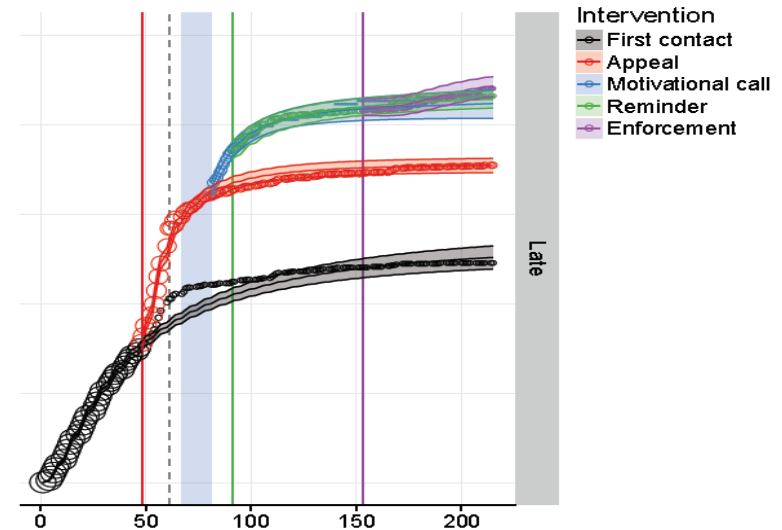
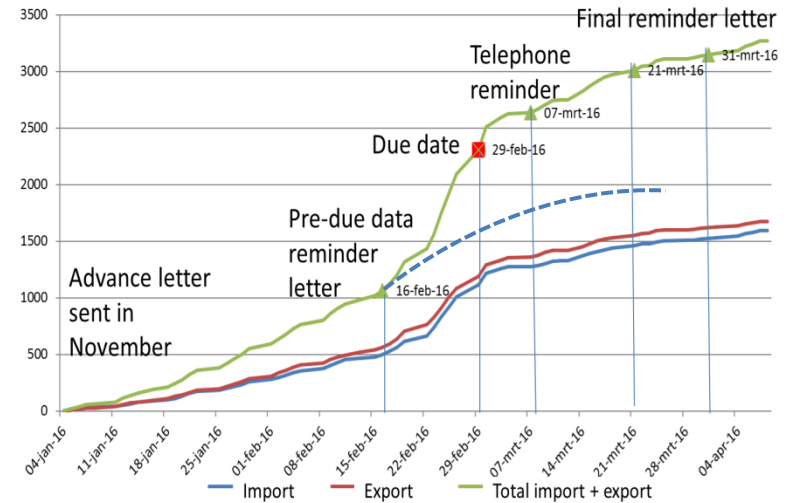
Conclusion (1/2)

- The contact strategy is effective for most surveys
- All measures:
 - add to the final response rate
 - are potentially effective (.27 response probability)
- The variability of measures is high, and depends on a number of factor that are in our control:
 - > duration of a measure, internal processes
 - out of our control:
 - > Business response processes
 - Tailoring of the contact strategy



Conclusion (2/2)

- Pre-due date reminders:
 - accelerate response rates
 - final response rates at equal or higher levels
- > International Trade in Goods
- Telephone reminding:
 - effective but expensive
 - the effect is small because applied to small groups (except for ITG)



Now ... what to do?

- If time is an issue:
 - Use pre-due date reminders (but at some costs)
 - Use at least one reminder about two weeks after the due date
- If time is *no* issue:
 - Skip the pre-due date reminder
 - Use a reminder immediately after the due date
- Use additional reminders if needed
- Use the telephone for specific relevant groups of businesses, not just for reminding but also to motivate

More
international studies
are needed to
compare results



But ...

We did **not** study:

- The effects of measures independently of each other: we studied the effects in a sequence
- Other contact strategies (e.g. without a pre-due date reminder)
- Background characteristics of businesses: Size class, NACE
- Representativeness of the response distribution
- Weighted response rates, like:
 - ‘revenue’ response rates (SBS)
 - ‘trade value’ response rates (ITG)
- Effects of each measure on final statistical estimates for target variables



рахмат
 Баярлалаа
 спасибо
 faafetai lava
 kiitos
 dhanyavad
 nani
 nandri
 bayarlalaa
 grazie
 hvala
 maururu
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Advance letter SBS

Introduction of SN + Survey

Invitation to complete questionnaire +
web address for additional information

Due date + survey is mandatory

How to complete the questionnaire:
questionnaire web address + user name
+ password

Contact information in case of
questions

Consolidated cluster

Thank you in advance

Geachte heer / mevrouw,

Het Centraal Bureau voor de Statistiek (CBS) is verantwoordelijk voor het samenstellen en publiceren van cijfers over productie, personeelsinzet en financiën van het bedrijfsleven. Een goed beeld van de ontwikkelingen van de verschillende bedrijfstakken en de bijdrage daarvan aan de Nederlandse economie zijn van groot belang voor bedrijfsleven, overheid en wetenschap.

Daarom vragen wij u de vragenlijst Productiestatistiek Industrie 2016 in te vullen. Ook voor uw bedrijf of instelling leveren deze CBS-publicaties waardevolle informatie op. Ze geven een algemeen beeld van uw bedrijfstak, u kunt zien hoe u presteert ten opzichte van de rest van de markt en u kunt uw marktaandeel vaststellen.

Meer informatie is te vinden op www.cbs.nl/ps bij de onderzoeksresultaten.

Wat vragen wij van u?

Vul de vragenlijst vóór **21 februari 2017** in. De overheid vindt de gegevens zo belangrijk, dat invullen **verplicht** is. Wees op tijd, dan voorkomt u een boete.

Zo vult u de vragenlijst in

U kunt de gegevens online via een beveiligde internetverbinding invullen en naar ons opsturen.

- Ga naar <https://psonline.cbs.nl>

- Vul in:

* gebruikersnummer **1000426**

* toegangscode **100426**

Stuur niet uw jaarrekening op, deze kunnen wij helaas niet verwerken.

Heeft u vragen?

Ga dan naar www.cbs.nl/ps voor meer informatie. Daar vindt u antwoorden op veelgestelde vragen en kunt u een aantal zaken online regelen.

Op www.cbs.nl/onderzoeksresultaten staan de resultaten van andere onderzoeken.

Uw onderneming bestaat uit een aantal groepsmaatschappijen. Daarom vragen we u om de geconsolideerde gegevens op te geven. De groepsmaatschappijen waarvan u de cijfers moet doorgeven, staan hieronder.

Bedrijf A

Bedrijf B

Bedrijf C

Wij danken u alvast hartelijk voor uw tijd en medewerking.

Hoogachtend,
Hoofddirecteur Dataverzameling

CBS Heerlen



Mw. dr. A. Boeijen

Heerlen, 21 februari 2017

International Trade in goods

