

This note outlines the method to triangulate, and aggregate questionnaires collected by programmatic partners and data collection initiatives at community and neighborhood level as a part of Multi-sector assessment. Aggregation will be achieved by systematic logic outlined in the subsequent sections and implemented using R-script programming.

The following guidelines outline the process followed during the Aggregation/Triangulation phase with data collected through the Multi-sector assessment. The Aggregation/Triangulation phase immediately follows the Data Cleaning and Verification phase.

OVERVIEW

Data collected by operational partners and data collection initiatives will produce the following types of data records:

1. Neighborhood-level records
2. Community-level records

Multiple partners and data collection initiatives are collecting data in approximately 5,600 communities in Syria where majority of communities are covered by more than one partners. Therefore, many communities will have multiple community-level records for triangulation. These multiple records per community will be weighted, triangulated, and aggregated to produce one record per community or neighbourhood levels.

Neighbourhood-level records will be collected in 13 major cities in Syria where neighbourhood p-codes are available. In these cities, each neighbourhood will be considered as a unit of analysis.

The data triangulation and aggregation process are outlined below:

- 1) Step One: Recoding of data variable
The data exported from KoBo will be recoded to proper names and labels.
 - Output: recoded RAW dataset
- 2) Step Two: Criteria and score for data confidence level
This confidence level information will be used in triangulation process.
 - Output: data reliability criteria and scores for triangulation
- 3) Step Three: Aggregation method
For each question in the questionnaire, aggregation method will be identified and aggregation logic will be elaborated.
This process will be implemented using R-Script.
- 4) Step Four: Community/Neighborhood-Level Aggregation
The raw dataset will be aggregated at neighbourhood level records from the 13 major cities, and the community level records to produce one record per community.

- Outputs: One record per community or neighbourhood

1. Data Preparation for aggregation/triangulation

Before starting data aggregation, raw data submitted by partner will be cleaned and verified during 'data cleaning / verification' step. In addition, entries in the 'Other' are explored, analysed and processed as below.

- Individual data collected by partners are first of all merged into one raw master data base. All 'Other' entry variables are explored to identify 'Other' entries that do not fit into existing categories and have therefore not been recoded by respective agencies. If a significant number of entries relating to a 'new' category is identified, a new variable (if binary) or new category is created and implemented across all data sets to ensure inclusion in the final aggregation of all categories. For variables where all categories are retained in the final aggregation, 'Other' will be included as a category in the event of any entry in any of the corresponding records. The text entry will remain in the raw data set for reference.

2. Criteria and Score for Confidence Level

The data weighting system is based on criteria related to the methodology applied in collecting data. The information related to the methods of data are recorded for each section/sector and will be scored as outlined in the table below. ¹

Parameters/Criteria	Options	Score
Key Informant Role or knowledge in subject matter ²	Expert	3
	General	2
	Limited	1
Data Collection modality	Face to Face	3
	Remote	1

The sum of the scores for each section of the questionnaire will be used to evaluate confidence level for each questionnaire record and this composite score will be recorded in the dataset.

¹ A general framework of data weighting system for HNO 2017 was developed by "Weighting work stream" of HNO process.

² Sector to provide score for each KI types

3. Aggregation Method (same geographic level)

Data Aggregation Plan

Multiple questionnaire submitted at same geographic unit will be aggregated into one record. For example, multiple questionnaires submitted by more than one programmatic partner and data collection initiative for a community will be aggregated to one record.

Following records will be generated by aggregating multiple questionnaires into one.

Type of data records	Aggregation and analysis need
Neighborhood	Neighborhood Level
Community	Community Level

The logic to systematically aggregate each type of question present in the Multi-sector questionnaire will be as outlined below³.

GLOSSARY

Categorical: questions and answers referring to categories that are not ordered in any way (e.g. Question: What are the main protection issues? Answers: Tension between host and displaced populations; Unexploded ordinance/Explosive devices etc.)

Ordinal: questions and answers referring to categories that are ordered in some way (e.g. Question: Damages to private buildings due to conflict? Answers: No damage; slight damage; moderate damage etc.)

Continuous/Numerical: questions and answers referring to numerical values (e.g. Question: How many IDPs are currently living in this community? Answer: e.g. 2,000)

3.1. Numerical question where 1 number is given as answer

Example Question: CCCM 2.2. How many collective centers and camps are in your community?

To estimate number closer to the questionnaires provided by the most reliable source, weighted average of the answers from different questionnaires will be calculated.

$$\text{Calculation} = \frac{\text{Data 1 x Score 1} + \text{Data 2 x Score 2} + \text{Data 3 x Score 3}}{\text{Score 1} + \text{Score 2} + \text{Score 3}}$$

Result will be rounded to nearest integer value.

Questions in the KoBo where this category applies:

Section	Question number	Notes
Inter-Sector	Q1.3	
CCCM	Q_2_2_2, Q_2_2_3, Q_2_2_4, Q_2_2_5	
Education	Q_3_9_1, Q_3_9_2	
FSS	Q_4_8_1_1, Q_4_8_1_2, Q_4_8_2_1, Q_4_8_2_2, Q_4_9_1_2, Q_4_9_1_3, Q_4_9_2_2, Q_4_9_2_3	
Health	Q_5_A_3_b, Q_5_B_2_b	

³ Data aggregation logic is similar to the method used in multi-sector assessments for HNO 2016 and HNO 2017.

NFI-Shelter
Protection
ERL

3.2. Numerical question where % is given as answer and SUM of categories to be 100%

Example question: 6.1 What % of your community live in each of the following type of dwelling?

To estimate the final % for each category of source following steps will be used:

- Weighted average for each category will be calculated for the figures as in 3.1

Questions in the KoBo where this category applies:

Section	Question number	Notes
Inter-Sector		
CCCM		
Education		
FSS		
Health		
NFI-Shelter	Q_6_1_2_1, Q_6_1_2_2, Q_6_1_2_3, Q_6_1_2_4, Q_6_1_2_5, Q_6_1_2_6, Q_6_1_2_7, Q_6_1_2_8	
Protection		
ERL		

3.3. Categorical question where 1 categorical answer is given

Example: 1.2b. What was the main reason for their displacement to this location? (Tick one box)

Answers from different questionnaires will be aggregated by identifying the answer provided 1) most often with 2) the highest reliability. The following steps will be followed to aggregate individual records into one record per location.

- Create binary variable for each of the categories
- Convert YES/NO or TRUE/FALSE to 1 or 0 respectively.
- Replace 1 with reliability score
- Sum the score for each category and identify the category with highest score
- Add the category with the highest score as a final result.

If multiple answers are found to have the same top score, all with the top score will be retained in the aggregated data set. Further verification and triangulated is required to establish the final result for the location.

Section	Question number	Notes
Inter-Sector	Q_1_2_b, Q_1_5_b	
CCCM		
Education	Q_3_8_1, Q_3_8_2	
FSS		
Health		
NFI-Shelter	Q_6_16	
Protection		
ERL		

3.4. Categorical question where 3 categorical answers are given without ranking

Example: 1.6a. What are the three most recent types of assistance delivered to the community in the past three months? (Tick up to three)

Following steps will be followed to aggregate individual records into one record for the location.

- Create binary variable for each of the categories
- Convert YES/NO or TRUE/FALSE to 1 or 0 respectively.
- Replace 1 with reliability score
- Sum the score for each category to identify the categories with highest score
- Add the categories with the 3 highest score as a final result.

If multiple categories are found to have same highest score within the top 3 highest scores, all will be retained. Further verification and triangulated is required to establish the final result for the location.

Questions in the KoBo where this category applies:

Section	Question number	Notes
Inter-Sector	Q_1_6a, Q_1_7	
CCCM	Q_2_7	
Education		
FSS		
Health	Q_5_B_4	
NFI-Shelter		
Protection		
ERL		

3.5. Categorical question where 4 categorical answers are given without ranking

Example: 2.11. What were the four biggest problems hosting and hosted households faced? (Select top four)

Following steps will be followed to aggregate individual records into one record for the location.

- Create binary variable for each of the categories
- Convert YES/NO or TRUE/FALSE to 1 or 0 respectively.
- Replace 1 with reliability score
- Sum the score for each category to identify the categories with highest score
- Add the categories with the 4 highest score as a final result.

If multiple categories are found to have same highest score within the top 5 highest scores, all will be retained. Further verification and triangulated is required to establish the final result for the location.

Questions in the KoBo where this category applies:

Section	Question number	Notes
Inter-Sector		
CCCM	Q_2_11	
Education		
FSS		

Section	Question number	Notes
Health		
NFI-Shelter		
Protection		
ERL		

3.6. Categorical question where 3 categorical answers are ranked 1 – 3

Example: 1.1. What are the top three concerns within this community?

(rank only top three: 1= most at risk, 2=second most at risk, 3=third most at risk)

Following steps will be followed to aggregate individual records into one record for the location.

- Scoring the rank – assign score 3 to highest rank, 2 to second rank and 1 to lowest ranked options.
- Multiply the rank score by reliability score
- Sum the score and identify the categories with the top three highest total score.
- Add these top three categories as final result together with associated rank

If multiple categories are found to have same highest score within the 3 highest ranked scores, all will be retained. Further verification and triangulated is required to establish the final result for the location.

Questions in the KoBo where this category applies:

Section	Question number	Notes
Inter-Sector	Q_1_1_1, Q_1_1_2, Q_1_1_3	
CCCM		
Education	Q_3_4_1, Q_3_4_2, Q_3_4_3, Q_3_5_1, Q_3_5_2, Q_3_5_3	
FSS	Q_4_1_1, Q_4_1_2, Q_4_1_3, Q_4_2_1, Q_4_2_2, Q_4_2_3, Q_4_3_1, Q_4_3_2, Q_4_3_3, Q_4_4_1, Q_4_4_2, Q_4_4_3, Q_4_5_1, Q_4_5_2, Q_4_5_3, Q_4_6_1, Q_4_6_2, Q_4_6_3, Q_4_7_1, Q_4_7_2, Q_4_7_3	
Health	Q_5_A_3_1_1, Q_5_A_3_1_2, Q_5_A_3_1_3, Q_5_B_2_1_1, Q_5_B_2_1_2, Q_5_B_2_1_3	
NFI-Shelter	Q_6_10_1_1, Q_6_10_1_2, Q_6_10_1_3, Q_6_10_2_1, Q_6_10_2_2, Q_6_10_2_3, Q_6_10_3_1, Q_6_10_3_2, Q_6_10_3_3, Q_6_10_4_1, Q_6_10_4_2, Q_6_10_4_3, Q_6_10_5_1, Q_6_10_5_2, Q_6_10_5_3	
Protection		
ERL		

3.7. Categorical question where 4 categorical answers are ranked 1 – 4

Example: 8.1. Which among the following groups are most at risk or vulnerable? (rank top 4)

(rank top four: 1= most important, 2=second most important, 3=third most important, 4=forth most important)

Following steps will be followed to aggregate individual records into one record for the location.

- Convert rank to score – assign score 4 to highest rank and 1 to the lowest ranked options.
- Multiply the rank by reliability score
- Sum the score and identify the categories with the top three highest total score.
- Add these top 4 categories as final result

If multiple categories are found to have same highest score within the 4 highest ranked scores, all will be retained. Further verification and triangulated is required to establish the final result for the location.

Questions in the KoBo where this category applies:

Section	Question number	Notes
Inter-Sector		
CCCM		
Education		
FSS		
Health	Q_5_B_6_1, Q_5_B_6_2, Q_5_B_6_3, Q_5_B_6_4	
NFI-Shelter		
Protection		
ERL	Q_8_1_1, Q_8_1_2, Q_8_1_3, Q_8_1_4	

3.8. Categorical question where all categorical answer that apply are given

Example:

Answers from all questionnaires will be retained as the final result.

Questions in the KoBo where this category applies:

Section	Question number	Notes
Inter-Sector	Q_1_6b1, Q_1_6c1	
CCCM	Q_2_3, Q_2_4, Q_2_5, Q_2_6, Q_2_9, Q_2_10, Q_2_13	
Education	Q_3_6_1	
FSS		
Health	Q_5_A_4, Q_5_B_3	
NFI-Shelter	Q_6_4, Q_6_8, Q_6_9, Q_6_11, Q_6_12, Q_6_13, Q_6_15, Q_6_17	
Protection	gos_doc, no_doc, no_doc_women, no_doc_men, no_doc_child, q16_2_event, q17_land, labour_girls_ages, labour_boys_ages, girls_separation, boys_separation, q9_discrimination_group, q9_with_disabilities, q9_old_persons	
ERL		

3.9. Ordinal question where 1 ordinal answer is given

Example: Education – 3.2: What percentage of children in the community are out of formal education in 2016/2017 school year?

Answers from the different questionnaires will be aggregated by giving more weight to answers provided with a higher reliability.

The following steps will be followed to aggregate individual records into one sub-district reality level record:

- Recode the ordinal categories into 1, 2, 3, 4 scores etc.
- Multiply each category score (e.g. 1, 2, 3) by the corresponding reliability score and sum up the scores
- Divide the sum of scores by the total sum of reliability score to obtain a weighted average across categories
- Recode back into corresponding original category, summing up where a value falls in the middle (e.g. 1.5)

Calculation:

$$\text{Weighted Category Score} = \frac{\text{Ordinal Category 1} \times \text{Score 1} + \text{Ordinal Category 2} \times \text{Score 2} + \text{Ordinal Category 3} \times \text{Score 3}}{\text{Score 1} + \text{Score 2} + \text{Score 3}}$$

If the weighted category score falls between 2 categories, adopt the worst case scenario.

Examples:

Education Q3.2

% range	None 0%	1 – 25%	26 – 50%	51 – 75%	76 – 99%	All 100%	Do not know	No Answer
Ordinal Score	0	1	2	3	4	5	Exclude	Exclude
Weighted Category Score (WCS) range	0 < WCS < 0.5	0.5 ≤ WCS < 1.5	1.5 ≤ WCS < 2.5	2.5 ≤ WCS < 3.5	3.5 ≤ WCS < 4.5	4.5 ≤ WCS		

Questions in the KoBo where this category applies:

Section	Question number	Notes
Inter-Sector	Q_1_4, Q_1_5_a, Q_1_6b, Q_1_6c, Q_K2, Q_K3, Q_1_2_1, Q_1_5, Q_1_6)	
CCCM	Q_2k_1_f, Q_2k_2_f, Q_2_1, Q_2_2_1, Q_2_8, Q_2_12	
Education	Q_3_1, Q_3_2_1, Q_3_2_2, Q_3_2_3, Q_3_2_4, Q_3_3_1, Q_3_3_2, Q_3_3_3, Q_3_3_4, Q_3_6, Q_3_7, Q_3_10, Q_3k_1_f, Q_3k_2_f	
FSS	Q_4k_1_f, Q_4k_2_f	
Health	Q_5_A_1_1, Q_5_A_1_2, Q_5_A_1_3, Q_5_A_1_4, Q_5_A_1_5, Q_5_A_1_6, Q_5_A_1_7, Q_5_A_1_8, Q_5_A_1_9, Q_5_A_1_10, Q_5_A_1_11, Q_5_A_1_12, Q_5_A_1_13, Q_5_A_1_14, Q_5_A_1_15, Q_5_A_1_16, Q_5_A_1_16_3, Q_5_A_2_1, Q_5_A_2_2, Q_5_A_2_3, Q_5_A_2_4, Q_5_A_2_5, Q_5_A_2_6, Q_5_A_2_7, Q_5_A_2_8, Q_5_A_2_9, Q_5_A_2_10, Q_5_A_2_11, Q_5_A_2_12, Q_5_A_2_13, Q_5_A_2_14, Q_5_A_2_15, Q_5_A_2_16, Q_5_A_2_17, Q_5_A_2_18, Q_5_A_2_19, Q_5_A_2_20, Q_5_A_2_21, Q_5_A_2_22, Q_5_A_2_22_3, Q_5_A_5_1, Q_5_A_5_2, Q_5_A_5_3, Q_5_A_5_4, Q_5_A_5_5, Q_5_A_5_6, Q_5_A_5_7, Q_5_A_5_8, Q_5_A_5_9, Q_5_A_5_10, Q_5_A_5_11, Q_5_A_5_12, Q_5_A_5_13, Q_5_A_5_14, Q_5_A_5_15, Q_5_A_5_16, Q_5_A_5_17, Q_5_A_5_18, Q_5_A_5_18_3, Q_5_B_1_1, Q_5_B_1_2, Q_5_B_1_3, Q_5_B_1_4, Q_5_B_1_5, Q_5_B_1_6, Q_5_B_1_7, Q_5_B_1_8, Q_5_B_1_9, Q_5_B_1_10, Q_5_B_1_11, Q_5_B_1_12, Q_5_B_1_13, Q_5_B_1_14, Q_5_B_1_15, Q_5_B_1_15_3, Q_5_B_5_1, Q_5_B_5_2, Q_5_B_5_3, Q_5_B_5_4, Q_5_B_5_5, Q_5_B_5_6, Q_5_B_5_7, Q_5_B_5_8, Q_5_B_5_9, Q_5_B_5_10, Q_5_B_5_11, Q_5_B_5_12, Q_5_B_5_13, Q_5_B_5_14, Q_5_B_5_15, Q_5_B_5_16, Q_5_B_5_16_3, Q_5k_1_f, Q_5k_2_f, Q_5_A_3_a, Q_5_A_3_1_a, Q_5_B_2_a, Q_5_B_2_1_a	
NFI-Shelter	Q_6_2, Q_6_3, Q_6_5, Q_6_6, Q_6_7, Q_6_13_1, Q_6_13_2, Q_6_13_3, Q_6_13_4, Q_6_13_5, Q_6_13_6, Q_6_13_7, Q_6_13_8, Q_6_13_9, Q_6_13_10, Q_6_13_11, Q_6_13_12, Q_6_13_13,	

Section	Question number	Notes
	Q_6_13_14, Q_6_13_15, Q_6_13_16, Q_6_13_17, Q_6_13_18, Q_6_13_19, Q_6_13_20, Q_6_13_21, Q_6_13_22, Q_6_13_23_1, Q_6_14, Q_6k_2, Q_6k_3, Q_6_1	
Protection	<p>Q_7_1_7_1_confirm, Q_7_1_7_2_confirm, q10_accept, q11_accept, Q_7k_1_f, Q_7k_2_f, Q_7_1_1_confirm, Q_7_1_1_CD_all_0, Q_7_1_1_CD_All, Q_7_1_1_CD_Men, Q_7_1_1_CD_Women, Q_7_1_1_CD_A_boys, Q_7_1_1_CD_A_girls, Q_7_1_1_CD_Boys, Q_7_1_1_CD_Girls, Q_7_1_1_CD_Disable, q18_women, q18_men, q18_children, q19_accept, Q_7_1_2_confirm, Q_7_1_2_HLP_all_0, Q_7_1_2_HLP_All, Q_7_1_2_HLP_Men, Q_7_1_2_HLP_Women, Q_7_1_2_HLP_A_boys, Q_7_1_2_HLP_A_girls, Q_7_1_2_HLP_Disable, Q_7_1_2_1_CLP_confirm, Q_7_1_2_1_CLP_DLP, Q_7_1_2_1_CLP_ULO, Q_7_1_2_1_CLP_NHA, Q_7_1_2_1_CLP_LOD, Q_7_1_2_1_CLP_NCR, Q_7_1_2_1_CLP_LPP, Q_7_1_2_1_CLP_RD, Q_7_1_2_1_CLP_CAP, Q_7_1_2_1_CLP_DO, Q_7_1_3_confirm, Q_7_1_3_DV_all_0, Q_7_1_3_DV_All, Q_7_1_3_DV_Men, Q_7_1_3_DV_Women, Q_7_1_3_DV_A_boys, Q_7_1_3_DV_A_girls, Q_7_1_3_DV_Boys, Q_7_1_3_DV_Girls, Q_7_1_3_DV_Disable, Q_7_1_4_confirm, Q_7_1_4_SV_all_0, Q_7_1_4_SV_All, Q_7_1_4_SV_Men, Q_7_1_4_SV_Women, Q_7_1_4_SV_A_boys, Q_7_1_4_SV_A_girls, Q_7_1_4_SV_Boys, Q_7_1_4_SV_Girls, Q_7_1_4_SV_Disable, Q_7_1_5_confirm, Q_7_1_5_HR_all_0, Q_7_1_5_HR_All, Q_7_1_5_HR_Men, Q_7_1_5_HR_Women, Q_7_1_5_HR_A_boys, Q_7_1_5_HR_A_girls, Q_7_1_5_HR_Boys, Q_7_1_5_HR_Girls, Q_7_1_5_HR_Disable, Q_7_1_6_confirm, Q_7_1_6_XH_all_0, Q_7_1_6_XH_All, Q_7_1_6_XH_Men, Q_7_1_6_XH_Women, Q_7_1_6_XH_A_boys, Q_7_1_6_XH_A_girls, Q_7_1_6_XH_Boys, Q_7_1_6_XH_Girls, Q_7_1_6_XH_Disable, q16_accept, q16_frequency, q16_1_accept, q16_2_accept, q17_accept, Q_7_1_7_confirm, Q_7_1_7_EM_all_0, Q_7_1_7_EM_All, Q_7_1_7_EM_A_boys, Q_7_1_7_EM_A_girls, Q_7_1_7_EM_Boys, Q_7_1_7_EM_Girls, Q_7_1_7_1_ER, Q_7_1_7_1_PR, Q_7_1_7_1_IP, Q_7_1_7_1_SP, Q_7_1_7_2_ER, Q_7_1_7_2_PR, Q_7_1_7_2_ERC, Q_7_1_7_2_SP, Q_7_1_7_2_IP, Q_7_1_7_EM_Disable, Q_7_1_8_confirm, Q_7_1_8_CR_all_0, Q_7_1_8_CR_All, Q_7_1_8_CR_A_boys, Q_7_1_8_CR_A_girls, Q_7_1_8_CR_Boys, Q_7_1_8_CR_Girls, Q_7_1_8_CR_Disable, Q_7_1_9_confirm, Q_7_1_9_CL_all_0, Q_7_1_9_CL_All, Q_7_1_9_CL_A_boys, Q_7_1_9_CL_A_girls, Q_7_1_9_CL_Boys, Q_7_1_9_CL_Girls, q14_accept, q15_accept, Q_7_1_9_CL_Disable, Q_7_1_10_confirm, Q_7_1_10_FS_all_0, Q_7_1_10_FS_All, Q_7_1_10_FS_Men, Q_7_1_10_FS_Women, Q_7_1_10_FS_A_boys, Q_7_1_10_FS_A_girls, Q_7_1_10_FS_Boys, Q_7_1_10_FS_Girls, Q_7_1_10_FS_Disable, Q_7_1_11_confirm, Q_7_1_11_SH_all_0, Q_7_1_11_SH_All, Q_7_1_11_SH_Men, Q_7_1_11_SH_Women, Q_7_1_11_SH_A_boys, Q_7_1_11_SH_A_girls, Q_7_1_11_SH_Boys, Q_7_1_11_SH_Girls, Q_7_1_11_SH_Disable, Q_7_1_12_confirm, Q_7_1_12_EE_all_0, Q_7_1_12_EE_All, Q_7_1_12_EE_Men, Q_7_1_12_EE_Women, Q_7_1_12_EE_A_boys, Q_7_1_12_EE_A_girls, Q_7_1_12_EE_Boys, Q_7_1_12_EE_Girls, Q_7_1_12_EE_Disable, Q_7_1_13_confirm, Q_7_1_13_KA_all_0, Q_7_1_13_KA_All, Q_7_1_13_KA_Men, Q_7_1_13_KA_Women, Q_7_1_13_KA_A_boys, Q_7_1_13_KA_A_girls, Q_7_1_13_KA_Boys, Q_7_1_13_KA_Girls, Q_7_1_13_KA_Disable, Q_7_1_14_confirm, Q_7_2_1_MR, Q_7_2_2_MRC_confirm, Q_7_2_2_MRC_AG, Q_7_2_2_MRC_CP, Q_7_2_2_MRC_RI, Q_7_2_2_MRC_GV, Q_7_2_2_MRC_XH, Q_7_2_2_MRC_SP, Q_7_2_2_MRC_LID, Q_7_2_2_MRC_CUR, Q_7_2_3_MRR_confirm, Q_7_2_3_MRR_WWC, Q_7_2_3_MRR_WA, Q_7_2_3_MRR_GA, Q_7_2_3_MRR_GWC, Q_7_2_3_MRR_PWD, Q_7_2_3_MRR_DP, Q_7_2_3_MRR_Men, Q_7_2_3_MRR_Boys, Q_7_2_3_MRR_IDP, Q_7_3_confirm, Q_7_3_1_confirm, Q_7_3_1_EM_All_0, Q_7_3_1_EM_All, Q_7_3_1_EM_Boys, Q_7_3_1_EM_Girls, Q_7_3_2_confirm, Q_7_3_2_SD_All_0, Q_7_3_2_SD_All, Q_7_3_2_SD_Boys, Q_7_3_2_SD_Girls, Q_7_3_3_confirm, Q_7_3_3_HA_All_0, Q_7_3_3_HA_All, Q_7_3_3_HA_Men, Q_7_3_3_HA_Women, Q_7_3_3_HA_Boys, Q_7_3_3_HA_Girls, Q_7_3_4_confirm, Q_7_3_4_IA_All_0,</p>	

Section	Question number	Notes
	<p>Q_7_3_4_IA_All, Q_7_3_4_IA_Men, Q_7_3_4_IA_Women, Q_7_3_4_IA_Boys, Q_7_3_4_IA_Girls, Q_7_3_5_confirm, Q_7_3_5_RMF_All_0, Q_7_3_5_RMF_All, Q_7_3_5_RMF_Women, Q_7_3_5_RMF_Girls, Q_7_3_6_confirm, Q_7_3_6_BEG_All_0, Q_7_3_6_BEG_All, Q_7_3_6_BEG_Men, Q_7_3_6_BEG_Women, Q_7_3_6_BEG_Boys, Q_7_3_6_BEG_Girls, Q_7_3_7_confirm, Q_7_3_7_ACS_All_0, Q_7_3_7_ACS_All, Q_7_3_7_ACS_Men, Q_7_3_7_ACS_Women, Q_7_3_7_ACS_Boys, Q_7_3_7_ACS_Girls, Q_7_3_8_confirm, Q_7_3_8_LCS_All_0, Q_7_3_8_LCS_All, Q_7_3_8_LCS_Men, Q_7_3_8_LCS_Women, Q_7_3_8_LCS_Boys, Q_7_3_8_LCS_Girls, Q_7_3_9_confirm, Q_7_4_confirm, Q_7_4_1_confirm, Q_7_4_1_DS_All_0, Q_7_4_1_DS_All, Q_7_4_1_DS_Men, Q_7_4_1_DS_Women, Q_7_4_1_DS_Boys, Q_7_4_1_DS_Girls, Q_7_4_2_confirm, Q_7_4_2_CM_All_0, Q_7_4_2_CM_All, Q_7_4_2_CM_Men, Q_7_4_2_CM_Women, Q_7_4_3_confirm, Q_7_4_3_PSC_All_0, Q_7_4_3_PSC_All, Q_7_4_3_PSC_Boys, Q_7_4_3_PSC_Girls, Q_7_4_4_confirm, Q_7_4_4_CC_All_0, Q_7_4_4_CC_All, Q_7_4_4_CC_Men, Q_7_4_4_CC_Women, Q_7_4_4_CC_Boys, Q_7_4_4_CC_Girls, Q_7_4_5_confirm, Q_7_4_5_WGC_All_0, Q_7_4_5_WGC_All, Q_7_4_5_WGC_Women, Q_7_4_5_WGC_Girls, Q_7_4_6_confirm, Q_7_4_6_RA_All_0, Q_7_4_6_RA_All, Q_7_4_6_RA_Men, Q_7_4_6_RA_Women, Q_7_4_6_RA_Boys, Q_7_4_6_RA_Girls, Q_7_4_7_confirm, Q_7_4_7_LSCD_All_0, Q_7_4_7_LSCD_All, Q_7_4_7_LSCD_Men, Q_7_4_7_LSCD_Women, Q_7_4_7_LSCD_Boys, Q_7_4_7_LSCD_Girls, Q_7_4_8_confirm, Q_7_4_8_LSHLP_All_0, Q_7_4_8_LSHLP_All, Q_7_4_8_LSHLP_Men, Q_7_4_8_LSHLP_Women, Q_7_4_8_LSHLP_Boys, Q_7_4_8_LSHLP_Girls, Q_7_4_9_confirm, Q_7_4_9_XHRE_All_0, Q_7_4_9_XHRE_All, Q_7_4_9_XHRE_Men, Q_7_4_9_XHRE_Women, Q_7_4_9_XHRE_Boys, Q_7_4_9_XHRE_Girls, Q_7_4_10_confirm, Q_7_4_10_PSS_SSV_All_0, Q_7_4_10_PSS_SSV_All, Q_7_4_10_PSS_SSV_Men, Q_7_4_10_PSS_SSV_Women, Q_7_4_10_PSS_SSV_Boys, Q_7_4_10_PSS_SSV_Girls, Q_7_4_11_confirm, Q_7_4_11_PSS_All_0, Q_7_4_11_PSS_All, Q_7_4_11_PSS_Men, Q_7_4_11_PSS_Women, Q_7_4_11_PSS_Boys, Q_7_4_11_PSS_Girls, Q_7_4_12_confirm, Q_7_4_12_MT_SSV_All_0, Q_7_4_12_MT_SSV_All, Q_7_4_12_MT_SSV_Men, Q_7_4_12_MT_SSV_Women, Q_7_4_12_MT_SSV_Boys, Q_7_4_12_MT_SSV_Girls, Q_7_5_confirm, Q_7_5_1_confirm, Q_7_5_1_CD_All_0, Q_7_5_1_CD_All, Q_7_5_1_CD_Men, Q_7_5_1_CD_Women, Q_7_5_1_CD_Boys, Q_7_5_1_CD_Girls, Q_7_5_2_confirm, Q_7_5_2_SH_All_0, Q_7_5_2_SH_All, Q_7_5_2_SH_Men, Q_7_5_2_SH_Women, Q_7_5_2_SH_Boys, Q_7_5_2_SH_Girls, Q_7_5_3_confirm, Q_7_5_3_MEA_All_0, Q_7_5_3_MEA_All, Q_7_5_3_MEA_Men, Q_7_5_3_MEA_Women, Q_7_5_3_MEA_Boys, Q_7_5_3_MEA_Girls, Q_7_5_4_confirm, Q_7_5_4_SFA_All_0, Q_7_5_4_SFA_All, Q_7_5_4_SFA_Men, Q_7_5_4_SFA_Women, Q_7_5_4_SFA_Boys, Q_7_5_4_SFA_Girls, Q_7_5_5_confirm, Q_7_5_5_DIS, q9_accept, Q_7_5_6_confirm, Q_7_5_6_ANN, Q_7_5_7_confirm</p>	
ERL	<p>Q_8_2_1, Q_8_2_2, Q_8_2_3, Q_8_2_4, Q_8_2_5, Q_8_2_6, Q_8_2_7, Q_8_2_8, Q_8_2_9, Q_8_2_9_1, Q_8_3_1, Q_8_3_2, Q_8_3_3, Q_8_3_4, Q_8_3_5, Q_8_3_6, Q_8_3_7, Q_8_3_8, Q_8_3_9, Q_8_3_9_1, Q_8_4_1, Q_8_4_2, Q_8_4_3, Q_8_4_4, Q_8_4_5, Q_8_4_6, Q_8_4_7, Q_8_4_8, Q_8_4_9, Q_8_4_9_1, Q_8_5_1, Q_8_5_2, Q_8_5_3, Q_8_5_4, Q_8_5_5, Q_8_5_6, Q_8_5_7, Q_8_5_8, Q_8_5_9, Q_8_5_9_1, Q_8_6_1, Q_8_6_2, Q_8_6_3, Q_8_6_4, Q_8_6_5, Q_8_6_6, Q_8_6_7, Q_8_6_8, Q_8_6_9, Q_8_6_9_1, Q_8_7_1, Q_8_7_2, Q_8_7_3, Q_8_7_4, Q_8_7_5, Q_8_7_6, Q_8_7_7, Q_8_7_8, Q_8_7_9, Q_8_7_9_1, Q_8_8_1, Q_8_8_2, Q_8_8_3, Q_8_8_4, Q_8_8_5, Q_8_8_6, Q_8_8_7, Q_8_8_8, Q_8_8_9, Q_8_8_9_1, Q_8k_2, Q_8k_3</p>	

3.10. Consideration of text input in Other field

- Retain all text information entered as concatenated texts.

3.11. Consideration of 'Do not know', 'Not Sure' and 'No Answer' in the aggregation

- If one of the variable is selected together with 'do not know', 'not sure' or 'no answer', then unselect 'do not know', 'not sure' or 'no answer'.
- If one of the questionnaire has response in any other main variables, consider it as final result.
- If there is no response for all main variables, return 'NA' in all variable.

DRAFT

Annex 1: Workflow of technical process

