Schematic examples on ESF+ target setting

ESF Evaluation Partnership meeting (9 June 2020): Target setting in the next programming period

In an online seminar on 5 March and on its Evaluation Network meeting of 13 May, DG REGIO presented its schematic example about filling in the programme template with elements of the intervention logic (e.g. specific objective, types of actions, indicators). It also included their suggested approach to estimating targets for indicators.

Below, a few examples are provided which are meant to show some additional approaches to indicator target setting, starting with the main elements of the intervention logic through an ESF+ example, followed by the main steps of the target calculation. These are presented for discussion in the partnership meeting.

▲ General Disclaimers

- 1. These examples are not meant to illustrate the depth and the quality of information in the actual programmes.
- 2. The examples described below are kept deliberately simple to better focus on the basic differences among alternative approaches. In general, it is encouraged to base target setting on realistic and, to the extent possible, nuanced assumptions to allow for good quality programming.
- 3. The Commission is fully aware of the difficulties of target setting during such times of uncertainty about the economic repercussions of the COVID crisis and related lockdown measures. The general capacity to produce sound forecasts is inevitably reduced, also because of policy changes currently being discussed. Hence the need to discuss different scenarios, including the main steps of the calculus and required type of data, as showcased in example 3 below.
- 4. All figures presented are fictitious and only included for the sake of the examples.

First example: Target estimation in a homogenous specific objective based on IP/SO level information

This example intends to show what kind of steps lead to the estimation of the target and what kind of assumptions are the pre-conditions for that estimation.

Intervention logic

Table 1 - Specific objective¹: (vii) fostering active inclusion with a view to promoting equal opportunities and active participation, and improving employability.

2.A.3.1 Interventions of the Funds - The related types of actions (cf. Article 17(3)(d)(i) 'the related types of actions and their expected contribution to those specific objectives')

- Contribution to the specific objective: the direct aim of the supported active inclusion policies is to bring disadvantaged target groups closer to the labour market. The expected result is that participants improve their skills or acquire new skills or competences necessary in the labour market as well as start searching for a job.
- Types of actions: personalised social and active labour market services by PES and NGOs to disadvantaged groups, in particular migrants and disabled.

Table 2 - Output indicator selected for target setting: CO03 inactive.

Table 3 - Result indicator selected for target setting: CR01: inactive participants engaged in job searching upon leaving.

Estimation of the target values

- Output indicators
 - 1. Historical unit cost in 2014-2020 IP 9.i active inclusion
 - 2. Assumptions and adjustments
 - 3. Estimation: target value = budget of the specific objective / adjusted unit cost
- Result indicators
 - 1. Historical success rate² (CR/CO) in 2014-2020 IP 9.i active inclusion: reference value
 - 2. Assumptions and adjustments
 - 3. Estimation: target value = adjusted success rate * reference output indicator's target value

CO03 inactive

Budget: EUR 5 million

- 1. Historical unit cost: EUR 800
- 2. Assumptions and adjustments
 - In the 2014-2020 programming period, the OP supported services to eligible inactive participants provided by selected NGOs. Services were provided by

¹ All references to the programme template refer to the Partial General Agreement on Annex V 'Template for programmes supported from the ERDF (Investment for Jobs and growth goal), ESF+, the Cohesion fund and the EMFF – Article 16(3)'.

² Another common alternative for estimating the target: unit cost per result.

both accredited providers and non-accredited providers. Two-thirds of them were non-accredited providers whose average unit cost was EUR 720. The accredited providers' average unit cost was EUR 960. In the next period, only services by accredited NGOs will be supported.³ This will raise the unit cost by 20% (from EUR 800 to EUR 960).

- Planned legislation from 2023 will regulate the wages of specialised personnel providing social services. As wages represented half of the cost per participant (EUR 400), and the average wage of the personnel is due to increase 10%, the plan is expected to increase the unit cost by an additional 48 euros.
- The unit cost for the new programme is expected to be about EUR 1000⁴per participant.
- 3. Estimation: 'CO03 inactive' target value = 5 million EUR / 1000 EUR/participant = 5000 participants.

CR01: inactive participants engaged in job searching upon leaving

- 1. Historical success rate (CR/CO) reference value: 25%
- 2. Assumptions and adjustments⁵
 - Differences in the quality of the services offered: a comparison between a sample of non-accredited and accredited providers has shown that participants receiving services from accredited providers registered at the PES with a success rate of 30%, compared to 22.5% track record of registration among recipients of services by non-accredited providers. On average their success rate was close to 25%.
 - Changes in the composition of the target group. In the current programming period, 50% of the participants were nationals and 50% were third-country nationals (TCN). In the future, as AMIF will also provide personalised support to migrants, the share of TCN is expected to be lower. This is expected to further raise the success rate by a couple of percentage points, as historical data show that the success rate among nationals has been 10 pp higher. As it is difficult to estimate the extent to which the share of nationals will increase, this composition effect is not taken into account in the initial target setting. In case the composition will be different from that of the current programming period

³ In our example, the government decided mainstreaming NGO's labour market service provision with its ALMPs. The primary objective was ensuring transparency in the public market of labour market services and sustained service provision by well-performing NGOs, instead of ad-hoc grants.

⁴ This is approximated from 1008 Euros for simplicity and also on the basis that increases in the cost might occur after part of the implementation is already underway.

⁵ As per the general disclaimer, it is broadly acknowledged that the achievement of results, especially employment results, can be significantly affected by changes to the socio-economic context, including the business cycle, and even small variations in the types of target groups addressed. A general framework for estimating results is the result equation presented in In Ecorys' background paper (available here) on Setting and adjusting targets for ESF Operational Programmes. The general equation (Section 4.2) was: result = a + b*(impact variables) + c*(participation), where:

[•] a = hypothetical success rate for a standard individual in a stable economy,

[•] b*impact variables = changes in the socio-economic context and due to the varying distance of the individuals addressed from the Labour Market and

[•] c*participation = the net effect of support.

in the first two years of implementation by more than 10%, the target value will be revised accordingly.

3. Estimation: target value for CR01 'inactive participants engaged in job searching upon leaving' = adjusted success rate * reference output indicator target value = 30% * 5000 participants = 1500 participants.

Second example: target estimation based on individual unit costs by type of action⁶

This example intends to show what kind of steps lead to the estimation of the target in a more complex specific objective and what kind of assumptions are the pre-conditions for that estimation.

Intervention logic: provision of ALMPs for inactive and unemployed individuals⁷

Estimation of the target value

CO01+CO03: unemployed + inactive

- 1. Historical unit costs
- 2. Assumptions per type of action
- 3. Estimation: target value = Σ (type of action's budget share / type of action's unit cost)

1. Historical unit costs

In IP 8.i of the 2014-2020 programme, three types of actions were implemented: retraining, mobility and job counselling. The budget of the IP was EUR 10 million.

	Retraining	Mobility	Job	Total	
			counselling		
Cost	50%	20%	30%	10,000,000	
Unit cost ⁹	10000	4000	1000	2500	
CO01+CO03	500	500	3000	4000	

2. Assumptions per type of action

For the next programming period, the same types of actions are planned for SO(i). The budget is planned to increase by 20%. The unit cost of retraining is expected to increase by 20%

⁶ As per the third example below, if the goal is to make programming by targets more flexible, then one might follow the "voucher/individual learning account/profiling" logic at SO level. Target groups would be sorted into "classes" or "bands" depending on the expected intensity of support needed to achieve a given result -> different average unit costs based on their background characteristic (e.g. educational attainment, health condition, age, employment record etc.). This would allow choosing flexibly the actual types of actions offered as the programme unfolds, and also across similar target groups (in the same "intensity band") with little prejudice to the reliability of targets. It would also prevent creaming of participants, as unit costs would be based on how much support (e.g. in terms of duration, or combined measures offered) is expected to attain a given result.

⁷ Not replicated in detail here for conciseness

⁸ It is acknowledged that integrated pathways or a mix of support services are increasingly offered to individuals. However, this example might be useful whenever, even in presence of a common first step for all participants (individual profiling) in the perspective of integrated pathways, then separate budgets are allocated to different types of action. This is for instance the case of the Youth Employment Initiative in Italy. ⁹ Differences in unit costs by target groups are assumed away for simplicity. This could also happen in actual programming in case the relevant disaggregated data is not available.

because the public employment service reports more referrals to trainings providing higher qualifications. They plan for their overall retraining provision with an even higher, 30% price level increase, however, ESF referrals concern more low-skilled participants. The amount of the mobility scheme is increased by 300 euros by the national regulation that fixes its amount. The unit cost for the job counselling provision is expected to decrease by 8-10% due to more stringent service provision protocols.

As the non-employed population is expected to increase, the mix of services will change in favour of the two cheaper provisions: 20-40-40 per cent to retraining, mobility and job counselling respectively.

3. Estimation: target value = Σ (type of action's budget share / type of action's unit cost)

New	Retraining	Mobility	Job counselling	Total
Type of action's budget share	20%	40%	40%	12,000,000
Unit cost	12000	4300	920	*
CO01+CO03	*	*	*	6533,67

^{*}These implicit, intermediary steps in the calculation can be found in the detailed calculations annexed to this document in Excel.

With the modified individual unit costs the total target for the number of participants (CO01+CO03) is estimated to 6500 persons.

Individual output targets per type of action are not planned. Also, the individual types of actions' budget share and unit costs are indicative and will be monitored only in light of the assumptions affecting the unit costs. The difference between the actual unit cost and the planned indicative will not automatically invalidate the original target.

CR04: participants in employment upon leaving

- 1. Historical average success rate
- 2. Estimation of success rates by type of action
- 3. Assumptions
- 4. Estimation of the target

1. Historical average success rate

In this example we assume that aggregate data on participants in employment come from a central data base, and that the number of participants in employment is not available by type of action. The total value of CR04 is about 1400 that corresponds to appr. 35% overall success rate.

2. Estimation of success rates by type of action¹⁰

In the PES national database on its LMPs there are data on the individual success rates of retraining and mobility actions, but not on job-counselling as that is never provided as a standalone instrument. According to those data retraining's success rates are well above 50% and

¹⁰ If data is available on the success rates by type of action, that is the preferred option. For instance, one possibility would be to exploit existing evaluation studies (e.g. in the context of Counterfactual Impact Evaluations) which tend to start from calculating post-support employment rates typically broken down by target group/type of measure, e.g. based on micro data, administrative sources or placement surveys.

mobility's about 50%. After looking at the composition of the types of retraining courses provided in the ESF programme, their success rate is estimated at about 70%.

From that it follows that the job-counselling success rate is estimated to approximately 27%. ((0.7*500+0.5*500+0.26667*3000)/4000=35%)

3. Assumptions

It is assumed that the success rates by type of action will remain similar to the current programming period. This implies assuming not only constant net effectiveness of the support offered¹¹ but also negligible changes to the socio-economic context and to the average profile of the target group.¹²

4. Estimation of the target

The target of CR04 equals Σ (type of action's success rate * type of action's budget share * total budget / type of action's unit cost): appr. 2100 persons.

Third example: target estimation based on the intensity of support offered

This example follows the same intervention logic of example 2.

Importantly, the example intends to showcase approaches to consider the change of socioeconomic context and uncertainty caused by the COVID-19 pandemic in the target setting methodologies. Three sub-scenarios are discussed which formulate different assumptions on success rates and the related definition of target values.

CO01+CO03: unemployed + inactive

- 1. Historical unit costs
- 2. Assumptions per intensity of support offered, by target group
- 3. Estimation: target value = weighted average of number of participants in each band*intensity of support

1. Historical unit costs

In IP 8.i of the 2014-2020 programme, two main target groups have been reached (inactive and unemployed), through a range of measures aimed at bringing them closer to the labour market. Given the growing use of integrated, personalised pathways, it is likely that the individual costs differ based on the conditions of the participants. ¹³ We assume that this information is available

¹¹ This is a comparatively sound assumption, based on recent meta-analyses on the effects of ALMPs and their determinants. See for instance Card, D., Kluve, J., Weber, A., 2015. What Works? A meta analysis of recent active labour market program evaluations. IZA Discussion Paper No. 9236; and Vooren et al, 2019. The effectiveness of active labour market policies: a meta-analysis. Journal of Economic Surveys (2019) Vol. 33, No. 1, pp. 125–149. doi: 10.1111/joes.12269. Effects might also be viewed as improving given the progressive increases in capacity and quality of the delivery of tailored services.

¹² It is certainly quite difficult that these two conditions will be verified. Assumed for simplicity and to better focus on the macro-differences among the approaches.

¹³ For instance, for the YEI in Italy a "disadvantage coefficient" was estimated econometrically by INAPP which linked the probability of becoming NEET to a range of background characteristics, including:

to the managing authority (this might be the case of training vouchers/individual learning or training accounts are offered, or relevant SCOs applied).

Below some fictitious unit costs:

- Inactive, low skilled, young = 4000 euro (band 4)
- Inactive, medium skilled, young = 2400 euro (band 3)
- Inactive, high skilled, young = 1600 euro (band 2)
- Unemployed, low skilled, young = 2400 euro (band 3)
- Unemployed, medium skilled, young = 1600 euro (band 2)
- Unemployed, high skilled, young = 800 euro (band 1)

Thus, one can have costs per "band", that is, costs per intensity of support.

2. Assumptions per intensity of support offered, by target group

Intensity of support varies with the type of result which is pursued. If the goal is gaining a qualification, the cost might be certainly different from employment. In this example, the result pursued is employment, so the intensity of support should be attuned to such a result. Different target groups with similar distances from the labour market can be replaced flexibly in programming, so changes in the composition of a band do not necessarily affect the target.

However, there are two changes which should be taken into account.

- On the one hand, generally deteriorating LM conditions, which means that all target groups become harder to employ. This does not necessarily impact on cost per participant (the budget can remain fixed), but would impact success rates.
- On the other hand, intended changes in the selection of the "band" (i.e. people at a greater distance from the labour market become more centre-stage and more funds are channelled towards them)

However, these could be considered duly justified cases of revision, or, in any event, necessary deviations from target, hence they should not necessarily be factored in from the outset.

3. Estimation of the target

New	Band 4	Band 3	Band 2	Band 1	Total
Band's budget share	20%	40%	30%	10%	12,000,000
Unit cost	4000	2400	1600	800	*
CO01+CO03	*	*	*	*	6,350

^{*} These implicit, intermediary steps in the calculation can be found in the detailed calculations annexed to this document in Excel.

CR04

1. Historical average success rate by type of action

• Country of origin and language proficiency

This determined also the intensity of support offered.

Regional context

[•] Labour market status 1 year before the profiling

[•] Educational attainment level

2. Assumptions

- a. Scenario A: detailed assumptions on changes to the socio-economic context
- b. Scenario B: fewer assumptions and revision clause
- c. Scenario C: general revision after two years
- 3. Estimation of the target
 - a. Scenario A
 - b. Scenario B
 - c. Scenario C

1. Historical average success rate by target group/band

In this example, it is assumed that data is available by target group or by "band". This is the case for instance where disaggregated information is available by going back to actual ESF micro-data (participant records) or by relying upon disaggregated data on participants' success rates which were presented in evaluations or collected through placement surveys.

It is assumed that target groups in the same "band" will have similar success rates after support, so based on information on a few target groups it is possible to estimate the success rate per band. The success rate at the SO level is calculated as a weighted average just like in Step 3 (estimation of the target) for the target on the output indicators.

In this example, we assume a (fictitious) success rate of 40% for individuals in Band 4, 45% in band 3, 50% in band 2 and 60% in band 1, resulting in a weighted average at SO level of approximately 50%.

2. Assumptions

As anticipated, three scenarios are presented below, to preliminarily showcase different approaches to target setting.

a. Scenario A: detailed assumptions

• Changes in the socio-economic context

i. Short term: success rates might decrease due to the crisis, and the effects could be heterogeneous across target groups/bands. This assumption is based on experience with the delivery of ALMPs during the 2008's crisis/a survey of the relevant literature 14/ad-hoc surveys with employers 15/briefing notes 16 and forecasts from international institutions (e.g. OECD/ILO) 17. The underlying reason for such differences is that not all sectors and workers are equally resilient to lockdown measures or have comparable capacity to adapt to the new challenges of the post-pandemic economy. Thus, it is expected that, for the first two years,

¹⁴ By way of example see Dustmann, C, A Glitz and T Vogel (2010), "Employment, wages, and the economic cycle: Differences between immigrants and natives," *European Economic Review* 54(1): 1-17;

¹⁵ By way of example see Adams-Prassl, A, T Boneva, M Golin and C Rauh (2020) "The large and unequal impact of COVID-19 on workers", VoxEU.org, 8 April. Available at https://voxeu.org/article/large-and-unequal-impact-covid-19-workers

¹⁶ Gelatt, J (2020) "Immigrant Workers. Vital to the U.S. COVID-19 Response, Disproportionately Vulnerable", Migration Policy Institute, Factsheet, April.

¹⁷ Example: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms 738753.pdf - still ongoing

individuals in band 4 will see their success rates decrease by 20 p.p., individuals in band 3 and 2 by 10 p.p. and individuals in band 1 by 5 p.p.. Approx. 80% of the budget will be used during the peak of the crisis, with a constant intensity of support provided (as per the estimation on the output indicators).

- ii. Medium to long term: due to the economic recovery and the success rates will be 5 p.p. higher than historical values across the board for all target groups and bands. This is due to the fact that, based on current employment forecasts ¹⁸/literature etc. labour demand will begin to grow by the end of 2021, thus creating raising opportunities to gain employment especially for those who lost their jobs only due to temporary closures and related financial distress of their employers or enterprises. ¹⁹. However, it is assumed that only 20% of the budget remains available for this phase.
- Changes in the composition of the target group: not so relevant as there is built-in flexibility in the definition of the "bands". However, there might be increasing emphasis on individuals at a certain distance from the labour market, or a general need to increase (decrease) the intensity of support. In such cases the choice to offer more intensive support is deliberate and should be seen as duly justified motivation to revise targets.

b. Scenario B: fewer assumptions and revision clause

Although it is anticipated that there might be changes to the context likely to affect success rates, no adjustment is factored in target setting at this stage, as the extent of such changes is too uncertain, and, moreover exogenous fluctuations in the determinants of success rates might be examined separately.

An automatic revision at the end of 2023 is however foreseen if the average unemployment rate in 2021-2023 will be at least 3 p.p. higher than its 2018-2020 average.

c. Scenario C: general revision after two years

Given the strong uncertainty about the evolution of the socio-economic context caused by COVID-related shocks to economies, it is deemed inevitable that targets defined based on current knowledge and forecasts will be unreliable proxies of performance. Hence, the targets are preliminarily set based on unadjusted historical data, with a general possibility to revise them at the end of 2022.

3. Estimation of the target

a. Scenario A: detailed assumptions

The estimation of the target goes in two separate steps, as it distinguishes between the first phase (80% of the budget and participations, lower success rates) and the second phase (20% of the budget and participations, lower success rates) are the second phase (20% of the budget and participations, lower success rates) are the second phase (20% of the budget and participations, lower success rates) are the second phase (20% of the budget and participations, lower success rates) are the second phase (20% of the budget and participations, lower success rates) are the second phase (20% of the budget and participations, lower success rates) are the second phase (20% of the budget and participations).

¹⁸ See for instance https://ec.europa.eu/info/sites/info/files/economy-finance/ip125 en.pdf

¹⁹ The economic shocks triggered by the unprecedented lockdown measures enforced might cause people theoretically closer to the labour market (e.g. previously employed or unemployed, but with decent levels of employability) to become unemployed or stop looking for a job. It might also mean that students with decent qualifications are discouraged from starting to look for a job, or not employed in more stable positions after work-based learning (traineeships, apprenticeships). This might drive up success rates in the medium term, due to the combination of progressively increasing employment chances and comparatively higher employability of those became temporarily unemployed or inactive due to the crisis.

of the budget and participations, higher success rates). It can be calculated either as a weighted average of the (adjusted) success rate per each period per the number of participants in each period, or as a sum of successful participants in each band and period.

In line with the assumptions above, the composition of participants in this fictitious example does not change as there is sufficient flexibility within each Band.

Phase 1 (80% of the total participations)	Band 4	Band 3	Band 2	Band 1	Total
Band's number of participants	480	1,600	1,800	1,200	5,080
Adjusted Success rate		35%	40%	55%	*
CR04	*	*	*	*	2,036
Phase 2 (20% of the total participations)	Band 4	Band 3	Band 2	Band 1	Total
Band's number of participants	120	400	450	300	1270
Adjusted Success rate	45%	50%	55%	65%	*
CR04	*	*	*	*	696,5
Total CR04 (Phase 1 + 2)	*	*	*	*	2,732.5

^{*} These implicit, intermediary steps in the calculation can be found in the detailed calculations annexed to this document in Excel.

Hence, the total CR04 target for the entire period equals its sum for phase 1 and 2 -> 2036 + 696, $5 = 2732.5^{20}$

b. Scenario B: fewer assumptions and revision clause

The estimation can be made multiplying the values of CO01+CO03 in each band for their historical success rates.²¹

	Band 4	Band 3	Band 2	Band 1	Total
Band's number of participants	600	2,000	2,250	1,500	6,350
Historical Success rate	40%	45%	50%	60%	*
CR04	*	*	*	*	3,165

^{*} These implicit, intermediary steps in the calculation can be found in the detailed calculations annexed to this document in Excel.

No adjustments are foreseen, but the target is liable to be revised by the end of 2023 if unemployment rates deviate significantly from 2018-2020 levels.

c. Scenario C: general revision after two years

Same as above, target preliminarily set at approx. 3165, but a general revision allowed at the end of 2022, based on clearer data.

²⁰ The corresponding final average success rate is 43%

 $^{^{21}}$ It is also possible to multiply the (weighted) average success rate for the target value of CO01+CO03. (6.350*49.84% = 3165)