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EUROPEAN RAIL SKILLS ALLIANCE

Continuous programmes monitoring methodology

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LIST OF ABBREVIATIONS

EQVET	European Quality Assurance in Vocational Education and Training
M&E	Monitoring and Evaluation
RBM	Results Based Management
ToC	Theory of Change

1 INTRODUCTION

The objective of this document is to provide measures and tools for continuous monitoring and evaluation of the results achievements, detecting bottlenecks in implementation and identifying both negative and positive effects of the investment programme and the activities involved.

In line with the EQAVET guidelines and framework for quality management, Deliverable 6.1 provides an evaluation and monitoring methodology based on the results-based management strategy, ensuring that all actors involved in development of the programmes contribute both directly and indirectly to results achievement.

This document supports the evaluation of programmes developed in the STAFFER project by providing a set of guidelines and templates for programme evaluators to monitor during the course of the programmes the degree of objectives achievement and whether they are going in the right direction, as well as to evaluate the programmes with the aim to see their impact and positive and negative aspects in order to replicate them, adapt them or generate new pro-grammes.

2 THE CONCEPT

2.1 Monitoring and Evaluation

Monitoring and Evaluation (M&E) is a process of collecting, systematising and analysing information based on the objectives, results, and activities planned and implemented in the project in order to improve its implementation and effectiveness. It is a management and learning tool that provides crucial information on the performance and success of the project.

The purpose of follow-up is to guide a project towards its purpose and to detect any problems that could make the project unlikely to achieve the expected results. This is done through regular tracking of technical progress and financial expenditures, where actual performance and results are compared with plans.

M&E will facilitate:

1. **effective management and decision making on corrective actions needed to improve project implementation and results**
2. **reporting and accountability to stakeholders**

2.1.1 Monitoring

"Monitoring" refers to the process of continuous analysis of progress according to the objectives set within the project, which allows to understand where the programmes are in relation to the expected results, and to identify problems that require decisions to be taken to accelerate progress. Monitoring enables real-time learning and feeds into evaluation. It is conceived as an internal project activity, becoming a fundamental element of good administration and management.

The key questions to consider when carrying out the monitoring are:

- **What key metrics can give us an idea of the state of implementation?**
- **Do we have effective data collection and analysis processes in place?**
- **To what extent are we effectively implementing our programme(s)?**
- **Based on the data collected, do we need to make any changes to our programme(s)?**

A monitoring plan usually focuses on the processes that take place during the implementation of a programme. It may include monitoring of the following during defined periods of time:

- **When programmes were implemented**
- **The location or region in which the programmes were implemented**
- **Which departments or teams carried out the activities**

- **How often certain activities were carried out**
- **Number of people reached by a programme's activities**
- **Number of outputs delivered (or number of hours of a service)**
- **Programme implementation costs**

2.1.2 Evaluation

"Evaluation" refers to a more analytical and sporadically executed exercise in which the degree of success of the project in achieving its results and purpose is determined on the basis of the set indicators. Apart from measuring effectiveness the analysis may include other criteria such as relevance, sustainability or may be directed at specific aspects. Projects are expected to carry out at least one evaluation at the end to determine changes in key indicators compared to the baseline values.

Key questions to consider when carrying out the evaluation are:

- **Have our activities made a measurable difference to our target group(s)?**
- **To what extent can the identified changes be attributed to our activities?**
- **What has contributed to our success (or failure)?**
- **Can we scale up the identified changes, or replicate them in other contexts?**
- **Have we achieved impacts in a cost-effective way?**
- **Have there been unexpected results?**

At the beginning of a programme, it is important to acquire baseline data, which will be used to compare the progress at each evaluation interval and at the end of the programme period. It is important to consider the following key elements when measuring outcomes (the changes that have occurred):

- **Understand how your inputs, outputs, activities, etc. generate change (theory of change).**
- **Design the evaluation plan before implementing a programme or intervention.**
- **Use results that are relevant to your beneficiaries**
- **Use data collection methods that fit the needs of the beneficiaries and the competencies of your employees**
- **Incentivise beneficiaries to provide you with key interval data**

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Monitoring and evaluation share some common objectives (1):

- **Improve project management and ensure the optimal use of funds**
- **Promote accountability and transparency in the management process**
- **Ensure the relevance, effectiveness and efficiency of technical co-operation**
- **Provide well-informed information on project progress and results, in order to be able to communicate to higher levels of the organisation, stakeholders and/or funding partners**
- **Learn from experience in order to improve project design, formulation and management (organisational learning).**

However, monitoring and evaluation are different in terms of their timing and the issues they address. Evaluation is more occasional than monitoring and is usually carried out "ex-post" by analysing the long-term impact of an intervention. Monitoring, however, is carried out periodically during the implementation of the project, assessing its progress.

2.2 Results Based Management (RBM)

Results Based Management (RBM) is a management strategy that lays the basis for an integrated approach to project/programme planning, monitoring and evaluation. RBM is not a set of tools or instructions, nor is it an end in itself; it is a way of thinking about projects and programmes that enables better management practices, greater organisational effectiveness and improved development results.

RBM supports project/programme managers in their daily work, ensuring greater results orientation. It promotes better performance, the integration of lessons learned into management decisions, and more effective progress monitoring, leading to better project/programme implementation (2).

When using the Results Based Management approach, implementers have to ask themselves the following questions:

- **Are we doing the right things, are our interventions getting us to our goal?**
- **Are we doing things the right way?**
- **How do we know?**

In an RBM approach, all actors who contribute directly or indirectly to the achievement of a set of results ensure that their processes, products and services contribute to the achievement of the

desired results. Stakeholders, in turn, use information and evidence from actual results to inform decision-making on the design, resourcing and implementation of programmes and activities (2).

The RBM approach moves away from focusing on inputs, activities and processes to focus on the benefits and achievements that are a direct effect of the intervention. It involves defining real-istic expected results based on appropriate analysis: identifying project/programme benefi-ciaries and designing projects/programmes to meet their needs; monitoring progress towards results and resources used through the use of appropriate indicators; identifying and managing risks; incorporating lessons learned and evidence, using them as a basis for decision-making; reporting on results achieved.

Some of the key elements of RBM are:

1. **Focusing the dialogue on results at all stages of the development process.**
2. **Align programming, monitoring and evaluation with results.**
3. **Keeping measurement and reporting simple.**
4. **Manage for, not by results.**
5. **Use information on results for learning and decision making**

A central principle of results-based management is the results chain, which is an illustration of the causal relationship between various elements over time (Figure 1) (Table 1). A results chain would be summarised as a series of conditional statements: if A is done, B will occur; if B occurs, C is likely to occur.
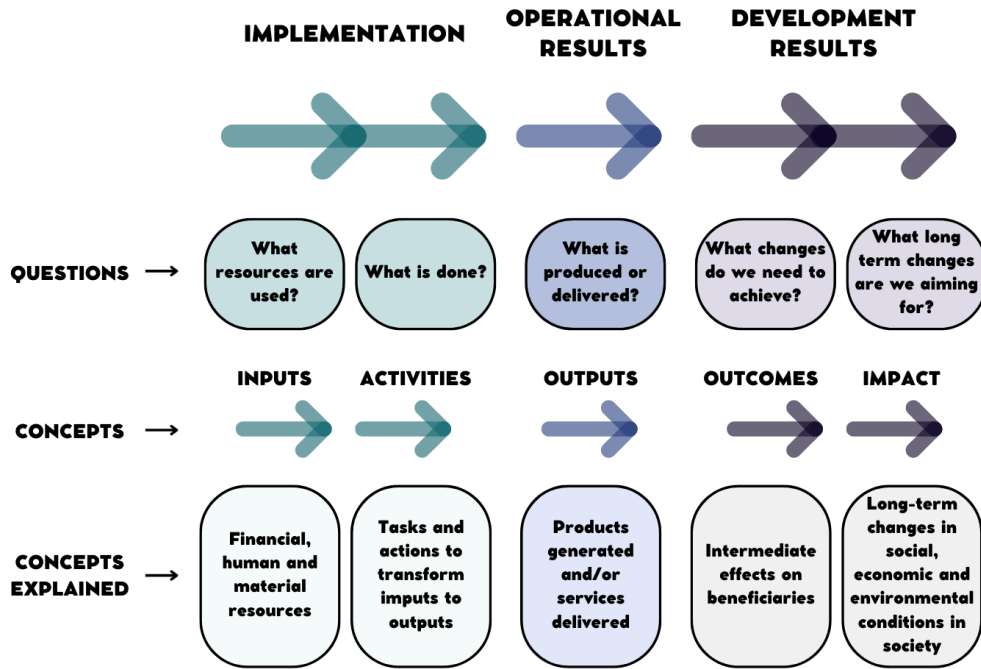
FIGURE 1 - THE RESULTS CHAIN. ADAPTED FROM(3)

INPUT	Financial, human and material resources used for the development intervention
ACTIVITIES	Choices made or work done using resources to produce specific outputs
OUTPUTS	Products or services relevant for the achievement of the outcomes - these are short-term products of completed activities
OUTCOMES	Expected intermediate effects on target groups; represent the most important level of results in RBM
IMPACT	Long-term improvement. The causal relationship between the development intervention and the changes that have occurred is often difficult to demonstrate and is a function of multiple factors, both negative and positive.

TABLE 1 - DEFINITIONS OF VALUE CHAIN CONCEPTS

A results chain, even if it shows a causal relationship over time, is not a simple linear process. There are many external factors that may affect the results.

Results can be caused by factors both internal and external to the programme. In the results value chain the question to ask is: "Would the change have happened without the intervention? This is why the intervention strategy has to have a reasonable influence on the expected results.

At the impact level, it is increasingly difficult to attribute change to a particular intervention, as there are many variables and actors contributing to it. Success or failure cannot be attributed

to a specific intervention. Multiple factors, events, conditions or risks beyond the control of the programme or intervention can negatively influence or threaten the achievement of intended outcomes or changes. Consequently, in any intervention it is important to analyse both internal and external risks that may hinder the success of the programme and the achievement of results. Risks are closely linked to results and should be analysed in relation to the programme's results framework.

Risk management is a key element in results-based management. Internal risks are factors within the control of the programme that can hinder success, and include human and financial resource capacity, corruption, management capacity, incentive structures, ownership, etc. External risks are factors beyond the programme's control that could hinder the achievement of results, and include political, institutional, economic, environmental, social and technological conditions.

2.2.1 Theory of Change (ToC)

A common conclusion in many evaluations is that we need to improve the formulation and communication of the results we expect (where we want to get to) and the approach we need to take to achieve them (which path we choose, the relevant activities). It is important to be clear in communicating the expected results and the preferred approach to achieve them, especially to identify which activities/measures work well and which do not.

Knowing the path, we are on and what the destination allows us to change the direction we are taking. It is necessary to know what works well and what does not in order to change.

For all these reasons, it is important that, in any programme or project, we determine the results we want to achieve, when we want to achieve them and what needs to be done, in order to successfully reach the goals and objectives set. The results should be based on a sound Theory of Change (ToC) that will guide the different phases of the programme/project implementation.

Theory of Change is an approach that serves as a guiding framework for all stages of planning (reflection), implementation (action) and results management (accountability and learning) when intervening in change processes. Theory of Change aims to identify the implicit mechanisms through which change is expected to be achieved (4) (5).

It is a method that organisations and groups use to think critically about what is needed to achieve a desired change; it is a process designed to describe how a complex change initiative will unfold over time. It creates an illustration of all the moving parts that must operate together to achieve the desired outcome.

The ToC articulates and illustrates the causal relationship between the different levels of results, from the immediate results/outputs/preconditions, to the intermediate results/outputs/preconditions, to the desired change or long-term outcome.

As a minimum, it should include the overall objectives, the intermediate results and processes through which it is possible to achieve the intended change of the intervention, and the different activities to be carried out or being implemented. ToC is developed in a participatory and interactive way and provides flexibility, extending the results chain.

Reflection, through dialogue between the people involved, on the "assumptions" of why and how the intervention should work is one of the key features of the theory of change. This reflection allows the analysis and discussion of the theoretical foundations or evidence on which the intervention is based.

If the theory of change is developed during the planning phase of an intervention, its aim is to ensure that all components of the intervention and the relationship between them are identified (to guarantee coherence between objectives, actions and outcomes), and that all actions are planned according to the best possible evidence (6).

If the theory of change is developed in the evaluation phase, its purpose is to identify what changes were intended to be achieved, whether the actions that were carried out were developed in such a way because they were consistent with the evidence found, and how the results have been or are intended to be evaluated (6). In this case, the theory of change will help to identify what data needs to be collected and how. The theory of change will then be checked against the empirically collected data to find out whether the expected and unexpected changes have been achieved, whether the outputs/outcomes achieved are in line with the evidence or not, whether the 'assumptions' were appropriate, and whether other factors have positively or negatively influenced the achievement of those outcomes.

A "backwards" logic is used, i.e., starting from the objectives to be achieved and working backwards to identify the intermediate results needed to achieve them, and finally setting out the actions needed to achieve those results. Once all the actions have been identified, it is also important to plan them, detailing the resources needed, the time frame and the people responsible for the action. There are different guides for the participatory development of an action plan (6) (7) (Figure 2).
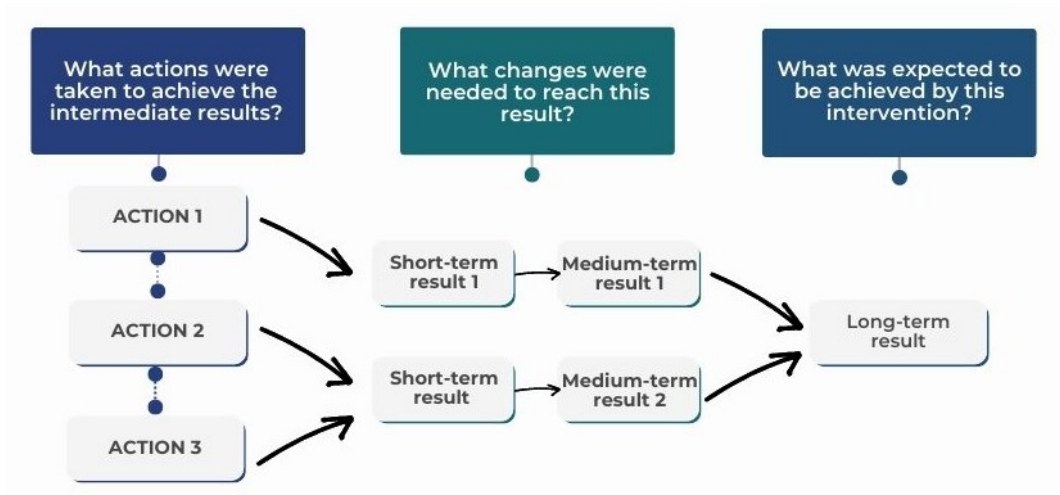
FIGURE 2 - MODEL FOR A THEORY OF CHANGE IN THE EVALUATION PHASE

In STAFFER, ToC will be used as a results-oriented approach to analyse the programmes the consortium members are working on and to plan actions that can positively influence and bring about changes in the talent in the railway sector. The approach of using ToC for STAFFER is appropriate for the following reasons:

- **ToC is a thinking and action approach. It is a way of fostering people's ability to think critically, not to take things for granted, to face uncertainties and to recognise the inevitability of diverse perspectives.**

- **ToC is a process. If used well, ToC is a continuous process of analysis and reflection. It is not a one-off exercise in the design phase of a programme, but involves a continuous cycle of action and learning.**

- **A ToC is also a product because ToC research results in specific results that represent the theory of change of an organisation, a team, a project or a programme. It is a "living" product because it changes over time.**

- **A ToC is a temporary snapshot, a reflection of thinking at a particular point in time, which will not and need not be completed. As a product, a theory of change provides a framework for sense-making that must be used, revised and adapted as the project or programme progresses, as other actors enter, as changes occur and as learning takes place (3).**

At STAFFER, a number of reasons and expected benefits justify the use of theory of change as a tool to guide the planning, monitoring and evaluation process:

- **Understanding the context and situation as a starting point for programme and project planning**

- **Moving beyond "business as usual" generic programme and project design through increased context awareness**
- **Developing a common understanding of the work and bringing out differences in perspective in a positive way**
- **Strengthening the clarity, effectiveness and focus of programmes and projects**
- **Using theory of change as a framework for assessing impact and improving monitoring and evaluation, testing assumptions, demonstrating impact and learning from impact**
- **Improving relationships with partners and stakeholders by identifying opportunities for dialogue and collaboration**
- **Providing a unifying framework for strategic decision-making, communication and reporting.**
- **Want to have a clearer conceptualisation of 'results' and understand the intermediate changes that matter to the organisation and stakeholders, to enable strategies to be optimised for the context.**
- **Strengthen adaptive management and responsiveness to changes in context**

2.2.1.1   Logical Framework

A Theory of Change explains the strategic options and articulates the assumptions of an intervention logic based on a desired change; a Logical Framework describes the (known) causal sequence of activities to be undertaken in relation to a desired outcome, representing it in a neat and tidy way where "X" leads to "Y".

The Logical Framework is an instrument that helps to define critical causal-temporal pathways to achieve change. Unlike the Theory of Change, it is composed of at least three tools: problem tree, objective tree and logic matrix. The problem tree and the objective tree will be executed in a first phase that will be more focused on the analysis of problems and objectives and the identification of alternative solutions. Meanwhile, the logic matrix belongs to the second phase, which is more focused on an analytical structure of the project.

Each of these tools is used to identify critical elements for the best implementation of an intervention. It helps to define the critical factors of a problem and makes it possible to integrate the activities, components, aims and purposes of the intervention in a logical matrix where it is possible to define short, medium and long-term objectives, as well as to assign responsibilities for each of the activities.

2.2.2 Pillars of RBM

2.2.2.1 Pillar I – Planning

Planning in an RBM system is the process of setting the goals or objectives to be achieved; formulating the strategies to achieve them; organising or creating the necessary measures; and establishing a framework for measuring results and determining the resources required. Planning underpins implementation, monitoring, reporting and evaluation by leading the way to good management and implementation actions.

A basic principle of results planning is to start with the desired changes (impact and outcomes) and then identify the outputs, activities and inputs required to achieve them – create a results framework. It involves a thorough analysis of the problem to be solved, the desired changes and the activities and inputs that are needed to achieve them (3).

Key questions to be considered for the planning phase (3):

1. **What is the problem to be solved** (*the undesirable situation)*?
2. **What do we want to achieve** (*the desired change)*?
3. **How do we get from A to B** *(the strategy)*?
4. **How will we know when we have arrived** *(the indicators)*?
5. **What assumptions are we making if the desired change is to happen** *(what needs to be in place)*?
6. **What are the risks and how will they be mitigated?**

2.2.2.2 Pillar II – Monitoring

Monitoring in an RBM system is an ongoing or periodic process that provides information on the degree of progress over time towards achieving a desired change or results. It involves systematic collection of data on selected indicators to measure performance against objectives. Data on indicators provide management and key stakeholders with information on the degree of progress towards implementation and achievement of outcomes/objectives, and use of allocated funds.

It tracks progress and alerts management as to whether actual results are being achieved. It focuses on the causa accuracy: Are the inputs or producing the expected results? Are activities producing the desired outputs? Are outputs being utilized by target users? Monitoring involves making adjustments and trade-offs. Monitoring checks to see whether outputs are of the expected quality and whether they are timely and sufficient to produce the expected change. If not, it needs to be adjusted – that is adaptive management.

Monitoring provides records of activities and results, and identifies challenges and risks. It does not explain why the programme is not reaching its planned outcome or impact. That type of analysis, is usually done through review and evaluation.

2.2.2.3 Monitoring should use indicators to collect evidence of reported results to validate the content of the report (3). Pillar III – Evaluation

Evaluation in RBM is a systematic and objective assessment of an ongoing or completed project, program, or policy, including evaluation of its design, implementation, and results. The objective is to determine the relevance and achievement of objectives, development efficiency, effectiveness, impact, and sustainability. Evaluation should provide reliable and useful information so that lessons learned can be incorporated into the decision-making process.

More importantly, the evaluation must be able to show whether expected results have been achieved, particularly outcomes and impacts, and if not, why not? They must provide information that monitoring cannot sufficiently provide. The aim of the evaluation is to achieve the desired results.

2.2.2.4 Pilar IV – Learning

Learning in RBM systems is a critical and continuous process throughout the cycle of planning, implementation, monitoring and evaluation, all of which contribute to knowledge creation. Learning enables management and the organization at all levels to understand what is working well and what needs to be adjusted. It has a major impact on strategy formulation, programme/project development and implementation. An effective monitoring system is essential to foster learning and accountability, which are essential elements of RBM (3).

FIGURE 3 - RBM CLYCLE (3)

3 DEVELOPMENT OF THE METHODOLOGY

3.1 Steps prior to M&E

3.1.1 Identify the Stakeholders

The first step is to identify who is the audience or stakeholders that will be affected both directly and indirectly by the programme. They can be individuals or organisations (public bodies, authorities, businesses, non-governmental organisations, etc.) and they can be both in favour of and against the changes that the project and/or programme will bring about. Also, depending on their role, they will have more or less influence on the implementation and results of the programmes and consequently of the project.

It is essential to listen to the relevant parties, as they provide different points of view and varied visions that will help to find relevant solutions and to evaluate the programmes. When stakeholders participate in the monitoring and evaluation process, it increases their commitment by involving the people who might be affected by the decisions to be taken or by their implementation.

Consideration should be given to the participation of people with different experiences, genders, ages, entities, departments, etc.
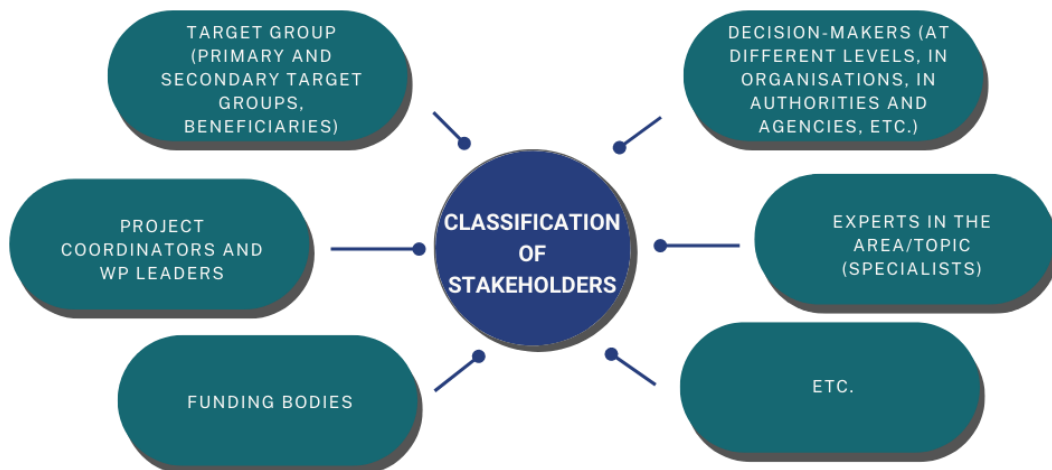

FIGURE 4 - CLASSIFICATION OF STAKEHOLDERS (8)

One stakeholder may be part of several of the groups.

After doing the analysis of the stakeholders that the programme affects or concerns, it is necessary to decide how to obtain information from them. This can be done in different ways, e.g., through a workshop, a seminar and/or questionnaires and/or interviews. However, it has been

found that the quickest, most participatory and effective way to gather information about the situation is through a workshop.

By interacting with stakeholders, a summary of why and what needs to be done in the framework of the project/programme will be elaborated. After that, the project members developing the programme will work out the details based on the stakeholders' inputs. However, it should be clear that it is the project members, in dialogue with the funding agencies, who make the decisions. However, it is advisable to communicate these decisions to the stakeholders involved in order to maintain good relations. These stakeholders are important actors in the change process, their support before, during and after the project period is crucial to achieve the results (8).

Benefits of engaging stakeholders:

- **Learning about change**
- **More effective decision-making**
- **Saving time and money**
- **Increased trust**
- **Better risk management**
- **Improved accountability**
- **Better understanding of needs**

SEE ANNEX I

3.2 Monitoring the results

3.2.1 Definition of expected results for monitoring and evaluation

In order to monitor and evaluate the results achieved by a programme, it is necessary to know what the intended results are.

If the programme has been formulated using the logical framework approach, the main document to consult will be the logical framework matrix, which specifies the resources available to the programme, the activities it undertakes, the results it pursues, the key indicators that will be used to assess whether the expected results were achieved, the sources from which data will be obtained to monitor the key indicators, and the main assumptions underlying the programme's theory of change.

However, if the programme's logical framework matrix is not available, a reconstruction of the programme's theory of change should be carried out by developing a results chain. For the

preparation of the results chain, it is advisable to involve different stakeholders in order to capture the results that each stakeholder expects from the programme.

3.2.1.1 Results Chain

The results chain is a Results Management tool that serves to understand the sequence of causality needed to achieve the expected results of the programme - starting with the resources available, followed by the activities undertaken and ending with the outputs delivered, the outcomes generated and the impacts to which they contribute. In this way, the results chain summarises the theory of change underlying the programme design.
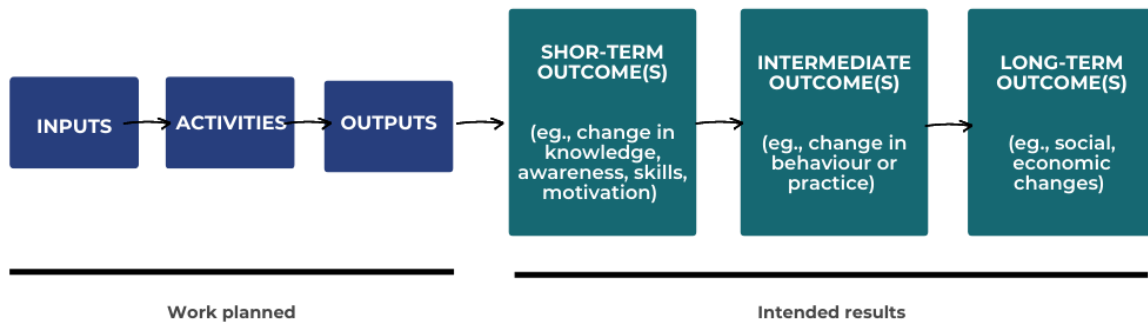
FIGURE 5 - STRUCTURE OF A RESULTS CHAIN

At the end of the exercise, a document will be available defining the main results that the programme aims to achieve, both in terms of the goods and services provided (outputs) and the changes it intends to generate in the behaviour and perceptions of the beneficiary population (outcomes) and in society in general (impacts).

SEE ANNEX II

This information will need to be transferred to the next document. **SEE ANNEX III COLUMN I**

3.2.2 Selection of objective indicators

Within RBM approaches indicators are critical as they measure different aspects of the project and serve to monitor the project or in this case the programmes. Indicators allow organisations to measure or quantify results and see if they have been achieved. Indicators can be both quantitative and qualitative, depending on what needs to be measured and how.

A good indicator should be SMART: Specific, Measurable, Achievable, Relevant and Time-bound (Figure 6). It is essential to strike a balance between having an appropriate set of measures to track results and the cost involved in collecting data for those indicators (9)

The indicators should be "SMART":

- **S**pecific (clear)
- **M**easurable (it should be possible to define indicators and means of verification for the objectives)
- **A**ccepted (e.g., in terms of available resources)
- **R**ealistic (on the basis of conditions such as mandate and resources)
- **T**ime limited (must be achieved during the project implementation period)

FIGURE 6 - SMART GOALS DEFINITION

Why are Indicators Important?

1. **Indicators help to measure objectives**
2. **Indicators specify (in measurable terms) how the achievement of an objective can be verified or demonstrated.**
3. **Indicators define performance standards (minimum requirements) for each objective.**
4. **Indicators focus on the important characteristics of an objective.**
5. **Indicators provide a basis for monitoring and evaluation of the project.**
6. **Indicators are necessary to provide information on the achievement of results.**
7. **Indicators lead planners and stakeholders to a clear definition and common understanding of the project objectives.**
8. **Indicators ensure that decision-making is based on relevant data.**
9. **Indicators can be quantitative or qualitative. Quantitative indicators are presented by number, percentage or ratio. Qualitative indicators seek to measure quality and are often based on perception, opinion or satisfaction levels.**

- **Quantitative indicators**: measure quantity, number, proportion or percentage.
- **Qualitative indicators**: measure perceptions, opinions, judgements. They should be used sparingly, as they are often based on subjective perceptions and may not be sufficient to demonstrate the actual results and changes that have occurred as a result of project/programme interventions.

The objective of indicators is therefore to obtain quantifiable information on actual progress that provides a more solid ground on which to make strategic decisions based on useful information and to help align budgets and manage resources to ensure successful outcomes. However, to properly assess the achievement of results, managers may need both quantitative and qualitative measures (10).

As when defining the expected results of a programme, it is important that the choice and formulation of indicators is carried out through a participatory process, so that those that are most relevant and important to all stakeholders are chosen.

From an indicator construction point of view, the formulation of an indicator should be as clear and straightforward as possible, bearing in mind that an indicator should always provide information about three dimensions of measurement: what it is intended to measure, how it is to be measured and the time period to which it refers.

It is important to keep in mind that as few indicators as possible should be chosen to provide a representative picture of the programme's progress and performance; and that monitoring these indicators should involve a reasonable deployment of resources and effort.

Examples of indicators are shown in table 2 to be used when developing the indicators for the evaluation of the programmes.

SEE ANNEX III COLUMN I

Overarching Indicators	**Indicator no 1**	**Relevance of quality assurance systems for VET providers**	(a) share of VET providers applying internal quality assurance systems defined by law/at own initiative
			(b) share of accredited VET providers.
	Indicator no 2	**Investment in training of teachers and trainers**	(a) share of teachers and trainers participating in further training
			(b) amount of funds invested
Indicators supporting quality objectives for VET policies	**Indicator no 3**	**Participation rate in VET programmes**	Number of participants in VET programmes, according to the type of programme and the individual criteria
	Indicator no 4	**Completion rate in VET programmes**	Number of persons having successfully completed/abandoned VET programmes, according to the type of programme and the individual criteria
	Indicator no 5	**Placement rate in VET programmes**	(a) destination of VET learners at a designated point in time after completion of training, according to the type of programme and the individual criteria
			(b) share of employed learners at a designated point in time after completion of training, according to the type of programme and the individual criteria
	Indicator no 6	**Utilisation of acquired skills at the workplace**	(a) information on occupation obtained by individuals after completion of training, according to type of training and individual criteria
			(b) satisfaction rate of individuals and employers with acquired skills/competences
	Indicator no 7	**Unemployment rate according to individual criteria**	
	Indicator no 8	**Prevalence of vulnerable groups**	(a) percentage of participants in VET classified as disadvantaged groups (in a defined region or catchment area) according to age and gender
			(b) success rate of disadvantaged groups according to age and gender
	Indicator no 9	**Mechanisms to identify training needs in the labour market:**	(a) information on mechanisms set up to identify changing demands at different levels
			(b) evidence of their effectiveness.
	Indicator no 10	**Schemes used to promote better access to VET**	(a) information on existing schemes at different levels
			(b) evidence of their effectiveness

TABLE 2 - EQAVET INDICATORS (11)

3.2.3 Determination of baseline and target values for each indicator

In order to be able to assess during the implementation of a programme or policy whether it is progressing as planned towards the achievement of the objectives set and whether, once the implementation period is over, the expected results have been obtained, it is not only necessary to have good indicators to measure the results, it is also necessary to know what the value of each indicator is before the programmed activities begin, and what its value should be in order to be able to assess whether the programme has been successful at the end of the programme.

The first task is to obtain for each of them the baseline values that define the initial situation.

Next, the values to be achieved, the goals, have to be determined. These values have to be ambitious and realistic at the same time.

SEE ANNEX III COLUMNS II - III

3.2.4 Establishing a Data collection plan for performance indicator monitoring

Implicit in M&E are tasks such as providing data, collecting data, processing and analysing the information collected, reporting results, alerting to problems detected, proposing recommendations, discussing possible solutions, and disseminating the results to partners, specialists and the public.

Gathering information, analysing it and making it available to decision-makers are not incidental activities that can be improvised on the fly: they are an integral part of programme or policy management and, as such, require adequate attention, resources and time.

Below is a brief summary of the different elements to consider when planning data collection:

- **Information needs: Information needed to track each of the indicators, such as, for example; moment or time period to which each indicator refers, disaggregation categories (sex, location, etc) and frequency (annual, quarterly).**
- **Data collection: This specifies the sources of information from which data will be collected, the method of collection, the roles and responsibilities of each person or organisation and the resources required.**
- **Timetable for the implementation of data collection, the instruments to be used and any additional needs related to data collection.**
- **Analysis, discussion and dissemination of results: monitoring reports, evaluation reports, etc., the roles and responsibilities of each of the people involved and finally the deadlines for reporting and dissemination of results.**

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Evaluations are studies that allow a better understanding of some aspects of the programme and its results, which cannot be found in the monitoring phase. They are therefore two complementary practices, and this should be taken into account when creating the links between the two parties and synchronising the timing of evaluations with that of monitoring activities to avoid duplication of efforts, especially in data collection.

SEE ANNEX III COLUMS IV-VII

3.2.5 Data collection for indicator monitoring

For the monitoring exercise to be useful, data collection should be carried out in such a way as to provide reliable, valid and timely data:

- **Reliable: the measurement of indicators should be conducted in the same way throughout the duration of the programme.**
- **Valid: indicator data should correctly measure programme performance.**
- **Timely: data should be available when needed to inform decision-making.**

3.2.6 Analysis and reporting of the collected data

Although most monitoring activities are usually related to the design of indicators and measurement tools and the collection of data, monitoring is not only about collecting information, but also about processing it properly and communicating it effectively in order to be useful for decision-making.

The analysis of monitoring data is usually limited to a simple, synthesised description of the information collected and is usually summarised as follows:

- **The current value taken by each indicator, and the date to which it refers.**
- **The state of progress of the programme towards the achievement of each expected result, and any other circumstances that are considered important to inform the person(s) responsible for the programme.**
- **The specific action(s) recommended to be taken to resolve problems or adapt to changes in circumstances identified.**

- **An action code that allows the person to whom the report is addressed to quickly visualise the state of progress of the programme and what kind of action is required to address the problems and situations being reported.**

The information generated by the M&E system will be used primarily for decision-making by the people coordinating the programme.

SEE ANNEX IV

Objective ver-ifiable indica-tors	Baseline value (DATE)	Current value (DATE)	Target value (DATE)	Source of in-formation	Progress Status (Prob-lems de-tected and relevant in-formation)	Recommended actions (and next steps)	Action code
1. Global objective/ Impact							
Indicator 1.1	0% (2015)	¿? (2016)	15% (2017)	Impact as-sessment (on-going)	Data not yet available	Confirm that the evaluation is progressing ac-cording to plan.	**?**
2. Effects/ Outcomes							
Indicator 2.1	15% (2015)	25% (2016)	25% (2017)	Source of in-formation 1	Progressing better than expected	Find out ra-tionale and re-vise target up-wards if appro-priate	**!**
Indicator 2.2	1.000 (2015)	2.000 (2016)	3.000 (2017)	Source of in-formation 2	Progressing according to plan	Re-check data on (date)	**[…]**
3. Prod-ucts/Out-puts							
Indicator 3.1	0 (2015)	2 (2016)	20 (2017)	Source of in-formation 3	Delay due to (explanation)	Carry out (cor-rective action)	**!**
Indicator 3.2	0 (2015)	3 (2016)	3 (2017)	Programme management	Completed		**✔**

TABLE 3 - STRUCTURE OF A RESULTS MONITORING REPORT (13)

3.3 Evaluation of the results

Evaluation and monitoring are complementary in the sense that while monitoring focuses on systematically and continuously collecting data in order to assess the performance of a programme or policy during its implementation, evaluation allows to address a wide range of questions that go beyond the scope of monitoring, but are also of interest.

3.3.1 Define the evaluation questions and the methodology to be used

Evaluation questions go beyond measurement to ask higher-order questions, such as whether the intervention is worthwhile or whether it could have been achieved in another way. In general, evaluation questions should lead to further action, such as project improvement, project integration or project redesign.

The key here is to strike a balance between asking enough questions to be able to satisfy the information demands of all key stakeholders in sufficient depth and detail, and keeping the number and complexity of questions within the limits of what can reasonably be answered by the evaluation team in the time and with the resources available.

Descriptive questions	Policy questions	Cause and effect questions
• What are the main objectives of the programme? • What services did the programme provide to the beneficiary population? • Are there differences in how the programme is implemented in different geographical areas? • Is the beneficiary population satisfied with the programme?	• Does the programme design respond to the needs of the beneficiary population? • Is the programme being adequately implemented? • Did the programme achieve its intended objectives? • Have more resources been spent than planned to carry out programme activities?	• As a result of your participation in the programme, has your education in the sector improved? • Does the programme have an indirect effect on people other than the beneficiary population?

TABLE 4 - EXAMPLES OF QUESTIONS TO ANSWER FOR EVALUATIONS

SEE ANNEX V

In determining the evaluation methodology, it is important to consider the different types of evaluation that exist., some examples are shown in Table 5.

	Rationalist	Pluralist	Participatory
Theoretical approach on which it is based	It tries to separate as much as possible the collection of data from the description of facts and the views of the evaluator and stakeholders.	It tries to be as inclusive as possible of the views, ideologies and values of all stakeholders.	It tries to involve partners and other stakeholders in the evaluation process.
	Prospective	**Formative**	**Summative**
Main purpose	Aimed at assessing the potential outcomes of the programme in order to decide on its feasibility and/or improve its design.	Aimed at learning how the programme is being implemented in order to improve its performance.	Aimed at determining the extent to which the expected results of the programme were achieved in order to decide on its continuation or extension.
	Focused on objectives	**Process**	**Impact**
Aspects of the programme on which it focuses	It focuses on assessing the extent to which a programme achieves clear and specific objectives.	It focuses on understanding how a programme is being implemented.	It focuses on measuring the extent to which the programme has generated effects on the behaviour and values of the beneficiary population and impacts on society as a whole.
	Ex ante/ Prospectiva	**Intermediate**	**Ex post/ Final**
Times at which it takes place	Evaluates the programme before it starts	Evaluates the programme as it is being implemented	Evaluates the programme once it has ended
	Intern	**Semi-independent**	**External/Independent**
Evaluation team carrying out the evaluation	Carried out by staff of the evaluating organisation	Carried out by staff of the evaluated organisation attached to a unit independent from the unit responsible for the programme.	Carried out by an independent evaluator or team, not affiliated to the organisation being evaluated
	Quantitative	**Mixed**	**Qualitative**
Data collection and analysis methods used	It employs quantitative methods for data collection and analysis.	Combines quantitative and qualitative methods for data collection and analysis	It employs qualitative methods for data collection and analysis.

TABLE 5 - TYPES OF EVALUATION (12)

The methodology selected for the evaluation of each of the programmes will be indicated in the final evaluation report.

3.3.2 Data collection for the evaluation

It is of great importance to choose the data collection method and instruments that best suit the object of study, the methodological approach used and the circumstances.

There is a wide variety of data collection methods and instruments. The choice of one method or another will depend on several factors, such as the level of depth and complexity of the information that needs to be collected, the budget and time available to do so, or the degree of representativeness of the population from which data are being collected.

Examples of data collection methods are given below (Table 6).

Sample survey	Data collection by means of a pre-designed questionnaire on certain characteristics of the beneficiary population of the programme under evaluation, or of another specific population, and which is carried out on a sample of individuals selected so as to be representative of the totality of individuals in that population.
Interview	Collecting information on one or more aspects of the programme under evaluation by asking key informants a series of more or less structured questions.
Examination of records and documents	Gathering information on the objectives, operational rules, performance, legal and institutional context in which it operates, or any other aspect of the programme under evaluation by consulting key documents, administrative records and other programme archives.
Direct observations	Data collection through observations by an evaluator of the development of the programme under evaluation, without interfering in its activities or interacting with the people who carry them out or with the beneficiary population.
Participatory comments	Data collection through the participation of the evaluator in the activities of the programme under evaluation.
Census surveys	Data collection by means of questionnaires previously designed on certain characteristics of each and every one of the individuals that make up a given population.

TABLE 6 - MAIN DATA COLLECTION METHODS (13)

3.3.3 Data analysis and preparation of the evaluation report

The next step after data collection is to process and analyse it in order to provide useful information to programme management and other stakeholders.

The main output of the data analysis is the final evaluation report, which contains findings, conclusions and recommendations, as well as lessons learned during the course of the evaluation (14).

- **Findings** are results of the study in relation to each of the questions addressed.
- **Conclusions** are assessments of the findings that indicate success and failure factors of the programme based on the information collected and its analysis.
- **Recommendations**, which are drawn from the conclusions in order to advise the main client or key partners on concrete actions to improve the programme.
- **Lessons learned**, which highlight the strengths or weaknesses of the programme design, implementation, outcomes and impact.

SEE ANNEX VI

3.3.4 Communication, discussion and use of the evaluation results

For an evaluation to be useful, it is not enough that it has been well planned, designed and carried out; it is also essential that its results are effectively communicated to programme managers so that they understand the evidence on which the evaluation team's findings are based and the practical implications of its recommendations.

ANNEX I

AUDIENCE	QUESTION	TIME
Stakeholders of interest for the programme	What is relevant to them about the programme? Or what might be of interest to them?	When will the information be of interest to them?

ANNEX II

PROBLEM STATEMENT	

INPUTS	ACTIVITIES	OUTPUTS	SHORT-TERM OUT-COME(S)	INTERMEDIATE OUT-COME(S)	LONG-TERM OUT-COME(S)
Resources needed to carry out activities efficiently. Examples: • Human resources • Space/facilities • Technology • Materials • Curriculum • Etc.	Activities required to achieve the results Examples: • Workshops • Trainings • Learning activities • Services • Policy advocacy • Product delivery • Etc.	Tangible results to be generated through the activities. Examples: • Number of beneficiaries reached • Number of participants • Percentage of completion • Percentage increase in learning outcomes • Etc.	Expected results shortly after the start of the programme. Changes in: • Learning • Awareness • Knowledge • Attitude • Skills • Views • Aspirations • Motivations	Results you want to see in your programme period. Changes in: - Actions - Behaviours - Practices - Decisions - Policy - Social actions	Results you want to see beyond the period of your programme. Changes in: • Conditions • Social contexts • Environmental characteristics

ANNEX III

Objective verifiable indicators	Baseline value	Target value	Information needs (time, frequency, categories of disaggregation of data)	Design of the data collection (source of information, roles and responsibilities, method, human, financial and equipment resources).	Implementation of data collection (timetable, instrument, additional needs)	Analysis, discussion and dissemination of results (M&E products to be undertaken, roles and responsibilities, reporting and dissemination activities, timing)
1. Global objective/Impact						
Indicator 1.1 Indicator 1.2 …..						
2. Effects/Outcomes						
Indicator 2.1 Indicator 2.2 …..						
3. Products/Outputs						
Indicator 3.1 Indicator 3.2 …..						

ANNEX IV

Objective verifiable indicators	Baseline value (DATE)	Current value (DATE)	Target value (DATE)	Source of information	Progress Status (Problems detected and relevant information)	Recommended actions (and next steps)	Action code
1. Global objective /Impact							
Indicator 1.1							
Indicator 1.2							
…..							
2. Effects/Outcomes							
Indicator 2.1							
Indicator 2.2							
…..							
3. Products/Outputs							
Indicator 3.1							
Indicator 3.2							

ANNEX V

EVALUATION						
Evaluation question	Where will the data come from? (Data Source/Method)	Who will capture the data? (Responsibility)	When will data be captured? (Timeframe)	Will there be any costs?	Who will be involved?	How will it be reported?

ANNEX VI

EVALUATION REPORT

1. INTRODUCTION

1.1.   PURPOSE OF THE EVALUATION

1.2.   CONTEXT AND DESCRIPTION OF THE PROGRAMME UNDER EVALUATION

2. DESCRIPTION OF THE EVALUATION

2.1.   PURPOSE OF THE EVALUATION

2.2.   EVALUATION QUESTIONS

2.3. APPLIED METHODOLOGY

2.4. METHODOLOGICAL LIMITATIONS AND LIMITATIONS OF THE AVAILABLE IN-FORMATION

2.5. ACTORS INVOLVED IN THE EVALUATION PROCESS

NAME	POSITION	ENTITY/COMPANY

3. FINDINGS

3.1. FACTUAL STATEMENTS ABOUT THE PROGRAMME UNDER EVALUATION

4. CONCLUSIONS

SUCCESS AND FAILURE FACTORS OF THE EVALUATED PROGRAMME SUP-PORTED BY THE DATA COLLECTED AND THEIR ANALYSIS AND INTERPRETA-TION

5. RECOMMENDATIONS

5.1. PROPOSALS TO IMPROVE THE EVALUATED PROGRAMME

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