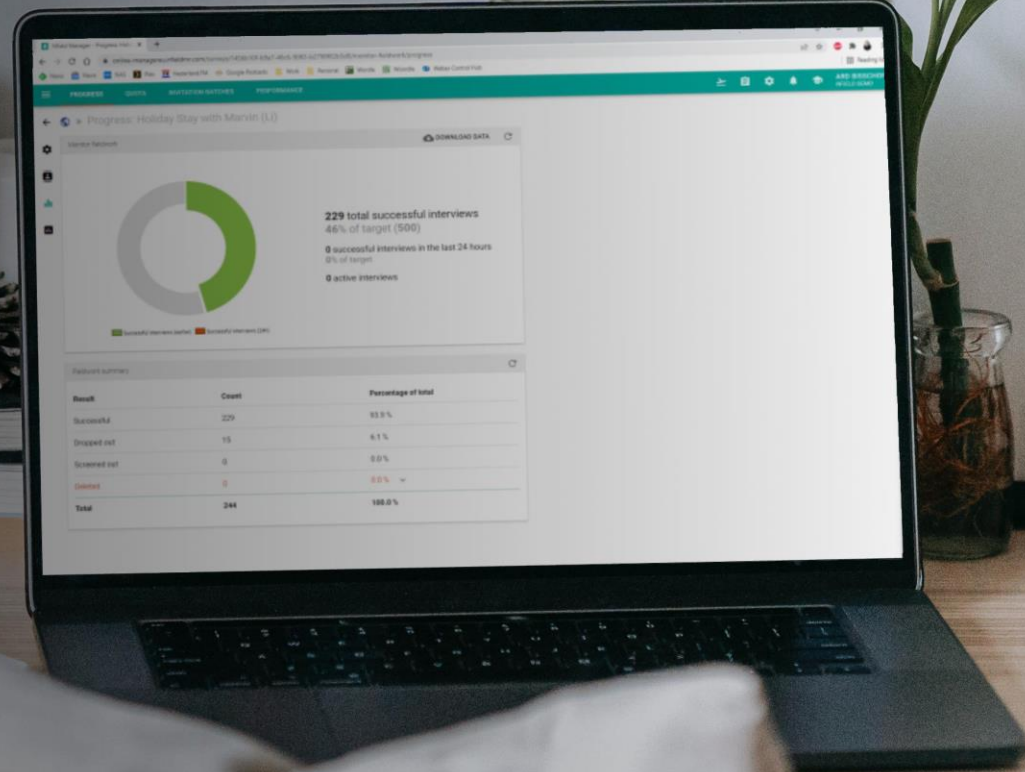# NIPO Academy

52 – Quota in Nfield: Advanced options 1:
Minimum and maximum targets

2nd session

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& Ard Bisschop

25 - 26 July 2024
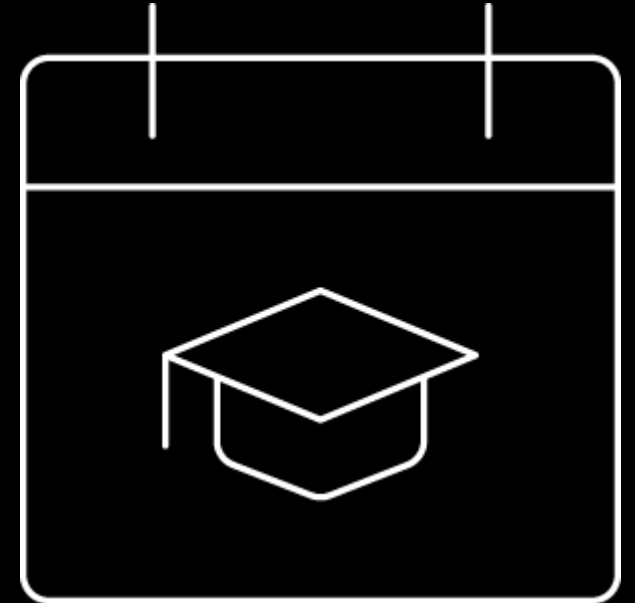
Quota Academies

Basic	Done
Advanced 1: Minimum and maximum targets	Now
Advanced 2: Locating (free) cells	1/2 August
Troubleshooting	8/9 August

AGENDA

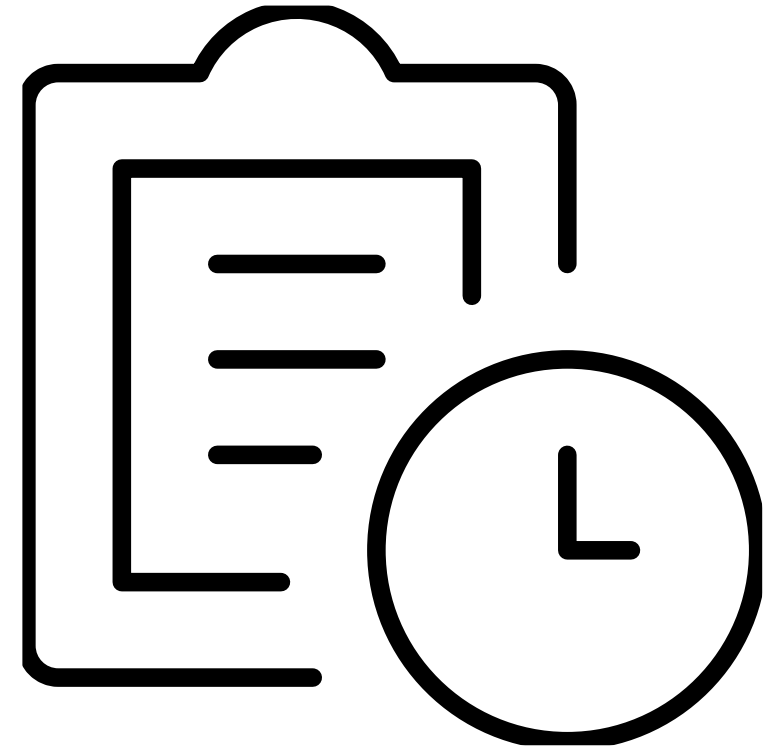1 Why maximum and minimum quotas

2 Minimum quota

3 Maximum quota

4 Quota evaluation

5 Multi codes quota

6 Quota frame validation

7 Questions

Total target

Successful interviews

Total target: 100   98

Minimum target

	Minimum	Target	Successful interviews
Male:	50		50
Female:	50		48

Minimum target + Total target

	Successful interviews
Total Target: 100	98

	Minimum	Target
Male:	50	50
Female:	50	48

Minimum target + Total target

	Successful interviews
Total Target: 100	98

	Minimum	Target	Successful interviews
Male:	40	60	
Female:	40	38	

Minimum target + Total target

		Successful	Required
Total Target: 100		98	2

	Minimum	Target	
Male:	40	60	0
Female:	40	38	2

Minimum target + Total target

		Successful	Required
Total Target: 100		97	3

	Minimum Target	Successful	Required
Male:	40	59	0
Female:	40	38	2

Recap Minimum / Total targets

Total targets are maximum targets.

Minimum targets sets the minimum required number of interviews for a cell.

Minimum targets alone do not stop interviewing.

To stop interviewing a total target or an explicit maximum target is needed.

Minimum targets may not contradict maximum targets.

Minimum targets combined with total targets will create implicit maximum targets

CAPI

CAPI only has minimum and total targets, no explicit maximum.

But because minimum targets and total targets create an implicit maximum, what follows is still also valid for CAPI.

Maximum target

	Maximum Target	Successful interviews
Male:	50	50
Female:	50	48

Maximum target + Total target

		Successful interviews
Total Target: 100		98

	Maximum	Target
Male:	50	50
Female:	50	48

Maximum target + Total target

		Successful interviews
Total Target: 100		98

	Maximum Target	
Male:	60	60
Female:	60	38

Maximum target + Total target

		Successful	Required	Allowed
Total Target: 100		98	2	2
	Maximum Target			
Male:	60	60	-	0
Female:	60	38	-	2

Maximum target + Total target

		Successful	Required	Allowed
Total Target: 100		97	3	3
	Maximum Target			
Male:	60	59	-	1
Female:	60	38	-	2

Recap Maximum

Total targets are maximum targets.

Maximum targets sets the maximum allowed number of interviews for a cell.

Maximum targets stop interviewing when reached.

Maximum targets on levels may not contradict total or minimal targets.

Maximum targets combined with total targets will create implicit minimum targets.

Evaluating quota frames 1 (only minimums)

	Successful	Required	Allowed
Total Target: 100	71	4	29

	Minimum	Target		
North:	15	20	0	25
South:	20	18	2	27
West:	20	19	1	26
East:	15	14	1	26

Evaluating quota frames 2 (minimums and maximums)

			Successful	Required	Allowed
Total Target: 100			71	4	29

	Minimum	Maximum			
North:	15	25	20	0	5
South:	20	35	18	2	17
West:	20	35	19	1	16
East:	15	30	14	1	16

Evaluating quota frames 3 (overshoot)

			Successful	Required	Allowed
Total Target: 100			100	1	1 (=total – successful; unless the required count is higher)

	Minimum	Maximum			
North:	15	25	26	0	0
South:	20	35	30	0	0
West:	20	35	30	0	0
East:	15	30	14	1	1

Evaluating quota frames 4 (interlocked)

			Successful	Required	Allowed
Total Target: 100			90	7	10

	Minimum	Maximum			
North:	16	25	15	1	4
Male	5	15	6	0	4
Female	5	15	9	0	4
South:	20	35	35	0	0
Male	10	20	15	0	0
Female	10	20	20	0	0
West:	20	35	30	0	3
Male	8	25	15	0	3
Female	10	25	15	0	3
East:	15	30	14	6	9
Male	8	20	6	2	5
Female	8	20	4	4	7

Recap quota evaluation algorithm

Start with calculating the required interviews from the lowest level and work your up to the highest.

Required interviews are calculated by deducting the minimum cell target from the Successful interviews in a cell, negative numbers are 0.
In case of interlocked two calculations are made: the one mentioned above and then also the sum of the required interviews on the child levels are calculated. That will result in two numbers, the highest number, are the required interviews for the parent level.
We end on the level of the total target, the required on this level is the sum of the required interview of the highest variable.

Then we start calculating the allowed interviews, this is done from top to bottom.

We start on the level of the total target. The allowed interviews are the "total target – the successful interviews" this is compared with the required interviews; the highest number are the allowed interviews.
From there we work our way down. Two numbers are calculated. First the required interviews of the sister levels are deducted from the allowed interviews of the parent level. And then the maximum of the level (if set) is deducted from the successful interviews of the level. the lowest number of these two, are the allowed interviews for this level. Exception: if the required interviews for this level are higher then the allowed interviews then the required interviews is also the number of allowed interviews.

Allowed = 0, means quota full.

Multi quotas

	Minimum	Target	Successful interviews
BrandA:	5		0
BrandB:	5		0
BrandC:	5		0
BrabdD:	5		0

Multi quotas interlocked

	Minimum	Maximum	Successful	Required	Allowed
Total Target 10			7	3	3
Male	5		4	1	1
BrandA:	2	3	2	0	1
BrandB:	2	3	3	0	0
BrandC:	2	3	1	1	1
BrandD:	2	3	1	1	1
Female	5		3	2	2
BrandA:	2	3	3	0	0
BrandB:	2	3	0	2	3
BrandC:	2	3	1	1	1
BrandD:	2	3	3	0	0

Recap multi quota

Multi quotas can only be used at the end of a branch

Only issue *STRAT command before you fill a multi quota or after you have finished filling the multi quota completely

Be carefull when using explicit maximums on a multi quota

Demo
Counting an interview
twice in a cell
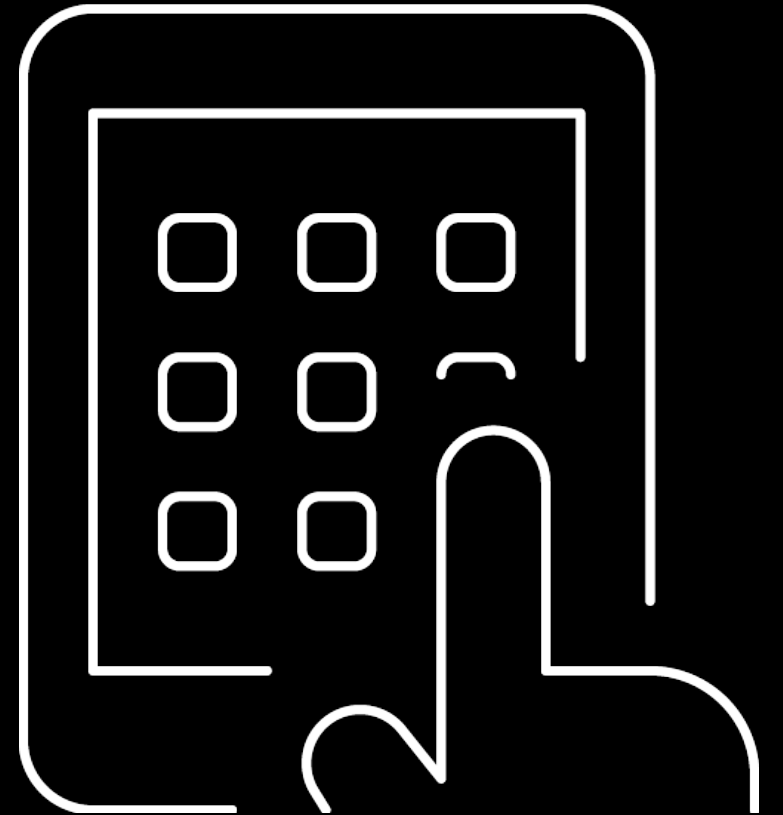
Quota Frame Validation

1. For each level, the minimum value (if configured) must be lower than or equal to the maximum value (if configured).

2. For each level that has nested single-code variables, the sum of the minimum values of the nested variable categories has to be lower than or equal to the level's maximum value.

3. For each level that has nested single-code variables, the sum of the maximum values of the nested variable categories has to be higher than or equal to the level's minimum value.

4. For each level that has nested multi-code variables, the minimum values of the nested variable categories have to be lower than or equal to the level's maximum value.

Questions?
(use the chat)
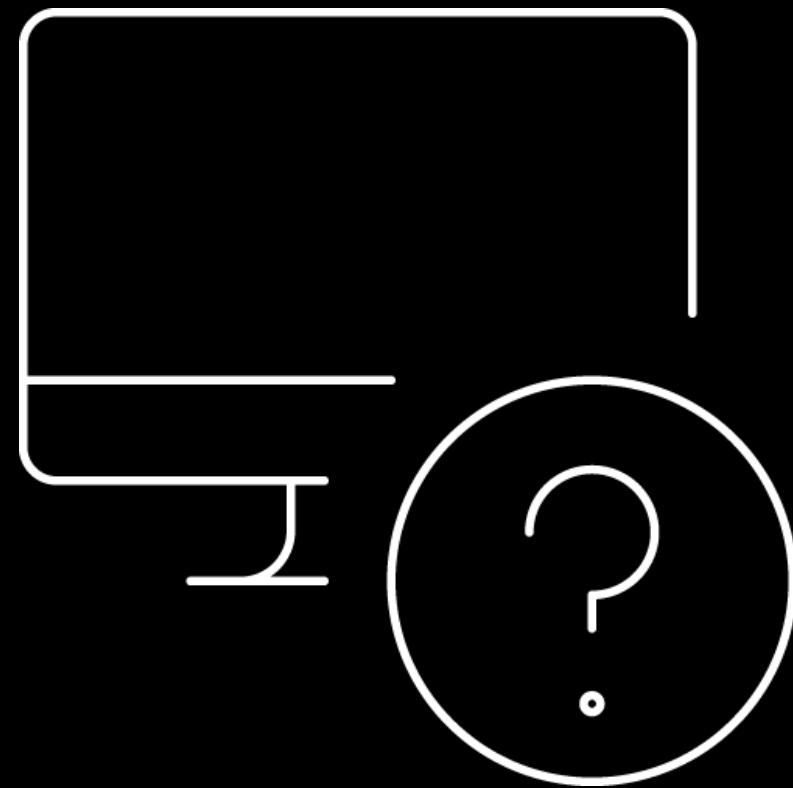
Final Remarks

- Recording of this session will be available later this week.

- Manuals are already updated.

- If you have suggestions for a topic, please write to your Helpdesk.

- *Next NIPO Academy > Quota advanced 2*

Thank you!

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