

Asset Management Action Plan (AMAP)

Kate Whitfield, P.Eng., MCIP, RPP



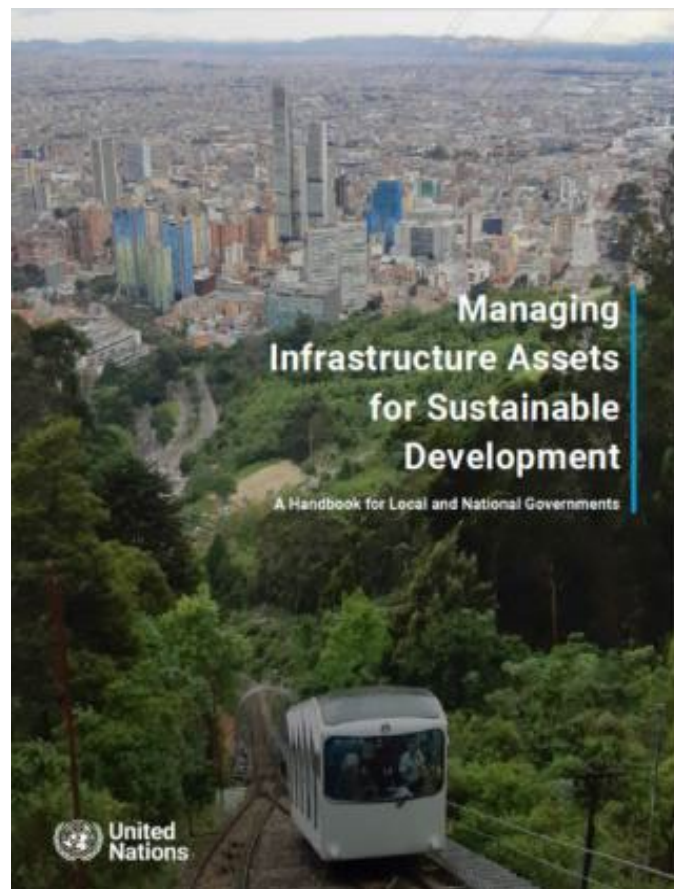
Ghana High Commission in Ottawa, Ontario, Canada

Kate Whitfield, P.Eng., MCIP, RPP
(‘Plangineer’)



Ottawa, Ontario, Canada in 2018

UN Tools on Infrastructure Asset Management



- Asset Management Diagnostic Tool

- Asset Management Action Plans (AMAP)

- Building data and information system

- Emergency response AMAPs

- Climate vulnerability assessment tool

- Process tool for building enabling environment

Check it out here:



What Is an Asset Management Action Plan?

- An **Asset Management Action Plan (AMAP)** is a structured framework that turns asset management principles into concrete, costed actions for one priority asset
- **Key Features**
 - Focuses on improving existing assets, not new projects
 - Links operations, maintenance, and climate resilience to budgeting and performance

What is an AMAP



- Methodical and repeatable process
- Translates recommendations from Diagnostic Tool into actions
- Focus on a priority asset

Tools to support the drafting of Asset Management Action Plans

AMAP Template



AMAP Writing Guide

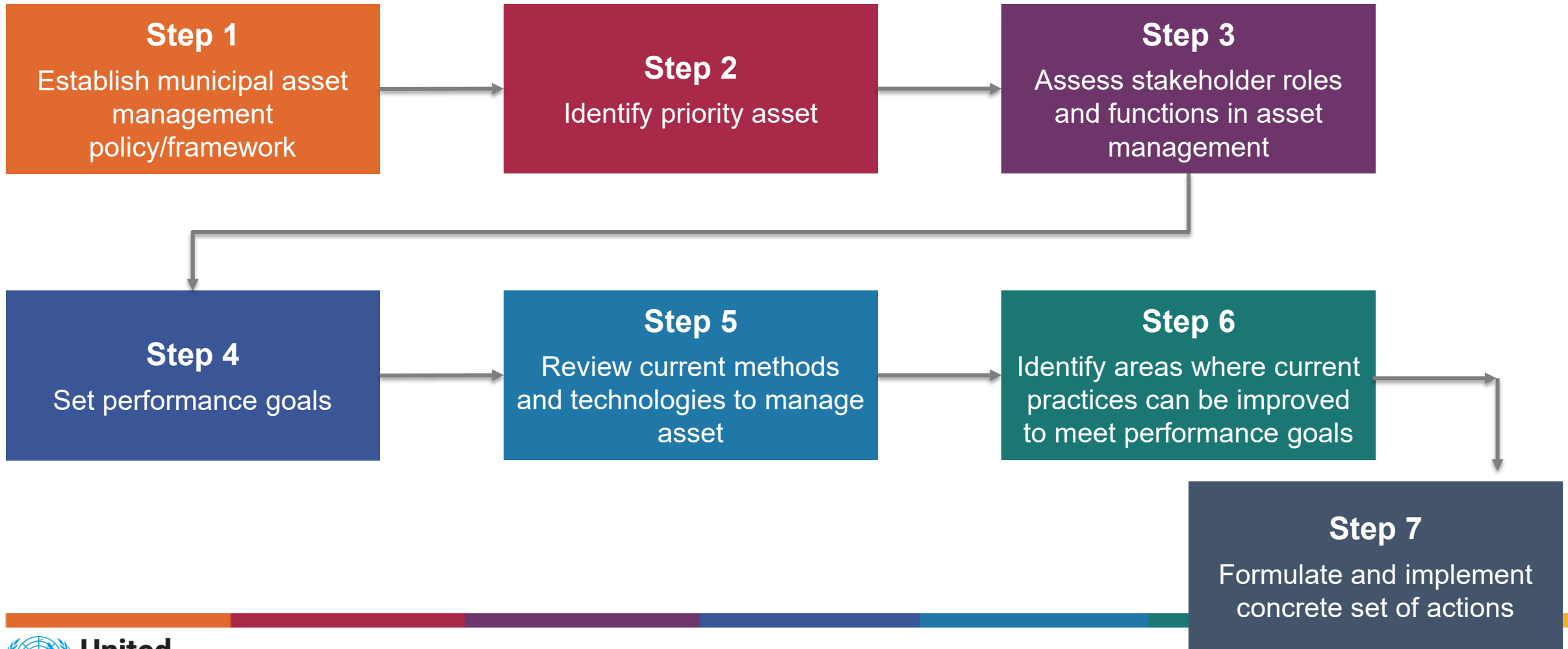


<https://financing.desa.un.org/tools-developing-asset-management-action-plan-amap>

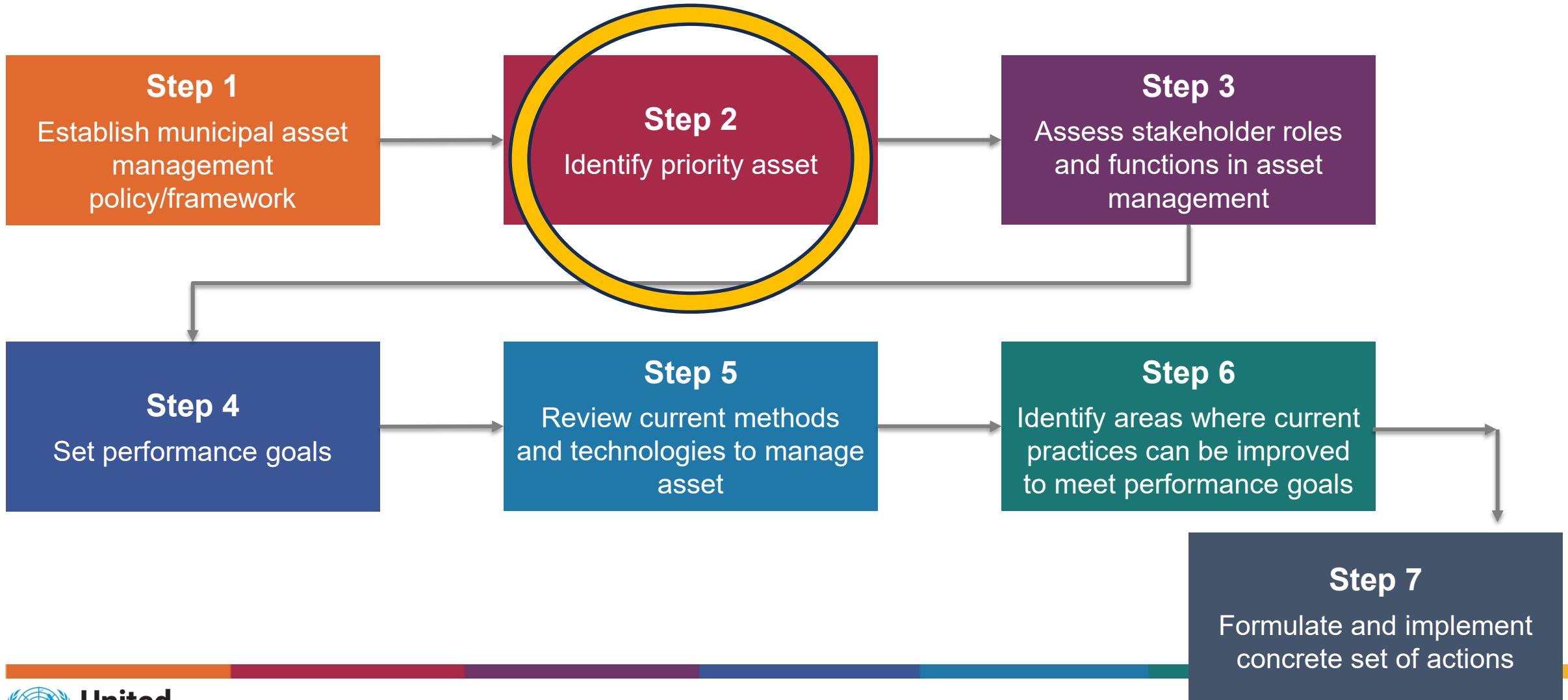
AMAP Steps (right from template!)



Key Process Steps for Designing an AMAP



Step 2: Identify Priority Asset



An **Asset Management Action Plan (AMAP)** is a structured framework that turns asset management principles into concrete, costed actions for one priority assets

Priority Assets

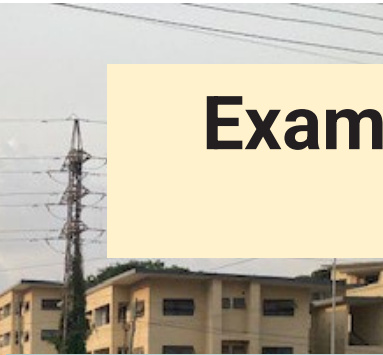
1	8
2	9
3	10
4	11
5	12
6	13
7	14

Priority Assets (Example Table)

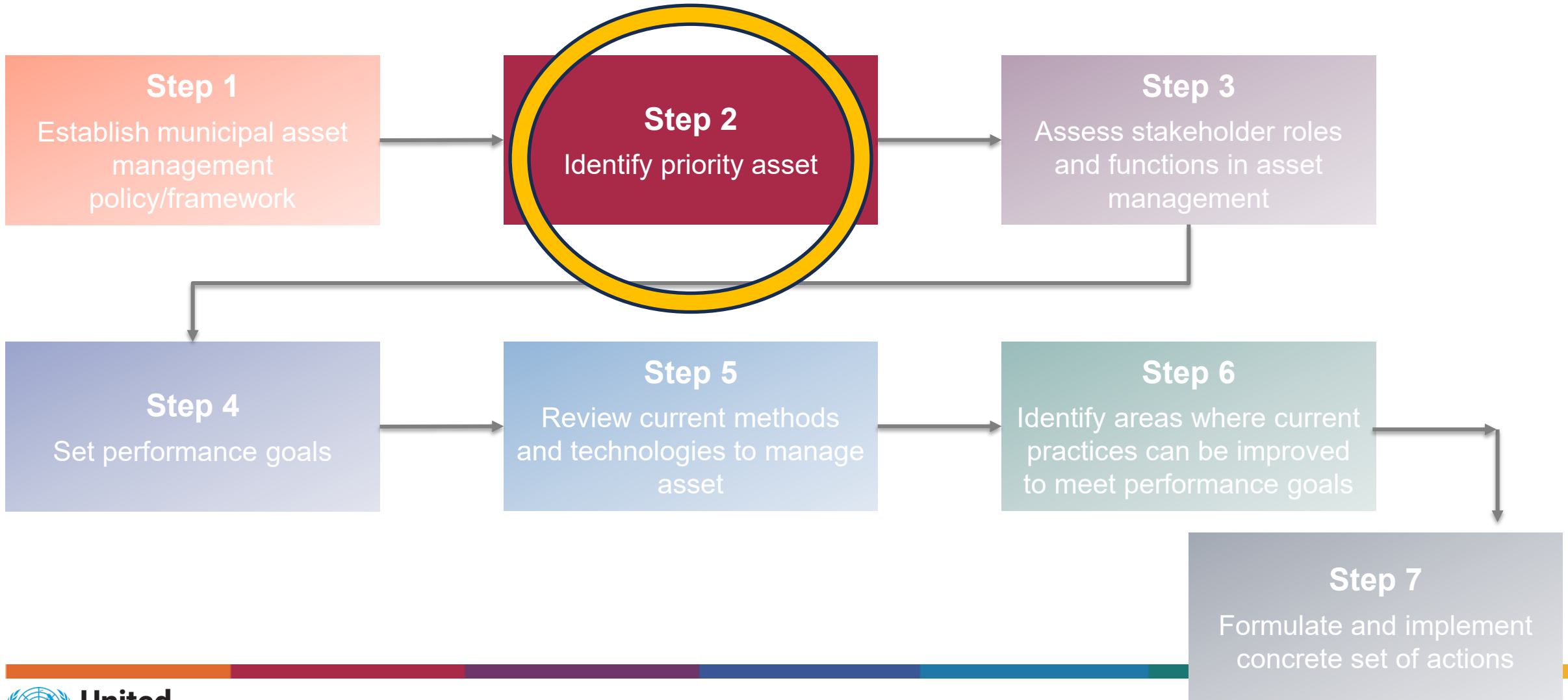
Priority Assets

1 water treatment works/plant	8
2 electrical substation	9
3 reservoir	10
4 solid waste landfill site	11
5 fleet – waste collection vehicles	12
6 local electrical distribution	13
7	14

Examples of Priority Assets



Step 2: Identify Priority Asset



Prioritisation Methods

- Vital function the asset supports
 - Health & safety
 - Security
 - Economic
 - Social well-being
- Impact of disruption
- Condition
- Value
- Combination of the above

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Asset	Impact	Condition	Value	Total	Priority
School	3	3	2	8	4
Water treatment plant	5	5	4	14	1
Sewage treatment plant	5	3	5	13	2
Local road	3	5	3	11	3

Table 2 from the AMAP Template: Determining Priority Asset

Asset	Vital function(s) supported e.g. health & safety, security, economic, social well-being, safe mobility of vulnerable social groups.	Impact of loss of service e.g. loss of life, compromised public safety and/or security, loss of revenue, community unrest, disproportionate impact on women and children, restricted mobility etc.	Current Condition e.g. excellent, fair, poor, in urgent need of repair	Financial Value e.g. Among the highest value assets, high value (costly to repair), moderate value (some financial impact if lost), low value (affordable to replace), very low value
insert	insert	insert	insert	insert

Your AMAP Step 2: Determining Priority Assets



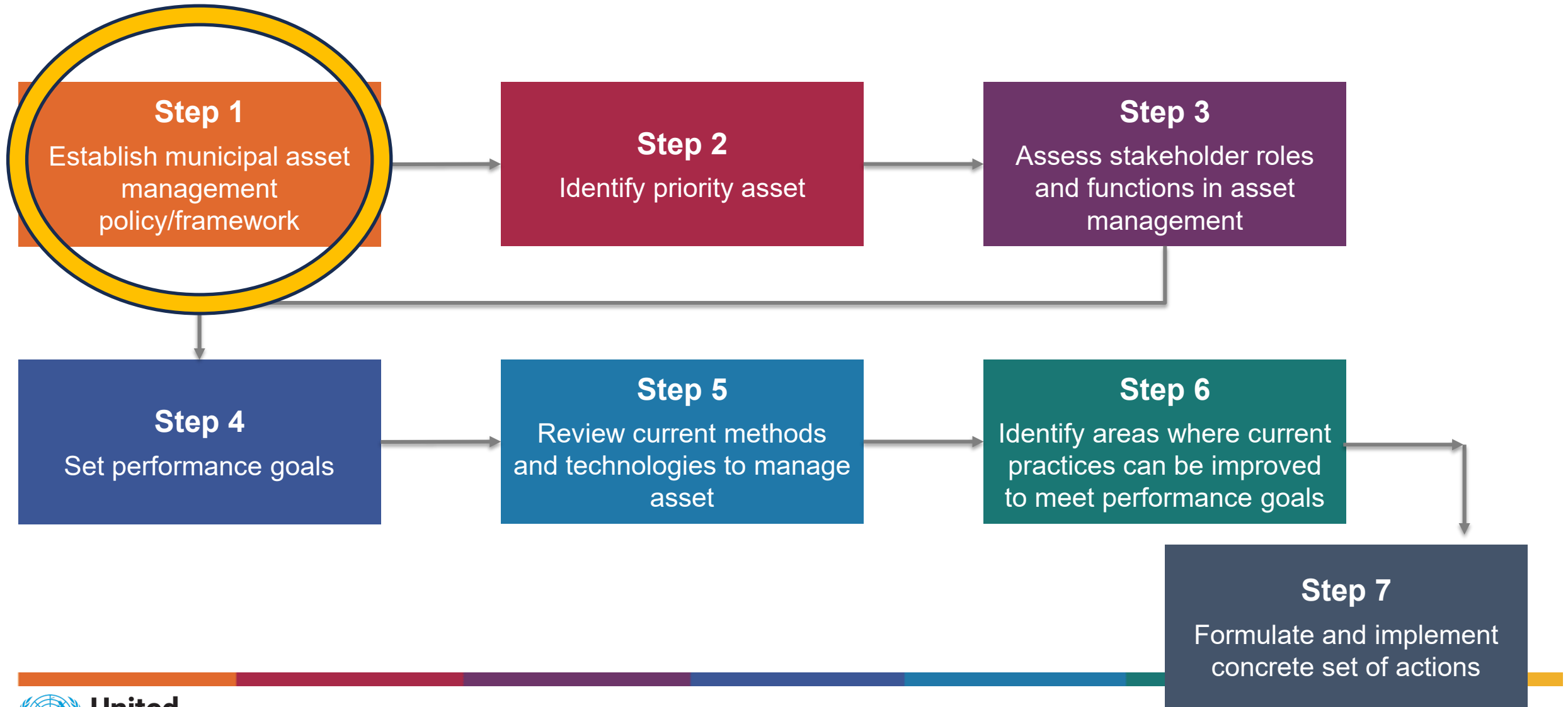
In your breakout group:

1. Identify two or three critical assets
2. Think through Table 2 of the AMAP template (shown below)
3. Use one of the prioritisation methods (or another of your choice) to determine your priority asset from those you have identified.

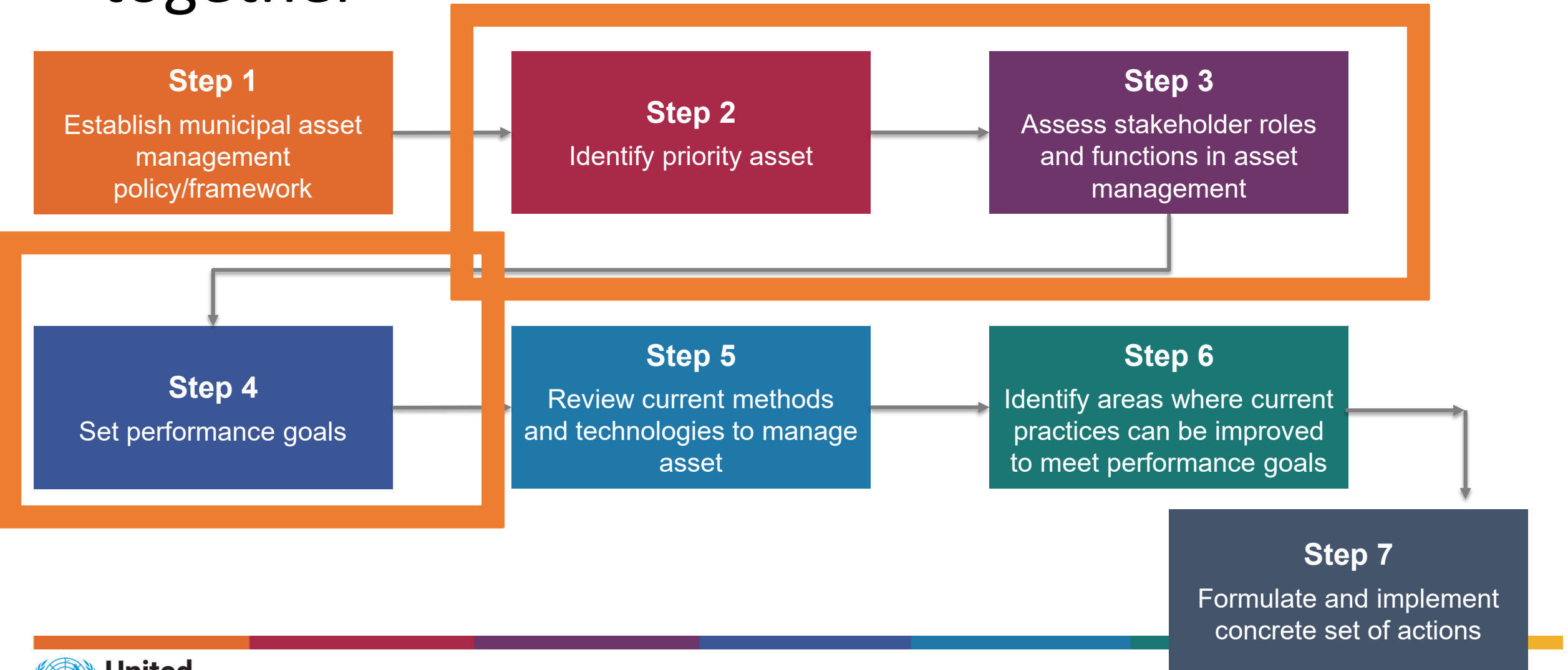
Assign a rapporteur.
Be prepared to discuss your answers.

Asset	Vital function(s) supported	Impact of loss of service	Current Condition	Financial Value
	e.g. health & safety, security, economic, social well-being, safe mobility of vulnerable social groups.	e.g. loss of life, compromised public safety and/or security, loss of revenue, community unrest, disproportionate impact on women and children, restricted mobility etc.	e.g. excellent, fair, poor, in urgent need of repair	e.g. Among the highest value assets, high value (costly to repair), moderate value (some financial impact if lost), low value (affordable to replace), very low value

Step 1: Policy and Framework



Look ahead to how Steps 2 through 4 work together



Priorities



Stakeholders



Stakeholders

Internal stakeholders	External stakeholders
<ul style="list-style-type: none">• Accounting Officer• Finance Chief• Municipal Engineer• Procurement Officer• Community Development Planner• Community Officer• Operators and others who maintain priority assets	<ul style="list-style-type: none">• End users (customers)• Utilities/service providers• Ministry of Local Government• Multilateral or bilateral development partners• Funding organizations



Step 3: Assess stakeholder roles and functions

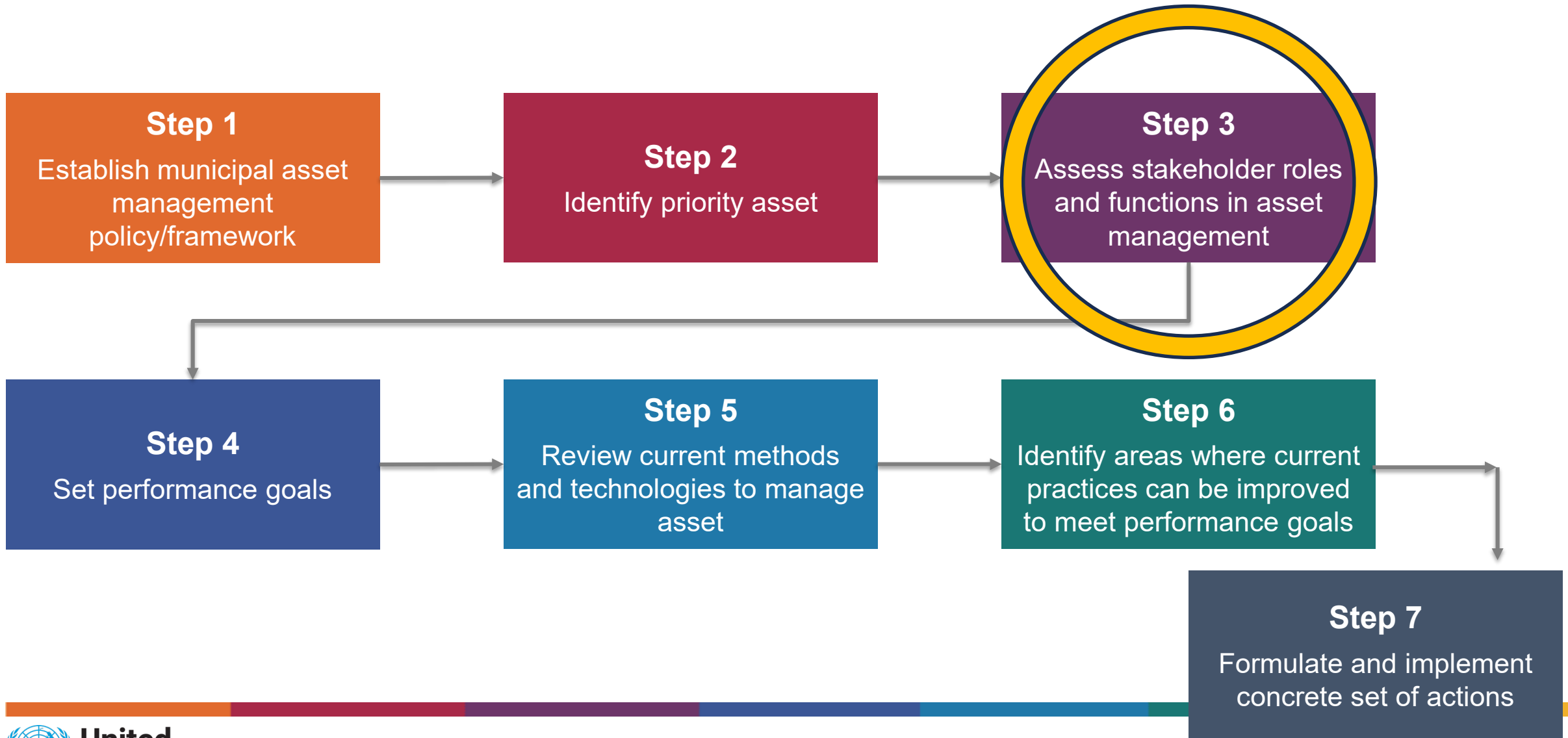


Table 3a from the AMAP Template: Internal Stakeholders

Stakeholders and Role <i>What stakeholders are involved or should be involved in the management of your asset? What is their role?</i> <i>e.g. asset manager, director of operations, maintenance supervisor, service provider, Councillor, community representatives such as women, persons with disabilities etc.</i>	Direct influence over functioning of asset <i>e.g. high or low</i>	Interest in functioning of asset <i>e.g. high or low</i>	Information needed by stakeholder to manage the priority asset <i>e.g. asset inventory data, asset condition data, level of service, costs of repairs, replacement value, remaining service life, overall access including minority groups etc.</i>	Do you have the information? YES or NO? <i>If yes: How do you capture this information? Who is responsible?</i> <i>If no: Write 'NO'</i>
are involved (insert)	insert	insert	insert	insert
should be involved (insert)	insert	insert	insert	insert

Table 3b from the AMAP Template: External Stakeholders

Stakeholders and Role <i>e.g. Service providers (utilities, developers, etc), investors/taxpayers, Government organisations and agencies, financial institutions/rating agencies, bilateral and multilateral donor agencies</i>	Direct influence over functioning of asset <i>e.g. high or low</i>	Interest in functioning of asset <i>e.g. high or low</i>	Information needed by stakeholder to manage the priority asset	Do you have the information? YES or NO?
are involved (insert)	insert	insert	insert	insert
should be involved (insert)	insert	insert	insert	insert

Your AMAP Step 3: Stakeholders



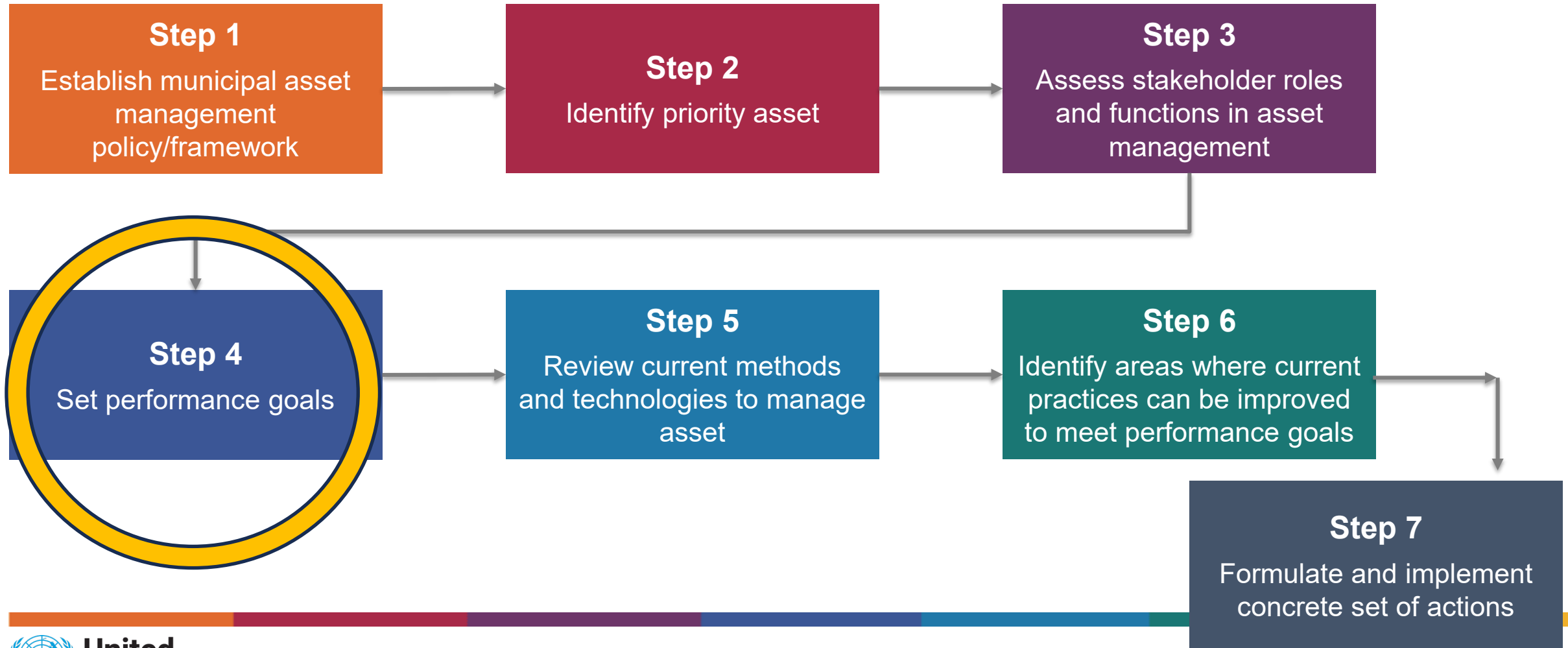
Assign a rapporteur.
Be prepared to discuss your answers.

In your breakout group identify:

1. Table 3a for Internal Stakeholders
2. Table 3b for External Stakeholders

Refer to the AMAP Writing Guide for examples

Step 4: Set Performance Goals



Goals



- Service attributes
 - accessibility, availability, compliance, reliability, responsiveness, cost of service, etc
- Levels of service
 - Government direction
 - Stakeholder needs
- Technical or customer-based
- Review, monitor and report

Example Goal

- Asset – Water Distribution System
- Performance goal – Provide reliable and safe water to our community
- Level of Service – urban vs rural
- Performance Measure
 - Reliability
 - Compliance

Specific

Measurable

Achievable

Realistic

Timely

Example Goal

- Asset – Water Distribution System
- Performance goal – Provide reliable and safe water to our community
- Level of Service – urban vs rural
- Performance Measure
 - Reliability - less than 25 disruptions per year per main
 - Compliance - all regulatory requirements are met

Specific

Measurable

Achievable

Realistic

Timely

Table 4a from the AMAP Template: Performance Goals

Priority Asset	Performance Goal <i>e.g. what you wish to achieve</i>	Level of Service and Attribute <i>Level of Service: e.g. what is provided to what stakeholders Attribute: e.g. technical or customer-based: reliability, accessibility, responsiveness, availability, compliance, return on investment ROI</i>	Performance Measure <i>How you will measure if you are meeting your goal.</i>
insert	insert	insert	insert



Thank you
