



## **UNEP Flexible Framework Initiative**

**Building national capacities on chemical  
accident prevention and preparedness**

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# Background - current industrial trends

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- ▶ **Production shift** from OECD countries to emerging economies
- ▶ Leading to increased trade and exposure in **less regulated economies and less informed markets**
  - ▶ Production (workers, chronic pollution and chemical accident risks )
  - ▶ Use (toxic products in chemicals, heavy metals, pesticides)
  - ▶ Disposal/recycling (e-waste, hazardous waste)



# The Flexible Framework Initiative



# The Flexible Framework Initiative

- ▶ Established in light of an action point from the **SAICM Global Plan of Action (GPA)**, which calls for the development of collaborative practically-oriented tools for chemical accident prevention.
- ▶ **Main purpose:**
  - ▶ **Increase countries' knowledge** on chemical accident prevention and preparedness
  - ▶ **Build capacities** of relevant institutions, agencies and experts to address the risks of chemical accidents
  - ▶ Help countries to develop/ review and implement an appropriate **Chemical Accident Prevention and Preparedness (CAPP)** Programme



# The Flexible Framework Guidance for Governments

- ▶ The Guidance provides information on:
  - ▶ Steps needed to develop a CAPP Programme
  - ▶ The possible elements of such programmes (related to roles of industry and authorities)
  - ▶ Resource materials to implement those elements
- ▶ The Guidance has been designed to be **flexible**:
  - ▶ CAPP elements can be adapted to particular national context.
  - ▶ Countries can define actions based on national priorities, resources and experience.



**Due to its flexibility, the Guidance can be a good basis for EC work on CAPP capacity-buidling.**



# Baseline and development of the FF Guidance

- International conventions (e.g. ILO 174, UNECE TEIA)
- International programmes (e.g. OECD GP-SPI)
- Legal instruments (e.g. Seveso Directives, US-RMP)

Prevention of accidents

Preparedness for accidents

Elements of CAPP programmes



## Expert working group

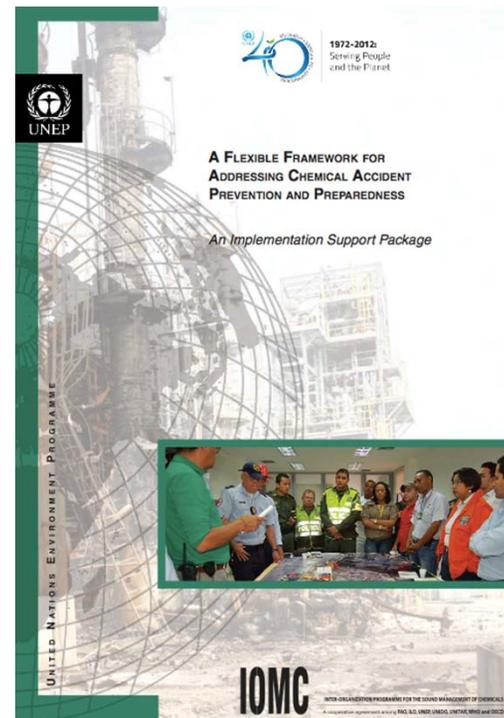
- |          |                       |  |
|----------|-----------------------|--|
| • UNEP   | • EC (DG Environment) | • ADPC                                 |
| • ILO    | • EC - JRC – MAHB     | • Experts                              |
| • UNECE  | • OECD WGCA           | • Countries (Thailand/The Netherlands) |
| • UNIDO  | • US-EPA              | • ICCA                                 |
| • WHO    | • UNEP/OCHA – JEU     | • Swedish Civil Contingencies Agency   |
| • UNITAR |                       |  |
| • CYTED  |                       |  |



# The Implementation Support Package (ISP)

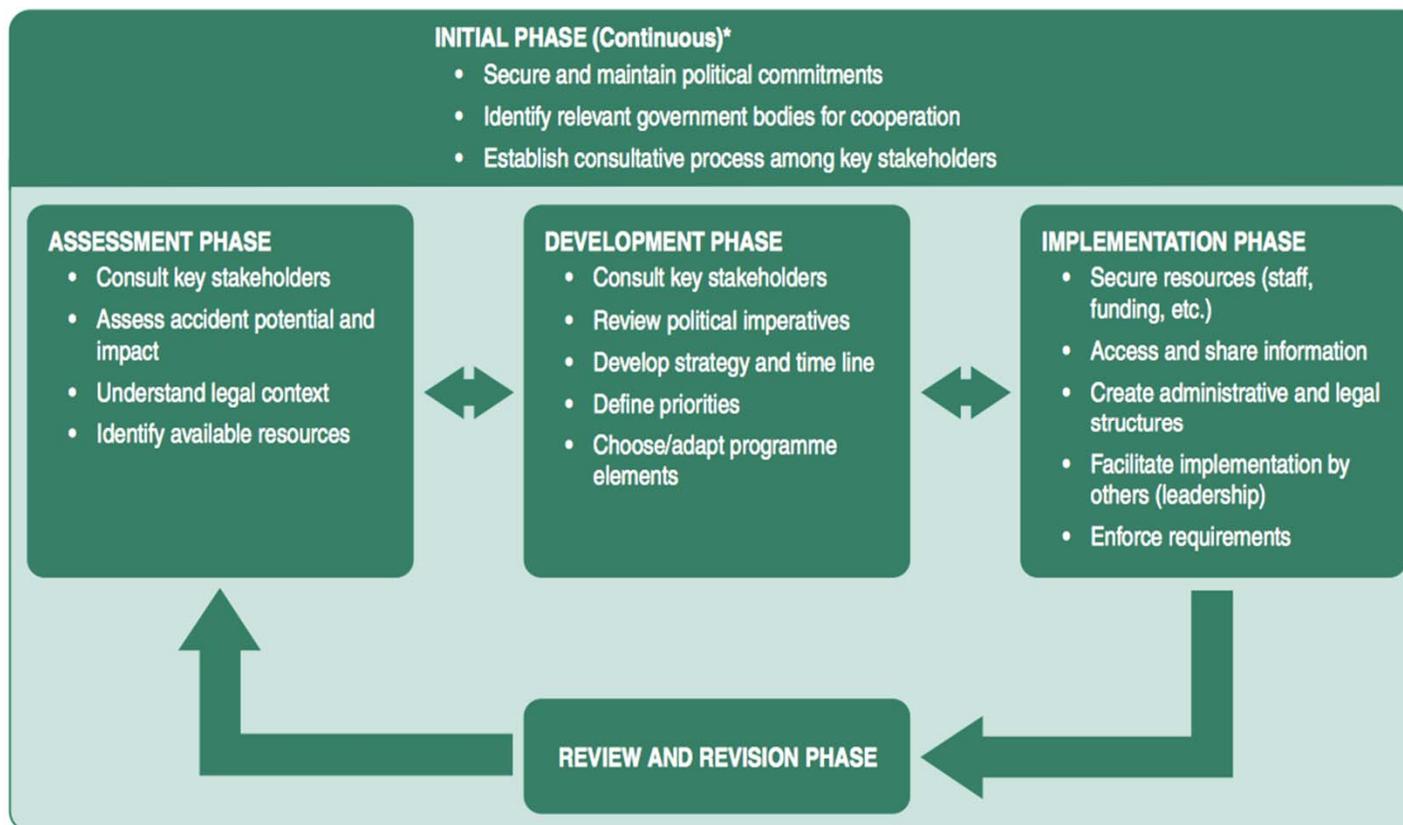


- ▶ Developed as a supplement of the Flexible Framework Guidance
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- ▶ Builds on experience and lessons learned of past CAPP Programme projects to facilitate CAPP efforts in other countries.
- ▶ Collects in one package CAPP training materials and tools useful for any implementing country and any technical support partner.





# The Flexible Framework methodology and the CAPP programme development projects



# The Flexible Framework methodology

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- ▶ The methodology is focused on developing a CAPP programme and suggests five phases:
  - ▶ **Initial Phase:** secure political commitment, identify key stakeholders and ensure consultative process
  - ▶ **Assessment Phase:** assess accident potential, legal context, available resources
  - ▶ **Development Phase:** develop strategy and timeline, define priorities, choose/adapt CAPP elements
  - ▶ **Implementation Phase:** secure resources, create administrative and legal structures, enforce requirements
  - ▶ **Review Phase**



# Elements suggested for a CAPP Programme

Countries review and adapt these elements according to their national needs, interests, and capacities.

<b>The Scope of the Programme</b>
Scope
<b>The Role of Competent Authorities</b>
Information Management
Inspections
Preparedness Planning
Siting and Land-Use Planning
<b>Requirements of Industry</b>
General Duty Clause
Notification
Prevention Policy and Safety Management Systems
Hazard Identification and Risk Assessment
Safety Reports
Preparedness Planning
<b>Information to the Public</b>
Information to the Public
<b>Accident Reporting, Investigation, and Follow-up</b>
Accident Reporting, Investigation, and Follow-up



# CAPP Programme development projects

- ▶ To support and train countries on implementing the Flexible Framework Guidance and the ISP
- ▶ The projects support the first three phases of the FF methodology by supporting:
  - ▶ The establishment of an **inter-agency Task Force**
  - ▶ Preparation of a **country situation report, a needs assessment, and a national roadmap** to move forward with the CAPP Programme
  - ▶ Organization **of training activities and a CAPP Launching Workshop**

**The final roadmap agreed at the end of the project is the basis for the following CAPP development and implementation process (not part of the project).**



# CAPP Programme development projects

- ▶ **Completed and ongoing CAPP development projects:**
  - ▶ UNEP funded projects (2009-2010): Cambodia, Philippines
  - ▶ SAICM Funded Projects (2012-2015): Mali, Senegal, Sri Lanka, Tanzania



# Key partners of the projects

## NATIONAL FOCAL POINT

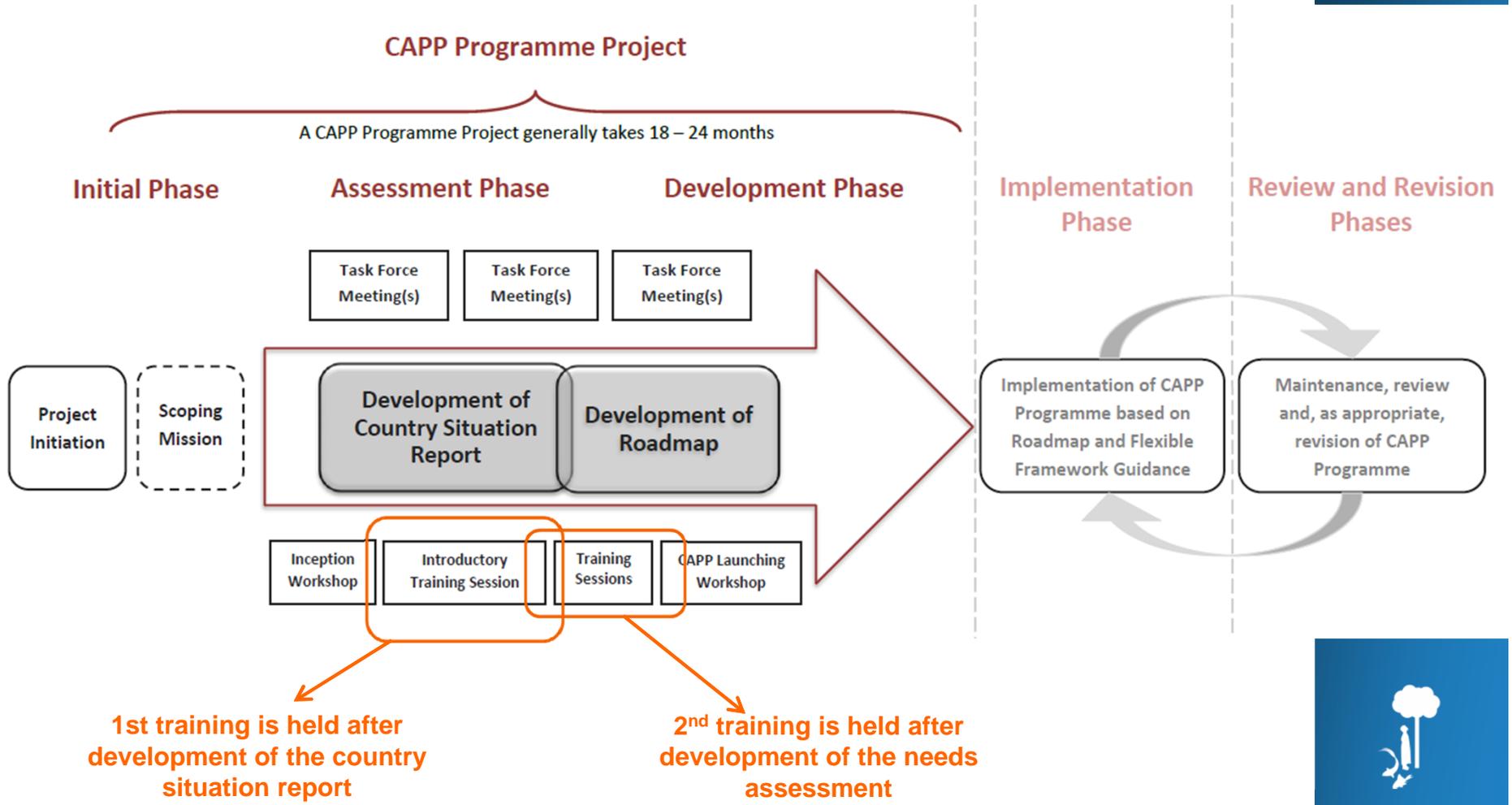
- Ministry of Environment of Cambodia
- National Directorate for Sanitation and Pollution Control of Mali
- Environmental Management Bureau of the Philippines
- Directorate of Environment and Classified Establishments of Senegal
- Central Environmental Authority of Sri Lanka
- Government Chemist Laboratory Agency of Tanzania

## TECHNICAL SUPPORT PARTNER

- Asian Disaster Preparedness Centre (Cambodia, Philippines and Sri Lanka)
- The French National Institute for Industrial Environment and Risks (Mali and Senegal)
- University of Dar es Salaam (Tanzania)



# Project design



# Initial phase

## Scoping meeting and inception workshop

- ▶ The scoping meeting discusses the objectives and activities of the project between the implementing country and any technical support partner.
- ▶ The inception workshop is used as an official launching of the activities, as well as a CAPP awareness raising event.

**Senior officials with the authority and leadership to move forward the project activities should be involved in this initial phase.**



# Initial phase

## Establishment of a national Task Force

- ▶ The Task Force has an inter-agency coordination approach. It includes representatives of Government, NGOs, industry and academia.
- ▶ The Task Force is responsible for leading the activities and providing technical input to the project outputs (to meet regularly).
- ▶ Can be a newly constituted body or ideally, it can be an existing committee or working group.

**The Flexible Framework ISP includes a generic template for a Task Force Terms of Reference (Annex III).**



# Composition of the Task Force

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- ▶ It typically includes representatives of:
  - ▶ environmental protection;
  - ▶ public health;
  - ▶ labour safety and/or occupational safety;
  - ▶ industrial development/industrial estates;
  - ▶ mining;
  - ▶ agriculture and/or pesticides;
  - ▶ transportation;
  - ▶ energy and/or petroleum and/or fossil fuels;
  - ▶ customs and/or exports and imports;
  - ▶ labelling and packaging;
  - ▶ emergency response (fire, police, medical).



## Case study – National Task Force in Mali

The Task Force in Mali was built upon an existing interagency and stakeholder mechanism for chemicals management:

- ▶ National Department for Sanitation, Pollution, and Nuisance Control
- ▶ University of Bamako
- ▶ Air Liquide – Mali
- ▶ TOTAL – Mali
- ▶ The gold mines of Yatéla, Morila, Loulo, and Sadiola SEMOS
- ▶ Red Cross
- ▶ National Association of Dyers
- ▶ National Health Laboratory
- ▶ National Department for Civil Protection
- ▶ National Department for Industry
- ▶ National Institute of Statistical Analysis
- ▶ National Department of Transportation
- ▶ National Department of Geology and Mines;
- ▶ National Department of Commerce
- ▶ Department of Customs
- ▶ National Department of Trade and Finance
- ▶ Association of Malian Consumers
- ▶ Agency for the development of Industrial Zones.





**The Task Force is responsible of ensuring that the necessary institutional arrangements are in place to move forward to implement an appropriate CAPP Programme and ensuring the programme's sustainability beyond the project timeframe.**

# Assessment phase

## Development of a country situation report

- ▶ Compiles information about the hazards and risks as well as the country's capabilities and resources for addressing them.
- ▶ Serves as a tool to reach a common understanding among key stakeholders, of the circumstances and resources available for developing a CAPP Programme.
- ▶ Informs the Task Force to help them create country-specific training and support activities.

**The Flexible Framework ISP includes a generic template for a Country Situation Report (Annex I).**



## Country Situation Report Suggested Table of Contents

<b>Part 1</b>	<b>Background Information</b> <i>including demographic, economic, and administrative facts as well as maps</i>
<b>Part 2</b>	<b>Accident Potential and History</b> <i>including nature and extent of hazards/risks, e.g., location of hazardous installations, chemicals of concern, and accident case history</i>
<b>Part 3</b>	<b>Government Infrastructure</b> <i>including a description of all relevant ministries, agencies, and other bodies involved with issues related to chemical accident prevention and preparedness</i>
<b>Part 4</b>	<b>Regulatory and Non-regulatory Context</b> <i>including legal instruments and non-regulatory mechanisms, as well as international collaborative activities, related to accident prevention and preparedness or more generally related to control of hazardous substances or hazardous installations</i>
<b>Part 5</b>	<b>Non-governmental Activities</b> <i>including activities of industry, labour, public interest groups, and research sector</i>
<b>Part 6</b>	<b>Community Awareness</b> <i>including a description of public awareness and programmes for informing communities in the vicinity of hazardous installations about what to do in the event of an accident</i>
<b>Part 7</b>	<b>Available Resources</b> <i>including experts, training, finances, equipment/technology, and data</i>
<b>Part 8</b>	<b>Other Relevant Information</b> <i>capturing any additional information the Country would like to include such as on-going and past Projects related to accident prevention and preparedness</i>
<b>Part 9</b>	<b>Conclusions</b>



# Development phase

## Preparing a roadmap

- ▶ The roadmap agrees the path to the national CAPP Programme Development and it is endorsed during the CAPP Launching Workshop. **It needs to be realistic.**
- ▶ It includes:
  - ▶ A needs assessment: identifying gaps in regulations, training, capacities, funding and equipment;
  - ▶ a description of national priorities for future action;
  - ▶ a strategy to move forward (timetable, responsible, milestones); and
  - ▶ an estimate of needed resources.

**The Flexible Framework ISP includes a specific information on how to prepare the roadmap (Annex II).**



## Roadmap Suggested Table of Contents

<b>Part 1</b>	<b>Introduction and Background</b> <i>including two subparts: the first explaining the purpose of the Roadmap and how it was developed; and the second containing a summary of the national CAPP Programme Project and related developments</i>
<b>Part 2</b>	<b>Needs Assessment</b> <i>including an identification of gaps and priorities</i>
<b>Part 3</b>	<b>National CAPP Programme Goals and Strategies</b> <i>including a summary of the Country's short-, medium-, and long-term goals and strategies for achieving these goals</i>
<b>Part 4</b>	<b>Action Plan</b> <i>including specific steps that can be taken in the short-, medium-, and long-term to meet identified goals</i>
<b>Part 5</b>	<b>Mobilising Resources (funding, expertise, equipment, information)</b> <i>including a list of the resources that are likely to be needed for the development and implementation of a national CAPP Programme</i>
<b>Part 6</b>	<b>Conclusions and Recommendations</b>

# Case study – Common priorities for six countries

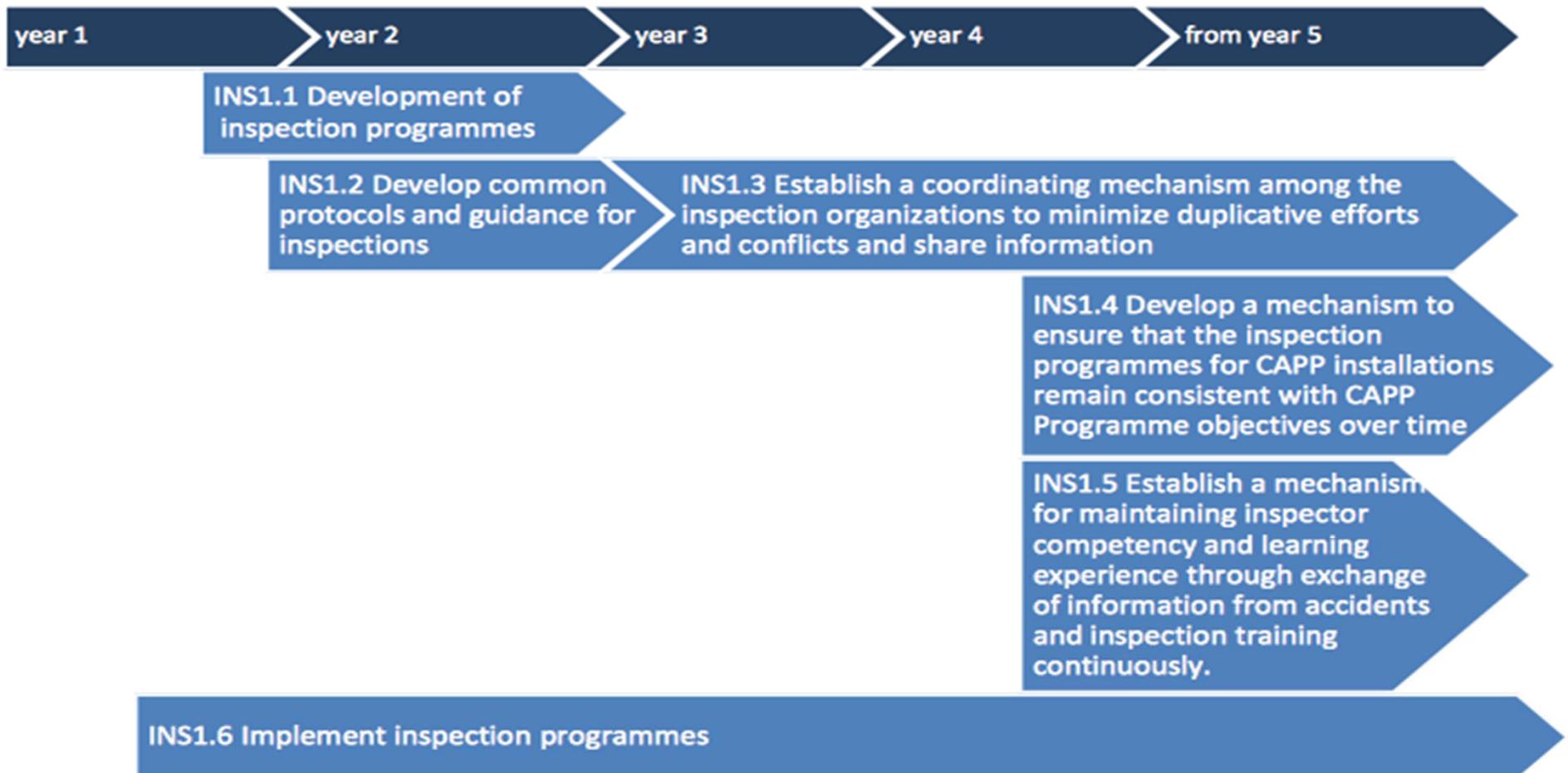
- ▶ The Roadmaps developed by the countries reflect the different individual priorities and needs. However, the following common priorities were identified:
  - ▶ Adequate enforcement of existing regulations
  - ▶ Drafting new legal texts to implement CAPP
  - ▶ Establish on-going coordination mechanisms
  - ▶ Establish a central information management system (database)



# Case study – Roadmap in Sri Lanka



- ▶ The Roadmap in Sri Lanka provides a clear framework and timeline for future activities (example below).



# Throughout the project's lifespan

## Building capacity/training

- ▶ The training workshops vary according to the country needs and interests. Usually they have a 3-day length.
- ▶ These workshops can be designed to:
  - ▶ Explain concepts related to CAPP;
  - ▶ describe the FF Guidance and how it can be used;
  - ▶ outline roles of different stakeholders;
  - ▶ explain key concepts such as risk assessment and hazard identification;
  - ▶ teach specific skills for CAPP programme development; and
  - ▶ help identify gaps and priorities.

**The Flexible Framework ISP includes a generic curriculum for training sessions (Annex VII).**



# Case study – Site visits during trainings in six countries



- ▶ Site visits during the trainings contributed to build specific CAPPs for national circumstances.
- ▶ Joint site visits also facilitated exchange of knowledge among countries.
- ▶ Examples – site visits:
  - ▶ The Philippines: Chlorine Bleach Production facility
  - ▶ Cambodia: Petroleum Fuel Depot (SOKIMEX)
  - ▶ Senegal and Mali: Senstock – fuel and LPG storage facility
  - ▶ Tanzania: Port of Dar es Salaam
  - ▶ Sri Lanka visited the Map Ta Phut Industrial State and oil and gas depot in Thailand



NEX

# Development phase

## Holding a CAPP Launching Workshop

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- ▶ It is the final activity of the project.
- ▶ Brings together senior officials, decision-makers and technical experts to reach agreement on the roadmap to implement the CAPP Programme.

**The Flexible Framework ISP includes a generic agenda for a CAPP Launching Workshop (Annex VIII).**



# Key findings

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- ▶ Shared common challenges among countries included:
    - ▶ inadequate enforcement of existing regulations,
    - ▶ lack of information on location of hazardous installations,
    - ▶ lack of a comprehensive specific legislation on CAPP.
  - ▶ Countries usually have already existing legislation on chemicals management, but it does not include a comprehensive approach to CAPP.
  - ▶ The development of legal framework usually comes after an accident or near-miss. This reflects the vulnerability of the country to chemical accidents.
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# Lessons learned



- ▶ As some countries may have similar situations, it is considered important to upscale activities from national to regional implementation.
- ▶ For effective implementation of the roadmap, a country must seek high-level support and political endorsement.
- ▶ Programmes building on existing national structures enhance multi-stakeholder coordination.
- ▶ Engagement of national and regional experts (and identifying « champions ») brings added value to the project deliverables.
- ▶ Proposed follow-up projects on specific priorities in the Roadmap can help achieve smaller but more frequent success on implementing the roadmap.
- ▶ Access to existing databases and documents, as well as experiences from other countries, help to avoid « re-inventing the wheel ».