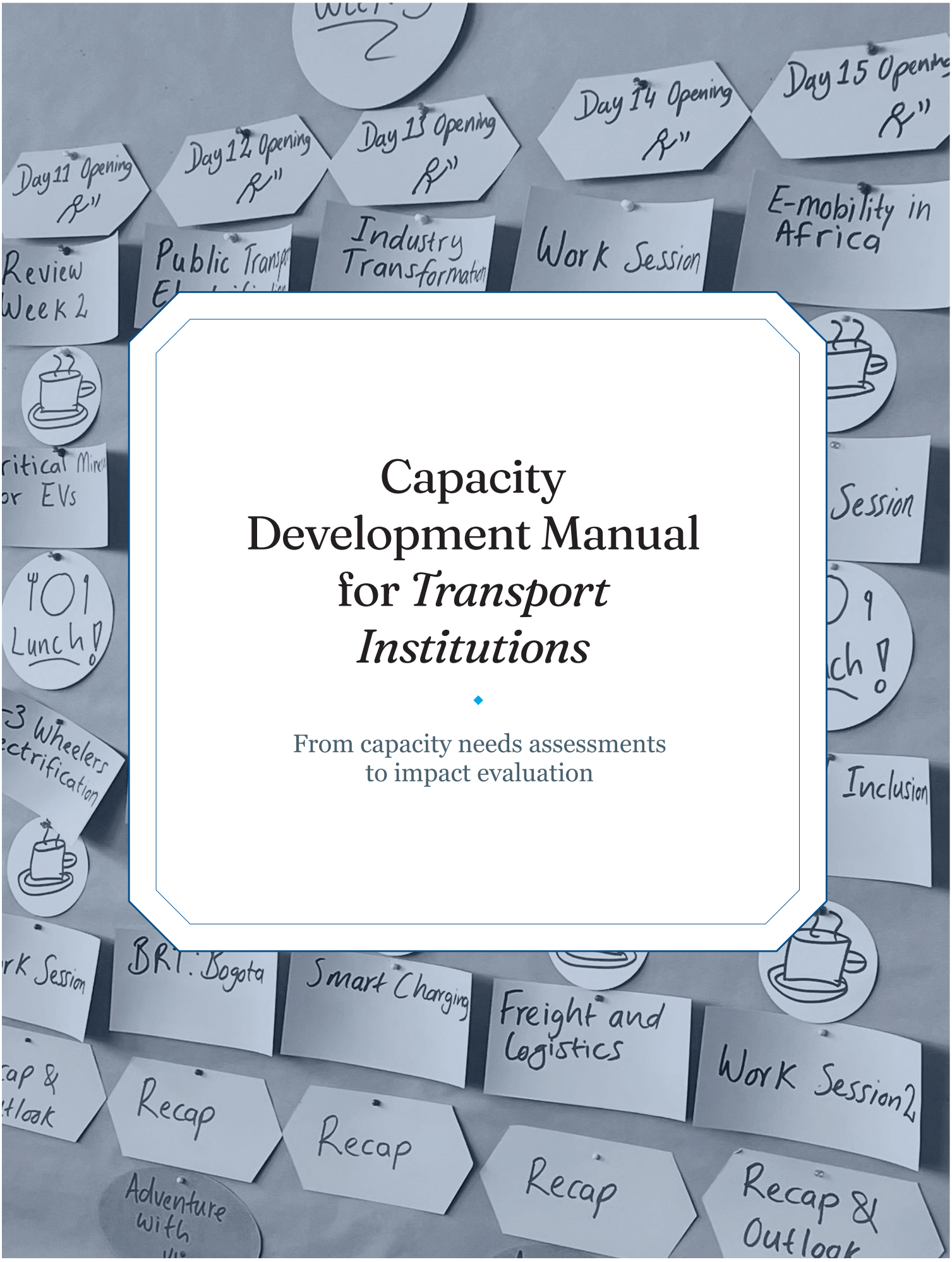


Capacity Development Manual for *Transport Institutions*

From capacity needs assessments to impact evaluation

Global Research and Technology Development Funded by UK Government
RCC Research Commissioning Centre
3ie International Initiative for Impact Evaluation
Transport for Cairo
مواصلات للقاهرة

Workshop during the Agora Sustainable Transport Fellowship - © Hend Eltabey, 2024

Project background

Transport institutions in low- and middle-income countries are at the forefront of efforts to make urban mobility systems more sustainable and climate-aligned. Yet many continue to face critical capacity gaps at the individual, organisational, and societal levels, limiting their ability to plan, implement, and sustain transformative transport initiatives. The UK government's Foreign, Commonwealth and Development Office (FCDO) funded High Volume Transport Applied Research (HVT), "Capacity Building in Sustainable Urban Mobility for Low-Income Countries" (2024), identified this challenge and revealed that while numerous capacity development efforts exist, they are often fragmented, short-term, and focused narrowly on training rather than on strengthening institutional systems and long-term learning structures.

This capacity development manual builds directly on this research, transforming its findings into practical and implementable guidance for transport institutions. The manual will provide guidance on assessing capacity gaps, choosing appropriate capacity development formats, embedding activities into organisational processes, and monitoring outcomes. By doing so, it will enable transport institutions to adopt a structured, strategic approach to capacity development that supports effective governance and sustainable transport delivery.

This manual is therefore an output of the High Volume Transport Applied Research (HVT) programme, funded by the UK government's Foreign, Commonwealth and Development Office through its Research Commissioning Centre (RCC). The RCC is managed by the International Initiative for Impact Evaluation (3ie) and the University of Birmingham, and the project sits within the Global Research and Technology Development portfolio.

The views expressed in this manual are those of the authors and do not necessarily reflect the official positions or policies of the UK's Foreign, Commonwealth and Development Office, the RCC, or other partners.

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The authors would also like to show their appreciation to Holger Dalkmann, Climate Compatible Growth (FCDO funded) Team Lead, for his continuous support and guidance with the HVT study and the preparation of the manual.

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MVG electric bus depot in Munich, Germany - © Hend Eltabey, 2024

About the manual

The Capacity Development Manual for Transport Institutions presents global best practices in capacity development processes based on the evidence and insights drawn from the FCDO-funded High Volume Transport Applied Research (HVT) study "Capacity Building in Sustainable Urban Mobility for Low-Income Countries" (2024).

To ensure the usefulness, clarity and adaptability for transport institutions, the manual has been reviewed and tested by a number of transport institutions in Low- and Middle-Income Countries in Africa and in Asia.

A baseline assessment of these institutions' current capacity development practices confirmed the need for the manual: Capacity development tends to be reactive and appraisal-driven, monitoring and evaluation is the weakest area, and the societal level of capacity is rarely addressed. It also showed that institutions draw on a familiar core of formats; such as trainings, conferences, seminars and study tours, and on very few structured planning tools, underusing the wider range of formats and tools that this manual introduces.

In response, the manual translates analytical findings into practical and simplified frameworks, tools and actionable steps. The manual is designed to be a valuable reference for transport institutions to plan, design and implement effective capacity development efforts.

The capacity development process recommended in the manual is a structured, cyclical approach moving from diagnosis to action to learning.

However, it is important to note that the suggested approach would be the ideal recommended scenario. In practice, each phase is often carried out as a separate activity and not as part of a structured process. Capacity development activities are often unstructured, scattered and implemented in an ad-hoc manner. To bridge this gap, the phases described could therefore also be applied independently and integrated into existing institutional processes, allowing institutions to adapt the suggested approach to their specific contexts.

Each section of the manual corresponds to a phase - planning, design and implementation, and monitoring and evaluation (M&E) - where users are encouraged to move sequentially through the chapters while adapting the tools and guiding questions to their institutional contexts.

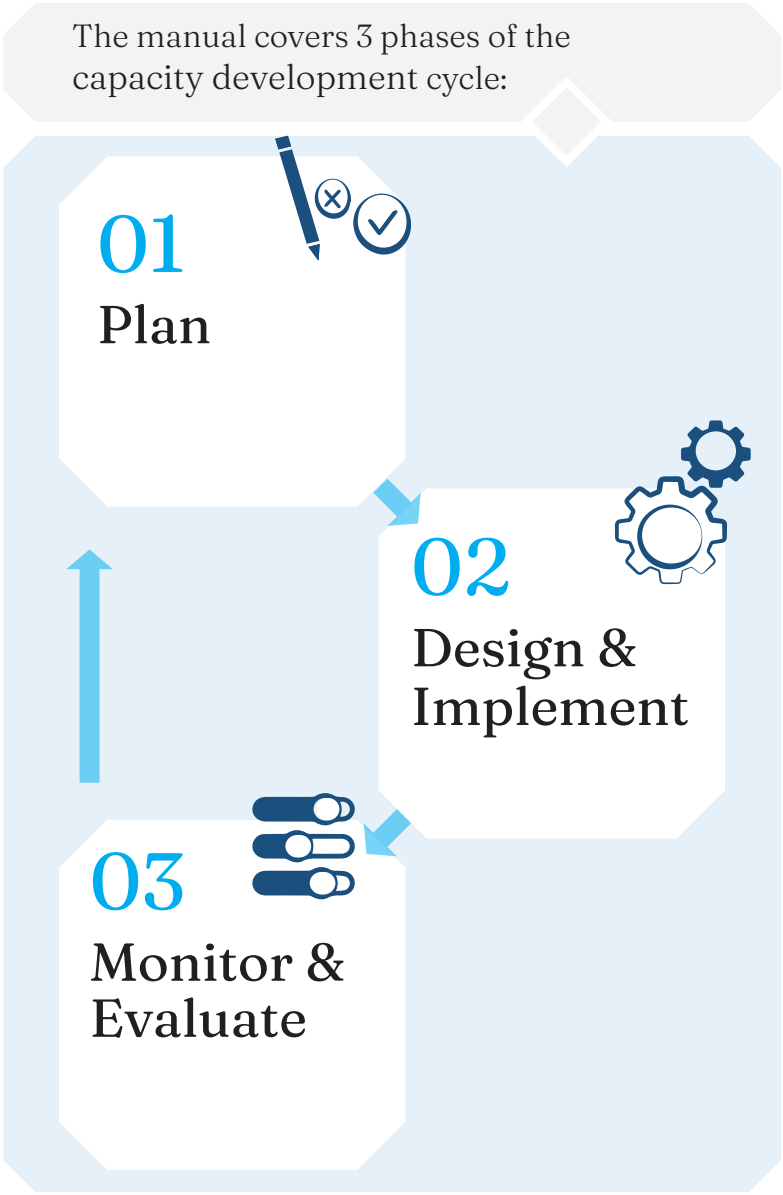


Figure (01): Capacity development cycle - (adapted from HVT, 2024)

Who is this manual for?

Although this manual is primarily intended for transport institutions at the national, regional, and local levels, it can also serve as a reference for international development agencies, training agencies, and any entity supporting capacity development activities for transport institutions.

When to use the manual?

The manual is designed to encourage institutions to independently identify which capacities they possess, which they need to improve and how they could do so. The manual achieves this through tools that embed capacity needs assessments, development plans as well as monitoring and evaluation practices into the institutions' everyday work. The manual is ideally used as a practical tool to:



Institutionalise capacity development planning

Conduct capacity needs assessments, prepare development plans, and undertake M&E exercises on a regular basis, not as one-off exercises.



Standardise evidence-based capacity development programmes

Findings from a capacity needs assessment feed directly into performance reviews, strategic planning, and project preparation and implementation.



Leverage (international) collaboration practices

In situations where transport institutions choose to cooperate with external partners on capacity development activities, the manual offers an easy to follow framework with global best practices to guide the process.

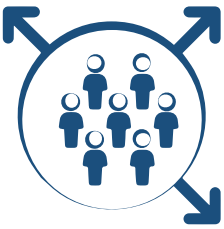
Important keywords

Before we start...



Capacity:

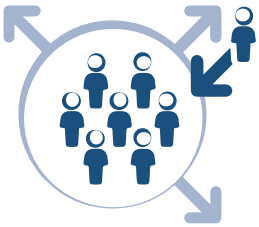
"The ability of people, organisations and society as a whole to manage their affairs successfully." (UNDG, 2017)



Capacity development:

"The process whereby people, organisations and society as a whole unleash, strengthen, create, adapt, and maintain capacity over time, in order to achieve development results." (UNDG, 2017)

Inherently, capacity development involves and supports making changes to an existing situation.



Capacity development support:

Efforts by external individuals or organisations to reinforce, facilitate, and catalyse capacity development.

Volkswagen production plant in Zwickau, Germany - © Hend Eltabey, 2024

How to define the different capacities?

Improving capacities can further relate to improving knowledge and understanding, acquiring new skills and/or boosting motivation and attitudes.

01 Knowledge — The theoretical knowledge individuals and organisations possess including thematically relevant and up-to-date concepts and frameworks.

02 Skills — The ability and competence to apply individual and organisational knowledge in practice.

03 Attitude — The mindset and willingness of individuals and organisations to apply knowledge and skills.

Capacities can be grouped into technical and functional capacities:

Technical capacities

Refers to the sector-specific expertise required for an institution to perform its substantive mandate within a given field.

** Refer to examples here*

Functional capacities

Applies across sectors and enables an organisation to effectively implement its mandate.

** Refer to examples here*

Capacities can relate to hard skills or soft skills.

Hard skills — Hard skills are tangible and visible, and can encompass technical capacities (e.g. transport planning skills) as well as functional capacities (e.g. developing organisational structures, designing business models or performing M&E).

Soft skills — Soft skills are intangible and invisible, as they are often of a social or relational nature. Examples include leadership, communication skills, commitment, and accountability.

Where to start?

Capacity gaps refer to the discrepancy between existing capacities and the level of capacity required to effectively fulfil a mandate or achieve desired objectives.

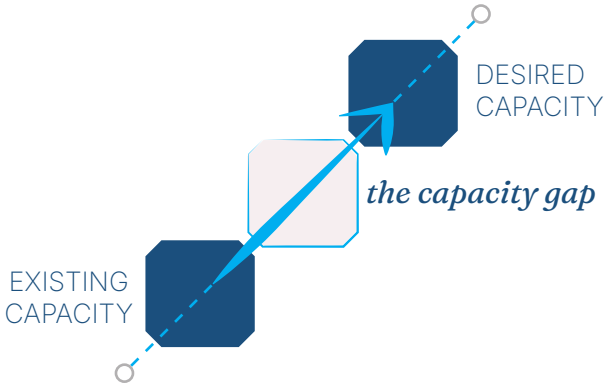


Figure (02): Capacity gaps

They represent weaknesses or limitations in knowledge, skills, attitudes or institutional and societal arrangements that hinder performance.

Identifying these gaps allows "needs" to be understood as areas where development is required to bridge the difference between current and desired capacity.

Where gaps appear

Capacity gaps can thus be identified across three different levels: on the individual level, the organisational level, and the societal level.

01

Individual level

Capacities and capacity gaps in human resources

→ TYPICAL GAPS

- Gaps in the number of staff
- Gaps in the education of staff
- Gaps in existing educational programmes
- Gaps in including sustainability in educational programmes

02

Organisational level

Capacities and capacity gaps within the transport institution

→ TYPICAL GAPS

- Gaps in governance capacity
- Gaps in planning capacity
- Gaps in technical knowledge & skills

03

Societal level

Capacities and capacity gaps within the broader society in which the transport institution works

→ TYPICAL GAPS

- Gaps in cooperation & partnerships capacities
- Lack of an enabling legal, political and/or socio-economic environment

Figure (03): Capacity gaps identified across different levels - (adapted from HVT, 2024)

The three levels of capacity development

The three levels of capacity development, the individual, organisational and societal, are inter-related and mutually reinforcing. However, the objective of developing each capacity level naturally differs. Hence, when planning a capacity development activity, it is important to first identify on which capacity level, individual, organisational or societal, the activity will be targeted.

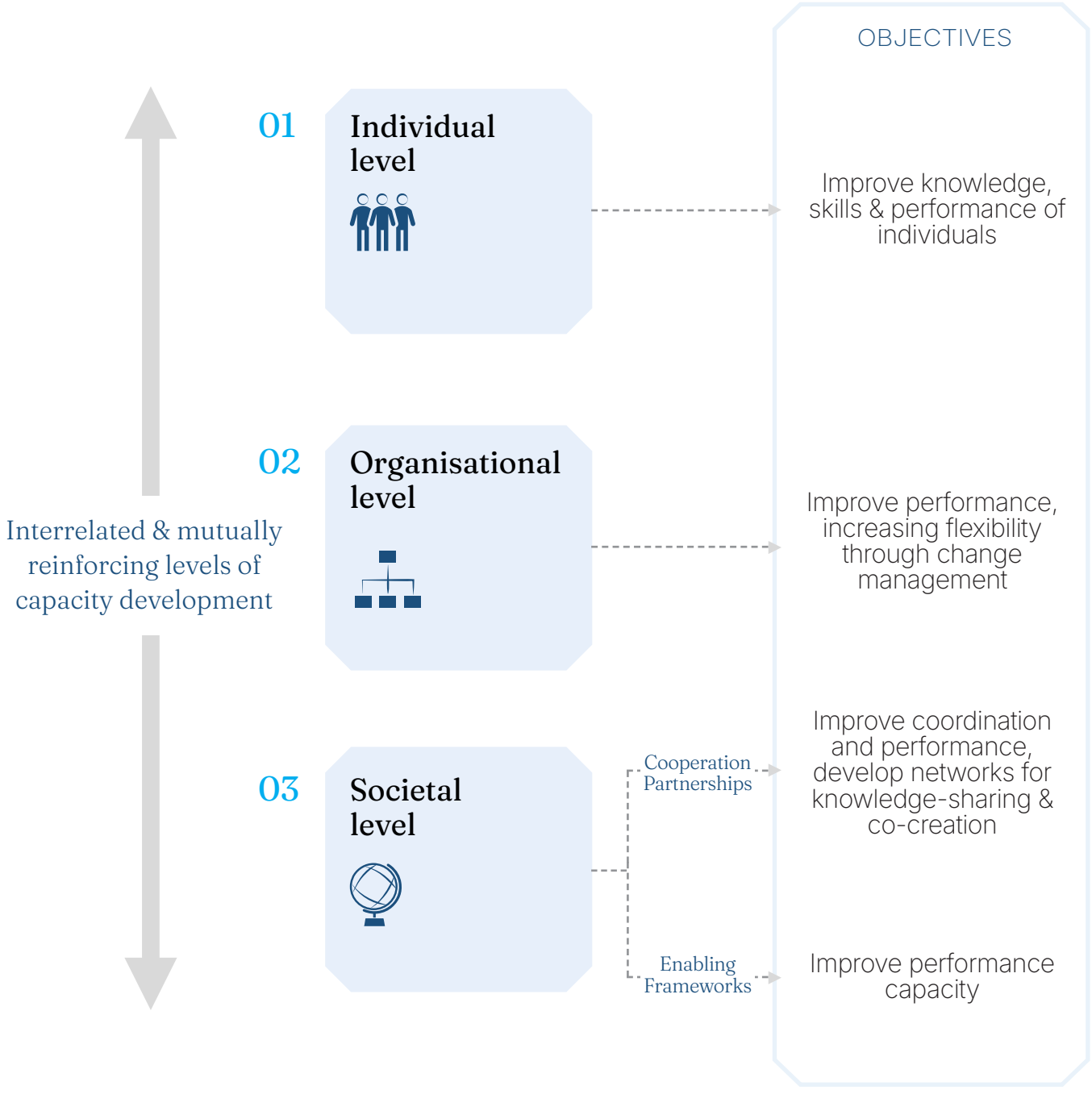


Figure (04): The three levels of capacity development - (adapted from HVT, 2024)

PHASE

01

Plan

PHASE

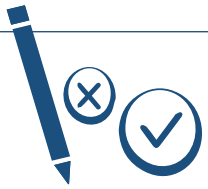
02

Design & Implement

PHASE

03

Monitor & Evaluate



The planning phase is about framing the assessment: what the capacity needs assessment should cover, how it will be organised, what data and evidence is needed, etc. This exercise is needed before any capacity development activity can be organised.

Guiding questions for a capacity needs assessment:

- What is the overall objective of the capacity development intervention?
- What specific capacity gaps exist at the individual, organisational, and societal levels?
- Are the identified gaps related to functional or technical capacities?
- Who are the internal and external resources needed to design the capacity development plan?
- How do we measure a successful preparation of the capacity needs assessment?

Checklist for planning a capacity needs assessment:

PHASE 01: PLAN		
01	Identify the assessment scope	◇
02	Identify data requirements	◇
03	Develop the management plan	◇
04	Analyse desired & current capacities	◇
05	Synthesise assessment findings	◇
06	Communicate assessment findings	◇
07	Evaluate the needs assessment process	◇

Capacity needs assessment process

A capacity needs assessment is a structured exercise that enables the identification of gaps between current capabilities and the knowledge, skills, and resources needed to achieve the goals of transport institutions. Capacities can be assessed on multiple levels: the individual, organisational and societal levels.

The capacity needs assessment process typically includes seven steps:

01 Pre-assessment

Define what to assess, what data is needed, and how the work will be organised.

STEPS

01 Identify the assessment scope

02 Identify data requirements

03 Develop the management plan

02 Conducting the assessment

Assess current vs. desired capacities, identify gaps, and recommend improvements.

STEPS

04 Analyse desired & current capacities

05 Synthesise assessment findings

03 Post-assessment

Communicate findings, validate outcomes, and evaluate assessment success.

STEPS

06 Communicate assessment findings

07 Evaluate the needs assessment process

Pre-assessment

01
STEP ONE

Identify the assessment scope

Clarify the assessment's objectives and the level of assessment (individual, organisational, or societal capacity assessment). Decide whether to focus on technical or functional capacities, and whether to assess hard capacities, soft capacities, or both. Key decisions to be taken during this step:

- Set the objectives: what's the purpose/ occasion for the assessment now?
- Which level?: individual/ organisational/ societal
- Which scope of capacities to focus on?: technical and/or functional

TOOLBOX

Before the end of each step, this manual supports institutions with a set of tools, each presented with information on "what it is", "when to use it", "how to fill it out" and an illustrative example showing how it applies in comparable contexts.

The illustrative examples are framed around a single storyline: A national transport authority in an LMIC context that regulates services at regional level and has operated city bus services for close to a decade on the local level. It prepares to launch an e-BRT corridor that it is staffed to operate for the first time. The storyline runs from capacity needs assessment (Phase 1) to implementation and M&E (Phases 2 and 3).

Step 1 is supported by a SWOT analysis template (Tool 1)

02
STEP TWO

Identify data requirements

Decide what evidence the assessment needs and where it will come from. Choose between qualitative and quantitative data (or both) and select the formats and tools that will bring about the right insights.

FORMATS

- Focus groups
- Workshops

TOOLS

- Concept mapping (Brainstorming)

TOOL 01

SWOT analysis

WHAT IS IT?

Identifies and organises strengths, weaknesses, opportunities, and threats on the individual, organisational or societal level.

WHEN TO USE IT?

At the start of the pre-assessment to discuss and agree on the scope of the capacity needs assessment. It is best to encourage each department head to fill out their own SWOT analysis sheets followed by a cross department check-in to validate and examine the priority capacity gaps.

HOW TO FILL IT OUT?

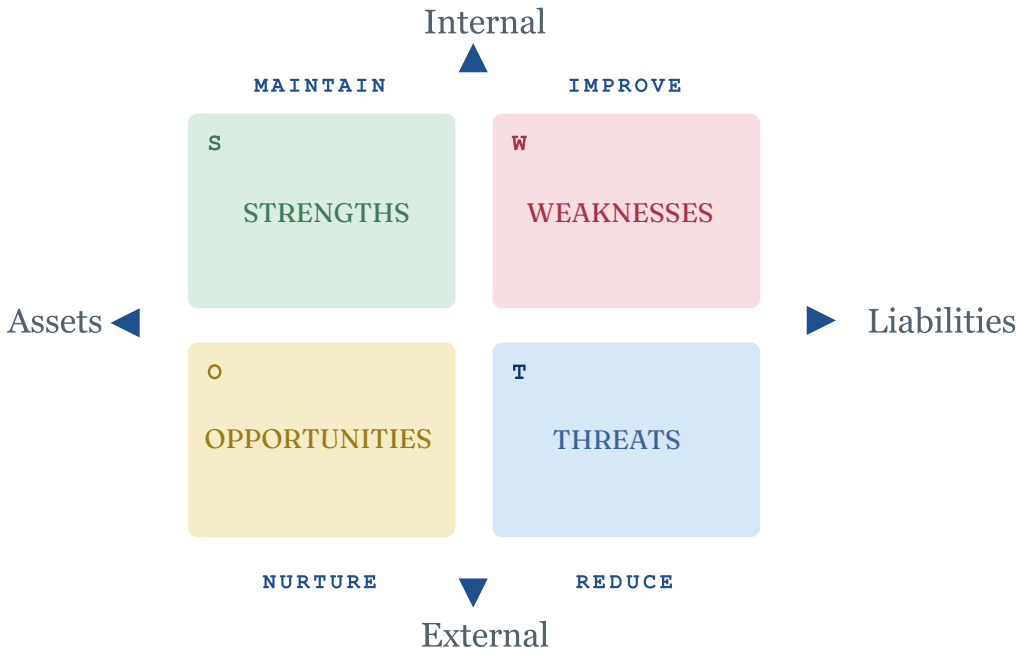
What each category means:

STRENGTHS
Internal resources and skills an organisation possesses that positively affect their performance.

WEAKNESSES
Internal deficiencies in skills, resources, or attributes that negatively impact its performance.

OPPORTUNITIES
External factors that an organisation can leverage to positively affect its performance.

THREATS
External factors that can negatively affect an organisation's performance.



TOOL 01

SWOT Analysis

Illustrative example: Below is a SWOT analysis template filled out with information for a fictional transport institution planning to launch an e-BRT corridor for the first time.

S STRENGTHS *internal · helpful*	**W** WEAKNESSES *internal · harmful*
Societal level: Existing mandate to plan, deliver and regulate buses Organisational level: Extensive route planning experience. Individual level: Availability of 20 transport engineers.	Societal level: Lack of coordination with other local transport institutions Organisational level: No prior BRT experience Individual level: No sustainable mobility formal education background
O OPPORTUNITIES *external · helpful*	**T** THREATS *external · harmful*
Societal level: Existing political willingness to electrify bus fleets Organisational level: Financing available for e-BRT project through IFIs Individual level: Electrification training opportunities	Societal level: Car-centric society and lack of buy-in from the informal operators Organisational level: Lack of integration between different transport modes Individual level: Local and international competition for skilled professionals

– INTERNAL –

– EXTERNAL –

Now it's your turn! Find your blank template here (under the Annex section)

Pre-assessment

03
STEP THREE

Develop the management plan

Define how the assessment will be delivered: logistics, timeline, budget, responsibilities, and risks. The management plan is the operational backbone of the needs assessment process and is best built using a structured set of tools. It should cover:

- Timeline & milestones
- Budget & resource allocation
- Roles, responsibilities & risks

TOOLBOX

Step 3 is supported by three fillable templates:
the Workplan & Gantt chart, the RACI matrix, and the RAID matrix.

Each tool draws on the one before it: the Workplan (Tool 2) establishes the tasks and timeline; the RACI matrix (Tool 3) assigns clear ownership for each task; the RAID matrix (Tool 4) then anticipates the risks and assumptions within the capacity assessment plan while considering the team members accountable for each task.

TOOL 02

Workplan & Gantt chart

WHAT IS IT?

A planning tool that organises the assessment's tasks, responsibilities, timelines, and dependencies.

WHEN TO USE IT?

During the pre-assessment phase, update it throughout the implementation and M&E to track task delivery against the original plan.

HOW TO FILL IT OUT?

01 Start from the deliverables, i.e. the final outputs, and work your way backwards to identify the tasks needed to deliver the final outputs.

02 List each task in chronological order within its phase. The timeline could be arranged on a daily/ weekly/ monthly basis.

03 The lighter fill shows the planned range; the darker fill marks the active working days.

Illustrative example: Below is a Gantt chart template filled out with information for a fictional transport institution planning to launch an e-BRT corridor for the first time.

TASK	ASSIGNED	START	END	WEEKS 1	2	3	4
PHASE 01 — Planning & Scoping							
Identify team members to work on the assessment (Stakeholder mapping)	HR Department	06/10/25	10/10/25				
Agree on scope for the capacity needs assessment (E-BRT)	Senior Management + HR Department	06/10/25	10/10/25				
PHASE 02 — Data Collection & Analysis							
Review successful case-studies. Review national plans & internal strategies. (Literature Review)	Bus Department	06/10/25	17/10/25				
Assess current versus needed capacities (Capacity Gaps)	Bus Department	13/10/25	24/10/25				
PHASE 03 — Synthesis & Reporting							
Prioritise which capacity gaps to address	Bus Department Head + HR Department	20/10/25	31/10/25				
Secure the needed approvals for the capacity gaps to address	HR Department	27/10/25	31/10/25				

ACTIVE
PLANNED

Now it's your turn! Find your blank template here (under the Annex section)

TOOL 03

RACI matrix

WHAT IS IT?

A tool that allows you to identify and visualise the roles and responsibilities for each task, step and deliverable among team members.

WHEN TO USE IT?

During the pre-assessment phase as the management plan is being agreed on. Revisit when the team composition changes.

HOW TO FILL IT OUT? - FIRST UNDERSTAND THE FOUR ROLES

ROLE	R RESPONSIBLE	A ACCOUNTABLE	C CONSULTED	I INFORMED
DESCRIPTION	The individual in charge of managing and completing a task from beginning to the end. Can answer questions about progress, timelines and tasks.	The individual who approves the work and owns the final result - usually the project manager or a senior leader who confirms that the task meets expectations.	Individuals who can provide guidance, share expertise, or review work before it progresses. They can influence decisions and improve outcomes.	Individuals who monitor progress and completion. They don't actively contribute to the work, but they're aware (informed) of the current status and changes of a task or project because a project's success may affect their work.
HEADCOUNT RULE	Each task can have several contributors, but should have at least one Responsible.	There should be only one Accountable role per task.	Several internal and external stakeholders can be Consulted.	Several people and stakeholders can be Informed.

TOOL 03

RACI matrix

RULE OF THUMB

Every row must have exactly one Accountable and at least one Responsible.

Illustrative example: Below is a RACI template filled out with information for a fictional transport institution planning to launch an e-BRT corridor for the first time.

TASK / DELIVERABLE	TEAM MEMBER ROLES							
	CEO	CFO	COO	HR DIR.	BUS DEPT. HEAD	TEAM LEAD	ANALYST	L&D SPEC.
PHASE 01 — Planning & Scoping								
Identify team members to work on the assessment (Stakeholder mapping)	I	I	C	A	R	I	—	R
Agree on scope for the capacity needs assessment (e-BRT)	I	I	C	A	R	I	—	R
PHASE 02 — Data Collection & Analysis								
Review successful case-studies. Review national plans & internal strategies. (Literature Review)	C	I	I	I	A	R	R	I
Assess current versus needed capacities (Capacity Gaps)	C	I	I	A	R	R	R	I
PHASE 03 — Synthesis & Reporting								
Prioritise which capacity gaps to address	I	I	I	R	A	R	R	I
Secure the needed approvals for the capacity gaps to address	C	C	C	A	I	I	I	R

Now it's your turn! Find your blank template here (under the Annex section)

Conducting the assessment

04
STEP FOUR

Analyse desired & current capacities

Identify the desired capacity, the current capacity, and the gaps between them. For each gap, list the consequences (problems) it produces and the causes that drive it within the institution. This analysis then feeds the next step, where priority measures are defined to address each gap.

FORMATS

- Focus groups
- Self-assessment surveys
- Performance observations
- Stakeholder interviews

TOOLS

- Concept mapping
- SWOT analysis
- Task & performance analysis
- Problem tree analysis

TOOLBOX

Step 4 is supported by two fillable templates:
The Task & performance analysis (Tool 4) decomposes a role into sub-tasks and rates the capacity gap on each: turning a vague sense of "we need more skills" into a precise list of where the skills are missing.

The Problem tree analysis (Tool 5) focuses on the capacity gaps with the biggest negative consequences and identifies their root causes.

TOOL 04

Task & performance analysis

WHAT IS IT?

A breakdown of what individuals & teams are doing versus what they should be doing: Decomposing roles into tasks & sub-tasks.

WHEN TO USE IT?

During the assessment phase when analysing the gap between current and desired capacities at the individual and/or organisational level.

HOW TO FILL IT OUT?

01 Focus on one desired main task of a team member and write it down in the 1st column.

Break down the desired sub-tasks needed to achieve the main task.

02 In the 5th and 6th columns reflect the actual tasks delivered.

03 In the 4th column comment on the gap, i.e. the difference between desired and actual tasks delivered and rate the gap level where:

LOW	A low gap indicates that the capacity is in place. No capacity development needed.
MED	A medium gap indicates the capacity is partially in place. Capacity development advised.
HIGH	A high gap indicates that the capacity is largely missing. Capacity development needed.

TOOL 04

Task & performance analysis

Illustrative example: Below is a task & performance analysis identifying the capacity gaps existing within the bus department, particularly for the team lead assigned at the fictional transport institution that plans to launch an e-BRT corridor for the first time.

DESIRED CAPACITY		CAPACITY GAP		ACTUAL CAPACITY	
TASK	SUB-TASKS	RATE THE GAP	COMMENT ON THE GAP	TASK	SUB-TASKS
DESIRED TASK **Technical: knowledge of sustainable mobility principles**	Multimodal network design and route planning	MED	No BRT network design experience	CURRENT TASK **Technical: knowledge of sustainable mobility principles**	Multimodal network design and route planning
	Fleet and asset management	MED	Limited experience procuring and maintaining e-buses		Fleet and asset management
	Procurement and contracting for e-BRT	HIGH	No experience procuring and regulating e-BRT services		
	Develop and implement public transport projects	MED	No BRT project experience		Develop and implement public transport projects
DESIRED TASK **Functional: project management**	Develop project plans and budgeting	LOW		CURRENT TASK **Functional: project management**	Develop project plans and budgeting
	Resource allocation and staffing	LOW			Resource allocation and staffing
	Risk management	LOW			Risk management

Now it's your turn! Find your blank template here (under the Annex section)

TOOL 05

Problem tree analysis

WHAT IS IT?

A graphical tool to map root causes and effects of a central capacity problem. Also known as *Root Cause Analysis* or *Fishbone Analysis*.

WHEN TO USE IT?

When the institution needs to clearly understand the root causes and consequences of a specific capacity gap identified in earlier analyses.

HOW TO FILL IT OUT?

01 Start by brainstorming and listing the existing negative consequences (effects) of a capacity gap.

These effects can be visually understood as the branches and leaves of a tree.

02 Continue by defining the core problem, the capacity gap, which brings about these negative consequences.

The core problem can be visually understood as the trunk of the tree.

03 Discuss the reasons behind why the core problem exists to identify its root causes.

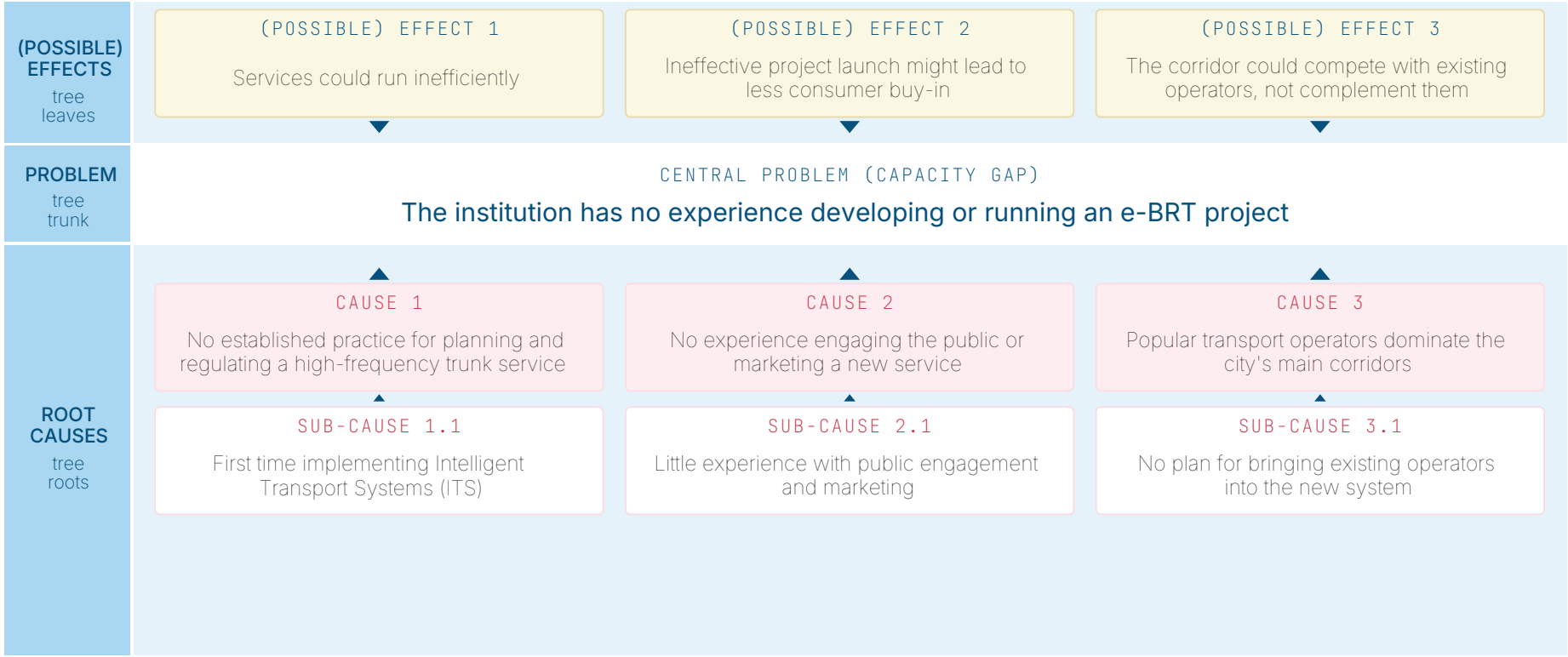
These root causes can be visually understood as the roots of a tree.

04 Repeat the exercise until root causes, problems and effects are clearly distinguished from each other, i.e. the causal relationships become clear and are agreed upon.

TOOL 05

Problem tree analysis

Illustrative example: Below is a problem tree that identifies the effects of capacity gaps while highlighting their root-causes. The central problem highlighted showcases a capacity gap where the team lead needs improvement at the fictional transport institution that plans to launch an e-BRT corridor for the first time.



Now it's your turn! Find your blank template here (under the Annex section)

Conducting the assessment

05
STEP
FIVE

Synthesise assessment findings

Synthesise the assessment's findings through stakeholder engagement. The identified root causes from Step 4 (analyse desired & current capacities) are brought back to stakeholders to validate, refine, and prioritise, producing a single, agreed upon picture of the institution's capacity gaps that will inform the design and implementation of the capacity development activity.

FORMATS

- Focus groups
- Validation workshops

TOOLBOX

Step 5 is supported by one fillable template:
the Eisenhower matrix (Tool 6) is used in this context to categorise and prioritise capacity development objectives by importance and urgency. The capacity development objectives are derived from the previously identified capacity gaps.

TOOL 06

Eisenhower matrix

WHAT IS IT?

A categorisation model used to prioritise tasks and recommendations by importance and urgency, sorting options into a sequenced plan.

WHEN TO USE IT?

When synthesising the needs assessment findings into an actionable sequence of capacity development objectives.

HOW TO FILL IT OUT?

01 Start by gathering the relevant capacity gaps identified based on the previous exercises which defined the desired objectives.

02 Rate the importance and urgency (high or low) of addressing the identified capacity gaps with regards to achieving the desired objectives.

03 Urgency reflects the time sensitivity of a capacity gap with regards to achieving the desired objectives.

Importance relates to the overall impact of a capacity gap for the realisation of the desired objectives should the gap remain unaddressed.

04 Assign the capacity gaps:

Box 01 · HIGH IMPORTANCE, HIGH URGENCY

Capacity gaps that are of high importance and high urgency should be addressed in the short-term, i.e. as soon as possible.

Box 02 · HIGH IMPORTANCE, LOW URGENCY

Capacity gaps that are of high importance but low urgency can be addressed in the medium-term.

Box 03 · LOW IMPORTANCE, URGENT

Capacity gaps that are of low importance but are urgent can be addressed in the medium-term.

Box 04 · LOW IMPORTANCE, NOT URGENT

Capacity gaps that are of low importance and low urgency can be addressed in the long-term.

TOOL 06

Eisenhower matrix

Illustrative example: Below is an Eisenhower matrix which rates the different desired objectives based on their level of importance and urgency. This example reflects only the needs identified by the team lead at the fictional transport institution that plans to launch an e-BRT corridor for the first time.

	URGENT	NOT URGENT
HIGH IMPORTANCE	TECHNICAL CAPACITY Capacity to plan and launch a dedicated corridor for the electric BRT service. Capacity to define and implement e-bus and charging procurement guidelines and processes. Capacity to operate electric bus fleet on a dedicated corridor.	TECHNICAL CAPACITY Capacity to develop a differentiated fare structure for the e-BRT service. Capacity to launch integrated fare payment with other existing public transport modes FUNCTIONAL CAPACITY Capacity to develop and implement an effective communications strategy for the e-BRT service
LOW IMPORTANCE	TECHNICAL CAPACITY Capacity to develop and implement user signage (wayfinding) within the BRT stations.	TECHNICAL CAPACITY Capacity to develop and implement account-based ticketing for the BRT service. FUNCTIONAL CAPACITY Capacity to design and implement BRT merchandise for users.

Now it's your turn! Find your blank template here (under the Annex section)

Post-assessment

06

STEP SIX

Communicate assessment findings

After conducting the needs assessment and synthesising the findings, it is important to communicate these findings to the relevant stakeholders within the transport institutions.

Usually, it is the human resources (HR) department that collects the assessment findings from each department, structurally summarises them and communicates these to the institution's upper management in order to secure the budgets to carry out the capacity development activities.

07

STEP SEVEN

Evaluate the needs assessment process

At the end of the capacity needs assessment, it is useful for transport institutions to evaluate the overall process.

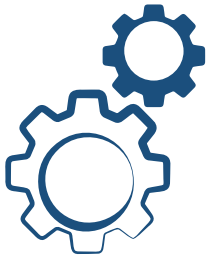
Through discussions and feedback forms, stakeholders can evaluate the degree of success of the planned versus achieved needs assessment objectives.

These findings can then be documented to serve as a reference for the next round of capacity needs assessments.

PHASE
01
Plan

PHASE
02
Design &
Implement

PHASE
03
Monitor &
Evaluate



The design & implementation phase revolves around translating findings from the capacity needs assessment into decisions: exploring alternative capacity development options for each prioritised gap, weighing their expected advantages and possible disadvantages, then selecting and implementing the option that would best bridge the gap and respond to the transport institution's capacity development objectives.

Guiding questions:

- Which capacity development format is most appropriate?
- Whom do we need to involve, either internally or externally, to prepare and implement the chosen capacity development activity? Do we need to collaborate with external partners?
- When and how do we operationalise the implementation of the capacity development activity?
- What financial resources are required to implement the planned activities?

Checklist for designing and implementing a capacity development activity:

PHASE 02: DESIGN & IMPLEMENT

08	Understanding capacity development formats	◇
09	Designing and/or choosing an activity	◇
10	Scoping common capacity development support providers	◇
11	Setting cost estimates and securing a budget	◇
12	Implementing the capacity development activity	◇

Design & implementation entails taking decisions informed by the needs assessment results to formulate the content, the target audience and the logistical details of the capacity development activity.

08
STEP EIGHT

Understanding capacity development formats

Before committing to a capacity development activity, it is important to first understand the multitude of capacity development formats available to transport institutions. Sorted based on typical duration, the below infographic gives an overview of the fifteen different capacity development formats identified by the HVT research (2024).

In the following pages of the manual, each format shall be presented providing definitions, recent examples in the transport and mobility field as well as some typical strengths and weaknesses which were highlighted by stakeholders in the HVT study (2024).

Short-term durations
typically spanning between a day to two weeks

Seminars & webinars 38
Workshops 39
Conferences 40
Trainings 41
Study tours 42

Medium-term durations
typically spanning several weeks/months

Massive open online courses (MOOCs) 43
Mentorship programmes 44
Peer reviews 45
Committees & working groups 46

Long-term durations
typically spanning several years

Job secondments 47
Scholarships 48
Joint centres 49
Formal education 50

Formats with variable durations

Customised reports 51
Data portals and knowledge libraries 52

Figure (05): Overview of capacity development formats - (adapted from HVT, 2024)



Seminars & webinars

Definition

Seminars are typically one-to-two-hour in-person or online events (webinars). The objective of seminars is introducing the audience to new concepts and the widescale dissemination of knowledge with different stakeholders.

Several organisations upload recordings of their webinars online to make them available for an unlimited amount of time.

Duration

1-2 hrs

Examples

- DigitalTransport4Africa (DT4A) Webinar Series
- ITDP Webinars YouTube Channel

Typical strengths	Typical weaknesses
• Short activity. • Can be attended by people with less time resources. • Relatively cost-effective. • Can be organised online as a webinar (depending on the objectives of the activity).	• Oftentimes organised as a one-off activity. • Short duration doesn't allow for deep-dive discussions. • For online seminars: Limited attention span and unstable internet can affect impact.



Workshops

Definition

Workshops are longer specialised sessions that typically take place over the course of one to three days, with a focus on presenting interactive material and engaging attendees.

The objective of workshops is the in-depth transfer of knowledge to a specific group of attendees. In most cases, the workshop attendees are pre-selected to ensure the successful achievement of the workshop objectives.

Duration

1-3 days

Examples

- Paratransit Reform Consultative Forum (Transitec & World Bank)
- Rethinking Transport Lab: Rethinking e-mobility in Africa (GIZ)

Typical strengths	Typical weaknesses
• Short activity. • Platform for interaction between instructors and participants. • Can be organised online as a webinar (depending on the objectives of the activity).	• Oftentimes organised as a one-off activity. • Short duration doesn't allow for deep-dive discussions.



Conferences

Definition

Conferences are typically organised over two-to-five days and feature different thematic sessions incorporating keynote presentations, panel discussions, fireside discussions, networking opportunities, etc.

They are usually organised under a specific theme with the objective of showcasing and discussing recent projects and case studies relevant to the conference attendees.

Duration

2-5 days

Examples

- MOBILIZE Annual Sustainable Transport Summit (ITDP)
- ITF Summit
- Global Public Transport Summit (UITP)
- World Urban Forum (UN-Habitat)
- African Transport Research Conference (VREF)
- Transforming Transportation (World Bank)

Typical strengths	Typical weaknesses
• Exposure to state-of-the art knowledge. • Networking opportunity.	• Cost-intensive for providers and recipients.



Trainings

Definition

Trainings extend along several sessions and usually focus on teaching skills or transferring knowledge necessary for a specific type of activity. Training programmes vary in length, with some lasting for one or two days, whereas others may consist of several modules and hence may take participants several weeks or months to complete.

Some organisations offer recurring training programmes as part of their training portfolio, whereas other organisations may offer one-off training courses.

Duration

1 training module typically lasts 3-5 days

Examples

- EIT Urban Mobility Training programmes
- International Road Federation Courses
- MobiliseYourCity Training programmes
- UITP Training programmes
- World Bank Leaders in Urban Transport Planning

Typical strengths	Typical weaknesses
• Duration of 3-5 days allows for focused training content with individual and/or group assignments. • Can be recurring. • Platform for interaction between trainers and participants. • Can be done online.	• Cost-intensive for participants. • Difficult to ensure target audience's availability for a full 3-5 days. • Capacity constraints: Cannot be attended by a large number of participants at the same time.

Study tours

Definition

Study tours are professional trips that are typically organised over a few days, but may be extended to two weeks. They are designed to help visiting delegations to learn lessons from the host city through trainings and site visits.

Duration

3 days to 2 weeks

Examples

- Tools of Urban Planning (AFD, Transitec and Urbaplan)
- CODATU Study Visits
- TUMI E-Bus Mission

Typical strengths	Typical weaknesses
• Interactive, sensory experience: Participants can see and touch best practice examples, talk directly with project owners and service providers. • "Fun" element of travelling. • Providers are currently experimenting with organising these study tours online.	• Time-intensive planning • Cost-intensive for providers and participants. • Capacity constraints: Cannot be attended by a large number of participants at the same time. • Difficult to choose contextually relevant and comparably reasonable destinations and case studies.

Massive open online courses

Definition

Massive Open Online Courses (MOOCs) are free online courses that are accessible for anyone to enrol and participate in.

Participants attend MOOCs virtually, either in real-time (synchronously) or based on their own schedule (asynchronously). This implies that participants can follow the courses flexibly, as course contents are uploaded and educational videos pre-recorded, so that participants can choose when to complete the courses. This setting not only allows for residents in other countries to overcome time zone differences, but also responds to the need of professionals to be able to work and study, without having to sacrifice time for either.

Duration

4-12 weeks

Examples

- E-learning courses (TUMI)
- GIS Essentials (TRECK and VREF)
- Global E-learning Program (UEMI)
- EU Mobility Academy (EIT)
- Urban Mobility in Africa (CODATU)
- Smart Freight Centre courses

Typical strengths	Typical weaknesses
• Publicly accessible. • Free of cost. • Offering relevant certification - sometimes with additional cost. • Typically, without capacity constraints.	• For providers, MOOCs are commonly costly to design, develop, market, and maintain. • For beneficiaries, it becomes difficult to sustain commitment & interest throughout the course often resulting in limited completion rates.



Mentorship programmes

Definition

Mentorship programmes are structured initiatives matching experienced professionals with less experienced individuals either within or outside the same organisation to provide professional guidance and to promote knowledge and skills transfers.

Duration

6-12 months

Examples

- NextGen Mentorship (VREF)
- Leaders in Urban Transport Planning Mentorship Programme (World Bank)
- The International Mentoring Programme for Urban Planners (Cities Forum)
- Youth for Road Safety (YOURS) Mentorship Programme

Typical strengths	Typical weaknesses
• Direct contact with experts. • Typically done on a volunteering basis by the mentors/experts.	• Capacity constraints: Cannot be made available to a large number of participants at the same time. • Requires the availability of a large, diverse, and available pool of experts.

Peer reviews

Definition

Peer reviews are an opportunity offered to transport institutions to get in touch with and get direct feedback from peers with relevant experience on topics, areas or projects of interest to the transport institution.

Duration

Peer reviews can range from 2 weeks to a few months depending on the activity/project to be reviewed.

Examples

- UITP Peer Reviews

Typical strengths	Typical weaknesses
• Opportunity to access best practice, knowledge and feedback from seasoned experts during the planning phase of a project and/or prior to its launch. • Relatively quick exercise without heavy paperwork.	• Finding suitable experts to act as reviewers requires a strong and diversified pool of experts, which not all organisations/ companies have.



Committees and working groups

Definition

Committees and working groups organised under the framework of associations are member-only platforms which offer opportunities to improve the capacities of members. These include opportunities for networking, peer exchange, knowledge-sharing and co-creation between members through in-person and online meetings.

Duration

Meetings take place over 1-3 days each quarter approximately

Examples

- African Association of Urban Mobility Authorities (AAUMA)
- CODATU member meetings
- UITP Committees and Working Groups

Typical strengths	Typical weaknesses
• Platform to reflect outside of the standard workplace and work collaboratively with others. • Networking opportunity. • Learning opportunity.	• Eligibility criteria. • Membership fees.



Job secondments

Definition

Job secondments temporarily place a staff member into another organisation or unit, such as a peer transport institution, an operator, a ministry, a utility or a development partner, to work within its teams for a defined period before returning to their own institution. The secondee learns by doing real work in the host institution, the arrangement can run one way or as a two-way exchange.

Duration

1-2 years

Examples

- Typically arranged bilaterally between transport institutions, their peers and partners.

Typical strengths	Typical weaknesses
• Extensive, hands-on experience. • Deepens inter-institutional relationships and networks. • Two-way exchanges build the capacity of both the home and host institutions at once.	• Temporary staffing gap. • Depends on finding a willing, well-matched host and settling HR/legal terms (contract, pay, liability). • Can be costly and logistically complex (travel, accommodation, visas and approvals). • Capacity constraints: Cannot be made available to a large number of employees at the same time.

Scholarships

Definition

Scholarships are a form of financial support to which individuals can apply to pursue formal or informal educational opportunities. They are typically awarded based on selection criteria including academic and professional background, diversity and inclusion criteria, and financial need.

Duration

This could range from 1 year to several years.

Examples

- Rethinking Transport Fellowship Programme (Agora Verkehrswende)
- Laurent Dauby Scholarship Programme (UITP)
- Lee Schipper Memorial Scholarship for Sustainable Transport and Energy Efficiency (VREF, WRI & Schipper Family)

Typical strengths	Typical weaknesses
• Opportunity to access formal and/or semi-formal learning programmes with financial support.	• Capacity constraints: Cannot be made available to a large number of participants at the same time. • Eligibility criteria. • Time-intensive application process.

Joint centres

Definition

Joint centres, sometimes referred to as centres of excellence, are legal entities established by two or more organisations to provide knowledge and promote sustainable mobility through joint forces. These centres can have a role in offering trainings and conducting research among other activities.

Duration

Multi-year

Examples

- UITP Centres of Transport Excellence (CTE)
- The Regional Transport Research and Education Centre, Kumasi - Africa Centres of Excellence (The World Bank)

Typical strengths	Typical weaknesses
• Joint efforts between two or more organisations to work together and promote local and/or regional knowledge and expertise.	• Lengthy administrative and legal set up. • Cost-intensive.

Formal education

Definition

Formal education is education which is institutionalised, intentional and planned through public organisations and recognised private bodies.

This requires that formal education programmes be acknowledged (certified) by the respective educational authorities, such as higher education councils. Such programmes can take place within but also outside of educational facilities.

Duration

2-5 years depending on undergraduate, graduate or post-graduate degrees

Examples

- MA Transport and Sustainable Mobility in African Cities (CODATU)
- MSc Transport Systems (TRECK)
- Master in Sustainable Management and Operations (Kühne Logistics University)
- Asia Graduate Diploma in Transportation Engineering (UITP & TUM Asia)

Typical strengths	Typical weaknesses
• Time-intensive: Allows comprehensive and in-depth studying of materials. • Mobility-specific programmes help experts from diverse academic backgrounds gain specialised knowledge of sustainable mobility.	• In some cases, these programmes are funded by external agencies or don't have a stable budget allocation, and this threatens their sustainability. • Without the endorsement of the transport institutions of their staff to sign up for these programmes, the enrolment rate from professionals decreases.

Customised reports

Definition

Customised reports provide context-specific guidance to transport institutions.

As opposed to general reports and best practice research, such knowledge products aim to specifically address the local conditions and circumstances of transport institutions in their respective cities/countries. These reports can either be directly requested by transport institutions or prepared by external partners and experts proactively.

Duration

One-off activity

Examples

- NaMATA BRT Design Framework (ITDP)
- Street Design Manual for Urban Areas in Kenya (ITDP, IKI, World Bank)

Typical strengths	Typical weaknesses
• Intended to respond to institutions' knowledge gaps. • Locally tailored guidelines give authorities clear steps on how the situation needs to improve and the steps needed to do it.	• One-off activities may not provide opportunities for long-term learning, support and follow-up. • As some customised reports are often developed without an official request by the relevant transport institutions, these reports often cannot guarantee the application of learnings.

Data portals and knowledge libraries

Definition

Libraries and data portals host knowledge products, either in physical formats or online.

Access to these knowledge products can help stakeholders improve their levels of technical knowledge and skills. Access to data portals and libraries may be public or membership-based.

Duration

Variable

Examples

- The BRT Standard (ITDP)
- DigitalTransport4Africa Open Data Sources (WRI)
- MyLibrary (UITP)
- Open Data Portal (World Bank)
- Data Portal (TfC)

Typical strengths	Typical weaknesses
• Accessible learning platform and opportunity for knowledge sharing. • Can include training/ conference material that users were not able to attend in real-time.	• May involve subscription fees. • Often difficult to navigate/use. • Requires proactive use by transport institutions. • Requires resources to maintain and update the portals.

09
STEP
NINE

Designing and/or choosing a capacity development activity

Designing a capacity development activity or choosing an available one to pursue should be guided by three key assessment considerations focused on the expected content, the intended target group and the logistics of the activity.

TOOLBOX

Step 9 is supported by two fillable templates:
The Assessment framework for capacity development activities (Tool 7) provides an assessment framework for capacity development activities and formats based on 14 analysis factors across content, audience, and logistics. Once transport institutions assess the available capacity development options, the matrix supports in producing a defensible shortlist of the highest aligned options. The Scenario building (Tool 8) then facilitates the decision-making process by exploring (and comparing) possible outcomes - both positive and negative - that would result from each of the shortlisted options.

The capacity development analysis factors are structured around three overarching themes:

Content

Target audience

Logistics

The three themes shall be explained in more detail in the comming pages.

Capacity development analysis factors:

Content

FACTORS	GUIDING QUESTIONS
Thematic focus	• Which topics and themes does the capacity development activity focus on? • Does the content cover technical or functional areas?
Contextual-isation	• Is the capacity development material tailored and customised to the context of the transport institution or is it general material applicable to different contexts?
Self-study components	• Does the capacity development activity include practice components such as homework, group work, presentations, tests etc.?
Certification/ accreditation	• In the case of trainings and formal education opportunities, do participants receive academic certificates, which are nationally, regionally, or internationally accredited? Can course completion imply credit hours? • Do participants receive a certificate of completion for non-academic opportunities?
Profile of expert(s)	• What are the qualification(s) of persons delivering the capacity development activity including relevant experience, knowledge and soft skills needed?
Reputation of provider	• What are the references of the organisation providing the capacity development activity? Is this a recurring activity? • Whom have they supported before?
Long-term support	• Does the provider offer long-term access to the material and support post-implementation?

Target audience

FACTORS	GUIDING QUESTIONS
Profile of audience	• Which transport institutions are sought for the capacity development activity? • Which profile of individuals is targeted, on a departmental/functional level as well as on a seniority level (junior, mid- or high-level employees)?
Accessibility	• Is access to the capacity development activity for free or is it a paid service? If so, could it be funded by some external partners?
Language	• What are the available languages in which the capacity development activity can be/is offered?

Logistics

FACTORS	GUIDING QUESTIONS
Setting	• Does the activity typically take place in-person or virtually?
Pace	• In the case of trainings and formal education opportunities, do participants have to engage in real-time (synchronous) or can they do so flexibly without direct interaction with the other participants and instructors (asynchronous)?
Duration	• How long does the activity typically last? Some activities can take as little as half a working day, whereas others may take several years.
Frequency	• Is this a one-off activity or a recurring one?

Figure (06): Capacity development analysis factors - (adapted from HVT, 2024)

TOOL 07

Assessment framework for capacity development activities

WHAT IS IT?

A structured scoring and assessment framework that compares capacity development activity options based on three levels: content, target audience and logistics, which in total cover 14 analysis factors. Conducting this exercise produces a quantitative assessment of each activity option in relation to an organisation's intended capacity development objectives.

WHEN TO USE IT?

After identifying the capacity gap to be addressed, the necessary information to compile this framework needs to be collected and analysed (scored) in order for the transport institution to be able to proceed with the capacity development activity option best suited to their development needs.

HOW TO FILL IT OUT?

01 List the available capacity development options to be considered and fill in the details responding to the analysis factors such as thematic focus, timeline, costs/pricing, providers, etc.

02 Analyse each option using the capacity development analysis factors. An additional row for 'scoring' can also be included here.

03 Score the options based on the scoring scale below & analyses performed.

SCORING SCALE

5	Excellent alignment
4	Good alignment
3	Moderate alignment
2	Weak alignment
1	Limited alignment

Use the template to score each analysis factor. Additionally, the template assumes that each of the themes and factors are equally important.

You can use a weighted score system favouring specific factors/themes to others in the list depending on institutional needs & capacities.

04 Interpret the score into decisions. The following table shows suggested score ranges to assess how strong the option needs to be considered. Any score below 60% should preferably be reconsidered altogether.

80–100%	56–70 points	Excellent alignment with institutional needs. Pursuing the activity is highly recommended.
70–79%	49–55 points	Good alignment with institutional needs. Pursuing the activity is recommended.
60–69%	42–48 points	Moderate alignment with institutional needs. Pursuing the activity is moderately recommended and may require adjustments.

TOOL 07

Assessment framework for capacity development activities

Illustrative example: Below is a capacity development analysis sheet that compares two shortlisted capacity development options considered by the fictional transport institution that plans to launch an e-BRT corridor for the first time.

	CAPACITY DEVELOPMENT ANALYSIS FACTOR	OPTION A e-BRT Study Tour		OPTION B e-Bus Workshop	
		DETAILS	SCORE	DETAILS	SCORE
CONTENT	Thematic focus	e-BRT electrification (governance, operations, vehicle and charging standards)	5	Strong on e-fleet specification, finance and procurement but lags on operational planning and service delivery	2
CONTENT	Contextualisation	Tour is host-city generic; follow-up support is fully tailored	5	Group sessions are pan-African and generic	3
CONTENT	Self-study components	No formal practice components	3	No formal practice components.	2
CONTENT	Certification / accreditation	None offered	2	Certificate of attendance is offered after the workshop	5
CONTENT	Profile of expert(s)	Host-city practitioners operating an electrified corridor	5	Clean-bus finance and operations specialists.	4
CONTENT	Reputation of provider	This is the second e-BRT tour the city hosts. References include the event agenda and presentation materials.	4	Workshop is recurrent on a yearly basis with different focus & providers. Stakeholder engagement opportunities with e-fleet provider/networks	5
CONTENT	Long-term support	No formal long-term support, however, contact will be established with relevant professionals for follow-up support if/where needed	5	Workshop material will be shared with all participants	3
AUDIENCE	Profile of audience	Small delegation of technical and senior staff	4	Finance, procurement and planning staff & senior technical staff	2
AUDIENCE	Accessibility / cost	Capacity for up to 5 participants, cost per participant to be paid to organiser is $2,500 excluding visa costs and per diem to be paid to staff	2	No capacity constraint on participants count. Cost per participant to be paid to organiser is $350 as well as visa, travel, accommodation costs and per diem to be paid to staff - no funding option available	3
AUDIENCE	Language	Host-city working language is English	4	Workshops typically run in English	4
LOGISTICS	Setting	In-person and on-site	5	In-person	4
LOGISTICS	Pace	Synchronous, fixed dates set by the host	4	Workshop synchronous and fixed	3
LOGISTICS	Duration	5 days on-site, 1 day virtually before and 1 day after the tour	4	Three days in-person and 2 travel days	4
LOGISTICS	Frequency	One-off activity aligning & tailored to project launch	4	Workshop is organised annually	4
	TOTAL SCORE / 70		56		48
	% ALIGNMENT	Excellent alignment - highly recommended	80%	Moderate alignment - may require adjustments	69%

Now it's your turn! Find your blank template here (under the Annex section)

TOOL 08

Scenario building

WHAT IS IT?

To facilitate the decision-making process, this tool is used to support organisations in exploring (and comparing) possible outcomes - both positive and negative - that would result from pursuing capacity development option A, B or C.

WHEN TO USE IT?

This exercise should be undertaken by the transport institution before it selects and commits to a capacity development activity.

HOW TO FILL IT OUT?

01 Define:

Start with writing down the identified capacity gap that the transport institution wants to address.

02 Explore:

List the different capacity development options you have shortlisted based on the previous exercises.

03 Create:

Create the different scenarios by identifying outcomes/ consequences (positive and negative) which may result from pursuing option A, B or C.

04 Communicate & Act:

After discussing internally and weighing the different options based on the expected/ anticipated positive and negative outcomes they could generate, decide which scenario is most favourable to your organisational capacity development needs.

Making this decision would also heavily depend on further discussions and cross-departmental coordination to ensure most employees/actors benefit from the learning options provided.

TOOL 08

Scenario building

Illustrative example: Below is a scenario building matrix to further compare the expected positive & negative outcomes of the capacity development activity options for the fictional transport institution that plans to launch an e-BRT corridor for the first time.

1 Define the gap	2 Create scenarios		3 Communicate and act
CAPACITY GAP	ACTIVITY OPTION	EXPECTED POSITIVE OUTCOMES (+)	EXPECTED NEGATIVE OUTCOMES (-)	GUIDING QUESTIONS
Focus on the high urgency + important gaps: 1. Capacity to plan and launch a dedicated corridor for the electric BRT service. 2. Capacity to define and implement e-bus and charging procurement guidelines and processes. 3. Capacity to operate electric bus fleet on a dedicated corridor.	**OPTION A** e-BRT Study Tour	• The 5 participating staff members will gain insight from experienced BRT operations using electric buses including e-charging. • The 5 participating staff members will share the insights and learning with their full team, which will support the bus team to prepare the procurement guidelines and processes and prepare service launch.	• Learning comes mainly from observation, not structured training.	**Q1.** Are the expected outcomes largely favourable or rather unfavourable? **Q2.** Is the activity worth pursuing given these expected outcomes?
	OPTION B e-Bus Workshop	• The 3 staff members from the planning and finance teams participating in the workshop will have improved knowledge to make investment decisions. • Staff members will have access to the workshop material. Internal learning sessions can be organised with the full finance and planning team to share the knowledge effectively.	• No structured way to build core planning methods. External support still needed.	

Now it's your turn! Find your blank template here (under the Annex section)

10
STEP
TEN

Scoping common capacity development support providers

Internal departments, such as strategy, human resources (HR), and internal training departments, play a central role in developing the organisational capacity of transport institutions. Strategy departments identify long-term goals and internal capacity needs, HR assesses workforce skills and development opportunities, and training departments organise in-house and external programmes to address capacity gaps, often using dedicated trainers.

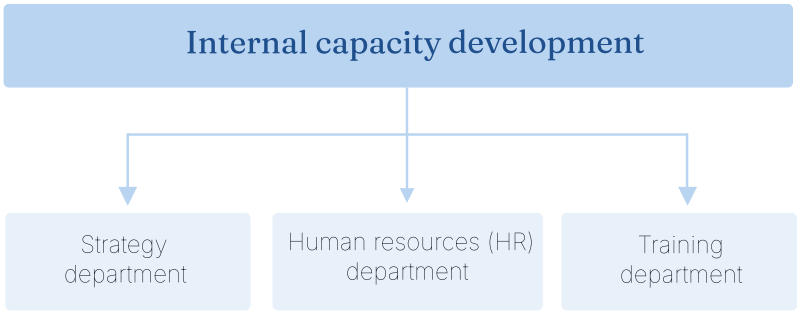


Figure (07): Internal Capacity development support providers - (adapted from HVT, 2024)

External capacity development can complement internal efforts but involves additional costs. This overview is illustrative, not exhaustive, showing some of the main stakeholders in the transport sector and examples of their activities. Different organisations may interpret and deliver capacity development in varied ways, so the list captures only a sample of available partners.[1]

[1] A full list of acronyms including those of the capacity development stakeholders in the overview infographic can be found in the annex.

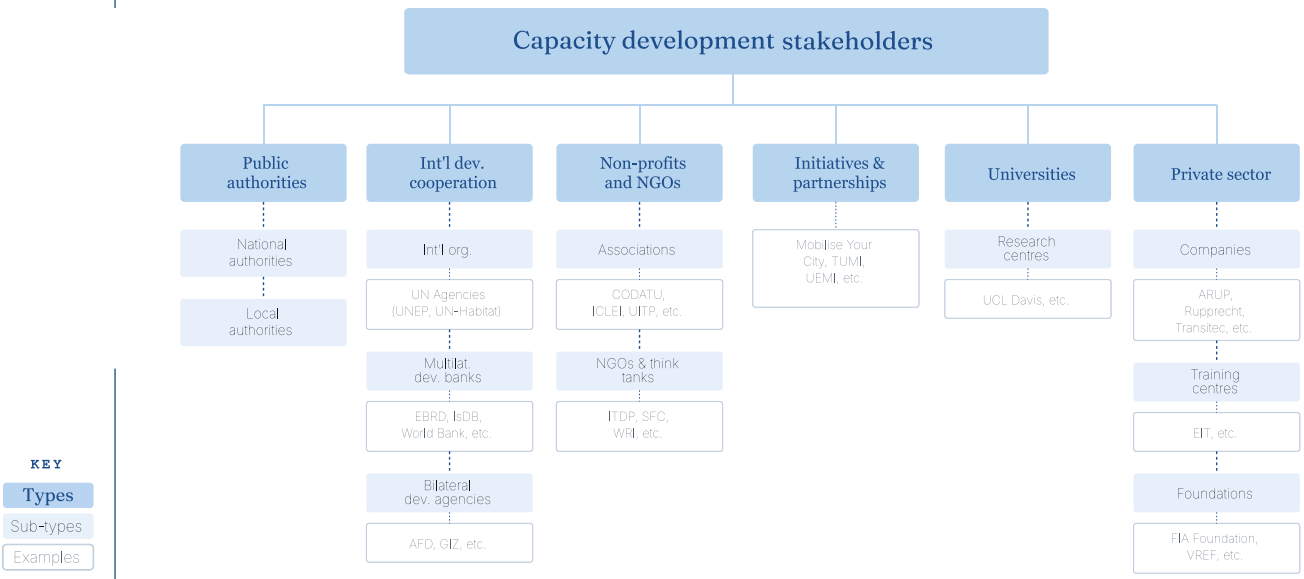


Figure (08): Overview of capacity development stakeholders in the transport sector - (adapted from HVT, 2024)

11

STEP
ELEVEN

Setting cost estimates and securing a budget

Once the capacity development programme is clearly defined (its objectives, activities, formats, and partner/provider roles) budgeting follows as a consequential and structured step within the capacity development cycle.

At this stage, partners align on funding responsibilities and resource contributions. This is followed by:

01 **Budget design**

Translating planned activities into an activity-based, time-bound financial plan, estimating direct and indirect costs.

02 **Budget validation**

Reviewing and confirming the proposed figures with the financial teams of all partners to ensure consistency and alignment with agreed on contributions.

03 **Financial proposal**

Consolidating the validated budget into a structured funding request that outlines total financial needs, partner contributions, and risk-sharing arrangements.

Implementing the capacity development activity

12
STEP
TWELVE

The previous steps in the manual outlined how transport institutions can identify and assess capacity gaps, as well as how to design appropriate short-, medium- or long-term capacity development activities to address them.

In this chapter, the manual will provide guidelines for transport institutions on how to move from design to implementation: Setting clear objectives and measurement indicators, breaking the activity plan down into tasks, assigning roles, planning timelines and communication plans for internal and external stakeholders.

TOOLBOX

Step 12 is supported by five fillable templates:
The Theory of Change (Tool 9) sets out a project's change pathway (short & long-term results) through inputs & activities. The Operational plan (Tool 10) translates those activities into tasks, timelines, and owners, enabling day-to-day tracking and coordination. The RAID matrix (Tool 11) then anticipates the risks and assumptions within the capacity development activity while considering the team members accountable for each task. Followed by the Logframe (Tool 12) that links goal, outcome, outputs, and activities to measurable indicators. Finally, the Progress report (Tool 13) then captures delivery and expenditures at fixed intervals, supporting evidence-based decisions on whether to continue, adjust, scale, or close the project.

GENERAL NOTE:

Depending on the scope of the capacity development activity, it may not be necessary to use all of the Gantt Chart, Logframe, RACI and Operational Plan tools. The decision of project management tools to be used for planning, implementing and evaluating a capacity development activity should be internally decided on by the transport institution based on need (activity scope and length) as well as available resources.

TOOL 09

Theory of Change

WHAT IS IT?

A Theory of Change maps how the capacity development activity is expected to work: how the inputs and activities lead, step by step, through short-term results to the long-term outcome and the wider goal.

WHEN TO USE IT?

After scenario building, once the capacity development activity has been chosen, to set out its change pathway and assumptions before you detail it into the operational plan and the logframe. Revisit it during monitoring and evaluation to test whether the assumptions are achieved.

HOW TO FILL IT OUT?

A Theory of Change is organised by spheres of control from what the institution directly controls (its inputs and activities), to what it can influence (the outcomes it works towards), to the wider result it aims to contribute to, but cannot achieve independently.

It is filled top-down: start from the change you want and work back to what you'll do, then read it bottom-up to check whether the logic holds. Reading up the rows, your direct control fades and your influence widens.

What each tier means

01 OVERALL OUTCOME — SPHERE OF INTEREST

The wider, long-term result the initiative contributes to but cannot achieve independently.

02 LONG-TERM OUTCOME — SPHERE OF INFLUENCE

The lasting change in the institution you are working towards; you can shape it, but others also affect it.

03 SHORT-TERM OUTCOME / RESULTS — INDIRECT SPHERE OF CONTROL

The immediate changes that appear once the outputs are put to use, but their uptake still depends on others.

04 ACTIVITIES — DIRECT SPHERE OF CONTROL

The concrete tasks the institution carries out, fully within its own control.

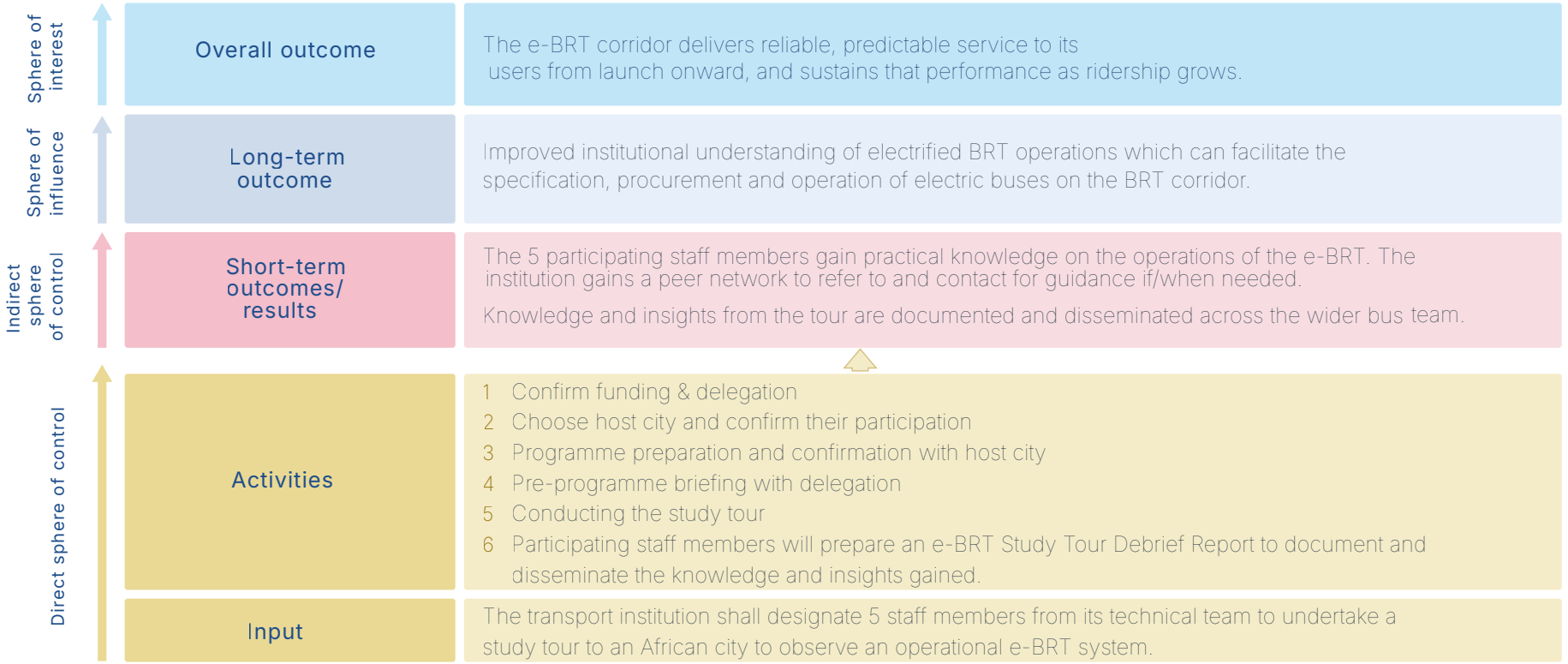
05 INPUTS — DIRECT SPHERE OF CONTROL

The resources, people and commitments put in to run those activities.

TOOL 09

Theory of Change

Illustrative example: Below is a theory of change diagram filled out for Option A (e-BRT Study Tour) considered by the fictional transport institution that plans to launch an e-BRT corridor for the first time.



Now it's your turn! Find your blank template here (under the Annex section)

TOOL 10

Operational plan

WHAT IS IT?

A practical management tool that translates the capacity development project design into clear tasks, timelines, responsibilities, and milestones. It enables systematic tracking of implementation progress and coordination among stakeholders.

WHEN TO USE IT?

When embarking on the implementation phase, after capacity gap identification & capacity development activity design or selection and once the theory of change is set out.

HOW TO FILL IT OUT?

01 Similar to the Logframe and Gantt chart, the Operational plan breaks down the different activities and tasks needed to deliver the needed output, i.e. the capacity development activity.

02 After filling out the first two columns, the responsible team members per tasks should be added (refer to the RACI matrix) as well as the resources needed to fulfil the tasks (this should be cross-checked with the agreed on budget) and the agreed upon start and end date and duration of the activity.

03 Finally, the status of the task should be updated and communicated with internal and external stakeholders when needed.

TOOL 10

Operational plan

Illustrative example: Below is the operational plan outlining activities, task owners, resources needed for Option A (e-BRT study tour) considered by the fictional transport institution that plans to launch an e-BRT corridor for the first time.

OUTPUT	ACTIVITY + TASK TITLES	TASK OWNER	RESOURCES NEEDED	START	END	DAYS	STATUS	YEAR / MONTH 2026 Jan	Feb	Mar
OPTION A e-BRT Study tour	Confirm funding	CFO	Participation & travel budget	06/01/26	10/01/26	5	DONE			
	Appoint participating staff members	Bus Dept. Head / Team Lead		10/01/26	15/01/26	6	DONE			
	Choose host city and confirm	Team Lead	Internal background research and choice of study tour destination and partner	15/01/26	25/01/26	11	DONE			
	Programme preparation and confirmation with host city	Analyst / Team Lead	Logistical arrangements and tour programme	25/01/26	30/01/26	6	DONE			
	Pre-tour briefing	Team Lead	Study Tour overview presentation	05/02/26	08/02/26	4	ACTIVE			
	Conduct the study tour	Delegation / Team Lead	Travel + Host schedule	09/02/26	13/02/26	5	ACTIVE			
	Debrief report	Team Lead		13/02/26	20/02/26	8	PLAN			
	Knowledge dissemination	Team Lead	Debrief report	10/03/26	15/03/26	6	PLAN			

DONE task complete ACTIVE in progress PLAN scheduled, not yet started

Now it's your turn! Find your blank template here (under the Annex section)

TOOL 11

RAID matrix (Risk matrix)

WHAT IS IT?

A tool used to identify and assess potential risks to the timely and successful implementation of the capacity development activity. It is organised as a (Risks, Assumptions, Issues, Dependencies) matrix.

WHEN TO USE IT?

Alongside the operational plan as implementation begins, to log the risks, assumptions, issues and dependencies that could affect delivery. Start it as early as the planning phase and update it throughout implementation and M&E, closing out items as they are resolved.

HOW TO FILL IT OUT?

01 Start off by identifying possible risks and assumptions as well as existing issues and dependencies. These can also be grouped into categories such as operational, political etc.

02 Next, rate - using "low", "medium" or "high" - the probability of their occurrence and the level of impact to the task delivery which their occurrence could bring.

03 Define mitigation measures for each risk, assumption, issue and dependency.

04 Assign an Owner for each identified risk, assumption, issue and dependency who would be responsible for monitoring and addressing these.

05 The Owner should also continuously update the matrix throughout the project duration by updating and communicating the status of the risk to the team.

What each category means:

RISK
Issues or events that may arise which would negatively affect the task or project delivery.

ASSUMPTION
Working premises (beliefs and ideas) presumed to be true without immediate proof or verification. Should these assumptions prove to be false they could affect task or project delivery.

ISSUE
Existing issues and problems which are already affecting task or project delivery negatively.

DEPENDENCY
External inputs without which tasks or projects cannot be delivered.

TOOL 11

RAID matrix (Risk matrix)

SEVERITY KEY

Use the three-tier scale across Probability (Prob.) & Impact:

- LOW — Monitor periodically
- MED — Monitor closely
- HIGH — Address as soon as possible

Illustrative example: Below is the RAID matrix filled out for Option A (e-BRT Study Tour) considered by the fictional transport institution that plans to launch an e-BRT corridor for the first time.

RAID CATEGORY	ITEM	DESCRIPTION	PROB.	IMPACT	MITIGATION MEASURE	STATUS	OWNER	DATE
RISK	Low reach	Due to high participation cost, only a small number of staff members may travel and benefit from the study tour.	MED	HIGH	Participating staff members will prepare a comprehensive study tour debrief report and deliver a knowledge sharing session to onboard the finance and planning departments.	OPEN	Team Lead	Feb-26
	Misaligned focus	The thematic focus on-site may not be aligned with the learning needs of the institution	LOW	HIGH	Carefully assessed the planned content of the study tour programme and objectives. Further, the participating staff members will organise a checklist of questions to answer during the study tour.	CLOSED	Bus Dept. Head	Feb-26
ASSUMPTION	Relevance of study tour destination	The context of the study tour destination must be relevant for the transport institution	LOW	HIGH	Comprehensive background research was conducted by the bus department to choose a city of comparable population and area size with an extensive and successful track record of operating a BRT corridor with electric buses	CLOSED	Team Lead	Feb-26
ISSUE	Visa and travel arrangements	International travel for the delegation needs visas and official travel approvals with long lead times, which can delay or compress the visit	MED	HIGH	Start visa and travel approval applications as soon as the host dates are confirmed; contract a travel agency to manage bookings; use the host's invitation letter to speed processing.	CLOSED	HR Director	Jan-26
	Short on-site duration	The visit lasts only a few days, so complex operations (e.g. charging and depot management) can only be observed briefly	LOW	MED	Prepare a focused observation checklist beforehand and request access to specific operations (depot, charging, control room)	CLOSED	Team Lead	Jan-26
DEPENDENCY	Partner (host) availability	Organising the study tour depends on having established contacts with a local partner who can host the delegation.	LOW	HIGH	The bus department has an existing friendly relationship with the transport authority in the study tour destination. Bookings will not be made before attaining written confirmation from the local partner (host).	CLOSED	CFO / Team Lead	Jan-26

OPEN still ongoing, needs attention CLOSED resolved or no longer applicable

Now it's your turn! Find your blank template here (under the Annex section)

TOOL 12

Logical framework (Logframe)

WHAT IS IT?

A project management framework used to define and monitor activities, outputs and objectives.

WHEN TO USE IT?

After agreeing on the theory of change and on pursuing a capacity development activity, it is time to translate the activity into measurable activities, outputs and objectives using SMART indicators. The Logframe should be filled out when designing the activity and should be routinely updated throughout the implementation and used for monitoring & evaluation purposes.

HOW TO FILL IT OUT?

01 Start from the bottom row of the table, and define the inputs (tasks and resources needed to produce the outputs) that have been discussed to implement the capacity development activity.

Identify the indicators chosen for these tasks, the means of verification as well as the risks and assumptions discussed.

02 Move up to the results row (outputs or products the activity delivers) where you should fill in the details of the capacity development activity agreed on and designed.

Fill in the indicators, means of verification as well as risks and assumptions.

03 Move up to the outcomes (objectives) row where the short-term objectives including learning objectives of the capacity development activity should be listed.

Add the indicators to measure these objectives, the means of verifications, risks and assumptions.

04 Finally, move up to the goals (impact) row where you can reflect on the long-term changes the capacity development activity should contribute to. Fill in the indicators, means of verification and risks and assumptions.

General reminder: Always use SMART (specific, measurable, achievable, relevant and time-bound) indicators & include their evidence under means of verification.

TOOL 12

Logical framework (Logframe)

◆ *Illustrative example:* Below is the Logframe applied to Option A (e-BRT Study Tour) chosen by the fictional transport institution that plans to launch an e-BRT corridor for the first time.

LEVEL (LOGIC)	PROJECT SUMMARY	INDICATORS	MEANS OF VERIFICATION	RISKS / ASSUMPTIONS
GOALS (impact)	A reliable, high-frequency e-BRT trunk service operates on the corridor.	Corridor runs to planned headways and reliability within 12 months of launch.	Operations and service performance reports.	e-BRT project proceeds on schedule.
OUTCOMES (objectives)	Bus team shall reflect on planned BRT corridor service plan based on study tour insights and make updates when needed.	Within 3 months of the study tour, the updated service plan will be presented to the board including guidelines for operation & maintenance.	Approved service plan and O&M guidelines.	Best practices gained from the study tour are accessible to all relevant staff members.
RESULTS (outputs)	5 staff members undertake the e-BRT Study Tour and capture the lessons in a debrief report.	Study tour completed by 5 staff; debrief report produced and circulated.	Study tour debrief report.	Host city available; travel approvals granted.
ACTIVITIES (inputs)	Organise and conduct the e-BRT Study Tour; produce the debrief report and deliver a knowledge sharing session.	Study tour, debrief report and knowledge sharing session delivered on schedule and within the budget.	Operational plan; progress reports.	Funding confirmed; host agrees to receive the delegation.

Now it's your turn! Find your blank template here (under the Annex section)

TOOL 13

Progress report

WHAT IS IT?

The progress report is a periodic tool to monitor expenditures, resource utilisation, implemented activities, delivery of outputs, and risk management.

WHEN TO USE IT?

A progress report can be used during the implementation phase of the capacity development activity, from start to completion, on a monthly/ quarterly basis depending on the length of the activity.

HOW TO FILL IT OUT?

01 Building on the operational plan, the progress report template can support in clarifying the current status of tasks in the notes column and assess whether the tasks are being implemented as planned or not.

Commonly, the status can be:

- COMPLETED
- PLANNED
- ONGOING
- CANCELLED
- AT RISK

02 In the case of the latter two, action items with deadlines can be identified to mitigate the risks. Refer to and update the RAID matrix for this exercise.

03 After filling out the detailed progress report template, a shortened high-level version of the report can be prepared with an overall status assessment for the given period to be shared with upper management.

TOOL 13

Progress report

Illustrative example: The progress report below is filled out for the tasks generated under the operational plan specifically for Option A (e-BRT Study Tour). The status and the action items should be updated frequently throughout the capacity development activity.

TASKS	STATUS	TASK OWNER	NOTES	ACTION ITEMS
Ensure budget availability	COMPLETED	CFO		
Identify and confirm with local partner at study tour destination	COMPLETED	Team Lead		
Study tour programme preparation & coordination with local partner	COMPLETED	Analyst / Team Lead		Share the final programme with the delegation
Appoint participating staff members (delegation)	COMPLETED	Bus Dept. Head		
Logistical arrangements	COMPLETED	HR team		
Conduct the study tour	ONGOING	Delegation / Team Lead		Log observations against the checklist each day
Study tour debrief report	PLANNED	Team Lead		Draft and circulate to the wider team
Study tour debrief knowledge sharing session	PLANNED	Team Lead		

Now it's your turn! Find your blank template here (under the Annex section)

PHASE
01
Plan

PHASE
02
Design &
Implement

PHASE
03
Monitor &
Evaluate



Monitoring & Evaluation (M&E) refers to the exercise of monitoring the progress and implementation of the capacity development activity as well as evaluating whether the activity delivered its intended objectives, i.e. filled the capacity gap, as well as other outcomes it may have produced.

The exercise also serves to deduce lessons learnt from planning and implementing this capacity development activity, which can be applied in future activities.

Guiding questions:

- How will progress be monitored, documented, and reviewed?
- What measurable changes occurred across the defined indicators (at the individual, organisational, and societal levels)?
- What are the key lessons learnt and how can they be applied in future activities?

Steps checklist:

PHASE 03: MONITOR & EVALUATE

13	Monitor & evaluate progress and outcomes	◇

Monitor & evaluate progress & outcomes

13
STEP
THIRTEEN

The main objective of this step is to monitor capacity development activities and evaluate their impact based on previously identified indicators (set in the Logframe) defining a successful capacity development activity.

Monitoring and evaluation answer two different questions. Monitoring is continuous, it tracks deliverables and implementation while the activity is being prepared for and conducted. For example, is preparation following the schedule and budget? Did the activity take place in the time and location agreed upon? Did the agreed upon staff members attend and participate fully? Was an on-site evaluation discussion and/or feedback forms organised?

Evaluation exercises are periodic: They take place right after the completion of the capacity development activity and may be repeated after several weeks and months to analyse whether the activity brought about the intended outcomes. For example, and depending on the capacity level the activity was targeting, the evaluation should analyse:

Individual level	Whether staff skills were improved and whether new skills are being applied?
Organisational level	Whether overall organisational performance and knowledge-sharing has improved?
Societal level	Whether changes in user satisfaction, increase in ridership, new regulations etc. are observed?

Long-term positive and negative impacts are often difficult to trace back to single capacity development activities: Improvements on the individual and organisational levels are often an effect of a multitude of factors and inputs, such as hiring new or more staff members, investing in new technology and equipment, etc. in addition to capacity development activities.

Changes on the societal capacity level are often even more difficult to trace back to single capacity development activities. Societal changes take time and often need input from external stakeholders.

Still, it is important to evaluate investments made by transport institutions for capacity development, and thus such exercises should be planned and carried out.

Tools introduced in this manual including scenario building, the theory of change, and the logframe are useful to analyse whether the capacity development activity achieved the intended short- and long-term outcomes.

Outputs and short-term outcomes sit at the individual level, long-term outcomes at the organisational level, and the overall outcome at the organisational and societal levels. Each indicator should be SMART and have a baseline, i.e. the starting value measured before the activity, and is defined up front in the Logframe (Tool 12), not afterwards.

Figure (09): Guidelines for setting indicators

While capacity development activities should be monitored continuously, the evaluation of the activity and the assessment of its impacts should ideally be undertaken in the short-, medium- and long-term:

- Short-term assessment can be done right after the completion of the activity to capture immediate feedback.
- The timing to conduct medium- and long-term assessments can be organised based on the initial indicator identification of when outcomes are to be expected (see Logframe).
- For capacity development activities that have a short duration, assessments 6 months and then 1 year after activity completion can be considered.

M&E is only worthwhile if its findings feed back into practice. At the close of each activity, briefly document what worked, what did not, and what needs to change, then carry those lessons into the design of the next activity, so the capacity development cycle is improved each time it is applied.

While M&E practices differ from institution to institution, the below points are key to document and analyse.

About the capacity development activity

- Name: .....
- Date: .....
- Location: .....
- Setting: .....
- Partner: .....
- Participating staff members: .....

Resources invested

- Budget: .....
- Actual cost (expenses) .....
- Actual cost (person-days): .....

Expected results and outcomes

- What were the main objectives of the capacity development activity?
- Which objectives were achieved in the short-term, i.e. right after activity completion?
- Which objectives were achieved in the medium-term?
- Which objectives were achieved in the long-term?
- What are the lessons learned? What went well and what can be improved?

Figure (10): Sample points and questions for monitoring & evaluating capacity development activities

Recommended monitoring & evaluation process

		TASK	OBJECTIVE	TOOL
Before Implementation	01	**Baseline assessment**	Establish the reference point	Capacity Needs Assessment Report
	02	**Indicator setting**	Define measurable indicators of progress & success	Logframe TOOL 12 Scenario Building TOOL 8
During Implementation	03	**Monitoring**	Collect data on progress and implementation of capacity development activity.	Progress Reports TOOL 13
	04	**Analysis**	Analysing the collected progress and implementation data compared to the plan (see Gantt chart and Operational plan) and identifying the next steps.	Logframe TOOL 12 Revisited at each milestone
After Implementation	05	**Evaluation**	To evaluate progress and implementation and to assess whether intended outcomes have been achieved.	Logframe TOOL 12
	06	**Dissemination**	Compiling and internally sharing findings and documenting lessons learnt for future reference.	Knowledge sharing sessions with internal and external stakeholders

Figure (11): Recommended monitoring and evaluation process



Agora Sustainable Transport Fellows at the MVG electric bus depot - © Hend Eltabey, 2024

References

01 AFD. (2021). *AFD and capacity building* [Factsheet].

02 African Cities Lab. (n.d.). *Articulating urban planning – Mobility for a sustainable city*. Retrieved March 21, 2024, from https://courses.africancitieslab.org/courses/course-v1:urbaplan-transitec+001+2022/about

03 ARUP. (n.d.). *Sustainable transport planning consultants*. Retrieved May 5, 2024, from https://www.arup.com/services/planning/transport-consulting

04 C40 Cities Finance Facility. (2017). *Capacity development plan*.

05 *Capacity building for transport institutions in Africa: SSATP expert interview*. (2024, March).

06 CODATU. (n.d.). *Angola: Support for the Angolan Ministry of Transport (2022–2025)*. Retrieved April 2, 2024, from https://www.codatu.org/en/ressource/angola-support-for-the-angolan-ministry-of-transport-2022-2025/

07 CODATU. (2009). *Who pays what for urban transport? Handbook of good practices*.

08 EBRD. (2019). *Transport sector strategy (2019–2024)*.

09 EBRD. (2022). *GrCF2 W2 E2 – CML2: Sustainable urban transport loan*.

10 FIA Foundation. (n.d.). *About FIA Foundation*. Retrieved May 5, 2024, from https://www.fiafoundation.org/about-us

11 Deutsche Gesellschaft für Internationale Zusammenarbeit. (2015). *Cooperation management for practitioners: Managing social change with Capacity WORKS*.

12 Deutsche Gesellschaft für Internationale Zusammenarbeit. (2018). *Supporting capacity development: A guiding framework for practitioners*.

13 Deutsche Gesellschaft für Internationale Zusammenarbeit. (2022). *Integrated sustainable urban transport systems for smart cities (SMART-SUT) capacity development strategy*.

14 GIZ. (n.d.). *Rethinking Transport Fellowship Programme by Agora Verkehrswende – Changing Transport*. Retrieved May 26, 2024, from https://changing-transport.org/event/rethinking-transport-fellowshipprogramme/

15 High Volume Transport Applied Research. (2024). *Capacity building in sustainable urban mobility for low income countries: Research on demand and success factors for future supply*. Retrieved September 9, 2026, from https://transport-links.com/hvt-publications/capacity-building-in-sustainable-urban-mobility-for-low-income-countries-research-on-demand-and-success-factors-for-future-supply/

References

16 HVT. (2024). *Powering change: Developing infrastructures in Africa that are resilient, greener and inclusive*. Retrieved June 13, 2024, from https://transport-links.com/news-and-events/powering-change-developing-infrastructures-in-africa-that-are-resilient-greener-and-inclusive

17 International Labour Organization. (2010). Capacity development for ILO tripartite constituents. In *Papers of the Governing Body, 309th session*.

18 ITDP. (2018, August 7). *In Dar es Salaam, African city leaders reflect on MOBILIZE*. Retrieved May 5, 2024, from https://itdp.org/2018/08/07/african-leaders-reflect-mobilize/

19 ITDP Africa. (2018). *NAMATA BRT design framework*.

20 ITDP Africa. (2022). *Ministry of Roads and Transport | Street design manual for urban areas in Kenya*.

21 ITDP. (2024). *The BRT standard*.

22 Institute for Transportation and Development Policy. (2016). *Best practice in national support for urban transportation. Part 2: Growing rapid transit infrastructure — Funding, financing, and capacity*.

23 Leaders in Urban Transport Planning. (2023). *SSATP–LUTP Africa mentorship program*.

24 Mizrahi, Y. (2004). *Capacity enhancement indicators: Review of the literature*. The International Bank for Reconstruction and Development / The World Bank.

25 Mobilise Your City. (n.d.-a). *Introducing MobiliseYourCity's training catalogue*. Retrieved May 20, 2024, from https://www.mobiliseyourcity.net/introducing-mobiliseyourcitys-training-catalogue

26 Mobilise Your City. (n.d.-b). *Training material*. Retrieved March 21, 2024, from https://www.mobiliseyourcity.net/training-materials

27 MobiliseYourCity. (n.d.). *Planning for sustainable mobility: SUMPs and NUMPs*. Retrieved March 31, 2024, from https://www.mobiliseyourcity.net/planning-sustainable-mobility-sumps-and-numps

28 Quickonomics. (2024). *The four different types of goods*. Retrieved May 5, 2024, from https://quickonomics.com/different-types-of-goods/

29 Rupprecht. (n.d.). *Who we are*. Retrieved May 5, 2024, from https://www.rupprecht-consult.eu/company/who-we-are

30 Rupprecht Consult – Forschung und Beratung GmbH. (n.d.). *Mobility Academy | About the academy*. https://www.mobility-academy.eu/mod/page/view.php?id=408

31 Schalekamp, H. (2018). *Building capacity: Overview of teaching and learning offerings to support urban public transport reform in South Africa*.

References

32 SEI University. (n.d.). *Capacity building on inclusive active mobility in Africa*. Retrieved May 9, 2024, from https://www.sei.org/projects/pan-african-capacity-building-on-inclusive-climate-resilient-planning-for-active-mobility/

33 SLOCAT. (2025). *Capacity building for transport transformation*. Retrieved September 9, 2026, from https://transportforcairo.com/wp-content/uploads/2026/02/2025_SLOCAT_Capacity-Building-for-Transport-Transformation.pdf

34 Partnership on Sustainable, Low Carbon Transport. (2019). *Capacity building needs assessment and strategy to promote low carbon development in high volume transport for selected low-income and lower-middle-income priority countries in Africa and South Asia*.

35 Transitec. (n.d.-a). *Knowledge sharing*. Retrieved May 5, 2024, from https://transitec.net/en/your-needs/knowledge-sharing.html

36 Transitec. (n.d.-b). *MOOC Articulation urbanisme – Mobilité pour une ville durable*. https://transitec.net/fr/actualites/item/11367-mooc-articulation-urbanisme-mobilite-pour-une-ville-soutenable-les-inscriptions-sont-ouvertes.html

37 Transport Research and Education Centre. (n.d.). *About TRECK*. Retrieved February 26, 2024, from https://treck.knust.edu.gh/about/history-of-treck

38 TUMI. (n.d.-a). *About TUMI*. Retrieved March 2, 2024, from https://transformative-mobility.org/about/

39 Transformative Urban Mobility Initiative. (2025). *Capacity development as an accelerator for sustainable transport*. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. Retrieved September 9, 2026, from https://transformative-mobility.org/wp-content/uploads/2025/07/TUMI-Global-Facts-Study-CapDev-as-Accelerator-for-Sustainable-Transport-1.pdf

40 Transformative Urban Mobility Initiative. (2018). *Implementing sustainable mobility: Capacity development catalogue*.

41 TUMI. (n.d.-c). *TUMI e-bus mission*. Retrieved March 20, 2024, from https://transformative-mobility.org/focus-area/tumi-e-bus-mission/#deep-dive-cities

42 Transformative Urban Mobility Initiative. (2020). *A 250k gap? Building capacity for the global mobility transition: Scaling capacity and education to achieve sustainable mobility for all*.

43 TUMI. (n.d.-b). *Leading transport transitions*.

44 UITP. (2018). *Policy brief: Establishing a public transport authority (PTA) in African cities*.

45 UITP. (n.d.-a). *2024–2025 scholarship programme*. Retrieved March 14, 2024, from https://www.uitp.org/uitp-academy/2024-2025-scholarship-programme/

46 UITP. (n.d.-b). *Peer review*. Retrieved May 6, 2024, from https://www.uitp.org/uitp-academy/peer-review/

References

47 UITP. (n.d.-c). *Public transport fundamentals*. Retrieved March 21, 2024, from https://www.uitp.org/trainings/public-transport-fundamentals-7/

48 United Nations. (2024). *Funds, programmes & other entities – UN system documentation*. Dag Hammarskjöld Library. Retrieved May 5, 2024, from https://research.un.org/en/docs/unsystem/fundsprogs

49 United Nations Development Group. (2009). *Capacity assessment methodology*.

50 United Nations Development Group. (2017). *Capacity development UNDAF companion guidance*.

51 United Nations Development Programme. (2015). *Capacity development: Measuring capacity*.

52 United Nations Educational, Scientific and Cultural Organization. (2001). *Revised recommendation concerning technical and vocational training*.

53 United Nations Educational, Scientific and Cultural Organization. (2006). *Global monitoring report: Education for all — Literacy for life*.

54 UNESCO Institute for Statistics. (2012). *International standard classification of education – ISCED*.

55 United Nations Human Settlements Programme. (2012). *Manual training needs assessment and training outcome evaluation in an urban context*.

56 United Nations Human Settlements Programme. (2021). *Guide to deliver capacity-building using digital tools*. Capacity Development and Training Unit.

57 UN-Habitat. (2012). *Capacity self-assessment methodology for local government training institutions*.

58 UNITAR. (2017). *Regional dialogue on road safety and sustainable transport systems*. Retrieved May 10, 2024, from https://www.unitar.org/about/news-stories/news/regional-dialogue-road-safety-and-sustainable-transport-systems

59 VREF. (2022). *Informal and shared mobility in low-middle-income countries: A road map for program implementation 2023–2029*.

60 VREF. (2024). *2024 Lee Schipper scholarship guidance*. Retrieved March 21, 2024, from https://vref.se/wp-content/uploads/2024/02/2024-LeeSchipper-Scholarship-Guidance.pdf

61 VREF. (n.d.). *About VREF*. Retrieved March 2024, from https://vref.se/about-vref/

62 Watkins, R., Meiers, M. W., & Visser, Y. L. (2012). *A guide to assessing needs: Essential tools for collecting information, making decisions, and achieving development results*. The World Bank.

63 World Bank. (n.d.-a). *The World Bank data*. Retrieved February 21, 2024, from https://data.worldbank.org/income-level/low-income

References

64 World Bank. (n.d.-b). *Overview: Leaders in Urban Transport Planning (LUTP)*. Retrieved March 14, 2024, from https://www.worldbank.org/en/programs/leaders-in-urban-transport-planning-program/overview

65 Wothaya, S., & Piovesan, L. (2023). *SSATP–Leaders in Urban Transport Planning (LUTP) Africa mentorship program*.

66 WRI. (n.d.-a). *DigitalTransport4Africa (DT4A) webinar series*. Retrieved May 5, 2024, from https://www.youtube.com/playlist?list=PLHC2pCeWNG2sUAFhbyI89Gb4zrDz5oily

67 WRI. (n.d.-b). *Resources – DigitalTransport4Africa*. Retrieved May 21, 2024.

68 WRI. (n.d.-c). *WRI Ross Center for Sustainable Cities*. Retrieved May 5, 2024, from https://www.wri.org/cities/about

List of acronyms

3ie	International Initiative for Impact Evaluation
AAUMA	African Association of Urban Mobility Authorities
AFC	Automatic Fare Collection
AFD	Agence Française de Développement
AMUGA	Urban Mobility Authority of Greater Abidjan
AVL	Automatic Vehicle Location
BRT	Bus Rapid Transit
CCG	Climate Compatible Growth
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CODATU	Coopération pour le Développement et l'Amélioration des Transports Urbains et périurbains
COO	Chief Operating Officer
CTE	Centres of Transport Excellence (UITP)
DT4A	DigitalTransport4Africa
EBRD	European Bank for Reconstruction and Development
EIT	European Institute of Innovation and Technology
FCDO	Foreign, Commonwealth and Development Office
FIA	Fédération Internationale de l'Automobile
GAPTE	Greater Accra Passenger Transport Executive
GIS	Geographic Information Systems
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GTFS	General Transit Feed Specification
HICs	High-Income Countries
HR	Human Resources
HVT	High Volume Transport Applied Research
ICLEI	Local Governments for Sustainability
IKI	Internationale Klima Initiative
IsDB	Islamic Development Bank
ITDP	Institute for Transportation and Development Policy
ITF	International Transport Forum

List of acronyms

ITS	Intelligent Transport Systems
KCCA	Kampala Capital City Authority
LAMATA	Lagos Metropolitan Area Transport Authority
L&D	Learning and Development
LMICs	Low- and Middle-Income Countries
Logframe	Logical Framework
LRT	Light Rail Transit
M&E	Monitoring and Evaluation
MOOCs	Massive Open Online Courses
MRT	Mass Rapid Transit
NaMATA	Nairobi Metropolitan Area Transport Authority
NUMPs	National Urban Mobility Plans
O&M	Operation and Maintenance
RACI	Responsible, Accountable, Consulted, Informed
RAID	Risk, Assumptions, Issues, Dependencies
RCC	Research Commissioning Centre
SFC	Smart Freight Centre
SMART	Specific, Measurable, Achievable, Relevant, Time-bound
SUMPs	Sustainable Urban Mobility Plans
SWOT	Strengths, Weaknesses, Opportunities, Threats
TfC	Transport for Cairo
TRECK	Transport Research and Education Centre
TUM	Technical University of Munich
TUMI	Transformative Urban Mobility Initiative
UC Davis	University of California, Davis
UEMI	Urban Electric Mobility Initiative
UITP	International Association of Public Transport
UNDG	United Nations Development Group
UNEP	UN Environment Programme
VREF	Volvo Research and Educational Foundations
WRI	World Resources Institute
YOURS	Youth for Road Safety

Technical & functional capacities

Below is a list of technical capacities commonly mentioned by transport institutions to be of relevance for their mandate.

Planning, regulating and licensing transport services

- Developing and implementing, including monitoring and enforcing, transport master plans, policies, rules and regulations
- Multimodal transport network design and route planning including bus, Bus Rapid Transit (BRT), Light Rail Transit (LRT), Mass Rapid Transit (MRT), paratransit/ informal transport, waterborne and cable car services, etc. (ensuring access and coverage on the urban, intercity, regional and/or international levels)
- Fleet and asset management
- Funding and financing of transport projects and services
- Procurement and contracting
- Integration (physical, timetables, fares) of transport services incl. public transport, active transport, taxi and private cars
- Intelligent Transport Systems (ITS) including Smart Traffic Management, Automatic Fare Collection (AFC), Automatic Vehilcle Location (AVL), etc.

Accessibility of transport services

- Ticketing and fare management
- Inclusivity measures for vulnerable users incl. women, children, senior citizens, persons with disabilities
- Passenger Information Systems

Freight & logistics

- Supply chain management
- Shifting to cargo bikes & rail
- Introducing and managing dry ports

Technical & functional capacities

Below is a list of technical capacities commonly mentioned by transport institutions to be of relevance for their mandate.

Land use management

- Construction & maintenance of roads, bridges, tracks, sidewalks etc.
- Street design and street furniture
- Travel demand management (parking management, congestion & road charging)

Sustainable transport and mobility

- Emissions accounting
- Developing and implementing Sustainable Urban Mobility Plans (SUMPs) and National Urban Mobility Plans (NUMPs)
- Promoting active travel
- Shifting to alternative fuels and electrification
- Regulating fleet age and emission standards
- Assessing environmental & social impacts
- Implementing climate adaptation and mitigation measures

Safety and security

- Enforcing service standards and protocols
- Crowd management
- Emergency preparedness and crisis management
- Ensuring cybersecurity

* This list is not comprehensive and merely serves to give an overview of the different categories of capacities that may be of relevance for transport institutions.

Technical & functional capacities

Below is a list of functional capacities commonly mentioned by transport institutions to be of relevance for their mandate.

Strategic planning

- Strategy formulation
- Short-, medium-, and long-term planning
- Budgeting

Project management

- Setting up a project management office
- Risk management
- Monitoring and evaluation

Human resources

- Assessing needs and capacities
- Recruitment and retention processes
- Ensuring a diverse and inclusive workforce

Inter-institutional cooperation

- Stakeholder analysis
- Coordination, collaboration and cooperation models

Internal and external communication

- Internal knowledge-sharing
- Inter-institutional coordination
- Public engagement & communication

* This list is not comprehensive and merely serves to give an overview of the different categories of capacities that may be of relevance for transport institutions.

List of tools

The following table maps all tools to their corresponding illustrative examples throughout the manual. The related blank templates are presented on the following pages and referenced in this table, allowing representative institutions to apply them in practice. For an enhanced user experience, it is recommended that the templates be printed in A3 format. Digital, editable versions of the templates are also available in Excel file format on the publication page of the manual to enable institutions to access, adapt, and use them directly.

		PLAN								IMPLEMENT				M&E	ILLUSTRATED EXAMPLE	BLANK TEMPLATE
	STEPS	01	02	03	04	05	06	07	08	09	10	11	12	13		
TOOL 01	SWOT Analysis	◆			◇										p. 20-21	p.91
TOOL 02	Workplan & Gantt chart			◆									◇	◇	p. 23	p.92
TOOL 03	RACI matrix			◆									◇		p. 24-25	p.93
TOOL 04	Task & performance analysis				◆										p. 27-28	p.94
TOOL 05	Problem tree analysis				◆										p. 29-30	p.95
TOOL 06	Eisenhower matrix					◆									p. 32-33	p.96
TOOL 07	Assessment framework for capacity development activities									◆					p. 56-57	p.97
TOOL 08	Scenario building									◆				◇	p. 58-59	p.98
TOOL 09	Theory of Change												◆	◇	p. 63-64	p.99
TOOL 10	Operational plan												◆	◇	p. 65-66	p.100
TOOL 11	RAID matrix (Risk matrix)			◌									◆	◇	p. 67-68	p.101
TOOL 12	Logical framework (Logframe)												◆	◇	p. 69-70	p.102
TOOL 13	Progress report												◆	◇	p. 71-72	p.103

Key ◆ Tool introduced at this step ◇ Tool revisited or updated ◌ Tool cross-referenced; introduced later

Capacity development steps

01 Identify the assessment scope
02 Identify data requirements
03 Develop the management plan
04 Analyse desired & current capacities
05 Synthesise assessment findings
06 Communicate assessment findings
07 Evaluate the needs assessment process
08 Understanding capacity development formats
09 Design and/or choosing an activity
10 Scoping common capacity development support providers
11 Setting cost estimates and securing a budget
12 Implementing the capacity development activity
13 Monitor & evaluate progress and outcomes

TOOL 01

SWOT Analysis

— INTERNAL —	**S** STRENGTHS *internal · helpful*
	W WEAKNESSES *internal · harmful*
— EXTERNAL —	**O** OPPORTUNITIES *external · helpful*
	T THREATS *external · harmful*

TOOL 02

Workplan & Gantt chart

WEEKS / MONTHS

TASK	ASSIGNED	START	END	1	2	3	4	5	6	7	8	9	10
PHASE 01													
PHASE 02													
PHASE 03													

ACTIVE PLANNED

TOOL 03

RACI matrix

TASK / DELIVERABLE	TEAM MEMBER ROLES							

TOOL 04

Task & performance analysis

SEVERITY KEY

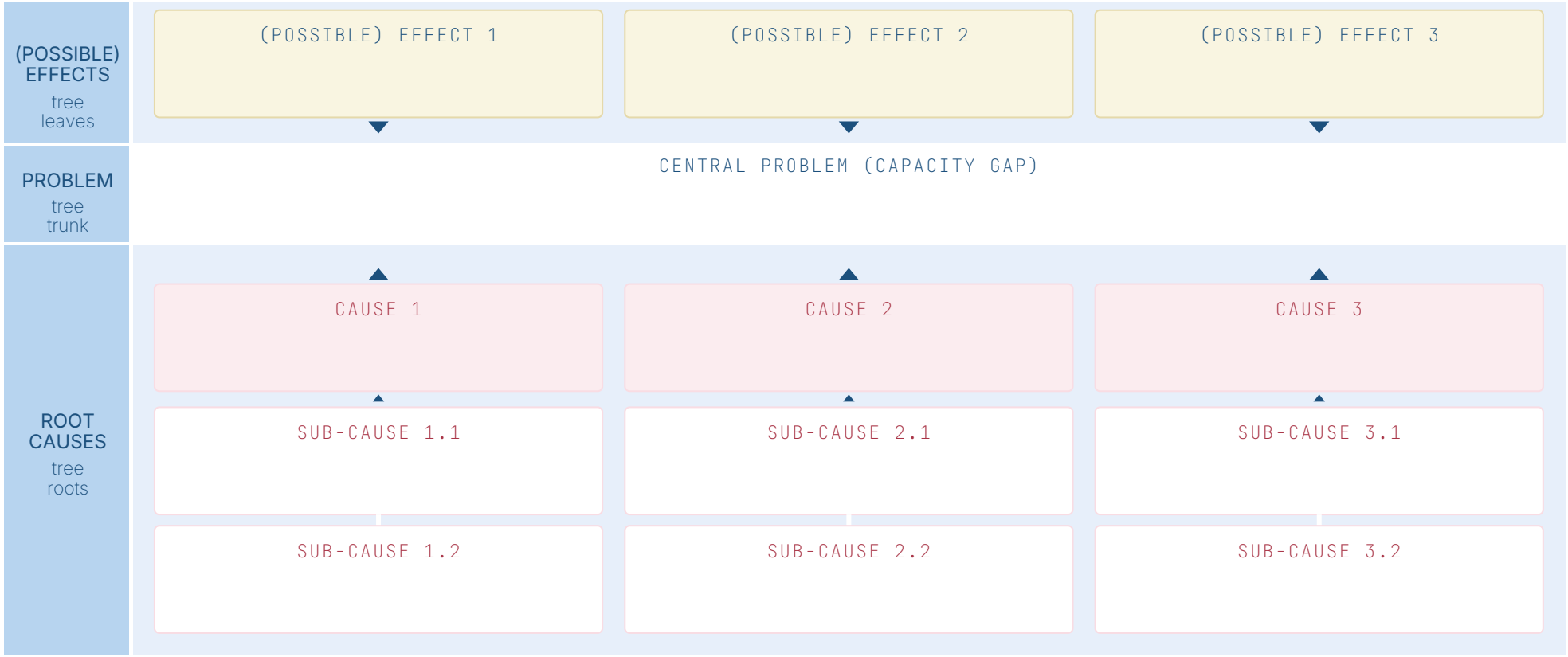
Compare the current to the desired capacity

LOW	The capacity is in place. No capacity development needed.
MED	The capacity is partially in place. Capacity development advised.
HIGH	The capacity is largely missing. Capacity development needed.

DESIRED CAPACITY		CAPACITY GAP		ACTUAL CAPACITY	
TASK	SUB-TASKS	RATE THE GAP	COMMENT ON THE GAP	TASK	SUB-TASKS
DESIRED TASK				CURRENT TASK	
DESIRED TASK				CURRENT TASK	

TOOL 05

Problem tree analysis



TOOL 06

Eisenhower matrix

	URGENT	NOT URGENT
HIGH IMPORTANCE		
LOW IMPORTANCE		

TOOL 07

Assessment framework for capacity development activities

CAPACITY DEVELOPMENT ANALYSIS FACTOR		OPTION A		OPTION B	
		DETAILS	SCORE	DETAILS	SCORE
CONTENT	Thematic focus				
	Contextualisation				
	Self-study components				
	Certification / accreditation				
	Profile of expert(s)				
	Reputation of provider				
	Long-term support				
AUDIENCE	Profile of audience				
	Accessibility / cost				
	Language				
LOGISTICS	Setting				
	Pace				
	Duration				
	Frequency				
	TOTAL SCORE / 70				
	% ALIGNMENT				

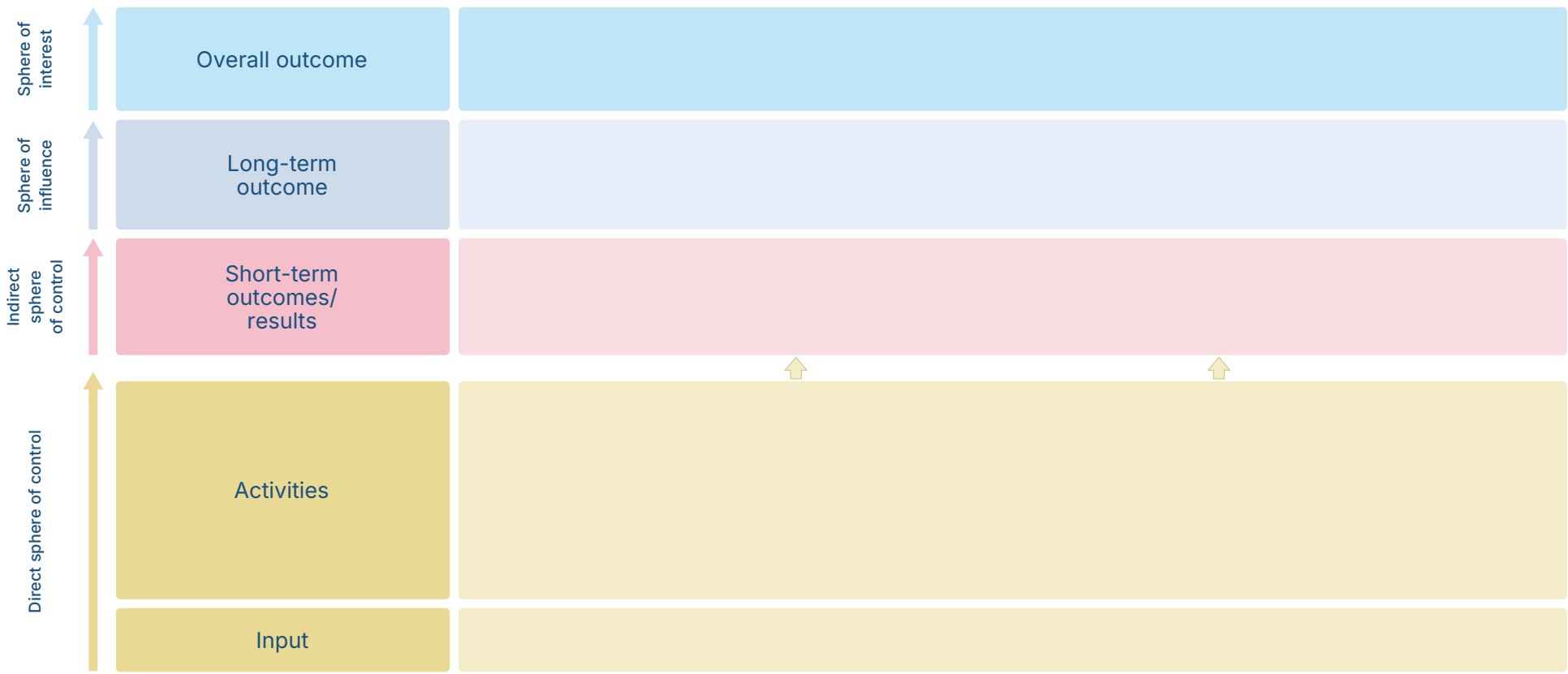
TOOL 08

Scenario building

1 Define the gap	2 Create scenarios		3 Communicate and act
CAPACITY GAP	ACTIVITY OPTION	EXPECTED POSITIVE OUTCOMES (+)	EXPECTED NEGATIVE OUTCOMES (-)	GUIDING QUESTIONS
	OPTION A			**Q1.** Are the expected outcomes largely favourable or rather unfavourable? **Q2.** Is the activity worth pursuing given these expected outcomes?
	OPTION B			

TOOL 09

Theory of Change



TOOL 10

Operational plan

OUTPUT	ACTIVITY + TASK TITLES	TASK OWNER	RESOURCES NEEDED	START	END	DAYS	STATUS	YEAR / MONTH

DONE task complete ACTIVE in progress PLAN scheduled, not yet started

TOOL 11

RAID matrix (Risk matrix)

SEVERITY KEY

Use the three-tier scale across Probability (Prob.) & Impact:

- LOW — Monitor periodically
- MED — Monitor closely
- HIGH — Address as soon as possible

RAID CATEGORY	ITEM	DESCRIPTION	PROB.	IMPACT	MITIGATION MEASURE	STATUS	OWNER	DATE
RISK								
ASSUMPTION								
ISSUE								
DEPENDENCY								

OPEN — still ongoing, needs attention

CLOSED — resolved or no longer applicable

TOOL 12

Logical framework (Logframe)

LEVEL (LOGIC)	PROJECT SUMMARY	INDICATORS	MEANS OF VERIFICATION	RISKS / ASSUMPTIONS
GOALS (impact)				
OUTCOMES (objectives)				
RESULTS (outputs)				
ACTIVITIES (inputs)				

TOOL 13

Progress report

TASKS	STATUS	TASK OWNER	NOTES	ACTION ITEMS

Global Research and Technology Development
Funded by UK Government
RCC Research Commissioning Centre
3ie International Initiative for Impact Evaluation
Transport for Cairo
مواصلات للقاهرة