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Digital census in Luxembourg :

New population census

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Content

- Characteristics of the last census (2011)
- Characteristics of the next census (2021)
 - Web questionnaire
 - Paper questionnaire
 - Control list
 - Administrative registers
 - Use of a new technology : scanning
- Conclusion

Characteristics of the last census (2011)

- Traditional census
- Paper questionnaire by household
- Collaboration between STATEC and municipalities
- +- 2 200 field enumerators
- New : Possibility to answer by internet (PDF format) → only 3 % of the population

➔ Need to improve the census :

-  Cost (6 millions in 2011)
-  Image of state
-  Annual census from 2024

Characteristics of the next census (2021)

- New name: digital census
 - Focus on internet
 - Combined census
- 4 different sources:
 1. Web questionnaire (through citizen portal) : by household
 2. Paper questionnaire : by household
 3. Control list
 4. Administrative registers
- Challenge but also opportunities for others surveys
- Pilot Census in October 2019

Characteristics of the next census (2021)

- Field enumeration : 4 weeks (February 2021)

1st week :
Internet

2nd week :
Internet

3rd week :
Internet
+
paper questionnaire

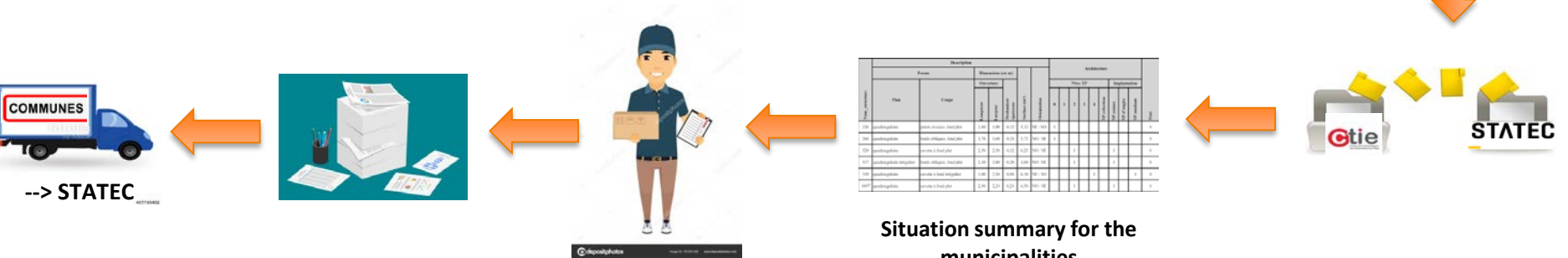
4th week :
paper questionnaire

- 5 languages :



- Cooperation with municipalities
- Staff : 2.5 persons from STATEC + 10 persons during 2 years
- Preparation of the 2024 census

1. Web questionnaire



Objective : 30% of the population

1. Web questionnaire

Code d'accès

Veillez saisir le code d'accès que vous avez reçu dans votre courrier postal. Vous ne pouvez déclarer qu'une seule démarche par ménage.

Code d'accès*

Identité du déclarant

Nom*

Prénom*

Quelle est l'adresse de votre ménage?

Code postal:*

 * Exemple: L2615, saisir 2615

Commune :*

 Sélectionner une valeur *

Rue:*

 Sélectionner une valeur *

Numéro de rue:*

 Sélectionner une valeur *

Je ne trouve pas l'adresse:



WORK IN PROGRESS

1. Web questionnaire

Composition du ménage

Prénom	Nom	
<input type="text" value="Martin"/>	<input type="text" value="Durand"/>	
<input type="text"/>	<input type="text"/>	

Ajouter une personne au ménage 

Information personne Martin Durand

Prénom:

✓

Nom:

✓

Situation par rapport à la vie économique:*

Exerce un emploi ou une activité, y compris travaux non rémunérés pour une entreprise familiale, dans le cadre d'un apprentissage ou d'un stage rémunéré

Sans activité

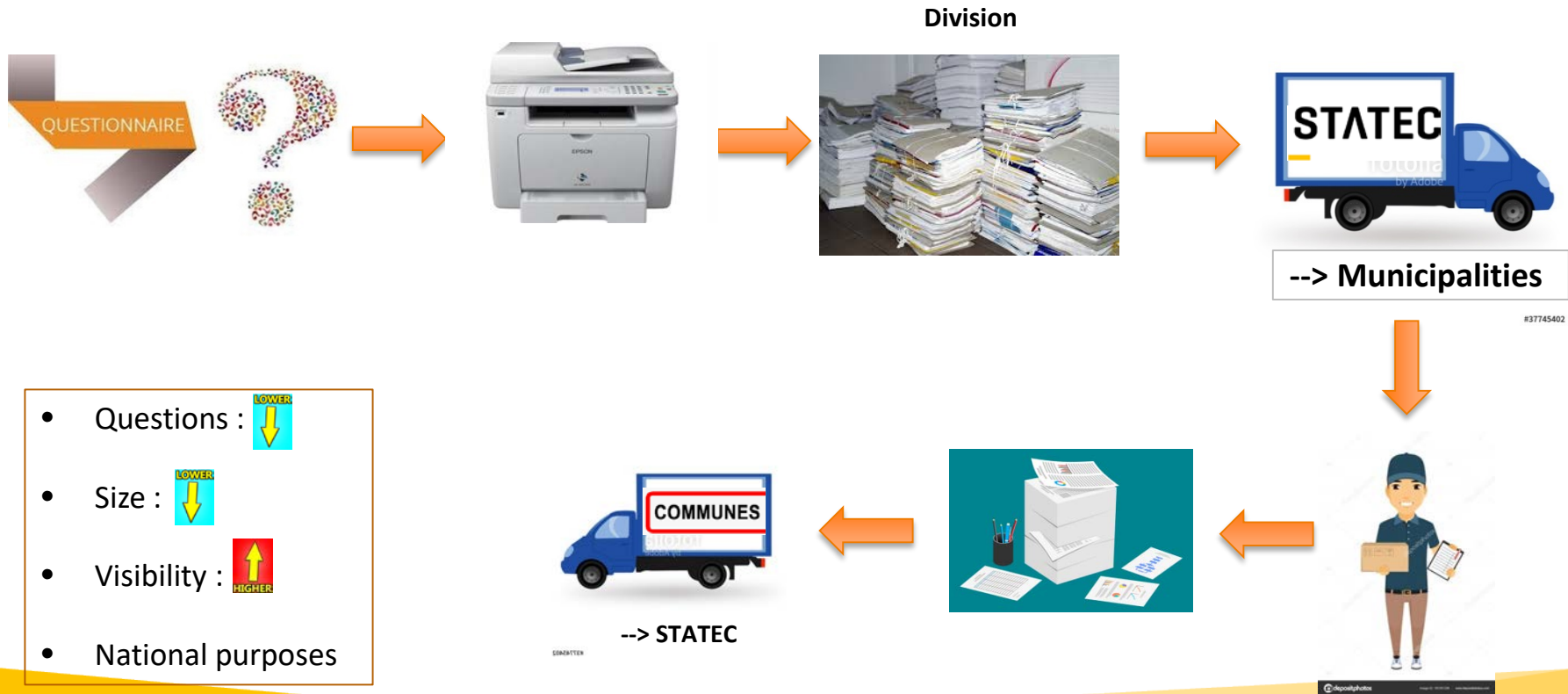


WORK IN PROGRESS

Need to promote the web questionnaire

- Web logins are distributed before the paper questionnaires (2 weeks later) : one login per 'household'
- A lottery is organised for those who have responded by internet
- One hour free for the public sector to fill-in
- A big campaign to promote the web response (advantages)
- 5 languages

2. Paper questionnaire



3. Control list



Code postal	Rue et n°	Nom de l'occupant	Étage	Numéro d'ordre			Population résidente			Population présente non résidente			Mode de collecte							
				immeuble	logement	ménage	Total	Masculin	Féminin	Total	Masculin	Féminin		Tradi- tionnel	Ex- tra-censu	En- jout commune				



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- Control list is used to check that every household has answered the questionnaire (paper or web)
- The list is pre-filled: name / address / ID number (1 line = 1 person)
- The census enumerators complete the list with the “census key”
- The ID number is not asked in the questionnaire !



The ID number has a crucial place in the census : it allows to link the questionnaires to the administrative registers

4. Administrative registers

RNPP



Population register

- ID number
- Name
- Address
- Sex
- Date of birth
- Nationality
- Legal marital status
- Country of birth
- Year of arrival in the country
- Place of usual residence one year prior to the census

RBL

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Building and dwelling register

Building characteristics:

- Address
- Type of building
- Period of construction
- Occupied or not

Dwelling characteristics:

- Only for house
- Surface
- Number of room

IGSS



Social security register

- ID number
- NACE or ID number of company

Not everybody :

- Own-account workers
- International organization
- People working outside the country

Limited number of registers



Need to have questions on questionnaire

Combining the different sources

- Population Register and dwelling register : address
- Then : Social security register : ID number
- → administrative data
- Variables from questionnaire : ID number (through key census)

Use of a new technology : scanning



Nom		Prénoms		Sexe		Date de naissance		Lieu de naissance		N° de naissance		N° de carte d'identité		N° de carte de profession	

Désignation exacte de la profession /
genaue Bezeichnung des Berufs

Nom		Prénoms		Sexe		Date de naissance		Lieu de naissance		N° de naissance		N° de carte d'identité		N° de carte de profession	

Masculin / *Männlich* 1
Féminin / *Weiblich* 2



Digital transmission

Use of a new technology : scanning

The scanning of all the paper questionnaires and control lists has some advantages:

- Only 'open questions' have to be encoded by an external company (saving money)
- No questionnaire has to be sent by truck (no transport → less risk)
- The scanned questions are separately sent to the encoding company (more confidentiality)
- Not every questionnaire has to be opened manually for preliminary control
→ automatically coherence control
- Corrections can be directly done in the database

But:

- Need to develop a new methodology
- Lot of work : 200 000 questionnaires of 20 pages
- Need of IT infrastructure

Use of a new technology : scanning

- New questionnaire (to illustrate : MALTA 2011)

The image shows a detailed questionnaire form for the MALTA 2011 census. It is organized into several sections, each with a heading in multiple languages (Maltese, English, and French). The sections include:

- 1 NOM / NAME:** Fields for name in Maltese, English, and French.
- 10 SEXE / GENDER:** Radio buttons for Male and Female.
- 11 DATE DE NAISSANCE / GEBURTSDATUM:** Fields for date of birth in Maltese, English, and French.
- 12 PAYS DE NAISSANCE / RESIDENCE ANTERIEURE A L'ETRANGER:** Fields for country of birth and previous residence.
- 13 PAYS DE NAISSANCE DES PARENTS / GEBURTSLAND DER ELTERN:** Fields for parents' country of birth.
- 14 SITUATION DE FAMILLE / FAMILIENSTAND:** Radio buttons for various family statuses.
- 15 LIENS ENTRE LES PERSONNES DU MENAGE:** Fields for marital status and other relationships.

What's new?

New visual :

- One language
- 1 document
- QR codes
- Delimiters



The image shows a simplified version of the questionnaire form, focusing on the 'POPULATION SECTION'. It includes a QR code at the top and bottom. The form is divided into two columns for Person 1 and Person 2. The questions are numbered 1 through 10. Annotations in red boxes and arrows highlight new features:

- Question 1:** 'What is your name?' - Includes a note: 'Insert the name of all the persons who usually live in this household, beginning with the name of the reference person as Person 1.' A red box highlights the instruction: 'always write in CAPITALS' and 'write in BLOCK OF DARK INK. DO NOT use pencil or ballpoint pen. Do NOT write in CAPITALS'.
- Question 2:** 'What is your surname?' - Includes a note: 'Insert the surname of all the persons who usually live in this household, beginning with the surname of the reference person as Person 1.' A red box highlights the instruction: 'don't forget ID card letter'.
- Question 3:** 'Insert your identity card number (e.g. 87689M)' - Includes a note: 'Include the ID card letter (e.g. M, C, L, H, etc.). For children, insert A or B and if an identity card is not available'.
- Question 4:** 'Insert your date of birth' - Includes a note: 'E.g. 30 November 1990 should read: 30 11 1990'. A red box highlights the instruction: 'Mark by drawing a cross' and 'Male (mark and draw a cross)'. A red box highlights the instruction: 'Mark by drawing a cross' and 'Female (mark the correct one)'.
- Question 5:** 'Indicate your sex' - Includes a note: 'Mark 1 (circle only)'. A red box highlights the instruction: 'Mark by drawing a cross' and 'Male (mark and draw a cross)'. A red box highlights the instruction: 'Mark by drawing a cross' and 'Female (mark the correct one)'.
- Question 6:** 'If applicable, insert the date of your first live birth' - Includes a note: 'Mark 1 (circle only)'. A red box highlights the instruction: 'Mark by drawing a cross' and 'Male (mark and draw a cross)'. A red box highlights the instruction: 'Mark by drawing a cross' and 'Female (mark the correct one)'.
- Question 7:** 'Which is your country of birth?' - Includes a note: 'Mark 1 (circle only)'. A red box highlights the instruction: 'when you have to choose mark only one option, a circle is used' and 'when you can choose mark more than one option, a square is used'. A red box highlights the instruction: 'If you mark OTHER don't forget to write down in CAPITALS the country in this box'.
- Question 8:** 'Do you have Maltese citizenship?' - Includes a note: 'Mark 1 (circle only)'. A red box highlights the instruction: 'Mark 1 (circle only)'.
- Question 9:** 'How did you gain Maltese citizenship?' - Includes a note: 'If you gained Maltese citizenship by marriage, mark 1 (circle only)'. A red box highlights the instruction: 'Mark 1 (circle only)'.
- Question 10:** 'Do you have any foreign citizenship?' - Includes a note: 'Mark 1 (circle only)'. A red box highlights the instruction: 'Mark 1 (circle only)'.



Conclusion

- Big challenge
- In house software
- Test in 2019
- Final decision : beginning 2020
- Cooperation with others administrations
- New way of thinking

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Thanks for your attention!
Some questions?

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